

MANLEY

Powers the Winners



High Performance Engine Components

2011





Firstly, I would like to thank each and every one of our loyal customers around the world for their past business. Obviously, your support is vital to the growth of our company and it is greatly appreciated. Secondly, I'm proud to report that, in 2011, we will be entering our 45th year in business; an accomplishment by any standards regardless of the industry. Our desire to manufacture the highest quality engine components and provide outstanding customer service has not wavered.

For 2011, we look to expand upon the incredibly successful launch of our crankshaft program. We've added valve, piston and connecting rod part numbers for a host of new engine platforms such as the Ford Coyote and Raptor. Our NexTek series of valvesprings received its annual shot in the arm with the development of some fantastic new part numbers aimed at Dirt Late Model, Pro Mod drag race and Chevy LS applications. We are also introducing a new line of Pro-Flo® oil pumps for the Chevy LS, Ford Modular and Chrysler HEMI markets.

- Trip Manley, Vice President



HANK
MANLEY

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Regional Manager



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Please visit our website at <http://www.manleyperformance.com>

SALES POLICY

Manley Performance urges the consumer to purchase all goods through an authorized dealer. Write or call for the names of the dealers in your area if you are not already familiar with them.

Prices: Due to the ever present fluctuation of material and labor costs, our prices are subject to change without notice.

Terms: Qualified accounts may be extended 2%, 10th proximo payment terms. We require five credit references to establish this open account status.

Freight: Orders exceeding \$2250 will be shipped F.F.A. The deduction of freight charges will be allowed providing the invoice is paid on or before the 10th of the month. Special shipping requests such as Air Freight, Express Mail, etc. will be billed to the account.

Return Policy: Specified on the back of the Price List.

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WARRANTY DISCLAIMER

Due to the intended usage of the products in this catalog, they are sold WITHOUT WARRANTY OR ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR THE INTENDED PURPOSE. Installation of parts intended for "off-highway" use could adversely affect the vehicle manufacturer's warranty coverage.

All weights specified are approximate and subject to manufacturing tolerances.

WARNING

Some parts in this catalog have been designed and are intended for off-highway application only. Installation on a vehicle intended for use on public roads may violate U.S., Canadian, state or provincial laws and regulations including those relating to emission requirements and motor vehicle safety standards. These parts are NOT intended for ANY aircraft applications.

In California some parts may legally be used only on a racing vehicle which will never be operated on public roads.

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A **MANLEY** VALVE FOR EVERY APPLICATION
CHOOSE FROM ONE OF FIVE SERIES OF STAINLESS VALVES

PERFORMANCE SERIES

- ✓ Stainless Steel (XH-422 Exhaust and NK-840 Intake)
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Stock and .100" Longer Lengths Available



STREET SERIES

- ✓ Stainless Steel (XH-424 Exhaust and NK-841 Intake)
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Street Master (Straight Stem) and Street Flo Shapes Available



RACE SERIES

- ✓ Stainless Steel (XH-426 Exhaust and NK-842 Intake)
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Race Master (Straight Stem) and Race Flo Shapes Available
- ✓ Recommended Exhaust Valves for Alcohol Engines



SEVERE DUTY® SERIES

- ✓ Superior Stainless for High Temperature Gasoline Engines
- ✓ Exhaust Material XH-428 with Double the Ultimate Tensile Strength (at 1500° F) over the competition
- ✓ Intake Material NK-844 with 1000 Times Better Fatigue Strength than competitors' offerings.



EXTREME DUTY SERIES

- ✓ Top Fuel, Funny Car and Marine Engine Exhaust Valves
- ✓ More Hot Hardness and High Temperature Strength than any competitive offerings
- ✓ XH-432 XtremeAlloy



EXHAUST VALVE TEMPERATURE RANGE CHART

900 F 1000 F 1100 F 1200 F 1300 F 1400 F 1500 F

● ————— RACE SERIES ————— ●

● ————— SEVERE DUTY SERIES ————— ●

● ————— EXTREME DUTY SERIES ————— ●

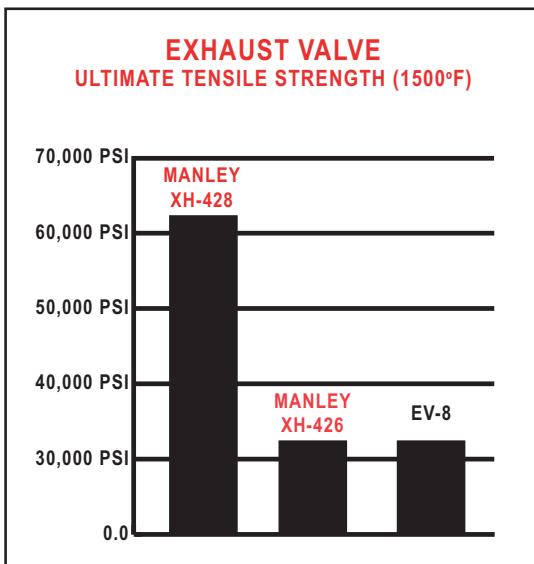
Temperatures at pyrometer 1" in header.

STAINLESS VALVES

VALVES

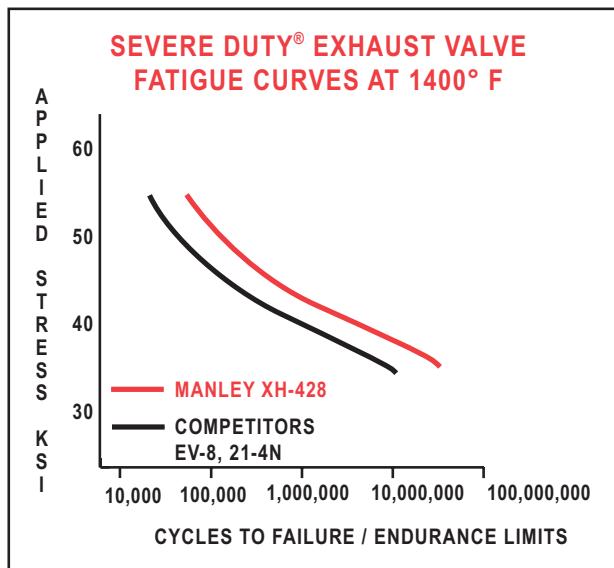
Manley Performance is universally acknowledged as the leading manufacturer of performance and racing valves in the world.

The reason for Manley's overwhelming success is simple: QUALITY. We offer the best materials in the industry - exclusive materials our competitors do not possess. Our stems are hard coated with .0002" thick chrome rather than a few millionths of flash. Our hard tips are superior to competitors' puddled stellite which can crack and erode off the stem. Our valve head and underhead shapes have been in the forefront of the quest for improved flow since the late 1960's. And always each Manley valve has been price targeted to specific markets to ensure the best possible value to the customer.



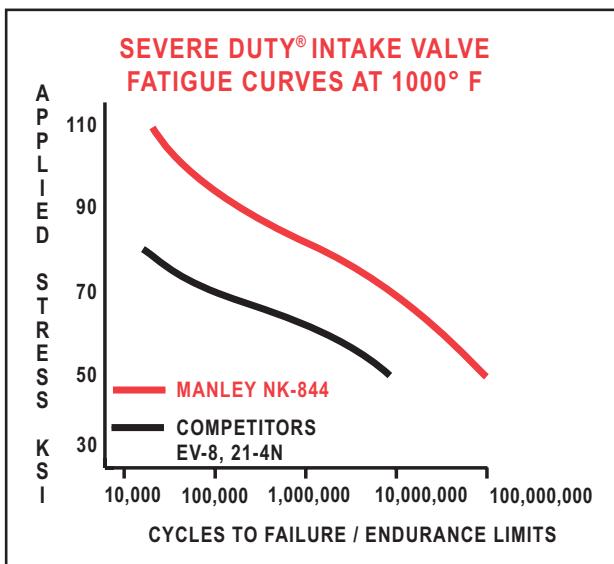
PERFORMANCE & STREET SERIES VALVES

Designed for the enthusiast preparing a stock or mildly modified street engine, or a bracket racer seeking maximum value for his dollar, the Performance or Street Series valves are the perfect choice. These dependable valves are also offered in Street Flo versions providing significant flow gains without head porting. All valves in both these series feature chrome stems, hard tips, swirl polished underhead areas, and fully machined combustion faces.



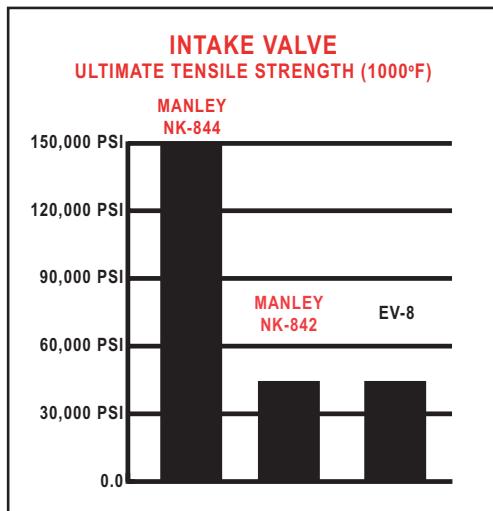
RACE MASTER VALVES

Race Master, and the Pro Flo versions identified as Race Flo valves, are manufactured of XH-426 material for the exhausts and NK-842 for the intakes. This series of valves is targeted at the bracket, drag and oval track racers operating below 8000 rpm - above which engine speed titanium is required. Any engine builder successfully using EV-8 alloy (21-4N) valves will find in this series of Manley valves a superior piece at a most attractive price. The Ultimate Tensile Strength charts on this page and the next, show the Manley Race Series to be equal to the best that the competitors have to offer.



SEVERE DUTY® VALVES

The Severe Duty® series of valves is the Manley signature in the performance and racing industry. Exhaust material XH-428 and intake material NK-844 is offered by no competitor in the world. And no pair of materials show such clear dominance over all others. Ultimate tensile strength of XH-428 at 1500°F is nearly double the competitors' EV-8. At 1000°F the Manley NK-844 displays more than four times the ultimate tensile of the competition's best intake material.

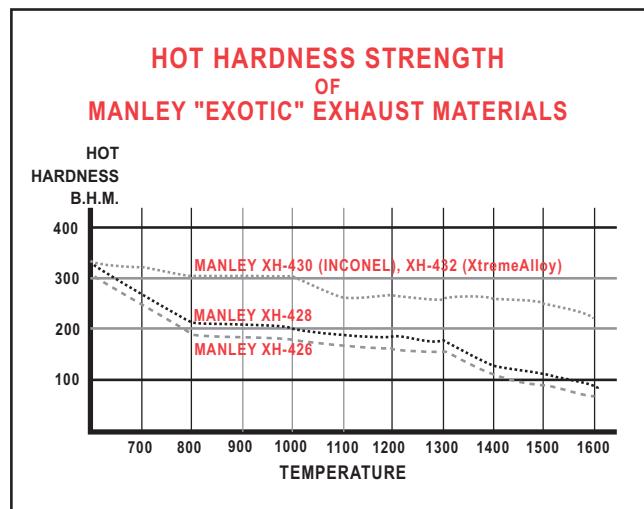


Further proof of the superiority of the Manley Severe Duty® valves is evident in our comprehensive fatigue tests. In normal operation where valve float is non-existent, a valve will experience 20,000 to 25,000 lbs of applied stress. However, when valves bounce on the seat the stress immediately soars to 40,000 to 60,000 lbs. Manley exhaust valves (at 40,000 psi and 1400°F) ran to 100,000,000 (one hundred million) cycles while competitors' offerings failed at 100,000 cycles. That's 1000 times better fatigue life.

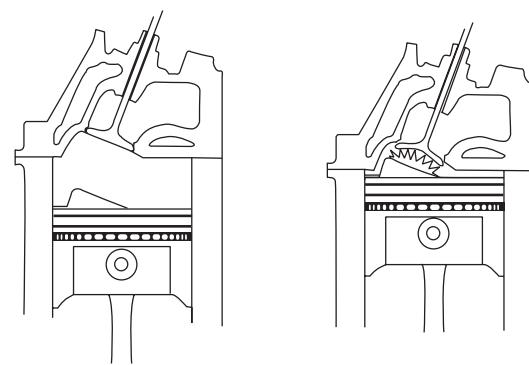
EXTREME DUTY VALVES

Top Fuel and Funny Car drag racers, Big Block Chevy marine enthusiasts, and Small Block Chevy restricted carburetor circle track competitors will all benefit by the use of Inconel and XtremeAlloy exhaust valves. Exotic steel is required simply because of the enormous heat imposed on the exhaust valves in these applications.

The accompanying graph illustrates the complete superiority of our "exotic" steels over our own XH-428 as well as competitor's EV-8.



In addition to the vastly superior strength and fatigue characteristics of Manley NK-844, our exclusive intake material exhibits an uncanny ability to resist chordal fractures. In an excellent sealing combustion chamber, the intake valve is actually deformed by the fuel explosion and pushed up into the port. The effect of this continuous deformation on competitors' material eventually is a chordal fracture propagating from the circumference of the valve and quickly becoming a missing pie shaped piece. Manley NK-844 is the absolute best choice of material to combat disastrous chordal fractures.



The illustration above shows an intake valve seated in the head with normal shape. The right illustration shows the valve being deformed under high combustion pressure.

STAINLESS VALVES

THE "PRO FLO" SHAPE A MANLEY ORIGINAL

- ✓ Up to 40% flow increase in small port OE style cylinder heads
- ✓ Proven performance improvement on the flow bench

Test for: Hot Rod Magazine
Tests performed by: Edelbrock
Type of cylinder head: 1969 Camaro

| AMOUNT OF NET VALVE LIFT | INTAKE IMPROVEMENT IN FLOW | EXHAUST IMPROVEMENT IN FLOW |
|--------------------------|----------------------------|-----------------------------|
| .150" | 42% | 93% |
| .200" | 37% | 27% |
| .250" | 25% | 23% |
| .300" | 12% | 22% |
| .350" | 7% | 19% |
| .400" | 5% | 14% |



AVAILABLE IN THREE SERIES OF VALVES

| Series | "Pro Flo" Designation |
|-------------|-----------------------|
| Street | Street Flo |
| Race | Race Flo |
| Severe Duty | Pro Flo |

STAINLESS STEEL & TITANIUM VALVE BUYERS GUIDE

| Valve Type | Replacement and Mild Street Performance | Engine Builders Using EV-8 High Perf Street Bracket Racers Oval Track Sportsman Racers | Naturally Aspirated Alcohol Burning Engines | Drag Racing Over 8000 RPM | Offshore Powerboat and Hi Performance Marine | Sprint Car Dirt Late Model |
|---------------------------|---|--|--|---|--|----------------------------|
| <i>Performance Series</i> | Acceptable | | | | | |
| <i>Street Series</i> | Preferred | | | | | |
| <i>Race Series</i> | Extra Insurance | Acceptable | Preferred Exhaust When Titanium is Not Allowed | | Not Recommended | |
| <i>Severe Duty®</i> | | Preferred | Preferred Intake When Titanium is Not Allowed | | Required Intake | |
| <i>Extreme Duty</i> | | Preferred with Restricted Carburetor | | Top Fuel Funny Car Exhaust Only | Required Exhaust | |
| <i>Titanium</i> | | | Preferred | Required Other Than Top Fuel or Funny Car | Race Only | Required |

BUICK V-6

STAGE I AND PRODUCTION CAST IRON HEADS SEVERE DUTY® VALVES

- ✓ XH-428 Exhaust Material
- ✓ NK-844 Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Machined
- ✓ Intakes are "Pro Flo" for Improved Flow



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11503-6 | Exh. | 1.500 | .3415 | Stock | 4.725 | .270 | 30° x 7/16" | .075 | .090 | 20° Dish | 98 |
| 11502-6 | Int. | 1.710 | .3415 | Stock | 4.730 | .270 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 95 |
| 11504-6 | Int. | 1.775 | .3415 | Stock | 4.730 | .270 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 97 |

OLDSMOBILE 330 - 455

SEVERE DUTY® VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Hard Tips
- ✓ Swirl Polished
- ✓ Chrome Stems
- ✓ Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11547-8 | Exh. | 1.710 | .3420 | Stock | 4.668 | .260 | 10° x 3/8" | .060 | .100 | 5° Dish |
| 11548-8 | Int. | 2.072 | .3420 | Stock | 4.713 | .260 | 10° x 3/8" | .050 | .080 | 5° Dish |

PONTIAC 400 - 428 - 455

RACE MASTER & RACE FLO VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11353-8 | Exh. | 1.660 | .3415 | Stock | 5.230 | .250 | 25° x 3/8" | .080 | .100 | 20° Dish |
| 11355-8 | Exh. | 1.770 | .3415 | Stock | 5.100 | .250 | 25° x 3/8" | .080 | .100 | 20° Dish |
| 11337-8 | Exh. | 1.770 | .3415 | Stock | 5.230 | .250 | 25° x 3/8" | .080 | .100 | 20° Dish |
| 11352-8 | Int. | 2.110 | .3415 | Stock | 5.215 | .250 | Pro Flo 12° x 3/8" | .050 | .100 | 7° Dish |
| 11364-8 | Int. | 2.110 | .3415 | Stock | 5.100 | .250 | Pro Flo 12° x 3/8" | .050 | .100 | 7° Dish |

Valves 11352 and 11353 fit Edelbrock 72cc cylinder heads. Both intakes have 30° seats.

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

LS-1 / LS-2 (LS-6 HEAD) SMALL BLOCK CHEVY

RACE FLO / RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Machined
- ✓ Intakes are "Pro Flo" for Improved Flow
- ✓ O.E. Style Radius Keeper Grooves

| Part No. | Type | Head Diam. | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11361-8 | Exh. | 1.550 | .3136 | Stock | 4.923 | .175 | 25° x 7/16" | .065 | .115 | 18° Dish | 87 |
| 11363-8 | Exh. | 1.575 | .3136 | Stock | 4.923 | .175 | 25° x 7/16" | .065 | .115 | 18° Dish | 89 |
| 11365-8 | Exh. | 1.600 | .3136 | Stock | 4.923 | .175 | 25° x 7/16" | .065 | .115 | 18° Dish | 91 |
| 11360-8 | Int. | 2.000 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 103 |
| 11360H-8 | Int. | 2.000 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 91 |
| 11362-8 | Int. | 2.020 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 105 |
| 11362H-8 | Int. | 2.020 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 93 |
| 11390-8 | Int. | 2.055 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 106 |
| 11390H-8 | Int. | 2.055 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 94 |
| 11398-8 | Int. | 2.080 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 107 |
| 11398H-8 | Int. | 2.080 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 95 |
| 11350-8 | Int. | 2.100 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 109 |
| 11350H-8 | Int. | 2.100 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 97 |
| | | | Hollow Stem | | | | | | | | |

SEVERE DUTY / PRO FLO VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Machined
- ✓ Intakes are "Pro Flo" for Improved Flow
- ✓ O.E. Style Radius Keeper Grooves

| Part No. | Type | Head Diam. | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11673-8 | Exh. | 1.550 | .3136 | Stock | 4.923 | .175 | 25° x 7/16" | .065 | .115 | 18° Dish | 88 |
| 11675-8 | Exh. | 1.575 | .3136 | Stock | 4.923 | .175 | 25° x 7/16" | .065 | .115 | 18° Dish | 90 |
| 11677-8 | Exh. | 1.600 | .3136 | Stock | 4.923 | .175 | 25° x 7/16" | .065 | .115 | 18° Dish | 92 |
| 11680-8 | Int. | 2.055 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 107 |
| 11680H-8 | Int. | 2.055 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 95 |
| 11682-8 | Int. | 2.080 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 108 |
| 11682H-8 | Int. | 2.080 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 96 |
| 11684-8 | Int. | 2.100 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 110 |
| 11684H-8 | Int. | 2.100 | .3133 | Stock | 4.874 | .175 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | 98 |
| | | | Hollow Stem | | | | | | | | |

EXTREME DUTY EXHAUST VALVES

- ✓ XH-432 XtremeAlloy Material
- ✓ Swirl Polished and Machined
- ✓ Chrome Stems and Hard Tips

| Part No. | Type | Head Diam. | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11681-8 | Exh. | 1.575 | .3136 | Stock | 4.923 | .175 | 25° x 7/16" | .065 | .115 | 18° Dish | 90 |
| 11683-8 | Exh. | 1.600 | .3136 | Stock | 4.923 | .175 | 25° x 7/16" | .065 | .115 | 18° Dish | 92 |

LS-3 / L-99 (L-92 HEAD) SMALL BLOCK CHEVY

RACE FLO / RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ Chrome Stems and Hard Tips
- ✓ Intakes are "Pro Flo" for Improved Flow
- ✓ NK-842 Stainless Intake Material
- ✓ Swirl Polished and Machined
- ✓ O.E. Style Radius Keeper Grooves

| Part No. | Type | Head Diam. | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|------------|----------------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11621-8 | Exh. | 1.590 | .3136 | Stock | 4.923 | .160 | 25° x 7/16" | .070 | .115 | 18° Dish | 93 |
| 11620-8 | Int. | 2.165 | .3133 | Stock | 4.900 | .160 | Pro Flo: 12° x 3/8" | .055 | .100 | 7° Dish | 117 |
| 11620H-8 | Int. | 2.165 | .3133 Hollow Stem | Stock | 4.900 | .160 | Pro Flo: 12° x 3/8" | .055 | .100 | 7° Dish | 108 |

SEVERE DUTY / PRO FLO VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ Chrome Stems and Hard Tips
- ✓ Intakes are "Pro Flo" for Improved Flow
- ✓ NK-844 Stainless Intake Material
- ✓ Swirl Polished and Machined
- ✓ O.E. Style Radius Keeper Grooves

| Part No. | Type | Head Diam. | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|------------|----------------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11661-8 | Exh. | 1.590 | .3136 | Stock | 4.923 | .160 | 25° x 7/16" | .070 | .115 | 18° Dish | 94 |
| 11686-8 | Int. | 2.165 | .3133 | Stock | 4.900 | .160 | Pro Flo: 12° x 3/8" | .055 | .100 | 7° Dish | 118 |
| 11686H-8 | Int. | 2.165 | .3133 Hollow Stem | Stock | 4.900 | .160 | Pro Flo: 12° x 3/8" | .055 | .100 | 7° Dish | 109 |

EXTREME DUTY EXHAUST VALVES

- ✓ XH-432 XtremeAlloy Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Machined

| Part No. | Type | Head Diam. | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11685-8 | Exh. | 1.590 | .3136 | Stock | 4.923 | .160 | 25° x 7/16" | .070 | .115 | 18° Dish | 94 |

LS-7 SMALL BLOCK CHEVY

SEVERE DUTY / PRO FLO VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ Chrome Stems and Hard Tips
- ✓ Intakes are "Pro Flo" for Improved Flow
- ✓ NK-844 Stainless Intake Material
- ✓ Swirl Polished and Machined
- ✓ O.E. Style Radius Keeper Grooves

| Part No. | Type | Head Diam. | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|------------|----------------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11679-8 | Exh. | 1.610 | .3136 | Stock | 5.230 | .290 | 25° x 7/16" | .075 | .100 | 18° Dish | 103 |
| 11688-8 | Int. | 2.205 | .3133 | Stock | 5.200 | .300 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 120 |
| 11688H-8 | Int. | 2.205 | .3133 Hollow Stem | Stock | 5.200 | .300 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 110 |

EXTREME DUTY EXHAUST VALVES

- ✓ XH-432 XtremeAlloy Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Machined

| Part No. | Type | Head Diam. | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11687-8 | Exh. | 1.610 | .3136 | Stock | 5.230 | .290 | 25° x 7/16" | .075 | .100 | 18° Dish | 103 |

STAINLESS VALVES

SMALL BLOCK CHEVROLET BUDGET REPLACEMENT VALVES

- ✓ XH-422 Stainless Exhaust Material
- ✓ NK-840 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Original Underhead Shapes and Finishes



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 10077-8 | Exh. | 1.500 | .3415 | Stock | 4.920 | .290 | Stock | .100 | .150 | Dimple | 106 |
| 10649-8 | Exh. | 1.600 | .3415 | Stock | 4.910 | .290 | Stock | .070 | .150 | Dimple | 105 |
| 10476-8 | Int. | 1.940 | .3415 | Stock | 4.880 | .250 | Stock | .065 | .125 | Dimple | 116 |
| 10650-8 | Int. | 2.020 | .3415 | Stock | 4.880 | .260 | Stock | .060 | .120 | Flat Face | 117 |

SMALL BLOCK CHEVROLET BUDGET PERFORMANCE VALVES

- ✓ XH-422 Stainless Exhaust Material
- ✓ NK-840 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 10577-8 | Exh. | 1.500 | .3415 | Stock | 4.911 | .250 | 15° x 1/2" | .060 | .100 | 10° Dish | 96 |
| 10549-8 | Exh. | 1.600 | .3415 | Stock | 4.911 | .250 | 15° x 1/2" | .060 | .100 | 10° Dish | 101 |
| 10551-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.011 | .250 | 15° x 1/2" | .060 | .100 | 10° Dish | 103 |
| 10548-8 | Int. | 1.900 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 105 |
| 10576-8 | Int. | 1.940 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 105 |
| 10550-8 | Int. | 2.020 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 109 |
| 10552-8 | Int. | 2.020 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 111 |
| 10554-8 | Int. | 2.055 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 110 |
| 10556-8 | Int. | 2.055 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 112 |

SMALL BLOCK CHEVROLET STREET FLO VALVES

- ✓ XH-424 Stainless Exhaust Material
- ✓ NK-841 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Increased Flow with "Pro Flo" Underhead



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 10721-8 | Exh. | 1.500 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .060 | .100 | 7° Dish | 89 |
| 10765-8 | Exh. | 1.600 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .060 | .100 | 7° Dish | 94 |
| 10722-8 | Int. | 1.940 | .3415 | Stock | 4.911 | .250 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 107 |
| 10764-8 | Int. | 2.000 | .3415 | Stock | 4.911 | .250 | Pro Flo: 10° x 3/8" | .050 | .080 | 6° Dish | 108 |
| 10766-8 | Int. | 2.020 | .3415 | Stock | 4.911 | .250 | Pro Flo: 10° x 3/8" | .050 | .080 | 6° Dish | 109 |

The 10764 will work on the new Chevy Vortec Bowtie cylinder head casting number 2553435IC and 2553437IC.

See page 3 for a description of our valve materials.

SMALL BLOCK CHEVROLET STREET MASTER VALVES

- ✓ XH-424 Stainless Exhaust Material
- ✓ NK-841 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Straight Stems



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 10777-8 | Exh. | 1.500 | .3415 | Stock | 4.911 | .250 | 15° x 1/2" | .060 | .100 | 10° Dish | 96 |
| 10747-8 | Exh. | 1.560 | .3415 | Stock | 4.911 | .250 | 15° x 1/2" | .060 | .100 | 10° Dish | 99 |
| 10749-8 | Exh. | 1.600 | .3415 | Stock | 4.911 | .250 | 15° x 1/2" | .060 | .100 | 10° Dish | 101 |
| 10751-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.011 | .250 | 15° x 1/2" | .060 | .100 | 10° Dish | 103 |
| 10776-8 | Int. | 1.940 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 105 |
| 10750-8 | Int. | 2.020 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 109 |
| 10752-8 | Int. | 2.020 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 111 |
| 10754-8 | Int. | 2.055 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 110 |
| 10756-8 | Int. | 2.055 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 112 |

The 10747 will work on the new Chevy Vortec Bowtie cylinder head casting number 2553435IC and 2553437IC.

See page 3 for a description of our valve materials.

STAINLESS VALVES

SMALL BLOCK CHEVROLET

RACE FLO VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Increased Flow with "Pro Flo" Underhead



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11521-8 | Exh. | 1.500 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .060 | .100 | 7° Dish | 89 |
| 11501-8 | Exh. | 1.560 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .060 | .100 | 7° Dish | 91 |
| 11565-8 | Exh. | 1.600 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .060 | .100 | 7° Dish | 94 |
| 11545-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.065 | .290 | Pro Flo: 15° x 1/2" | .090 | .100 | 9° Dish | 95 |
| 11555-8 | Exh. | 1.600 | .3415 | .200 Longer | 5.165 | .290 | Pro Flo: 15° x 1/2" | .090 | .100 | 9° Dish | 96 |
| 11559-8 | Exh. | 1.600 | .3415 | .300 Longer | 5.265 | .290 | Pro Flo: 15° x 1/2" | .090 | .100 | 9° Dish | 97 |
| 11797-8 | Exh. | 1.625 | .3415 | .100 Longer | 5.065 | .290 | Pro Flo: 15° x 1/2" | .090 | .100 | 9° Dish | 98 |
| 11799-8 | Exh. | 1.625 | .3415 | .200 Longer | 5.165 | .290 | Pro Flo: 15° x 1/2" | .090 | .100 | 9° Dish | 99 |
| 11506-8 | Int. | 1.840 | .3415 | Stock | 4.911 | .250 | Pro Flo: 10° x 3/8" | .060 | .080 | 5° Dish | 104 |
| 11522-8 | Int. | 1.940 | .3415 | Stock | 4.911 | .250 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 107 |
| 11500-8 | Int. | 2.000 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 109 |
| 11566-8 | Int. | 2.020 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 5° Dish | 113 |
| 11796-8 | Int. | 2.020 | .3415 | .100 Longer | 5.040 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 115 |
| 11568-8 | Int. | 2.055 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 5° Dish | 115 |
| 11546-8 | Int. | 2.055 | .3415 | .100 Longer | 5.040 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 116 |
| 11552-8 | Int. | 2.055 | .3415 | .200 Longer | 5.140 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 117 |
| 11556-8 | Int. | 2.055 | .3415 | .300 Longer | 5.240 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 118 |
| 11558-8 | Int. | 2.080 | .3415 | Stock | 4.940 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 114 |
| 11560-8 | Int. | 2.080 | .3415 | .100 Longer | 5.040 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 115 |
| 11564-8 | Int. | 2.080 | .3415 | .200 Longer | 5.140 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 116 |
| 11574-8 | Int. | 2.080 | .3415 | .300 Longer | 5.240 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 117 |
| 11576-8 | Int. | 2.100 | .3415 | .100 Longer | 5.040 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 116 |
| 11584-8 | Int. | 2.100 | .3415 | .200 Longer | 5.140 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 117 |
| 11594-8 | Int. | 2.100 | .3415 | .300 Longer | 5.240 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 118 |
| 11774-8 | Int. | 2.125 | .3415 | .100 Longer | 5.040 | .290 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 118 |
| 11776-8 | Int. | 2.125 | .3415 | .200 Longer | 5.140 | .290 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 119 |
| 11778-8 | Int. | 2.125 | .3415 | .300 Longer | 5.240 | .290 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 120 |

Exhaust valves 11501, 11521, 11565, and intake valves 11500, 11522, 11566, and 11568 have a Pro Flo start 1.400" from the head. All others have a Pro Flo start of 1.600" from the head.

See page 3 for a description of our valve materials.

Need a different length? Head diameter not listed?
See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

SMALL BLOCK CHEVROLET

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Straight Stems



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11861-8 | Exh. | 1.500 | .3415 | Stock | 4.951 | .290 | 15° x 1/2" | .060 | .100 | 9° Dish | 96 |
| 11301-8 | Exh. | 1.500 | .3415 | .100 Longer | 5.065 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 103 |
| 11863-8 | Exh. | 1.600 | .3415 | Stock | 4.951 | .290 | 15° x 1/2" | .060 | .100 | 9° Dish | 102 |
| 11877-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.065 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 109 |
| 11321-8 | Exh. | 1.600 | .3415 | .200 Longer | 5.165 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 110 |
| 11323-8 | Exh. | 1.600 | .3415 | .300 Longer | 5.265 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 111 |
| 11325-8 | Exh. | 1.600 | .3415 | .400 Longer | 5.365 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 112 |
| 11327-8 | Exh. | 1.600 | .3415 | .500 Longer | 5.465 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 113 |
| 11329-8 | Exh. | 1.625 | .3415 | Stock | 4.965 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 103 |
| 11879-8 | Exh. | 1.625 | .3415 | .100 Longer | 5.065 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 110 |
| 11331-8 | Exh. | 1.625 | .3415 | .200 Longer | 5.165 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 112 |
| 11333-8 | Exh. | 1.625 | .3415 | .300 Longer | 5.265 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 114 |
| 11860-8 | Int. | 1.940 | .3415 | Stock | 4.951 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 109 |
| 11300-8 | Int. | 1.940 | .3415 | .100 Longer | 5.040 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 111 |
| 11864-8 | Int. | 2.020 | .3415 | Stock | 4.951 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 114 |
| 11318-8 | Int. | 2.020 | .3415 | .100 Longer | 5.040 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 116 |
| 11316-8 | Int. | 2.020 | .3415 | .200 Longer | 5.140 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 122 |
| 11806-8 | Int. | 2.055 | .3415 | Stock | 4.940 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 118 |
| 11810-8 | Int. | 2.055 | .3415 | .100 Longer | 5.040 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 120 |
| 11808-8 | Int. | 2.080 | .3415 | Stock | 4.940 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 124 |
| 11812-8 | Int. | 2.080 | .3415 | .100 Longer | 5.040 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 126 |
| 11320-8 | Int. | 2.080 | .3415 | .200 Longer | 5.140 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 127 |
| 11322-8 | Int. | 2.080 | .3415 | .300 Longer | 5.240 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 129 |
| 11324-8 | Int. | 2.080 | .3415 | .400 Longer | 5.340 | .290 | 10° x 3/8" | .065 | .080 | 5° Dish | 131 |
| 11326-8 | Int. | 2.080 | .3415 | .500 Longer | 5.440 | .290 | 10° x 3/8" | .065 | .080 | 5° Dish | 133 |
| 11328-8 | Int. | 2.100 | .3415 | .100 Longer | 5.040 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 127 |
| 11330-8 | Int. | 2.100 | .3415 | .200 Longer | 5.140 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 128 |
| 11332-8 | Int. | 2.100 | .3415 | .300 Longer | 5.240 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 129 |
| 11334-8 | Int. | 2.100 | .3415 | .400 Longer | 5.340 | .290 | 10° x 3/8" | .065 | .080 | 5° Dish | 132 |
| 11336-8 | Int. | 2.100 | .3415 | .500 Longer | 5.440 | .290 | 10° x 3/8" | .065 | .080 | 5° Dish | 134 |
| 11340-8 | Int. | 2.125 | .3415 | .100 Longer | 5.040 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 130 |
| 11342-8 | Int. | 2.125 | .3415 | .200 Longer | 5.140 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 132 |
| 11344-8 | Int. | 2.125 | .3415 | .300 Longer | 5.240 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 134 |
| 11346-8 | Int. | 2.125 | .3415 | .400 Longer | 5.340 | .290 | 10° x 3/8" | .065 | .080 | 5° Dish | 136 |
| 11348-8 | Int. | 2.125 | .3415 | .500 Longer | 5.440 | .290 | 10° x 3/8" | .065 | .080 | 5° Dish | 138 |

See page 3 for a description of our valve materials.

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

SMALL BLOCK CHEVROLET

RACE MASTER VALVES, 5/16" (.311") STEM

- ✓ No Need for Inserted Tips or Wear Caps
- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Thin Stem for Increased Flow and Light Weight



These .311" stem valves are ONLY available with Bead Loc® keeper grooves. Bead Loc® valve locks are REQUIRED.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11305-8 | Exh. | 1.600 | .3110 | .100 Longer | 5.040 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 94 |
| 11319-8 | Exh. | 1.600 | .3110 | .200 Longer | 5.140 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 95 |
| 11335-8 | Exh. | 1.600 | .3110 | .300 Longer | 5.240 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 96 |
| 11341-8 | Exh. | 1.600 | .3110 | .600 Longer | 5.540 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 99 |
| 11343-8 | Exh. | 1.600 | .3110 | .700 Longer | 5.640 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 100 |
| 11303-8 | Exh. | 1.625 | .3110 | .100 Longer | 5.040 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 97 |
| 11345-8 | Exh. | 1.625 | .3110 | .300 Longer | 5.240 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 99 |
| 11347-8 | Exh. | 1.625 | .3110 | .600 Longer | 5.540 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 102 |
| 11349-8 | Exh. | 1.625 | .3110 | .700 Longer | 5.640 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 103 |
| 11302-8 | Int. | 1.940 | .3110 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 105 |
| 11304-8 | Int. | 2.020 | .3110 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 108 |
| 11306-8 | Int. | 2.055 | .3110 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 110 |
| 11704-8 | Int. | 2.055 | .3110 | .200 Longer | 5.110 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 112 |
| 11706-8 | Int. | 2.080 | .3110 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 112 |
| 11708-8 | Int. | 2.080 | .3110 | .200 Longer | 5.110 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 113 |
| 12314-8 | Int. | 2.100 | .3110 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 114 |
| 12316-8 | Int. | 2.100 | .3110 | .200 Longer | 5.110 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 115 |
| 12318-8 | Int. | 2.125 | .3110 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 116 |
| 12320-8 | Int. | 2.125 | .3110 | .200 Longer | 5.110 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 117 |
| 12322-8 | Int. | 2.180 | .3110 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 119 |
| 12324-8 | Int. | 2.180 | .3110 | .200 Longer | 5.110 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 120 |
| 12326-8 | Int. | 2.200 | .3110 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 121 |
| 12328-8 | Int. | 2.200 | .3110 | .200 Longer | 5.110 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 122 |

SMALL BLOCK CHEVROLET

AFR 180cc, 190cc, 195cc, 210cc, 220cc, 227cc SERIES CYLINDER HEADS

RACE FLO / RACE MASTER VALVES

- ✓ Lightweight 8mm stems
- ✓ LS (.060" single radius) style keeper grooves
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



Use Manley valve lock P/N 13098-16 (7°) or 13153-16 (10°) depending on your spring/retainer choice.

Manley stem sizes are .3136" (exh.) and .3133" (int.) respectively. AFR heads have guides sized to .3147" (nominal). Manley strongly recommends that all guides be checked and correctly sized for the Manley valve stem sizes listed to achieve the proper clearances.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 12301-8 | Exh. | 1.600 | .3136 | Stock | 4.950 | .260 | 25° x 7/16" | .070 | .100 | 18° Dish | 94 |
| 12303-8 | Exh. | 1.600 | .3136 | .100 Longer | 5.050 | .260 | 25° x 7/16" | .070 | .100 | 18° Dish | 95 |
| 12300-8 | Int. | 2.020 | .3133 | Stock | 4.930 | .260 | Pro Flo 12° x 3/8" | .050 | .080 | 7° Dish | 108 |
| 12302-8 | Int. | 2.020 | .3133 | .100 Longer | 5.030 | .260 | Pro Flo 12° x 3/8" | .050 | .080 | 7° Dish | 110 |
| 12304-8 | Int. | 2.050 | .3133 | Stock | 4.930 | .260 | Pro Flo 12° x 3/8" | .050 | .080 | 7° Dish | 112 |
| 12306-8 | Int. | 2.050 | .3133 | .100 Longer | 5.030 | .260 | Pro Flo 12° x 3/8" | .050 | .080 | 7° Dish | 112 |
| 12308-8 | Int. | 2.080 | .3133 | Stock | 4.930 | .260 | Pro Flo 12° x 3/8" | .050 | .080 | 7° Dish | 113 |
| 12310-8 | Int. | 2.080 | .3133 | .100 Longer | 5.030 | .260 | Pro Flo 12° x 3/8" | .050 | .080 | 7° Dish | 114 |
| 12312-8 | Int. | 2.100 | .3133 | .100 Longer | 5.030 | .260 | Pro Flo 12° x 3/8" | .050 | .080 | 7° Dish | 115 |

Note: New part numbers are **ITALICIZED**.

SMALL BLOCK CHEVROLET

SEVERE DUTY® VALVES 7 MM (.274") STEM

- ✓ No Need for Inserted Tips or Wear Caps
- ✓ XH-428 Stainless Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Thin Stem for Increased Flow and Light Weight



These .274" stem valves are ONLY available with Bead Loc® keeper grooves. Bead Loc® valve locks are REQUIRED.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11235-8 | Exh. | 1.600 | .2740 | .100 Longer | 5.040 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 84 |
| 11236-8 | Int. | 1.940 | .2740 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 95 |
| 11238-8 | Int. | 2.020 | .2740 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 98 |
| 11240-8 | Int. | 2.055 | .2740 | .100 Longer | 5.010 | .290 | 10° x 3/8" | .050 | .080 | 5° Dish | 100 |

See page 14 for information about rpm limitations and rocker arms.

SMALL BLOCK CHEVROLET

SEVERE DUTY® VALVES 5/16" (.311") STEM

- ✓ No Need for Inserted Tips or Wear Caps
- ✓ XH-428 Stainless Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Thin Stem for Increased Flow and Light Weight



Hollow .311" stem Gen II blank P/N 11224H can be found on page 42 to support your custom requirements.

These .311" stem valves are ONLY available with Bead Loc® keeper grooves. Bead Loc® valve locks are REQUIRED.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|-------------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11231-8 | Exh. | 1.600 | .3110 | .100 Longer | 5.040 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 94 |
| 11351-8 | Exh. | 1.600 | .3110 | .200 Longer | 5.140 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 95 |
| 11357-8 | Exh. | 1.600 | .3110 | .300 Longer | 5.240 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 96 |
| 11359-8 | Exh. | 1.600 | .3110 | .600 Longer | 5.540 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 99 |
| 11387-8 | Exh. | 1.600 | .3110 | .700 Longer | 5.640 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 100 |
| 11389-8 | Exh. | 1.625 | .3110 | .300 Longer | 5.240 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 99 |
| 11397-8 | Exh. | 1.625 | .3110 | .600 Longer | 5.540 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 102 |
| 11399-8 | Exh. | 1.625 | .3110 | .700 Longer | 5.640 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 103 |
| 11230-8 | Int. | 1.940 | .3110 | .100 Longer | 5.010 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 105 |
| 11232-8 | Int. | 2.020 | .3110 | .100 Longer | 5.010 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 108 |
| 11234-8 | Int. | 2.055 | .3110 | .100 Longer | 5.010 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 110 |
| 11234H-8 | Int. | 2.055 | .3110 | .100 Longer | 5.010 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 98 |
| Hollow Stem | | | | | | | | | | | |
| 11710-8 | Int. | 2.055 | .3110 | .200 Longer | 5.110 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 112 |
| 11710H-8 | Int. | 2.055 | .3110 | .200 Longer | 5.110 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 100 |
| Hollow Stem | | | | | | | | | | | |
| 11712-8 | Int. | 2.080 | .3110 | .100 Longer | 5.010 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 112 |
| 11712H-8 | Int. | 2.080 | .3110 | .100 Longer | 5.010 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 100 |
| Hollow Stem | | | | | | | | | | | |
| 11714-8 | Int. | 2.080 | .3110 | .200 Longer | 5.110 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 113 |
| 11714H-8 | Int. | 2.080 | .3110 | .200 Longer | 5.110 | .290 | 12° x 3/8" | .050 | .080 | 7° Dish | 101 |
| Hollow Stem | | | | | | | | | | | |

See page 14 for information about rpm limitations and rocker arms.

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

SMALL BLOCK CHEVROLET SEVERE DUTY® EXHAUST VALVES

- ✓ XH-428 Stainless Material
- ✓ Chrome Stems
- ✓ Hard Tips
- ✓ Swirl Polished
- ✓ Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11567-8 | Exh. | 1.500 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .060 | .100 | 7° Dish | 92 |
| 11887-8 | Exh. | 1.500 | .3415 | .100 Longer | 5.036 | .250 | 15° x 1/2" | .085 | .085 | 10° Dish | 94 |
| 11747-8 | Exh. | 1.500 | .3415 | .200 Longer | 5.140 | .290 | 15° x 1/2" | .085 | .100 | 9° Dish | 101 |
| 11543-8 | Exh. | 1.600 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .060 | .100 | 7° Dish | 95 |
| 11595-8 | Exh. | 1.600 | .3415 | Stock | 4.936 | .250 | 10° x 3/8" | .085 | .085 | Flat Face | 100 |
| 11539-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.036 | .250 | 10° x 3/8" | .085 | .085 | 7° Dish | 102 |
| 11865-8 | Exh. | 1.600 | .3415 | .200 Longer | 5.121 | .250 | 15° x 1/2" | .070 | .100 | 9° Dish | 105 |
| 11551-8 | Exh. | 1.600 | .3415 | Stock | 4.921 | .250 | 30° x 1/2" | .070 | .100 | 25° Dish | 106 |
| 11869-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.021 | .250 | 30° x 1/2" | .070 | .100 | 25° Dish | 109 |
| 11771-8 | Exh. | 1.600 | .3415 | .200 Longer | 5.121 | .250 | 30° x 1/2" | .070 | .100 | 25° Dish | 111 |
| 11785-8 | Exh. | 1.600 | .3415 | .300 Longer | 5.221 | .250 | 30° x 1/2" | .070 | .100 | 25° Dish | 113 |
| 11573-8 | Exh. | 1.600 | .3415 | Stock | 4.965 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 107 |
| 11749-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.065 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 108 |
| 11751-8 | Exh. | 1.600 | .3415 | .200 Longer | 5.165 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 110 |
| 11753-8 | Exh. | 1.600 | .3415 | .300 Longer | 5.265 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 111 |
| 11755-8 | Exh. | 1.600 | .3415 | .400 Longer | 5.365 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 112 |
| 11513-8 | Exh. | 1.600 | .3415 | .500 Longer | 5.465 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 113 |
| 11767-8 | Exh. | 1.600 | .3415 | .600 Longer | 5.565 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 114 |
| 11541-8 | Exh. | 1.625 | .3415 | Stock | 4.911 | .250 | 15° x 1/2" | .060 | .100 | 9° Dish | 95 |
| 11585-8 | Exh. | 1.625 | .3415 | Stock | 4.936 | .250 | 15° x 1/2" | .085 | .100 | 9° Dish | 106 |
| 11537-8 | Exh. | 1.625 | .3415 | .100 Longer | 5.036 | .250 | 15° x 1/2" | .085 | .100 | 9° Dish | 102 |
| 11871-8 | Exh. | 1.625 | .3415 | .200 Longer | 5.121 | .250 | 15° x 1/2" | .070 | .100 | 9° Dish | 105 |
| 11557-8 | Exh. | 1.625 | .3415 | Stock | 4.921 | .250 | 30° x 1/2" | .070 | .100 | 25° Dish | 109 |
| 11569-8 | Exh. | 1.625 | .3415 | .100 Longer | 5.021 | .250 | 30° x 1/2" | .070 | .100 | 25° Dish | 111 |
| 11571-8 | Exh. | 1.625 | .3415 | .200 Longer | 5.121 | .250 | 30° x 1/2" | .070 | .100 | 25° Dish | 113 |
| 11579-8 | Exh. | 1.625 | .3415 | .300 Longer | 5.221 | .250 | 30° x 1/2" | .070 | .100 | 25° Dish | 115 |
| 11851-8 | Exh. | 1.625 | .3415 | .100 Longer | 5.065 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 109 |
| 11577-8 | Exh. | 1.625 | .3415 | .200 Longer | 5.165 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 115 |
| 11757-8 | Exh. | 1.625 | .3415 | .300 Longer | 5.265 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 116 |
| 11759-8 | Exh. | 1.625 | .3415 | .400 Longer | 5.365 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 117 |
| 11511-8 | Exh. | 1.625 | .3415 | .500 Longer | 5.465 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 118 |
| 11763-8 | Exh. | 1.625 | .3415 | .600 Longer | 5.565 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 122 |

See page 3 for a description of our valve materials.

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

SMALL BLOCK CHEVROLET SEVERE DUTY® INTAKE VALVES

- ✓ NK-844 Stainless Material
- ✓ Chrome Stems
- ✓ Hard Tips
- ✓ Swirl Polished
- ✓ Fully Machined



Want a hollow stem Severe Duty® intake? It's as easy as 1-2-3. Refer to Gen II blank P/N 11254H on page 42 to support your custom requirements.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11540-8 | Int. | 1.720 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 99 |
| 11716-8 | Int. | 1.720 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .050 | .100 | 5° Dish | 103 |
| 11542-8 | Int. | 1.840 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 106 |
| 11820-8 | Int. | 1.840 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .050 | .100 | 5° Dish | 110 |
| 11592-8 | Int. | 1.937 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 109 |
| 11886-8 | Int. | 1.940 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .100 | 5° Dish | 111 |
| 11748-8 | Int. | 1.940 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .050 | .100 | 5° Dish | 115 |
| 11596-8 | Int. | 2.020 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 7° Dish | 111 |
| 11826-8 | Int. | 2.020 | .3415 | .100 Longer | 5.026 | .250 | 10° x 3/8" | .065 | .080 | 5° Dish | 113 |
| 11544-8 | Int. | 2.020 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .065 | .080 | 5° Dish | 125 |
| 11598-8 | Int. | 2.055 | .3415 | Stock | 4.911 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 113 |
| 11828-8 | Int. | 2.055 | .3415 | Stock | 4.926 | .250 | 12° x 3/8" | .065 | .080 | Flat Face | 128 |
| 11846-8 | Int. | 2.055 | .3415 | .100 Longer | 5.026 | .250 | 12° x 3/8" | .065 | .080 | 7° Dish | 125 |
| 11700-8 | Int. | 2.055 | .3415 | .200 Longer | 5.140 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 127 |
| 11818-8 | Int. | 2.080 | .3415 | Stock | 4.926 | .250 | 12° x 3/8" | .065 | .080 | Flat Face | 131 |
| 11844-8 | Int. | 2.080 | .3415 | .100 Longer | 5.026 | .250 | 12° x 3/8" | .065 | .080 | 7° Dish | 126 |
| 11858-8 | Int. | 2.080 | .3415 | .200 Longer | 5.140 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 129 |
| 11762-8 | Int. | 2.080 | .3415 | .300 Longer | 5.240 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 131 |
| 11764-8 | Int. | 2.080 | .3415 | .400 Longer | 5.340 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 132 |
| 11512-8 | Int. | 2.080 | .3415 | .500 Longer | 5.440 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 134 |
| 11852-8 | Int. | 2.100 | .3415 | .100 Longer | 5.026 | .250 | 12° x 3/8" | .065 | .080 | 7° Dish | 128 |
| 11862-8 | Int. | 2.100 | .3415 | .200 Longer | 5.140 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 131 |
| 11750-8 | Int. | 2.100 | .3415 | .300 Longer | 5.240 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 132 |
| 11752-8 | Int. | 2.100 | .3415 | .400 Longer | 5.340 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 133 |
| 11510-8 | Int. | 2.100 | .3415 | .500 Longer | 5.440 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 135 |
| 11770-8 | Int. | 2.100 | .3415 | .600 Longer | 5.540 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 137 |
| 11848-8 | Int. | 2.125 | .3415 | .100 Longer | 5.026 | .250 | 12° x 3/8" | .065 | .080 | 7° Dish | 131 |
| 11866-8 | Int. | 2.125 | .3415 | .200 Longer | 5.125 | .250 | 12° x 3/8" | .065 | .080 | 7° Dish | 132 |
| 11754-8 | Int. | 2.125 | .3415 | .300 Longer | 5.240 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 133 |
| 11756-8 | Int. | 2.125 | .3415 | .400 Longer | 5.340 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 134 |
| 11508-8 | Int. | 2.125 | .3415 | .500 Longer | 5.440 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 135 |
| 11768-8 | Int. | 2.125 | .3415 | .600 Longer | 5.540 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 137 |
| 11758-8 | Int. | 2.150 | .3415 | .400 Longer | 5.340 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 133 |
| 11760-8 | Int. | 2.150 | .3415 | .500 Longer | 5.440 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 135 |
| 11766-8 | Int. | 2.150 | .3415 | .600 Longer | 5.540 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 137 |

See page 3 for a description of our valve materials.

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

SMALL BLOCK CHEVROLET

SEVERE DUTY® "PRO FLO" VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Improved Flow with "Pro Flo" Underhead



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11827-8 | Exh. | 1.600 | .3415 | Stock | 4.936 | .250 | Pro Flo: 12° x 3/8" | .085 | .080 | 7° Dish | 98 |
| 11823-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.036 | .250 | Pro Flo: 12° x 3/8" | .085 | .080 | 7° Dish | 100 |
| 11840-8 | Int. | 1.937 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 111 |
| 11830-8 | Int. | 2.020 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 114 |
| 11882-8 | Int. | 2.020 | .3415 | .100 Longer | 5.011 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 115 |
| 11732-8 | Int. | 2.055 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 115 |
| 11824-8 | Int. | 2.055 | .3415 | .100 Longer | 5.011 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 116 |
| 11734-8 | Int. | 2.055 | .3415 | .200 Longer | 5.111 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 117 |
| 11736-8 | Int. | 2.080 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 117 |
| 11772-8 | Int. | 2.080 | .3415 | .100 Longer | 5.011 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 118 |
| 11738-8 | Int. | 2.080 | .3415 | .200 Longer | 5.111 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 119 |
| 11740-8 | Int. | 2.080 | .3415 | .300 Longer | 5.211 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 120 |
| 11742-8 | Int. | 2.100 | .3415 | .100 Longer | 5.011 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 119 |
| 11744-8 | Int. | 2.100 | .3415 | .200 Longer | 5.111 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 120 |
| 11746-8 | Int. | 2.100 | .3415 | .300 Longer | 5.211 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 121 |

SMALL BLOCK CHEVROLET

SEVERE DUTY® VALVES

LEGAL NHRA SUPER STOCK



- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11567-8 | Exh. | 1.500 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .060 | .100 | 7° Dish | 92 |
| 11887-8 | Exh. | 1.500 | .3415 | .100 Longer | 5.036 | .250 | 15° x 1/2" | .085 | .100 | 10° Dish | 94 |
| 11747-8 | Exh. | 1.500 | .3415 | .200 Longer | 5.140 | .290 | 15° x 1/2" | .085 | .100 | 9° Dish | 101 |
| 11540-8 | Int. | 1.720 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 99 |
| 11542-8 | Int. | 1.840 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 106 |
| 11886-8 | Int. | 1.940 | .3415 | .100 Longer | 5.011 | .250 | 10° x 3/8" | .050 | .100 | 5° Dish | 111 |
| 11748-8 | Int. | 1.940 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .050 | .100 | 5° Dish | 115 |

SMALL BLOCK CHEVROLET

EXTREME DUTY EXHAUST VALVES

- ✓ XH-432 XtremeAlloy Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11599-8 | Exh. | 1.600 | .3415 | .050 Longer | 5.015 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 106 |
| 11701-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.065 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 108 |
| 11705-8 | Exh. | 1.600 | .3415 | .200 Longer | 5.165 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 110 |
| 11709-8 | Exh. | 1.600 | .3415 | .300 Longer | 5.265 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 111 |
| 11711-8 | Exh. | 1.600 | .3415 | .400 Longer | 5.365 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 112 |
| 11713-8 | Exh. | 1.625 | .3415 | .100 Longer | 5.065 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 110 |
| 11715-8 | Exh. | 1.625 | .3415 | .200 Longer | 5.165 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 111 |
| 11721-8 | Exh. | 1.625 | .3415 | .300 Longer | 5.265 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 112 |
| 11725-8 | Exh. | 1.625 | .3415 | .400 Longer | 5.365 | .290 | 15° x 1/2" | .080 | .100 | 9° Dish | 113 |

See page 3 for a description of our valve materials.

409 CHEVROLET

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Straight Stems



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11311-8 | Exh. | 1.735 | .3715 | Stock | 5.105 | .225 | 15° x 1/2" | .080 | .100 | 9° Dish | 115 |
| 11313-8 | Exh. | 1.750 | .3715 | Stock | 5.105 | .225 | 15° x 1/2" | .080 | .100 | 9° Dish | 117 |
| 11310-8 | Int. | 2.200 | .3715 | Stock | 5.105 | .225 | 12° x 3/8" | .065 | .080 | 7° Dish | 139 |
| 11312-8 | Int. | 2.250 | .3715 | Stock | 5.105 | .225 | 12° x 3/8" | .065 | .080 | 7° Dish | 141 |

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

BIG BLOCK CHEVROLET

STREET FLO VALVES

STOCK 3/8" STEM DIAMETERS

- ✓ XH-424 Stainless Exhaust Material
- ✓ NK-841 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Improved Flow with "Pro Flo" Underhead



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 10717-8 | Exh. | 1.725 | .3715 | Stock | 5.350 | .220 | Pro Flo: 10° x 3/8" | .060 | .100 | 5° Dish | 120 |
| 10727-8 | Exh. | 1.880 | .3715 | Stock | 5.350 | .220 | Pro Flo: 10° x 3/8" | .060 | .100 | 5° Dish | 131 |
| 10714-8 | Int. | 2.065 | .3715 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 130 |
| 10728-8 | Int. | 2.190 | .3715 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 135 |
| 10726-8 | Int. | 2.250 | .3715 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 138 |

BIG BLOCK CHEVROLET

RACE FLO VALVES

STOCK 3/8" STEM DIAMETER

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Improved Flow with "Pro Flo" Underhead



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11517-8 | Exh. | 1.725 | .3715 | Stock | 5.350 | .220 | Pro Flo: 10° x 3/8" | .060 | .100 | 5° Dish | 120 |
| 11527-8 | Exh. | 1.880 | .3715 | Stock | 5.350 | .220 | Pro Flo: 10° x 3/8" | .060 | .100 | 5° Dish | 131 |
| 11514-8 | Int. | 2.065 | .3715 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 130 |
| 11528-8 | Int. | 2.190 | .3715 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 135 |
| 11526-8 | Int. | 2.250 | .3715 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 138 |

BIG BLOCK CHEVROLET RACE MASTER VALVES STOCK 3/8" STEM DIAMETER

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11509-8 | Exh. | 1.880 | .3715 | Stock | 5.422 | .250 | 15° x 1/2" | .075 | .100 | 9° Dish | 139 |
| 11515-8 | Exh. | 1.880 | .3715 | .100 Longer | 5.522 | .250 | 15° x 1/2" | .075 | .100 | 9° Dish | 141 |
| 11707-8 | Exh. | 1.900 | .3715 | Stock | 5.422 | .250 | 15° x 1/2" | .075 | .100 | 9° Dish | 141 |
| 11723-8 | Exh. | 1.900 | .3715 | .100 Longer | 5.522 | .250 | 15° x 1/2" | .075 | .100 | 9° Dish | 143 |
| 11849-8 | Exh. | 1.940 | .3715 | Stock | 5.422 | .250 | 15° x 1/2" | .075 | .100 | 9° Dish | 144 |
| 11893-8 | Exh. | 1.940 | .3715 | .100 Longer | 5.522 | .250 | 15° x 1/2" | .075 | .100 | 9° Dish | 146 |
| 11718-8 | Int. | 2.190 | .3715 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 150 |
| 11720-8 | Int. | 2.190 | .3715 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 152 |
| 11722-8 | Int. | 2.250 | .3715 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 153 |
| 11724-8 | Int. | 2.250 | .3715 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 155 |
| 11726-8 | Int. | 2.300 | .3715 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 156 |
| 11728-8 | Int. | 2.300 | .3715 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 158 |

See page 3 for a description of our valve materials.

BIG BLOCK CHEVROLET SEVERE DUTY® VALVES STOCK 3/8" STEM DIAMETERS

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



Want a hollow stem Severe Duty® intake? It's as easy as 1-2-3. Refer to Gen II blank P/N 11252H on page 42 to support your custom requirements.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11553-8 | Exh. | 1.720 | .3715 | Stock | 5.354 | .220 | 10° x 3/8" | .065 | .100 | 6° Dish | 122 |
| 11519-8 | Exh. | 1.725 | .3715 | .100 Longer | 5.464 | .220 | 12° x 3/8" | .075 | .100 | 7° Dish | 125 |
| 11563-8 | Exh. | 1.880 | .3715 | Stock | 5.354 | .220 | 10° x 3/8" | .065 | .100 | 6° Dish | 134 |
| 11525-8 | Exh. | 1.880 | .3715 | .100 Longer | 5.464 | .220 | 12° x 3/8" | .075 | .100 | 7° Dish | 138 |
| 11593-8 | Exh. | 1.900 | .3715 | Stock | 5.364 | .220 | 12° x 3/8" | .075 | .100 | 7° Dish | 140 |
| 11535-8 | Exh. | 1.900 | .3715 | .100 Longer | 5.464 | .220 | 12° x 3/8" | .075 | .100 | 7° Dish | 142 |
| 11561-8 | Exh. | 1.940 | .3715 | Stock | 5.364 | .220 | 12° x 3/8" | .075 | .100 | 7° Dish | 143 |
| 11533-8 | Exh. | 1.940 | .3715 | .100 Longer | 5.464 | .220 | 12° x 3/8" | .075 | .100 | 7° Dish | 145 |
| 11836-8 | Int. | 2.065 | .3720 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 131 |
| 11554-8 | Int. | 2.065 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 138 |
| 11520-8 | Int. | 2.190 | .3720 | Stock | 5.218 | .220 | 10° x 3/8" | .050 | .080 | 7° Dish | 145 |
| 11832-8 | Int. | 2.190 | .3720 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 138 |
| 11538-8 | Int. | 2.190 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 146 |
| 11562-8 | Int. | 2.250 | .3720 | Stock | 5.218 | .220 | 10° x 3/8" | .050 | .080 | 7° Dish | 149 |
| 11524-8 | Int. | 2.250 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 153 |
| 11534-8 | Int. | 2.250 | .3720 | .200 Longer | 5.433 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 156 |
| 11530-8 | Int. | 2.300 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 160 |
| 11536-8 | Int. | 2.300 | .3720 | .200 Longer | 5.433 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 168 |
| 11570-8 | Int. | 2.300 | .3720 | .250 Longer | 5.513 | .250 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 171 |

See page 3 for a description of our valve materials.

STAINLESS VALVES

BIG BLOCK CHEVROLET

SEVERE DUTY® "PRO FLO" VALVES

STOCK 3/8" STEM DIAMETERS

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Improved Flow with "Pro Flo" Underhead
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



Want a hollow stem Severe Duty® intake? It's as easy as 1-2-3. Refer to Gen II blank P/N 11252H on page 42 to support your custom requirements.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11835-8 | Exh. | 1.725 | .3715 | Stock | 5.374 | .220 | Pro Flo: 10° x 3/8" | .085 | .100 | 5° Dish | 121 |
| 11831-8 | Exh. | 1.880 | .3715 | Stock | 5.374 | .220 | Pro Flo: 10° x 3/8" | .085 | .100 | 5° Dish | 132 |
| 11836-8 | Int. | 2.065 | .3720 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 131 |
| 11554-8 | Int. | 2.065 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 138 |
| 11832-8 | Int. | 2.190 | .3720 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 138 |
| 11538-8 | Int. | 2.190 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 146 |
| 11524-8 | Int. | 2.250 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 162 |
| 11534-8 | Int. | 2.250 | .3720 | .200 Longer | 5.433 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 164 |
| 11530-8 | Int. | 2.300 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 160 |
| 11536-8 | Int. | 2.300 | .3720 | .200 Longer | 5.433 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 168 |
| 11570-8 | Int. | 2.300 | .3720 | .250 Longer | 5.513 | .250 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 171 |

See page 3 for a description of our valve materials.

BIG BLOCK CHEVROLET

EXTREME DUTY & MARINE VALVES

STOCK 3/8" STEM DIAMETERS

- ✓ XH-432 XtremeAlloy Exhaust Material
- ✓ NK-844 Intake Material
- ✓ Swirl Polished and Fully Machined
- ✓ Chrome Stems and Hard Tips



Want a hollow stem Severe Duty® intake? It's as easy as 1-2-3. Refer to Gen II blank P/N 11252H on page 42 to support your custom requirements.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11587-8 | Exh. | 1.880 | .3715 | Stock | 5.354 | .220 | 10° x 3/8" | .065 | .100 | 6° Dish | 139 |
| 11731-8 | Exh. | 1.880 | .3715 | .100 Longer | 5.454 | .220 | 10° x 3/8" | .065 | .100 | 6° Dish | 142 |
| 11507-8 | Exh. | 1.900 | .3715 | Stock | 5.354 | .220 | 10° x 3/8" | .065 | .100 | 6° Dish | 140 |
| 11733-8 | Exh. | 1.900 | .3715 | .100 Longer | 5.454 | .220 | 10° x 3/8" | .075 | .100 | 6° Dish | 143 |
| 11735-8 | Exh. | 1.940 | .3715 | .100 Longer | 5.454 | .220 | 10° x 3/8" | .065 | .100 | 6° Dish | 144 |
| 11836-8 | Int. | 2.065 | .3720 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 131 |
| 11554-8 | Int. | 2.065 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 138 |
| 11520-8 | Int. | 2.190 | .3720 | Stock | 5.218 | .220 | 10° x 3/8" | .050 | .080 | 7° Dish | 145 |
| 11832-8 | Int. | 2.190 | .3720 | Stock | 5.218 | .220 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 138 |
| 11538-8 | Int. | 2.190 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 146 |
| 11562-8 | Int. | 2.250 | .3720 | Stock | 5.218 | .220 | 10° x 3/8" | .050 | .080 | 7° Dish | 149 |
| 11524-8 | Int. | 2.250 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 153 |
| 11534-8 | Int. | 2.250 | .3720 | .200 Longer | 5.433 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 156 |
| 11530-8 | Int. | 2.300 | .3720 | .100 Longer | 5.325 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 160 |
| 11536-8 | Int. | 2.300 | .3720 | .200 Longer | 5.433 | .220 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 168 |
| 11570-8 | Int. | 2.300 | .3720 | .250 Longer | 5.513 | .250 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | 171 |

See page 3 for a description of our valve materials.

BIG BLOCK CHEVROLET

RACE MASTER VALVES 1 1/32" STEM DIAMETER

- ✓ XH-426 Stainless Exhaust Material
- ✓ Chrome Stems and Hard Tips
- ✓ 1 1/32" Stems for Improved Flow, Lighter Weight

- ✓ NK-842 Stainless Intake Material
- ✓ Swirl Polished and Fully Machined

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11881-8 | Exh. | 1.880 | .3415 | Stock | 5.422 | .250 | 10° x 3/8" | .075 | .100 | 6° Dish | 122 |
| 11717-8 | Exh. | 1.880 | .3415 | Stock | 5.422 | .250 | 25° x 3/8" | .075 | .100 | 20° Dish | 127 |
| 11761-8 | Exh. | 1.880 | .3415 | .100 Longer | 5.522 | .250 | 10° x 3/8" | .075 | .100 | 6° Dish | 124 |
| 11719-8 | Exh. | 1.880 | .3415 | .100 Longer | 5.522 | .250 | 25° x 3/8" | .075 | .100 | 20° Dish | 129 |
| 11883-8 | Exh. | 1.900 | .3415 | Stock | 5.422 | .250 | 10° x 3/8" | .075 | .100 | 5° Dish | 123 |
| 11765-8 | Exh. | 1.900 | .3415 | Stock | 5.422 | .250 | 25° x 3/8" | .075 | .100 | 20° Dish | 128 |
| 11769-8 | Exh. | 1.900 | .3415 | .100 Longer | 5.522 | .250 | 10° x 3/8" | .075 | .100 | 5° Dish | 125 |
| 11775-8 | Exh. | 1.900 | .3415 | .100 Longer | 5.522 | .250 | 25° x 3/8" | .075 | .100 | 20° Dish | 130 |
| 11885-8 | Exh. | 1.940 | .3415 | Stock | 5.422 | .250 | 10° x 3/8" | .075 | .100 | 5° Dish | 124 |
| 11777-8 | Exh. | 1.940 | .3415 | .100 Longer | 5.522 | .250 | 10° x 3/8" | .075 | .100 | 5° Dish | 126 |
| 11872-8 | Int. | 2.190 | .3415 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 139 |
| 11894-8 | Int. | 2.190 | .3415 | .100 Longer | 5.344 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 140 |
| 11874-8 | Int. | 2.250 | .3415 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 140 |
| 11814-8 | Int. | 2.250 | .3415 | .100 Longer | 5.344 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 142 |
| 11868-8 | Int. | 2.250 | .3415 | .250 Longer | 5.494 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 145 |
| 11730-8 | Int. | 2.300 | .3415 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 143 |
| 11816-8 | Int. | 2.300 | .3415 | .100 Longer | 5.344 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 146 |
| 11870-8 | Int. | 2.300 | .3415 | .250 Longer | 5.494 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 147 |

BIG BLOCK CHEVROLET

SEVERE DUTY® VALVES 1 1/32" STEM DIAMETERS

- ✓ XH-428 Stainless Exhaust Material
- ✓ Chrome Stems and Hard Tips

- ✓ NK-844 Stainless Intake Material
- ✓ Swirl Polished and Fully Machined

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11843-8 | Exh. | 1.880 | .3415 | Stock | 5.422 | .250 | 10° x 3/8" | .075 | .100 | 6° Dish | 122 |
| 11815-8 | Exh. | 1.880 | .3415 | .100 Longer | 5.522 | .250 | 10° x 3/8" | .075 | .100 | 6° Dish | 125 |
| 11845-8 | Exh. | 1.880 | .3415 | .100 Longer | 5.522 | .250 | 25° x 3/8" | .075 | .100 | 20° Dish | 130 |
| 11817-8 | Exh. | 1.900 | .3415 | Stock | 5.422 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 122 |
| 11811-8 | Exh. | 1.900 | .3415 | .100 Longer | 5.522 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 126 |
| 11847-8 | Exh. | 1.900 | .3415 | .100 Longer | 5.522 | .250 | 25° x 3/8" | .075 | .100 | 20° Dish | 132 |
| 11803-8 | Exh. | 1.940 | .3415 | Stock | 5.422 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 123 |
| 11809-8 | Exh. | 1.940 | .3415 | .100 Longer | 5.522 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 127 |
| 11800-8 | Int. | 2.190 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 139 |
| 11822-8 | Int. | 2.190 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 140 |
| 11896-8 | Int. | 2.190 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 146 |
| 11802-8 | Int. | 2.250 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 139 |
| 11850-8 | Int. | 2.250 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 142 |
| 11856-8 | Int. | 2.250 | .3415 | .250 Longer | 5.494 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 145 |
| 11898-8 | Int. | 2.250 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 150 |
| 11780-8 | Int. | 2.300 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 143 |
| 11842-8 | Int. | 2.300 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 146 |
| 11784-8 | Int. | 2.300 | .3415 | .200 Longer | 5.444 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 147 |
| 11854-8 | Int. | 2.300 | .3415 | .250 Longer | 5.494 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 148 |
| 11878-8 | Int. | 2.300 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 149 |
| 11838-8 | Int. | 2.325 | .3415 | .250 Longer | 5.509 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 150 |
| 11880-8 | Int. | 2.350 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 152 |

STAINLESS VALVES

BIG BLOCK CHEVROLET EXTREME DUTY & MARINE VALVES 1 1/32" STEM DIAMETERS

- ✓ XH-432 XtremeAlloy Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Reduced Stem Diameter
- ✓ Chrome Stems and Hard Tips
- ✓ Greater Flow and Less Weight
- ✓ Swirl Polished and Fully Machined

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/Grams |
|---|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|-----------|
| 11743-8 | Exh. | 1.880 | .3415 | Stock | 5.422 | .250 | 15° x 1/2" | .075 | .085 | 9° Dish | 133 |
| 12743-8 | Exh. | 1.880 | .3415 | Stock | 5.422 | .250 | 18° x 1/2" | .075 | .085 | 12° Dish | 133 |
| 11737-8 | Exh. | 1.880 | .3415 | .100 Longer | 5.522 | .250 | 15° x 1/2" | .075 | .085 | 9° Dish | 133 |
| 12737-8 | Exh. | 1.880 | .3415 | .100 Longer | 5.522 | .250 | 18° x 1/2" | .075 | .085 | 12° Dish | 133 |
| 11745-8 | Exh. | 1.900 | .3415 | Stock | 5.422 | .250 | 15° x 1/2" | .075 | .085 | 9° Dish | 136 |
| 12745-8 | Exh. | 1.900 | .3415 | Stock | 5.422 | .250 | 18° x 1/2" | .075 | .085 | 12° Dish | 136 |
| 11739-8 | Exh. | 1.900 | .3415 | .100 Longer | 5.522 | .250 | 15° x 1/2" | .075 | .085 | 9° Dish | 136 |
| 12739-8 | Exh. | 1.900 | .3415 | .100 Longer | 5.522 | .250 | 18° x 1/2" | .075 | .085 | 12° Dish | 136 |
| 11773-8 | Exh. | 1.940 | .3415 | Stock | 5.422 | .250 | 15° x 1/2" | .075 | .085 | 9° Dish | 140 |
| 12773-8 | Exh. | 1.940 | .3415 | Stock | 5.422 | .250 | 18° x 1/2" | .075 | .085 | 12° Dish | 140 |
| 11741-8 | Exh. | 1.940 | .3415 | .100 Longer | 5.522 | .250 | 15° x 1/2" | .075 | .085 | 9° Dish | 140 |
| 12741-8 | Exh. | 1.940 | .3415 | .100 Longer | 5.522 | .250 | 18° x 1/2" | .075 | .085 | 12° Dish | 140 |
| Gen II blank P/N 11277 is also available with an 18° back angle, flat face (no dish). Refer to page 42. | | | | | | | | | | | |
| 11800-8 | Int. | 2.190 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 139 |
| 11822-8 | Int. | 2.190 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 140 |
| 11896-8 | Int. | 2.190 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 146 |
| 11802-8 | Int. | 2.250 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 139 |
| 11850-8 | Int. | 2.250 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 142 |
| 11856-8 | Int. | 2.250 | .3415 | .250 Longer | 5.494 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 145 |
| 11898-8 | Int. | 2.250 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 150 |
| 11780-8 | Int. | 2.300 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 143 |
| 11842-8 | Int. | 2.300 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 146 |
| 11784-8 | Int. | 2.300 | .3415 | .200 Longer | 5.444 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 147 |
| 11854-8 | Int. | 2.300 | .3415 | .250 Longer | 5.494 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 148 |
| 11878-8 | Int. | 2.300 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 149 |
| 11838-8 | Int. | 2.325 | .3415 | .250 Longer | 5.509 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 150 |
| 11880-8 | Int. | 2.350 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 152 |

BIG BLOCK CHEVROLET

BRODIX BB-4/SAR, EDELBROCK VICTOR CHEVROLET #12363425 HEADS SEVERE DUTY® VALVES 1 1/32" STEMS

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Swirl Polished and Fully Machined
- ✓ Chrome Stems and Hard Tips

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|-----------|
| 11845-8 | Exh. | 1.880 | .3415 | .100 Longer | 5.522 | .250 | 25° x 3/8" | .075 | .100 | 20° Dish | 130 |
| 11847-8 | Exh. | 1.900 | .3415 | .100 Longer | 5.522 | .250 | 25° x 3/8" | .075 | .100 | 20° Dish | 132 |
| 11896-8 | Int. | 2.190 | .3415 | .350 Longer | 5.595 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 146 |
| 11898-8 | Int. | 2.250 | .3415 | .350 Longer | 5.605 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 148 |
| 11878-8 | Int. | 2.300 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 148 |
| 11880-8 | Int. | 2.350 | .3415 | .350 Longer | 5.610 | .250 | 12° x 3/8" | .065 | .100 | 7° Dish | 150 |

DART BIG BLOCK PRO I® & 320 / 360 HEADS SEVERE DUTY® VALVES 1 1/32" STEM DIAMETERS

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11843-8 | Exh. | 1.880 | .3415 | Stock | 5.422 | .250 | 10° x 3/8" | .075 | .100 | 6° Dish | 122 |
| 11817-8 | Exh. | 1.900 | .3415 | Stock | 5.422 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 122 |
| 11856-8 | Int. | 2.250 | .3415 | .250 Longer | 5.494 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 145 |
| 11854-8 | Int. | 2.300 | .3415 | .250 Longer | 5.494 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 147 |

BIG BLOCK CHEVROLET

PONTIAC "PRO STOCK" & DART "BIG CHIEF"

EXTREME DUTY & SEVERE DUTY® VALVES 1 1/32" STEMS

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------------------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| EXTREME DUTY VALVES | | | | | | | | | | | |
| 11597-8 | Exh. | 1.900 | .3415 | Stock | 6.450 | .290 | 15° x 1/2" | .085 | .080 | 9° Dish | 143 |
| SEVERE DUTY® VALVES | | | | | | | | | | | |
| 11581-8 | Exh. | 1.900 | .3415 | Stock | 6.380 | .250 | 25° x 3/8" | .085 | .100 | 20° Dish | 144 |
| 11583-8 | Exh. | 1.940 | .3415 | Stock | 6.400 | .250 | 25° x 3/8" | .085 | .100 | 20° Dish | 150 |
| 11580-8 | Int. | 2.325 | .3415 | Stock | 6.590 | .250 | 10° x 3/8" | .050 | .075 | 5° Dish | 165 |
| 11582-8 | Int. | 2.400 | .3415 | Stock | 6.600 | .250 | 10° x 3/8" | .050 | .075 | 5° Dish | 168 |

BIG BLOCK CHEVROLET

SEVERE DUTY® VALVES 5/16" (.311") STEM DIAMETERS

These .311" stem valves are ONLY available with Bead Loc® keeper grooves. Bead Loc® valve locks are REQUIRED.

Want a hollow stem Severe Duty® intake? It's as easy as 1-2-3. Refer to Gen II blank P/N 11264H on page 42 to support your custom requirements.



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|-------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 12843-8 | Exh. | 1.880 | .3110 | Stock | 5.422 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 107 |
| 12815-8 | Exh. | 1.880 | .3110 | .100 Longer | 5.522 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 110 |
| 12817-8 | Exh. | 1.900 | .3110 | Stock | 5.422 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 108 |
| 12811-8 | Exh. | 1.900 | .3110 | .100 Longer | 5.522 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 111 |
| 12803-8 | Exh. | 1.940 | .3110 | Stock | 5.422 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 109 |
| 12809-8 | Exh. | 1.940 | .3110 | .100 Longer | 5.522 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 112 |
| 12802-8 | Int. | 2.250 | .3110 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 122 |
| 12850-8 | Int. | 2.250 | .3110 | .100 Longer | 5.344 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 125 |
| 12850H-8 | Int. | 2.250 | .3110 | .100 Longer | 5.344 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 113 |
| Hollow Stem | | | | | | | | | | | |
| 12856-8 | Int. | 2.250 | .3110 | .250 Longer | 5.494 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 128 |
| 12856H-8 | Int. | 2.250 | .3110 | .250 Longer | 5.494 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 116 |
| Hollow Stem | | | | | | | | | | | |
| 12898-8 | Int. | 2.250 | .3110 | .350 Longer | 5.594 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 132 |
| 12780-8 | Int. | 2.300 | .3110 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 126 |
| 12842-8 | Int. | 2.300 | .3110 | .100 Longer | 5.344 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 128 |
| 12784-8 | Int. | 2.300 | .3110 | .200 Longer | 5.444 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 129 |
| 12854-8 | Int. | 2.300 | .3110 | .250 Longer | 5.494 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 130 |
| 12878-8 | Int. | 2.300 | .3110 | .350 Longer | 5.594 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 133 |
| 12838-8 | Int. | 2.325 | .3110 | .250 Longer | 5.594 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 134 |
| 12880-8 | Int. | 2.350 | .3110 | .350 Longer | 5.594 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 135 |

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

Note: New part numbers are **ITALICIZED**.

STAINLESS VALVES

CHRYSLER / DODGE 5.7 & 6.1L HEMI RACE FLO & RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Swirl Polished & Fully Machined
- ✓ Improved Flow with "Pro Flo" Underhead

Must use factory locks for triple grooves and use Manley's Bead Loc® P/N 13093-16 with the Bead Loc® single radius groove.



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|---|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| Chrysler HEMI 5.7L (Thru 2008) w/ TRIPLE GROOVE | | | | | | | | | | | |
| 11665-8 | Exh. | 1.555" | .3125" | Stock | 4.845" | .120 | 25° x 1/2" | .065 | .100 | 20° Dish | 88 |
| 11667-8 | Exh. | 1.575" | .3125" | Stock | 4.845" | .120 | 25° x 1/2" | .065 | .100 | 20° Dish | 90 |
| 11664-8 | Int. | 2.000" | .3125" | Stock | 4.955" | .120 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 103 |
| 11666-8 | Int. | 2.020" | .3125" | Stock | 4.955" | .120 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 104 |
| 11666H-8 | Int. | 2.020" | .3125" | Stock | 4.955" | .120 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 92 |
| Hollow Stem | | | | | | | | | | | |
| Chrysler HEMI 5.7L (Thru 2008) w/ BEAD LOC® GROOVE | | | | | | | | | | | |
| 11665B-8 | Exh. | 1.555" | .3125" | Stock | 4.845" | .135 | 25° x 1/2" | .065 | .100 | 20° Dish | 88 |
| 11667B-8 | Exh. | 1.575" | .3125" | Stock | 4.845" | .135 | 25° x 1/2" | .065 | .100 | 20° Dish | 90 |
| 11664B-8 | Int. | 2.000" | .3125" | Stock | 4.955" | .135 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 103 |
| 11666B-8 | Int. | 2.020" | .3125" | Stock | 4.955" | .135 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 104 |
| 11666HB-8 | Int. | 2.020" | .3125" | Stock | 4.955" | .135 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 92 |
| Hollow Stem | | | | | | | | | | | |
| Chrysler HEMI 5.7L (2009 - Up) w/ TRIPLE GROOVE | | | | | | | | | | | |
| 11695-8 | Exh. | 1.555" | .3125" | Stock | 5.125" | .120 | 25° x 1/2" | .065 | .100 | 20° Dish | 95 |
| 11697-8 | Exh. | 1.575" | .3125" | Stock | 5.125" | .120 | 25° x 1/2" | .065 | .100 | 20° Dish | 97 |
| 11694-8 | Int. | 2.050" | .3125" | Stock | 5.176" | .120 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 111 |
| 11696-8 | Int. | 2.080" | .3125" | Stock | 5.176" | .120 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 113 |
| 11696H-8 | Int. | 2.080" | .3125" | Stock | 5.176" | .120 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 101 |
| Hollow Stem | | | | | | | | | | | |
| Chrysler HEMI 5.7L (2009 - Up) w/ BEAD LOC® GROOVE | | | | | | | | | | | |
| 11695B-8 | Exh. | 1.555" | .3125" | Stock | 5.125" | .135 | 25° x 1/2" | .065 | .100 | 20° Dish | 95 |
| 11697B-8 | Exh. | 1.575" | .3125" | Stock | 5.125" | .135 | 25° x 1/2" | .065 | .100 | 20° Dish | 97 |
| 11694B-8 | Int. | 2.050" | .3125" | Stock | 5.176" | .135 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 111 |
| 11696B-8 | Int. | 2.080" | .3125" | Stock | 5.176" | .135 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 113 |
| 11696HB-8 | Int. | 2.080" | .3125" | Stock | 5.176" | .135 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 101 |
| Hollow Stem | | | | | | | | | | | |
| Chrysler HEMI 6.1L w/ TRIPLE GROOVE | | | | | | | | | | | |
| 11669-8 | Exh. | 1.595" | .3125" | Stock | 4.925" | .120 | 25° x 1/2" | .065 | .100 | 20° Dish | 91 |
| 11671-8 | Exh. | 1.625" | .3125" | Stock | 4.925" | .120 | 25° x 1/2" | .065 | .100 | 20° Dish | 93 |
| 11668-8 | Int. | 2.080" | .3125" | Stock | 4.990" | .120 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 108 |
| 11670-8 | Int. | 2.100" | .3125" | Stock | 4.990" | .120 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 111 |
| 11670H-8 | Int. | 2.100" | .3125" | Stock | 4.990" | .120 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 99 |
| Hollow Stem | | | | | | | | | | | |
| Chrysler HEMI 6.1L w/ BEAD LOC® GROOVE | | | | | | | | | | | |
| 11669B-8 | Exh. | 1.595" | .3125" | Stock | 4.925" | .135 | 25° x 1/2" | .065 | .100 | 20° Dish | 91 |
| 11671B-8 | Exh. | 1.625" | .3125" | Stock | 4.925" | .135 | 25° x 1/2" | .065 | .100 | 20° Dish | 93 |
| 11668B-8 | Int. | 2.080" | .3125" | Stock | 4.990" | .135 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 108 |
| 11670B-8 | Int. | 2.100" | .3125" | Stock | 4.990" | .135 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 111 |
| 11670HB-8 | Int. | 2.100" | .3125" | Stock | 4.990" | .135 | Pro Flo: 12° x 3/8" | .050 | .085 | 7° Dish | 99 |
| Hollow Stem | | | | | | | | | | | |

Manley Performance recommends that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory sizes may vary depending on the specific engine.

CHRYSLER 340 - 360 RACE SERIES VALVES & SEVERE DUTY® "PRO FLO" VALVES

- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ W-2 Valves are "Pro Flo" Underhead



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|---|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| W-2 LATE MODEL STOCK P/N P5249769 CYLINDER HEAD | | | | | | | | | | | |
| 11703-8 | Exh. | 1.600 | .3415 | Stock | 5.255 | .290 | Pro Flo: 22° x 1/2" | .095 | .080 | 17° Dish | 111 |
| 11702-8 | Int. | 2.020 | .3415 | Stock | 5.240 | .290 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | 125 |
| P/N 11703-8 exhaust is a Race-Flo. P/N 11702-8 intake is a Severe Duty Pro-Flo. | | | | | | | | | | | |
| W-2 CYLINDER HEAD SEVERE DUTY® "PRO FLO" VALVES | | | | | | | | | | | |
| 11549-8 | Exh. | 1.600 | .3715 | .150 Longer | 5.075 | .220 | Pro Flo: 12° x 3/8" | .085 | .100 | 7° Dish | 107 |
| 11550-8 | Int. | 2.020 | .3720 | .150 Longer | 5.050 | .220 | Pro Flo: 12° x 7/16" | .050 | .080 | 7° Dish | 123 |
| STOCK CYLINDER HEAD RACE MASTER VALVES | | | | | | | | | | | |
| 11781-8 | Exh. | 1.600 | .3715 | Stock | 4.970 | .225 | 15° x 1/2" | .080 | .100 | 9° Dish | 104 |
| 11783-8 | Exh. | 1.625 | .3715 | Stock | 4.970 | .225 | 15° x 1/2" | .080 | .100 | 9° Dish | 105 |
| 11782-8 | Int. | 2.020 | .3715 | Stock | 4.980 | .225 | 12° x 3/8" | .050 | .080 | 7° Dish | 118 |

CHRYSLER 361 - 383 426 WEDGE - 440 RACE FLO & RACE MASTER VALVES



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11859-8 | Exh. | 1.740 | .3720 | Stock | 4.908 | .275 | Pro Flo: 10° x 3/8" | .085 | .100 | 5° Dish | 116 |
| 11307-8 | Exh. | 1.740 | .3715 | .100 Longer | 5.010 | .275 | 15° x 1/2" | .080 | .100 | 9° Dish | 121 |
| 11891-8 | Exh. | 1.810 | .3720 | Stock | 4.908 | .275 | Pro Flo: 10° x 3/8" | .085 | .100 | 5° Dish | 121 |
| 11309-8 | Exh. | 1.810 | .3715 | .100 Longer | 5.010 | .275 | 15° x 1/2" | .080 | .100 | 9° Dish | 126 |
| 11892-8 | Int. | 2.080 | .3720 | Stock | 4.873 | .275 | Pro Flo: 10° x 3/8" | .050 | .085 | 5° Dish | 122 |
| 11308-8 | Int. | 2.080 | .3715 | .100 Longer | 5.000 | .275 | 12° x 3/8" | .060 | .080 | 7° Dish | 125 |
| 11890-8 | Int. | 2.140 | .3720 | Stock | 4.873 | .275 | Pro Flo: 10° x 3/8" | .050 | .085 | 5° Dish | 126 |
| 11314-8 | Int. | 2.140 | .3715 | .100 Longer | 5.000 | .275 | 12° x 3/8" | .060 | .080 | 7° Dish | 131 |
| 11388-8 | Int. | 2.180 | .3715 | .100 Longer | 5.000 | .275 | 12° x 3/8" | .060 | .080 | 7° Dish | 134 |

SEVERE DUTY® "PRO FLO" VALVES

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11841-8 | Exh. | 1.740 | .3720 | Stock | 4.908 | .275 | Pro Flo: 10° x 3/8" | .085 | .100 | 5° Dish | 116 |
| 11839-8 | Exh. | 1.810 | .3720 | Stock | 4.908 | .275 | Pro Flo: 10° x 3/8" | .085 | .100 | 5° Dish | 121 |
| 11833-8 | Exh. | 1.880 | .3720 | Stock | 4.908 | .275 | Pro Flo: 10° x 3/8" | .085 | .100 | 5° Dish | 126 |
| 11876-8 | Int. | 2.080 | .3720 | Stock | 4.873 | .275 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 122 |
| 11834-8 | Int. | 2.140 | .3720 | Stock | 4.873 | .275 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 126 |

See page 3 for a description of our valve materials.

STAINLESS VALVES

CHRYSLER 440-1

"INDY CYLINDER HEADS"

RACE MASTER VALVES & SEVERE DUTY® VALVES

- ✓ Swirl Polished
- ✓ Fully Machined
- ✓ Chrome Stems
- ✓ Hard Tips

Manufactured specifically for Indy Cylinder Head's own 440-1 aluminum or cast iron head.



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|---------------------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| RACE MASTER VALVES | | | | | | | | | | | |
| 11381-8 | Exh. | 1.810 | .3415 | Stock | 5.400 | .250 | 10° x 3/8" | .075 | .100 | 6° Dish | 118 |
| 11380-8 | Int. | 2.190 | .3415 | Stock | 5.344 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 134 |
| 11382-8 | Int. | 2.250 | .3415 | Stock | 5.344 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 136 |
| SEVERE DUTY VALVES | | | | | | | | | | | |
| 11813-8 | Exh. | 1.810 | .3415 | Stock | 5.369 | .250 | 12° x 3/8" | .075 | .100 | 7° Dish | 115 |
| 11822-8 | Int. | 2.190 | .3415 | Stock | 5.344 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 140 |
| 11850-8 | Int. | 2.250 | .3415 | Stock | 5.344 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 142 |

See page 3 for a description of our valve materials.

DODGE VIPER V-10

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Swirl Polished
- ✓ Fully Machined
- ✓ Chrome Stems
- ✓ Hard Tips
- ✓ Bead Loc® keeper grooves for use with the factory valve locks or Manley .3110" stem Bead Loc® valve locks.



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11641-10 | Exh. | 1.580 | .3110 | Stock | 5.770 | .110 | 18° x 1/2" | .075 | .100 | 12° Dish | 101 |
| 11643-10 | Exh. | 1.600 | .3110 | Stock | 5.770 | .110 | 18° x 1/2" | .075 | .100 | 12° Dish | 102 |
| 11645-10 | Exh. | 1.600 | .3110 | .100 Longer | 5.870 | .110 | 18° x 1/2" | .075 | .100 | 12° Dish | 103 |
| 11647-10 | Exh. | 1.600 | .3110 | .200 Longer | 5.970 | .110 | 18° x 1/2" | .075 | .100 | 12° Dish | 104 |
| 11642-10 | Int. | 1.920 | .3110 | Stock | 5.728 | .110 | 12° x 3/8" | .050 | .080 | 7° Dish | 105 |
| 11644-10 | Int. | 2.020 | .3110 | Stock | 5.728 | .110 | 12° x 3/8" | .050 | .080 | 7° Dish | 112 |
| 11646-10 | Int. | 2.020 | .3110 | .100 Longer | 5.828 | .110 | 12° x 3/8" | .050 | .080 | 7° Dish | 113 |
| 11648-10 | Int. | 2.020 | .3110 | .200 Longer | 5.928 | .110 | 12° x 3/8" | .050 | .080 | 7° Dish | 114 |
| 11660-10 | Int. | 2.055 | .3110 | .100 Longer | 5.828 | .110 | 12° x 3/8" | .050 | .080 | 7° Dish | 114 |

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

CHRYSLER 426 HEMI

RACE MASTER & SEVERE DUTY® VALVES

- ✓ XH-426 Race Master Stainless Exhaust Material
- ✓ NK-844 Severe Duty® Stainless Intake Material
- ✓ NK-842 Race Master Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



"B" suffix indicates a Bead Loc® keeper groove. Bead Loc® valve locks are required.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|---------------------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| RACE MASTER VALVES | | | | | | | | | | | |
| 11315-8 | Exh. | 1.900 | .3075 | Stock | 4.855 | .200 | 22° x 3/8" | .070 | .100 | 18° Dish | 104 |
| 11315B-8 | Exh. | 1.900 | .3075 | Stock | 4.855 | .200 | 22° x 3/8" | .070 | .100 | 18° Dish | 104 |
| 11317-8 | Exh. | 1.940 | .3075 | Stock | 4.865 | .200 | 22° x 3/8" | .070 | .100 | 18° Dish | 107 |
| 11317B-8 | Exh. | 1.940 | .3075 | Stock | 4.865 | .200 | 22° x 3/8" | .070 | .100 | 18° Dish | 107 |
| 11901-8 | Exh. | 1.900 | .3100 | Stock | 4.915 | .250 | 22° x 1/4" | .075 | .100 | 17° Dish | 132 |
| 11905-8 | Exh. | 1.940 | .3100 | Stock | 4.915 | .250 | 22° x 1/4" | .075 | .100 | 17° Dish | 133 |
| SEVERE DUTY VALVES | | | | | | | | | | | |
| 11902-8 | Int. | 2.200 | .3085 | Stock | 5.405 | .200 | 24° x 3/4" | .060 | .095 | 20° Dish | 133 |
| 11902B-8 | Int. | 2.200 | .3085 | Stock | 5.405 | .200 | 24° x 3/4" | .060 | .095 | 20° Dish | 133 |
| 11904-8 | Int. | 2.250 | .3085 | Stock | 5.424 | .200 | 24° x 3/4" | .060 | .095 | 20° Dish | 136 |
| 11904B-8 | Int. | 2.250 | .3085 | Stock | 5.424 | .200 | 24° x 3/4" | .060 | .095 | 20° Dish | 136 |
| 11906-8 | Int. | 2.250 | .3085 | .050 Longer | 5.474 | .200 | 24° x 3/4" | .060 | .095 | 20° Dish | 137 |
| 11906B-8 | Int. | 2.250 | .3085 | .050 Longer | 5.474 | .200 | 24° x 3/4" | .060 | .095 | 20° Dish | 137 |
| 11908-8 | Int. | 2.250 | .3085 | .100 Longer | 5.524 | .200 | 24° x 3/4" | .060 | .095 | 20° Dish | 138 |
| 11908B-8 | Int. | 2.250 | .3085 | .100 Longer | 5.524 | .200 | 24° x 3/4" | .060 | .095 | 20° Dish | 138 |
| RACE MASTER VALVES | | | | | | | | | | | |
| 11516-8 | Int. | 2.200 | .3100 | Stock | 5.490 | .250 | 24° x 3/4" | .060 | .080 | 19° Dish | 128 |
| 11518-8 | Int. | 2.250 | .3100 | Stock | 5.490 | .250 | 24° x 3/4" | .060 | .080 | 19° Dish | 131 |

TOP FUEL & FUNNY CAR

EXTREME DUTY EXHAUST VALVES

- ✓ XH-432 XtremeAlloy Material
- ✓ Chrome Stems and Swirl Polished
- ✓ Hard Tips



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|-----------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| 11837-8 | Exh. | 1.950 | .3715 | .100 Longer | 5.020 | .250 | 22° x 1/2" | .100 | .100 | 15° Dish | 166 |
| 11729B-8* | Exh. | 1.950 | .3715 | .200 Longer | 5.120 | .250 | 22° x 1/2" | .100 | .100 | 15° Dish | 169 |
| 11855-8 | Exh. | 2.000 | .3715 | .100 Longer | 5.020 | .250 | 22° x 1/2" | .080 | .125 | 15° Dish | 165 |
| 11895-8* | Exh. | 2.000 | .3715 | * | 5.315 | * | 22° x 1/2" | .090 | .110 | 15° Dish | 169 |

All valves above except 11855 have a 55° seat angle.

* Valve 11895 is stocked at the O/A length listed above with no keeper grooves.

Please specify the overall length and groove location you require. There is no charge for these machining operations.
Valve 11729B has a Bead Loc® keeper groove. Bead Loc® valve locks are required.

STAINLESS VALVES

FORD 4.6L & 5.4L SOHC (2 VALVE)

RACE MASTER VALVES

Must use factory locks for triple grooves and use Manley's Bead Loc® P/N 13089-16 with the Bead Loc® single radius groove.



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/Grams |
|---|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|-----------|
| 1999 AND LATER w/ TRIPLE GROOVE | | | | | | | | | | | |
| 11637-8 | Exh. | 36.0 mm | .2740 | Stock | 4.650 | .470 | 15° x 1/2" | .060 | .080 | 9° Dish | 66 |
| 11639-8 | Exh. | 37.0 mm | .2740 | Stock | 4.650 | .470 | 15° x 1/2" | .060 | .080 | 9° Dish | 68 |
| 1999 AND LATER w/ BEAD LOC® GROOVE | | | | | | | | | | | |
| 11637B-8 | Exh. | 36.0 mm | .2740 | Stock | 4.650 | .485 | 15° x 1/2" | .060 | .080 | 9° Dish | 66 |
| 11639B-8 | Exh. | 37.0 mm | .2740 | Stock | 4.650 | .485 | 15° x 1/2" | .060 | .080 | 9° Dish | 68 |
| 11636B-8 | Int. | 44.5 mm | .2750 | Stock | 4.705 | .485 | 10° x 3/8" | .050 | .080 | 5° Dish | 76 |
| 11640B-8 | Int. | 45.5 mm | .2750 | Stock | 4.705 | .485 | 10° x 3/8" | .050 | .080 | 5° Dish | 78 |
| 1996 - 1998 w/ TRIPLE GROOVE | | | | | | | | | | | |
| 11635-8 | Exh. | 34.0 mm | .2740 | Stock | 4.650 | .470 | 15° x 1/2" | .060 | .080 | 9° Dish | 62 |
| 11637-8* | Exh. | 36.0 mm | .2740 | Stock | 4.650 | .470 | 15° x 1/2" | .060 | .080 | 9° Dish | 66 |
| 11634-8 | Int. | 44.5 mm | .2750 | Stock | 4.630 | .470 | 10° x 3/8" | .050 | .080 | 5° Dish | 77 |
| 11638-8* | Int. | 46.83 mm | .2750 | Stock | 4.630 | .470 | 10° x 3/8" | .050 | .080 | 5° Dish | 82 |
| 1996 - 1998 w/ BEAD LOC® GROOVE | | | | | | | | | | | |
| 11635B-8 | Exh. | 34.0 mm | .2740 | Stock | 4.650 | .485 | 15° x 1/2" | .060 | .080 | 9° Dish | 62 |
| 11637B-8* | Exh. | 36.0 mm | .2740 | Stock | 4.650 | .485 | 15° x 1/2" | .060 | .080 | 9° Dish | 66 |
| 11634B-8 | Int. | 44.5 mm | .2750 | Stock | 4.630 | .485 | 10° x 3/8" | .050 | .080 | 5° Dish | 77 |
| 11638B-8* | Int. | 46.83 mm | .2750 | Stock | 4.630 | .485 | 10° x 3/8" | .050 | .080 | 5° Dish | 82 |

* Part numbers 11637-8, 11637B-8, 11638-8 and 11638B-8 are for the Ford Racing M-6049-D46 cylinder head.

FORD 4.6L & 5.4L DOHC (3 VALVE)

RACE MASTER VALVES & EXTREME DUTY VALVES



Must use factory locks for triple grooves and use Manley's Bead Loc® P/N 13088-24 with the Bead Loc® single radius groove.

These Manley valves are boxed in sets of 8 pieces. Please order two boxes of intakes and one box of exhausts to fit your engine.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/Grams |
|--|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|-----------|
| EXTREME DUTY VALVES w/ TRIPLE GROOVE | | | | | | | | | | | |
| 11631-8 | Exh. | 37.5 mm | .2345 | Stock | 4.585 | .380 | 25° x 11/32" | .080 | .100 | 20° Dish | 68 |
| 11633-8 | Exh. | 38.5 mm | .2345 | Stock | 4.585 | .380 | 25° x 11/32" | .080 | .100 | 20° Dish | 70 |
| EXTREME DUTY VALVES w/ BEAD LOC® GROOVE | | | | | | | | | | | |
| 11631B-8 | Exh. | 37.5 mm | .2345 | Stock | 4.585 | .395 | 25° x 11/32" | .080 | .100 | 20° Dish | 68 |
| 11633B-8 | Exh. | 38.5 mm | .2345 | Stock | 4.585 | .395 | 25° x 11/32" | .080 | .100 | 20° Dish | 70 |
| RACE MASTER VALVES w/ TRIPLE GROOVE | | | | | | | | | | | |
| 11630-8 | Int. | 34 mm | .2355 | Stock | 4.620 | .315 | 12° x 5/16" | .065 | .100 | 8° Dish | 53 |
| 11632-8 | Int. | 35 mm | .2355 | Stock | 4.620 | .315 | 12° x 5/16" | .065 | .100 | 8° Dish | 54 |
| RACE MASTER VALVES w/ BEAD LOC® GROOVE | | | | | | | | | | | |
| 11630B-8 | Int. | 34 mm | .2355 | Stock | 4.620 | .330 | 12° x 5/16" | .065 | .100 | 8° Dish | 53 |
| 11632B-8 | Int. | 35 mm | .2355 | Stock | 4.620 | .330 | 12° x 5/16" | .065 | .100 | 8° Dish | 54 |

STAINLESS VALVES

FORD 4.6L & 5.4L DOHC (4 VALVE)

RACE MASTER VALVES

Must use factory locks for triple grooves and use Manley's Bead Loc® P/N 13089-32 with the Bead Loc® single radius groove.

These Manley valves are boxed in sets of 8 pieces. Please order two boxes of both intakes and exhausts to fit your engine.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|-------------------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| TRIPLE GROOVE | | | | | | | | | | | |
| 11615-8 | Exh. | 30 mm | .2740 | Stock | 4.587 | .425 | 15° x 1/2" | .050 | .080 | 9° Dish | 53 |
| 11617-8 | Exh. | 31 mm | .2740 | Stock | 4.587 | .425 | 15° x 1/2" | .050 | .080 | 9° Dish | 55 |
| BEAD LOC® GROOVE | | | | | | | | | | | |
| 11615B-8 | Exh. | 30 mm | .2740 | Stock | 4.587 | .440 | 15° x 1/2" | .050 | .080 | 9° Dish | 53 |
| 11617B-8 | Exh. | 31 mm | .2740 | Stock | 4.587 | .440 | 15° x 1/2" | .050 | .080 | 9° Dish | 55 |
| 11616B-8 | Int. | 37 mm | .2750 | Stock | 5.339 | .620 | 10° x 3/8" | .045 | .080 | 5° Dish | 68 |
| 11618B-8 | Int. | 38 mm | .2750 | Stock | 5.339 | .620 | 10° x 3/8" | .045 | .080 | 5° Dish | 70 |

FORD "COYOTE" 5.0L DOHC (4 VALVE)

RACE MASTER VALVES

Must use factory locks for triple grooves and use Manley's Bead Loc® P/N 13086-32 with the Bead Loc® single radius groove.

These Manley valves are boxed in sets of 8 pieces. Please order two boxes of both intakes and exhausts to fit your engine.



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|-------------------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| TRIPLE GROOVE | | | | | | | | | | | |
| 11623-8 | Exh. | 31mm | .2345 | Stock | 4.274 | .305 | 30° x 11/32" | .050 | .080 | 25° Dish | TBA |
| 11625-8 | Exh. | 31.5mm | .2345 | Stock | 4.274 | .305 | 30° x 11/32" | .050 | .080 | 25° Dish | TBA |
| 11627-8 | Exh. | 32mm | .2345 | Stock | 4.274 | .305 | 30° x 11/32" | .050 | .080 | 25° Dish | TBA |
| 11622-8* | Int. | 37mm | .2345 | Stock | 4.722 | .365 | 10° x 5/16" | .045 | .080 | 5° Dish | TBA |
| 11624-8* | Int. | 37.5mm | .2345 | Stock | 4.722 | .365 | 10° x 5/16" | .045 | .080 | 5° Dish | TBA |
| 11626-8* | Int. | 38mm | .2345 | Stock | 4.722 | .365 | 10° x 5/16" | .045 | .080 | 5° Dish | TBA |
| BEAD LOC® GROOVE | | | | | | | | | | | |
| 11623B-8 | Exh. | 31mm | .2345 | Stock | 4.274 | .320 | 30° x 11/32" | .050 | .080 | 25° Dish | TBA |
| 11625B-8 | Exh. | 31.5mm | .2345 | Stock | 4.274 | .320 | 30° x 11/32" | .050 | .080 | 25° Dish | TBA |
| 11627B-8 | Exh. | 32mm | .2345 | Stock | 4.274 | .320 | 30° x 11/32" | .050 | .080 | 25° Dish | TBA |
| 11622B-8* | Int. | 37mm | .2345 | Stock | 4.722 | .380 | 10° x 5/16" | .045 | .080 | 5° Dish | TBA |
| 11624B-8* | Int. | 37.5mm | .2345 | Stock | 4.722 | .380 | 10° x 5/16" | .045 | .080 | 5° Dish | TBA |
| 11626B-8* | Int. | 38mm | .2345 | Stock | 4.722 | .380 | 10° x 5/16" | .045 | .080 | 5° Dish | TBA |

FORD "RAPTOR" 6.2L SOHC (2 VALVE)

RACE MASTER VALVES



Must use factory locks for triple grooves and use Manley's Bead Loc® P/N 13087-16 with the Bead Loc® single radius groove.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|-------------------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| TRIPLE GROOVE | | | | | | | | | | | |
| 11611-8 | Exh. | 42mm | .3120 | Stock | 5.356 | .110 | 25° x 7/16" | .060 | .100 | 20° Dish | TBA |
| 11613-8 | Exh. | 43mm | .3120 | Stock | 5.356 | .110 | 25° x 7/16" | .060 | .100 | 20° Dish | TBA |
| 11610-8* | Int. | 53.5mm | .3122 | Stock | 5.424 | .110 | 12° x 5/16" | .050 | .080 | 7° Dish | TBA |
| 11612-8* | Int. | 54.5mm | .3122 | Stock | 5.424 | .110 | 12° x 5/16" | .050 | .080 | 7° Dish | TBA |
| 11612H-8* | Int. | 54.5mm | .3122 | Stock | 5.424 | .110 | 12° x 5/16" | .050 | .080 | 7° Dish | TBA |
| Hollow Stem | | | | | | | | | | | |
| BEAD LOC® GROOVE | | | | | | | | | | | |
| 11611B-8 | Exh. | 42mm | .3120 | Stock | 5.356 | .125 | 25° x 7/16" | .060 | .100 | 20° Dish | TBA |
| 11613B-8 | Exh. | 43mm | .3120 | Stock | 5.356 | .125 | 25° x 7/16" | .060 | .100 | 20° Dish | TBA |
| 11610B-8* | Int. | 53.5mm | .3122 | Stock | 5.424 | .125 | 12° x 5/16" | .050 | .080 | 7° Dish | TBA |
| 11612B-8* | Int. | 54.5mm | .3122 | Stock | 5.424 | .125 | 12° x 5/16" | .050 | .080 | 7° Dish | TBA |
| 11612HB-8* | Int. | 54.5mm | .3122 | Stock | 5.424 | .125 | 12° x 5/16" | .050 | .080 | 7° Dish | TBA |
| Hollow Stem | | | | | | | | | | | |

* Intakes have backcut - .050" x 30°

STAINLESS VALVES

VALVES

FORD 2300

"ESSLINGER" RACE MASTER VALVES



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|---|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| SEMI-FINISHED VALVES FOR "ESSLINGER" HEADS | | | | | | | | | | | |
| 11791-4 | Exh. | 1.590 | .3415 | * | 4.800 | * | 15° x 1/2" | .060 | .100 | 9° Dish | 105 |
| FINISHED VALVES FOR "ESSLINGER" FLAT TAPPET APPLICATIONS | | | | | | | | | | | |
| 11793-4 | Exh. | 1.590 | .3415 | Stock | 4.800 | .550 | 15° x 1/2" | .060 | .100 | 9° Dish | 104 |
| 11792-4 | Int. | 1.890 | .3415 | Stock | 4.800 | .550 | 10° x 3/8" | .050 | .080 | 5° Dish | 109 |
| FINISHED VALVES FOR "ESSLINGER" ROLLER TAPPET APPLICATIONS | | | | | | | | | | | |
| 11795-4 | Exh. | 1.590 | .3415 | Stock | 4.800 | .400 | 15° x 1/2" | .060 | .100 | 9° Dish | 104 |
| 11794-4 | Int. | 1.890 | .3415 | Stock | 4.800 | .400 | 10° x 3/8" | .050 | .080 | 5° Dish | 109 |

Valves 11790 and 11791 have hard tips but no grooves. Use P/N 04008 to order custom grooved valves.

FORD 289 - 302 - 351W

BUDGET PERFORMANCE, STREET FLO, & RACE FLO VALVES



- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|--|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| BUDGET PERFORMANCE VALVES FOR USE WITH NON-RAIL OR ROLLER ROCKERS | | | | | | | | | | | |
| 10549-8* | Exh. | 1.600 | .3415 | Stock | 4.911 | .250 | 15° x 1/2" | .060 | .100 | 10° Dish | 101 |
| 10548-8* | Int. | 1.900 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 105 |
| 10576-8* | Int. | 1.940 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 116 |
| 10550-8* | Int. | 2.020 | .3415 | Stock | 4.911 | .250 | 10° x 3/8" | .050 | .080 | 6° Dish | 109 |
| RACE FLO VALVES FOR USE WITH NON RAIL OR ROLLER ROCKERS | | | | | | | | | | | |
| 11531-8* | Exh. | 1.600 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .060 | .100 | 7° Dish | 94 |
| 11532-8* | Int. | 1.940 | .3415 | Stock | 4.911 | .250 | Pro Flo: 10° x 3/8" | .050 | .080 | 5° Dish | 107 |
| 11566-8* | Int. | 2.020 | .3415 | Stock | 4.911 | .250 | Pro Flo: 12° x 3/8" | .050 | .080 | 5° Dish | 113 |
| STREET FLO VALVES FOR USE WITH RAIL TYPE ROCKERS | | | | | | | | | | | |
| 10723-8 | Exh. | 1.465 | .3415 | Stock | 5.080 | .395 | Pro Flo: 12° x 3/8" | .060 | .100 | 7° Dish | 93 |
| 10775-8 | Exh. | 1.550 | .3415 | Stock | 5.080 | .395 | Pro Flo: 12° x 3/8" | .060 | .100 | 7° Dish | 94 |
| 10778-8 | Int. | 1.850 | .3420 | Stock | 5.075 | .395 | Pro Flo: 12° x 3/8" | .050 | .080 | 7° Dish | 105 |
| RACE FLO VALVES FOR USE WITH RAIL TYPE ROCKERS | | | | | | | | | | | |
| 11523-8 | Exh. | 1.465 | .3415 | Stock | 5.080 | .395 | Pro Flo: 12° x 3/8" | .060 | .100 | 5° Dish | 93 |
| 11575-8 | Exh. | 1.550 | .3415 | Stock | 5.080 | .395 | Pro Flo: 12° x 3/8" | .060 | .100 | 5° Dish | 94 |
| 11889-8 | Exh. | 1.600 | .3415 | Stock | 5.080 | .395 | Pro Flo: 12° x 3/8" | .060 | .100 | 5° Dish | 95 |
| 11572-8 | Int. | 1.785 | .3420 | Stock | 5.075 | .395 | Pro Flo: 12° x 3/8" | .050 | .080 | 5° Dish | 104 |
| 11578-8 | Int. | 1.850 | .3420 | Stock | 5.075 | .395 | Pro Flo: 12° x 3/8" | .050 | .080 | 5° Dish | 105 |
| 11888-8 | Int. | 1.940 | .3420 | Stock | 5.075 | .395 | Pro Flo: 12° x 3/8" | .050 | .080 | 5° Dish | 110 |

* Ford valves with .250" tips must use non-rail type rockers or roller rockers.

Ford S.V.O. straight stem equivalents: P/N 11575 = M-6505-G302 P/N 11578 = M-6507-G302

STAINLESS VALVES

FORD 351C

RACE MASTER VALVES & SEVERE DUTY® VALVES

- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



VALVES

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------------------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| RACE MASTER VALVES | | | | | | | | | | | |
| 11873-8 | Exh. | 1.710 | .3415 | Stock | 5.042 | .250 | 10° x 3/8" | .060 | .100 | 7° Dish | 108 |
| 11872-8 | Int. | 2.190 | .3415 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 139 |
| 11874-8 | Int. | 2.250 | .3415 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 140 |
| SEVERE DUTY® VALVES | | | | | | | | | | | |
| 11807-8 | Exh. | 1.655 | .3415 | Stock | 5.067 | .220 | 12° x 3/8" | .085 | .100 | 7° Dish | 102 |
| 11853-8 | Exh. | 1.655 | .3415 | .100 Longer | 5.167 | .250 | 12° x 3/8" | .085 | .100 | 7° Dish | 105 |
| 11805-8 | Exh. | 1.710 | .3415 | Stock | 5.067 | .220 | 12° x 3/8" | .085 | .100 | 7° Dish | 108 |
| 11857-8 | Exh. | 1.710 | .3415 | .100 Longer | 5.167 | .250 | 12° x 3/8" | .085 | .100 | 7° Dish | 111 |
| 11800-8 | Int. | 2.190 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 139 |
| 11822-8 | Int. | 2.190 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 140 |
| 11802-8 | Int. | 2.250 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 139 |
| 11850-8 | Int. | 2.250 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 142 |

FORD SVO "SPORTSMAN"

N-351 CYLINDER HEAD

RACE MASTER VALVES & SEVERE DUTY® VALVES

- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head | Wgt/ Grams |
|----------------------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|------------|
| RACE MASTER VALVES | | | | | | | | | | | |
| 11321-8 | Exh. | 1.600 | .3415 | Stock | 5.165 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 112 |
| 11316-8 | Int. | 2.020 | .3415 | Stock | 5.140 | .290 | 12° x 3/8" | .065 | .080 | 7° Dish | 127 |
| SEVERE DUTY® VALVES | | | | | | | | | | | |
| 11865-8 | Exh. | 1.600 | .3415 | Stock | 5.121 | .250 | 15° x 1/2" | .070 | .100 | 9° Dish | 105 |
| 11751-8 | Exh. | 1.600 | .3415 | Stock | 5.165 | .290 | 15° x 1/2" | .090 | .100 | 9° Dish | 110 |
| 11544-8 | Int. | 2.020 | .3415 | Stock | 5.140 | .290 | 10° x 3/8" | .065 | .080 | 5° Dish | 125 |

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

FORD 429 - 460

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|---------------------------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11875-8 | Exh. | 1.760 | .3415 | Stock | 5.042 | .250 | 12° x 3/8" | .060 | .100 | 7° Dish | 113 |
| 11872-8 | Int. | 2.190 | .3415 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 139 |
| 11874-8 | Int. | 2.250 | .3415 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 140 |
| BLUE THUNDER HEADS | | | | | | | | | | | |
| 11829-8 | Exh. | 1.880 | .3415 | Stock | 5.070 | .250 | 25° x 3/8" | .090 | .100 | 20° Dish | 118 |
| 11899-8 | Exh. | 1.880 | .3415 | .100 Longer | 5.170 | .250 | 25° x 3/8" | .090 | .100 | 20° Dish | 120 |
| 11874-8 | Int. | 2.250 | .3415 | Stock | 5.244 | .250 | 10° x 3/8" | .050 | .080 | 5° Dish | 140 |

FORD 429 - 460

SEVERE DUTY® VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11529-8 | Exh. | 1.760 | .3415 | Stock | 5.067 | .250 | 12° x 3/8" | .085 | .085 | 7° Dish | 113 |
| 11801-8 | Exh. | 1.760 | .3415 | .100 Longer | 5.167 | .250 | 12° x 3/8" | .085 | .085 | 7° Dish | 116 |
| 11800-8 | Int. | 2.190 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 139 |
| 11822-8 | Int. | 2.190 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .080 | 7° Dish | 140 |
| 11802-8 | Int. | 2.250 | .3415 | Stock | 5.244 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 139 |
| 11850-8 | Int. | 2.250 | .3415 | .100 Longer | 5.344 | .250 | 12° x 3/8" | .050 | .100 | 7° Dish | 142 |

The size of the Super Cobra Jet valves are 2.245" Int. (30° seat) and 1.750" Exh. Other 429 - 460 cylinder heads have smaller valve diameters. Our valves can be easily cut or the seats enlarged.

Need a different length? Head diameter not listed?

See pages 42 & 43 for Gen II blanks to construct a valve to your exact specifications.

FORD 429 - 460

ALUMINUM AFTERMARKET HEADS RACEMASTER & SEVERE DUTY® VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11591-8 | Exh. | 1.880 | .3415 | Stock | 5.655 | .260 | 25° x 3/8" | .075 | .100 | 20° Dish | 129 |
| 11586-8 | Int. | 2.250 | .3415 | Stock | 5.725 | .260 | 10° x 13/32" | .065 | .075 | 5° Dish | 153 |
| 11588-8 | Int. | 2.300 | .3415 | Stock | 5.725 | .260 | 10° x 13/32" | .065 | .075 | 5° Dish | 166 |
| 11590-8 | Int. | 2.400 | .3415 | Stock | 5.725 | .260 | 10° x 13/32" | .065 | .075 | 5° Dish | 170 |

(11588 = M-6507-A460; 11586 = M-6507-B460; 11591 = M-6505-A460; 11590 = M-6507-E460)

FORD 427

(MEDIUM, HI RISER, TUNNEL PORT) SEVERE DUTY® SOLID STEM VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11825-8 | Exh. | 1.750 | .3705 | Stock | 5.426 | .320 | 20° x 3/8" | .060 | .100 | 15° Dish | 124 |
| 11884-8 | Int. | 2.190 | .3715 | Stock | 5.446 | .320 | 23° x 5/16" | .070 | .120 | 20° Dish | 143 |
| 11804-8 | Int. | 2.250 | .3715 | Stock | 5.454 | .320 | 23° x 5/16" | .065 | .090 | 20° Dish | 145 |

The above valves can be cut down to 1.656" for the 428 exhaust and 2.090" for the 428 intake. The lengths of the 427 and 428 valves are the same. Valves 11804 and 11884 have a 30° seat.

FORD BOSS 429

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11787-8 | Exh. | 1.900 | .3715 | Stock | 5.650 | .350 | 15° x 1/2" | .080 | .100 | 9° Dish | 122 |
| 11786-8* | Int. | 2.280 | .3715 | Stock | 5.625 | .350 | 12° x 3/8" | .060 | .100 | 7° Dish | 141 |
| 11788-8* | Int. | 2.400 | .3715 | Stock | 5.570 | .350 | 12° x 3/8" | .060 | .100 | 7° Dish | 143 |

* P/N 11786-8 & P/N 11788-8 have a 30° seat

5.570" is the length of the NASCAR intake valve. It is short because it is sunk in the head. If you do not wish to sink the valve, order a GEN II intake at your desired length.

STAINLESS VALVES

VALVES

HONDA / ACURA

RACE FLO / RACE MASTER VALVES

| Part No. | Type | Head Diameter | Stem Diameter | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head |
|--|------|---------------|-----------------|--------------|------------|--------------------------|--------|------------|-------------|
| ACURA INTEGRA GSR 1.7L - DOHC V-TEC 16 VALVE (B17A1) - 1992 - 1993 | | | | | | | | | |
| ACURA INTEGRA GSR 1.8L - DOHC V-TEC 16 VALVE (B18C1-C3) - 1994 - 2000 | | | | | | | | | |
| HONDA DEL SOL 1.6L - DOHC V-TEC 16 VALVE (B16A1) - 1994 - 1997 | | | | | | | | | |
| HONDA CIVIC SI 1.6L - DOHC V-TEC 16 VALVE (B16A3) - 1999 - 2000 | | | | | | | | | |
| 11373-8 | Exh. | 28.0 mm | 5.5 mm / .2165" | 102.70 mm | 2.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11691-8 | Exh. | 28.0 mm | 5.5 mm / .2165" | 102.70 mm | 2.5 mm | Pro Flo: 22° x 5/16" | .065" | .080" | Flat Face |
| 11375-8 | Exh. | 28.5 mm | 5.5 mm / .2165" | 102.70 mm | 2.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11693-8 | Exh. | 28.5 mm | 5.5 mm / .2165" | 102.70 mm | 2.5 mm | Pro Flo: 22° x 5/16" | .065" | .080" | Flat Face |
| 11377-8 | Exh. | 29.0 mm | 5.5 mm / .2165" | 102.70 mm | 2.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11372-8 | Int. | 33.0 mm | 5.5 mm / .2165" | 102.40 mm | 2.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11690-8 | Int. | 33.0 mm | 5.5 mm / .2165" | 102.40 mm | 2.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | Flat Face |
| 11374-8 | Int. | 33.5 mm | 5.5 mm / .2165" | 102.40 mm | 2.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11692-8 | Int. | 33.5 mm | 5.5 mm / .2165" | 102.40 mm | 2.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | Flat Face |
| 11376-8 | Int. | 34.0 mm | 5.5 mm / .2165" | 102.40 mm | 2.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| ACURA RSX Type S 2.0L - DOHC i-VTEC 16 VALVE (K20A2) - 2001 - Up | | | | | | | | | |
| 11127-8 | Exh. | 30.0 mm | 5.5 mm / .2165" | 109.04 mm | 2.08 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11129-8 | Exh. | 30.5 mm | 5.5 mm / .2165" | 109.04 mm | 2.08 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11131-8 | Exh. | 31.0 mm | 5.5 mm / .2165" | 109.04 mm | 2.08 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11128-8 | Int. | 35.0 mm | 5.5 mm / .2165" | 109.22 mm | 2.08 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11130-8 | Int. | 35.5 mm | 5.5 mm / .2165" | 109.22 mm | 2.08 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11132-8 | Int. | 36.0 mm | 5.5 mm / .2165" | 109.22 mm | 2.08 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| HONDA ACCORD 2.2L - SOHC V-TEC 16 VALVE (F22B1) - 1994 - 1997 | | | | | | | | | |
| 11371-8 | Exh. | 29 mm | 5.5 mm / .2165" | 114.25 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11379-8 | Exh. | 30 mm | 5.5 mm / .2165" | 114.25 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11370-8 | Int. | 34 mm | 5.5 mm / .2165" | 116.00 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11378-8 | Int. | 35 mm | 5.5 mm / .2165" | 116.00 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| HONDA CIVIC 1.6L - SOHC 16 VALVE (D16Z6-Y5-Y7-Y8) - 1992 - 2000 | | | | | | | | | |
| 11367-8 | Exh. | 26 mm | 5.5 mm / .2165" | 115.95 mm | 1.9 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11369-8 | Exh. | 27 mm | 5.5 mm / .2165" | 115.95 mm | 1.9 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11366-8 | Int. | 30 mm | 5.5 mm / .2165" | 118.60 mm | 1.9 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11368-8 | Int. | 31 mm | 5.5 mm / .2165" | 118.60 mm | 1.9 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| HONDA CIVIC CRX SI 1.6L - SOHC 16 VALVE (D16A6) - 1988 - 1991 | | | | | | | | | |
| 11383-8 | Exh. | 25 mm | 5.5 mm / .2165" | 118.75 mm | 4.35 mm | Pro Flo: 22° x 5/16" | .065" | .080" | 17° Dish |
| 11385-8 | Exh. | 26 mm | 5.5 mm / .2165" | 118.75 mm | 4.35 mm | Pro Flo: 22° x 5/16" | .065" | .080" | 17° Dish |
| 11384-8 | Int. | 29 mm | 5.5 mm / .2165" | 115.00 mm | 4.1 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11386-8 | Int. | 30 mm | 5.5 mm / .2165" | 115.00 mm | 4.1 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| HONDA PRELUDE 2.2L - DOHC V-TEC 16 VALVE (H22A1-A4) - 1993 - 2000 | | | | | | | | | |
| 11393-8 | Exh. | 30.0 mm | 5.5 mm / .2165" | 106.90 mm | 1.9 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11339-8 | Exh. | 30.5 mm | 5.5 mm / .2165" | 106.90 mm | 1.9 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11395-8 | Exh. | 31.0 mm | 5.5 mm / .2165" | 106.90 mm | 1.9 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11394-8 | Int. | 35.0 mm | 5.5 mm / .2165" | 106.65 mm | 1.9 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11338-8 | Int. | 35.5 mm | 5.5 mm / .2165" | 106.65 mm | 1.9 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11396-8 | Int. | 36.0 mm | 5.5 mm / .2165" | 106.65 mm | 1.9 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |

All Manley Performance aftermarket valves for the Honda / Acura engines are manufactured with a 5.5 mm stem diameter. We recommend that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory size may vary slightly depending on the specific engine.

NISSAN

RACE FLO / RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Improved flow with "Pro Flo" Intakes



VALVES

| Part No. | Type | Head Diameter | Stem Diameter | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head |
|--|------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| NISSAN 300 ZX 3.0L - DOHC 24 VALVE (VG30D - TURBO VG30DTT) - 1990 - 1996 | | | | | | | | | |
| 11105-12 | Exh. | 29.5 mm | 6 mm / .2362" | 103.65 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11107-12 | Exh. | 30.5 mm | 6 mm / .2362" | 103.65 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11106-12 | Int. | 34.0 mm | 6 mm / .2362" | 103.13 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11108-12 | Int. | 35.0 mm | 6 mm / .2362" | 103.13 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| NISSAN 3.5L V6 - DOHC 24 VALVE (VQ35DE, VQ35DET) | | | | | | | | | |
| 11149-12 | Exh. | 31.5 mm | 6 mm / .2362" | 94 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11151-12 | Exh. | 32.0 mm | 6 mm / .2362" | 94 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11153-12 | Exh. | 32.5 mm | 6 mm / .2362" | 94 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11148-12 | Int. | 37.0 mm | 6 mm / .2362" | 96.5 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11150-12 | Int. | 37.5 mm | 6 mm / .2362" | 96.5 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11152-12 | Int. | 38.0 mm | 6 mm / .2362" | 96.5 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| NISSAN PATROL St-S, St-L, Ti 4.8L - DOHC 24 VALVE (VTC) | | | | | | | | | |
| 11141-12 | Exh. | 33.5 mm | 6.96 mm / .2740" | 98.3 mm | 3.56 mm | 25° x 3/8" | .050" | .100" | Flat Face |
| 11143-12 | Exh. | 34.7 mm | 6.96 mm / .2740" | 98.3 mm | 3.56 mm | 25° x 3/8" | .050" | .100" | Flat Face |
| 11177-12 | Exh. | 35.0 mm | 6.96 mm / .2740" | 98.3 mm | 3.56 mm | 25° x 3/8" | .050" | .100" | Flat Face |
| 11179-12 | Exh. | 35.0 mm | 6.96 mm / .2740" | 98.3 mm | 3.56 mm | 25° x 3/8" | .050" | .100" | 20° Dish |
| 11181-12 | Exh. | 35.5 mm | 6.96 mm / .2740" | 98.3 mm | 3.56 mm | 25° x 3/8" | .050" | .100" | Flat Face |
| 11183-12 | Exh. | 35.5 mm | 6.96 mm / .2740" | 98.3 mm | 3.56 mm | 25° x 3/8" | .050" | .100" | 20° Dish |
| 11142-12 | Int. | 38.5 mm | 6.96 mm / .2740" | 100.21 mm | 3.56 mm | Pro Flo: 12° x 3/8" | .045" | .100" | Flat Face |
| 11144-12 | Int. | 39.7 mm | 6.96 mm / .2740" | 100.21 mm | 3.56 mm | Pro Flo: 12° x 3/8" | .045" | .100" | Flat Face |
| 11174-12 | Int. | 40.0 mm | 6.96 mm / .2740" | 100.21 mm | 3.56 mm | Pro Flo: 12° x 3/8" | .045" | .100" | Flat Face |
| 11176-12 | Int. | 40.0 mm | 6.96 mm / .2740" | 100.21 mm | 3.56 mm | Pro Flo: 12° x 3/8" | .045" | .100" | 7° Dish |
| 11178-12 | Int. | 40.5 mm | 6.96 mm / .2740" | 100.21 mm | 3.56 mm | Pro Flo: 12° x 3/8" | .045" | .100" | Flat Face |
| 11180-12 | Int. | 40.5 mm | 6.96 mm / .2740" | 100.21 mm | 3.56 mm | Pro Flo: 12° x 3/8" | .045" | .100" | 7° Dish |
| NISSAN SENTRA SE-R 2.0L - DOHC 16 VALVE (SR20DE) - 1991 - 1998 | | | | | | | | | |
| 11109-8 | Exh. | 30.15 mm | 6 mm / .2362" | 102.4 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11111-8 | Exh. | 31.15 mm | 6 mm / .2362" | 102.4 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| NISSAN SENTRA SE-R 2.0L - DOHC 16 VALVE (SR20DET) - 1991 - 1998 | | | | | | | | | |
| 11145-8* | Exh. | 30.15 mm | 7 mm / .2740" | 102.4 mm | 3.5 mm | 15° x 1/2" | .065" | .080" | 9° Dish |
| 11147-8* | Exh. | 31.15 mm | 7 mm / .2740" | 102.4 mm | 3.5 mm | 15° x 1/2" | .065" | .080" | 9° Dish |
| * Both of these exhaust valves feature a 1mm stem diameter reduction in the keeper groove area to allow the use of the same valve springs, retainers and locks as the intake valves. | | | | | | | | | |
| NISSAN SENTRA SE-R 2.0L - DOHC 16 VALVE (SR20DE, SR20DET) - 1991 - 1998 | | | | | | | | | |
| 11110-8 | Int. | 34.15 mm | 6 mm / .2362" | 101.4 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11112-8 | Int. | 35.15 mm | 6 mm / .2362" | 101.4 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| NISSAN 2.6L INLINE 6-24 VALVE (RB26DET/T) | | | | | | | | | |
| 11163-12* | Exh. | 30.15 mm | 7 mm / .2740" | 101.52 mm | 3.5 mm | 15° x 1/2" | .065" | .080" | 9° Dish |
| 11165-12* | Exh. | 31.15 mm | 7 mm / .2740" | 101.52 mm | 3.5 mm | 15° x 1/2" | .065" | .080" | 9° Dish |
| * Both of these exhaust valves feature a 1mm stem diameter reduction in the keeper groove area to allow the use of the same valve springs, retainers and locks as the intake valves. | | | | | | | | | |
| 11162-12 | Int. | 34.6 mm | 6 mm / .2362" | 102.33 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11164-12 | Int. | 35.6 mm | 6 mm / .2362" | 102.33 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| NISSAN 3.0L INLINE 6 - SOHC 12 VALVE (RB30E/T) | | | | | | | | | |
| 11185-6 | Exh. | 35.1 mm | 8 mm / .3136" | 124.59 mm | 4.45 mm | 25° x 7/16" | .065" | .100" | 18° Dish |
| 11187-6 | Exh. | 36.1 mm | 8 mm / .3136" | 124.59 mm | 4.45 mm | 25° x 7/16" | .065" | .100" | 18° Dish |
| 11182-6 | Int. | 42.1 mm | 7 mm / .2750" | 125.68 mm | 4.45 mm | 10° x 3/8" | .050" | .080" | 5° Dish |
| 11184-6 | Int. | 43.1 mm | 7 mm / .2750" | 125.68 mm | 4.45 mm | 10° x 3/8" | .050" | .080" | 5° Dish |

Manley Performance recommends that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory sizes may vary depending on the specific engine.

STAINLESS VALVES

NISSAN GT-R 3.8L-DOHC 24 VALVE (VR38DETT)

RACE MASTER / EXTREME DUTY VALVES

- ✓ XtremeAlloy XH-432 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Swirl Polished and Fully Machined
- ✓ Chrome Stems and Hard Tips



| Part No. | Type | Head Diameter | Stem Diameter | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head |
|----------------------------|------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|
| EXTREME DUTY VALVES | | | | | | | | | |
| 11193-12 | Exh. | 32.15 mm | 5.96 mm / .2345" | 92 mm | 2.16 mm | 25° x 11/32" | .060" | .100" | Dimple |
| 11195-12 | Exh. | 33.15 mm | 5.96 mm / .2345" | 92 mm | 2.16 mm | 25° x 11/32" | .060" | .100" | Dimple |
| RACE MASTER VALVES | | | | | | | | | |
| 11190-12* | Int. | 37.15 mm | 5.97 mm / .2350" | 95 mm | 4.95 mm | 25° x 11/32" | .050" | .100" | Flat Face |
| 11192-12* | Int. | 38.15 mm | 5.97 mm / .2350" | 95 mm | 4.95 mm | 25° x 11/32" | .050" | .100" | Flat Face |

* Intakes have backcut - .040" x 30°

NOTE: Tip area is reduced in diameter to .215" for compatibility with factory locks and retainers.

TOYOTA RACE FLO / RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ Improved flow with "Pro Flo" Intake Underhead
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems, Swirl Polished and Fully Machined



| Part No. | Type | Head Diameter | Stem Diameter | O/A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head |
|---|------|---------------|-----------------|------------|------------|--------------------------|--------|------------|-------------|
| TOYOTA 4AG (ATLANTIC) | | | | | | | | | |
| 11113-8 | Exh. | 27.5 mm | 6 mm / .2362" | 99.75 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11114-8 | Int. | 32.0 mm | 6 mm / .2362" | 99.6 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| TOYOTA LAND CRUISER 4.5L - DOHC 24 VALVE (1FZ-FE) - 1993 - 1998 | | | | | | | | | |
| 11167-12 | Exh. | 32.0 mm | 7 mm / .2740" | 99 mm | 3.8 mm | 15° x 1/2" | .065" | .080" | Flat Face |
| 11169-12 | Exh. | 33.2 mm | 7 mm / .2740" | 99 mm | 3.8 mm | 15° x 1/2" | .065" | .080" | Flat Face |
| 11189-12 | Exh. | 33.5 mm | 7 mm / .2740" | 99 mm | 3.8 mm | 15° x 1/2" | .065" | .080" | Flat Face |
| 11191-12 | Exh. | 33.5 mm | 7 mm / .2740" | 99 mm | 3.8 mm | 15° x 1/2" | .065" | .080" | 9° Dish |
| 11173-12 | Exh. | 34.0 mm | 7 mm / .2740" | 99 mm | 3.8 mm | 15° x 1/2" | .065" | .080" | Flat Face |
| 11175-12 | Exh. | 34.0 mm | 7 mm / .2740" | 99 mm | 3.8 mm | 15° x 1/2" | .065" | .080" | 9° Dish |
| 11166-12 | Int. | 38.0 mm | 7 mm / .2740" | 100 mm | 3.8 mm | Pro Flo: 10° x 3/8" | .050" | .075" | Flat Face |
| 11168-12 | Int. | 39.2 mm | 7 mm / .2740" | 100 mm | 3.8 mm | Pro Flo: 10° x 3/8" | .050" | .075" | Flat Face |
| 11186-12 | Int. | 39.5 mm | 7 mm / .2740" | 100 mm | 3.8 mm | Pro Flo: 10° x 3/8" | .050" | .075" | Flat Face |
| 11188-12 | Int. | 39.5 mm | 7 mm / .2740" | 100 mm | 3.8 mm | Pro Flo: 10° x 3/8" | .050" | .075" | 5° Dish |
| 11170-12 | Int. | 40.0 mm | 7 mm / .2740" | 100 mm | 3.8 mm | Pro Flo: 10° x 3/8" | .050" | .075" | Flat Face |
| 11172-12 | Int. | 40.0 mm | 7 mm / .2740" | 100 mm | 3.8 mm | Pro Flo: 10° x 3/8" | .050" | .075" | 5° Dish |
| TOYOTA MR2 2.0L - DOHC 16 VALVE (TURBO 3SGTE) - 1990 - 1995 | | | | | | | | | |
| 11115-8 | Exh. | 29.0 mm | 6 mm / .2362" | 99.5 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11117-8 | Exh. | 30.0 mm | 6 mm / .2362" | 99.5 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11116-8 | Int. | 33.5 mm | 6 mm / .2362" | 100.55 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11118-8 | Int. | 34.5 mm | 6 mm / .2362" | 100.55 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| TOYOTA SCION tC 2.4L - DOHC 16 VALVE (2AZFE) | | | | | | | | | |
| 11157-8 | Exh. | 29.5 mm | 5.5 mm / .2165" | 101.65 mm | 2.49 mm | 25° x 11/32" | .065" | .080" | Flat Face |
| 11159-8 | Exh. | 30.5 mm | 5.5 mm / .2165" | 101.65 mm | 2.49 mm | 25° x 11/32" | .065" | .080" | Flat Face |
| 11156-8 | Int. | 34.0 mm | 5.5 mm / .2165" | 101.96 mm | 2.49 mm | Pro Flo: 22° x 5/16" | .050" | .075" | Flat Face |
| 11158-8 | Int. | 35.0 mm | 5.5 mm / .2165" | 101.96 mm | 2.49 mm | Pro Flo: 22° x 5/16" | .050" | .075" | Flat Face |
| TOYOTA SUPRA 3.0L - DOHC 24 VALVE (7MGE - TURBO 7MGTE) - 1986 - 1992 | | | | | | | | | |
| 11119-12 | Exh. | 27.5 mm | 6 mm / .2362" | 98.05 mm | 4.0 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11121-12 | Exh. | 28.5 mm | 6 mm / .2362" | 98.05 mm | 4.0 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11120-12 | Int. | 32.0 mm | 6 mm / .2362" | 98.05 mm | 4.0 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11122-12 | Int. | 33.0 mm | 6 mm / .2362" | 98.05 mm | 4.0 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| TOYOTA SUPRA 3.0L I/L 6 CYL - DOHC 24 VALVE (2JZGE - 2JZGTE) - 1994 - 1998 | | | | | | | | | |
| 11123-12 | Exh. | 29.0 mm | 6 mm / .2362" | 99.1 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11125-12 | Exh. | 30.0 mm | 6 mm / .2362" | 99.1 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11124-12 | Int. | 33.6 mm | 6 mm / .2362" | 98.55 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |
| 11126-12 | Int. | 34.6 mm | 6 mm / .2362" | 98.55 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |

All Manley Performance aftermarket valves for the Toyota engines are manufactured with either 5.5, 6 or 7mm stem diameters. We recommend that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory sizes may vary depending on the specific motor.

MAZDA

RACE FLO / RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Improved flow with "Pro Flo" Intakes



| Part No. | Type | Head Diameter | Stem Diameter | O/A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head |
|--|------|---------------|---------------|------------|------------|--------------------------|--------|------------|-------------|
| MAZDA MIATA 1.8L - DOHC 16 VALVE (BP056) - 1990 - 1999 | | | | | | | | | |
| 11101-8 | Exh. | 28 mm | 6 mm / .2362" | 101.52 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11103-8 | Exh. | 29 mm | 6 mm / .2362" | 101.52 mm | 3.5 mm | 25° x 11/32" | .065" | .080" | 20° Dish |
| 11102-8 Int. 33 mm 6 mm / .2362" 101.35 mm 3.5 mm Pro Flo: 22° x 5/16" .050" .075" 17° Dish | | | | | | | | | |
| 11104-8 | Int. | 34 mm | 6 mm / .2362" | 101.35 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050" | .075" | 17° Dish |

MITSUBISHI

RACE FLO VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined
- ✓ Improved flow with "Pro Flo" Underhead



| Part No. | Type | Head Diameter | Stem Diameter | O/A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head |
|---|------|---------------|------------------|------------|------------|--------------------------|--------|------------|-------------|
| MITSUBISHI ECLIPSE GS, GST 2.0L - DOHC 16 VALVE (4G63-4G63T) 1990 - 2000 | | | | | | | | | |
| 11133-8 | Exh. | 30.5 mm | 6.54 mm / .2575" | 109.7 mm | 3.8 mm | Pro Flo: 22° x 7/16" | .065" | .080" | 17° Dish |
| 11161-8 | Exh. | 31.0 mm | 6.54 mm / .2575" | 109.7 mm | 3.8 mm | Pro Flo: 22° x 7/16" | .065" | .080" | 17° Dish |
| 11135-8 | Exh. | 31.5 mm | 6.54 mm / .2575" | 109.7 mm | 3.8 mm | Pro Flo: 22° x 7/16" | .065" | .080" | 17° Dish |
| 11134-8 Int. 34 mm 6.57 mm / .2587" 109.7 mm 3.8 mm Pro Flo: 20° x 11/32" .050" .075" 15° Dish | | | | | | | | | |
| 11160-8 | Int. | 34.5 mm | 6.57 mm / .2587" | 109.7 mm | 3.8 mm | Pro Flo: 20° x 11/32" | .050" | .075" | 15° Dish |
| 11136-8 | Int. | 35 mm | 6.57 mm / .2587" | 109.7 mm | 3.8 mm | Pro Flo: 20° x 11/32" | .050" | .075" | 15° Dish |

SUBARU WRX EJ205 / STi EJ257

RACE SERIES VALVES & EXTREME DUTY VALVES

- ✓ XtremeAlloy and XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Swirl Polished and Fully Machined
- ✓ Chrome Stems and Hard Tips



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O/A Length | Tip Length | Underhead Angle/Radius | Margin | Seat Width | Top of Head |
|----------------------------|------|---------------|---------------|------------------|------------|------------|------------------------|--------|------------|-------------|
| RACE MASTER VALVES | | | | | | | | | | |
| 11155-8 | Exh. | 32 mm | 6.0 mm/.2362" | Stock | 104.75 mm | 3.5 mm | 25° x 11/32" | .060 | .080 | 20° Dish |
| 11171-8 | Exh. | 33 mm | 6.0 mm/.2362" | Stock | 104.75 mm | 3.5 mm | 25° x 11/32" | .060 | .080 | 20° Dish |
| EXTREME DUTY VALVES | | | | | | | | | | |
| 11137-8 | Exh. | 32 mm | 5.96mm/.2345" | Stock | 104.75 mm | 3.5 mm | 25° x 11/32" | .060 | .100 | 20° Dish |
| 11139-8 | Exh. | 33 mm | 5.96mm/.2345" | Stock | 104.75 mm | 3.5 mm | 25° x 11/32" | .060 | .100 | 20° Dish |
| RACE FLO VALVES | | | | | | | | | | |
| 11138-8 | Int. | 36 mm | 6.0mm/.2362" | Stock | 104.6 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050 | .080 | 17° Dish |
| 11140-8 | Int. | 37 mm | 6.0mm/.2362" | Stock | 104.6 mm | 3.5 mm | Pro Flo: 22° x 5/16" | .050 | .080 | 17° Dish |

All Manley Performance aftermarket intake valves and exhaust valve 11155 and 11171 for the Subaru engines are manufactured with a 6 mm stem diameter. We recommend that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory sizes may vary depending on the specific motor.

STAINLESS VALVES

VOLKSWAGEN RABBIT

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems, Swirl Polished and Fully Machined
- ✓ Special Hard Tips and Hardened Keeper Grooves



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11657-4 | Exh. | 34.0 mm | .313 | Stock | 3.976 | .130 | 15° x 3/8" | .075 | .075 | 10° Dish | 63 |
| 11656-4 | Int. | 40.5 mm | .313 | Stock | 3.976 | .130 | 10° x 11/32" | .075 | .075 | 5° Dish | 76 |

VOLKSWAGEN 1200 - 1600

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems, Swirl Polished and Fully Machined
- ✓ Special Hard Tips and Hardened Keeper Grooves



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11649-4 | Exh. | 32.0 mm | .3130 | Stock | 4.405 | .170 | 15° x 3/8" | .070 | .090 | 10° Dish | 65 |
| 11651-4 | Exh. | 33.0 mm | .3130 | Stock | 4.405 | .170 | 15° x 3/8" | .070 | .090 | 10° Dish | 67 |
| 11653-4 | Exh. | 35.5 mm | .3130 | Stock | 4.405 | .170 | 15° x 3/8" | .070 | .090 | 10° Dish | 69 |
| 11655-4 | Exh. | 37.5 mm | .3130 | Stock | 4.405 | .170 | 15° x 3/8" | .070 | .090 | 10° Dish | 73 |
| 11650-4 | Int. | 40.0 mm | .3130 | Stock | 4.405 | .170 | 10° x 11/32" | .070 | .090 | 6° Dish | 79 |
| 11652-4 | Int. | 42.0 mm | .3130 | Stock | 4.405 | .170 | 10° x 11/32" | .070 | .090 | 6° Dish | 79 |
| 11654-4 | Int. | 43.7 mm | .3130 | Stock | 4.405 | .170 | 10° x 11/32" | .070 | .090 | 6° Dish | 83 |

VOLKSWAGEN TYPE IV

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Chrome Stems, Swirl Polished and Fully Machined
- ✓ Special Hard Tips and Hardened Keeper Grooves



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|-------------|
| 11659-4 | Exh. | 38 mm | .3130 | Stock | 4.606 | .170 | 15° x 1/2" | .060 | .075 | 9° Dish | 78 |
| 11658-4 | Int. | 48 mm | .3130 | Stock | 4.606 | .170 | 10° x 3/8" | .060 | .075 | 5° Dish | 101 |

PLEASE SEE GEN II CUSTOM VALVE SPECIFICATIONS PAGES 42 & 43

A WEAR CAP IS NOT NECESSARY WITH GEN II*

TIP LENGTH _____

GROOVE TYPE

STEM DIAM.

CYLINDER HEAD

CHEVROLET SQUARE GROOVE

BEAD LOC® .055" RADIUS

LS-1 .060" RADIUS

HONDA .055" RADIUS

OTHER : _____

OVERALL
LENGTH _____

1ST BACK CUT
WIDTH _____

ANGLE _____

EDGE

MARGIN

SEAT

WIDTH
ANGLE _____

SHARP

BREAK _____

CORNER RADIUS _____

ORDER INFO

ACCT. NO. _____

NAME _____

DATE _____

P.O. # _____

QTY. _____

DUE DATE _____

SHIP VIA _____

PLEASE FILL IN ALL DIMENSIONS AND ORDER INFO

USE BLANK P/N _____

CYLINDER HEAD _____

* Provided that the overall length is within the minimum length parameter of the Gen II blank that is machined.

MANLEY PERFORMANCE PROD.
1960 SWARTHMORE AVE.
LAKEWOOD, NJ 08701
PHONE: 732-905-3366
FAX: 732-905-3010

CUSTOM STAINLESS VALVES

GEN II EXTREME DUTY & SEVERE DUTY® SERIES

- ✓ Hard Tips and Hardened Grooves
- ✓ No Need for Inserted Tips or Wear Caps

The procedure for ordering a custom valve is as simple as 1-2-3 !

1. Select the blank appropriate for your finished piece based first on stem diameter.
2. Give us your final head diameter along with the seat and margin widths.
3. Specify the length of the valve you want, along with groove type and location.

* Part numbers with asterisks can be reduced 1.500" or 38 mm, except P/N 11277 can be reduced 1.750". All others .800" or 20.32 mm.

All Gen II custom stainless valve part numbers are priced to include all machining to render a finished valve provided that no more than .250" of material needs to be removed from the head diameter. If more than .250" of material is to be removed from the head diameter, then an additional machining charge P/N 04007 must be added to the price of the valve.



| Part No. | Type | Maximum Head Diameter | Stem Diameter | Maximum Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Material |
|---|------|-----------------------|-------------------|----------------|--------------------------|--------|------------|-------------|-------------|
| XTREMEALLOY GEN II CUSTOM EXHAUST VALVES | | | | | | | | | |
| 11225-8* | Exh. | 1.625 | .3415 | 5.600 | 15° x 1/2" | .080 | .100 | 9° Dish | XtremeAlloy |
| 11223-8* | Exh. | 2.060 | .3415 | 6.700 | 15° x 1/2" | .080 | .100 | 9° Dish | XtremeAlloy |
| 11277-8* | Exh. | 2.060 | .3415 | 6.700 | 18° x 1/2" | .080 | .100 | Flat Face | XtremeAlloy |
| 11275-8* | Exh. | 42.0 mm | 8.0 mm / .3136 | 5.600 | 25° x 7/16" | .065 | .100 | 18° Dish | XtremeAlloy |
| 11257-8 | Exh. | 1.750 | .3095 | 5.400 | 25° x 3/8" | .060 | .100 | 20° Dish | XtremeAlloy |
| 11265-8* | Exh. | 39.0 mm | 5.96 mm / .2345 | 4.800 | 25° x 11/32" | .080 | .100 | 20° Dish | XtremeAlloy |
| SEVERE DUTY® GEN II CUSTOM VALVES | | | | | | | | | |
| 11251-8 | Exh. | 1.940 | .3715 | 5.650 | 12° x 3/8" | .085 | .100 | 7° Dish | XH-428 |
| 11252-8* | Int. | 2.300 | .3720 | 5.600 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | NK-844 |
| 11252H-8* | Int. | 2.300 | .3720 Hollow Stem | 5.600 | Pro Flo: 12° x 7/16" | .065 | .080 | 7° Dish | NK-844 |
| Pro Flo start is 1.600" from the top of the head. | | | | | | | | | |
| 11245-8 | Exh. | 1.625 | .3415 | 5.640 | 15° x 1/2" | .090 | .100 | 9° Dish | XH-428 |
| 11255-8 | Exh. | 1.625 | .3415 | 5.640 | 30° x 1/2" | .070 | .100 | 25° Dish | XH-428 |
| 11253-8 | Exh. | 1.940 | .3415 | 5.650 | 12° x 3/8" | .075 | .080 | 7° Dish | XH-428 |
| 11221-8 | Exh. | 2.000 | .3415 | 6.700 | 25° x 3/8" | .080 | .100 | 20° Dish | XH-428 |
| 11219-8 | Exh. | 2.060 | .3415 | 6.700 | 15° x 1/2" | .080 | .100 | 9° Dish | XH-428 |
| 11256-8* | Int. | 2.080 | .3415 | 5.640 | 10° x 3/8" | .065 | .080 | 5° Dish | NK-844 |
| 11254-8* | Int. | 2.150 | .3415 | 5.640 | 12° x 3/8" | .065 | .080 | 7° Dish | NK-844 |
| 11254H-8* | Int. | 2.150 | .3415 Hollow Stem | 5.640 | 12° x 3/8" | .065 | .080 | 7° Dish | NK-844 |
| 11242-8* | Int. | 2.150 | .3415 | 5.655 | Pro Flo: 12° x 3/8" | .065 | .080 | 7° Dish | NK-844 |
| Pro Flo start is 1.600" from the top of the head. | | | | | | | | | |
| 11258-8* | Int. | 2.425 | .3415 | 5.700 | 12° x 3/8" | .065 | .080 | 7° Dish | NK-844 |
| 11220-8* | Int. | 2.425 | .3415 | 6.800 | 10° x 3/8" | .050 | .080 | 5° Dish | NK-844 |
| 11222-8* | Int. | 2.425 | .3415 | 6.700 | 20° x 3/8" | .050 | .080 | 15° Dish | NK-844 |
| 11279-8* | Exh. | 42.0 mm | 8.0 mm / .3136 | 5.600 | 25° x 7/16" | .065 | .100 | 18° Dish | XH-428 |
| 11274-8* | Int. | 56.5 mm | 8.0 mm / .3133 | 5.600 | Pro Flo: 12° x 3/8" | .060 | .095 | 7° Dish | NK-844 |
| 11274H-8* | Int. | 56.5 mm | 8.0 mm / .3133 | 5.600 | Pro Flo: 12° x 3/8" | .060 | .095 | 7° Dish | NK-844 |
| Hollow Stem Pro Flo start is 1.300" from the top of the head. | | | | | | | | | |
| 11227-8 | Exh. | 1.625 | .3110 | 5.750 | 15° x 1/2" | .080 | .100 | 9° Dish | XH-428 |
| 11263-8 | Exh. | 1.940 | .3110 | 6.100 | 12° x 3/8" | .085 | .100 | 7° Dish | XH-428 |
| 11224-8* | Int. | 2.200 | .3110 | 5.750 | 12° x 3/8" | .050 | .080 | 7° Dish | NK-844 |
| 11224H-8* | Int. | 2.200 | .3110 Hollow Stem | 5.750 | 12° x 3/8" | .050 | .080 | 7° Dish | NK-844 |
| 11264-8* | Int. | 2.400 | .3110 | 6.300 | 10° x 3/8" | .065 | .080 | 5° Dish | NK-844 |
| 11264H-8* | Int. | 2.400 | .3110 Hollow Stem | 6.300 | 10° x 3/8" | .065 | .080 | 5° Dish | NK-844 |
| 11229-8 | Exh. | 1.625 | 7.0 mm / .2740 | 5.600 | 15° x 1/2" | .080 | .100 | 9° Dish | XH-428 |
| 11226-8* | Int. | 2.200 | 7.0 mm / .2740 | 5.600 | 10° x 3/8" | .050 | .080 | 5° Dish | NK-844 |

CUSTOM STAINLESS VALVES

GEN II RACE SERIES

- ✓ Hard Tips and Hardened Grooves
- ✓ No Need for Inserted Tips or Wear Caps

The procedure for ordering a custom valve is as simple as 1-2-3 !

1. Select the blank appropriate for your finished piece based first on stem diameter.
2. Give us your final head diameter along with the seat and margin widths.
3. Specify the length of the valve you want, along with groove type and location.

* Part numbers with asterisks can be reduced 1.500" or 38 mm. All others .800" or 20.32 mm.

All Gen II custom stainless valve part numbers are priced to include all machining to render a finished valve provided that no more than .250" of material needs to be removed from the head diameter. If more than .250" of material is to be removed from the head diameter, then an additional machining charge P/N 04007 must be added to the price of the valve.



| Part No. | Type | Maximum Head Diameter | Stem Diameter | Maximum Length | Underhead Angle / Radius | Margin | Seat Width | Top of Head | Material |
|---|------|-----------------------|-------------------|----------------|--------------------------|--------|------------|-------------|----------|
| 11215-8 | Exh. | 1.940 | .3715 | 5.650 | 15° x 1/2" | .080 | .100 | 9° Dish | XH-426 |
| 11214-8 | Int. | 2.425 | .3715 | 5.650 | 12° x 3/8" | .050 | .080 | 7° Dish | NK-842 |
| 11203-8 | Exh. | 1.625 | .3415 | 5.500 | 15° x 1/2" | .090 | .100 | 9° Dish | XH-426 |
| 11217-8 | Exh. | 1.650 | .3415 | 5.640 | Pro Flo: 15° x 1/2" | .090 | .100 | 9° Dish | XH-426 |
| 11243-8 | Exh. | 1.900 | .3415 | 5.700 | 25° x 3/8" | .080 | .100 | 20° Dish | XH-426 |
| 11201-8 | Exh. | 1.940 | .3415 | 6.415 | 25° x 3/8" | .080 | .100 | 20° Dish | XH-426 |
| 11241-8 | Exh. | 1.940 | .3415 | 6.000 | 10° x 3/8" | .075 | .100 | 5° Dish | XH-426 |
| 11218-8 | Int. | 2.125 | .3415 | 5.540 | 12° x 3/8" | .065 | .080 | 7° Dish | NK-842 |
| 11216-8 | Int. | 2.150 | .3415 | 5.655 | Pro Flo 12° x 3/8" | .065 | .080 | 7° Dish | NK-842 |
| Pro Flo start is 1.600" from the top of the head. | | | | | | | | | |
| 11200-8 | Int. | 2.375 | .3415 | 5.700 | 10° x 3/8" | .050 | .080 | 5° Dish | NK-842 |
| 11244-8 | Int. | 2.425 | .3415 | 6.600 | 10° x 3/8" | .050 | .080 | 5° Dish | NK-842 |
| 11211-4 | Exh. | 38.5 mm | 8.0 mm / .3130" | 4.500 | 15° x 3/8" | .060 | .090 | 10° Dish | XH-426 |
| 11205-4 | Exh. | 40.0 mm | 8.0 mm / .3130" | 5.000 | 15° x 1/2" | .080 | .100 | 9° Dish | XH-426 |
| 11210-4 | Int. | 48.5 mm | 8.0 mm / .3130" | 4.500 | 10° x 11/32" | .060 | .080 | 5° Dish | NK-842 |
| 11204-4 | Int. | 52.0 mm | 8.0 mm / .3130" | 5.000 | 10° x 3/8" | .050 | .080 | 5° Dish | NK-842 |
| 11269-8* | Exh. | 42.0 mm | 8.0 mm / .3136" | 5.600 | 25° x 7/16" | .065 | .100 | 18° Dish | XH-426 |
| 11270-8* | Int. | 56.5 mm | 8.0 mm / .3133" | 5.600 | Pro Flo: 12° x 3/8" | .060 | .095 | 7° Dish | NK-842 |
| 11270H-8* | Int. | 56.5 mm | 8.0 mm / .3133" | 5.600 | Pro Flo: 12° x 3/8" | .060 | .095 | 7° Dish | NK-842 |
| Hollow Stem | | | | | | | | | |
| Pro Flo start is 1.300" from the top of the head. | | | | | | | | | |
| 11271-8 | Exh. | 1.625 | .3125 | 5.300 | 25° x 1/2" | .065 | .100 | 20° Dish | XH-426 |
| 11272-8 | Int. | 2.125 | .3125 | 5.300 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | NK-842 |
| 11272H-8 | Int. | 2.125 | .3125 Hollow Stem | 5.300 | Pro Flo: 12° x 3/8" | .050 | .095 | 7° Dish | NK-842 |
| Pro Flo start is 1.300" from the top of the head. | | | | | | | | | |
| 11207-8 | Exh. | 1.625 | .3110 | 5.700 | 15° x 1/2" | .080 | .100 | 9° Dish | XH-426 |
| 11261-8 | Exh. | 1.625 | .3110 | 6.400 | 18° x 1/2" | .080 | .100 | 12° Dish | XH-426 |
| 11206-8 | Int. | 2.200 | .3110 | 5.700 | 10° x 3/8" | .050 | .080 | 5° Dish | NK-842 |
| 11262-8 | Int. | 2.100 | .3110 | 6.400 | 12° x 3/8" | .050 | .080 | 7° Dish | NK-842 |
| 11249-8 | Exh. | 2.100 | .3100 | 5.400 | 22° x 1/4" | .050 | .100 | 17° Dish | XH-426 |
| 11248-8* | Int. | 2.300 | .3100 | 5.900 | 24° x 3/4" | .060 | .080 | 19° Dish | NK-842 |
| 11247-8 | Exh. | 37.0 mm | 7.0 mm / .2740" | 4.800 | 15° x 1/2" | .080 | .100 | 9° Dish | XH-426 |
| 11267-8 | Exh. | 41.9mm / 1.650 | 7.0 mm / .2755" | 4.700 | 30° x 1/2" | .060 | .100 | 24° Dish | XH-426 |
| 11246-8 | Int. | 48.0 mm | 7.0 mm / .2740" | 4.800 | 10° x 3/8" | .050 | .080 | 5° Dish | NK-842 |
| 11250-8* | Int. | 48.0 mm | 7.0 mm / .2750" | 5.430 | 10° x 3/8" | .065 | .080 | 5° Dish | NK-842 |
| 11268-8 | Int. | 50.8mm / 2.000 | 7.0 mm / .2755" | 4.600 | 28° x 7/16" | .050 | .100 | 22° Dish | NK-842 |
| 11213-8 | Exh. | 33.0 mm | 6.0 mm / .2362" | 113.5 mm | 25° x 11/32" | .065 | .080 | 20° Dish | XH-426 |
| 11212-8 | Int. | 39.0 mm | 6.0 mm / .2362" | 113.5 mm | Pro Flo: 22° x 5/16" | .065 | .080 | 17° Dish | NK-842 |
| 11266-8* | Int. | 35.0 mm | 5.98 mm / .2355" | 4.800 | 12° x 5/16" | .065 | .100 | 7° Dish | NK-842 |
| 11276-4 | Int. | 40.0 mm | 5.97 mm / .2350" | 113.0 mm | 25° x 11/32" | .065 | .100 | Flat Face | NK-842 |
| 11209-8 | Exh. | 32.0 mm | 5.5 mm / .2165" | 119.0 mm | 25° x 11/32" | .065 | .080 | Flat Face | XH-426 |
| 11239-8 | Exh. | 33.5 mm | 5.5 mm / .2165" | 122.0 mm | Pro Flo: 22° x 5/16" | .065 | .080 | Flat Face | XH-426 |
| 11208-8 | Int. | 37.0 mm | 5.5 mm / .2165" | 119.0 mm | Pro Flo: 22° x 5/16" | .065 | .080 | Flat Face | NK-842 |

Note: New part numbers are **ITALICIZED**.

TITANIUM VALVES

SMALL BLOCK GM, FORD & CHRYSLER

TITANIUM EXHAUST VALVES

- ✓ All valves have inserted hard tips
- ✓ "HT" suffix indicates high temperature material
- ✓ Available with conventional square or Manley's Bead Loc® single radius keeper grooves



| Square Groove Part No. | Bead Loc® Groove Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Wgt / Grams |
|------------------------|---------------------------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11401T-8 | 11401TB-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.060 | .290 | 15° x 1/2" | .100 | .100 | 73 |
| 11403T-8 | 11403TB-8 | Exh. | 1.600 | .3415 | .200 Longer | 5.160 | .290 | 15° x 1/2" | .100 | .100 | 74 |
| 11405T-8 | 11405TB-8 | Exh. | 1.600 | .3415 | .300 Longer | 5.260 | .290 | 15° x 1/2" | .100 | .100 | 75 |
| 11407T-8 | 11407TB-8 | Exh. | 1.600 | .3415 | .400 Longer | 5.360 | .290 | 15° x 1/2" | .100 | .100 | 76 |
| 11409T-8 | 11409TB-8 | Exh. | 1.600 | .3415 | .500 Longer | 5.460 | .290 | 15° x 1/2" | .100 | .100 | 77 |
| 11451T-8 | 11451TB-8 | Exh. | 1.600 | .3415 | .600 Longer | 5.560 | .290 | 15° x 1/2" | .100 | .100 | 78 |
| 11463T-8 | 11463TB-8 | Exh. | 1.600 | .3415 | Stock | 4.960 | .290 | 20° x 7/16" | .100 | .100 | 74 |
| 11425T-8 | 11425TB-8 | Exh. | 1.600 | .3415 | .100 Longer | 5.060 | .290 | 20° x 7/16" | .100 | .100 | 75 |
| ----- | 11421TB-8 | Exh. | 1.600 | .3110 | .200 Longer | 5.160 | .290 | 20° x 7/16" | .100 | .100 | 70 |
| 11467HT-8* | 11467HTB-8* | Exh. | 1.600 | .3415 | .200 Longer | 5.140 | .290 | 20° x 7/16" | .080 | .085 | 73 |
| 11427T-8 | 11427TB-8 | Exh. | 1.600 | .3415 | .200 Longer | 5.160 | .290 | 20° x 7/16" | .100 | .100 | 76 |
| 11427HT-8 | 11427HTB-8 | Exh. | 1.600 | .3415 | .200 Longer | 5.160 | .290 | 20° x 7/16" | .100 | .100 | 76 |
| 11429T-8 | 11429TB-8 | Exh. | 1.600 | .3415 | .300 Longer | 5.260 | .290 | 20° x 7/16" | .100 | .100 | 77 |
| 11431T-8 | 11431TB-8 | Exh. | 1.600 | .3415 | .400 Longer | 5.360 | .290 | 20° x 7/16" | .100 | .100 | 78 |
| 11433T-8 | 11433TB-8 | Exh. | 1.600 | .3415 | .500 Longer | 5.460 | .290 | 20° x 7/16" | .100 | .100 | 79 |
| 11471HT-8 | 11471HTB-8 | Exh. | 1.600 | .3415 | .600 Longer | 5.560 | .290 | 20° x 7/16" | .100 | .100 | 80 |
| ----- | 11471TB-8 | Exh. | 1.600 | .3415 | .600 Longer | 5.560 | .290 | 20° x 7/16" | .100 | .100 | 80 |
| 11469HT-8 | 11469HTB-8 | Exh. | 1.600 | .3415 | .600 Longer | 5.560 | .290 | 25° x 3/4" | .100 | .100 | 83 |
| 11411T-8 | 11411TB-8 | Exh. | 1.625 | .3415 | .100 Longer | 5.060 | .290 | 15° x 1/2" | .100 | .100 | 74 |
| 11413T-8 | 11413TB-8 | Exh. | 1.625 | .3415 | .200 Longer | 5.160 | .290 | 15° x 1/2" | .100 | .100 | 75 |
| 11417T-8 | 11417TB-8 | Exh. | 1.625 | .3415 | .400 Longer | 5.360 | .290 | 15° x 1/2" | .100 | .100 | 77 |
| 11419T-8 | 11419TB-8 | Exh. | 1.625 | .3415 | .500 Longer | 5.460 | .290 | 15° x 1/2" | .100 | .100 | 78 |
| 11447T-8 | 11447TB-8 | Exh. | 1.625 | .3415 | .600 Longer | 5.560 | .290 | 15° x 1/2" | .100 | .100 | 79 |
| 11447HT-8 | 11447HTB-8 | Exh. | 1.625 | .3415 | .600 Longer | 5.560 | .290 | 15° x 1/2" | .100 | .100 | 79 |
| 11435T-8 | 11435TB-8 | Exh. | 1.625 | .3415 | .100 Longer | 5.060 | .290 | 20° x 7/16" | .100 | .100 | 75 |
| 11437T-8 | 11437TB-8 | Exh. | 1.625 | .3415 | .200 Longer | 5.160 | .290 | 20° x 7/16" | .100 | .100 | 76 |
| 11439T-8 | 11439TB-8 | Exh. | 1.625 | .3415 | .300 Longer | 5.260 | .290 | 20° x 7/16" | .100 | .100 | 77 |
| 11441T-8 | 11441TB-8 | Exh. | 1.625 | .3415 | .400 Longer | 5.360 | .290 | 20° x 7/16" | .100 | .100 | 78 |
| 11443T-8 | 11443TB-8 | Exh. | 1.625 | .3415 | .500 Longer | 5.460 | .290 | 20° x 7/16" | .100 | .100 | 79 |
| 11443HT-8 | 11443HTB-8 | Exh. | 1.625 | .3415 | .500 Longer | 5.460 | .290 | 20° x 7/16" | .100 | .100 | 79 |
| 11453T-8 | 11453TB-8 | Exh. | 1.625 | .3415 | .600 Longer | 5.560 | .290 | 20° x 7/16" | .100 | .100 | 80 |
| 11453HT-8 | 11453HTB-8 | Exh. | 1.625 | .3415 | .600 Longer | 5.560 | .290 | 20° x 7/16" | .100 | .100 | 80 |
| ----- | 11475HTB-8 | Exh. | 1.625 | .3415 | .700 Longer | 5.660 | .290 | 20° x 7/16" | .100 | .100 | 81 |
| 11455HT-8 | 11455HTB-8 | Exh. | 1.625 | .3415 | .500 Longer | 5.460 | .290 | 25° x 3/4" | .100 | .100 | 85 |
| 11457T-8 | 11457TB-8 | Exh. | 1.625 | .3415 | .600 Longer | 5.560 | .290 | 25° x 3/4" | .100 | .100 | 86 |
| 11457HT-8 | 11457HTB-8 | Exh. | 1.625 | .3415 | .600 Longer | 5.560 | .290 | 25° x 3/4" | .100 | .100 | 86 |
| 11473T-8 | 11473TB-8 | Exh. | 1.625 | .3415 | .700 Longer | 5.660 | .290 | 25° x 3/4" | .100 | .100 | 87 |
| ----- | 11477TB-8** | Exh. | 1.625 | .3415 | .700 Longer | 5.640 | .290 | 25° x 1/2" | .080 | .100 | 85 |
| 11445T-8 | 11445TB-8 | Exh. | 1.650 | .3415 | .500 Longer | 5.460 | .290 | 20° x 7/16" | .100 | .100 | 81 |

* Valve 11467HT has a back cut of .055" x 30°

** Valve 11477TB has a 55° seat.

Note: New part numbers are **ITALICIZED**.

SMALL BLOCK GM, FORD & CHRYSLER

TITANIUM INTAKE VALVES

- ✓ All valves have inserted hard tips
- ✓ "HT" suffix indicates higher hardness material
- ✓ Available with conventional square or Manley's Bead Loc® single radius keeper grooves
- ✓ "C" suffix indicates Thin Film seat coating (See page 52 for more details)

VALVES



| Square Groove Part No. | Bead Loc® Groove Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Wgt / Grams |
|------------------------|---------------------------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11948T-8 | 11948TB-8 | Int. | 2.020 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 86 |
| 11452T-8 | 11452TB-8 | Int. | 2.055 | .3415 | Stock | 4.940 | .290 | 10° x 3/8" | .080 | .100 | 85 |
| 11474T-8 | 11474TB-8 | Int. | 2.055 | .3415 | .100 Longer | 5.040 | .290 | 10° x 3/8" | .080 | .100 | 86 |
| 11950T-8 | 11950TB-8 | Int. | 2.055 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 87 |
| 11454T-8 | 11454TB-8 | Int. | 2.080 | .3415 | Stock | 4.940 | .290 | 10° x 3/8" | .080 | .100 | 86 |
| 11400T-8 | 11400TB-8 | Int. | 2.080 | .3415 | .100 Longer | 5.040 | .290 | 10° x 3/8" | .080 | .100 | 87 |
| ----- | 11472HTB-8 | Int. | 2.080 | .3110 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 81 |
| 11402T-8 | 11402TB-8 | Int. | 2.080 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 88 |
| ----- | 11402HTB-8 | Int. | 2.080 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 88 |
| 11404T-8 | 11404TB-8 | Int. | 2.080 | .3415 | .300 Longer | 5.240 | .290 | 10° x 3/8" | .080 | .100 | 89 |
| 11408T-8 | 11408TB-8 | Int. | 2.100 | .3415 | .100 Longer | 5.040 | .290 | 10° x 3/8" | .080 | .100 | 89 |
| ----- | 11478HTB-8 | Int. | 2.100 | .3110 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 82 |
| ----- | 11478HTBC-8** | Int. | 2.100 | .3110 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .060 | 82 |
| 11410T-8 | 11410TB-8 | Int. | 2.100 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 90 |
| ----- | 11410HTB-8 | Int. | 2.100 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 90 |
| ----- | 11410HTBC-8** | Int. | 2.100 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .060 | 90 |
| 11412T-8 | 11412TB-8 | Int. | 2.100 | .3415 | .300 Longer | 5.240 | .290 | 10° x 3/8" | .080 | .100 | 91 |
| 11456T-8 | 11456TB-8 | Int. | 2.100 | .3415 | .300 Longer | 5.240 | .290 | 12° x 7/16" | .080 | .100 | 93 |
| 11462T-8* | 11462TB-8* | Int. | 2.100 | .3415 | .345 Longer | 5.285 | .290 | 12° x 3/8" | .080 | .090 | 94 |
| 11462HT-8* | 11462HTB-8* | Int. | 2.100 | .3415 | .345 Longer | 5.285 | .290 | 12° x 3/8" | .080 | .090 | 94 |
| 11414T-8 | 11414TB-8 | Int. | 2.100 | .3415 | .400 Longer | 5.340 | .290 | 10° x 3/8" | .080 | .100 | 94 |
| 11416T-8 | 11416TB-8 | Int. | 2.100 | .3415 | .500 Longer | 5.440 | .290 | 10° x 3/8" | .080 | .100 | 95 |
| 11446T-8 | 11446TB-8 | Int. | 2.100 | .3415 | .500 Longer | 5.440 | .290 | 12° x 7/16" | .080 | .100 | 96 |
| 11434T-8 | 11434TB-8 | Int. | 2.100 | .3415 | .600 Longer | 5.540 | .290 | 10° x 3/8" | .080 | .100 | 96 |
| 11442T-8 | 11442TB-8 | Int. | 2.125 | .3415 | .100 Longer | 5.040 | .290 | 10° x 3/8" | .080 | .100 | 90 |
| 11418T-8 | 11418TB-8 | Int. | 2.125 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 91 |
| 11420T-8 | 11420TB-8 | Int. | 2.125 | .3415 | .300 Longer | 5.240 | .290 | 10° x 3/8" | .080 | .100 | 92 |
| 11422T-8 | 11422TB-8 | Int. | 2.125 | .3415 | .400 Longer | 5.340 | .290 | 10° x 3/8" | .080 | .100 | 93 |
| 11424T-8 | 11424TB-8 | Int. | 2.125 | .3415 | .500 Longer | 5.440 | .290 | 10° x 3/8" | .080 | .100 | 94 |
| 11448T-8 | 11448TB-8 | Int. | 2.125 | .3415 | .500 Longer | 5.440 | .290 | 12° x 7/16" | .080 | .100 | 95 |
| 11436T-8 | 11436TB-8 | Int. | 2.125 | .3415 | .600 Longer | 5.540 | .290 | 10° x 3/8" | .080 | .100 | 95 |
| 11470T-8 | 11470TB-8 | Int. | 2.125 | .3415 | .600 Longer | 5.540 | .290 | 12° x 7/16" | .080 | .100 | 96 |
| 11428T-8 | 11428TB-8 | Int. | 2.150 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100 | 94 |
| 11430T-8 | 11430TB-8 | Int. | 2.150 | .3415 | .300 Longer | 5.240 | .290 | 10° x 3/8" | .080 | .100 | 95 |
| 11432T-8 | 11432TB-8 | Int. | 2.150 | .3415 | .400 Longer | 5.340 | .290 | 10° x 3/8" | .080 | .100 | 96 |
| 11458T-8 | 11458TB-8 | Int. | 2.150 | .3415 | .400 Longer | 5.340 | .290 | 12° x 7/16" | .080 | .100 | 97 |
| 11426T-8 | 11426TB-8 | Int. | 2.150 | .3415 | .500 Longer | 5.440 | .290 | 10° x 3/8" | .080 | .100 | 97 |
| 11450T-8 | 11450TB-8 | Int. | 2.150 | .3415 | .500 Longer | 5.440 | .290 | 12° x 7/16" | .080 | .100 | 98 |
| ----- | 11496HTB-8 | Int. | 2.150 | .3110 | .600 Longer | 5.540 | .290 | 12° x 3/8" | .080 | .100 | 91 |
| 11438T-8 | 11438TB-8 | Int. | 2.150 | .3415 | .600 Longer | 5.540 | .290 | 10° x 3/8" | .080 | .100 | 99 |
| 11460T-8 | 11460TB-8 | Int. | 2.150 | .3415 | .600 Longer | 5.540 | .290 | 12° x 7/16" | .080 | .100 | 100 |
| ----- | 11460HTB-8 | Int. | 2.150 | .3415 | .600 Longer | 5.540 | .290 | 12° x 7/16" | .080 | .100 | 100 |
| ----- | 11498HTB-8 | Int. | 2.150 | .3110 | .700 Longer | 5.640 | .290 | 12° x 3/8" | .080 | .100 | 92 |
| 11476HT-8 | 11476HTB-8 | Int. | 2.150 | .3415 | .700 Longer | 5.640 | .290 | 12° x 3/8" | .080 | .100 | 101 |

* Valves 11462T & 11462HT have a back cut of .090" x 30°.

** Valves 11478HTBC & 11410HTBC have a back cut of .080" x 30°.

Note: New part numbers are **ITALICIZED**.

2.180" and 2.200" head diameter offerings continued on next page.

TITANIUM VALVES

VALVES

SMALL BLOCK GM, FORD & CHRYSLER

TITANIUM INTAKE VALVES

- ✓ All valves have inserted hard tips
- ✓ "HT" suffix indicates higher hardness material
- ✓ Available with conventional square or Manley's Bead Loc® single radius keeper grooves



| Square Groove Part No. | Bead Loc® Groove Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Wgt / Grams |
|------------------------|---------------------------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11466T-8 | 11466TB-8 | Int. | 2.180 | .3415 | .500 Longer | 5.440 | .290 | 12° x 3/8" | .080 | .100 | 99 |
| ----- | 11494HTB-8 | Int. | 2.180 | .3110 | .600 Longer | 5.540 | .290 | 12° x 3/8" | .080 | .100 | 92 |
| 11468T-8 | 11468TB-8 | Int. | 2.180 | .3415 | .600 Longer | 5.540 | .290 | 12° x 3/8" | .080 | .100 | 100 |
| ----- | 11468HTB-8 | Int. | 2.180 | .3415 | .600 Longer | 5.540 | .290 | 12° x 3/8" | .080 | .100 | 100 |
| ----- | 11488HTB-8 | Int. | 2.180 | .3110 | .700 Longer | 5.640 | .290 | 12° x 3/8" | .080 | .100 | 93 |
| 11486HT-8 | 11486HTB-8 | Int. | 2.180 | .3415 | .700 Longer | 5.640 | .290 | 12° x 3/8" | .080 | .100 | 101 |
| ----- | 11942HTB-8* | Int. | 2.180 | .3110 | .800 Longer | 5.740 | .290 | 12° x 3/8" | .080 | .080 | 94 |
| 11464T-8 | 11464TB-8 | Int. | 2.200 | .3415 | .600 Longer | 5.540 | .290 | 10° x 3/8" | .080 | .100 | 100 |

* Valve 11942HTB has a 52° seat.

LS-7 SMALL BLOCK CHEVY

TITANIUM INTAKE VALVES

- ✓ These valves have an inserted hard tip
- ✓ These valves have an O.E. style single radius keeper groove.

Use Manley valve lock P/N 13098-16 (7°) or 13153-16 (10°) depending on your spring/retainer choice.



SMALL BLOCK CHEVROLET

AFR 210CC, 220CC, 227CC

ELIMINATOR RACING HEADS

TITANIUM VALVES



- ✓ All valves have inserted hard tips
- ✓ All valves feature Chevy LS (.060" single radius) style keeper grooves

Use Manley valve lock P/N 13098-16 (7°) or 13153-16 (10°) depending on your spring/retainer choice.

Manley stem size is .3135". AFR heads have guides sized to .3147" (nominal). Manley strongly recommends that all guides be checked and correctly sized for the Manley valve stem sizes listed to achieve the proper clearances.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Wgt / Grams |
|-----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11967TB-8 | Exh. | 1.600" | .3135" | Stock | 5.090" | .290" | 25° x 7/16" | .080 | .100 | 75 |
| 11968TB-8 | Int. | 2.080" | .3135" | Stock | 5.080" | .290" | 12° x 3/8" | .070 | .100 | 88 |
| 11970TB-8 | Int. | 2.100" | .3135" | Stock | 5.080" | .290" | 12° x 3/8" | .070 | .100 | 90 |

SMALL BLOCK BRODIX "ASCS" CYLINDER HEADS

TITANIUM VALVES

- ✓ All valves have inserted hard tips
- ✓ "HT" suffix indicates higher hardness intake material and high temperature exhaust alloy
- ✓ All valves below are made with Manley's Bead Loc® single radius keeper grooves
- ✓ "C" suffix indicates Thin Film seat coating (See page 52 for more details)



| Part No. | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width/Angle | Back Cut Width/Angle | Wgt / Grams |
|-----------------------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------------|----------------------|-------------|
| EXHAUST VALVES | | | | | | | | | | |
| 11421TB-8 | 1.600 | .3110 | .200 Longer | 5.160 | .290 | 20° x 7/16" | .100 | .100/45° | ----- | 70 |
| 11427TB-8 | 1.600 | .3415 | .200 Longer | 5.160 | .290 | 20° x 7/16" | .100 | .100/45° | ----- | 76 |
| 11427HTB-8 | 1.600 | .3415 | .200 Longer | 5.160 | .290 | 20° x 7/16" | .100 | .100/45° | ----- | 76 |
| 11437TB-8 | 1.625 | .3415 | .200 Longer | 5.160 | .290 | 20° x 7/16" | .100 | .100/45° | ----- | 76 |
| INTAKE VALVES | | | | | | | | | | |
| 11472HTB-8 | 2.080 | .3110 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100/45° | ----- | 81 |
| 11478HTB-8 | 2.100 | .3110 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100/45° | ----- | 82 |
| 11478HTBC-8 | 2.100 | .3110 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .060/45° | .080/30° | 82 |
| 11402HTB-8 | 2.080 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100/45° | ----- | 88 |
| 11410HTB-8 | 2.100 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .100/45° | ----- | 90 |
| 11410HTBC-8 | 2.100 | .3415 | .200 Longer | 5.140 | .290 | 10° x 3/8" | .080 | .060/45° | .080/30° | 90 |

SMALL BLOCK "ALL PRO" & BRODIX GB CYLINDER HEADS

TITANIUM VALVES

- ✓ All exhaust valves are "HT" high temperature material with inserted hard tips
- ✓ All intake valves are "HT" higher hardness material with inserted hard tips
- ✓ All valves have Manley's Bead Loc® single radius keeper grooves
- ✓ "C" suffix indicates Thin Film seat coating (See page 52 for more details)



| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width/Angle | Back Cut Width/Angle | Wgt / Grams |
|-----------------------|---------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------------|----------------------|-------------|
| EXHAUST VALVES | | | | | | | | | | | |
| 11961HTB-8 | ALL PRO | 1.600 | .3415 | Stock | 5.950 | .300 | 20° x 7/16" | .090 | .065/45° | .080/31° | 77 |
| 11963HTB-8 | GB 2000 | 1.600 | .3415 | Stock | 6.090 | .300 | 25° x 3/4" | .090 | .065/45° | ----- | 80 |
| 11965HTB-8 | GB 2300 | 1.600 | .3415 | Stock | 6.250 | .300 | 25° x 3/4" | .090 | .065/45° | ----- | 85 |
| INTAKE VALVES | | | | | | | | | | | |
| 11960HTB-8 | ALL PRO | 2.200 | .3110 | Stock | 5.950 | .300 | 10° x 3/8" | .080 | .050/45° | .080/33° | 90 |
| 11962HTB-8 | GB 2000 | 2.200 | .3110 | Stock | 6.090 | .300 | 12° x 3/8" | .080 | .050/45° | .080/33° | 91 |
| 11962HTBC-8 | GB 2000 | 2.200 | .3110 | Stock | 6.090 | .300 | 12° x 3/8" | .080 | .050/45° | .080/33° | 91 |
| 11964HTB-8 | GB 2300 | 2.200 | .3110 | Stock | 6.250 | .300 | 12° x 3/8" | .080 | .050/45° | .080/33° | 92 |
| 11964HTBC-8 | GB 2300 | 2.200 | .3110 | Stock | 6.250 | .300 | 12° x 3/8" | .080 | .050/45° | .080/33° | 92 |
| 11966HTB-8 | GB 2300 | 2.200 | .3110 | Stock | 6.250 | .300 | 12° x 3/8" | .080 | .050/52° | .080/33° | 92 |
| 11966HTBC-8 | GB 2300 | 2.200 | .3110 | Stock | 6.250 | .300 | 12° x 3/8" | .080 | .050/52° | .080/33° | 92 |

TITANIUM VALVES

BIG BLOCK GENERAL MOTORS TITANIUM VALVES

✓ "H" suffix indicates higher hardness material

✓ Available with conventional square or Manley's Bead Loc® single radius keeper grooves

All part numbers without a "T" suffix do not include a hard tip. Tip protection is required. Manley wear cap P/N 42104 or 42104TM.



| Square Groove Part No. | Bead Loc® Groove Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Wgt / Grams |
|------------------------|---------------------------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11485-8 | 11485B-8 | Exh. | 1.840 | .3415 | Stock | 5.440 | .250 | 30° x 5/8" | .090 | .075 | 98 |
| 11479-8 | 11479B-8 | Exh. | 1.880 | .3415 | Stock | 5.440 | .250 | 30° x 5/8" | .090 | .075 | 100 |
| 11481-8 | 11481B-8 | Exh. | 1.900 | .3415 | Stock | 5.440 | .250 | 30° x 5/8" | .090 | .075 | 101 |
| 11483-8 | 11483B-8 | Exh. | 1.900 | .3415 | .100 Longer | 5.540 | .250 | 30° x 5/8" | .090 | .075 | 102 |
| 11480-8 | 11480B-8 | Int. | 2.250 | .3415 | Stock | 5.250 | .250 | 10° x 3/8" | .065 | .075 | 89 |
| 11490-8 | 11490B-8 | Int. | 2.250 | .3415 | .100 Longer | 5.350 | .250 | 10° x 3/8" | .065 | .075 | 90 |
| 11490T-8 | 11490TB-8 | Int. | 2.250 | .3415 | .100 Longer | 5.350 | .290 | 10° x 3/8" | .065 | .075 | 90 |
| 11492-8 | 11492B-8 | Int. | 2.250 | .3415 | .250 Longer | 5.500 | .250 | 10° x 3/8" | .065 | .075 | 91 |
| 11492T-8 | 11492TB-8 | Int. | 2.250 | .3415 | .250 Longer | 5.540 | .290 | 10° x 3/8" | .065 | .075 | 92 |
| 11952-8 | 11952B-8 | Int. | 2.250 | .3415 | .350 Longer | 5.600 | .250 | 10° x 3/8" | .065 | .075 | 93 |
| 11944T-8 | 11944TB-8 | Int. | 2.300 | .3415 | .100 Longer | 5.350 | .290 | 10° x 3/8" | .065 | .075 | 94 |
| 11482-8 | 11482B-8 | Int. | 2.300 | .3415 | .250 Longer | 5.500 | .250 | 10° x 3/8" | .065 | .075 | 95 |
| 11482H-8 | 11482HB-8 | Int. | 2.300 | .3415 | .250 Longer | 5.500 | .250 | 10° x 3/8" | .065 | .075 | 95 |
| 11482T-8 | 11482TB-8 | Int. | 2.300 | .3415 | .250 Longer | 5.540 | .290 | 10° x 3/8" | .065 | .075 | 96 |
| 11940-8 | 11940B-8 | Int. | 2.325 | .3415 | .250 Longer | 5.500 | .250 | 10° x 3/8" | .065 | .075 | 96 |
| 11940H-8 | 11940HB-8 | Int. | 2.325 | .3415 | .250 Longer | 5.500 | .250 | 10° x 3/8" | .065 | .075 | 96 |
| 11484-8 | 11484B-8 | Int. | 2.350 | .3415 | .250 Longer | 5.500 | .250 | 10° x 3/8" | .065 | .075 | 97 |
| 11954-8 | 11954B-8 | Int. | 2.350 | .3415 | .350 Longer | 5.600 | .250 | 10° x 3/8" | .065 | .075 | 99 |
| 11954H-8 | 11954HB-8 | Int. | 2.350 | .3415 | .350 Longer | 5.600 | .250 | 10° x 3/8" | .065 | .075 | 99 |

DART BIG BLOCK PRO I® & 320 / 360 HEADS TITANIUM VALVES

✓ "H" suffix indicates higher hardness material

✓ Available with conventional square or Manley's Bead Loc® single radius keeper grooves

Dart Big Block titanium valves do not come with a hardened tip. Tip protection is required - Manley wear cap P/N 42104 or 42104TM.

| Square Groove Part No. | Bead Loc® Groove Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Wgt / Grams |
|------------------------|---------------------------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11479-8 | 11479B-8 | Exh. | 1.880 | .3415 | Stock | 5.440 | .250 | 30° x 5/8" | .090 | .075 | 100 |
| 11481-8 | 11481B-8 | Exh. | 1.900 | .3415 | Stock | 5.440 | .250 | 30° x 5/8" | .090 | .075 | 101 |
| 11492-8 | 11492B-8 | Int. | 2.250 | .3415 | .250 Longer | 5.500 | .250 | 10° x 3/8" | .065 | .075 | 91 |
| 11492T-8 | 11492TB-8 | Int. | 2.250 | .3415 | .250 Longer | 5.540 | .290 | 10° x 3/8" | .065 | .075 | 92 |
| 11482-8 | 11482B-8 | Int. | 2.300 | .3415 | .250 Longer | 5.500 | .250 | 10° x 3/8" | .065 | .075 | 95 |
| 11482H-8 | 11482HB-8 | Int. | 2.300 | .3415 | .250 Longer | 5.500 | .250 | 10° x 3/8" | .065 | .075 | 95 |
| 11482T-8 | 11482TB-8 | Int. | 2.300 | .3415 | .250 Longer | 5.540 | .290 | 10° x 3/8" | .065 | .075 | 96 |

PONTIAC PRO STOCK & DART BIG CHIEF TITANIUM VALVES

- ✓ "H" suffix indicates higher hardness material
- ✓ Available with conventional square or Manley's Bead Loc® single radius keeper grooves

All part numbers without a "T" suffix do not include a hard tip. Tip protection is required. Manley wear cap P/N 42104 or 42104TM.

| Square Groove Part No. | Bead Loc® Groove Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Wgt / Grams |
|------------------------|---------------------------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11921-8 | 11921B-8 | Exh. | 1.900 | .3415 | Stock | 6.450 | .250 | 30° x 5/8" | .125 | .075 | 116 |
| 11923T-8 | 11923TB-8 | Exh. | 1.900 | .3415 | Stock | 6.490 | .290 | 30° x 5/8" | .125 | .075 | 117 |
| 11920-8 | 11920B-8 | Int. | 2.400 | .3415 | Stock | 6.600 | .250 | 12° x 3/8" | .065 | .075 | 112 |
| 11920H-8 | 11920HB-8 | Int. | 2.400 | .3415 | Stock | 6.600 | .250 | 12° x 3/8" | .065 | .075 | 112 |
| 11922T-8 | 11922TB-8 | Int. | 2.400 | .3415 | Stock | 6.640 | .290 | 12° x 3/8" | .065 | .075 | 113 |
| 11924-8 | 11924B-8 | Int. | 2.450 | .3415 | Stock | 6.600 | .250 | 12° x 3/8" | .065 | .075 | 114 |

TOP FUEL, FUNNY CAR, TAD & TAFC TITANIUM VALVES

These valves do not come with a hardened tip. Tip protection is required - Manley wear cap P/N 42104 or 42104TM.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Wgt / Grams |
|-----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 11989-8 | Exh. | 2.000 | .3415 | .100 Longer | 5.020 | .250 | 25° x 3/8" | .085 | .075 | 100 |
| 11956-8 | Int. | 2.375 | .3415 | .100 Longer | 5.600 | .250 | 25° x 5/8" | .065 | .075 | 139 |
| 11994B-8* | Int. | 2.400 | .3415 | .100 Longer | 5.600 | .250 | 25° x 5/8" | .070 | .125 | 141 |
| 11998B-8* | Int. | 2.400 | .3415 | .200 Longer | 5.700 | .250 | 25° x 5/8" | .080 | .125 | 142 |

* Valves 11994B and 11998B have a Bead Loc® keeper groove. Bead Loc® valve locks are required.

Note: Manley Performance can custom build valves for any possible combination with a very short lead time. Please call your sales representative.

BRIGGS & STRATTON TITANIUM VALVES

* Dimensions are per customer specifications.

| Part No. | Type | Head Diameter | Stem Diameter | Installed Height | O / A Length | Tip Length | Underhead Angle / Radius | Margin | Seat Width | Wgt / Grams |
|----------|------|---------------|---------------|------------------|--------------|------------|--------------------------|--------|------------|-------------|
| 98031-1 | Exh. | 1.500 Max | .2475 | * | 4.800 Max | .235 | 5° x 5/16" Max. | * | * | |
| 98030-1 | Int. | 2.000 Max | .2475 | * | 4.800 Max | .235 | 5° x 5/16" Max. | * | * | |

Note: Manley Performance can custom build valves for any possible combination with a very short lead time. Please call your sales representative.

CUSTOM TITANIUM VALVES

VALVES

Manley Performance can manufacture titanium valves for just about any application imaginable. Servicing your custom requirements is our specialty; we do it every single day and typically 8 pieces at a time.

We inventory an extensive selection of blanks in varying stem sizes with the stem coating correctly positioned to properly fit the multitude of aftermarket cylinder heads available. This allows us to maintain reliable and very reasonable turnaround times (typically 7-10 working days) throughout the year.

If by chance we don't have a blank in stock to match your particular application, then don't worry. We'll simply make it from one of our raw forgings. This will lengthen the lead-time to 6 weeks.

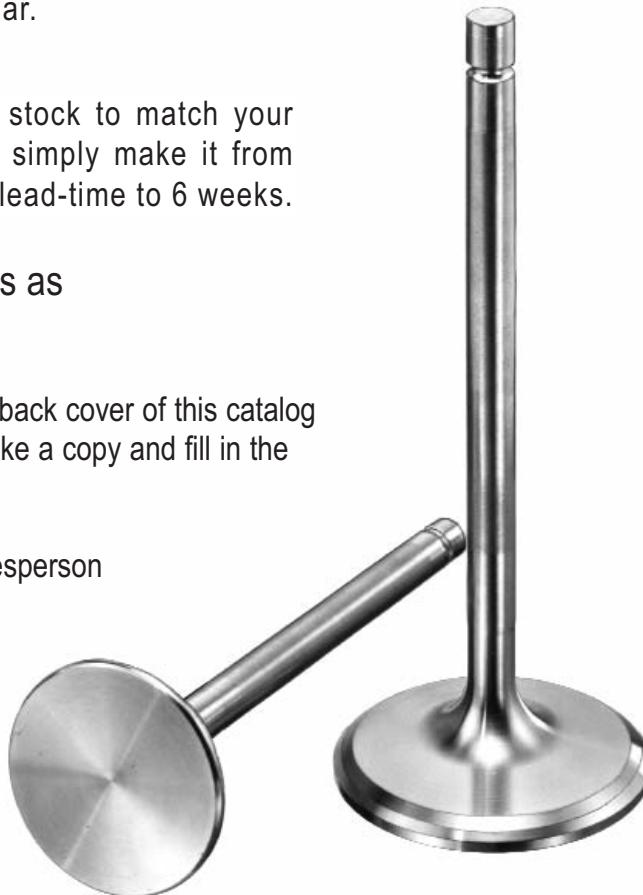
Ordering **Manley** custom titanium valves is as easy as 1 – 2 – 3!

1. Refer to the blank valve print on the inside of the back cover of this catalog or on our website under the custom valve tab. Make a copy and fill in the specifications of the valves you need.
2. Please contact your inside or outside Manley salesperson to review your order.
3. Fax your approved prints to the factory for processing, specifying your account number, a purchase order number and quantity.

For any stem size, any groove type, machined (dished) combustion faces or special head shapes and seat cuts, we're here to service your needs.

Ask your salesman about our special, lightweight "fluted dish" option on the combustion face of the valve.

Our customers' prints are proprietary and confidential.



Fluted Dish

CUSTOM HOLLOW STEM TITANIUM INTAKE VALVES

Manley Performance is proud to offer our customers hollow stem titanium intake valve technology.

- ✓ Precision gun drilling
- ✓ Smooth surface finish
- ✓ Generous corner radius, no stress raisers
- ✓ Able to utilize a hard steel tip on 5/16" and larger stem diameter valves
- ✓ Extremely Lightweight - 10-12% weight reduction
- ✓ Thin film coated seat face (optional)

Look no further for the ultimate hollow stem titanium intake valve. Easy to order and relatively fast turnaround times...

Ordering **Manley** custom hollow stem titanium valves is as easy as 1 – 2 – 3!

1. Refer to the blank valve print on the inside of the back cover of this catalog or on our website under the custom valve tab. Make a copy and fill in the specifications of the valves you need.
2. Please contact your inside or outside Manley salesperson to review your order.
3. Fax your approved prints to the factory for processing, specifying your account number, a purchase order number and quantity.

Our customers' prints are proprietary and confidential.



CUSTOM TITANIUM VALVES

TITANIUM VALVE “THIN FILM” SEAT FACE COATING

Advantages:

- ✓ High hardness and lubricity dramatically improves valve seat face wear.
- ✓ Prevents “trenching” of the seat face which maintains combustion seal.
- ✓ Provides greater resistance to wear typically seen when valve float or dirt is present in the engine.
- ✓ Better seal between the valve seat face and the seat in the cylinder head equals more horsepower.

Contact your Manley salesperson for further details on how to order.



Greg Anderson
KB Racing

MANLEY VALVE LOCKS... SIMPLY THE BEST!

CONVENTIONAL vs BEAD LOC® VALVE STEM GROOVES

The groove in a valve stem, seemingly unimportant, in reality is vital to the success of a valve's performance. Imperfectly formed grooves, inferior or mismatched locks, and improper retainers can lead to catastrophic failure.

The so called "conventional" or square groove design has enjoyed enormous success. But the success of a "conventional" groove is dependent upon precise machining. First, the surface finish of the groove must be outstanding to guarantee against failure due to residual machining marks.

Next, the groove must have a precise .013" radius in the upper corner. Too small a radius leaves the groove subject to the dangers of a sharp fillet. Too large a radius leaves open the possibility of the groove being abraded in this area by the upper inside edge of the tang of the lock. Also, an oversized radius leaves a reduced horizontal shelf in the groove which is, or should be, the only contact point with the tang of the lock. Contact by the lock in the root of the groove is a disaster waiting to happen.

Perfectly formed "conventional" grooves with proper locks and retainers will deliver good service. However, there are sub-standard components on the market that can conspire to destroy a correctly machined groove.

The essence of the Bead Loc® groove is its simplicity and forgiveness. The groove itself is a straightforward .110" full radius. The contact points with a Bead Loc® radius lock are approximately 2:00 and 10:00 o'clock, not at the root of the groove. This system affords minimal vertical movement, especially when valve float is present, which means reduced erosion of the valve for enhanced service life.

Manley Performance supports both the "conventional" groove system and the Bead Loc® system with the most extensive line-up of the highest quality locks in the industry.

7° STAMPED VALVE LOCKS

- ✓ Stamped locks are recommended ONLY for mild performance engines

| Part No. | Quantity | Valve Stem | Groove Type |
|----------|----------|------------|--------------|
| 13238-16 | 16 pr. | .5/16" | Conventional |
| 13127-16 | 16 pr. | .11/32" | Conventional |



BULK PRICING
AVAILABLE

7° MACHINED VALVE LOCKS

- ✓ Highest quality steel alloy
- ✓ Heat treated and black oxide finished

| Part No. | Quantity | Valve Stem | Groove Type |
|----------|----------|-----------------|--|
| 13086-32 | 32 pr. | .2345" | Bead Loc® Ford 5.0L "Coyote" (4 Valve) |
| 13088-24 | 24 pr. | .2345"-.2355" | Bead Loc® Ford Modular 4.6L (3 Valve) |
| 13089-16 | 16 pr. | .2740"-.2750" | Bead Loc® Ford Modular 4.6L/5.4L (2 Valve) |
| 13089-32 | 32 pr. | .2740"-.2750" | Bead Loc® Ford Modular 4.6L/5.4L (4 Valve) |
| 13087-16 | 16 pr. | .5/16" (.3120") | Bead Loc® Ford 6.2L "Raptor" (2 Valve) |
| 13093-16 | 16 pr. | .5/16" (.3125") | Bead Loc® Chrysler Hemi 5.7L/6.1L |
| 13098-16 | 16 pr. | 8mm (.3135") | Single Radius Chevy LS |
| 13090-16 | 16 pr. | .5/16" (.3100") | Conventional |
| 13091-16 | 16 pr. | .11/32" | Conventional |
| 13092-16 | 16 pr. | .3/8" | Conventional |



BULK PRICING
AVAILABLE

Note: New part numbers are **ITALICIZED**.

VALVE LOCKS

SUPER 7° VALVE LOCKS STEEL MATERIAL

- ✓ Heat treated and black oxide finished
- ✓ Highest quality steel alloy
- ✓ Thicker for greater strength

| Part No. | Quantity | Valve Stem | Installed Height | Groove Type | Wgt. / Pr. |
|-----------|----------|------------|------------------|--------------|------------|
| 13050-8 | 8 pr. | .3110" | .050" less | Bead Loc® | 8.2 gms |
| 13051-8 | 8 pr. | .3110" | Standard | Bead Loc® | 8.2 gms |
| 13052-8 | 8 pr. | .3110" | .050" more | Bead Loc® | 8.2 gms |
| 13080-16* | 16 pr. | .3110" | Standard | Conventional | 8.3 gms |
| 13085-16* | 16 pr. | .3110" | .050" more | Conventional | 8.2 gms |
| 13060-8 | 8 pr. | .3415" | .050" less | Bead Loc® | 7.4 gms |
| 13061-8 | 8 pr. | .3415" | Standard | Bead Loc® | 7.4 gms |
| 13062-8 | 8 pr. | .3415" | .050" more | Bead Loc® | 7.4 gms |
| 13081-16* | 16 pr. | .3415" | .050" less | Conventional | 9.9 gms |
| 13083-16* | 16 pr. | .3415" | Standard | Conventional | 7.5 gms |
| 13084-16* | 16 pr. | .3415" | .050" more | Conventional | 7.6 gms |



* Also available in quantities of 8 pairs. To order as a set of 8 pairs change the part number from a (-16) to a (-8).

SUPER 7° VALVE LOCKS TITANIUM MATERIAL

- ✓ Lightweight titanium material

| Part No. | Quantity | Valve Stem | Installed Height | Groove Type | Wgt. / Pr. |
|------------|----------|--------------|------------------|--------------|------------|
| 13030T-8 | 8 pr. | 7 mm /.2740" | .050" less | Bead Loc® | 5.6 gms |
| 13037T-8 | 8 pr. | 7 mm /.2740" | Standard | Bead Loc® | 4.9 gms |
| 13038T-8 | 8 pr. | 7 mm /.2740" | .050" more | Bead Loc® | 4.6 gms |
| 13051T-8 | 8 pr. | .3110" | Standard | Bead Loc® | 4.5 gms |
| 13052T-8 | 8 pr. | .3110" | .050" more | Bead Loc® | 4.5 gms |
| 13061T-8 | 8 pr. | .3415" | Standard | Bead Loc® | 4.1 gms |
| 13062T-8 | 8 pr. | .3415" | .050" more | Bead Loc® | 4.1 gms |
| 13081T-16* | 16 pr. | .3415" | .050" less | Conventional | 5.5 gms |
| 13083T-16* | 16 pr. | .3415" | Standard | Conventional | 4.2 gms |
| 13084T-16* | 16 pr. | .3415" | .050" more | Conventional | 4.1 gms |



* Also available in quantities of 8 pairs. To order as a set of 8 pairs change the part number from a (-16) to a (-8).

SUPER 7° "CAPTIV-LOC" VALVE LOCKS

- ✓ Developed by Keith Dorton
- ✓ Encapsulates hard tip in titanium valve if it comes loose
- ✓ Use with valves with .290" to .330" tip lengths
- ✓ Available in steel and titanium material

| Part No. | Steel | Titanium | Quantity | Valve Stem | Installed Height | Groove Type | Wgt. / Pr. |
|-----------|------------|------------|----------|------------|------------------|--------------|---------------|
| --- | --- | 13039T-8 | 8 pr. | .3110" | .050" less | Bead Loc® | 5.7 gms |
| 13033-8 | 13033T-8 | 13033T-8 | 8 pr. | .3110" | Standard | Bead Loc® | 9.5 / 5.6 gms |
| 13034-8 | 13034T-8 | 13034T-8 | 8 pr. | .3110" | .050" more | Bead Loc® | 9.4 / 5.3 gms |
| --- | --- | 13040T-8 | 8 pr. | .3415" | .050" less | Bead Loc® | 5.0 gms |
| 13035-8 | 13035T-8 | 13035T-8 | 8 pr. | .3415" | Standard | Bead Loc® | 8.6 / 4.9 gms |
| 13036-8 | 13036T-8 | 13036T-8 | 8 pr. | .3415" | .050" more | Bead Loc® | 8.5 / 4.7 gms |
| 13031-16* | 13031T-16* | 13031T-16* | 16 pr. | .3415" | Standard | Conventional | 9.2 / 5.3 gms |
| 13032-16* | 13032T-16* | 13032T-16* | 16 pr. | .3415" | .050" more | Conventional | 9.3 / 5.0 gms |



* Also available in quantities of 8 pairs. To order as a set of 8 pairs change the part number from a (-16) to a (-8).

SPORT COMPACT VALVE LOCKS

- ✓ Manufactured from premium quality heat treated steel
- ✓ Machined to exacting tolerances

| Part No. | Quantity | Description | Valve Stem | Groove Type | Angle | Wgt. / Pr. |
|----------|----------|---------------|------------------|-------------|-------|------------|
| 13010-8 | 8 pr. | Honda / Acura | 5.5 mm / .2165" | OEM Radius | 7° | 1.5 gms |
| 13012-8 | 8 pr. | Nissan | 6.0 mm / .2362" | OEM Radius | 6° | 1.4 gms |
| 13014-8 | 8 pr. | Toyota | 6.0 mm / .2362" | OEM Radius | 6° | 1.3 gms |
| 13016-8 | 8 pr. | Mitsubishi | 6.56 mm / .2581" | OEM Radius | 6° | 1.3 gms |



CYL HEAD COMPONENTS

PRECISION CRAFTED 10° MACHINED VALVE LOCKS STEEL MATERIAL

- ✓ Highest quality steel alloy
- ✓ Heat treated and black oxide finished

| Part No. | Quantity | Valve Stem | Installed Height | Groove Type | Wgt. / Pr. |
|-----------|----------|--------------|------------------|------------------------|------------|
| 13171-8 | 8 pr. | 7 mm /.2740" | .050" less | Bead Loc® | 7.4 gms |
| 13170-8 | 8 pr. | 7 mm /.2740" | Standard | Bead Loc® | 7.4 gms |
| 13172-8 | 8 pr. | 7 mm /.2740" | .050" more | Bead Loc® | 7.4 gms |
| 13190-8 | 8 pr. | .3075" | Standard | Bead Loc® | 6.7 gms |
| 13191-8 | 8 pr. | .3085" | Standard | Bead Loc® | 6.7 gms |
| 13193-16* | 16 pr. | .3085" | Standard | Conventional | 6.7 gms |
| 13151-8 | 8 pr. | .3110" | Standard | Bead Loc® | 7.0 gms |
| 13152-8 | 8 pr. | .3110" | .050" more | Bead Loc® | 6.4 gms |
| 13096-16* | 16 pr. | .3110" | Standard | Conventional | 6.7 gms |
| 13196-16* | 16 pr. | .3110" | .050" more | Conventional | 6.0 gms |
| 13153-16* | 16 pr. | 8 mm (.3135) | Standard | Single Radius Chevy LS | 6.6 gms |
| 13160-8 | 8 pr. | .3415" | .050" less | Bead Loc® | 6.8 gms |
| 13161-8 | 8 pr. | .3415" | Standard | Bead Loc® | 6.3 gms |
| 13162-8 | 8 pr. | .3415" | .050" more | Bead Loc® | 6.3 gms |
| 13097-16* | 16 pr. | .3415" | Standard | Conventional | 6.8 gms |
| 13194-16* | 16 pr. | .3415" | Standard | Conventional | 6.1 gms |
| 13198-16* | 16 pr. | .3415" | .050" more | Conventional | 5.6 gms |
| 13192-8 | 8 pr. | .3715" | Standard | Bead Loc® | 5.0 gms |
| 13195-16* | 16 pr. | .3715" | Standard | Conventional | 5.0 gms |



* Also available in quantities of 8 pairs. To order as a set of 8 pairs change the part number from a (-16) to a (-8).

Lock 13097 is NOT recessed to accept a wear cap.

PRECISION CRAFTED 10° MACHINED VALVE LOCKS TITANIUM MATERIAL

- ✓ Durable and lightweight

| Part No. | Quantity | Valve Stem | Installed Height | Groove Type | Wgt. / Pr. |
|------------|----------|--------------|------------------|--------------|------------|
| 13171T-8 | 8 pr. | 7 mm /.2740" | .050" less | Bead Loc® | 4.3 gms |
| 13151T-8 | 8 pr. | .3110" | Standard | Bead Loc® | 3.9 gms |
| 13152T-8 | 8 pr. | .3110" | .050" more | Bead Loc® | 3.6 gms |
| 13096T-16* | 16 pr. | .3110" | Standard | Conventional | 3.8 gms |
| 13161T-8 | 8 pr. | .3415" | Standard | Bead Loc® | 3.6 gms |
| 13162T-8 | 8 pr. | .3415" | .050" more | Bead Loc® | 3.6 gms |
| 13194T-16* | 16 pr. | .3415" | Standard | Conventional | 3.5 gms |
| 13198T-16* | 16 pr. | .3415" | .050" more | Conventional | 3.5 gms |



* Also available in quantities of 8 pairs. To order as a set of 8 pairs change the part number from a (-16) to a (-8).

Note: New part numbers are **ITALICIZED**.

LOC CAP SYSTEM

MANLEY PERFORMANCE LOC CAP SYSTEM

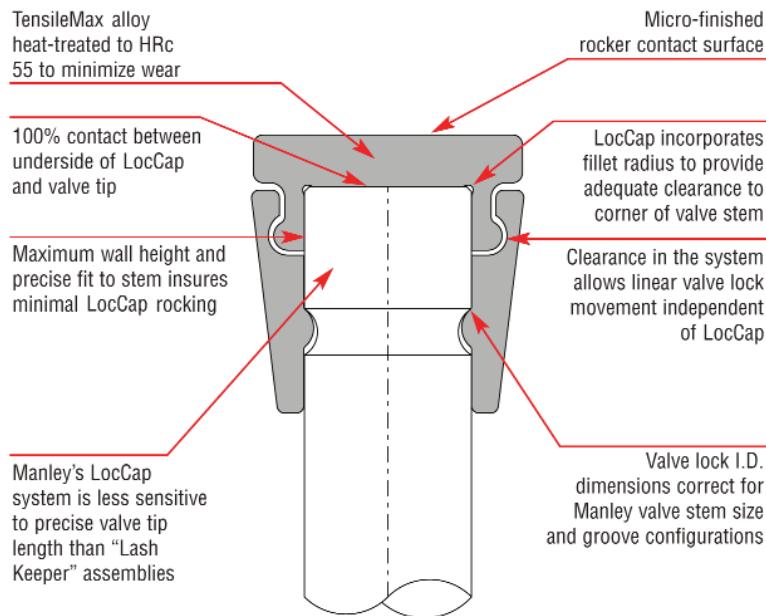
- ✓ The ULTIMATE valve lock/wear cap assembly
- ✓ Designed specifically for Fuel, Alcohol and Pro Mod Racers

First developed by our engineering team in the late 1990s for NASCAR applications, Manley's LocCap system is designed to retain the wear cap on the tip of the valve by employing an external bead on the wear cap that—when the system is assembled—resides within an internal "retention channel" located on the I.D. of the valve locks. Manley's valve train components group, headed by Manley GM Michael Tokarchik, refined the original designs combining a state-of-the-art steel alloy and ultra precise manufacturing techniques to achieve the goal of delivering a no compromises valve lock/wear cap assembly for the supercharged classes.

Manley's LocCap systems are available in true 7-degree as well as 10-degree assemblies for 11/32" and 3/8" stem valves in both Manley Bead Loc® and conventional square groove configurations. In addition, Manley's LocCap system retrofits to competitors' "Lash Keeper" assemblies, maintaining original valve spring installed height, valve overall length, valve tip length (0.250") and retainer designs.

Both the LocCap valve locks and wear caps are precision machined using Manley's TensileMax UHSS (ultra high strength steel). The wear caps are thru-hardened to HRC 55 (harder than typical tool steel) to minimize wear due to aggressive rocker contact. Manley's proprietary heat treatment processes minimize distortion, thereby improving the fit of the wear cap and valve locks to the valve stem.

For high RPM alcohol and Pro Mod racers desiring the lightest possible valve train mass, Manley also manufactures LocCap valve locks from high strength titanium alloy.



VALVE LOCKS

| Valve Stem Size | 7° Bead Loc | 7° Square Groove | 10° Bead Loc | 10° Square Groove |
|-----------------|----------------|------------------|----------------|-------------------|
| 5/16" (.3100") | ----- | ----- | 13441-8 | ----- |
| 11/32" (.3415") | 13361-8 | 13394-8 | 13461-8 | 13494-8 |
| 3/8" (.3715") | 13392-8 | 13395-8 | 13492-8 | 13495-8 |

Note: -8 indicates one set of 8 pairs. Valve Locks are available in high strength titanium alloy. Add "T" suffix when ordering.

TITANIUM RETAINERS

| Valve Spring Type | Valve Spring Part No. | 7° +.100" Part No. | 10° Std. Part No. | 10° +.100" Part No. | 10° +.170" Part No. |
|------------------------|---------------------------------------|-----------------------------------|-------------------------|------------------------------------|---------------------------|
| Steel Double Springs | 221455, 221456, 221457, 221460 | 23675-8 23677-8* | 23684-8 | 23676-8* 23679-8* | 23683-8* |
| Steel Double Springs | 221463 | ----- | ----- | 23686-8* | ----- |
| Steel Triple Springs | 221447, 221448, 221449, 221450, 22451 | 23673-8 | ----- | 23653-8* 23753-8* | ----- |
| Titanium Double Spring | | 23678-8* | ----- | 23668-8* | ----- |

Note: -8 indicates 8 pieces.

* Lightweight design high strength Ti-17 titanium material

Note: New part numbers are *ITALICIZED*.

INSERTED TIPS

- ✓ Wear resistant steel alloy
- ✓ Ideal titanium valve tip protection

| Part No. | Quantity | Description | Knurl Diameter | Post Length |
|----------|----------|--------------------|----------------|-------------|
| 42311-8 | 8 pcs. | Fits 5/16" valves | .173" | .120" |
| 42105-8 | 8 pcs. | Fits 11/32" valves | .193" | .120" |
| 42340-8 | 8 pcs. | Fits 3/8" valves | .193" | .120" |



WEAR CAPS

- ✓ 4140 alloy steel
- ✓ Special heat treatment
- ✓ Non rotating caps afford less valve tip erosion



| Part No. | Quantity | Description | Minimum Tip | Type | Thickness |
|----------|----------|-----------------------------|-------------|--------------|-----------|
| 42263-8 | 8 pcs. | .2165" stem valves (5.5 mm) | .095" | Standard | .040" |
| 42254-8 | 8 pcs. | .2360" stem valves (6 mm) | .275" | Non Rotating | .060" |
| 42264-8 | 8 pcs. | .2360" stem valves (6 mm) | .095" | Standard | .040" |
| 42100-8 | 8 pcs. | .2740" stem valves (7 mm) | .250" | Standard | .085" |
| 42118-8 | 8 pcs. | .2740" stem valves (7 mm) | .290" | Non Rotating | .080" |
| 42101-16 | 16 pcs. | .3085" stem valves (5/16") | .250" | Standard | .080" |
| 42139-8 | 8 pcs. | .3110" stem valves (5/16") | .250" | Standard | .080" |
| 42300-8 | 8 pcs. | .3110" stem valves (5/16") | .250" | Non Rotating | .080" |
| 42125-8 | 8 pcs. | .3130" stem valves (8 mm) | .130" | Standard | .080" |
| 42104-16 | 16 pcs. | .3415" stem valves (11/32") | .250" | Standard | .080" |
| 42301-8 | 8 pcs. | .3415" stem valves (11/32") | .250" | Non Rotating | .080" |
| 42108-16 | 16 pcs. | .3715" stem valves (3/8") | .220" | Standard | .080" |

TENSILEMAX WEAR CAPS

- ✓ Precision machined from TensileMax UHSS (Ultra High Strength Steel)
- ✓ Thru-hardened to HRc55 to minimize wear due to aggressive rocker contact
- ✓ Proprietary heat treatment processes minimize distortion

| Part No. | Quantity | Description | Minimum Tip | Type | Thickness |
|------------|----------|-----------------------------|-------------|----------|-----------|
| 42100TM-8 | 8 pcs. | .2740" stem valves (7mm) | .250" | Standard | .085" |
| 42139TM-8 | 8 pcs. | .3110" stem valves (5/16") | .250" | Standard | .080" |
| 42104TM-16 | 16 pcs. | .3415" stem valves (11/32") | .250" | Standard | .080" |

VALVE STEM SEALS, GUIDES & CUTTERS

VITON MATERIAL VALVE STEM SEALS

- ✓ A necessity when using NexTek® triple valve springs.
- ✓ Special design allows clearance inside small I.D. springs.

| Part No. | Quantity | Description | Guide O.D. | Installed Seal O.D. | Use Cutter No. |
|----------|----------|---------------|------------|---------------------|----------------|
| 24041-8 | 8 pcs. | .274" valves | .431" | .566" | 41410 |
| 24040-8 | 8 pcs. | 5/16" valves | .420" | .566" | 41510 |
| 24042-8 | 8 pcs. | 5/16" valves | .500" | .608" | 41610 |
| 24047-8 | 8 pcs. | 5/16" valves | .530" | .677" | 41710 |
| 24043-8 | 8 pcs. | 11/32" valves | .500" | .620" | 41611 |
| 24045-8 | 8 pcs. | 11/32" valves | .530" | .674" | 41711 |
| 24044-8 | 8 pcs. | 3/8" valves | .500" | .623" | 41612 |
| 24046-8 | 8 pcs. | 3/8" valves | .530" | .677" | 41712 |



ALL TEFLON VALVE STEM SEALS

- ✓ Spring loaded wiper to remove excess oil

| Part No. | Quantity | Description | Guide O.D. | Use Cutter No. |
|----------|----------|---------------|------------|----------------|
| 24029-16 | 16 pcs. | 5/16" valves | .500" | 41610 |
| 24034-16 | 16 pcs. | 5/16" valves | .530" | 41710 |
| 24037-16 | 16 pcs. | 11/32" valves | .500" | 41611 |
| 24035-16 | 16 pcs. | 11/32" valves | .530" | 41711 |
| 24039-16 | 16 pcs. | 3/8" valves | .500" | 41612 |
| 24036-16 | 16 pcs. | 3/8" valves | .530" | 41712 |



VALVE GUIDE SEAL CUTTERS

- ✓ Carbide tipped cutters
- ✓ Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods

| Part No. | Quantity | Pilot Size | Seal No. | Guide O.D. |
|----------|----------|--------------|---------------|------------|
| 41410 | 1 | 7 mm (.274") | 24041 | .431" |
| 41510 | 1 | 5/16" | 24040 | .420" |
| 41610 | 1 | 5/16" | 24029 / 24042 | .500" |
| 41710 | 1 | 5/16" | 24034 / 24047 | .530" |
| 41611 | 1 | 11/32" | 24037 / 24043 | .500" |
| 41711 | 1 | 11/32" | 24035 / 24045 | .530" |
| 41612 | 1 | 3/8" | 24039 / 24044 | .500" |
| 41712 | 1 | 3/8" | 24036 / 24046 | .530" |



VALVE GUIDE SEAL CUTTER PILOT

- ✓ For use with any spring seat or seal cutter

| Part No. | Quantity | Description |
|----------|----------|---------------------|
| 41274 | 1 | 7 mm cutter pilot |
| 41516 | 1 | 5/16" cutter pilot |
| 41132 | 1 | 11/32" cutter pilot |
| 41138 | 1 | 3/8" cutter pilot |



BRONZE VALVE GUIDES

- ✓ .502" O.D. ✓ 1.625" length under flange ✓ Threaded seal area above flange

| Part No. | Quantity | Description |
|----------|----------|----------------------------------|
| 12081-8 | 8 pcs. | Bronze insert guide - .274" I.D. |
| 12084-8 | 8 pcs. | Bronze insert guide - .311" I.D. |



BRONZE VALVE GUIDE SLEEVES

- ✓ Repair worn guides quickly and easily

| Part No. | Quantity | Description |
|----------|----------|--|
| 42157-32 | 32 pcs. | Repairs 5/16" valve guides. For 11/32" bore size (.3410" - .3425"). |
| 42158-32 | 32 pcs. | Repairs 11/32" valve guides. For 3/8" bore size (.3720" - .3735"). |
| 42159-32 | 32 pcs. | Repairs 3/8" valve guides. For .4040" - .4055" bore size. |
| 42161-16 | 16 pcs. | .018" wall to convert 11/32" guides to accept 5/16" valves. For .3440" bored hole maximum I.D. |
| 42162-16 | 16 pcs. | .030" wall to convert 3/8" guides to accept 5/16" valves. For .3735" bored hole maximum I.D. |



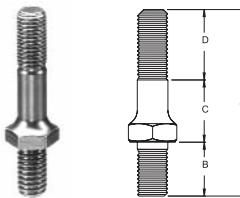
ROCKER ARMS & STUDS

PROFESSIONAL

ROCKER ARM SCREW-IN STUDS

- ✓ 8740 material with 190,000 psi tensile strength
- ✓ Rolled threads
- ✓ Large radii
- ✓ Flat poly lock surface

BULK PRICING
AVAILABLE



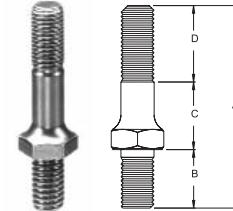
| Part No. | Quantity | Application | Roller Rockers | Stud Girdles | Upper Threads | A | Dimensions | C | D |
|----------|----------|---|----------------|--------------|---------------|--------|------------|--------|--------|
| | | | | | | | B | | |
| 42276-16 | 16 pcs. | SB Chevy & Ford | Yes | No | 3/8" | 2.425" | .670" | .945" | .810" |
| 42277-16 | 16 pcs. | SB Chevy & Ford | Yes | No | 7/16" | 2.440" | .660" | .890" | .890" |
| 42287-16 | 16 pcs. | SB Chevy w/ 18° head | Yes | Yes | 7/16" | 2.850" | .750" | 1.300" | .800" |
| 42288-16 | 16 pcs. | SB & BB Chevy | Yes | Yes | 7/16" | 2.810" | .740" | 1.020" | 1.050" |
| 42290-8 | 8 pcs. | SB & BB Chevy | Yes | Yes | 7/16" | 2.810" | .740" | 1.020" | 1.050" |
| 42287-16 | 16 pcs. | BB Chevy | Yes | Yes | 7/16" | 2.850" | .750" | 1.300" | .800" |
| 42278-16 | 16 pcs. | BB Chevy | No | No | 7/16" | 2.580" | .820" | .900" | .860" |
| 42255-8 | 8 pcs. | BB Chevy w/ alum. head, exhaust stud only | Yes | Yes | 7/16" | 3.700" | 1.700" | 1.000" | 1.000" |
| 42256-16 | 16 pcs. | BB Chevy w/ tall springs | Yes | Yes | 7/16" | 3.200" | .850" | 1.550" | .800" |
| 42266-16 | 16 pcs. | BB Chevy Mark V w/ 3/8" lower threads converting to Mark IV heads | Yes | No | 7/16" | 2.600" | .775" | .885" | 1.000" |
| 42293-8 | 8 pcs. | BB Chevy w/ Dart aluminum | Yes | Yes | 7/16" | 3.300" | 1.300" | 1.000" | 1.000" |

STREET MASTER

ROCKER ARM SCREW-IN STUDS

- ✓ Special maxalloy steel
- ✓ Rolled threads

BULK PRICING
AVAILABLE



PROFESSIONAL

ROCKER ARM ADJUSTING NUTS

- ✓ Special chrome moly hex material
- ✓ Heat treated and black oxide
- ✓ Set screws and allen wrench included

| Part No. | Quantity | Description |
|----------|----------|---------------------------------|
| 42106-16 | 16 pcs. | SB Chevy & Ford |
| 42147-16 | 16 pcs. | SB Chevy & Ford with poly locks |
| 42103-16 | 16 pcs. | SB Chevy, BB Chevy & Ford |



SMALL BLOCK CHEVROLET STAMPED STEEL ROCKER ARM KITS

- ✓ Highest quality steel
- ✓ Heat treated
- ✓ Long slots to avoid stud interference
- ✓ Kits include oil grooved rocker balls and nuts

These rockers are the non "self-aligning" type used from 1955 to 1989.

| Part No. | Quantity | Description | Stud Diameter |
|----------|------------------|-----------------------------------|---------------|
| 43140 | 1 set for 1 head | Small Block - Long Slot 1.5 Ratio | 3/8" |
| 43150 | 1 set for 1 head | Small Block - Long Slot 1.6 Ratio | 3/8" |



ROCKER ARM KIT COMPONENTS

NOTE: Individual rockers only are sold as -8, and rocker balls and rocker nuts are sold as -16. Kits include only 8 pieces of each part.

| Kit | Rocker | Ball | Nut |
|-------|---------|----------|----------|
| 43140 | 43141-8 | 43142-16 | 43143-16 |
| 43150 | 43151-8 | 43142-16 | 43143-16 |

STEEL GUIDE PLATES

STEEL GUIDE PLATES

- ✓ Meticulously crafted stamping
- ✓ Heat treated and black oxide finished



SMALL BLOCK CHEVROLET RAISED GUIDE PLATE

| Part No. | Quantity | Description | Slots | Pushrods |
|----------|----------|-------------------|-----------|----------|
| 42151-8 | 8 pcs. | Small Block Chevy | On-Center | 5/16" |
| 42150-8 | 8 pcs. | Small Block Chevy | On-Center | 3/8" |



SMALL BLOCK CHEVROLET FLAT GUIDE PLATE

| Part No. | Quantity | Description | Slots | Pushrods |
|----------|----------|-------------------|-----------|----------|
| 42355-8 | 8 pcs. | Small Block Chevy | On-Center | 5/16" |
| 42356-8 | 8 pcs. | Small Block Chevy | On-Center | 3/8" |



BIG BLOCK CHEVROLET

| Part No. | Quantity | Description | Pushrods |
|----------|----------|----------------------------|----------|
| 42164-8 | 8 pcs. | Big Block Chevy | 3/8" |
| 42165-8 | 8 pcs. | Big Block Chevy Adjustable | 3/8" |
| 42149-8 | 8 pcs. | Big Block Chevy | 7/16" |



FORD 289 - 302 - 351 W PRE 1977 HEADS

| Part No. | Quantity | Description | Pushrods |
|----------|----------|------------------------|----------|
| 42152-8 | 8 pcs. | 289, 302 W, 351 W Ford | 5/16" |



FORD 302 BOSS - 351 C (WITH MODIFIED HEADS)

| Part No. | Quantity | Description | Pushrods |
|----------|----------|--------------------------|----------|
| 42163-8 | 8 pcs. | 302 Boss, 351 C Modified | 5/16" |
| 42156-8 | 8 pcs. | 302 Boss, 351 C Modified | 3/8" |



To convert Ford 351C engines to adjustable rocker arms and pushrod guide plates, machine the old rocker stanchions down to a height of .550" as measured from the adjacent head bolt spot face with cutter 41860. Drill and tap the old screw hole to accept stud 42277.

FORD 429 - 460

| Part No. | Quantity | Description | Pushrods |
|----------|----------|---------------|----------|
| 42166-8 | 8 pcs. | 429, 460 Ford | 5/16" |
| 42160-8 | 8 pcs. | 429, 460 Ford | 3/8" |



SUPERIOR HEAD BOLTS

- ✓ 180,000 psi material
- ✓ Longer than stock for use with washers
- ✓ Improved wrenchability with 1/2" hex head

| Part No. | Quantity | Description |
|----------|------------------|---|
| 42193 | 1 set for 1 head | Chevrolet V-6 |
| 42171 | 1 set for 1 head | SB Chevy V-8 |
| 42312 | 1 set for 1 head | SB Chevy, Brodix - 12 and Pontiac 10093328 castings |
| 42313 | 1 set for 1 head | SB Chevy, Brodix aluminum and Pontiac 10033867 |
| 42170 | 1 set for 1 head | BB Chevy |
| 42180 | 1 set for 1 head | BB Chevy with Dart Pro 1 heads |
| 42192 | 1 set for 1 head | BB Chevy with Brodix heads, Merlin II Aluminum |
| 42322 | 1 set for 1 head | BB Chevy with Chevy Bow Tie, Dart Aluminum and Merlin heads |
| 42178 | 1 set for 1 head | Chrysler 383-440 |
| 42198 | 1 set for 1 head | Indy Cylinder Head 440-1 BB Chrysler head |



CYL HEAD COMPONENTS

HARDENED HEAD BOLT WASHERS

- ✓ Special heat treatment to prevent galling

| Part No. | Quantity | Description |
|----------|----------|--|
| 42102 | 34 pcs. | All Chevys, 289-351 Fords, .760" O.D., 7/16" I.D., .125" thick |
| 42127 | 20 pcs. | All Chryslers, Pontiacs, 390-427 Fords, .875" O.D., 1/2" I.D., .105" thick |
| 42136 | 34 pcs. | Ideal washers for aluminum heads. 7/16" I.D. but larger .935" O.D. for better fit in aftermarket aluminum heads, .125" thick |



CYLINDER HEAD STUD KITS

- ✓ Chrome moly steel
- ✓ 190,000 psi tensile strength
- ✓ Kit includes studs, washers and nuts

| Part No. | Quantity | Description |
|----------|------------------|--|
| 42190 | 1 set for 1 head | SB Chevy OEM cast iron and aluminum Brodix -8, -10, -11, Track 1, Dart Sportsman and Dart II |
| 42283 | 1 set for 1 head | BB Chevy with Dart and Chevy Bow Tie heads flat milled |
| 42284 | 1 set for 1 head | BB Chevy with Brodix heads flat milled |
| 42191 | 1 set for 1 head | BB Chevy with non Bow Tie heads flat milled |
| 42197 | 1 set for 1 head | Ford 4.6L 2 valve and 4 valve heads |
| 42030 | 1 set for 1 head | Nissan 2.6L RB26 |
| 42031 | 1 set for 1 head | Subaru WRX EJ Series |



SUBARU MAIN BOLT KIT

- ✓ Forged 8740 chrome moly
- ✓ 200,000 psi tensile strength
- ✓ Kit includes bolts and hardened washers

| Part No. | Quantity | Description |
|----------|--------------------|---|
| 42020 | 1 set for 1 engine | Subaru 2.0L, 2.2L, 2.5L SOHC/DOHC EJ Series Crankcase thru bolt kit |



FASTENERS

7/16" CYLINDER HEAD STUD NUTS

| Part No. | Quantity | Description |
|----------|----------|---|
| 42279-4 | 4 pcs. | Hex head stud nut for all Chevrolets and 4.6L Fords |
| 42289-4 | 4 pcs. | 12 point stud nut for all Chevrolets and 4.6L Fords |



HEX HEAD INTAKE MANIFOLD BOLTS

✓ P/N 42175 and 42176 have gold irridite finished bolts and hardened washers

✓ P/N 42177 has black oxide finished bolts and hardened washers



Black Oxide Finish Gold Iridite Finish

| Part No. | Quantity | Description | Underhead Length |
|----------|----------|---|------------------|
| 42176 | 1 set | Small Block Chevrolet | 1.125" |
| 42177 | 1 set | Small Block Chevrolet using thin casting hi-rise manifolds | 1.000" |
| 42175 | 1 set | Big Block Chevrolet | 1.125" |
| 42294-16 | 16 pcs. | Hardened washers for 42175 & 42176 bolts. .100" thick. Gold Iridite | |
| 42299-16 | 16 pcs. | Hardened washers for 42177 bolts. .125" thick. Black oxide | |

12 POINT HEAD INTAKE MANIFOLD BOLTS

✓ Bolts and washers gold irridite finish

✓ Shipped with hardened washers



| Part No. | Quantity | Description | Underhead Length |
|----------|----------|---|------------------|
| 42292 | 1 set | Small Block Chevrolet, Chrysler "A" and "B" engines | 1.125" |
| 42291 | 1 set | Big Block Chevrolet using thin casting hi-rise manifolds | 1.125" |
| 42294-16 | 16 pcs. | Hardened washers for above bolts. .100" thick. Gold Iridite | |

HARD TO FIND "AN" WASHERS

✓ .060" thick

| Part No. | Quantity | I.D. | O.D. |
|----------|----------|-------|-------|
| 42194 | 12 pcs. | 5/16" | 9/16" |
| 42195 | 12 pcs. | 3/8" | 5/8" |
| 42196 | 12 pcs. | 7/16" | 3/4" |



STUD KITS, BOLTS & GEARS

FRONT TIMING COVER BOLTS

- ✓ Special flange for greater "wrenchability"
- ✓ Integral lock washer

| Part No. | Quantity | Description |
|----------|----------|--|
| 42174 | 1 set | Small and Big Block Chevys-black oxide |
| 42179 | 1 set | Small and Big Block Chevys-gold irridite |



FRONT TIMING COVER STUD KITS

- ✓ Nut starter radius to prevent cross-threading
- ✓ Flanged, serrated, self-locking nuts included

| Part No. | Quantity | Description |
|----------|----------|----------------------------|
| 42134 | 1 set | Small and Big Block Chevys |



OIL PAN BOLTS

- ✓ Special flange for greater "wrenchability"
- ✓ Integral lock washer

| Part No. | Quantity | Description |
|----------|----------|---------------------------------------|
| 42173 | 1 set | Small Block Chevrolet - black oxide |
| 42189 | 1 set | Small Block Chevrolet - gold irridite |
| 42172 | 1 set | Big Block Chevrolet - black oxide |
| 42188 | 1 set | Big Block Chevrolet - gold irridite |



OIL PAN STUD KITS

- ✓ Nut starter radius to prevent cross-threading
- ✓ Flanged, serrated, self-locking nuts included

| Part No. | Quantity | Description |
|----------|----------|-----------------------|
| 42148 | 1 set | Small Block Chevrolet |
| 42155 | 1 set | Big Block Chevrolet |



BALANCER BOLTS

- ✓ Parallel ground washer included
- ✓ Rolled threads

| Part No. | Quantity | Description |
|----------|----------|---|
| 42223 | 1 | SB Chevy 2.470" length. Use 13/16" 12-point socket. |
| 42224 | 1 | BB Chevy 1.560" length. Use 13/16" 12-point socket. |



12 Point

BRONZE DISTRIBUTOR GEARS

- ✓ Precision aluminum / silicon bronze
- ✓ Required with 8620 billet roller camshafts

| Part No. | Quantity | Description |
|----------|----------|--|
| 42240 | 1 | SB and BB Chevrolet - for .490" diameter shaft |
| 42246 | 1 | SB and BB Chevrolet - for .500" diameter aftermarket shaft |



VALVE SPRINGS

NEXTEK® SERIES VALVE SPRINGS

. . . BETTER BY DESIGN

CYL HEAD COMPONENTS

Manley Performance introduced the NexTek® (Next Technology) line of valve springs over a decade ago to satisfy the needs of top level engine builders demanding the absolute highest quality valve springs. What started out as only a very small handful of part numbers, specifically designed for the roller cam "BGN" market and high-end Drag Racing arena (Pro Stock/Comp), has evolved into an expansive array of successful part numbers for a wide variety of drag, oval, marine and street/strip applications.

Today, Manley Nextek® springs can be found in drag race applications ranging from Bracket to Top Fuel, in oval track engines across the country such as DLM and Sprint cars, as well as in late model Chevy LS, Chrysler 5.7L/6.1L Hemi and Ford Modular vehicles on the street and strip.

Camshaft designers have not stood still and are constantly pushing the envelope with more aggressive lobes. Engine speeds continue to increase in many applications. These factors motivate our valve spring designers to engineer product solutions.



New for 2011, we are proud to introduce the following additions:

- ✓ P/N 221463-16 - An extension of our "Lightweight Dual Drag Race" lineup specifically designed for the HIGH lift, BIG cubic inch PRO MOD market.
- ✓ P/N 221446SF-16 - The "ULTIMATE" DLM (Dirt Late Model) oval track spring. Extremely lightweight, ideal loads, .800" lift capable - A PROVEN winner!
- ✓ P/N 221435-16 - Now you can run that .700" lift cam in your Chevy LS motor!
- ✓ P/N 221433-24 - Ford Modular (3 valve) for .580" lift applications.

Complete specifications are listed under the appropriate headings on the pages that follow.

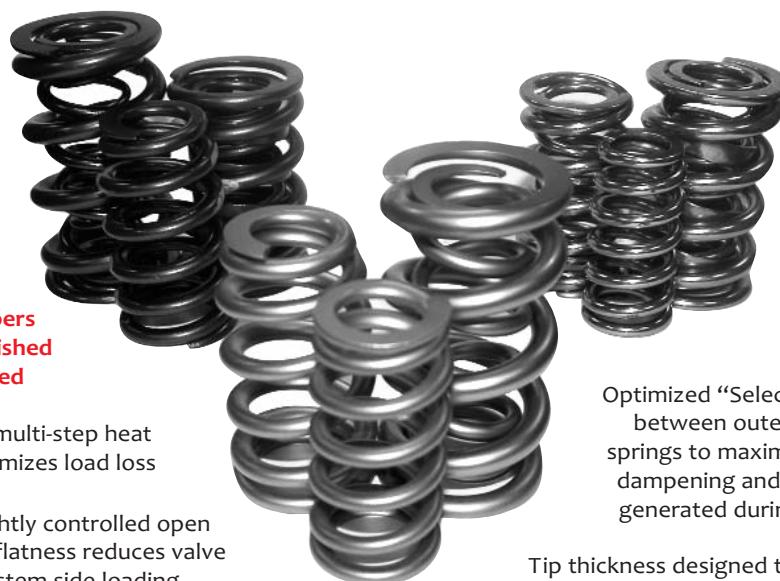
Manufactured from "super clean" Hi-Tensile Chrome Silicon steel

Shot-peened to MIL Specs for maximum fatigue life

Many part numbers available fully polished or Super Finished

Proprietary multi-step heat treating minimizes load loss

Tightly controlled open end flatness reduces valve stem side loading



Tip thickness designed to eliminate overload breakage

Many offerings are a damperless design which eliminates unnecessary damper weight and reduces retainer wear

Computer-aided modeling of designs minimizes valve bounce and valve gear separation

Optimized "Select Size Fitting" between outer and inner springs to maximize harmonic dampening and reduce heat generated during operation

LIGHTWEIGHT DUAL DRAG RACE VALVE SPRINGS

- ✓ **Higher natural frequency** and **lower active mass** provides improved valvetrain control and higher RPM potential
- ✓ Dual spring design **reduces friction**, which generates less heat and translates into **greatly reduced load loss**
- ✓ Extensively tested on the Spiritron, dyno and race track (including blown nitro engines) and proven highly effective
- ✓ Smaller diameter, **lightweight dual design** allows engine to rev higher with **improved valve train control**
- ✓ Accepts smaller, lighter retainers which also **promotes higher revs**
- ✓ Ultra clean, **high tensile strength** material
- ✓ Super Finished multi-step surface enhancement significantly improves fatigue strength
- ✓ Ideal loads for **multiple applications** with minimal load loss



CYL HEAD COMPONENTS

| Part No. | Description | Maximum Valve Lift | O.D. | I.D. | Installed / Open Pressure | Rate (lbs. / in.) | Coil Bind | Component Code |
|------------------|------------------------------------|--------------------|-------|------|-----------------------------|---------------------|-----------|----------------|
| 221455-16 | Competition Eliminator | 1.000 | 1.500 | .719 | 438 @ 2.175 1235 @ 1.175 | 797 | 1.130 | A |
| 221457-16 | Super Stock Competition Eliminator | .950 | 1.500 | .719 | 395 @ 2.150 1155 @ 1.200 | 800 | 1.130 | A |
| 221456-16 | Super Stock Competition Eliminator | .900 | 1.500 | .719 | 316 @ 2.100 1036 @ 1.200 | 800 | 1.130 | A |
| 221460-16 | Alcohol Classes | .950 | 1.522 | .719 | 400 @ 2.250 1300 @ 1.300 | 948 | 1.255 | A |
| 221463-16 | Pro Mod | 1.250 | 1.585 | .785 | 410 @ 2.450 1340 @ 1.200 | 745 | 1.140 | B |

| Component Code | Titanium Retainers | TensileMax Retainers | I.D. Spring Locators | Cup O.D. | Cup I.D. | Seat Cutter |
|----------------|--|---|--|----------------------------------|------------------------------|----------------------------------|
| A | 23675-16 7° (+.100" for 7° LocCap) 23677-16 7° (+.100" for 7° LocCap) TI-17 Alloy 23684-16 10° Std. Installed 23676-16 10° (+.100") 23679-16 10° (+.100") Lightweight Ti-17 Alloy 23683-16 10° (+.170") Lightweight Ti-17 Alloy | 23675TM-16 7° (+.100") 23677TM-16 10° (+.100") 42347-16 42318-16 42335-16 42120-16 | 42347-16 42318-16 42335-16 42120-16 | 1.535 1.610 1.535 1.610 | .570 .570 .635 .635 | 41836 41857 41835 41855 |
| B | 23686-16 10° (+.100") Lightweight Ti-17 Alloy | 23686TM-16 10° (+.100") | 42459-16* | 1.610 | .635 | 41855 |

* Pro Series Locators

Note: New part numbers are **ITALICIZED**.

VALVE SPRINGS

NEXTEK® SERIES DRAG RACE VALVE SPRINGS

- ✓ Unequalled performance
- ✓ All springs are triple except 221424 & 221425 double w/o damper
- ✓ Manley eclipses the 1200 lb. barrier
- ✓ Better valve train stability and component life
- ✓ Ideally suited for Fuel and Alcohol classes, Pro Stock, Competition, Super Stock, Super Gas and Mountain Motor applications



All Manley NexTek® valve springs listed below are available in Polished versions to reduce friction, improve fatigue life and minimize load loss. For example 221449P-16.

| Part No. | Polished Part No. | Description | Maximum Valve Lift | O.D. | I.D. | Installed / Open Pressure | Rate (lbs. / in.) | Coil Bind | Component Code |
|------------|-------------------|---|--------------------|-------|------|-----------------------------|-------------------|-----------|----------------|
| 221424-16 | 221424P-16 | Super Gas, Super Comp., Big Block Bracket | .880 | 1.640 | .860 | 250 @ 2.000 800 @ 1.150 | 647 | 1.070 | A |
| 221425-16 | 221425P-16 | Super Gas, Super Comp., Big Block Bracket | .900 | 1.640 | .860 | 280 @ 2.100 794 @ 1.250 | 604 | 1.150 | A |
| 221447-16* | 221447P-16* | Super Stock, Pro Mod., Competition Eliminator | .800 | 1.677 | .635 | 350 @ 2.000 895 @ 1.270 | 746 | 1.160 | B |
| 221448-16* | 221448P-16* | Super Stock, Pro Mod., Competition Eliminator | .900 | 1.677 | .635 | 350 @ 2.100 1010 @ 1.200 | 733 | 1.142 | B |
| 221449-16* | 221449P-16* | Pro Stock, Fuel & Alcohol | 1.000 | 1.677 | .632 | 350 @ 2.200 1070 @ 1.200 | 720 | 1.142 | B |
| 221450-16* | 221450P-16* | Pro Stock, Fuel & Alcohol | 1.000 | 1.677 | .632 | 370 @ 2.200 1140 @ 1.200 | 770 | 1.142 | B |
| 221451-16* | 221451P-16* | Pro Stock, Fuel & Alcohol | 1.050 | 1.677 | .635 | 410 @ 2.300 1210 @ 1.250 | 761 | 1.180 | B |

* Advertised pressures are achieved after springs have been pressed solid three times.

| Component Code | 10° Titanium Retainers | Type | Installed Height | Spring Cups & Locations | Type | Cup O.D. | Cup I.D. | Seat Cutter |
|----------------|------------------------|-------------------------------|------------------|--|------|----------|----------|-------------|
| A | 23649-16 | Standard | Std. | 42121-16 | OD | 1.740 | .635 | 41851 |
| | 23640-16 | Standard | +.100 | 42128-16* | OD | 1.740 | .635 | 41851 |
| | 23540-16 | Lightweight | +.100 | 42379-16* | OD | 1.740 | .570 | 41859 |
| | | | | * 42128 & 42379 have a wall height of .250 instead of .150 | | | | |
| | | | | 42337-16 | ID | 1.570 | .570 | 41857 |
| | | | | 42437-16* | ID | 1.570 | .567 | 41857 |
| | | | | * Pro Series Locators | | | | |
| B | 23663-16 | Standard | Std. | 42371-16 | OD | 1.740 | .635 | 41851 |
| | 23653-16 | Standard | +.100 | 42372-16 | OD | 1.740 | .570 | 41859 |
| | 23553-16 | Lightweight | +.100 | 42364-16 | ID | 1.660 | .570 | 41858 |
| | 23553 L-16 | Lightweight & Impinged | +.100 | | | | | |
| | 23673-16 | 7° Valve Locks Required | +.100 | | | | | |
| | 23753-16 | Lightweight & Ti-17 Material | +.100 | | | | | |
| | 23708L-16 | Super 7° Valve Locks Required | +.100 | | | | | |

VALVE SPRING & TITANIUM RETAINER KITS

- ✓ Large savings over purchasing items separately

| Kit No. | Quantity | Application | NexTek® Spring No. | 10° Titanium Retainer No. |
|---------|----------|---|--------------------|---------------------------|
| 261424 | 1 kit | Super Gas, Super Comp., Big Block Bracket Engines | 221424-16 | 23640-16 |
| 261424L | 1 kit | Same, except lightweight titanium retainers | 221424-16 | 23540-16 |
| 261425 | 1 kit | Super Gas, Super Comp., Big Block Bracket Engines | 221425-16 | 23640-16 |
| 261425L | 1 kit | Same, except lightweight titanium retainers | 221425-16 | 23540-16 |

VALVE SPRINGS

NEXTEK® SERIES

OVAL TRACK & ENDURANCE VALVE SPRINGS



- ✓ No degradation of spring pressure in the later stages of a race
- ✓ Specially processed premium-grade chrome silicon that is virtually free of impurities or surface irregularities
- ✓ NexTek® Series valve springs have been tested by leading engine builders and are confirmed to be the best performing valve springs on the market today

| Part No. | Polished Part No. | Super Finished Part No. | Description | Maximum Valve Lift | O.D. | I.D. | Installed / Open Pressure | Rate / in.) | Coil Bind | Component Code |
|-----------|-------------------|-------------------------|---------------------------------|----------------------------|-------|------|----------------------------|-------------|-----------|----------------|
| 221432-16 | ----- | ----- | Late Model Stock w/ Flat Tappet | .630 double with damper | 1.530 | .750 | 150 @ 1.900 423 @ 1.270 | 435 | 1.170 | A |
| ----- | 221440P-16 | ----- | Circle Track Roller | .700 double with damper | 1.570 | .760 | 255 @ 2.000 629 @ 1.300 | 534 | 1.190 | B |
| ----- | 221441P-16 | ----- | Circle Track Roller | .730 double with damper | 1.570 | .750 | 280 @ 2.030 700 @ 1.300 | 575 | 1.215 | C |
| ----- | 221442-16 | ----- | Circle Track Roller | .750 double without damper | 1.560 | .812 | 260 @ 2.000 660 @ 1.250 | 533 | 1.200 | D |
| 221443-16 | 221443P-16 | ----- | Circle Track Roller | .730 double without damper | 1.580 | .832 | 235 @ 1.950 610 @ 1.250 | 535 | 1.170 | E |
| 221444-16 | 221444P-16 | ----- | Circle Track Roller | .750 double without damper | 1.610 | .842 | 235 @ 2.050 645 @ 1.300 | 546 | 1.220 | F |
| ----- | 221445P-16 | ----- | Circle Track Roller | .800 double without damper | 1.620 | .852 | 280 @ 2.050 680 @ 1.250 | 500 | 1.200 | G |
| ----- | 221446SF-16 | ----- | Circle Track Roller | .800 double without damper | 1.400 | .700 | 240 @ 2.050 700 @ 1.250 | 575 | 1.150 | H |

ANCILLARY COMPONENTS

| Component Code | Super 7° Retainers | Super 7° Lightweight | Super 7° +.050 | Tensile Max Super 7° | H-13 Tool Steel | Spring Cups & Locators | Type | Cup O.D. | Cup I.D. | Cup Thickness | Seat Cutter |
|----------------|---|---|--|--|---|--|----------------------------|---|--------------------------------------|--------------------------------------|---|
| A | 23707 -16 23672 ICD-16 23707 SCD-16 23644-16 23650-16 | (10° Ti Std.) (10° Ti +.100) | | 23707TM-16 | | 42330-16 42326-16* 42426-16* 42466-16* | ID | 1.535 | .635 | .062 | 41835 |
| B | 23705 ICD-16 23644-16 23650-16 | 23705 L-16 (10° Ti Std.) (10° Ti +.100) | 23706 L-16 23706 LI-16 (10° Ti Std.) (10° Ti +.100) | 23705TM-16 23705LTM-16 (Lightweight) | | 42331-16 | ID | 1.530 | .570 | .062 | 41856 |
| C | 23672-16 23672 I-16 23672 ICD-16 23647-16 | 23672 L-16 (10° Ti +.100) | | 23672TM-16 | 23647TS-16 (10° +.100) 23672TS-16 (Super 7°) | 42330-16 42326-16* 42426-16* 42466-16* | ID | 1.535 | .635 | .062 | 41835 |
| D | 23682-16 23682 I-16 23682 ICD-16 23643-16 | 23682 L-16 23682 LI-16 (10° Ti +.100) | | 23682TM-16 | 23643TS-16 (10° +.100) 23682TS-16 (Super 7°) | 42343-16 42443-16* | ID | 1.550 | .570 | .062 | 41856 |
| E | 23681-16 23681 I-16 23681 ICD-16 23648-16 | 23681 L-16 23681 LI-16 23691 ICD-16 (10° Ti +.100) | 23691-16 23691 ICD-16 23681TS-16 (Super 7°) | | 23648TS-16 (10° +.100) 23681TS-16 (Super 7°) | 42370-16 42369-16 42373-16 42573-16* 42438-16* | OD ID ID ID ID | 1.687 1.570 1.570 1.570 1.570 | .570 .635 .570 .567 .567 | .062 .062 .062 .062 .045 | 41858 41856 41856 41856 41856 |
| F | 23681-16 23681 I-16 23681 ICD-16 23648-16 | 23681 L-16 23681 LI-16 (10° Ti +.100) | 23691-16 23691 ICD-16 | | 23648TS-16 (10° +.100) 23681TS-16 (Super 7°) | 42365-16 42367-16 42368-16 | OD ID ID | 1.740 1.610 1.610 | .570 .570 .635 | .062 .062 .062 | 41859 41857 41855 |
| G | 23685-16 23685 I-16 | 23685 L-16 23685 LI-16 | | 23685TM-16 23685DCTM-16 | | 42342-16 | ID | 1.610 | .570 | .062 | 41857 |
| H | | 23746 L-16 | | 23746TM-16 | 23746TS-16 (Super 7°) 23747TS-16 (10° +.100) | 42446-16* | ID | 1.410 | .567 | .062 | 41850 |

SUFFIX CODE: I : Impinged ICD : Impinged, Convoluted and Drilled SCD : Steel, Convoluted and Drilled L : Lightweight LI : Lightweight and Impinged

Note: New part numbers are **ITALICIZED**.

* Pro Series Locators

VALVE SPRINGS

NEXTEK® SERIES

**HIGH PERFORMANCE STREET/STRIP VALVE SPRINGS
FOR SB CHEVY LS, SB CHRYSLER HEMI & FORD MODULAR APPLICATIONS.**



- ✓ Specially processed premium-grade chrome silicon that is virtually free of impurities or surface irregularities

| Part No. | Description | Maximum Valve Lift | O.D. | I.D. | Installed / Open Pressure | Rate (lbs. / in.) | Coil Bind | Component Code |
|------------|--|--------------------|--|-------------------------|----------------------------|-------------------|-----------|----------------|
| 221423-16 | SBC LS-1, LT-1 / LT-4 / L-98 Stock Diameter Street/Strip | .575 | 1.255 Single Without Damper Ovate Wire | .830 | 115 @ 1.750 350 @ 1.175 | 409 | 1.100 | A |
| 221428-16 | SBC LS-Series, LT-1 / LT-4 / L-98 High Performance Street/Strip | .600 | 1.076 Top 1.311 Bottom | .650 Top .885 Bottom | 150 @ 1.800 355 @ 1.200 | 341 | 1.085 | B |
| 221438-16 | SBC LS-Series, LT-1 / LT-4 / L-98 High Performance Street/Strip | .650 | 1.076 Top 1.311 Bottom | .650 Top .885 Bottom | 150 @ 1.800 375 @ 1.150 | 353 | 1.100 | B |
| 221436-16 | SBC LS-Series, High Performance Street/Strip | .660 | 1.295 Fully Polished Double | .676 Without Damper | 155 @ 1.810 405 @ 1.150 | 379 | 1.100 | C |
| 221435-16 | SBC LS-Series, High Performance Street/Strip | .700 | 1.340 Fully Polished Double | .726 Without Damper | 170 @ 1.810 446 @ 1.110 | 394 | 1.050 | D |
| 221430-16* | Chrysler Hemi 5.7L(Thru 2008), 6.1L Stock Diameter High Performance Street/Strip | .600 | 1.056 Top 1.206 Bottom | .630 Top .780 Bottom | 130 @ 1.811 370 @ 1.211 | 400 | 1.170 | E |
| 221431-16* | Chrysler Hemi 5.7L, 6.1L High Performance Street/Strip | .650 | 1.076 Top 1.311 Bottom | .650 Top .885 Bottom | 146 @ 1.811 371 @ 1.161 | 353 | 1.100 | F |
| 221427-16 | Ford 4.6L, 5.4L SOHC 2 Valves per Cylinder Stock Diameter Street/Strip | .580 | 1.020 Top 1.125 Bottom | .642 Top .748 Bottom | 95 @ 1.680 240 @ 1.130 | 264 | 1.080 | G |
| 221437-16 | Ford 4.6L, 5.4L SOHC 2 Valves per Cylinder Stock Diameter Ideal for Boosted Applications | .580 | 1.030 Top 1.175 Bottom | .642 Top .787 Bottom | 125 @ 1.680 265 @ 1.130 | 255 | 1.080 | G |
| 221429-24 | Ford 4.6L, 5.4L 3 Valve 3 Valves per Cylinder Stock Diameter Street/Strip | .500 | .880 Top 1.025 Bottom | .565 Top .710 Bottom | 95 @ 1.670 230 @ 1.170 | 270 | 1.100 | H |
| 221433-24 | Ford 4.6L, 5.4L 3 Valve 3 Valves per Cylinder High Performance Street/Strip | .580 | 1.013 Top 1.101 Bottom | .650 Top .738 Bottom | 110 @ 1.670 260 @ 1.090 | 258 | 1.020 | I |
| 221434-32 | Ford 4.6L, 5.4L DOHC 4 Valves per Cylinder Stock Diameter High Performance Street/Strip | .525 | 1.016 Top 1.126 Bottom | .640 Top .750 Bottom | 95 @ 1.420 260 @ .920 | 330 | .880 | J |

* These Chrysler Hemi springs come with shims which are ONLY needed for 6.1L applications on the intake side in order to achieve the correct installed height. P/N 221431 also includes a set of piloting rings that install over the factory "Top Hat" integral valve seal to properly locate the ID of the spring on early 5.7L (thru 2008) and 6.1L applications. P/N 221431X-16 which does not include any shims or piloting rings is also available for the Hemi Drag Pak engines.

Please refer to opposite page 69 for the appropriate fitting retainers and spring cups. Match the component codes listed to find the correct parts.

ANCILLARY COMPONENTS

| Component Code | Retainer Part No. | Description | Spring Cup Part No. | Type | Cup O.D. | Cup I.D. | Cup Thickness | Seat Cutter |
|----------------|--|---|---|------|----------|----------|---------------|-------------|
| A | 23631-16 23664-16 23632-16 23633-16 23634-16 | 7° Steel for Manley 13098 or factory LS-1 valve lock and factory spring seat 7° Steel +.050 for LT-1 and standard type valve lock 7° Titanium for Manley 13098 or factory LS-1 valve lock and factory spring seat 7° Titanium +.050 for Manley 13098 or factory LS-1 valve lock and factory spring seat 7° Titanium +.050 for LT-1 and standard type valve lock | 42341-16 | ID | 1.170 | .505 | .035 | None |
| B | 23620-16 23622-16 23625-16 23626-16 | 7° Steel for Manley 13098 or factory LS-1 valve lock and factory spring seat 7° Titanium for Manley 13098 or factory LS-1 valve lock and factory spring seat 7° Titanium +.050 for Manley 13098 or factory LS-1 valve lock and factory spring seat 7° Titanium +.050 for LT-1 and standard type valve lock | 42338-16 42336-16 | ID | 1.290 | .505 | .035 | None |
| C | 23621-16 23623-16 23624-16 | 7° Steel +.050 for Manley 13098 or factory LS-1 valve lock 7° Titanium +.050 for Manley 13098 or factory LS-1 valve lock 7° Titanium +.050 for LT-1 and standard type valve lock | 42334-16 | ID | 1.270 | .505 | .035 | None |
| D | 23610-16 23611-16 | 7° Steel +.050 for Manley 13098 or factory LS-1 valve lock 7° Titanium +.050 for Manley 13098 or factory LS-1 valve lock | 42348-16 42135-16 | ID | 1.320 | .505 | .035 | None |
| E | 23629-16 | 7° Titanium for Manley 13093 or factory valve lock | 42324-16 | ID | 1.300 | .812 | .205 | None |
| F | 23612-16 23613-16 | 7° Steel for Manley 13093 or factory valve lock 7° Titanium for Manley 13093 or factory valve lock | Must use ID locator P/N 42324-16 for the 2009 and up Hemi 5.7L. | | | | | |
| G | 23627-16 23667-16 | 7° Titanium for Manley 13089 or factory valve lock 7° Titanium + .060 for Manley 13089 or factory valve lock | | | | | | |
| H | 23628-24 | 7° Titanium for Manley 13088 or factory valve lock | | | | | | |
| I | 23614-24 | 7° Titanium for Manley 13088 or factory valve lock | | | | | | |
| J | 23627-32 23667-32 | 7° Titanium for Manley 13089 or factory valve lock 7° Titanium + .060 for Manley 13089 or factory valve lock | | | | | | |

Mark Luton / MMR
World's Fastest Ford Modular!



Note: New part numbers are **ITALICIZED**.

VALVE SPRINGS

STREET MASTER VALVE SPRINGS

✓ Chrome silicon material

✓ Designed for low stress and long service life



| Part No. | Type | Application | Size OD/ID | Pressures | Rate (lbs. / in.) | 7° Steel Retainer | 10° Steel Retainer | Titanium Retainer |
|----------|------------------|--------------------------------------|---------------|---|---------------------|---|--|-------------------------|
| 22409-16 | Outer w/ damper | SB Chevy Street Use | 1.250" .865" | 110 @ 1.700" 285 @ 1.210" Coil Bind: 1.180" | 357 | 23651 (std.) 23652 (.050") | 23642 (7° x 11/32" +.050") | |
| 22408-16 | Double w/ damper | SB Chevy, LS-1 Chevy, Ford, Chrysler | 1.437" .720" | 115 @ 1.800" 310 @ 1.250" 350 @ 1.200" Coil Bind: 1.100" | 354 | 23645 (11/32") 23646 (11/32" +.100") 23666 (3/8") | 23635 (10 Degree) (7° x 5/16" LS-1) 23639 (7° x 5/16" +.050" LS-1) | 23630 23638 23639 |
| 22407-16 | Double w/ damper | SB & BB Chevy | 1.437" .720" | 135 @ 1.800" 350 @ 1.250" Coil Bind: 1.085" | 391 | 23645 (11/32") 23646 (11/32" +.100") 23666 (3/8") | 23635 (10 Degree) | 23630 |
| 22406-16 | Outer w/ damper | BB Chevy, Chrysler | 1.550" 1.080" | 125 @ 1.875" 355 @ 1.375" Coil Bind: 1.190" | 460 | 23645 (11/32") 23646 (11/32" +.100") 23666 (3/8") | 23635 (10 Degree) | 23630 |

PROFESSIONAL VALVE SPRINGS

✓ Chrome silicon material for oval track racing

✓ H-11 tool steel for drag racing



| Part No. | Type | Application | Size OD/ID | Pressures | Coil Bind | Rate (lbs. / in.) | Super 7° Ti. Retainer | 10° Steel Retainer | 10° Titanium Retainer |
|-----------|------------------|---------------------------------------|--------------|------------------------------|-----------|---------------------|--|---|--------------------------------|
| 22410-16 | Outer w/ damper | Oval track Stock Class Chrome Silicon | 1.260" .876" | 130 @ 1.750" 334 @ 1.200" | 1.095" | 370 | 23651 (7°x11/32" Steel) 23652 (7°x11/32" +.050" Steel) 23642 (7°x11/32" +.050" Titanium) | | |
| 22411-16 | Outer w/ damper | SB Chevy Stock Diameter Tool Steel | 1.255" .870" | 115 @ 1.750" 390 @ 1.175" | 1.100" | 470 | 23651 (7°x11/32" Steel) 23652 (7°x11/32" +.050" Steel) 23642 (7°x11/32" +.050" Titanium) | | |
| 22441-16 | Double w/ damper | Oval Track Chrome Silicon | 1.550" .740" | 170 @ 1.900" 500 @ 1.200" | 1.100" | 471 | 23670 23670TM (Tensile Max) | 23659 (+.100") 23660TS (+.100" H-13) | 23658 (std.) 23660 (+.100") |
| 22429-16 | Double w/ damper | Oval Track Chrome Silicon | 1.550" .740" | 150 @ 1.880" 425 @ 1.280" | 1.180" | 458 | 23672 23672TM (Tensile Max) 23672TS (H-13) | 23656 (+.100") 23647TS (+.100" H-13) | 23657 (std.) 23661 (+.100") |
| 22430-16 | Double w/ damper | Oval Track Chrome Silicon | 1.550" .735" | 210 @ 1.900" 525 @ 1.250" | 1.200" | 484 | 23672 23672TM (Tensile Max) 23672TS (H-13) | 23656 (+.100") 23647TS (+.100" H-13) | 23657 (std.) 23661 (+.100") |
| 22431-16 | Double w/ damper | Oval / Drag Chrome Silicon | 1.550" .725" | 225 @ 1.950" 580 @ 1.250" | 1.190" | 507 | 23670 23670TM (Tensile Max) | 23659 (+.100") 23660TS (+.100" H-13) | 23658 (std.) 23660 (+.100") |
| 22440-16 | Double w/ damper | Drag Race Chrome Silicon | 1.550" .720" | 250 @ 1.850" 680 @ 1.150" | 1.090" | 614 | 23670 23670TM (Tensile Max) | 23659 (+.100") 23660TS (+.100" H-13) | 23658 (std.) 23660 (+.100") |
| 22438-16* | Double w/ damper | Drag Race Tool Steel | 1.625" .775" | 328 @ 1.900" 806 @ 1.200" | 1.090" | 682 | 23669 | | 23654 (std.) 23655 (+.100") |
| 22448-16* | Double w/ damper | Drag Race Tool Steel | 1.625" .775" | 240 @ 1.900" 760 @ 1.150" | 1.090" | 693 | 23669 | | 23654 (std.) 23655 (+.100") |
| 22458-16* | Double w/ damper | Drag Race Tool Steel | 1.625" .775" | 260 @ 2.000" 840 @ 1.150" | 1.090" | 682 | 23669 | | 23654 (std.) 23655 (+.100") |

* Advertised pressures are achieved after springs have been pressed solid three times.

VALVE SPRINGS

SPORT COMPACT VALVE SPRINGS

HONDA/ACURA, MITSUBISHI, NISSAN, TOYOTA, SUBARU & DODGE APPLICATIONS

- ✓ Wound from super clean alloy
- ✓ Designed to handle aftermarket camshafts
- ✓ Revs up to 10,000 RPM with Manley titanium retainers



| Part No. | Quantity | Application | O.D. / I.D. Outer Inner | Pressures | Stock / Maximum Net Lift | Coil Bind | Rate (lbs. / in.) | Titanium Retainer |
|----------|----------|---|-------------------------------|--|--------------------------------|--------------|------------------------|----------------------|
| 22105-16 | 16 pcs. | Acura B Series V-Tec High Performance Race | 1.180"/.870" .865"/.660" | 82 @ 1.350" 206 @ .950" 248 @ .815" | .400" .535" | .765" | 310 | 23100-16 |
| 22110-16 | 16 pcs. | Honda H22 V-Tec | 1.160"/.870" .865"/.660" | 88 @ 1.400" 200 @ .950" 232 @ .840" | .450" .560" | .790" | 227 | 23100-16 |
| 22120-16 | 16 pcs. | Honda B Series Non V-Tec | 1.105"/.820" .800"/.630" | 54 @ 1.375" 143 @ .990" 195 @ .760" | .385" .615" | .710" | 230 | 23120-16 |
| | | Stock installed height on B Series Non V-Tec spring is: Intake - 1.320" / Exhaust - 1.425". | | | | | | |
| 22140-16 | 16 pcs. | Honda K20A/K20Z | 1.160"/.870" .865"/.660" | 80 @ 1.590" 249 @ 1.140" 283 @ 1.050" | .450" .540" | 1.000" | 375 | 23140-16 |
| 22145-16 | 16 pcs. | Honda K20A3/K24A | 1.106"/.787" | 79 @ 1.565" 182 @ 1.185" 226 @ 1.025" | .380" .545" | .975" | 274 | 23145-16 |
| 22150-16 | 16 pcs. | Honda F20C/F22C | 1.160"/.870" .865"/.660" | 84 @ 1.580" 264 @ 1.100" 283 @ 1.050" | .480" .530" | 1.000" | 375 | 23150-16 |
| 22190-16 | 16 pcs. | Dodge SRT-4 | 1.100"/.775" | 92 @ 1.500" 188 @ 1.175" 237 @ 1.000" | .325" .500" | .950" | 294 | 23190-16 |
| 22115-16 | 16 pcs. | Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-1999) DSM | 1.160"/.870" .865"/.660" | 104 @ 1.580" 237 @ 1.210" 269 @ 1.120" | .370" .460" | 1.070" | 359 | 23115-16 |
| 22125-16 | 16 pcs. | Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-2006) DSM / EVO | 1.100"/.775" | 66 @ 1.580" 175 @ 1.210" 237 @ 1.000" | .370" .580" | .950" | 294 | 23125-16 |
| 22195-16 | 16 pcs. | Mitsubishi EVO X 4B11T DOHC 16 Valve (2008-Up) | .990"/.710" | 86 @ 1.400" 180 @ 1.030" 198 @ .970" | .370" .430" | .920" | 253 | 23195-16 |
| 22155-24 | 24 pcs. | Nissan Patrol TB48 | 1.100"/.775" | 75 @ 1.550" 191 @ 1.165" 237 @ 1.100" | .385" .550" | .950" | 294 | 23155-24 |
| 22160-16 | 16 pcs. | Nissan KA24DE | 1.180"/.880" .870"/.670" | 73 @ 1.400" 191 @ 1.050" 228 @ .900" | .350" .500" | .850" | 310 | 23160-16 |
| 22165-16 | 16 pcs. | Nissan SR20DE/SR20DET | 1.160"/.835" | 90 @ 1.550" 185 @ 1.170" 225 @ 1.010" | .380" .540" | .960" | 248 | 23165-16 |
| 22170-24 | 24 pcs. | Nissan VQ35DET | .990"/.710" | 80 @ 1.425" 175 @ 1.050" 195 @ .970" | .375" .455" | .920" | 253 | 23170-24 |
| 22175-24 | 24 pcs. | Nissan RB26DET | 1.100"/.775" | 80 @ 1.535" 197 @ 1.140" 237 @ 1.000" | .395" .535" | .950" | 294 | 23175-24 |
| 22180-16 | 16 pcs. | Subaru WRX/Sti | 1.050"/.755" | 60 @ 1.420" 151 @ 1.050" 187 @ .895" | .370" .525" | .845" | 245 | 23180-16 |
| 22185-16 | 16 pcs. | Subaru WRX/Sti | 1.126"/.640" | 95 @ 1.420" 217 @ 1.050" 257 @ .930" | .370" .490" | .880" | 330 | 23185-16 |
| 22130-24 | 24 pcs. | Toyota Supra 2JZGT/2JZGTE 6 cyl. | 1.050"/.755" | 82 @ 1.325" 165 @ .985" 187 @ .895" | .340" .430" | .845" | 245 | 23130-24 |

Note: New part numbers are **ITALICIZED**.

SPRING RETAINERS

MANLEY RETAINERS

....SIMPLY THE BEST!

- ✓ Engineered using finite element analysis
- ✓ Specially heat treated titanium material
- ✓ Exclusive "impingement" finishing process
- ✓ TensileMax steel alloy
- ✓ CNC machined to exacting tolerances
and jewel-like surface finishes



Lightweight Titanium



TensileMax Steel



ICD Titanium



7° & 10° Titanium



H-13 Tool Steel

SPRING RETAINERS

ICD SUPER 7° TITANIUM RETAINERS PAT. 5,322,039

Designed by our own Michael Tokarchik, the Manley ICD retainer represents the pinnacle of titanium retainer technology.

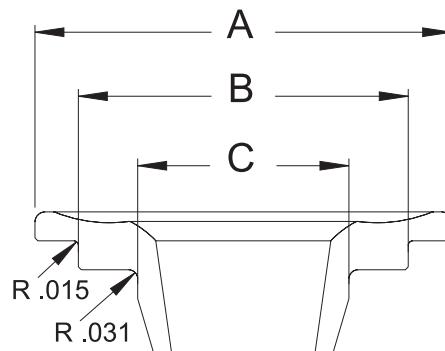
- ✓ Using Finite Element Analysis, the convoluted O.D. is engineered to provide the optimum balance of fatigue strength, weight and stress distribution.
- ✓ Holes precisely located through the retainers' cross section introduce oil to the valve spring at the critical inner to outer spring interface, greatly extending valve spring life.
- ✓ Finally, the heat-treated aerospace grade titanium alloy is surface enhanced with Manley's exclusive impingement process. This process eliminates all machining marks, improves fatigue strength and elevates surface hardness, thus reducing wear on both the ID and the spring shelves.
- ✓ Due to the larger .031" radius on the corner of the inner step, the I.D. of each valve spring, specifically the inner spring, must be chamfered prior to installation. It is highly recommended to use Manley's valve spring chamfering tool, P/N 40174.
- ✓ As light as 14 grams depending on part number.

Super 7° ICD retainers require use of Super 7° valve locks.

ICD SUPER 7° TITANIUM RETAINERS



CYL HEAD COMPONENTS

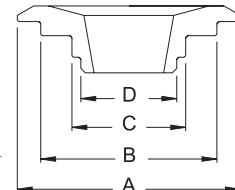


| Part No. | Quantity | Spring Type | Spring | Spring O.D. | Dimensions | | | Wgt/ Grams |
|--------------|----------|-------------|---|-----------------|------------|--------|-------|---------------|
| | | | | | A | B | C | |
| 23669 ICD-16 | 16 pcs. | Double | Manley 22438, 22448, 22458, Comp 26099 | 1.550" - 1.625" | 1.440" | 1.175" | .765" | 18 |
| 23672 ICD-16 | 16 pcs. | Double | Manley 221441P, 22429, 22430 | 1.550" - 1.625" | 1.440" | 1.125" | .730" | 14 |
| 23674 ICD-16 | 16 pcs. | Double | Comp 927, Isky 9315, 9365 | 1.550" - 1.625" | 1.440" | 1.140" | .730" | 16 |
| 23681 ICD-16 | 16 pcs. | Double | Manley 221443, 221444 | 1.580" - 1.610" | 1.440" | 1.150" | .825" | 18 |
| 23691 ICD-16 | 16 pcs. | Double | Same as 23681 except +.050" | 1.580" - 1.610" | 1.440" | 1.150" | .825" | 18 |
| 23682 ICD-16 | 16 pcs. | Double | Manley 221442 | 1.560" | 1.440" | 1.120" | .805" | 17 |
| 23705 ICD-16 | 16 pcs. | Double | Manley 221440P | 1.560" | 1.440" | 1.140" | .745" | 16 |

SPRING RETAINERS

SUPER 7° TITANIUM RETAINERS

- ✓ Super 7° angle is actually 8°
- ✓ Heat treated titanium material for maximum strength
- ✓ Available with or without our exclusive impingement surface enhancement process
- ✓ Impingement results in a 20% improvement in resistance to abrasion, a 30% improvement in fatigue strength, and an overall improvement in surface finish
- ✓ "L" Suffix indicates Lightweight version which is 3-4 grams lighter than standard part number



BULK PRICING
AVAILABLE

| Part No. | Part No. w/ Impinge | Quantity | Spring Type | Spring | Spring O.D. | Keeper Degree | Dimensions | | Wgt/ Grams | |
|------------|------------------------|----------|----------------|---|-----------------------|------------------|------------|--------|---------------|-------|
| | | | | | | | A | B | C | D |
| 23746 L-16 | ----- | 16 pcs. | Double | Manley 221446SF | 1.400" | Super 7° | 1.260" | .980" | .690" | --- |
| 23700 L-16 | 23700 LI-16 | 16 pcs. | Double | PSI CT1040 | 1.500" | Super 7° | 1.450" | 1.080" | .785" | --- |
| 23670-16 | 23670 I-16 | 16 pcs. | Double | Manley 22431, 22440, 22441 | 1.550" | Super 7° | 1.500" | 1.105" | .710" | --- |
| 23671-16 | ----- | 16 pcs. | Double | K Motion K-1600 | 1.550" | Super 7° | 1.500" | 1.150" | .755" | --- |
| 23672-16 | 23672 I-16 | 16 pcs. | Double | Manley 221441P, 22429, 22430 | 1.550" | Super 7° | 1.500" | 1.125" | .730" | --- |
| 23672 L-16 | ----- | 16 pcs. | Double | 20% lighter than 23672 | 1.550" | Super 7° | 1.500" | 1.125" | .730" | --- |
| 23674 L-16 | 23674 LI-16 | 16 pcs. | Double | Comp. 927 | 1.550" | Super 7° | 1.500" | 1.140" | .730" | --- |
| 23669-16 | ----- | 16 pcs. | Double | Manley 22438, 22448, 22458 | 1.550"/ Comp 26099 | Super 7° | 1.500" | 1.175" | .765" | --- |
| 23670 L-16 | 23705 LI-16 | 16 pcs. | Double | Manley 221440P | 1.560" | Super 7° | 1.450" | 1.140" | .745" | --- |
| 23706 L-16 | 23706 LI-16 | 16 pcs. | Double | .050" more installed than 23705 L | 1.560" | Super 7° | 1.450" | 1.140" | .745" | --- |
| 23682-16 | 23682 I-16 | 16 pcs. | Double | Manley 221442 | 1.560" | Super 7° | 1.500" | 1.120" | .805" | --- |
| 23682 L-16 | 23682 LI-16 | 16 pcs. | Double | 16% lighter than 23682 | 1.560" | Super 7° | 1.500" | 1.120" | .805" | --- |
| 23681-16 | 23681 I-16 | 16 pcs. | Double | Manley 221443, 221444 | 1.580" / 1.610" | Super 7° | 1.500" | 1.150" | .825" | --- |
| 23681 L-16 | 23681 LI-16 | 16 pcs. | Double | 17% lighter than 23681 | 1.580" / 1.610" | Super 7° | 1.450" | 1.150" | .825" | --- |
| 23691-16 | ----- | 16 pcs. | Double | .050" more installed than 23681 | 1.580" / 1.610" | Super 7° | 1.500" | 1.150" | .825" | --- |
| 23685-16 | 23685 I-16 | 16 pcs. | Double | Manley 221445P | 1.620" | Super 7° | 1.500" | 1.175" | .840" | --- |
| 23685 L-16 | 23685 LI-16 | 16 pcs. | Double | 16% lighter than 23685 | 1.620" | Super 7° | 1.460" | 1.175" | .840" | --- |
| 23680-16 | 23680 I-16 | 16 pcs. | Double | Isky 9685 | 1.625" | Super 7° | 1.500" | 1.185" | .760" | --- |
| 23708 L-16 | ----- | 16 pcs. | Triple | Manley 221447, 221448 221449, 221450, 221451 | 1.660" | Super 7° | 1.450" | 1.185" | .870" | .635" |
| | | | | | | | | | | 17 |

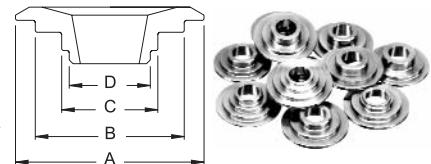
Please call with your custom retainer requirements.

SPRING RETAINERS

10° TITANIUM RETAINERS

- ✓ Special 6AL-4V titanium for maximum strength
- ✓ Excellent value for all forms of racing

BULK PRICING
AVAILABLE



| Part No. | Quantity | Spring Type | Spring | Height | Spring O.D. | Keeper Degree | Dimensions | | | | Wgt/ Grams |
|----------|----------|-------------|---|--------|-------------------|---------------|------------|--------|-------|-------|---------------|
| | | | | | | | A | B | C | D | |
| 23630-16 | 16 pcs. | Outer-Inner | 22406, 22407, 22408 | Std. | 1.437"/ 1.550" | 10° | 1.440" | 1.050" | .700" | --- | 15 |
| 23684-16 | 16 pcs. | Double | Manley 221455, 221456, 221457, 221460 | Std. | 1.500" | 10° | 1.325" | 1.035" | .705" | --- | 14 |
| 23644-16 | 16 pcs. | Double | Manley 221432, Manley 221440P, Comp. 927 | Std. | 1.550" | 10° | 1.500" | 1.140" | .740" | --- | 17 |
| 23658-16 | 16 pcs. | Double | Manley 22431, 22440, 22441 | Std. | 1.550" | 10° | 1.500" | 1.105" | .710" | --- | 16 |
| 23657-16 | 16 pcs. | Double | Manley 22429, 22430 | Std. | 1.550" | 10° | 1.500" | 1.120" | .705" | --- | 18 |
| 23649-16 | 16 pcs. | Double | Manley 221424, 221425 | Std. | 1.625" | 10° | 1.500" | 1.175" | .850" | --- | 19 |
| 23654-16 | 16 pcs. | Double | Manley 22458 | Std. | 1.625" | 10° | 1.500" | 1.175" | .765" | --- | 17 |
| 23663-16 | 16 pcs. | Triple | Manley 221447, 221448, 221449, 221450, 221451 | Std. | 1.660" | 10° | 1.500" | 1.185" | .860" | .620" | 21 |
| 23676-16 | 16 pcs. | Double | Manley 221455 221456, 221457, 221460 | +.100" | 1.500" | 10° | 1.325" | 1.035" | .705" | --- | 13 |
| 23641-16 | 16 pcs. | Triple | Crane 99882 | +.100" | 1.550" | 10° | 1.500" | 1.130" | .735" | .640" | 17 |
| 23650-16 | 16 pcs. | Double | Manley 221432, Manley 221440P, Comp. 927 | +.100" | 1.550" | 10° | 1.500" | 1.140" | .740" | --- | 18 |
| 23660-16 | 16 pcs. | Double | Manley 22431, 22440, 22441 | +.100" | 1.550" | 10° | 1.500" | 1.105" | .710" | --- | 17 |
| 23661-16 | 16 pcs. | Double | Manley 22429, 22430 | +.100" | 1.550" | 10° | 1.500" | 1.120" | .705" | --- | 17 |
| 23647-16 | 16 pcs. | Double | Comp. 938, K-950 | +.100" | 1.550" | 10° | 1.500" | 1.120" | .730" | --- | 18 |
| 23643-16 | 16 pcs. | Double | Manley 221442 | +.100" | 1.560" | 10° | 1.500" | 1.120" | .805" | --- | 19 |
| 23648-16 | 16 pcs. | Double | Manley 221443, Manley 221444, Comp. 951 | +.100" | 1.580"/ 1.610" | 10° | 1.500" | 1.150" | .825" | --- | 20 |
| 23655-16 | 16 pcs. | Double | Manley 22458 K-1000, K-1000H | +.100" | 1.625" | 10° | 1.500" | 1.175" | .765" | --- | 17 |
| 23640-16 | 16 pcs. | Double | Manley 221424, 221425 | +.100" | 1.625" | 10° | 1.500" | 1.175" | .850" | --- | 20 |
| 23662-16 | 16 pcs. | Triple | Comp. 948 | +.100" | 1.625" | 10° | 1.500" | 1.190" | .875" | .640" | 19 |
| 23665-16 | 16 pcs. | Triple | K-1400 | +.100" | 1.625" | 10° | 1.500" | 1.185" | .765" | .645" | 18 |
| 23653-16 | 16 pcs. | Triple | Manley 221447, 221448, 221449, 221450, 221451 | +.100" | 1.660" | 10° | 1.500" | 1.185" | .860" | .620" | 19 |

Please call with your custom retainer requirements.

SPRING RETAINERS

LIGHTWEIGHT 10° TITANIUM RETAINERS

- ✓ Squeeze more RPM's out of your engine
- ✓ Avoid valve float
- ✓ Lightweight retainer does not sacrifice reliability
- ✓ 16 grams - compared to normal 19 to 21 grams
- ✓ Special heat treated titanium for maximum strength
- ✓ Must use 10° valve locks



| Part No. | Quantity | Spring Type | Spring | Height | Spring O.D. | A | Dimensions B | C | D | Wgt/ Grams |
|------------|----------|-------------|---|-------------------------------|-----------------|--------|--------------|-------|-------|------------|
| 23540-16 | 16 pcs. | Double | Manley 221424, 221425 | +.100" | 1.625" | 1.430" | 1.175" | .850" | --- | 17 |
| 23562-16 | 16 pcs. | Triple | Pacaloy Comp 946, 947, 948 | +.100" | 1.625" / 1.650" | 1.430" | 1.190" | .875" | .640" | 16 |
| 23553-16 | 16 pcs. | Triple | Manley 221447, 221448, 221449, 221450, 221451 | +.100" | 1.660" | 1.430" | 1.185" | .860" | .620" | 16 |
| 23553 I-16 | 16 pcs. | Triple | Manley 221447, 221448, 221449, 221450, 221451 | +.100" | 1.660" | 1.430" | 1.185" | .860" | .620" | 16 |
| | | | | 23553 I retainer is impinged. | | | | | | |
| 23679-16* | 16 pcs. | Double | Manley 221455, 221456, 221457, 221460 | +.100" | 1.500" | 1.325" | 1.035" | .705" | --- | 14 |
| 23683-16* | 16 pcs. | Double | Manley 221455, 221456, 221457, 221460 | +.170" | 1.500" | 1.325" | 1.035" | .705" | --- | 14 |
| 23686-16* | 16 pcs. | Double | Manley 221463 | +.100" | 1.585" | 1.350" | 1.100" | .780" | --- | 16 |
| 23753-16* | 16 pcs. | Triple | Manley 221447, 221448, 221449, 221450, 221451 | +.100" | 1.660" | 1.430" | 1.185" | .860" | .620" | 17 |

* Made from our high strength Ti-17 Titanium Material

7° TITANIUM RETAINERS

- ✓ CAD designed for ultimate reduction in mass without sacrificing strength



| Part No. | Quantity | Manley Spring | Installed Height | Retainer O.D. | Spring O.D. | Spring I.D. | Keeper Degree | x Valve Stem | Wgt/ Grams |
|-----------|----------|--|------------------|---------------|---------------|-------------|-------------------|--------------|------------|
| 23628-24 | 24 pcs. | 221429 | Std. | .775" | .880" | .565" | 7° x 6mm | | 4 |
| 23614-24 | 24 pcs. | 221433 | Std. | .875" | 1.013" | .650" | 7° x 6mm | | 5 |
| 23627-16 | 16 pcs. | 221427/221437 | Std. | .875" | 1.020"/1.030" | .642" | 7° x 7mm | | 5 |
| 23667-16 | 16 pcs. | 221427/221437 | +.060" | .875" | 1.020"/1.030" | .642" | 7° x 7mm | | 5 |
| 23629-16 | 16 pcs. | 221430 | Std. | .915" | 1.056" | .630" | 7° x 5/16" | | 5 |
| 23613-16 | 16 pcs. | 221431 | Std. | .935" | 1.076" | .650" | 7° x 5/16" | | 6 |
| 23622-16 | 16 pcs. | 221428/221438 | Std. | .935" | 1.076" | .650" | 7° x 8mm | | 5 |
| 23625-16 | 16 pcs. | 221428/221438 | +.050" | .935" | 1.076" | .650" | 7° x 8mm | | 5 |
| 23626-16 | 16 pcs. | 221428/221438 | +.050" | .935" | 1.076" | .650" | 7° x 11/32" | | 6 |
| 23642-16 | 16 pcs. | 22409, 22410 | +.050" | 1.150" | 1.250" | .865" | 7° x 11/32" | | 9 |
| 23632-16 | 16 pcs. | 221423 | Std. | 1.155" | 1.255" | .830" | 7° x 8mm | | 9 |
| 23633-16 | 16 pcs. | 221423 | +.050" | 1.155" | 1.255" | .830" | 7° x 8mm | | 8 |
| 23634-16 | 16 pcs. | 221423 | +.050" | 1.150" | 1.255" | .830" | 7° x 11/32" | | 9 |
| 23623-16 | 16 pcs. | 221436 | +.050" | 1.155" | 1.290"/1.295" | .674"/.676" | 7° x 8mm | | 10 |
| 23624-16 | 16 pcs. | 221436 | +.050" | 1.155" | 1.290"/1.295" | .674"/.676" | 7° x 11/32" | | 10 |
| 23611-16 | 16 pcs. | 221435 | +.050" | 1.200" | 1.340" | .726" | 7° x 8mm | | 11 |
| 23638-16 | 16 pcs. | 22408 | Std. | 1.340" | 1.437" | .720" | 7° x 8mm | | 14 |
| 23639-16 | 16 pcs. | 22408 | +.050" | 1.340" | 1.437" | .720" | 7° x 8mm | | 14 |
| 23675-16 | 16 pcs. | 221455, 221456, 221457, 221460 | +.100" | 1.325" | 1.500" | .719" | 7° x 11/32", 3/8" | | 14 |
| 23677-16* | 16 pcs. | 221455, 221456, 221457, 221460 | +.100" | 1.325" | 1.500" | .719" | 7° x 11/32", 3/8" | | 15 |
| 23673-16 | 16 pcs. | 221447, 221448, 221449, 221450, 221451 | +.100" | 1.500" | 1.660" | .635" | 7° x 11/32", 3/8" | | 20 |

* Made from our high strength Super 7 Titanium Material

P/N's 23611, 23623, 23632, 23633, 23638, 23639, 23622, & 23625 must use Manley 13098 or factory Chevrolet LS-1 valve locks.

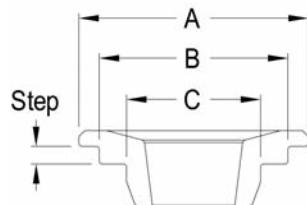
P/N's 23624, 23634, 23626, & 23642 are for the following engine models: LT-1 / LT-4 / L-98. Must use Manley 13091.

Note: New part numbers are **ITALICIZED**.

SPRING RETAINERS

SPORT COMPACT TITANIUM RETAINERS

- ✓ Heat treated aerospace grade titanium
- ✓ CNC machined to exacting tolerances
- ✓ Lightweight and extremely durable
- ✓ A must for your high revving sport compact engine



CYL HEAD COMPONENTS

| Part No. | Application | Spring | Valve Stem Diameter | Valve Lock Degree | A | B | C | Dimensions Step | Wgt/ Grams |
|----------|--|------------------------|---------------------|-------------------|--------|-------|-------|-----------------|------------|
| 23000-16 | Acura B18C / B16A / H22 | Stock Spring | 5.5 mm | 7° | 1.100" | .830" | .600" | .080" | 6 |
| 23100-16 | Acura B16A / B18C / B17A Honda H22 V-Tec | Manley 22105, 22110 | 5.5 mm | 7° | 1.150" | .850" | .650" | .080" | 7 |
| 23120-16 | Honda B18A / B (Non V-Tec) | Manley 22120 | 6.5 mm | 7° | 1.100" | .805" | .610" | .080" | 6 |
| 23140-16 | Honda K20A/K20Z | Manley 22140 | 5.5 mm | 7° | 1.050" | .850" | .610" | .080" | 7 |
| 23145-16 | Honda K20A3/K24A | Manley 22145 | 5.5 mm | 7° | 1.050" | .775" | .610" | .045" | 8 |
| 23150-16 | Honda F20C/F22C | Manley 22150 | 5.5 mm | 7° | 1.050" | .850" | .610" | .080" | 7 |
| 23190-16 | Dodge SRT-4 | Manley 22190 | 6.0 mm | 7° | 1.050" | .760" | ---- | .100" | 6 |
| 23115-16 | Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-1999) | Manley 22115 | 6.6 mm | 6° | 1.050" | .850" | .610" | .040" | 8 |
| 23125-16 | Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-2006) | Manley 22125 | 6.6 mm | 6° | 1.050" | .760" | ---- | .140" | 9 |
| 23195-16 | Mitsubishi EVO X 4B11T | Manley 22195 | 5.5 mm | 7.5° | .960" | .690" | ---- | .100" | 7 |
| 23155-24 | Nissan Patrol TB48 | Manley 22155 | 6.0 mm | 6° | 1.050" | .760" | ---- | .080" | 7 |
| 23160-16 | Nissan KA24DE | Manley 22160 | 7.0 mm | 7° | 1.150" | .850" | .650" | .080" | 9 |
| 23165-16 | Nissan SR20DE/SR20DET | Manley 22165 | 6.0 mm | 6° | 1.150" | .825" | ---- | .080" | 10 |
| 23170-24 | Nissan VQ35DET | Manley 22170 | 5.5 mm | 6° | .960" | .690" | ---- | .140" | 8 |
| 23175-24 | Nissan RB26DETT | Manley 22175 | 6.0 mm | 6° | 1.050" | .760" | ---- | .080" | 8 |
| 23180-16 | Subaru WRX/Sti | Manley 22180 | 6.0 mm | 6° | 1.050" | .745" | .515" | .100" | 6 |
| 23185-16 | Subaru WRX/Sti | Manley 22185 | 6.0 mm | 6° | .875" | .627" | .465" | .095" | 5 |
| 23130-24 | Toyota Supra 2JZGT/2JZGTE 6 cyl. | Manley 22130 | 6.0 mm | 6° | 1.050" | .745" | .515" | .100" | 6 |

SPORT COMPACT VALVE SPRING & RETAINER KITS



- ✓ Wound from super clean alloy
- ✓ Designed to handle aftermarket camshafts

| Part No. Without Valve Locks | Part No. With Valve Locks | Application | Max Net Lift | Spring No. | Titanium Retainer No. | Valve Locks |
|------------------------------------|---------------------------------|--|-----------------|------------|--------------------------|-------------|
| 26105 | 26105K | Acura B Series, V-Tec | .535" | 22105-16 | 23100-16 | 13010-8 |
| 26110 | 26110K | Honda H22, V-Tec | .560" | 22110-16 | 23100-16 | 13010-8 |
| 26120 | ----- | Honda B Series, Non V-Tec | .615" | 22120-16 | 23120-16 | ----- |
| 26140 | 26140K | Honda K20A/K20Z | .540" | 22140-16 | 23140-16 | 13010-8 |
| 26145 | 26145K | Honda K20A3/K24A | .545" | 22145-16 | 23145-16 | 13010-8 |
| 26150 | 26150K | Honda F20C/F22C | .530" | 22150-16 | 23150-16 | 13010-8 |
| 26190 | ----- | Dodge SRT-4 | .500" | 22190-16 | 23190-16 | ----- |
| 26115 | 26115K | Mitsubishi 4G63-4G63T DSM DOHC 16 Valve (1990-1999) | .460" | 22115-16 | 23115-16 | 13016-8 |
| 26125 | 26125K | Mitsubishi 4G63-4G63T DSM / EVO DOHC 16 Valve (1990-2006) | .580" | 22125-16 | 23125-16 | 13016-8 |
| 26195 | ----- | Mitsubishi EVO X 4B11T | .430" | 22195-16 | 23195-16 | ----- |
| 26155 | ----- | Nissan Patrol TB48 | .550" | 22155-24 | 23155-24 | ----- |
| 26160 | ----- | Nissan KA24DE | .500" | 22160-16 | 23160-16 | ----- |
| 26165 | 26165K | Nissan SR20DE/SR20DET | .540" | 22165-16 | 23165-16 | 13012-8 |
| 26170 | ----- | Nissan VQ35DET | .455" | 22170-24 | 23170-24 | ----- |
| 26175 | 26175K | Nissan RB26DETT | .535" | 22175-24 | 23175-24 | 13012-8 |
| 26180 | ----- | Subaru WRX/Sti | .525" | 22180-16 | 23180-16 | ----- |
| 26185 | ----- | Subaru WRX/Sti | .490" | 22185-16 | 23185-16 | ----- |
| 26130 | 26130K | Toyota Supra, 2JZGT/2JZGTE 6 cyl. | .430" | 22130-24 | 23130-24 | 13014-8 |

Note: New part numbers are **ITALICIZED**.

SPRING RETAINERS

TENSILEMAX STEEL RETAINERS

These are serious retainers for serious engine builders who DEMAND THE VERY BEST...

- ✓ Manufactured from our incredibly tough TensileMax alloy
- ✓ Designed to be as light as standard titanium retainers and very close in weight to lightweight titanium versions (within 2-4 grams)
- ✓ Specially heat treated to provide a hardness of Rc 52-54 and prevent retainer wear
- ✓ Exclusive process yields a part that provides the optimum balance between ultimate strength, fatigue strength, hardness and ductility
- ✓ Unique impingement process developed specifically for our TensileMax alloy and hardness range to improve fatigue strength and promote better oiling between the spring and retainer



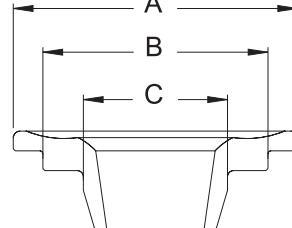
Standard TensileMax



Convoluted TensileMax



Double Convoluted TensileMax



| Part No. | Quantity | Spring Type | Spring | Spring O.D. | Keeper Degree | A | Dimensions B | C | Profile | Wgt/ Grams |
|--------------|----------|-------------|---|-------------|---------------|--------|--------------|-------|-------------------|------------|
| 23746TM-16 | 16 pcs. | Double | Manley 221446SF | 1.400" | Super 7° | 1.260" | .980" | .690" | Standard | 16 |
| 23675TM-16 | 16 pcs. | Double | Manley 221455, 221456 221457, 221460 | 1.500" | 7° (+.100") | 1.325" | 1.035" | .705" | Standard | 18 |
| 23676TM-16 | 16 pcs. | Double | Manley 221455, 221456 221457, 221460 | 1.500" | 10° (+.100") | 1.325" | 1.035" | .705" | Standard | TBA |
| 23707TM-16 | 16 pcs. | Double | Manley 221432 | 1.530" | Super 7° | 1.420" | 1.125" | .740" | Convoluted | 21 |
| 23670TM-16 | 16 pcs. | Double | Manley 22431, 22440, 22441 | 1.550" | Super 7° | 1.420" | 1.105" | .710" | Convoluted | 20 |
| 23674TM-16 | 16 pcs. | Double | Comp. 927 | 1.550" | Super 7° | 1.440" | 1.140" | .730" | Standard | 22 |
| 23682TM-16 | 16 pcs. | Double | Manley 221442 | 1.560" | Super 7° | 1.440" | 1.120" | .805" | Standard | 23 |
| 23672TM-16 | 16 pcs. | Double | Manley 221441P, 22429, 22430 | 1.570" | Super 7° | 1.440" | 1.125" | .730" | Standard | 20 |
| 23705TM-16 | 16 pcs. | Double | Manley 221440P | 1.570" | Super 7° | 1.440" | 1.140" | .745" | Standard | 22 |
| 23705LTM-16 | 16 pcs. | Double | 14% lighter than 23705TM | 1.570" | Super 7° | 1.440" | 1.140" | .745" | Standard | 19 |
| 23686TM-16 | 16 pcs. | Double | Manley 221463 | 1.585" | 10° (+.100") | 1.350" | 1.100" | .780" | Standard | TBA |
| 23685TM-16 | 16 pcs. | Double | Manley 221445P | 1.620" | Super 7° | 1.460" | 1.175" | .840" | Standard | 23 |
| 23685DCTM-16 | 16 pcs. | Double | Manley 221445P | 1.620" | Super 7° | 1.460" | 1.175" | .840" | Double Convoluted | 22 |

LIGHTWEIGHT H-13 TOOL STEEL RETAINERS

For those searching for a slightly more economical alternative to titanium retainers, either to help solve a "wear problem" or because of "class rules," Manley lightweight H-13 Tool Steel retainers are your solution! H-13 tool steel allows for better processing than "other" tool steels typically utilized; thus yielding a stronger, more durable product.

- ✓ 33% lighter than standard 10° steel retainers
- ✓ Only 2-4 grams heavier than titanium versions
- ✓ Heat treated to provide hardness of Rc 56

| Part No. | Quantity | Spring Type | Spring | Spring O.D. | Keeper Degree | A | Dimensions B | C | Wgt/ Grams |
|------------|----------|-------------|------------------------------|---------------|---------------|--------|--------------|-------|------------|
| 23746TS-16 | 16 pcs. | Double | Manley 221446SF | 1.400" | Super 7° | 1.260" | .980" | .690" | 17 |
| 23747TS-16 | 16 pcs. | Double | Manley 221446SF | 1.400" | 10° (+.100") | 1.260" | .980" | .690" | 18 |
| 23660TS-16 | 16 pcs. | Double | Manley 22431, 22440, 22441 | 1.550" | 10° (+.100") | 1.420" | 1.105" | .710" | 21 |
| 23643TS-16 | 16 pcs. | Double | Manley 221442 | 1.560" | 10° (+.100") | 1.440" | 1.120" | .805" | 23 |
| 23682TS-16 | 16 pcs. | Double | Manley 221442 | 1.560" | Super 7° | 1.440" | 1.120" | .805" | TBA |
| 23647TS-16 | 16 pcs. | Double | Manley 221441P, 22429, 22430 | 1.570" | 10° (+.100") | 1.440" | 1.120" | .730" | 22 |
| 23672TS-16 | 16 pcs. | Double | Manley 221441P, 22429, 22430 | 1.570" | Super 7° | 1.440" | 1.125" | .730" | TBA |
| 23648TS-16 | 16 pcs. | Double | Manley 221443, 221444 | 1.580"/1.610" | 10° (+.100") | 1.440" | 1.150" | .825" | 24 |
| 23681TS-16 | 16 pcs. | Double | Manley 221443, 221444 | 1.580"/1.610" | Super 7° | 1.440" | 1.150" | .825" | TBA |

Call your Manley salesman to inquire about custom H-13 tool steel retainers. We can manufacture for Super 7° applications as well.

Note: New part numbers are **ITALICIZED**.



SPRING RETAINERS

SUPER 7° "SCD" STEEL RETAINERS

PATENT No. 5,322,039

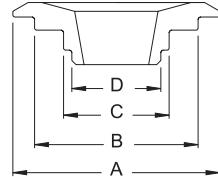
- ✓ Convoluted and drilled
- ✓ All the "trickest" features of our ICD titanium retainers
- ✓ Thru-hardened 4140 chrome moly steel
- ✓ 20% lighter than a steel 10° retainer
- ✓ Strategic holes to oil and cool springs



| Part No. | Material | Quantity | Manley Spring | Spring O.D. | Keeper Degree | A | Dimensions B | C | Wgt/ Grams |
|--------------|----------|----------|---------------|---------------|---------------|--------|--------------|-------|------------|
| 23707 SCD-16 | Steel | 16 pcs. | 221432 | 1.530"/1.575" | Super 7° | 1.440" | 1.125" | .740" | 25 |
| 23670 SCD-16 | Steel | 16 pcs. | 22440 | 1.550" | Super 7° | 1.440" | 1.105" | .710" | 24 |

STREET MASTER STEEL VALVE SPRING RETAINERS

- ✓ CNC machined to exacting tolerances
- ✓ Thru-hardened 4140 chrome moly



| Part No. | Material | Quantity | Spring | Spring Height | Spring O.D. | Keeper Degree ^x | Valve Stem | A | Dimensions B | C | D | Wgt/ Grams |
|----------|----------|----------|-------------------------------|---------------|---------------|----------------------------|------------|--------|--------------|-------|-----|------------|
| 23612-16 | Steel | 16 pcs. | 221431 | Std. | 1.076" | 7° x 5/16" | .935" | .640" | --- | --- | --- | 10 |
| 23620-16 | Steel | 16 pcs. | 221428, 221438 | Std. | 1.076" | 7° x 8mm | .935" | .640" | --- | --- | --- | 10 |
| 23651-16 | Steel | 16 pcs. | 22409, 22410 | Std. | 1.250" | 7° x 11/32" | 1.245" | .865" | .680" | --- | --- | 21 |
| 23652-16 | Steel | 16 pcs. | 22409, 22410 | +.050" | 1.250" | 7° x 11/32" | 1.245" | .865" | .680" | --- | --- | 21 |
| 23631-16 | Steel | 16 pcs. | 221423 | Std. | 1.255" | 7° x 8mm | 1.155" | .825" | --- | --- | --- | 17 |
| 23664-16 | Steel | 16 pcs. | 221423 | +.050" | 1.255" | 7° x 11/32" | 1.150" | .825" | --- | --- | --- | 16 |
| 23621-16 | Steel | 16 pcs. | 221436 | +.050" | 1.290" | 7° x 8mm | 1.155" | .950" | .675" | --- | --- | 17 |
| 23610-16 | Steel | 16 pcs. | 221435 | +.050" | 1.340" | 7° x 8mm | 1.200" | .985" | .715" | --- | --- | 19 |
| 23645-16 | Steel | 16 pcs. | 22406, 22407, 22408 | Std. | 1.437"/1.550" | 7° x 11/32" | 1.440" | 1.050" | .700" | --- | --- | 28 |
| 23635-16 | Steel | 16 pcs. | 22406, 22407, 22408 | +.060" | 1.437"/1.550" | 10° x All | 1.440" | 1.050" | .700" | --- | --- | 31 |
| 23666-16 | Steel | 16 pcs. | 22406, 22407, 22408 | Std. | 1.437"/1.550" | 7° x 3/8" | 1.440" | 1.050" | .700" | --- | --- | 31 |
| 23646-16 | Steel | 16 pcs. | 22406, 22407, 22408 | +.100" | 1.437"/1.550" | 7° x 11/32" | 1.440" | 1.050" | .700" | --- | --- | 30 |
| 23636-16 | Steel | 16 pcs. | Crane 99882 | Std. | 1.550" | 10° x All | 1.500" | 1.130" | .735" | .640" | --- | 29 |
| 23659-16 | Steel | 16 pcs. | Manley 22431, 22440, 22441 | +.100" | 1.550" | 10° x All | 1.500" | 1.105" | .710" | --- | --- | 31 |
| 23656-16 | Steel | 16 pcs. | Manley 22429, 22430 | +.100" | 1.550" | 10° x All | 1.500" | 1.120" | .705" | --- | --- | 31 |

P/N 23610, 23620, 23621, & 23631 must use Manley 13098 or factory Chevrolet LS-1 valve locks.

VALVE SPRING SHIMS

- ✓ Available in .060", .030" and .015" thickness
- ✓ Heat treated to resist wear



| Part Numbers | | .060" | .030" | .015" | Quantity | O.D. | I.D. | Type | Description |
|--------------|----------|----------|-------|---------|----------|-------|------|------|--------------------------------|
| 02236-50 | 02233-50 | 02231-50 | | 50 pcs. | 1.250" | .812" | Hard | | SB Chevy-stock size springs |
| 03236-50 | 03233-50 | 03231-50 | | 50 pcs. | 1.480" | .703" | Hard | | BB Chevrolet |
| 03256-50 | 03253-50 | 03251-50 | | 50 pcs. | 1.437" | .785" | Hard | | SB Chevrolet w/ larger springs |
| 03266-50 | 03263-50 | 03261-50 | | 50 pcs. | 1.500" | .645" | Hard | | Chevrolet - Chrysler |
| 03276-50 | 03273-50 | 03271-50 | | 50 pcs. | 1.625" | .645" | Hard | | Chevrolet - Chrysler - Ford |

SPRING CUPS & I.D. LOCATORS

O.D. VALVE SPRING CUPS

- ✓ CNC machined
- ✓ Accurate and durable .062" thick
- ✓ Heat treated and black oxide finished



| Part No. | Quantity | Fits Spring O.D. | Cup O.D. | Cup I.D. | Wall Shoulder Height | Manley Spring | Use Cutter Number |
|----------|----------|------------------|----------|----------|----------------------|--|-------------------|
| 42142-16 | 16 pcs. | 1.250" | 1.390" | .570" | .150" | 22409, 22410 | 41850 |
| 42126-16 | 16 pcs. | 1.437" | 1.550" | .687" | .150" | 22407, 22408 | 41835 |
| 42122-16 | 16 pcs. | 1.550" | 1.680" | .635" | .150" | 22429, 22430, 22431, 22440, 22441 | 41852 |
| 42377-16 | 16 pcs. | 1.550" | 1.680" | .577" | .150" | 22429, 22430, 22431, 22440, 22441 | 41858 |
| 42370-16 | 16 pcs. | 1.580" | 1.687" | .570" | .140" | 221443 | 41858 |
| 42365-16 | 16 pcs. | 1.610" | 1.740" | .570" | .140" | 221444 | 41859 |
| 42121-16 | 16 pcs. | 1.625" | 1.740" | .635" | .150" | 22438, 221424, 221425 | 41851 |
| 42128-16 | 16 pcs. | 1.625" | 1.740" | .635" | .250" | 22438, 221424, 221425 | 41851 |
| 42379-16 | 16 pcs. | 1.650" | 1.740" | .570" | .250" | 221424, 221425 | 41859 |
| 42371-16 | 16 pcs. | 1.660" | 1.740" | .635" | .140" | 221447, 221448, 221449 221450, 221451 | 41851 |
| 42372-16 | 16 pcs. | 1.660" | 1.740" | .570" | .140" | 221447, 221448, 221449 221450, 221451 | 41859 |

PRO SERIES

I.D. VALVE SPRING LOCATORS

- ✓ CNC machined to tolerances $\pm .002"$
- ✓ Excellent surface finish
- ✓ 8620 material heat treated and black oxide finished



| Part No. | Quantity | Fits Spring O.D. | Locator O.D. | Locator I.D. | Cup Thickness | Wall Shoulder Height | Shoulder Diameter | Manley Spring | Use Cutter Number |
|----------|----------|------------------|--------------|--------------|---------------|----------------------|-------------------|-----------------|-------------------|
| 42446-16 | 16 pcs. | 1.400" | 1.410" | .567" | .062" | .163" | .690" | 221446SF | 41850 |
| 42426-16 | 16 pcs. | 1.550" | 1.535" | .567" | .062" | .163" | .740" | 221432, 221441P | 41856 |
| 42466-16 | 16 pcs. | 1.550" | 1.535" | .567" | .045" | .163" | .740" | 221432, 221441P | 41856 |
| 42443-16 | 16 pcs. | 1.560" | 1.550" | .567" | .062" | .163" | .802" | 221442 | 41856 |
| 42573-16 | 16 pcs. | 1.580" | 1.570" | .567" | .062" | .163" | .828" | 221443 | 41856 |
| 42438-16 | 16 pcs. | 1.580" | 1.570" | .567" | .045" | .163" | .828" | 221443 | 41856 |
| 42437-16 | 16 pcs. | 1.625" | 1.570" | .567" | .062" | .163" | .850" | 221424, 221425 | 41857 |
| 42459-16 | 16 pcs. | 1.585" | 1.610" | .635" | .062" | .163" | .775" | 221463 | 41855 |

Please call with your custom spring locator requirements.

Note: New part numbers are **ITALICIZED**.

SPRING LOCATORS

I.D. VALVE SPRING LOCATORS

- ✓ CNC machined
- ✓ Accurate and durable
- ✓ Heat treated and black oxide finished



| Part No. | Quantity | Fits Spring O.D. | Locator O.D. | Locator I.D. | Cup Thickness | Wall Shoulder Height | Shoulder Diameter | Spring | Use Cutter Number |
|-----------------|----------|------------------|--------------|--------------|---------------|----------------------|-------------------|---|-------------------|
| 42460-16 | 16 pcs. | .870" | .845" | .555" | .057" | .100" | .600" | Manley 22160 Inner Spring | None |
| 42115-16 | 16 pcs. | 1.160" | 1.100" | .500" | .095" | .200" | .610" | Manley 22115 | None |
| 42123-16 | 16 pcs. | 1.255" | 1.250" | .780" | .180" | .090" | .880" | Manley 22411 | None |
| 42341-16 | 16 pcs. | 1.255" | 1.170" | .505" | .035" | .145" | .825" | Manley 221423 | None |
| 42334-16 | 16 pcs. | 1.290" | 1.270" | .505" | .035" | .145" | .675" | Manley 221436 | None |
| 42338-16 | 16 pcs. | 1.311" | 1.290" | .505" | .035" | .145" | .875" | Manley 221428, 221438 | None |
| 42336-16 | 16 pcs. | 1.311" | 1.290" | .505" | .062" | .145" | .875" | Manley 221428, 221438 | None |
| 42324-16 | 16 pcs. | 1.311" | 1.300" | .812" | .205" | .145" | .875" | Manley 221431 | None |
| 42348-16 | 16 pcs. | 1.340" | 1.320" | .505" | .035" | .145" | .715" | Manley 221435 | None |
| 42135-16 | 16 pcs. | 1.340" | 1.320" | .567" | .035" | .145" | .715" | Manley 221435 | None |
| 42335-16 | 16 pcs. | 1.550" | 1.535" | .635" | .062" | .140" | .710" | Manley 221455, 221456, 221457, 221460 | 41835 |
| 42347-16 | 16 pcs. | 1.550" | 1.535" | .570" | .062" | .140" | .710" | Manley 221455, 221456, 221457, 221460 | 41836 |
| 42119-16 | 16 pcs. | 1.550" | 1.535" | .635" | .062" | .140" | .720" | Manley 22430, 22431, 22440, Isky 9385 | 41835 |
| 42317-16 | 16 pcs. | 1.550" | 1.535" | .570" | .062" | .140" | .720" | Manley 22430, 22431, 22440 | 41856 |
| 42330-16 | 16 pcs. | 1.550" | 1.535" | .635" | .062" | .140" | .740" | Manley 221432, 221441P | 41835 |
| 42326-16 | 16 pcs. | 1.550" | 1.535" | .570" | .062" | .140" | .740" | Manley 221432, 221441P | 41856 |
| 42378-16 | 16 pcs. | 1.550" | 1.535" | .570" | .062" | .140" | .765" | Isky 9685 | 41856 |
| 42331-16 | 16 pcs. | 1.550" | 1.530" | .570" | .062" | .140" | .750" | Manley 221440P | 41856 |
| 42332-16 | 16 pcs. | 1.550" | 1.535" | .570" | .062" | .140" | .810" | Comp 943 | 41856 |
| 42333-16 | 16 pcs. | 1.550" | 1.535" | .635" | .062" | .140" | .810" | Comp 943 | 41835 |
| 42343-16 | 16 pcs. | 1.560" | 1.550" | .567" | .062" | .163" | .802" | Manley 221442 | 41856 |
| 42373-16 | 16 pcs. | 1.580" | 1.570" | .570" | .062" | .140" | .825" | Manley 221443 | 41856 |
| 42369-16 | 16 pcs. | 1.580" | 1.570" | .635" | .062" | .140" | .825" | Manley 221443 | 41856 |
| 42367-16 | 16 pcs. | 1.610" | 1.610" | .570" | .062" | .140" | .825" | Manley 221444 | 41857 |
| 42368-16 | 16 pcs. | 1.610" | 1.610" | .635" | .062" | .140" | .825" | Manley 221444 | 41855 |
| 42342-16 | 16 pcs. | 1.620" | 1.610" | .570" | .062" | .140" | .840" | Manley 221445P | 41857 |
| 42337-16 | 16 pcs. | 1.625" | 1.570" | .570" | .062" | .140" | .850" | Manley 221424, 221425 | 41857 |
| 42120-16 | 16 pcs. | 1.625" | 1.610" | .635" | .062" | .140" | .710" | Manley 221455, 56, 57, 60 K Motion K1000, K1000H | 41855 |
| 42318-16 | 16 pcs. | 1.625" | 1.610" | .570" | .062" | .140" | .710" | Manley 221455, 56, 57, 60 K Motion K1000, K1000H | 41857 |
| 42374-16 | 16 pcs. | 1.625" | 1.610" | .570" | .062" | .140" | .765" | Manley 22458 | 41857 |
| 42376-16 | 16 pcs. | 1.625" | 1.615" | .570" | .062" | .140" | .675" | Crane 99877 | 41857 |
| 42375-16 | 16 pcs. | 1.625" | 1.625" | .635" | .062" | .140" | .760" | Isky 9685 | 41855 |
| 42364-16 | 16 pcs. | 1.660" | 1.660" | .570" | .062" | .140" | .630" | Manley 221447, 221448, 221449, 221450, 221451 | 41858 |

Please call with your custom spring locator requirements.

Note: New part numbers are **ITALICIZED**.

TOOLS / CUTTERS

ROCKER STUD BOSS CUTTERS

- ✓ Extra large diameter cutter to completely clean stud bosses while reducing height
- ✓ Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods

| Part No. | Quantity | Description |
|----------|----------|--------------------------------------|
| 41860 | 1 | Use for Fords and Small Block Chevys |



CYLINDER HEAD SPRING SEAT CUTTERS

- ✓ Extra strength carbide cutters
- ✓ Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods

Replacement pilots: 7 mm/.274" - 41274, 5/16" - 41516, 11/32" - 41132, 3/8" - 41138

| Part No. | Quantity | Description |
|----------|----------|--|
| 41824 | 1 | Cuts 1.250" O.D., .750" I.D. with 11/32" pilot |
| 41850 | 1 | Cuts 1.445" O.D., .570" I.D. with 11/32" pilot |
| 41835 | 1 | Cuts 1.565" O.D., .625" I.D. with 11/32" pilot |
| 41856 | 1 | Cuts 1.580" O.D., .570" I.D. with 11/32" pilot |
| 41857 | 1 | Cuts 1.635" O.D., .570" I.D. with 11/32" pilot |
| 41855 | 1 | Cuts 1.635" O.D., .625" I.D. with 11/32" pilot |
| 41858 | 1 | Cuts 1.690" O.D., .570" I.D. with 11/32" pilot |
| 41852 | 1 | Cuts 1.690" O.D., .625" I.D. with 11/32" pilot |
| 41859 | 1 | Cuts 1.755" O.D., .570" I.D. with 11/32" pilot |
| 41851 | 1 | Cuts 1.755" O.D., .625" I.D. with 11/32" pilot |



VALVE GUIDE SEAL CUTTERS

- ✓ Extra strength carbide cutters
- ✓ Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods

| Part No. | Quantity | Pilot Size | Seal No. | Guide O.D. |
|----------|----------|--------------|----------|------------|
| 41410 | 1 | 7 mm (.274") | 24041 | .431" |
| 41510 | 1 | 5/16" | 24040 | .420" |
| 41610 | 1 | 5/16" | 24029 | .500" |
| 41710 | 1 | 5/16" | 24034 | .530" |
| 41611 | 1 | 11/32" | 24037 | .500" |
| 41711 | 1 | 11/32" | 24035 | .530" |
| 41612 | 1 | 3/8" | 24039 | .500" |
| 41712 | 1 | 3/8" | 24036 | .530" |



VALVE GUIDE SEAL CUTTER PILOT

- ✓ For use with any spring seat or seal cutter

| Part No. | Quantity | Description |
|----------|----------|---------------------|
| 41274 | 1 | 7 mm cutter pilot |
| 41516 | 1 | 5/16" cutter pilot |
| 41132 | 1 | 11/32" cutter pilot |
| 41138 | 1 | 3/8" cutter pilot |



**SMALL BLOCK CHEVROLET
SWEDGED END PUSHRODS
.080" WALL 1010 STEEL**



- ✓ Heat treated and black oxide finish
- ✓ For use in hydraulic lifter applications with less than 400 lbs. open spring pressure and under 7500 rpm

| Part No. | Quantity | Description | Diameter | Length |
|----------|----------|-------------------------------|----------|--------|
| 25785-16 | 16 pcs. | SB Chevy - Stock Length | 5/16" | 7.794" |
| 25786-16 | 16 pcs. | SB Chevy - .100" Longer | 5/16" | 7.894" |
| 25717-16 | 16 pcs. | Late model 350 - Stock Length | 5/16" | 7.170" |
| 25719-16 | 16 pcs. | Late model 350 - .050" Longer | 5/16" | 7.220" |

25717 and 25719 are for late model OEM hydraulic roller lifters. Hardened guide plates 42355 are required with aluminum heads.

**SMALL BLOCK CHEVROLET
BALL END PUSHRODS
.080" WALL 1010 STEEL**



- ✓ Excellent pushrods for mildly modified engines with open spring pressure under 300 lbs

| Part No. | Quantity | Description | Diameter | Length |
|----------|----------|-------------------------|----------|--------|
| 25737-16 | 16 pcs. | SB Chevy - Stock Length | 5/16" | 7.794" |
| 25777-16 | 16 pcs. | SB Chevy - .100" Longer | 5/16" | 7.894" |
| 25790-16 | 16 pcs. | SB Chevy - .150" Longer | 5/16" | 7.944" |

**FORD 5.0L
SWEDGED END PUSHRODS
.080" WALL 1010 STEEL & 4130 CHROME MOLY**



- ✓ Stock length pushrod for use with stock Ford valve (5.080" O/A)
- ✓ Use of Chevy valves (O/A 4.911") in Ford heads requires .172" shorter pushrods

| Part No. | Quantity | Description | Material | Diameter | Length |
|----------|----------|---------------|----------|----------|--------|
| 25723-16 | 16 pcs. | Stock Length | 1010 | 5/16" | 6.272" |
| 25725-16 | 16 pcs. | .172" Shorter | 1010 | 5/16" | 6.100" |
| 25627-16 | 16 pcs. | Stock Length | 4130 | 5/16" | 6.272" |
| 25610-16 | 16 pcs. | .172" Shorter | 4130 | 5/16" | 6.100" |

PUSHRODS

4130 CHROME MOLY SWEDGED END PUSHRODS

- ✓ Meticulously formed ends with exact radii
- ✓ Excellent concentricity, closely controlled length
- ✓ Heat treated and black oxide finished
- ✓ Private label stenciling available



5/16" .080" WALL 5/16" .120" WALL

| Length | 5/16" Dia. .080" Wall | 5/16" Dia. .120" Wall | 3/8" Dia. .080" Wall | 3/8" Dia. .120" Wall | 7/16" Dia. .165" Wall |
|--------|--------------------------|--------------------------|-------------------------|-------------------------|--------------------------|
| | Part No. | Part No. | Part No. | Part No. | Part No. |
| 6.050 | 25605-16 | | | | |
| 6.100 | 25610-16 | | | | |
| 6.150 | 25615-16 | | | | |
| 6.200 | 25620-16 | | | | |
| 6.250 | 25625-16 | | | | |
| 6.272 | 25627-16 | | | | |
| 6.300 | 25630-16 | | 25305-8 | | |
| 6.350 | 25635-16 | | 25306-8 | | |
| 6.400 | 25640-16 | | 25307-8 | | |
| 6.450 | 25645-16 | | 25308-8 | | |
| 6.500 | 25650-16 | | 25843-8 | 25309-8 | |
| 6.550 | 25655-16 | | 25844-8 | | |
| 6.600 | 25660-16 | | 25846-8 | | |
| 6.650 | 25665-16 | | 25837-8 | | |
| 6.700 | 25670-16 | | 25838-8 | | |
| 6.750 | 25675-16 | | 25839-8 | | |
| 6.800 | 25680-16 | | 25817-8 | | |
| 6.850 | 25685-16 | | 25819-8 | 25316-8 | |
| 6.900 | 25690-16 | | 25853-8 | 25317-8 | |
| 6.950 | 25695-16 | | 25857-8 | 25318-8 | |
| 7.000 | 25700-16 | | 25862-8 | 25319-8 | |
| 7.050 | 25727-16 | | 25827-8 | | |
| 7.100 | 25729-16 | | 25829-8 | | |
| 7.150 | 25741-16 | | 25841-8 | | |
| 7.200 | 25733-16 | | 25872-8 | | |
| 7.250 | 25734-16 | | 25873-8 | | |
| 7.300 | 25730-16 | | 25874-8 | | |
| 7.350 | 25751-16 | | 25851-8 | | |
| 7.375 | 25732-16 | | | | |
| 7.400 | 25735-16 | | 25822-8 | | |
| 7.450 | 25736-16 | | 25836-8 | | |
| 7.500 | 25754-16 | | 25854-8 | | |
| 7.550 | 25755-16 | | 25818-8 | | |
| 7.600 | 25767-16 | | 25876-8 | 25331-8 | 25174-8 |
| 7.625 | | | 25824-8 | | |
| 7.650 | 25768-16 | | 25877-8 | 25332-8 | 25129-8 |
| 7.675 | | | 25834-8 | | |
| 7.700 | 25772-16 | 25233-16 | 25828-8 | 25333-8 | 25130-8 |
| 7.725 | | | 25831-8 | | |
| 7.750 | 25707-16 | 25234-16 | 25832-8 | 25334-8 | 25131-8 |
| 7.775 | | | 25833-8 | | |
| 7.800 | 25709-16 | 25235-16 | 25787-8 | 25335-8 | 25132-8 |
| 7.825 | 25781-16 | | 25808-8 | | |
| 7.850 | 25711-16 | 25236-16 | 25878-8 | 25336-8 | 25133-8 |
| 7.875 | | | 25879-8 | | |
| 7.900 | 25712-16 | 25237-16 | 25788-8 | 25337-8 | 25134-8 |
| 7.925 | | | 25813-8 | | |
| 7.950 | 25715-16 | 25238-16 | 25814-8 | 25338-8 | 25135-8 |
| 7.975 | | | 25809-8 | | |
| 8.000 | 25716-16 | 25239-16 | 25816-8 | 25339-8 | 25136-8 |
| 8.025 | | | 25802-8 | | |
| 8.050 | 25721-16 | 25240-16 | 25821-8 | 25340-8 | 25137-8 |
| 8.075 | | | 25807-8 | | |
| 8.100 | 25722-16 | 25241-16 | 25810-8 | 25341-8 | 25138-8 |
| 8.125 | | | 25811-8 | | |
| 8.150 | 25744-16 | 25242-16 | 25815-8 | 25342-8 | 25139-8 |

| Length | 5/16" Dia. .080" Wall | 5/16" Dia. .120" Wall | 3/8" Dia. .080" Wall | 3/8" Dia. .120" Wall | 7/16" Dia. .165" Wall |
|--------|--------------------------|--------------------------|-------------------------|-------------------------|--------------------------|
| | Part No. | Part No. | Part No. | Part No. | Part No. |
| 8.175 | | | | 25812-8 | |
| 8.200 | 25745-16 | | | 25820-8 | 25343-8 |
| 8.225 | | | | 25823-8 | 25140-8 |
| 8.250 | 25701-16 | | | 25825-8 | 25344-8 |
| 8.275 | 25753-16 | | | | 25141-8 |
| 8.280 | | | | 25795-8 | 25142-8 |
| 8.300 | 25702-16 | | | 25830-8 | 25345-8 |
| 8.325 | 25762-16 | | | 25826-8 | |
| 8.350 | 25703-16 | | | 25835-8 | 25346-8 |
| 8.375 | 25763-16 | | | | 25144-8 |
| 8.380 | | | | 25769-8 | |
| 8.400 | 25706-16 | | | 25840-8 | 25347-8 |
| 8.425 | 25764-16 | | | 25842-8 | |
| 8.450 | 25708-16 | | | 25845-8 | 25348-8 |
| 8.475 | | | | 25847-8 | |
| 8.500 | 25774-16 | | | 25850-8 | 25349-8 |
| 8.525 | | | | 25856-8 | |
| 8.550 | 25710-16 | | | 25855-8 | 25350-8 |
| 8.575 | | | | 25858-8 | |
| 8.600 | 25718-16 | | | 25860-8 | 25351-8 |
| 8.625 | | | | 25863-8 | |
| 8.650 | 25724-16 | | | 25865-8 | 25352-8 |
| 8.680 | | | | 25797-8 | 25151-8 |
| 8.700 | 25799-16 | | | 25870-8 | 25353-8 |
| 8.725 | | | | 25867-8 | |
| 8.750 | 25738-16 | | | 25875-8 | 25354-8 |
| 8.775 | | | | 25868-8 | |
| 8.800 | 25742-16 | | | 25880-8 | 25355-8 |
| 8.825 | | | | 25882-8 | |
| 8.850 | 25746-16 | | | 25885-8 | 25155-8 |
| 8.875 | | | | 25887-8 | |
| 8.900 | 25758-16 | | | 25890-8 | 25357-8 |
| 8.925 | | | | 25892-8 | |
| 8.950 | 25757-16 | | | 25895-8 | 25358-8 |
| 8.975 | | | | 25897-8 | |
| 9.000 | 25765-16 | | | 25900-8 | 25359-8 |
| 9.025 | | | | 25926-8 | |
| 9.050 | 25766-16 | | | 25905-8 | 25360-8 |
| 9.075 | | | | 25927-8 | |
| 9.100 | 25776-16 | | | 25910-8 | 25361-8 |
| 9.125 | | | | 25928-8 | |
| 9.150 | 25791-16 | | | 25915-8 | 25362-8 |
| 9.175 | | | | 25929-8 | |
| 9.200 | 25792-16 | | | 25920-8 | 25363-8 |
| 9.250 | 25800-16 | | | 25796-8 | 25364-8 |
| 9.300 | 25801-16 | | | 25930-8 | 25365-8 |
| 9.350 | 25803-16 | | | 25770-8 | 25366-8 |
| 9.400 | 25804-16 | | | 25940-8 | 25367-8 |
| 9.450 | 25805-16 | | | 25945-8 | 25368-8 |
| 9.500 | 25806-16 | | | 25950-8 | 25369-8 |
| 9.550 | 25848-16 | | | 25955-8 | 25370-8 |
| 9.600 | 25849-16 | | | 25960-8 | 25371-8 |
| 9.650 | | | | 25798-8 | 25372-8 |
| 9.700 | 25859-16 | | | 25970-8 | 25373-8 |
| 9.750 | | | | 25975-8 | 25374-8 |
| 9.800 | 25864-16 | | | 25980-8 | 25375-8 |

PUSHRODS

4130 CHROME MOLY SWEDGED END PUSHRODS

- ✓ Meticulously formed ends with exact radii
- ✓ Excellent concentricity, closely controlled length
- ✓ Heat treated and black oxide finished
- ✓ Private label stenciling available



3/8" .080" WALL 3/8" .120" WALL 7/16" .165" WALL

| Length | 5/16" Dia. .080" Wall | 5/16" Dia. .120" Wall | 3/8" Dia. .080" Wall | 3/8" Dia. .120" Wall | 7/16" Dia. .165" Wall |
|----------|--------------------------|--------------------------|-------------------------|-------------------------|--------------------------|
| Part No. | | Part No. | Part No. | Part No. | Part No. |
| 9.850 | | 25985-8 | 25376-8 | 25176-8 | |
| 9.900 | 25869-16 | | 25990-8 | 25377-8 | 25177-8 |
| 9.950 | | | 25995-8 | 25378-8 | 25178-8 |
| 10.000 | | | 25906-8 | 25379-8 | 25179-8 |
| 10.050 | | | 25907-8 | | 25100-8 |
| 10.075 | | | | | 25101-8 |
| 10.100 | | | 25901-8 | | 25102-8 |
| 10.125 | | | | | 25103-8 |
| 10.150 | | | 25908-8 | | 25104-8 |
| 10.200 | | | 25909-8 | | 25123-8 |
| 10.250 | | | 25911-8 | | 25124-8 |
| 10.300 | | | 25912-8 | | 25105-8 |
| 10.325 | | | | | 25106-8 |
| 10.350 | | | 25913-8 | | 25125-8 |
| 10.400 | | | 25902-8 | | 25126-8 |
| 10.450 | | | 25914-8 | | 25107-8 |
| 10.475 | | | | | 25108-8 |
| 10.500 | | | 25903-8 | | 25109-8 |
| 10.525 | | | | | 25110-8 |
| 10.550 | | | 25916-8 | | 25111-8 |
| 10.575 | | | | | 25112-8 |
| 10.600 | | | 25917-8 | | 25113-8 |
| 10.625 | | | | | 25114-8 |
| 10.650 | | | 25918-8 | | 25119-8 |
| 10.700 | | | 25919-8 | | 25120-8 |
| 10.750 | | | 25921-8 | | 25121-8 |
| 10.800 | | | 25922-8 | | 25127-8 |
| 10.850 | | | 25923-8 | | 25115-8 |
| 10.875 | | | | | 25116-8 |
| 10.900 | | | 25924-8 | | 25117-8 |
| 10.925 | | | | | 25118-8 |
| 10.950 | | | 25925-8 | | 25122-8 |
| 11.000 | | | 25904-8 | | 25128-8 |
| 11.050 | | | | | 25180-8 |
| 11.100 | | | | | 25181-8 |
| 11.150 | | | | | 25182-8 |
| 11.200 | | | | | 25183-8 |
| 11.250 | | | | | 25184-8 |
| 11.300 | | | | | 25185-8 |
| 11.350 | | | | | 25186-8 |
| 11.400 | | | | | 25187-8 |
| 11.450 | | | | | 25188-8 |
| 11.500 | | | | | 25189-8 |
| 11.550 | | | | | 25190-8 |
| 11.600 | | | | | 25191-8 |
| 11.650 | | | | | 25192-8 |
| 11.700 | | | | | 25193-8 |
| 11.750 | | | | | 25194-8 |
| 11.800 | | | | | 25195-8 |
| 11.850 | | | | | 25196-8 |
| 11.900 | | | | | 25197-8 |
| 11.950 | | | | | 25198-8 |
| 12.000 | | | | | 25199-8 |
| 12.050 | | | | | 25200-8 |
| 12.100 | | | | | 25201-8 |
| 12.150 | | | | | 25202-8 |

COMMON 5/16" PUSHROD LENGTH APPLICATIONS

| Part No. | Description | Length |
|---|--|--|
| SMALL BLOCK CHEVY | | |
| 25709-16 | 265-350 Stock | 7.800" |
| 25711-16 | .050" Longer | 7.850" |
| 25712-16 | .100" Longer | 7.900" |
| 25733-16 | Late Model 350 | 7.200" |
| 25735-16 | LS-1 Stock | 7.400" |
| CHRYSLER / DODGE 5.7L HEMI | | |
| 26570 | HEMI 5.7L Stock Length Includes 8 Intakes and 8 Exhausts | Stock Length Int. 6.600" Exh. 7.825" |
| CHRYSLER / DODGE SRT-8 6.1L HEMI | | |
| 26610 | SRT-8 HEMI 6.1L Stock Length Includes 8 Intakes and 8 Exhausts | Stock Length Int. 6.650" and 8 Exhausts Exh. 7.850" |
| SMALL BLOCK FORD | | |
| 25627-16 | Stock 5.0 L | 6.272" |
| 25744-16 | Stock 351 W | 8.150" |
| 25706-16 | Stock 351 C | 8.400" |
| 25710-16 | Yates +.150" | 8.550" |

COMMON 3/8" PUSHROD LENGTH APPLICATIONS

| Part No. | Description | Length |
|-----------------|--------------------------------------|--------|
| 25787-8* | SB Chevy - Stock Length & Stock LS-7 | 7.800" |
| 25788-8* | SB Chevy - .100" Longer | 7.900" |
| BB Chevy | | |
| 25795-8 | BB Chevy - Stock Intake | 8.280" |
| 25796-8 | BB Chevy - Stock Exhaust | 9.250" |
| 25797-8 | BB Chevy - .400" Longer Int. | 8.680" |
| 25798-8 | BB Chevy - .400" Longer Exh. | 9.650" |
| Ford | | |
| 25815-8* | 351 W Ford - Stock Length | 8.150" |
| 25840-8* | 351 C Ford - Stock Length | 8.400" |
| 25855-8* | Yates +.150" Longer | 8.550" |

* You must order 2 sets of 8 pieces for a complete engine.

PUSHRODS

4130 CHROME MOLY

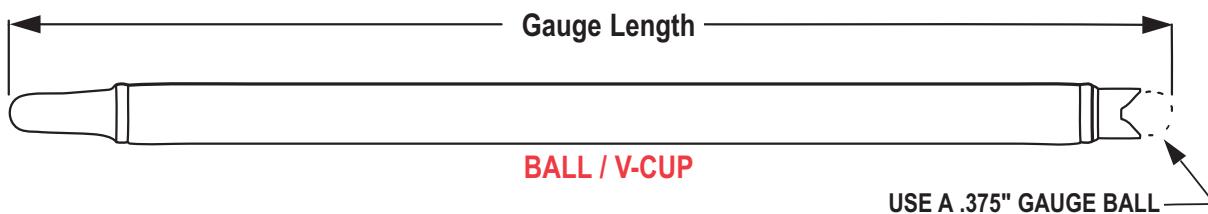
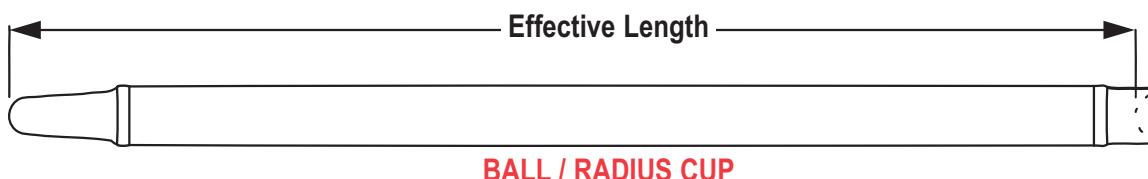
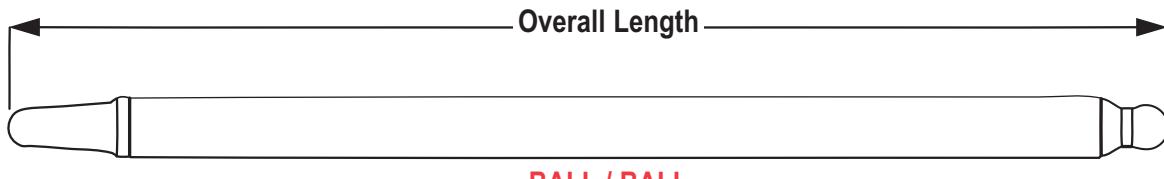
7/16", 1/2" & 9/16" THREE PIECE PUSHRODS

CUSTOM ORDER PUSHRODS

Manley's custom order pushrods are manufactured from seamless 4130/4135 aircraft-grade tubing, which is heat treated for optimum strength and stiffness. Most pushrod tips are available in 4130 Chrome Moly with our "Extreme Duty" tips manufactured from H-13 Tool Steel.

When determining the correct pushrod length, Manley Performance requires that you follow these guidelines.

- **BALL / BALL** design are to be ordered by referring to the **overall length** measurement.
- **BALL / RADIUS CUP** design are properly ordered by the "**effective**" length. The "**effective**" length is measured from the bottom of the cup to the top of the ball.
- **BALL / V-CUP** design requires the use of a 3/8" diameter gauge ball to determine "**gauge**" length. Place the 3/8" diameter ball in the V and then measure and report the gauge length.



For ease of determining your precise pushrod length, Manley offers P/N **40125** which is a reusable, adjustable pushrod measuring kit. This kit contains a 7/16" diameter adjustable pushrod, a complete assortment of every tip configuration, checking springs and detailed instructions which allow an engine builder to determine the exact pushrod length within an 8.000" to 14.000" range.

NOTE: Custom 7/16" diameter pushrods ARE guide plate compatible. Custom 1/2" and 9/16" diameter pushrods ARE NOT guide plate compatible.

CUSTOM ORDER PUSHRODS

The ordering process is as simple as 1 - 2 - 3 !

1. Choose the diameter that you require.
2. Choose the appropriate rocker and lifter ends, (specify 4130 or "Extreme Duty" H-13 material if both are offered).
3. Determine the "length" (up to a 14" maximum finished length) based on the guidelines on page 86.

For each finished pushrod you will be billed for:

1pc. - Tubing Section

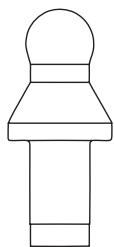
(Note: this includes the cost of machining to the final size and tip installation)

1pc. - Rocker Arm End

1pc. - Lifter End

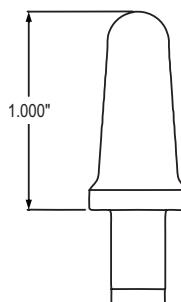
4130/4135 CHROME MOLY SEAMLESS TUBING

| Part No. | Diameter | Wall Thickness |
|----------|----------|----------------|
| 25437-1 | 7/16" | .165" |
| 25500-1 | 1/2" | .188" |
| 25563-1 | 9/16" | .188" |



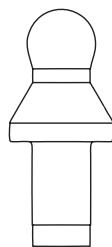
5/16" BALL SHORT

| Tip Material | Pushrod Tip Part Number |
|--------------|-------------------------|
| 4130 | 24100-1 |
| H-13 | 24101-1 |



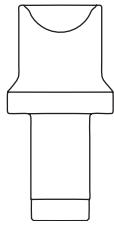
5/16" BALL LONG

| Tip Material | Pushrod Tip Part Number |
|--------------|-------------------------|
| 4130 | 24102-1 |
| H-13 | 24103-1 |



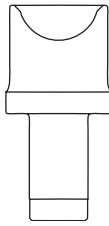
3/8" BALL

| Tip Material | Pushrod Tip Part Number |
|--------------|-------------------------|
| 4130 | 24104-1 |
| H-13 | 24105-1 |



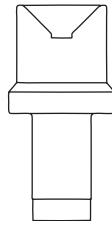
5/16" CUP

| Tip Material | Pushrod Tip Part Number |
|--------------|-------------------------|
| 4130 | 24106-1 |
| H-13 | 24107-1 |



3/8" CUP

| Tip Material | Pushrod Tip Part Number |
|--------------|-------------------------|
| 4130 | 24108-1 |
| H-13 | 24109-1 |



V-CUP

| Tip Material | Pushrod Tip Part Number |
|--------------|-------------------------|
| 4130 | 24110-1* |
| H-13 | 24111-1 |

* Supplied with a bronze insert.

Our goal is to ship your custom pushrod order in 3-5 working days. In the event you need them quicker, specify surcharge P/N 04001 which guarantees shipping in 2 working days.

PUSHRODS

CHRYSLER - FORD - PONTIAC - HOLDEN

PUSHRODS

- ✓ Cup and tip pushrods and ball end pushrods manufactured of 1010 steel
- ✓ Wedged end pushrods manufactured of 4130 chrome moly
- ✓ All pushrods are heat treated and black oxide finished



| Part No. | Quantity | Description | Type | Diam. | Length |
|-------------------------|----------|--|-----------|--------|-------------------------------------|
| CHRYSLER ENGINES | | | | | |
| 26570 | 16 pcs. | HEMI 5.7 L Includes 8 Intakes and 8 Exhausts | Swedged | 5/16" | Stock Int. 6.600" Exh. 7.825" |
| FORD ENGINES | | | | | |
| 25704-16 | 16 pcs. | 260-289-302 Ford | Ball End | 5/16" | 6.776" |
| 25728-16 | 16 pcs. | 302 Boss Ford converted to use 42156 guide plates | Swedged | 3/8" | 7.700" |
| 25748-16 | 16 pcs. | 302W Ford - all engines after 10-21-68 | Ball End | 5/16" | 6.886" |
| 25705-16 | 16 pcs. | 332-428 Ford with adjustable rocker arms | Cup & Tip | 11/32" | 9.157" |
| 25747-16 | 16 pcs. | 351W Ford | Ball End | 5/16" | 8.150" |
| 25744-16 | 16 pcs. | 351W Ford | Swedged | 5/16" | 8.150" |
| 25750-16 | 16 pcs. | 351C Ford - not Boss | Ball End | 5/16" | 8.408" |
| 25752-16 | 16 pcs. | 351C Ford - not Boss | Swedged | 3/8" | 8.408" |
| 25779-16 | 16 pcs. | 351M-400 Ford | Swedged | 3/8" | 9.500" |
| 25789-16 | 16 pcs. | 429-460 Ford | Ball End | 5/16" | 8.550" |
| 25782-16 | 16 pcs. | 429-460 Ford | Swedged | 3/8" | 8.550" |
| PONTIAC ENGINES | | | | | |
| 25726-16 | 16 pcs. | 400-428-455 Pontiac | Ball End | 5/16" | 9.130" |
| HOLDEN ENGINES | | | | | |
| 25773-16 | 16 pcs. | Holden V-8 | Ball End | 5/16" | 8.670" |



CAMSHAFT SPACERS & MORE

ROLLER THRUST BUTTONS

- ✓ Prevents camshaft from walking forward in the block
- ✓ Some Small Block Chevys require the center hole in the cam sprocket to be enlarged to .875" diameter

| Part No. | Quantity | Description |
|----------|----------|--|
| 42111 | 1 | Small Block Chevrolet w/ early (up to 1978) timing cover. Length .850" |
| 42113 | 1 | Small Block Chevrolet w/ late "short style" (1979/up) timing cover. Length .690" |
| 42145 | 1 | Big Block Chevrolet. Length .950" |



ALUMINUM CAMSHAFT SPACERS

- ✓ An excellent economical answer to the problem of camshaft "walk"
- ✓ Some Small Block Chevys require the center hole in the cam sprocket to be enlarged to .875" diameter

| Part No. | Quantity | Description |
|----------|----------|--|
| 42146 | 1 | Small Block Chevrolet w/ early (up to 1978) timing cover. Length .830" |
| 42144 | 1 | Small Block Chevrolet w/ late "short style" (1979/up) timing cover. Length .690" |
| 42116 | 1 | Big Block Chevrolet. Length .950" |



BALANCER REPAIR SLEEVE

- ✓ An inexpensive way to repair worn stock Chevrolet balancers
- ✓ Protects new, precious aluminum crankshaft hubs

| Part No. | Quantity | Description |
|----------|----------|----------------------------|
| 42226 | 1 | All Small Block Chevrolets |



CAMSHAFT LOCK PLATE

- ✓ Positively secures sprocket bolts in place
- ✓ Bendable tabs. Grade 8 camshaft bolts

| Part No. | Quantity | Description |
|----------|----------|---------------------|
| 42114 | 1 kit | SB and BB Chevrolet |



TIMING CHAIN KITS

SMALL BLOCK & BIG BLOCK CHEVROLET BILLET STEEL SPROCKETS & DOUBLE ROLLER CHAIN



- ✓ Fully machined billet steel camshaft and crankshaft sprockets
- ✓ Roller chain designed with .250" diameter rollers
- ✓ Crank sprocket includes three keyways enabling either 0°, or +/- 4° of timing
- ✓ Camshaft sprockets are machined for and include a brass wear shim or a Torrington thrust bearing

| Part No. | Description | Center-to Center | Chain | Shim/ Torrington |
|----------|--|------------------|-------|---------------------|
| 73111 | SB Chevy w/ Brass Shim | Stock | 76161 | 42140 |
| 73121 | SB Chevy w/ Captive Torrington | Stock | 76161 | 42420 |
| 73311 | SB Chevy w/ Brass Shim | .005" Shorter | 76161 | 42140 |
| 73321 | SB Chevy w/ Captive Torrington | .005" Shorter | 76161 | 42420 |
| 73201 | SB Chevy w/ BB Chevy Snout & Brass Shim | Stock | 76161 | 42140 |
| 73221 | SB Chevy w/ BB Chevy Snout & Captive Torrington | Stock | 76161 | 42420 |
| 73211 | SB Chevy w/ BB Chevy Snout & Brass Shim | .005" Shorter | 76161 | 42140 |
| 73231 | SB Chevy w/ BB Chevy Snout & Captive Torrington | .005" Shorter | 76161 | 42420 |
| 73242 | BB Chevy w/ Captive Torrington and Cam Lock Plate w/ Roller Thrust Button | Stock | 76162 | 42420 |

SMALL BLOCK CHEVROLET LS-1/LS-6 (1997-2004), LS2 & LS-3 BILLET STEEL SPROCKETS & DOUBLE ROLLER CHAIN



- ✓ Fully machined billet steel camshaft and crankshaft sprockets
- ✓ Roller chain designed with .250" diameter rollers
- ✓ Nine keyway crankshaft sprocket enabling either 0°, or +/- 2°, +/- 4°, +/- 6°, +/- 8° of timing
- ✓ Camshaft sprockets are machined for and include a Torrington thrust bearing

| Part No. | Description | Center-to Center | Chain | Torrington |
|----------|---|------------------|-------|------------|
| 73233 | SB Chevy LS-1/LS-6 w/ Captive Torrington and 9 Keyway Crankshaft Sprocket | Stock | 76233 | 42419 |
| 73234 | SB Chevy LS-2 w/ Captive Torrington and 9 Keyway Crankshaft Sprocket | Stock | 76233 | 42419 |
| 73235 | SB Chevy LS-3 Single Bolt Cam w/ Captive Torrington and 9 Keyway Crankshaft Sprocket | Stock | 76233 | 42419 |
| 73236 | SB Chevy LS-3 Three Bolt Cam w/ Captive Torrington and 9 Keyway Crankshaft Sprocket | Stock | 76233 | 42419 |
| 73333 | SB Chevy LS-1/LS-6 w/ Captive Torrington and 9 Keyway Crankshaft Sprocket | .005" Shorter | 76233 | 42419 |
| 73334 | SB Chevy LS-2 w/ Captive Torrington and 9 Keyway Crankshaft Sprocket | .005" Shorter | 76233 | 42419 |

CHRYSLER/DODGE HEMI 5.7L/6.1L BILLET STEEL SPROCKETS & DOUBLE ROLLER CHAIN



- ✓ Fully machined billet steel camshaft & crankshaft sprockets
- ✓ Nine keyway crankshaft sprocket enabling either 0°, or +/- 2°, +/- 4°, +/- 6°, +/- 8° of timing
- ✓ Roller chain designed with .250" diameter rollers
- ✓ Available with or without a Torrington thrust bearing

Part numbers 73205 and 73206 are compatible with the following engines: Chrysler 5.7L 2004-10, Chrysler 6.1L 2006-10, Dodge 5.7L 2005-10, Dodge 6.1L 2006-10, and Dodge Truck 5.7L 2003-10.

| Part No. | Description | Center-to Center | Chain | Torrington |
|----------|---|------------------|-------|------------|
| 73205 | Chrysler/Dodge Hemi 5.7L/6.1L w/ 9 Keyway Crankshaft Sprocket | Stock | 76205 | ----- |
| 73206 | Chrysler/Dodge Hemi 5.7L/6.1L w/ Captive Torrington and 9 Keyway Crankshaft Sprocket | Stock | 76205 | 42419 |

TIMING CHAIN KITS

CAST CAM SPROCKET KITS WITH TORRINGTON BEARINGS, ROLLER THRUST BUTTONS & LOCKS

- ✓ Fully machined steel crankshaft sprocket with three keyways enabling either 0°, or +/- 4° of timing
- ✓ Cast camshaft sprocket machined for Torrington thrust bearing
- ✓ Roller chain designed with .250" diameter rollers
- ✓ Kit includes captive Torrington bearing, roller thrust button, and Manley camshaft lock



| Part No. | Description | Center-to-Center | Chain | Torrington Bearing | Thrust Button | Cam Lock |
|----------|------------------|------------------|-------|--------------------|---------------|----------|
| 73141 | SB Chevy '55-'78 | Stock | 76161 | 42420 | 42111 | 42114 |
| 73151 | SB Chevy '79/up | Stock | 76161 | 42420 | 42113 | 42114 |
| 73142 | BB Chevy | Stock | 76162 | 42420 | 42145 | 42114 |

RACE ROLLER TIMING KITS WITH TORRINGTON BEARINGS & CAST CAM SPROCKET

- ✓ Same kits as 73141, 73151 and 73142 except they do not include the roller thrust button and cam lock
- ✓ Kits are available standard and .005" short

| Part No. | Description | Center -to -Center | Chain | Torrington Bearing |
|----------|--------------|--------------------|-------|--------------------|
| 73181 | SB Chevrolet | Stock | 76161 | 42420 |
| 73191 | SB Chevrolet | .005" Shorter | 76161 | 42420 |
| 73182 | BB Chevrolet | Stock | 76162 | 42420 |
| 73192 | BB Chevrolet | .005" Shorter | 76162 | 42420 |



RACE ROLLER TIMING KITS WITH BRASS WEAR SHIMS & CAST CAM SPROCKET

- ✓ Fully machined steel crankshaft sprocket with three keyways enabling either 0°, or +/- 4° of timing
- ✓ Cast camshaft sprocket machined for brass wear shim
- ✓ Roller chain designed with .250" diameter rollers
- ✓ Chevrolet kits include wear shim

| Part No. | Description | Center -to -Center | Chain | Brass Block Wear Shim |
|----------|----------------------------------|--------------------|-------|-----------------------|
| 73161 | SB Chevrolet | Stock | 76161 | 42140 |
| 73171 | SB Chevrolet | .005" Shorter | 76161 | 42140 |
| 73162 | BB Chevrolet | Stock | 76162 | 42140 |
| 73172 | BB Chevrolet | .005" Shorter | 76162 | 42140 |
| 73174 | Ford 255-302-351W (Late 1973-88) | Stock | 76174 | None |
| 73146 | Ford 429-460 | Stock | 76146 | None |



STREET MASTER ROLLER CHAIN KITS

- ✓ Standard style roller chains
- ✓ Three keyway steel crankshaft sprocket and cast cam sprocket enabling either 0°, or +/- 4° of timing
- ✓ Excellent value kit for mild performance engines

| Part No. | Description | Center -to -Center | Chain |
|----------|----------------------------------|--------------------|-------|
| 73163 | Small Block Chevrolet | Stock | 76163 |
| 73168 | Big Block Chevrolet | Stock | 76168 |
| 73164 | Ford 255-302-351W (Late 1973-88) | Stock | 76163 |



OIL PUMPS & MORE

OIL PUMPS

- ✓ Quality oil pumps meticulously machined
- ✓ Precision formed gears to assure proper oil pressure

| Part No. | Quantity | Description | Volume | Cover Type | Inlet Size | Pick-up |
|----------|----------|-------------------|-----------|------------|------------|----------------|
| 71087 | 1 | Small Block Chevy | 25% Add'l | 4 bolt | 5/8" | Use Stock |
| 71089 | 1 | Small Block Chevy | 25% Add'l | 5 bolt | 3/4" | 72090 Included |
| 71091 | 1 | Big Block Chevy | 22% Add'l | 5 bolt | 3/4" | Use Stock |

Replacement pick-ups for pump 71089 are sold separately as P/N 72090.



OIL PUMP STUD & "DRIVE" SHAFTS

- ✓ An oil pump stud is the professional way to secure your oil pump to the rear main cap
- ✓ Precision manufactured pump drive shafts

| Part No. | Quantity | Description | Application |
|----------|----------|----------------------|----------------------|
| 42339 | 1 | Oil pump stud | Fits all Chevys |
| 42328 | 1 | Oil pump drive shaft | SB Chevy and 90° V-6 |
| 42329 | 1 | Oil pump drive shaft | BB Chevy |

CHEVROLET LIGHTWEIGHT FUEL PUMP PUSHROD

A stock Chevrolet fuel pump can "float" at high engine speeds just like a heavy intake valve. A lightweight fuel pump pushrod helps a mechanical fuel pump do its job when the tach climbs past 6000 rpm. Made from 4130 chrome moly steel tubing.

| Part No. | Quantity | Description |
|----------|----------|------------------------------------|
| 42236 | 1 | Fits Small and Big Block Chevrolet |

OIL RESTRICTOR KIT

- ✓ Carefully machined for exact fit
- ✓ The .060" orifice precisely meters oil flow to the engine
- ✓ Spare "O" rings included

| Part No. | Quantity | Material | Description |
|----------|----------|-----------|---|
| 42237-2 | Set of 2 | Aluminum | Fits non Bow Tie Chevys. Hex Head |
| 42238-2 | Set of 2 | Stainless | Fits all Chevys including Bow Tie and Rocket Block. Recessed Allen head |



LIFTER VALLEY BREATHER TUBES

- ✓ Eliminates excessive oil drain back while maintaining proper ventilation
- ✓ 1/4" NPT Thread Size

| Part No. | Quantity | Description |
|----------|----------|---------------------|
| 42235-8 | 8 pcs. | Fits all Chevrolets |



PRO-FLO® OIL PUMPS

- ✓ CHEVROLET LS SERIES
- ✓ FORD MODULAR 4.6L / 5.4L
- ✓ CHRYSLER HEMI 5.7L / 6.1L



Manley oil pumps are engineered to provide optimum performance and reliability. Utilizing Melling's "Select Performance" series of oil pumps, Manley disassembles, hand ports and blueprints each pump for optimum performance. Hi-Performance engines require Hi-Performance oil pumps and these deliver the proper oil volume and pressure with minimum parasitic horsepower loss, cavitation and oil aeration.

| Part No. | Engine Application | Features |
|--|---------------------------------|---|
| CHEVY LS SERIES | | |
| 71295 | Standard volume | Hard-coat anodized CNC machined aluminum housing with a phosphate coated CNC machined cast iron cover for improved oil pump performance and durability. Pump is supplied with a high pressure by-pass spring already installed providing a 10% increase in pressure over stock. Additional o-rings are also provided. |
| 71296 | 18% increased volume over stock | Hard-coat anodized CNC machined aluminum housing with a phosphate coated CNC machined cast iron cover for improved oil pump performance and durability. Pump is supplied with a high pressure by-pass spring already installed and also includes a stock pressure spring. Additional o-rings are also provided. |
| NOTE: Both LS oil pumps are modified to provide adequate clearance when installed on engines utilizing double row timing chain kits. | | |
| FORD MODULAR 4.6L (2, 3, & 4 Valve) | | |
| 71340 | Standard volume | Hi-Pressure 20 PSI upgrade over stock; Hard-Coat Anodized Aluminum Body; Cast iron cover Uses stock 15/16" bolt on screen. Note: This pump can be installed on a 2004-2008 5.4L with VIN codes S and V |
| 71176 | Standard volume | Hard-Coat Anodized Aluminum Body; Cast iron cover; Chrome Moly Billet Rotors Uses stock 13/16" bolt on screen. |
| 71227 | 8% increased volume over stock | Hard-Coat Anodized Aluminum Body; Cast iron cover; Chrome Moly Billet Rotors Uses stock 15/16" bolt on screen. |
| CHRYSLER HEMI 5.7L / 6.1L | | |
| 71342 | Standard 6.1L volume | Hard-Coat anodized aluminum body with a cast iron phosphate coated cover for improved oil pump performance and durability. Adjustable by-pass pressure of 50 PSI, 60 PSI and 65 PSI with supplied pressure springs. |



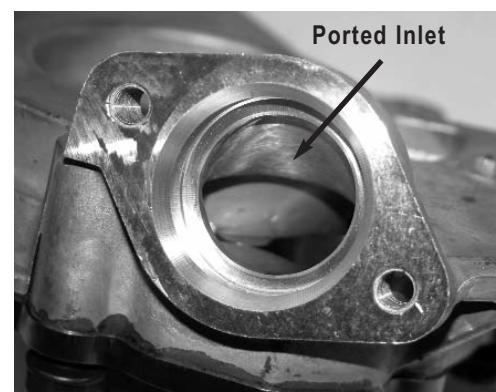
Chevy LS



Ford Modular



Chrysler Hemi



Pro-Flo®

PLATINUM SERIES PISTONS

MANLEY PERFORMANCE

PLATINUM SERIES PISTONS

Hank Manley began selling high performance aftermarket pistons which he had TRW manufacture for him over 40 years ago. Over the years, the Manley Small Block Chevy flat tops and forged hollow dome pistons were wildly successful; as were our 4 ¼" big block offerings. The same can be said about our Ford 351C "Glidden" pistons.

Manley brought piston manufacturing in-house almost 15 years ago; and today we are producing the highest quality pistons for the best value in the entire marketplace. We are nowhere near the largest piston manufacturer in the industry. Instead, we concentrate our efforts on the markets that we can support 100% so that we deliver our customers the absolute best part for their money. This list includes Small Block Chevy flat tops and dome pistons, Big Block Chevy pistons ranging from dish to flat top to high compression dome models, a tremendous Chevy LS shelf stock offering, 5.7L/6.1L Hemi parts, the most extensive lineup of Ford Modular product and finally, our plethora of sport compact pistons.

- ✓ Domestic 2618 alloy forgings
- ✓ Unique (to Manley) fixturing allowing skirt turning / ring groove machining be performed in one single operation to ensure the ultimate ring groove to skirt squareness
- ✓ Better ring seal = More power
- ✓ Cam and barrel (skirt) profiles that make power but are friendly on the cylinder walls
- ✓ Skirt coatings on many applications
- ✓ Offset wrist pin designs on many applications where appropriate
- ✓ Total Seal piston rings used exclusively
- ✓ Wrist pin upgrades (9310 alloy) available

PISTONS, RINGS, & PINS



Skirt Turning

...NO LONGER THE BEST
KEPT SECRET AMONG
ELITE ENGINE BUILDERS



Milling Operation



Skirt Formscan



Sunnen Pin Honing

PLATINUM SERIES PISTONS

ULTRA LITE SMALL BLOCK CHEVROLET

"FORMULA-WON®" DESIGN FLAT TOP & 14.5cc DISH

4" BORE 23° HEAD .043" x .043" x 3 MM RINGS

- ✓ 2618 high strength material
- ✓ Super lightweight design for 525 HP and 8,000 RPM
- ✓ Lateral gas ports included
- ✓ Round wire locks included
- ✓ Pressure balance groove
- ✓ Perfect ring groove to skirt squareness
- ✓ Premium Chrome Moly pin integral to design



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | |
|---------------------|-----------|---------------|----------------------|----------------------|-----------------|-----------------------|------------------------|--------------------|
| | | | | | | | Ductile Iron Top Rings | Gapless® Top Rings |
| FLAT TOP | | | | | | | | |
| 593030-8 | 4.030" | 5.700" | 3.480"-3.500" | 1.550" | 394 | 466 | 46213-8 | 46213GT-8 |
| 593035-8 | 4.035" | 5.700" | 3.480"-3.500" | 1.550" | 396 | 468 | 46215-8 | 46215GT-8 |
| 593040-8 | 4.040" | 5.700" | 3.480"-3.500" | 1.550" | 397 | 469 | 46214-8 | 46214GT-8 |
| 593130-8 | 4.030" | 6.000" | 3.480"-3.500" | 1.250" | 355 | 427 | 46213-8 | 46213GT-8 |
| 593135-8 | 4.035" | 6.000" | 3.480"-3.500" | 1.250" | 357 | 429 | 46215-8 | 46215GT-8 |
| 593140-8 | 4.040" | 6.000" | 3.480"-3.500" | 1.250" | 358 | 430 | 46214-8 | 46214GT-8 |
| 593230-8 | 4.030" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 338 | 410 | 46213-8 | 46213GT-8 |
| 593235-8 | 4.035" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 340 | 412 | 46215-8 | 46215GT-8 |
| 593240-8 | 4.040" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 341 | 413 | 46214-8 | 46214GT-8 |
| -14.5cc DISH | | | | | | | | |
| 593430-8 | 4.030" | 5.700" | 3.480"-3.500" | 1.550" | 421 | 493 | 46213-8 | 46213GT-8 |
| 593435-8 | 4.035" | 5.700" | 3.480"-3.500" | 1.550" | 423 | 495 | 46215-8 | 46215GT-8 |
| 593440-8 | 4.040" | 5.700" | 3.480"-3.500" | 1.550" | 424 | 496 | 46214-8 | 46214GT-8 |
| 593530-8 | 4.030" | 6.000" | 3.480"-3.500" | 1.250" | 382 | 454 | 46213-8 | 46213GT-8 |
| 593535-8 | 4.035" | 6.000" | 3.480"-3.500" | 1.250" | 384 | 456 | 46215-8 | 46215GT-8 |
| 593540-8 | 4.040" | 6.000" | 3.480"-3.500" | 1.250" | 385 | 457 | 46214-8 | 46214GT-8 |
| 593630-8 | 4.030" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 365 | 437 | 46213-8 | 46213GT-8 |
| 593635-8 | 4.035" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 367 | 439 | 46215-8 | 46215GT-8 |
| 593640-8 | 4.040" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 368 | 440 | 46214-8 | 46214GT-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness
Top: .160" 2nd: .165" Oil: .145"



COMMON FEATURES

| | | | |
|--------------------|---|-------------------|--|
| Dome Volume: | -2.0cc Flat Top or -14.5cc Dish | Max. Valve Sizes: | 2.125" Int., 1.650" Exh. |
| Compression Ratio: | Flat Top: 10.34:1 w/ 64cc & 3.48" Stroke Dish: 9.04:1 w/ 64cc & 3.48" Stroke | Valve Angle: | 22° |
| Top Ring: | .043", .155" down | Pin Included: | Premium Chrome Moly P/N 42241 (.095" wall, 72 grams, 2.300" long, .927" dia.) |
| Second Ring: | .043" | Round Wire Locks: | P/N 42262 - .061" wide |
| Oil Ring: | 3 mm | Recommended | |
| Deck Thickness: | .155" | Piston Clearance: | .005" measured 1.100" from bottom of the oil ring |
| Valve Notches: | Flat Top: .220" Int., .150" Exh. -14.5cc Dish: .300" Int., .215" Exh. | | |



SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET 2 BARREL CLASS

4" BORE FLAT TOP 23° HEAD

- ✓ 2618 high strength material
- ✓ 2.300" length Premium Chrome Moly pin included - integral to the piston design
- ✓ Lightweight design: .155" thick deck
- ✓ Perfect ring groove to skirt squareness
- ✓ Round Wire Locks included - NO CHARGE
- ✓ Pressure balance groove
- ✓ Semi-banded skirt for improved skirt stability



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | |
|---|-----------|---------------|----------------------|----------------------|-----------------|-----------------------|------------------------|--------------------|
| | | | | | | | Ductile Iron Top Rings | Gapless® Top Rings |
| 1/16" x 1/16" x 3/16" RINGS | | | | | | | | |
| 590030-8 | 4.030" | 5.700" | 3.480"-3.500" | 1.550" | 438 | 510 | 46353-8 | 46353GT-8 |
| 590035-8 | 4.035" | 5.700" | 3.480"-3.500" | 1.550" | 441 | 513 | 46355-8 | 46355GT-8 |
| 590040-8 | 4.040" | 5.700" | 3.480"-3.500" | 1.550" | 443 | 515 | 46354-8 | 46354GT-8 |
| 590130-8 | 4.030" | 6.000" | 3.480"-3.500" | 1.250" | 399 | 471 | 46353-8 | 46353GT-8 |
| 590135-8 | 4.035" | 6.000" | 3.480"-3.500" | 1.250" | 400 | 472 | 46355-8 | 46355GT-8 |
| 590140-8 | 4.040" | 6.000" | 3.480"-3.500" | 1.250" | 401 | 473 | 46354-8 | 46354GT-8 |
| The following pistons will include groove lock spacer 46400 | | | | | | | | |
| 590230-8 | 4.030" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 369 | 441 | 46353-8 | 46353GT-8 |
| 590235-8 | 4.035" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 370 | 442 | 46355-8 | 46355GT-8 |
| 590240-8 | 4.040" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 371 | 443 | 46354-8 | 46354GT-8 |
| Gas Ported .043" x .043" x 3 mm RINGS | | | | | | | | |
| 591030-8 | 4.030" | 5.700" | 3.480"-3.500" | 1.550" | 438 | 510 | 46213-8 | 46213GT-8 |
| 591035-8 | 4.035" | 5.700" | 3.480"-3.500" | 1.550" | 440 | 512 | 46215-8 | 46215GT-8 |
| 591040-8 | 4.040" | 5.700" | 3.480"-3.500" | 1.550" | 442 | 514 | 46214-8 | 46214GT-8 |
| 591130-8 | 4.030" | 6.000" | 3.480"-3.500" | 1.250" | 400 | 472 | 46213-8 | 46213GT-8 |
| 591135-8 | 4.035" | 6.000" | 3.480"-3.500" | 1.250" | 401 | 473 | 46215-8 | 46215GT-8 |
| 591140-8 | 4.040" | 6.000" | 3.480"-3.500" | 1.250" | 402 | 474 | 46214-8 | 46214GT-8 |
| 591230-8 | 4.030" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 380 | 452 | 46213-8 | 46213GT-8 |
| 591235-8 | 4.035" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 382 | 454 | 46215-8 | 46215GT-8 |
| 591240-8 | 4.040" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 384 | 456 | 46214-8 | 46214GT-8 |
| The following pistons will include groove lock spacer 46400 | | | | | | | | |
| 591330-8 | 4.030" | 6.200" | 3.480"-3.500" | 1.050" | 367 | 439 | 46213-8 | 46213GT-8 |
| 591335-8 | 4.035" | 6.200" | 3.480"-3.500" | 1.050" | 368 | 440 | 46215-8 | 46215GT-8 |
| 591340-8 | 4.040" | 6.200" | 3.480"-3.500" | 1.050" | 369 | 441 | 46214-8 | 46214GT-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

1/16" x 3/16" Top: .183" 2nd: .183" Oil: .183" .043" x 3mm Top: .160" 2nd: .165" Oil: .145"

PREMIUM CHROME
MOLY PIN

COMMON FEATURES

- Dome Volume: -2.5cc
 Compression Ratio: 10.34:1 w/ 64cc & 3.48" Stroke
 Top Ring: 1/16" or .043" Gas Ported, .155" down
 Second Ring: 1/16" or .043"
 Oil Ring: 3/16" or 3 mm
 Deck Thickness: .155"
 Valve Notches: .210" Int., .150" Exh.
 Maximum Fly Cut: .270" Int., .170" Exh.
 Max. Valve Sizes: 2.125" Int., 1.650" Exh.
 Valve Angle: 22°
 Pin Included: Premium Chrome Moly P/N 42241 (.095" wall, 72 grams, 2.300" long, .927" dia.)
 Round Wire Locks: P/N 42262 - .061" wide
 Recommended
 Piston Clearance: .005" measured 1.100" from bottom of the oil ring



SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET

4 BARREL CLASS

4" BORE FLAT TOP 23° HEAD

- ✓ 2618 high strength material
- ✓ Lightweight design
- ✓ Slightly thicker deck (.185") for higher horsepower applications
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.300" length Premium Chrome Moly pin included - integral to the piston design
- ✓ Round Wire Locks included - NO CHARGE
- ✓ Full banded skirt design for increased skirt stability



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | |
|---|-----------|---------------|----------------------|----------------------|-----------------|-----------------------|------------------------|--------------------|
| | | | | | | | Ductile Iron Top Rings | Gapless® Top Rings |
| 1/16" x 1/16" x 3/16" RINGS | | | | | | | | |
| 590530-8 | 4.030" | 5.700" | 3.480"-3.500" | 1.550" | 458 | 553 | 46353-8 | 46353GT-8 |
| 590535-8 | 4.035" | 5.700" | 3.480"-3.500" | 1.550" | 459 | 554 | 46355-8 | 46355GT-8 |
| 590540-8 | 4.040" | 5.700" | 3.480"-3.500" | 1.550" | 460 | 555 | 46354-8 | 46354GT-8 |
| 590545-8 | 4.045" | 5.700" | 3.480"-3.500" | 1.550" | 465 | 560 | 46354-8 | 46354GT-8 |
| 590560-8 | 4.060" | 5.700" | 3.480"-3.500" | 1.550" | 470 | 565 | 46356-8 | 46356GT-8 |
| 590730-8 | 4.030" | 5.700" | 3.750" | 1.425" | 438 | 533 | 46353-8 | 46353GT-8 |
| 590630-8 | 4.030" | 6.000" | 3.480"-3.500" | 1.250" | 415 | 510 | 46353-8 | 46353GT-8 |
| 590635-8 | 4.035" | 6.000" | 3.480"-3.500" | 1.250" | 416 | 511 | 46355-8 | 46355GT-8 |
| 590640-8 | 4.040" | 6.000" | 3.480"-3.500" | 1.250" | 418 | 513 | 46354-8 | 46354GT-8 |
| 590660-8 | 4.060" | 6.000" | 3.480"-3.500" | 1.250" | 427 | 522 | 46356-8 | 46356GT-8 |
| The following pistons will include groove lock spacer 46400 | | | | | | | | |
| 590830-8 | 4.030" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 399 | 494 | 46353-8 | 46353GT-8 |
| 590835-8 | 4.035" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 400 | 495 | 46355-8 | 46355GT-8 |
| 590840-8 | 4.040" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 401 | 496 | 46354-8 | 46354GT-8 |
| 590860-8 | 4.060" | 6.000"/6.125" | 3.750"/3.480"-3.500" | 1.125" | 411 | 506 | 46356-8 | 46356GT-8 |
| Gas Ported .043" x .043" x 3 mm RINGS | | | | | | | | |
| 591530-8 | 4.030" | 5.700" | 3.480"-3.500" | 1.550" | 457 | 552 | 46213-8 | 46213GT-8 |
| 591535-8 | 4.035" | 5.700" | 3.480"-3.500" | 1.550" | 459 | 554 | 46215-8 | 46215GT-8 |
| 591540-8 | 4.040" | 5.700" | 3.480"-3.500" | 1.550" | 460 | 555 | 46214-8 | 46214GT-8 |
| 591560-8 | 4.060" | 5.700" | 3.480"-3.500" | 1.550" | 470 | 565 | 46216-8 | 46216GT-8 |
| 591630-8 | 4.030" | 6.000" | 3.480"-3.500" | 1.250" | 415 | 510 | 46213-8 | 46213GT-8 |
| 591635-8 | 4.035" | 6.000" | 3.480"-3.500" | 1.250" | 416 | 511 | 46215-8 | 46215GT-8 |
| 591640-8 | 4.040" | 6.000" | 3.480"-3.500" | 1.250" | 418 | 513 | 46214-8 | 46214GT-8 |
| 591660-8 | 4.060" | 6.000" | 3.480"-3.500" | 1.250" | 426 | 521 | 46216-8 | 46216GT-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness
1/16" x 3/16" Top: .183" 2nd: .183" Oil: .183" .043" x 3mm Top: .160" 2nd: .165" Oil: .145"



COMMON FEATURES

- Dome Volume: -4.0cc
 Compression Ratio: 10.16:1 w/ 64cc & 3.48" Stroke
 Top Ring: 1/16" or .043" Gas Ported, .185" down
 Second Ring: 1/16" or .043"
 Oil Ring: 3/16" or 3 mm
 Deck Thickness: .185"
 Valve Notches: .300" Int., .190" Exh.
 Maximum Fly Cut: .360" Int., .260" Exh.
 Max. Valve Sizes: 2.125" Int., 1.650" Exh.
 Valve Angle: 22°
 Pin Included: Premium Chrome Moly P/N 42242 (.130" wall, 95 grams, 2.300" long, .927" dia.)
 Round Wire Locks: P/N 42262 - .061" wide
 Recommended
 Piston Clearance: .005" measured 1.100" from bottom of the oil ring



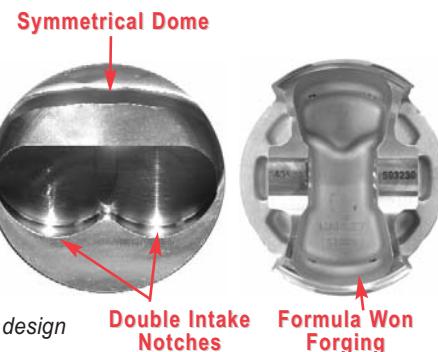
SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET 4" BORE DOME

FOR ALL 23° CYLINDER HEADS

- ✓ 2618 high strength material lightweight design
- ✓ Thick deck for high horsepower applications
- ✓ Double intake notches
- ✓ Symmetrical dome profile (no lefts/rights required)
- ✓ Manley "Formula Won" style forging
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.300" length Premium Chrome Moly .150" wall pin included - integral to the piston design
- ✓ Round Wire Locks included - NO CHARGE



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Dome Volume | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | |
|---|-----------|------------|---------------|----------------------|-------------|-----------------|-----------------------|------------------------|-------------------------|
| | | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings |
| 1.5mm x 1.5mm x 3.0mm RINGS | | | | | | | | | |
| 591730-8 | 4.030" | 6.000" | 3.480"-3.500" | 1.250" | 14.5cc | TBA | TBA | 46123-8 | 46123ST-8 |
| 591735-8 | 4.035" | 6.000" | 3.480"-3.500" | 1.250" | 14.5cc | TBA | TBA | 46125-8 | 46125ST-8 |
| 591740-8 | 4.040" | 6.000" | 3.480"-3.500" | 1.250" | 14.5cc | TBA | TBA | 46124-8 | 46124ST-8 |
| 591760-8 | 4.060" | 6.000" | 3.480"-3.500" | 1.250" | 14.5cc | TBA | TBA | 46126-8 | 46126ST-8 |
| 591830-8 | 4.030" | 6.000" | 3.750" | 1.125" | 10cc | TBA | TBA | 46123-8 | 46123ST-8 |
| 591835-8 | 4.035" | 6.000" | 3.750" | 1.125" | 10cc | TBA | TBA | 46125-8 | 46125ST-8 |
| 591840-8 | 4.040" | 6.000" | 3.750" | 1.125" | 10cc | TBA | TBA | 46124-8 | 46124ST-8 |
| 591860-8 | 4.060" | 6.000" | 3.750" | 1.125" | 10cc | TBA | TBA | 46126-8 | 46126ST-8 |
| Gas Ported .043" x .043" x 3mm RINGS | | | | | | | | | |
| 591930-8 | 4.030" | 6.000" | 3.480"-3.500" | 1.250" | 14.5cc | TBA | TBA | 46223-8 | 46223ST-8 |
| 591935-8 | 4.035" | 6.000" | 3.480"-3.500" | 1.250" | 14.5cc | TBA | TBA | 46225-8 | 46225ST-8 |
| 591940-8 | 4.040" | 6.000" | 3.480"-3.500" | 1.250" | 14.5cc | TBA | TBA | 46224-8 | 46224ST-8 |
| 591960-8 | 4.060" | 6.000" | 3.480"-3.500" | 1.250" | 14.5cc | TBA | TBA | 46226-8 | 46226ST-8 |
| 591430-8 | 4.030" | 6.000" | 3.750" | 1.125" | 10cc | TBA | TBA | 46223-8 | 46223ST-8 |
| 591435-8 | 4.035" | 6.000" | 3.750" | 1.125" | 10cc | TBA | TBA | 46225-8 | 46225ST-8 |
| 591440-8 | 4.040" | 6.000" | 3.750" | 1.125" | 10cc | TBA | TBA | 46224-8 | 46224ST-8 |
| 591460-8 | 4.060" | 6.000" | 3.750" | 1.125" | 10cc | TBA | TBA | 46226-8 | 46226ST-8 |

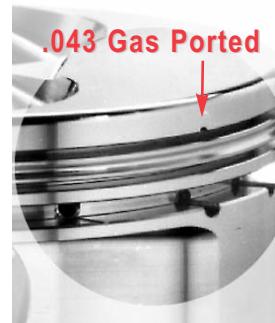
The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness:
1.5mm x 1.5mm x 3.0mm Top: .155" 2nd: .170" Oil: .145" .043"x .043" x 3mm Top: .160" 2nd: .165" Oil: .145"

PISTONS, RINGS, & PINS



COMMON FEATURES

- Compression Ratio: 14.5:1 w/ 58cc, **13.2:1 w/ 64cc** & 11.3:1 w/ 76cc
 Top Ring: 1.5mm, .225 down or .043" Gas Ported .225" down
 Second Ring: 1.5mm Napier profile or .043" taper face
 Oil Ring: 3 mm
 Valve Notches: 2 Intake notches, .275" deep
 Maximum Fly Cut: .350" Int.
 Max. Valve Sizes: 2.200" Int.
 Valve Angle: 22°
 Pin Included: Premium Chrome Moly P/N 42442 (.150" wall, 110 grams, 2.300" long, .927" dia.)
 Round Wire Locks: P/N 42262 - .061" wide
 Recommended
 Piston Clearance: .005" measured 1.100" from bottom of the oil ring



SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET LS SERIES

LS-1/LS-2/LS-6, LS-3/L-92, LS-7 FOR STOCK 3.622" STROKE

- ✓ 2618 high strength material lightweight design
- ✓ Premium Chrome Moly wrist pins included with round wire locks P/N 42262 (.061" wide)
- ✓ Offset wrist pin design
- ✓ Machined for reluctor wheel clearance
- ✓ 1.5, 1.5, 3mm ring package
- ✓ Forced pin oiling, pressure balance groove and precision pin fitting



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Pin Diameter | Piston Wt / Gms | Piston & Pin Wt / Gms | Valve Pocket Type | Valve Pocket Depth Int. / Exh. | Piston Ring Sets | |
|----------------------|-----------|------------|--------|----------------------|--------------|-----------------|-----------------------|-------------------|--------------------------------|------------------------|-------------------------|
| | | | | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings |
| -4cc FLAT TOP | | | | | | | | | | | |
| 592007C-8 | 3.905" | 6.098" | 3.622" | 1.340" | 24mm/.945" | 428 | 518 | LS-1,2,6 | .175"/.150" | 46107-8 | 46107ST-8 |
| 592107C-8 | 3.905" | 6.125" | 3.622" | 1.313" | .927" | 425 | 520 | LS-1,2,6 | .175"/.150" | 46107-8 | 46107ST-8 |
| 592110C-8 | 3.910" | 6.125" | 3.622" | 1.313" | .927" | 427 | 522 | LS-1,2,6 | .175"/.150" | 46107-8 | 46107ST-8 |
| 592501C-8 | 4.001" | 6.125" | 3.622" | 1.304" | .927" | 438 | 533 | LS-1,2,3,6,92 | .185"/.130" | 46110-8 | 46110ST-8 |
| 592510C-8 | 4.010" | 6.125" | 3.622" | 1.304" | .927" | 442 | 537 | LS-1,2,3,6,92 | .185"/.130" | 46111-8 | 46111ST-8 |
| 592530C-8 | 4.030" | 6.125" | 3.622" | 1.304" | .927" | 449 | 544 | LS-1,2,3,6,92 | .185"/.130" | 46113-8 | 46113ST-8 |
| 592565C-8 | 4.065" | 6.125" | 3.622" | 1.304" | .927" | 453 | 548 | LS-1,2,3,6,92 | .185"/.130" | 46116-8 | 46116ST-8 |
| 592570C-8 | 4.070" | 6.125" | 3.622" | 1.304" | .927" | 455 | 550 | LS-1,2,3,6,92 | .185"/.130" | 46117-8 | 46117ST-8 |
| -10cc DISH | | | | | | | | | | | |
| 596107C-8 | 3.905" | 6.125" | 3.622" | 1.304" | .927" | 425 | 520 | LS-1,2,3,6,92 | .185"/.130" | 46107-8 | 46107ST-8 |
| 596101C-8 | 4.001" | 6.125" | 3.622" | 1.304" | .927" | 439 | 534 | LS-1,2,3,6,92 | .185"/.130" | 46110-8 | 46110ST-8 |
| 596110C-8 | 4.010" | 6.125" | 3.622" | 1.304" | .927" | 442 | 538 | LS-1,2,3,6,92 | .185"/.130" | 46111-8 | 46111ST-8 |
| 596130C-8 | 4.030" | 6.125" | 3.622" | 1.304" | .927" | 449 | 545 | LS-1,2,3,6,92 | .185"/.130" | 46113-8 | 46113ST-8 |
| 596165C-8 | 4.065" | 6.125" | 3.622" | 1.304" | .927" | 453 | 549 | LS-1,2,3,6,92 | .185"/.130" | 46116-8 | 46116ST-8 |
| 596170C-8 | 4.070" | 6.125" | 3.622" | 1.304" | .927" | 455 | 551 | LS-1,2,3,6,92 | .185"/.130" | 46117-8 | 46117ST-8 |

NOTE: Gapless® Top Ring Sets are also available. See pages 118 and 119.

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

Top: .151"

2nd: .168"

Oil: .136"



COMMON FEATURES

- Top Ring:** 1.5 mm .225" down, Flat Top & -10cc Dish
Second Ring: 1.5 mm
Oil Ring: 3 mm
Pin Included: Premium Chrome Moly P/N 42218 for the 3.905" bore (.120" wall, 90 grams, 2.300" long, 24mm/.945" dia.)
 Premium Chrome Moly P/N 42242 for the 3.905" - 4.070" bore (.130" wall, 95 grams, 2.300" long, .927" dia.)

- Round Wire Locks:** P/N 42262 - .061" wide
Recommended Piston Clearance: .0045" measured 1.100" from bottom of the oil ring

CHEVY LS 3.622" STROKE COMPRESSION RATIO CHART

| Bore | Stroke | Cylinder Head (cc) | | | |
|----------------------|--------|--------------------|------|------|------|
| | | 64 | 66 | 70 | 72 |
| -4cc FLAT TOP | | | | | |
| 3.905 | 3.622 | 10.2 | 10.0 | 9.5 | 9.3 |
| 3.910 | 3.622 | 10.3 | 10.1 | 9.7 | 9.5 |
| 4.001 | 3.622 | 10.6 | 10.4 | 9.8 | 9.6 |
| 4.010 | 3.622 | 10.7 | 10.5 | 9.9 | 9.7 |
| 4.030 | 3.622 | 10.8 | 10.6 | 10.1 | 9.9 |
| 4.065 | 3.622 | 11.0 | 10.7 | 10.2 | 10.0 |
| 4.070 | 3.622 | 11.1 | 10.8 | 10.3 | 10.1 |

| Bore | Stroke | Cylinder Head (cc) | | | |
|-------------------|--------|--------------------|------|-----|-----|
| | | 64 | 66 | 70 | 72 |
| -10cc DISH | | | | | |
| 3.905 | 3.622 | 9.6 | 9.4 | 9.1 | 8.9 |
| 4.001 | 3.622 | 10.0 | 9.8 | 9.4 | 9.2 |
| 4.010 | 3.622 | 10.1 | 9.9 | 9.5 | 9.3 |
| 4.030 | 3.622 | 10.2 | 9.9 | 9.5 | 9.3 |
| 4.065 | 3.622 | 10.3 | 10.1 | 9.7 | 9.5 |
| 4.070 | 3.622 | 10.3 | 10.1 | 9.7 | 9.5 |

SEE PAGE 117 FOR CUSTOM PISTONS

Note: New part numbers are **ITALICIZED**.

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET LS SERIES

LS-1/LS-2/LS-6, LS-3/L-92, LS-7 FOR 4.000" STROKE

- ✓ 2618 high strength material lightweight design
- ✓ Premium Chrome Moly wrist pins included with round wire locks P/N 42262 (.061" wide)
- ✓ Offset wrist pin design
- ✓ Machined for reluctor wheel clearance
- ✓ 1.5, 1.5, 3mm ring package
- ✓ Forced pin oiling, pressure balance groove and precision pin fitting



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Pin Diameter | Piston Wt / Gms | Piston & Pin Wt / Gms | Valve Pocket Type | Valve Pocket Depth Int. / Exh. | Piston Ring Sets | |
|----------------------|-----------|------------|--------|----------------------|--------------|-----------------|-----------------------|-------------------|--------------------------------|------------------------|-------------------------|
| | | | | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings |
| -4cc FLAT TOP | | | | | | | | | | | |
| 592207C-8 | 3.905" | 6.125" | 4.000" | 1.115" | .927" | 391 | 486 | LS-1,2,6 | .175"/.150" | 46107-8 | 46107ST-8 |
| 592605C-8 | 4.005" | 6.125" | 4.000" | 1.115" | .927" | 407 | 502 | LS-1,2,3,6,92 | .185"/.130" | 46110-8 | 46110ST-8 |
| 592610C-8 | 4.010" | 6.125" | 4.000" | 1.115" | .927" | 409 | 504 | LS-1,2,3,6,92 | .185"/.130" | 46111-8 | 46111ST-8 |
| 592630C-8 | 4.030" | 6.125" | 4.000" | 1.115" | .927" | 418 | 513 | LS-1,2,3,6,92 | .185"/.130" | 46113-8 | 46113ST-8 |
| 592670C-8 | 4.070" | 6.125" | 4.000" | 1.115" | .927" | 423 | 518 | LS-1,2,3,6,92 | .185"/.130" | 46117-8 | 46117ST-8 |
| -5cc FLAT TOP | | | | | | | | | | | |
| 592300C-8 | 4.125" | 6.125" | 4.000" | 1.115" | .927" | 432 | 528 | LS-1,2,3,6,7,92 | .225" Trough | 46360-8 | 46360ST-8 |
| 592305C-8 | 4.130" | 6.125" | 4.000" | 1.115" | .927" | 434 | 530 | LS-1,2,3,6,7,92 | .225" Trough | 46360-8 | 46360ST-8 |
| -10cc DISH | | | | | | | | | | | |
| 592701C-8 | 4.001" | 6.125" | 4.000" | 1.115" | .927" | 403 | 498 | LS-1,2,3,6,92 | .185"/.130" | 46110-8 | 46110ST-8 |
| 592705C-8 | 4.005" | 6.125" | 4.000" | 1.115" | .927" | 406 | 501 | LS-1,2,3,6,92 | .185"/.130" | 46110-8 | 46110ST-8 |
| 592730C-8 | 4.030" | 6.125" | 4.000" | 1.115" | .927" | 412 | 508 | LS-1,2,3,6,92 | .185"/.130" | 46113-8 | 46113ST-8 |
| 592765C-8 | 4.065" | 6.125" | 4.000" | 1.115" | .927" | 418 | 513 | LS-1,2,3,6,92 | .185"/.130" | 46116-8 | 46116ST-8 |
| 592770C-8 | 4.070" | 6.125" | 4.000" | 1.115" | .927" | 420 | 515 | LS-1,2,3,6,92 | .185"/.130" | 46117-8 | 46117ST-8 |
| -11cc DISH | | | | | | | | | | | |
| 592400C-8 | 4.125" | 6.125" | 4.000" | 1.115" | .927" | 432 | 528 | LS-1,2,3,6,7,92 | .225" Trough | 46360-8 | 46360ST-8 |
| 592405C-8 | 4.130" | 6.125" | 4.000" | 1.115" | .927" | 434 | 530 | LS-1,2,3,6,7,92 | .225" Trough | 46360-8 | 46360ST-8 |
| -18cc DISH | | | | | | | | | | | |
| 596207C-8 | 3.905" | 6.125" | 4.000" | 1.115" | .927" | TBA | TBA | LS-1,2,3,6,92 | .175" Trough | 46107-8 | 46107ST-8 |
| 596205C-8 | 4.005" | 6.125" | 4.000" | 1.115" | .927" | TBA | TBA | LS-1,2,3,6,92 | .175" Trough | 46110-8 | 46110ST-8 |
| 596230C-8 | 4.030" | 6.125" | 4.000" | 1.115" | .927" | TBA | TBA | LS-1,2,3,6,92 | .175" Trough | 46113-8 | 46113ST-8 |
| 596265C-8 | 4.065" | 6.125" | 4.000" | 1.115" | .927" | TBA | TBA | LS-1,2,3,6,92 | .175" Trough | 46116-8 | 46116ST-8 |
| 596270C-8 | 4.070" | 6.125" | 4.000" | 1.115" | .927" | TBA | TBA | LS-1,2,3,6,92 | .175" Trough | 46117-8 | 46117ST-8 |
| 596300C-8 | 4.125" | 6.125" | 4.000" | 1.115" | .927" | TBA | TBA | LS-1,2,3,6,7,92 | .175" Trough | 46360-8 | 46360ST-8 |
| 596305C-8 | 4.130" | 6.125" | 4.000" | 1.115" | .927" | TBA | TBA | LS-1,2,3,6,7,92 | .175" Trough | 46360-8 | 46360ST-8 |
| -29cc DISH | | | | | | | | | | | |
| 592807C-8 | 3.905" | 6.125" | 4.000" | 1.115" | .927" | 379 | 474 | LS-1,2,3,6,92 | .175" Trough | 46107-8 | 46107ST-8 |
| 592805C-8 | 4.005" | 6.125" | 4.000" | 1.115" | .927" | 397 | 492 | LS-1,2,3,6,92 | .175" Trough | 46110-8 | 46110ST-8 |
| 592830C-8 | 4.030" | 6.125" | 4.000" | 1.115" | .927" | 405 | 500 | LS-1,2,3,6,92 | .175" Trough | 46113-8 | 46113ST-8 |
| 592865C-8 | 4.065" | 6.125" | 4.000" | 1.115" | .927" | 411 | 506 | LS-1,2,3,6,92 | .175" Trough | 46116-8 | 46116ST-8 |
| 592870C-8 | 4.070" | 6.125" | 4.000" | 1.115" | .927" | 413 | 508 | LS-1,2,3,6,92 | .175" Trough | 46117-8 | 46117ST-8 |
| 592900C-8 | 4.125" | 6.125" | 4.000" | 1.115" | .927" | 430 | 526 | LS-1,2,3,6,7,92 | .175" Trough | 46360-8 | 46360ST-8 |
| 592905C-8 | 4.130" | 6.125" | 4.000" | 1.115" | .927" | 434 | 530 | LS-1,2,3,6,7,92 | .175" Trough | 46360-8 | 46360ST-8 |

NOTE: Gapless® Top Ring Sets are also available. See pages 118 and 119.

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

Top: .151"

2nd: .168"

Oil: .136"



COMMON FEATURES FOR ALL PISTONS ON PAGES 100-101

Top Ring: 1.5 mm .225" down, Flat Top & -10cc/-11cc Dishes
.250" down, -18cc, -29cc & -31cc Dishes

Round Wire Locks: P/N 42262 - .061" wide

Second Ring: 1.5 mm

Recommended Piston Clearance: .0045" measured 1.100" from bottom of the oil ring

Oil Ring: 3 mm

Pin Included: Premium Chrome Moly P/N 42218 for the 3.905" bore
(.120" wall, 90 grams, 2.300" long, 24mm/.945" dia.)

Premium Chrome Moly P/N 42242 for the 3.905" - 4.070" bore

(.130" wall, 95 grams, 2.300" long, .927" dia.)

Premium Chrome Moly P/N 42228 for the 4.125" - 4.130" bore

(.125" wall, 96 grams, 2.500" long, .927" dia.)

SEE PAGE 117 FOR CUSTOM PISTONS

Note: New part numbers are **ITALICIZED**.

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET LS SERIES

LS-1/LS-2/LS-6, LS-3/L-92, LS-7 FOR 4.100" STROKE

- ✓ 2618 high strength material lightweight design
- ✓ Premium Chrome Moly wrist pins included with round wire locks P/N 42262 (.061" wide)
- ✓ Offset wrist pin design
- ✓ Machined for reluctor wheel clearance
- ✓ 1.5, 1.5, 3mm ring package
- ✓ Forced pin oiling, pressure balance groove and precision pin fitting



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Pin Diameter | Piston Wt / Gms | Piston & Pin Wt / Gms | Valve Pocket Type | Valve Pocket Depth Int. / Exh. | Piston Ring Sets | |
|-------------------|-----------|------------|--------|----------------------|--------------|-----------------|-----------------------|-------------------|--------------------------------|------------------------|-------------------------|
| | | | | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings |
| -10cc DISH | | | | | | | | | | | |
| 596505C-8 | 4.005" | 6.125" | 4.100" | 1.065" | .927" | 395 | 490 | LS-1,2,3,6,92 | .185"/.130" | 46110-8 | 46110ST-8 |
| 596565C-8 | 4.065" | 6.125" | 4.100" | 1.065" | .927" | 411 | 506 | LS-1,2,3,6,92 | .185"/.130" | 46116-8 | 46116ST-8 |
| 596570C-8 | 4.070" | 6.125" | 4.100" | 1.065" | .927" | 413 | 508 | LS-1,2,3,6,92 | .185"/.130" | 46117-8 | 46117ST-8 |
| -11cc DISH | | | | | | | | | | | |
| 596600C-8 | 4.125" | 6.125" | 4.100" | 1.065" | .927" | 422 | 518 | LS-1,2,3,6,7,92 | .225" Trough | 46360-8 | 46360ST-8 |
| 596605C-8 | 4.130" | 6.125" | 4.100" | 1.065" | .927" | 424 | 520 | LS-1,2,3,6,7,92 | .225" Trough | 46360-8 | 46360ST-8 |
| -31cc DISH | | | | | | | | | | | |
| 596705C-8 | 4.005" | 6.125" | 4.100" | 1.065" | .927" | 398 | 493 | LS-1,2,3,6,92 | .175" Trough | 46110-8 | 46110ST-8 |
| 596765C-8 | 4.065" | 6.125" | 4.100" | 1.065" | .927" | 413 | 508 | LS-1,2,3,6,92 | .175" Trough | 46116-8 | 46116ST-8 |
| 596770C-8 | 4.070" | 6.125" | 4.100" | 1.065" | .927" | 416 | 511 | LS-1,2,3,6,92 | .175" Trough | 46117-8 | 46117ST-8 |
| 596800C-8 | 4.125" | 6.125" | 4.100" | 1.065" | .927" | 428 | 524 | LS-1,2,3,6,7,92 | .175" Trough | 46360-8 | 46360ST-8 |
| 596805C-8 | 4.130" | 6.125" | 4.100" | 1.065" | .927" | 430 | 526 | LS-1,2,3,6,7,92 | .175" Trough | 46360-8 | 46360ST-8 |

NOTE: Gapless® Top Ring Sets are also available. See pages 118 and 119.

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness
Top: .151" 2nd: .168" Oil: .136"



CHEVY LS 4.000" & 4.100" STROKE COMPRESSION RATIO CHART

| Bore | Stroke | Cylinder Head (cc) | | |
|---------------------------------|--------|--------------------|------|------|
| | | 64 | 66 | 70 |
| -4cc & -5cc FLAT TOP | | | | |
| 3.905 | 4.000 | 11.2 | 11.0 | 10.4 |
| 4.005 | 4.000 | 11.7 | 11.4 | 10.9 |
| 4.010 | 4.000 | 11.7 | 11.5 | 11.0 |
| 4.030 | 4.000 | 11.9 | 11.6 | 11.1 |
| 4.070 | 4.000 | 12.1 | 11.8 | 11.3 |
| 4.125 | 4.000 | 12.3 | 12.0 | 11.5 |
| 4.130 | 4.000 | 12.4 | 12.1 | 11.6 |
| -10cc & -11cc DISH | | | | |
| 4.001 | 4.000 | 10.8 | 10.6 | 10.1 |
| 4.005 | 4.000 | 10.9 | 10.7 | 10.2 |
| 4.005 | 4.100 | 11.1 | 10.9 | 10.5 |
| 4.030 | 4.000 | 11.1 | 10.8 | 10.3 |
| 4.065 | 4.000 | 11.3 | 11.0 | 10.5 |
| 4.065 | 4.100 | 11.4 | 11.2 | 10.7 |
| 4.070 | 4.000 | 11.4 | 11.1 | 10.6 |
| 4.070 | 4.100 | 11.5 | 11.3 | 10.8 |
| 4.125 | 4.000 | 11.5 | 11.3 | 10.8 |
| 4.125 | 4.100 | 11.6 | 11.4 | 10.9 |
| 4.130 | 4.000 | 11.6 | 11.4 | 10.5 |
| 4.130 | 4.100 | 11.7 | 11.5 | 11.0 |
| -31cc DISH | | | | |
| 4.005 | 4.100 | 11.4 | 10.9 | 10.7 |
| 4.065 | 4.100 | 11.6 | 11.4 | 10.5 |
| 4.070 | 4.100 | 11.7 | 11.5 | 11.0 |

| Bore | Stroke | Cylinder Head (cc) | | |
|-------------------|--------|--------------------|------|------|
| | | 64 | 66 | 70 |
| -18cc DISH | | | | |
| 3.905 | 4.000 | 9.7 | 9.5 | 9.2 |
| 4.005 | 4.000 | 10.1 | 9.9 | 9.5 |
| 4.030 | 4.000 | 10.2 | 10.0 | 9.6 |
| 4.065 | 4.000 | 10.4 | 10.2 | 9.8 |
| 4.070 | 4.000 | 10.4 | 10.2 | 9.8 |
| 4.125 | 4.000 | 10.6 | 10.4 | 10.0 |
| 4.130 | 4.000 | 10.6 | 10.4 | 10.0 |
| -29cc DISH | | | | |
| 3.905 | 4.000 | 8.7 | 8.5 | 8.2 |
| 4.005 | 4.000 | 9.1 | 8.9 | 8.6 |
| 4.030 | 4.000 | 9.2 | 9.0 | 8.7 |
| 4.065 | 4.000 | 9.3 | 9.1 | 8.8 |
| 4.070 | 4.000 | 9.4 | 9.2 | 8.9 |
| 4.125 | 4.000 | 9.6 | 9.4 | 9.1 |
| 4.130 | 4.000 | 9.7 | 9.5 | 9.2 |
| -31cc DISH | | | | |
| 4.005 | 4.100 | 9.1 | 9.0 | 8.7 |
| 4.065 | 4.100 | 9.3 | 9.2 | 8.9 |
| 4.070 | 4.100 | 9.4 | 9.3 | 9.0 |
| 4.125 | 4.100 | 9.6 | 9.4 | 9.1 |
| 4.130 | 4.100 | 9.7 | 9.5 | 9.2 |

SEE PAGE 100 FOR COMMON FEATURES

SEE PAGE 117 FOR CUSTOM PISTONS

Compression ratios are calculated at 0.00" deck clearance, a 9.240" deck height, and a .042" thick compressed head gasket.

PLATINUM SERIES PISTONS

BIG BLOCK CHEVROLET

4.500" BORE FLAT TOP & MINI DOME

- ✓ 2618 high strength material, lightweight design
- ✓ Perfect ring groove to skirt squareness and pressure balance groove
- ✓ Premium Chrome Moly pin and spiral locks included
- ✓ Pin fitting included
- ✓ Suitable for superchargers, turbos, nitrous



Flat Top

Mini Dome

| Part No. | Bore Size | STD Deck Block Rod Length / Crank Stroke | Tall Deck Block Rod Length / Crank Stroke | Compression Distance | Piston Wt / Gms | Dome Volume | Piston Ring Set |
|------------------|-----------|---|--|----------------------|-----------------|-------------|-----------------|
| FLAT TOP | | | | | | | |
| 696000-8 | 4.500" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 713 | .3cc | 46450-8 |
| 696030-8 | 4.530" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 721 | .3cc | 46453-8 |
| 696060-8 | 4.560" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 729 | .3cc | 46456-8 |
| 696080-8 | 4.600" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 755 | .3cc | 46458-8 |
| 696100-8 | 4.500" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 650 | .3cc | 46450-8 |
| 696130-8 | 4.530" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 660 | .3cc | 46453-8 |
| 696160-8 | 4.560" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 670 | .3cc | 46456-8 |
| 696180-8 | 4.600" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 695 | .3cc | 46458-8 |
| 696200-8 | 4.500" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 676 | .3cc | 46450-8 |
| 696230-8 | 4.530" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 692 | .3cc | 46453-8 |
| 696260-8 | 4.560" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 705 | .3cc | 46456-8 |
| 696280-8 | 4.600" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 732 | .3cc | 46458-8 |
| 696300-8 | 4.500" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 615 | .3cc | 46450-8 |
| 696330-8 | 4.530" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 632 | .3cc | 46453-8 |
| 696360-8 | 4.560" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 637 | .3cc | 46456-8 |
| 696380-8 | 4.600" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 665 | .3cc | 46458-8 |
| MINI DOME | | | | | | | |
| 696800-8 | 4.500" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 690 | 2cc | 46450-8 |
| 696830-8 | 4.530" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 694 | 2cc | 46453-8 |

NOTE: Gapless® Top Ring Sets are also available. See pages 118 and 119.

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness
Top: .200" 2nd: .200" Oil: .170"



COMMON FEATURES

- Top Ring: 1/16", .350" down Flat Top, .305" Mini Dome
 Second Ring: 1/16"
 Oil Ring: 3/16"
 Intake Valve Notch: .300" Flat Top, .270" Mini Dome
 Exhaust Valve: +.090"
 Pin Included: **Flat Top:** Premium Chrome Moly P/N 42220 (.180" wall, 170 grams, 2.930" long, .990" dia.)
Mini Dome: Premium Chrome Moly P/N 42219 (.150" wall, 147 grams, 2.930" long, .990" dia.)
 Spiral Locks: P/N 42271 - .042" wide (4 per piston)
 Recommended
 Piston Clearance: .006" measured 1.100" from bottom of the oil ring

COMPRESSION RATIO CHART

| Bore | Stroke | 112cc | 118cc | 124cc |
|----------------------|--------|--------|--------|--------|
| -3cc FLAT TOP | | | | |
| 4.500" | 4.000" | 9.0:1 | 8.7:1 | 8.4:1 |
| 4.530" | 4.000" | 9.1:1 | 8.8:1 | 8.5:1 |
| 4.560" | 4.000" | 9.3:1 | 8.9:1 | 8.6:1 |
| 4.600" | 4.000" | 9.4:1 | 9.0:1 | 8.7:1 |
| 4.500" | 4.250" | 9.6:1 | 9.2:1 | 8.8:1 |
| 4.530" | 4.250" | 9.7:1 | 9.3:1 | 8.9:1 |
| 4.560" | 4.250" | 9.8:1 | 9.4:1 | 9.0:1 |
| 4.600" | 4.250" | 9.9:1 | 9.5:1 | 9.1:1 |
| 4.500" | 4.500" | 10.1:1 | 9.7:1 | 9.3:1 |
| 4.530" | 4.500" | 10.2:1 | 9.8:1 | 9.4:1 |
| 4.560" | 4.500" | 10.3:1 | 9.9:1 | 9.5:1 |
| 4.600" | 4.500" | 10.5:1 | 10.0:1 | 9.7:1 |
| 4.500" | 4.750" | 10.6:1 | 10.1:1 | 9.8:1 |
| 4.530" | 4.750" | 10.7:1 | 10.3:1 | 9.9:1 |
| 4.560" | 4.750" | 10.8:1 | 10.4:1 | 10.0:1 |
| 4.600" | 4.750" | 11.0:1 | 10.5:1 | 10.1:1 |
| 2cc MINI DOME | | | | |
| 4.500" | 4.000" | 9.4:1 | 9.0:1 | 8.7:1 |
| 4.530" | 4.000" | 9.5:1 | 9.1:1 | 8.8:1 |

All compression ratios are calculated at .010" deck clearance.

Pistons with 1.395" and 1.270" compression distances REQUIRE, and are shipped with, groove lock spacers.

SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

BIG BLOCK CHEVROLET

4.500" INVERTED DOME

- ✓ 2618 high strength material
- ✓ Lightweight design
- ✓ Full banded skirt for increased skirt stability
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ Premium Chrome Moly pin included
- ✓ Spiral locks included
- ✓ Pin fitting included
- ✓ Suitable for superchargers, turbos, nitrous



| Part No. | Bore Size | STD Deck Block Rod Length / Crank Stroke | Tall Deck Block Rod Length / Crank Stroke | Compression Distance | Piston Wt / Gms | Dome Volume | Piston Ring Set |
|----------|-----------|--|---|----------------------|-----------------|-------------|-----------------|
| 696400-8 | 4.500" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 706 | - 10cc | 46450-8 |
| 696430-8 | 4.530" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 724 | - 10cc | 46453-8 |
| 696460-8 | 4.560" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 736 | - 10cc | 46456-8 |
| 696480-8 | 4.600" | 6.135" / 4.000" | 6.535" / 4.000" | 1.645" | 757 | - 10cc | 46458-8 |
| 696500-8 | 4.500" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 647 | - 10cc | 46450-8 |
| 696530-8 | 4.530" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 660 | - 10cc | 46453-8 |
| 696560-8 | 4.560" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 671 | - 10cc | 46456-8 |
| 696580-8 | 4.600" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 695 | - 10cc | 46458-8 |
| 696600-8 | 4.500" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 680 | - 20cc | 46450-8 |
| 696630-8 | 4.530" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 700 | - 20cc | 46453-8 |
| 696660-8 | 4.560" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 710 | - 20cc | 46456-8 |
| 696680-8 | 4.600" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 724 | - 20cc | 46458-8 |
| 696700-8 | 4.500" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 621 | - 20cc | 46450-8 |
| 696730-8 | 4.530" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 634 | - 20cc | 46453-8 |
| 696760-8 | 4.560" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 645 | - 20cc | 46456-8 |
| 696780-8 | 4.600" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 668 | - 20cc | 46458-8 |

NOTE: Gapless® Top Ring Sets are also available. See pages 118 and 119.

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

Top: .200" 2nd: .200" Oil: .170"



COMMON FEATURES

- Top Ring:** 1/16", .350" down
- Second Ring:** 1/16"
- Oil Ring:** 3/16"
- Intake Valve Notch:** .300"
- Exhaust Valve:** +.090"
- Pin Included:** Premium Chrome Moly P/N 42220
(.180" wall, 170 grams, 2.930" long, .990" dia.)
- Spiral Locks:** P/N 42271 - .042" wide (4 per piston)
- Recommended**
- Piston Clearance:** .006" measured 1.100" from bottom of the oil ring

Pistons with 1.395" and 1.270" compression distances REQUIRE, and are shipped with, groove lock spacers.

COMPRESSION RATIO CHART

| Bore | Stroke | 112cc | 118cc | 124cc |
|--------|--------|--------|-------|-------|
| 4.500" | 4.000" | 8.6:1 | 8.3:1 | 8.0:1 |
| 4.530" | 4.000" | 8.7:1 | 8.4:1 | 8.1:1 |
| 4.560" | 4.000" | 8.8:1 | 8.5:1 | 8.2:1 |
| 4.600" | 4.000" | 8.9:1 | 8.6:1 | 8.3:1 |
| 4.500" | 4.250" | 8.6:1 | 8.3:1 | 8.0:1 |
| 4.530" | 4.250" | 8.7:1 | 8.4:1 | 8.1:1 |
| 4.560" | 4.250" | 8.8:1 | 8.5:1 | 8.2:1 |
| 4.600" | 4.250" | 8.9:1 | 8.6:1 | 8.3:1 |
| 4.500" | 4.500" | 9.6:1 | 9.2:1 | 8.9:1 |
| 4.530" | 4.500" | 9.7:1 | 9.3:1 | 9.0:1 |
| 4.560" | 4.500" | 9.8:1 | 9.4:1 | 9.1:1 |
| 4.600" | 4.500" | 10.0:1 | 9.6:1 | 9.2:1 |
| 4.500" | 4.750" | 9.5:1 | 9.1:1 | 8.8:1 |
| 4.530" | 4.750" | 9.6:1 | 9.2:1 | 8.9:1 |
| 4.560" | 4.750" | 9.7:1 | 9.3:1 | 9.0:1 |
| 4.600" | 4.750" | 9.8:1 | 9.5:1 | 9.2:1 |

All compression ratios are calculated at .010" deck clearance.

SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

BIG BLOCK CHEVROLET

4.500" BORE 42cc HOLLOW DOME

- ✓ 2618 high strength material
- ✓ Lightweight design
- ✓ **Lateral gas ports included**
- ✓ Perfect for drag race applications
- ✓ Exact ring groove to skirt squareness
- ✓ Full banded skirt design for increased skirt stability
- ✓ Round wire locks included
- ✓ .043" x .043" x 3/16" ring package



| Part No. | Bore Size | STD Deck Block Rod Length / Crank Stroke | Tall Deck Block Rod Length / Crank Stroke | Compression Distance | Piston Wt / Gms | Dome Volume | Piston Ring Sets | |
|----------|-----------|---|--|-------------------------|--------------------|----------------|---------------------------|----------------------------|
| | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings |
| 697500-8 | 4.500" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 677 | 42cc | 46550-8 | 46550ST-8 |
| 697530-8 | 4.530" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 690 | 42cc | 46553-8 | 46553ST-8 |
| 697560-8 | 4.560" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 704 | 42cc | 46556-8 | 46556ST-8 |
| 697580-8 | 4.600" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 710 | 42cc | 46558-8 | 46558ST-8 |
| 697600-8 | 4.500" | 6.535" / 4.000" | ----- | 1.245" | 651 | 42cc | 46550-8 | 46550ST-8 |
| 697630-8 | 4.530" | 6.535" / 4.000" | ----- | 1.245" | 664 | 42cc | 46553-8 | 46553ST-8 |
| 697660-8 | 4.560" | 6.535" / 4.000" | ----- | 1.245" | 667 | 42cc | 46556-8 | 46556ST-8 |
| 697680-8 | 4.600" | 6.535" / 4.000" | ----- | 1.245" | 671 | 42cc | 46558-8 | 46558ST-8 |
| 697700-8 | 4.500" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 713 | 42cc | 46550-8 | 46550ST-8 |
| 697730-8 | 4.530" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 720 | 42cc | 46553-8 | 46553ST-8 |
| 697760-8 | 4.560" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 726 | 42cc | 46556-8 | 46556ST-8 |
| 697780-8 | 4.600" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 731 | 42cc | 46558-8 | 46558ST-8 |
| 697800-8 | 4.500" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 662 | 42cc | 46550-8 | 46550ST-8 |
| 697830-8 | 4.530" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 676 | 42cc | 46553-8 | 46553ST-8 |
| 697860-8 | 4.560" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 680 | 42cc | 46556-8 | 46556ST-8 |
| 697880-8 | 4.600" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 684 | 42cc | 46558-8 | 46558ST-8 |
| 697900-8 | 4.500" | 6.535" / 4.250" | ----- | 1.120" | 615 | 42cc | 46550-8 | 46550ST-8 |
| 697930-8 | 4.530" | 6.535" / 4.250" | ----- | 1.120" | 627 | 42cc | 46553-8 | 46553ST-8 |
| 697960-8 | 4.560" | 6.535" / 4.250" | ----- | 1.120" | 634 | 42cc | 46556-8 | 46556ST-8 |
| 697980-8 | 4.600" | 6.535" / 4.250" | ----- | 1.120" | 640 | 42cc | 46558-8 | 46558ST-8 |

NOTE: Gapless® Top Ring Sets are also available. See pages 118 and 119.

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

Top: .175" 2nd: .170" 4.500"/4.530" Oil: .200"
.210" 4.560"/4.600"

PREMIUM CHROME
MOLY PIN

COMMON FEATURES

- Top Ring:** .043, .320" down except on 1.120" CD is .290" down
- Second Ring:** .043
- Oil Ring:** 3/16"
- Intake Valve Notch:** .320"
- Exhaust Valve:** +.090"
- Pin Included:** Premium Chrome Moly P/N 42201
(.150" wall, 146 grams, 2.930" long, .990" dia.)
- Round Wire Locks:** P/N 42275 - .072" wide (2 per piston)
- Recommended**
- Piston Clearance:** .006" measured 1.100" from bottom of the oil ring

Pistons with 1.270" and shorter compression distances REQUIRE, and are shipped with, groove lock spacers.

SEE PAGE 117 FOR CUSTOM PISTONS

COMPRESSION RATIO CHART

| Bore | Stroke | 112cc | 118cc | 124cc |
|--------|--------|--------|--------|--------|
| 4.500" | 4.000" | 13.4:1 | 12.6:1 | 11.9:1 |
| 4.530" | 4.000" | 13.6:1 | 12.7:1 | 12.0:1 |
| 4.560" | 4.000" | 13.7:1 | 12.9:1 | 12.1:1 |
| 4.600" | 4.000" | 13.9:1 | 13.1:1 | 12.3:1 |
| 4.500" | 4.250" | 14.2:1 | 13.3:1 | 12.5:1 |
| 4.530" | 4.250" | 14.4:1 | 13.5:1 | 12.7:1 |
| 4.560" | 4.250" | 14.5:1 | 13.6:1 | 12.8:1 |
| 4.600" | 4.250" | 14.8:1 | 13.8:1 | 13.0:1 |
| 4.500" | 4.500" | 14.9:1 | 14.0:1 | 13.2:1 |
| 4.530" | 4.500" | 15.1:1 | 14.1:1 | 13.3:1 |
| 4.560" | 4.500" | 15.2:1 | 14.3:1 | 13.5:1 |
| 4.600" | 4.500" | 15.5:1 | 14.5:1 | 13.7:1 |
| 4.500" | 4.750" | 15.6:1 | 14.7:1 | 13.8:1 |
| 4.530" | 4.750" | 15.8:1 | 14.9:1 | 14.0:1 |
| 4.560" | 4.750" | 16.0:1 | 15.0:1 | 14.2:1 |
| 4.600" | 4.750" | 16.3:1 | 15.3:1 | 14.4:1 |

All compression ratios are calculated at .010" deck clearance.

PLATINUM SERIES PISTONS

BIG BLOCK CHEVROLET

4.500" BORE 48cc HOLLOW DOME

- ✓ 2618 high strength material
- ✓ Lightweight design
- ✓ Perfect for drag race applications
- ✓ Exact ring groove to skirt squareness
- ✓ Full banded skirt design for increased skirt stability



| Part No. | Bore Size | Rod Length / Crank Stroke | Crankshaft Stroke | Compression Distance | Piston Wt / Gms | Dome Volume | Piston Ring Set |
|----------|-----------|---------------------------|-------------------|----------------------|-----------------|-------------|-----------------|
| 697000-8 | 4.500" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 677 | 48cc | 46450-8 |
| 697030-8 | 4.530" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 690 | 48cc | 46453-8 |
| 697060-8 | 4.560" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 704 | 48cc | 46456-8 |
| 697080-8 | 4.600" | 6.385" / 4.000" | 6.535" / 4.500" | 1.395" | 710 | 48cc | 46458-8 |
| 697100-8 | 4.500" | 6.535" / 4.000" | ----- | 1.245" | 651 | 48cc | 46450-8 |
| 697130-8 | 4.530" | 6.535" / 4.000" | ----- | 1.245" | 664 | 48cc | 46453-8 |
| 697160-8 | 4.560" | 6.535" / 4.000" | ----- | 1.245" | 667 | 48cc | 46456-8 |
| 697180-8 | 4.600" | 6.535" / 4.000" | ----- | 1.245" | 671 | 48cc | 46458-8 |
| 697200-8 | 4.500" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 708 | 48cc | 46450-8 |
| 697230-8 | 4.530" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 720 | 48cc | 46453-8 |
| 697260-8 | 4.560" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 726 | 48cc | 46456-8 |
| 697280-8 | 4.600" | 6.135" / 4.250" | 6.535" / 4.250" | 1.520" | 731 | 48cc | 46458-8 |
| 697300-8 | 4.500" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 662 | 48cc | 46450-8 |
| 697330-8 | 4.530" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 676 | 48cc | 46453-8 |
| 697360-8 | 4.560" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 680 | 48cc | 46456-8 |
| 697380-8 | 4.600" | 6.385" / 4.250" | 6.535" / 4.750" | 1.270" | 684 | 48cc | 46458-8 |
| 697400-8 | 4.500" | 6.535" / 4.250" | ----- | 1.120" | 615 | 48cc | 46450-8 |
| 697430-8 | 4.530" | 6.535" / 4.250" | ----- | 1.120" | 627 | 48cc | 46453-8 |
| 697460-8 | 4.560" | 6.535" / 4.250" | ----- | 1.120" | 634 | 48cc | 46456-8 |
| 697480-8 | 4.600" | 6.535" / 4.250" | ----- | 1.120" | 640 | 48cc | 46458-8 |

NOTE: Gapless® Top Ring Sets are also available. See pages 118 and 119.

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness:
Top: .200" 2nd: .200" Oil: .170"



COMMON FEATURES

- Top Ring:** 1/16", .320" down except on 1.120" CD is .270" down
Second Ring: 1/16"
Oil Ring: 3/16"
Intake Valve Notch: .320"
Exhaust Valve: +.090"
Pin Included: Premium Chrome Moly P/N 42219
 (.150" wall, 147 grams, 2.930" long, .990" dia.)
Spiral Locks: P/N 42271 - .042" wide (4 per piston)
Recommended

Piston Clearance: .006" measured 1.100" from bottom of the oil ring

Pistons with 1.395" and shorter compression distances REQUIRE, and are shipped with, groove lock spacers.

COMPRESSION RATIO CHART

| Bore | Stroke | 112cc | 118cc | 124cc |
|--------|--------|--------|--------|--------|
| 4.500" | 4.000" | 14.4:1 | 13.4:1 | 12.6:1 |
| 4.530" | 4.000" | 14.6:1 | 13.6:1 | 12.8:1 |
| 4.560" | 4.000" | 14.7:1 | 13.7:1 | 12.9:1 |
| 4.600" | 4.000" | 15.0:1 | 14.0:1 | 13.1:1 |
| 4.500" | 4.250" | 15.2:1 | 14.2:1 | 13.3:1 |
| 4.530" | 4.250" | 15.4:1 | 14.4:1 | 13.5:1 |
| 4.560" | 4.250" | 15.6:1 | 14.6:1 | 13.6:1 |
| 4.600" | 4.250" | 15.8:1 | 14.8:1 | 13.8:1 |
| 4.500" | 4.500" | 15.9:1 | 14.9:1 | 14.0:1 |
| 4.530" | 4.500" | 16.1:1 | 15.1:1 | 14.1:1 |
| 4.560" | 4.500" | 16.3:1 | 15.2:1 | 14.3:1 |
| 4.600" | 4.500" | 16.6:1 | 15.5:1 | 14.5:1 |
| 4.500" | 4.750" | 16.8:1 | 15.6:1 | 14.7:1 |
| 4.530" | 4.750" | 17.0:1 | 15.8:1 | 14.9:1 |
| 4.560" | 4.750" | 17.2:1 | 16.0:1 | 15.0:1 |
| 4.600" | 4.750" | 17.4:1 | 16.3:1 | 15.3:1 |

SEE PAGE 117 FOR CUSTOM PISTONS

All compression ratios are calculated at .010" deck clearance.

PLATINUM SERIES PISTONS

CHRYSLER 5.7L HEMI DOME, FLAT TOP & DISH

- ✓ Forged 2618 high strength material lightweight design
- ✓ 2.300" x .130" wall Premium Chrome Moly pin included - integral to the piston design
- ✓ Offset wrist pin design
- ✓ Round Wire locks and Premium Chrome Moly Wrist Pins included - NO CHARGE
- ✓ 1.5, 1.5, 3mm ring package
- ✓ Other features include forced pin oiling, pressure balance groove and precision pin fitting



Note: These pistons are designed for connecting rods with .927" diameter floating wrist pins.

| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Pin Diameter | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | |
|---------------------------------------|------------------|------------|-----------------|----------------------|--------------|-----------------|-----------------------|------------------------|-------------------------|
| | | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings |
| STOCK STROKE 9.3cc DOME | | | | | | | | | |
| 597400C-8 | 3.917" / 99.5mm | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 427 | 522 | 46120-8 | 46120ST-8 |
| 597405C-8 | 3.922" / 99.63mm | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 428 | 523 | 46121-8 | 46121ST-8 |
| 597420C-8 | 3.937" / 100mm | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 434 | 529 | 46122-8 | 46122ST-8 |
| STOCK STROKE -1.5cc FLAT TOP | | | | | | | | | |
| 597500C-8 | 3.917" / 99.5mm | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 400 | 495 | 46120-8 | 46120ST-8 |
| 597505C-8 | 3.922" / 99.63mm | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 402 | 497 | 46121-8 | 46121ST-8 |
| 597520C-8 | 3.937" / 100mm | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 408 | 503 | 46122-8 | 46122ST-8 |
| STROKER SERIES -1.5cc FLAT TOP | | | | | | | | | |
| 597200C-8 | 3.917" / 99.5mm | 6.125" | 4.050" | 1.085" | .927" | 362 | 457 | 46120-8 | 46120ST-8 |
| 597205C-8 | 3.922" / 99.63mm | 6.125" | 4.050" | 1.085" | .927" | 364 | 459 | 46121-8 | 46121ST-8 |
| 597220C-8 | 3.937" / 100mm | 6.125" | 4.050" | 1.085" | .927" | 369 | 464 | 46122-8 | 46122ST-8 |
| STROKER SERIES -14cc DISH | | | | | | | | | |
| 597300C-8 | 3.917" / 99.5mm | 6.125" | 4.050" | 1.085" | .927" | 351 | 446 | 46120-8 | 46120ST-8 |
| 597305C-8 | 3.922" / 99.63mm | 6.125" | 4.050" | 1.085" | .927" | 354 | 449 | 46121-8 | 46121ST-8 |
| 597320C-8 | 3.937" / 100mm | 6.125" | 4.050" | 1.085" | .927" | 359 | 454 | 46122-8 | 46122ST-8 |

NOTE: Gapless® Top Ring Sets are also available. See pages 118 and 119.

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

Top: .151"

2nd: .168"

Oil: .136"



COMMON FEATURES

- Top Ring: 1.5 mm, .250" down
- Second Ring: 1.5 mm
- Oil Ring: 3 mm
- Deck Thickness: Dome .180" / Flat Top .200" / Dish .200"
- Valve Notches: .100" Int., .080" Exh.
- Pin Included: Premium Chrome Moly P/N 42242 (.130" wall, 95 grams, 2.300" long, .927" dia.)
- Round Wire Locks: P/N 42262 - .061" wide
- Recommended
- Piston Clearance: .0045" measured 1.100" from bottom of the oil ring.



COMPRESSION RATIO CHART

| Bore | Stroke | 5.7L | | |
|------------------------|---------------|-------------------|-----------------|------------------------|
| | | Thru 2008 85cc | 2009-Up 65cc | 6.1L Head 74.5cc |
| 9.3cc DOME | | | | |
| 3.917" / 99.5mm | 3.579"/90.9mm | 9.63:1 | 12.42:1 | 10.90:1 |
| 3.922" / 99.63mm | 3.579"/90.9mm | 9.65:1 | 12.45:1 | 10.92:1 |
| 3.937" / 100mm | 3.579"/90.9mm | 9.72:1 | 12.53:1 | 11.00:1 |
| -1.5cc FLAT TOP | | | | |
| 3.917" / 99.5mm | 3.579"/90.9mm | 8.62:1 | 10.72:1 | 9.60:1 |
| 3.922" / 99.63mm | 3.579"/90.9mm | 8.64:1 | 10.75:1 | 9.62:1 |
| 3.937" / 100mm | 3.579"/90.9mm | 8.70:1 | 10.82:1 | 9.69:1 |
| 3.917" / 99.5mm | 4.050" | 9.63:1 | 12.00:1 | 10.73:1 |
| 3.922" / 99.63mm | 4.050" | 9.65:1 | 12.03:1 | 10.75:1 |
| 3.937" / 100mm | 4.050" | 9.72:1 | 12.11:1 | 10.83:1 |
| -14cc DISH | | | | |
| 3.917" / 99.5mm | 4.050" | 8.60:1 | 10.39:1 | 9.45:1 |
| 3.922" / 99.63mm | 4.050" | 8.62:1 | 10.41:1 | 9.47:1 |
| 3.937" / 100mm | 4.050" | 8.68:1 | 10.48:1 | 9.53:1 |

Compression ratios are calculated at .003" deck clearance, a 3.941" head gasket ID with a .028" compressed thickness.

SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

CHRYSLER 6.1L HEMI DOME, FLAT TOP & DISH

- ✓ Forged 2618 high strength material lightweight design
- ✓ 2.300" x .130" wall Premium Chrome Moly pin included - integral to the piston design
- ✓ Offset wrist pin design
- ✓ Round Wire locks and Premium Chrome Moly Wrist Pins included - NO CHARGE
- ✓ 1.5, 1.5, 3mm ring package
- ✓ Other features include forced pin oiling, pressure balance groove and precision pin fitting

Note: These pistons are designed for connecting rods with .927" diameter floating wrist pins.



| Part No. | Bore Size | Rod Length | Stroke | Compression | Pin | Piston | Piston & Pin | Piston Ring Sets | |
|---------------------------------------|-----------|------------|-----------------|-------------|----------|----------|--------------|------------------------|-------------------------|
| | | | | Distance | Diameter | Wt / Gms | Wt / Gms | Ductile Iron Top Rings | Premium Steel Top Rings |
| STOCK STROKE 5cc DOME | | | | | | | | | |
| 597660C-8 | 4.060" | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 453 | 548 | 46116-8 | 46116ST-8 |
| 597665C-8 | 4.065" | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 455 | 550 | 46116-8 | 46116ST-8 |
| 597680C-8 | 4.080" | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 461 | 556 | 46118-8 | 46118ST-8 |
| STOCK STROKE -21cc DISH | | | | | | | | | |
| 597760C-8 | 4.060" | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 419 | 514 | 46116-8 | 46116ST-8 |
| 597765C-8 | 4.065" | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 421 | 516 | 46116-8 | 46116ST-8 |
| 597780C-8 | 4.080" | 6.240" | 3.579" / 90.9mm | 1.220" | .927" | 425 | 520 | 46118-8 | 46118ST-8 |
| STROKER SERIES -1.5cc FLAT TOP | | | | | | | | | |
| 597860C-8 | 4.060" | 6.125" | 4.050" | 1.085" | .927" | 392 | 487 | 46116-8 | 46116ST-8 |
| 597865C-8 | 4.065" | 6.125" | 4.050" | 1.085" | .927" | 394 | 489 | 46116-8 | 46116ST-8 |
| 597880C-8 | 4.080" | 6.125" | 4.050" | 1.085" | .927" | 398 | 493 | 46118-8 | 46118ST-8 |
| STROKER SERIES -31cc DISH | | | | | | | | | |
| 597960C-8 | 4.060" | 6.125" | 4.050" | 1.085" | .927" | 376 | 471 | 46116-8 | 46116ST-8 |
| 597965C-8 | 4.065" | 6.125" | 4.050" | 1.085" | .927" | 378 | 473 | 46116-8 | 46116ST-8 |
| 597980C-8 | 4.080" | 6.125" | 4.050" | 1.085" | .927" | 383 | 478 | 46118-8 | 46118ST-8 |

NOTE: Gapless® Top Ring Sets are also available. See pages 118 and 119.

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness
Top: .151" 2nd: .168" Oil: .136"



COMMON FEATURES



- Top Ring: 1.5 mm, .250" down
- Second Ring: 1.5 mm
- Oil Ring: 3 mm
- Deck Thickness: Dome .200" / Flat Top .200" / Dish .200"
- Valve Notches: .100" Int., .080" Exh.
- Pin Included: Premium Chrome Moly P/N 42242 (.130" wall, 95 grams, 2.300" long, .927" dia.)
- Round Wire Locks: P/N 42262 - .061" wide
- Recommended
- Piston Clearance: .0045" measured 1.100" from bottom of the oil ring.

COMPRESSION RATIO CHART

| Bore | Stroke | 5cc Dome | Flat Top | -21cc Dish | -31cc Dish |
|--------|---------------|----------|----------|------------|------------|
| 4.060" | 3.579"/90.9mm | 10.64:1 | ----- | 8.25:1 | ----- |
| 4.065" | 3.579"/90.9mm | 10.66:1 | ----- | 8.26:1 | ----- |
| 4.080" | 3.579"/90.9mm | 10.73:1 | ----- | 8.32:1 | ----- |
| 4.060" | 4.050" | ----- | 11.07:1 | ----- | 8.49:1 |
| 4.065" | 4.050" | ----- | 11.10:1 | ----- | 8.50:1 |
| 4.080" | 4.050" | ----- | 11.17:1 | ----- | 8.56:1 |

Compression ratios are calculated at .003" deck clearance, a 4.100" head gasket ID with a .040" compressed thickness and a 74.5cc combustion chamber.

SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

FORD 4.6L & 5.4L (3 VALVE)

6.5cc, 14cc & 18cc DISH PISTONS

- ✓ 2618 high strength material lightweight design
- ✓ 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length Premium Chrome Moly pin included with round wire locks
- ✓ Full banded skirt design for increased skirt stability



PREMIUM CHROME
MOLY PIN



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | | |
|--|-----------|------------|--------|----------------------|-----------------|-----------------------|------------------------|-------------------------|--------------------|
| | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings | Gapless® Top Rings |
| -6.5cc DISH | | | | | | | | | |
| 594300C-8 | 3.552" | 5.933" | 3.543" | 1.220" | 352 | 440 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 594320C-8 | 3.572" | 5.933" | 3.543" | 1.220" | 362 | 450 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 594330C-8 | 3.582" | 5.933" | 3.543" | 1.220" | 367 | 455 | 46630-8 | 46630ST-8 | 46630GT-8 |
| -14cc DISH TURBO SERIES | | | | | | | | | |
| 594500C-8 | 3.552" | 5.933" | 3.543" | 1.220" | 360 | 448 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 594520C-8 | 3.572" | 5.933" | 3.543" | 1.220" | 370 | 458 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 594530C-8 | 3.582" | 5.933" | 3.543" | 1.220" | 375 | 463 | 46630-8 | 46630ST-8 | 46630GT-8 |
| 594570C-8 | 3.700" | 5.933" | 3.543" | 1.220" | 413 | 501 | 46670-8 | 46670ST-8 | 46670GT-8 |
| -14cc DISH STROKER TURBO SERIES | | | | | | | | | |
| 595500C-8 | 3.552" | 5.850" | 3.750" | 1.200" | 375 | 463 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 595520C-8 | 3.572" | 5.850" | 3.750" | 1.200" | 382 | 470 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 595530C-8 | 3.582" | 5.850" | 3.750" | 1.200" | 385 | 473 | 46630-8 | 46630ST-8 | 46630GT-8 |
| -18cc DISH STROKER TURBO SERIES | | | | | | | | | |
| 595570C-8 | 3.700" | 5.850" | 3.750" | 1.200" | 421 | 509 | 46670-8 | 46670ST-8 | 46670GT-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

Top: .162" 2nd: .152" Oil: .145"

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

FLAT TOP PISTONS

- ✓ 2618 high strength material lightweight design
- ✓ 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length Premium Chrome Moly pin included with round wire locks
- ✓ Full banded skirt design for increased skirt stability



PREMIUM CHROME
MOLY PIN



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | | |
|-----------------------|-----------|-----------------|-----------------|----------------------|-----------------|-----------------------|------------------------|-------------------------|--------------------|
| | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings | Gapless® Top Rings |
| STROKER SERIES | | | | | | | | | |
| 594000C-8 | 3.552" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 335 | 423 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 594200C-8 | 3.572" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 345 | 433 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 594300C-8 | 3.582" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 350 | 438 | 46630-8 | 46630ST-8 | 46630GT-8 |
| 594070C-8 | 3.700" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 388 | 476 | 46670-8 | 46670ST-8 | 46670GT-8 |
| STROKER SERIES | | | | | | | | | |
| 595000C-8 | 3.552" | 5.850" | 3.750" | 1.200" | 350 | 438 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 595020C-8 | 3.572" | 5.850" | 3.750" | 1.200" | 357 | 445 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 595030C-8 | 3.582" | 5.850" | 3.750" | 1.200" | 360 | 448 | 46630-8 | 46630ST-8 | 46630GT-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

COMMON FEATURES

- Dome Volume: 0cc Flat Top, -6.5cc, -14cc, and -18cc Dish
 Top Ring: 1.5 mm, .220" down
 Second Ring: 1.5 mm
 Oil Ring: 3 mm
 Deck Thickness: .185"
 Pin Included: Premium Chrome Moly P/N 42203
 (.120" wall, 88 grams, 2.500" long, 22mm dia.)

Round Wire Locks: P/N 42270 - .061" wide

Recommended

Piston Clearance: .003" measured .850" from bottom of the oil ring

SEE PAGE 111 FOR COMPRESSION RATIOS

SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

11cc DISH PISTON

- ✓ 2618 high strength material lightweight design
- ✓ 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length Premium Chrome Moly pin included round wire locks
- ✓ Full banded skirt design for increased skirt stability



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | | |
|-----------------------|-----------|-----------------|-----------------|----------------------|-----------------|-----------------------|------------------------|-------------------------|--------------------|
| | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings | Gapless® Top Rings |
| 594100C-8 | 3.552" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 350 | 438 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 594120C-8 | 3.572" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 355 | 443 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 594130C-8 | 3.582" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 362 | 450 | 46630-8 | 46630ST-8 | 46630GT-8 |
| STROKER SERIES | | | | | | | | | |
| 595100C-8 | 3.552" | 5.850" | 3.750" | 1.200" | 346 | 434 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 595120C-8 | 3.572" | 5.850" | 3.750" | 1.200" | 353 | 441 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 595130C-8 | 3.582" | 5.850" | 3.750" | 1.200" | 358 | 446 | 46630-8 | 46630ST-8 | 46630GT-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness:
Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

18cc SPHERICAL DISH PISTON

- ✓ 2618 high strength material lightweight design
- ✓ 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length Premium Chrome Moly pin included with round wire locks
- ✓ Full banded skirt design for increased skirt stability



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | | |
|-----------------------|-----------|-----------------|-----------------|----------------------|-----------------|-----------------------|------------------------|-------------------------|--------------------|
| | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings | Gapless® Top Rings |
| 594200C-8 | 3.552" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 384 | 472 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 594220C-8 | 3.572" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 390 | 478 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 594230C-8 | 3.582" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 393 | 481 | 46630-8 | 46630ST-8 | 46630GT-8 |
| 594270C-8 | 3.700" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 431 | 519 | 46670-8 | 46670ST-8 | 46670GT-8 |
| STROKER SERIES | | | | | | | | | |
| 595200C-8 | 3.552" | 5.850" | 3.750" | 1.200" | 372 | 460 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 595220C-8 | 3.572" | 5.850" | 3.750" | 1.200" | 380 | 468 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 595230C-8 | 3.582" | 5.850" | 3.750" | 1.200" | 383 | 471 | 46630-8 | 46630ST-8 | 46630GT-8 |
| 595270C-8 | 3.700" | 5.850" | 3.750" | 1.200" | 421 | 509 | 46670-8 | 46670ST-8 | 46670GT-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness:
Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

COMMON FEATURES

- Dome Volume: -11cc and -18cc
Deck Thickness: .185"
Top Ring: 1.5 mm, .220" down
Second Ring: 1.5 mm
Oil Ring: 3 mm
Pin Included: Premium Chrome Moly P/N 42203
(.120" wall, 88 grams, 2.500" long, 22mm dia.)

- Round Wire Locks: P/N 42270 - .061" wide
Recommended Piston Clearance: .003" measured .850" from bottom of the oil ring

SEE PAGE 111 FOR COMPRESSION RATIOS
SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

23cc DISH PISTON

- ✓ 2618 high strength material lightweight design
- ✓ 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length Premium Chrome Moly pin included with round wire locks
- ✓ Full banded skirt design for increased skirt stability



PREMIUM CHROME
MOLY PIN



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | | |
|-----------------------|-----------|-----------------|-----------------|----------------------|-----------------|-----------------------|------------------------|-------------------------|--------------------|
| | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings | Gapless® Top Rings |
| 594400C-8 | 3.552" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 351 | 439 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 594420C-8 | 3.572" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 359 | 447 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 594430C-8 | 3.582" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 363 | 451 | 46630-8 | 46630ST-8 | 46630GT-8 |
| 594470C-8 | 3.700" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 401 | 489 | 46670-8 | 46670ST-8 | 46670GT-8 |
| STROKER SERIES | | | | | | | | | |
| 595400C-8 | 3.552" | 5.850" | 3.750" | 1.200" | 336 | 424 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 595420C-8 | 3.572" | 5.850" | 3.750" | 1.200" | 342 | 430 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 595430C-8 | 3.582" | 5.850" | 3.750" | 1.200" | 346 | 434 | 46630-8 | 46630ST-8 | 46630GT-8 |
| 595470C-8 | 3.700" | 5.850" | 3.750" | 1.200" | 384 | 472 | 46670-8 | 46670ST-8 | 46670GT-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

Top: .162"

2nd: .152"

Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

FORD 4.6L STROKER SOHC & DOHC (2 & 4 VALVE)

28cc DISH PISTON

- ✓ 2618 high strength material lightweight design
- ✓ 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length Premium Chrome Moly pin included with round wire locks
- ✓ Full banded skirt design for increased skirt stability



PREMIUM CHROME
MOLY PIN



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Sets | | |
|-----------|-----------|------------|--------|----------------------|-----------------|-----------------------|------------------------|-------------------------|--------------------|
| | | | | | | | Ductile Iron Top Rings | Premium Steel Top Rings | Gapless® Top Rings |
| 595600C-8 | 3.552" | 5.850" | 3.750" | 1.200" | 341 | 429 | 46600-8 | 46600ST-8 | 46600GT-8 |
| 595620C-8 | 3.572" | 5.850" | 3.750" | 1.200" | 347 | 435 | 46620-8 | 46620ST-8 | 46620GT-8 |
| 595630C-8 | 3.582" | 5.850" | 3.750" | 1.200" | 351 | 439 | 46630-8 | 46630ST-8 | 46630GT-8 |
| 595670C-8 | 3.700" | 5.850" | 3.750" | 1.200" | 389 | 477 | 46670-8 | 46670ST-8 | 46670GT-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness

Top: .162"

2nd: .152"

Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

COMMON FEATURES

- | | |
|-----------------|---|
| Dome Volume: | -23cc and -28cc |
| Deck Thickness: | .185" |
| Top Ring: | 1.5 mm, .220" down |
| Second Ring: | 1.5 mm |
| Oil Ring: | 3 mm |
| Pin Included: | Premium Chrome Moly P/N 42203 (.120" wall, 88 grams, 2.500" long, 22mm dia.) |

Round Wire Locks: P/N 42270 -.061" wide

Recommended
Piston Clearance: .003" measured .850" from bottom of
the oil ring

SEE PAGE 111 FOR COMPRESSION RATIOS

SEE PAGE 117 FOR CUSTOM PISTONS

STREET MASTER PISTONS

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

"STREET MASTER" SERIES FORGED ALUMINUM 18cc SPHERICAL DISH PISTON

- ✓ Perfect blend of economy and high performance
- ✓ 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length Premium Chrome Moly pin included with round wire locks
- ✓ Full banded skirt design for increased skirt stability

PREMIUM CHROME
MOLY PIN



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | Piston Ring Set |
|----------|-----------|-----------------|-----------------|----------------------|-----------------|-----------------------|-----------------|
| 494200-8 | 3.552" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 369 | 457 | 46600-8 |
| 494220-8 | 3.572" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 376 | 464 | 46620-8 |
| 494230-8 | 3.582" | 5.933" / 6.657" | 3.543" / 4.165" | 1.220" | 379 | 467 | 46630-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness:

Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

COMMON FEATURES

Dome Volume: -18cc
Compression Ratio: 8.53:1 w/ 51cc & 3.543" Stroke
Top Ring: 1.5 mm, .220" down
Second Ring: 1.5 mm
Oil Ring: 3 mm

Pin Included: Premium Chrome Moly P/N 42203
(.120" wall, 88 grams, 2.500" long)
Round Wire Locks: P/N 42270 - .061" wide
Recommended
Piston Clearance: .0035" measured .850" from bottom of
the oil ring

FORD MODULAR COMPRESSION RATIOS

| Bore | Stroke | 42cc | 51cc | 52cc |
|-------------------------------------|--------|-------|-------|-------|
| Flat Top 4.6/5.4L | | | | |
| 3.552 | 3.543 | 12.65 | 10.86 | 10.69 |
| 3.572 | 3.543 | 12.78 | 10.97 | 10.80 |
| 3.582 | 3.543 | 12.85 | 11.02 | 10.85 |
| 3.700 | 3.543 | 13.55 | 11.63 | 11.45 |
| 3.552 | 3.750 | 13.33 | 11.43 | 11.26 |
| 3.572 | 3.750 | 13.47 | 11.55 | 11.37 |
| 3.582 | 3.750 | 13.54 | 11.61 | 11.43 |
| 3.552 | 4.165 | 11.01 | 9.83 | 9.72 |
| 3.572 | 4.165 | 11.09 | 9.91 | 9.79 |
| 3.582 | 4.165 | 11.13 | 9.95 | 9.83 |
| 3.700 | 4.165 | 11.56 | 10.35 | 10.23 |
| 11cc 4.6/5.4L Std Dish | | | | |
| 3.552 | 3.543 | 10.53 | 9.29 | 9.18 |
| 3.572 | 3.543 | 10.64 | 9.39 | 9.27 |
| 3.582 | 3.543 | 10.69 | 9.43 | 9.31 |
| 3.552 | 3.750 | 11.09 | 9.78 | 9.65 |
| 3.572 | 3.750 | 11.20 | 9.88 | 9.75 |
| 3.582 | 3.750 | 11.25 | 9.92 | 9.80 |
| 3.552 | 4.165 | 9.61 | 8.72 | 8.64 |
| 3.572 | 4.165 | 9.68 | 8.79 | 8.70 |
| 3.582 | 4.165 | 9.72 | 8.83 | 8.74 |
| 18cc 4.6/5.4L Spherical Dish | | | | |
| 3.552 | 3.543 | 9.54 | 8.53 | 8.44 |
| 3.572 | 3.543 | 9.63 | 8.62 | 8.52 |
| 3.582 | 3.543 | 9.68 | 8.66 | 8.56 |
| 3.700 | 3.543 | 10.21 | 9.13 | 9.03 |
| 3.552 | 3.750 | 10.04 | 8.97 | 8.87 |
| 3.572 | 3.750 | 10.14 | 9.06 | 8.96 |
| 3.582 | 3.750 | 10.19 | 9.11 | 9.00 |
| 3.700 | 3.750 | 10.75 | 9.61 | 9.50 |
| 3.552 | 4.165 | 8.91 | 8.15 | 8.08 |
| 3.572 | 4.165 | 8.97 | 8.22 | 8.14 |
| 3.582 | 4.165 | 9.01 | 8.25 | 8.17 |
| 3.700 | 4.165 | 9.39 | 8.61 | 8.53 |

| Bore | Stroke | 42cc | 51cc | 52cc |
|------------------------------------|--------|-------|------|------|
| 23cc 4.6/5.4L Std Dish | | | | |
| 3.552 | 3.543 | 8.95 | 8.07 | 7.98 |
| 3.572 | 3.543 | 9.04 | 8.15 | 8.06 |
| 3.582 | 3.543 | 9.08 | 8.19 | 8.10 |
| 3.700 | 3.543 | 9.58 | 8.64 | 8.54 |
| 3.552 | 3.750 | 9.41 | 8.48 | 8.39 |
| 3.572 | 3.750 | 9.51 | 8.57 | 8.47 |
| 3.582 | 3.750 | 9.55 | 8.61 | 8.52 |
| 3.700 | 3.750 | 10.08 | 9.08 | 8.98 |
| 3.552 | 4.165 | 8.47 | 7.79 | 7.73 |
| 3.572 | 4.165 | 8.53 | 7.85 | 7.79 |
| 3.582 | 4.165 | 8.57 | 7.89 | 7.82 |
| 3.700 | 4.165 | 8.93 | 8.23 | 8.16 |
| 28cc 4.6L Std Dish | | | | |
| 3.552 | 3.750 | 8.87 | 8.05 | 7.97 |
| 3.572 | 3.750 | 8.96 | 8.13 | 8.05 |
| 3.582 | 3.750 | 9.00 | 8.17 | 8.09 |
| 3.700 | 3.750 | 9.50 | 8.62 | 8.53 |
| 6.5cc 4.6L 3V Std Dish | | | | |
| 3.552 | 3.543 | 9.86 | | |
| 3.572 | 3.543 | 9.95 | | |
| 3.582 | 3.543 | 10.00 | | |
| 14cc 4.6L 3V Std Dish | | | | |
| 3.552 | 3.543 | 8.94 | | |
| 3.572 | 3.543 | 9.03 | | |
| 3.582 | 3.543 | 9.07 | | |
| 3.700 | 3.543 | 9.58 | | |
| 3.552 | 3.750 | 9.41 | | |
| 3.572 | 3.750 | 9.51 | | |
| 3.582 | 3.750 | 9.55 | | |
| 18cc 4.6L 3V Spherical Dish | | | | |
| 3.700 | 3.750 | 9.64 | | |

Head Gasket Bore 3.620 (3.552-3.582) 4.6L Deck Clearance .008
Head Gasket Bore 3.700 (3.700) 5.4L Deck Clearance .120
Compressed Gasket Thickness .036

4.6L Stock Stroke 3.543 using 5.933 Connecting Rod and 1.220 C/H
4.6L Stroker 3.750 using 5.850 Connecting Rod and 1.200 C/H
5.4L Stock Stroke 4.165 using 6.657 Connecting Rod and 1.220 C/H

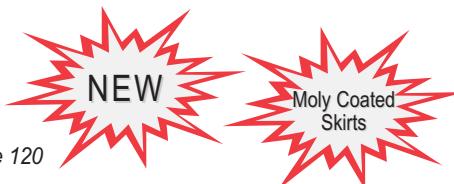
PLATINUM SERIES PISTONS

FORD "COYOTE" 5.0L DOHC (4 VALVE)

+6.75cc DOME & -12cc DISH PISTONS

- ✓ 2618 high strength material; Lightweight design
- ✓ Offset wrist pin design for quiet start-ups
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length Premium Chrome Moly pin included with round wire locks
- ✓ 9310 alloy .180" wall pin upgrades available, see page 120
- ✓ 1.2, 1.2, 3mm ring package
- ✓ Made for +1mm valve sizes

NOTE: These pistons are designed for connecting rods with .866" / 22mm diameter floating wrist pins.



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | — Piston Ring Sets — | |
|------------------------------|-----------|------------|--------|----------------------|-----------------|-----------------------|-------------------------|--|
| | | | | | | | Premium Steel Top Rings | |
| +6.75cc DOME (11.5:1) | | | | | | | | |
| 598000C-8 | 3.630" | 5.933" | 3.650" | 1.165" | TBA | TBA | 46700ST-8 | |
| 598005C-8 | 3.635" | 5.933" | 3.650" | 1.165" | TBA | TBA | 46700ST-8 | |
| 598010C-8 | 3.640" | 5.933" | 3.650" | 1.165" | TBA | TBA | 46710ST-8 | |
| -12cc DISH (9.0:1) | | | | | | | | |
| 598100C-8 | 3.630" | 5.933" | 3.650" | 1.165" | TBA | TBA | 46700ST-8 | |
| 598105C-8 | 3.635" | 5.933" | 3.650" | 1.165" | TBA | TBA | 46700ST-8 | |
| 598110C-8 | 3.640" | 5.933" | 3.650" | 1.165" | TBA | TBA | 46710ST-8 | |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness
Top: .141" 2nd: .143" Oil: .145"

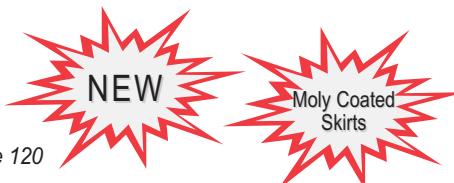
PREMIUM CHROME
MOLY PIN

FORD "RAPTOR" 6.2L SOHC (2 VALVE)

+7.5cc DOME & -12cc DISH PISTONS

- ✓ 2618 high strength material; Lightweight design
- ✓ Offset wrist pin design for quiet start-ups
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.300" length Premium Chrome Moly pin included with round wire locks
- ✓ 9310 alloy .170" wall pin upgrades available, see page 120
- ✓ 1.5, 1.5, 3mm ring package
- ✓ Made for +1mm valve sizes

Note: These pistons are designed for connecting rods with .927" diameter floating wrist pins.



| Part No. | Bore Size | Rod Length | Stroke | Compression Distance | Piston Wt / Gms | Piston & Pin Wt / Gms | — Piston Ring Sets — | |
|-----------------------------|-----------|------------|--------|----------------------|-----------------|-----------------------|----------------------|-------------------------|
| | | | | | | | Ductile Top Rings | Premium Steel Top Rings |
| +7.5cc DOME (11.0:1) | | | | | | | | |
| 598200C-8 | 4.015" | 6.200" | 3.740" | 1.315" | TBA | TBA | 46111-8 | 46111ST-8 |
| 598205C-8 | 4.020" | 6.200" | 3.740" | 1.315" | TBA | TBA | 46112-8 | 46112ST-8 |
| -12cc DISH (9.0:1) | | | | | | | | |
| 598300C-8 | 4.015" | 6.200" | 3.740" | 1.315" | TBA | TBA | 46111-8 | 46111ST-8 |
| 598305C-8 | 4.020" | 6.200" | 3.740" | 1.315" | TBA | TBA | 46112-8 | 46112ST-8 |

The root diameter of the ring grooves accommodates Manley rings and others which have the following radial thickness
Top: .155" 2nd: .170" Oil: .145"

PREMIUM CHROME
MOLY PIN

SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

ACURA / HONDA

- B18C • B16A
- K20A • B20B w/ B16A HEAD
- K24A w/ K20A HEAD



- ✓ 2618 high strength material; lightweight design
- ✓ Premium Chrome Moly pin included
- ✓ 9310 alloy .210" wall pin upgrades available
(except 22mm x 2.500" applications where 9310 alloy .180" wall is available) See page 120
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ Premium Steel top ring sets and Round Wire locks included - NO CHARGE
- ✓ Recommended piston clearance .0040" measured 1.100" from the bottom of the oil ring

| Part No. | Bore Size mm | Over Size | Rod Length | Stroke mm | Compression Distance | Dome Volume(cc) | Compression Ratio | Piston Type | Piston Wt / Gms | Included Ring Set |
|--|--------------|-----------|------------|-----------|----------------------|-----------------|-------------------|-------------|-----------------|-------------------|
| Acura Integra GSR 94-01 - B18C1 DOHC V-Tec .827"/21mm x 2.250" Pin x .150" Wall | | | | | | | | | | |
| 600000-4 | 81.0 | STD | 5.433" | 87.2 | 1.181" | -9.3 | 9.0 | Dish | 290 | 46810-4 |
| 600005-4 | 81.5 | .5mm | 5.433" | 87.2 | 1.181" | -9.3 | 9.0 | Dish | 294 | 46815-4 |
| 600100-4 | 81.0 | STD | 5.433" | 87.2 | 1.181" | 1.2 | 11.0 | Dome | 293 | 46810-4 |
| 600105-4 | 81.5 | .5mm | 5.433" | 87.2 | 1.181" | 1.2 | 11.0 | Dome | 297 | 46815-4 |
| 600200-4 | 81.0 | STD | 5.433" | 87.2 | 1.195" | 6.7 | 12.5 | Dome | 295 | 46810-4 |
| 600205-4 | 81.5 | .5mm | 5.433" | 87.2 | 1.195" | 6.7 | 12.5 | Dome | 299 | 46815-4 |
| Acura Integra Type R 97-00 - B18C5 DOHC V-Tec .827"/21mm x 2.250" Pin x .150" Wall | | | | | | | | | | |
| 601005-4 | 81.5 | .5mm | 5.433" | 87.2 | 1.195" | 3.4 | 11.5 | Dome | 315 | 46815-4 |
| 601105-4 | 81.5 | .5mm | 5.433" | 87.2 | 1.195" | -9.8 | 9.0 | Dish | 294 | 46815-4 |
| Acura RSX 02-Up - K20A-A2-A3 DOHC V-Tec .866"/22mm x 2.500" Pin x .150" Wall | | | | | | | | | | |
| 610000-4 | 86.0 | STD | 5.472" | 86.0 | 1.181" | -6.5 | 9.0 | Dish | 319 | 46860-4 |
| 610100-4 | 86.0 | STD | 5.472" | 86.0 | 1.181" | 8.4 | 11.5 | Dome | 324 | 46860-4 |
| 610200-4 | 86.0 | STD | 5.472" | 86.0 | 1.181" | 12.5 | 12.5 | Dome | 329 | 46860-4 |
| Honda CRV 97-00 - B20B4 w/ B16A1-A2-A3 Head .827"/21mm x 2.250" Pin x .150" Wall | | | | | | | | | | |
| 602000-4 | 84.0 | STD | 5.394" | 89.0 | 1.181" | -11.9 | 9.0 | Dish | 299 | 46840-4 |
| 602005-4 | 84.5 | .5mm | 5.394" | 89.0 | 1.181" | -11.9 | 9.0 | Dish | 312 | 46845-4 |
| 602010-4 | 85.0 | +1.0mm | 5.394" | 89.0 | 1.181" | -11.9 | 9.0 | Dish | 325 | 46850-4 |
| 602100-4 | 84.0 | STD | 5.394" | 89.0 | 1.181" | 4.8 | 12.5 | Dome | 318 | 46840-4 |
| 602105-4 | 84.5 | .5mm | 5.394" | 89.0 | 1.181" | 4.8 | 12.5 | Dome | 331 | 46845-4 |
| 602110-4 | 85.0 | +1.0mm | 5.394" | 89.0 | 1.181" | 4.8 | 12.5 | Dome | 344 | 46850-4 |
| Honda CRV 02-Up - K24A w/ K20A-A2-A3 Head DOHC V-Tec .866"/22mm x 2.500" Pin x .150" Wall | | | | | | | | | | |
| 611000-4 | 87.0 | STD | 5.984" | 99.0 | 1.181" | -17.9 | 9.0 | Dish | 334 | 46870-4 |
| 611100-4 | 87.0 | STD | 5.984" | 99.0 | 1.181" | -1.0 | 11.5 | Flat Top | 339 | 46870-4 |
| 611200-4 | 87.0 | STD | 5.984" | 99.0 | 1.181" | 4.5 | 12.5 | Dome | 344 | 46870-4 |
| Honda Del Sol 93-97/Civic SI 99-00 - B16A1-A2-A3 DOHC V-Tec .827"/21mm x 2.250" Pin x .150" Wall | | | | | | | | | | |
| 603000-4 | 81.0 | STD | 5.290" | 77.4 | 1.181" | 8.0 | 11.0 | Dome | 310 | 46810-4 |
| 603005-4 | 81.5 | .5mm | 5.290" | 77.4 | 1.181" | 8.0 | 11.0 | Dome | 316 | 46815-4 |
| 603100-4 | 81.0 | STD | 5.290" | 77.4 | 1.181" | -2.2 | 9.8 | Flat Top | 291 | 46810-4 |
| 603105-4 | 81.5 | .5mm | 5.290" | 77.4 | 1.181" | -2.2 | 9.8 | Flat Top | 297 | 46815-4 |

SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

MITSUBISHI

- 4G63/4G63T 1ST GEN (6 BOLT)
- 4G63/4G63T 2ND GEN (7 BOLT) / EVO VIII, IX

- ✓ 2618 high strength material; Lightweight design with offset wrist pin for quiet start-ups
- ✓ Premium .150" wall x 2.250" length Chrome Moly pin included .827"/21mm 6 bolt & .866"/22mm 7 bolt
- ✓ 9310 alloy .210" wall pin upgrades available, see page 120
- ✓ Pressure balance groove
- ✓ Made for +1mm valve sizes
- ✓ Premium Steel top ring sets and Round Wire locks included - NO CHARGE
- ✓ Recommended piston clearance .0035" measured 1.100" from the bottom of the oil ring



| Part No. | Bore Size mm | Over Size | Rod Length mm | Stroke mm | Comp Distance | Dome Volume (cc) | Cylinder Head (cc) | Comp Ratio | Piston Type | Piston Wt / Gms | Included Ring Set |
|--|--------------|-----------|---------------|-----------|---------------|------------------|--------------------|-------------|-------------|-----------------|-------------------|
| Mitsubishi Eclipse GS/GST/GSX-Eagle Talon TSi 90-93.5 (6 Bolt) - 4G63/4G63T | | | | | | | | | | | |
| 88mm STD STROKE (2.0L) | | | | | | | | | | | |
| 605000C-4 | 85 | STD | 150 | 88 | 1.375" | -12 | 47 | 8.5 | Dish | 340 | 46850-4 |
| 605005C-4 | 85.5 | +.5mm | 150 | 88 | 1.375" | -12 | 47 | 8.5 | Dish | 344 | 46855-4 |
| 60510C-4 | 86 | +1.0mm | 150 | 88 | 1.375" | -12 | 47 | 8.5 | Dish | 348 | 46860-4 |
| 605100C-4 | 85 | STD | 150 | 88 | 1.375" | -8 | 47 | 9.0 | Dish | 349 | 46850-4 |
| 605105C-4 | 85.5 | +.5mm | 150 | 88 | 1.375" | -8 | 47 | 9.0 | Dish | 356 | 46855-4 |
| 605110C-4 | 86 | +1.0mm | 150 | 88 | 1.375" | -8 | 47 | 9.0 | Dish | 365 | 46860-4 |
| 100mm STROKER (2.3L) | | | | | | | | | | | |
| 607005C-4 | 85.5 | +.5mm | 150 | 100 | 1.130" | -22 | 47 | 8.5 | Dish | 300 | 46855-4 |
| Mitsubishi Eclipse GST/GSX-Eagle Talon TSi 93.5-99 (7 Bolt) - 4G63/4G63T Evo VIII, IX 03-06 4G63T | | | | | | | | | | | |
| 88mm STD STROKE (2.0L) | | | | | | | | | | | |
| 606000C-4 | 85 | STD | 150 | 88 | 1.375" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | 337 | 46850-4 |
| 606005C-4 | 85.5 | +.5mm | 150 | 88 | 1.375" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | 341 | 46855-4 |
| 60610C-4 | 86 | +1.0mm | 150 | 88 | 1.375" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | 345 | 46860-4 |
| 60615C-4 | 86.5 | +1.5mm | 150 | 88 | 1.375" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | 349 | 46865-4 |
| 60620C-4 | 87 | +2.0mm | 150 | 88 | 1.375" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46870-4 |
| 606100C-4 | 85 | STD | 150 | 88 | 1.375" | -8 | 47 / 43 | 9.0 / 9.5 | Dish | 342 | 46850-4 |
| 606105C-4 | 85.5 | +.5mm | 150 | 88 | 1.375" | -8 | 47 / 43 | 9.0 / 9.5 | Dish | 350 | 46855-4 |
| 606110C-4 | 86 | +1.0mm | 150 | 88 | 1.375" | -8 | 47 / 43 | 9.0 / 9.5 | Dish | 358 | 46860-4 |
| 606115C-4 | 86.5 | +1.5mm | 150 | 88 | 1.375" | -8 | 47 / 43 | 9.0 / 9.5 | Dish | TBA | 46865-4 |
| 606120C-4 | 87 | +2.0mm | 150 | 88 | 1.375" | -8 | 47 / 43 | 9.0 / 9.5 | Dish | TBA | 46870-4 |
| 606200C-4 | 85 | STD | 150 | 88 | 1.375" | -2.5 | 47 / 43 | 10.0 / 10.5 | Flat Top | TBA | 46850-4 |
| 606205C-4 | 85.5 | +.5mm | 150 | 88 | 1.375" | -2.5 | 47 / 43 | 10.0 / 10.5 | Flat Top | TBA | 46855-4 |
| 606210C-4 | 86 | +1.0mm | 150 | 88 | 1.375" | -2.5 | 47 / 43 | 10.0 / 10.5 | Flat Top | TBA | 46860-4 |
| 606215C-4 | 86.5 | +1.5mm | 150 | 88 | 1.375" | -2.5 | 47 / 43 | 10.0 / 10.5 | Flat Top | TBA | 46865-4 |
| 606220C-4 | 87 | +2.0mm | 150 | 88 | 1.375" | -2.5 | 47 / 43 | 10.0 / 10.5 | Flat Top | TBA | 46870-4 |
| 617000C-4 | 85 | STD | 156 | 88 | 1.130" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | 298 | 46850-4 |
| 617005C-4 | 85.5 | +.5mm | 156 | 88 | 1.130" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | 305 | 46855-4 |
| 617010C-4 | 86 | +1.0mm | 156 | 88 | 1.130" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | 313 | 46860-4 |
| 617015C-4 | 86.5 | +1.5mm | 156 | 88 | 1.130" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46865-4 |
| 617020C-4 | 87 | +2.0mm | 156 | 88 | 1.130" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46870-4 |
| 94mm STROKER (2.1L) | | | | | | | | | | | |
| 618000C-4 | 85 | STD | 150 | 94 | 1.248" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | 311 | 46850-4 |
| 618005C-4 | 85.5 | +.5mm | 150 | 94 | 1.248" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | 319 | 46855-4 |
| 618010C-4 | 86 | +1.0mm | 150 | 94 | 1.248" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | 327 | 46860-4 |
| 618015C-4 | 86.5 | +1.5mm | 150 | 94 | 1.248" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46865-4 |
| 618020C-4 | 87 | +2.0mm | 150 | 94 | 1.248" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46870-4 |
| 618200C-4 | 85 | STD | 150 | 94 | 1.248" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46850-4 |
| 618205C-4 | 85.5 | +.5mm | 150 | 94 | 1.248" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46855-4 |
| 618210C-4 | 86 | +1.0mm | 150 | 94 | 1.248" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46860-4 |
| 618215C-4 | 86.5 | +1.5mm | 150 | 94 | 1.248" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46865-4 |
| 618220C-4 | 87 | +2.0mm | 150 | 94 | 1.248" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46870-4 |
| 619000C-4 | 85 | STD | 156 | 94 | 1.012" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | 272 | 46850-4 |
| 619005C-4 | 85.5 | +.5mm | 156 | 94 | 1.012" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | 277 | 46855-4 |
| 619010C-4 | 86 | +1.0mm | 156 | 94 | 1.012" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | 287 | 46860-4 |
| 619015C-4 | 86.5 | +1.5mm | 156 | 94 | 1.012" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46865-4 |
| 619020C-4 | 87 | +2.0mm | 156 | 94 | 1.012" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46870-4 |
| 619200C-4 | 85 | STD | 156 | 94 | 1.012" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46850-4 |
| 619205C-4 | 85.5 | +.5mm | 156 | 94 | 1.012" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46855-4 |
| 619210C-4 | 86 | +1.0mm | 156 | 94 | 1.012" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46860-4 |
| 619215C-4 | 86.5 | +1.5mm | 156 | 94 | 1.012" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46865-4 |
| 619220C-4 | 87 | +2.0mm | 156 | 94 | 1.012" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46870-4 |

Note: New part numbers are **ITALICIZED**.

SEE PAGE 117 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

MITSUBISHI

- 4G63/4G63T 2ND GEN (7 BOLT) / EVO VIII, IX
- 4G64 w/ 4G63 CYLINDER HEAD
- 4B11T (EVO X)



- ✓ 2618 high strength material; Lightweight design with offset wrist pin for quiet start-ups
- ✓ Premium .150" wall x 2.250" length Chrome Moly pin included .866"/22mm 7 bolt & .180" wall 23mm EVO X
- ✓ 9310 alloy .210" wall pin upgrades available, see page 120
- ✓ Pressure balance groove
- ✓ Made for +1mm valve sizes
- ✓ Premium Steel top ring sets and Round Wire locks included - NO CHARGE
- ✓ Recommended piston clearance .0035" measured 1.100" from the bottom of the oil ring

| Part No. | Bore Size mm | Over Size | Rod Length mm | Stroke mm | Comp Distance | Dome Volume (cc) | Cylinder Head (cc) | Comp Ratio | Piston Type | Piston Wt / Gms | Included Ring Set |
|--|--------------|-----------|---------------|-----------|---------------|------------------|--------------------|-------------|-------------|-----------------|-------------------|
| Mitsubishi Eclipse GST/GSX-Eagle Talon TSi 93.5-99 (7 Bolt) - 4G63/4G63T Evo VIII, IX 03-06 4G63T | | | | | | | | | | | |
| 100mm STROKER (2.3L) | | | | | | | | | | | |
| DSM / EVO DSM / EVO | | | | | | | | | | | |
| 608000C-4 | 85 | STD | 150 | 100 | 1.130" | -22 | 47 / 43 | 8.5 / 9.0 | Dish | 291 | 46850-4 |
| 608005C-4 | 85.5 | .5mm | 150 | 100 | 1.130" | -22 | 47 / 43 | 8.5 / 9.0 | Dish | 295 | 46855-4 |
| 608010C-4 | 86 | +1.0mm | 150 | 100 | 1.130" | -22 | 47 / 43 | 8.5 / 9.0 | Dish | 299 | 46860-4 |
| 608015C-4 | 86.5 | +1.5mm | 150 | 100 | 1.130" | -22 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46865-4 |
| 608020C-4 | 87 | +2.0mm | 150 | 100 | 1.130" | -22 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46870-4 |
| Mitsubishi 4G64 w/ 4G63 Head 95-99 .866"/22mm x 2.250" Pin x .150" Wall | | | | | | | | | | | |
| 88mm DE-STROKED (2.1L) | | | | | | | | | | | |
| DSM / EVO DSM / EVO | | | | | | | | | | | |
| 606015C-4 | 86.5 | STD | 156 | 88 | 1.375" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | 349 | 46865-4 |
| 606020C-4 | 87 | .5mm | 156 | 88 | 1.375" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46870-4 |
| 606115C-4 | 86.5 | STD | 156 | 88 | 1.375" | -8 | 47 / 43 | 9.0 / 9.5 | Dish | TBA | 46865-4 |
| 606120C-4 | 87 | .5mm | 156 | 88 | 1.375" | -8 | 47 / 43 | 9.0 / 9.5 | Dish | TBA | 46870-4 |
| 606215C-4 | 86.5 | STD | 156 | 88 | 1.375" | -2.5 | 47 / 43 | 10.0 / 10.5 | Flat Top | TBA | 46865-4 |
| 606220C-4 | 87 | .5mm | 156 | 88 | 1.375" | -2.5 | 47 / 43 | 10.0 / 10.5 | Flat Top | TBA | 46870-4 |
| 617015C-4 | 86.5 | STD | 162 | 88 | 1.130" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46865-4 |
| 617020C-4 | 87 | .5mm | 162 | 88 | 1.130" | -12 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46870-4 |
| 94mm DE-STROKED (2.2L) | | | | | | | | | | | |
| 618015C-4 | 86.5 | STD | 156 | 94 | 1.248" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46865-4 |
| 618020C-4 | 87 | .5mm | 156 | 94 | 1.248" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46870-4 |
| 618215C-4 | 86.5 | STD | 156 | 94 | 1.248" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46865-4 |
| 618220C-4 | 87 | .5mm | 156 | 94 | 1.248" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46870-4 |
| 619015C-4 | 86.5 | STD | 162 | 94 | 1.012" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46865-4 |
| 619020C-4 | 87 | .5mm | 162 | 94 | 1.012" | -17 | 47 / 43 | 8.5 / 9.0 | Dish | TBA | 46870-4 |
| 619215C-4 | 86.5 | STD | 162 | 94 | 1.012" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46865-4 |
| 619220C-4 | 87 | .5mm | 162 | 94 | 1.012" | -8 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46870-4 |
| 100mm STD STROKE (2.4L) | | | | | | | | | | | |
| 613000C-4 | 86.5 | STD | 150 | 100 | 1.375" | -23.5 | 47 / 43 | 8.5 / 9.0 | Dish | 338 | 46865-4 |
| 613005C-4 | 87 | .5mm | 150 | 100 | 1.375" | -23.5 | 47 / 43 | 8.5 / 9.0 | Dish | 346 | 46870-4 |
| 606015C-4 | 86.5 | +1.5mm | 150 | 100 | 1.375" | -12 | 47 / 43 | 10.0 / 10.5 | Dish | 349 | 46865-4 |
| 606020C-4 | 87 | +2.0mm | 150 | 100 | 1.375" | -12 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46870-4 |
| 608015C-4 | 86.5 | +1.5mm | 156 | 100 | 1.130" | -22 | 47 / 43 | 8.6 / 9.1 | Dish | TBA | 46865-4 |
| 608020C-4 | 87 | +2.0mm | 156 | 100 | 1.130" | -22 | 47 / 43 | 8.6 / 9.1 | Dish | TBA | 46870-4 |
| 617015C-4 | 86.5 | STD | 156 | 100 | 1.130" | -12 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46865-4 |
| 617020C-4 | 87 | .5mm | 156 | 100 | 1.130" | -12 | 47 / 43 | 10.0 / 10.5 | Dish | TBA | 46870-4 |
| Mitsubishi EVO X 08-Up - 4B11T .9055"/23mm x 2.250" Pin x .180" Wall | | | | | | | | | | | |
| 86mm STD STROKE (2.0L) | | | | | | | | | | | |
| 614000C-4 | 86 | STD | 143.66 | 86 | 1.313" | -5 | 49 | 9.0 | Dish | 337 | 46860-4 |
| 614005C-4 | 86.5 | .5mm | 143.66 | 86 | 1.313" | -5 | 49 | 9.0 | Dish | 343 | 46865-4 |
| 94mm STROKER (2.2L) | | | | | | | | | | | |
| 624000C-4 | 86 | STD | 143.66 | 94 | 1.155" | -11 | 49 | 9.0 | Dish | TBA | 46860-4 |
| 624005C-4 | 86.5 | .5mm | 143.66 | 94 | 1.155" | -11 | 49 | 9.0 | Dish | TBA | 46865-4 |

SEE PAGE 117 FOR CUSTOM PISTONS

Note: New part numbers are **ITALICIZED**.

PLATINUM SERIES PISTONS

SUBARU

- EJ205 (WRX)
- EJ257 (WRX STI)

- ✓ 2618 high strength material; Lightweight design with offset wrist pin for quiet start-ups
- ✓ Premium Chrome Moly pin included
- ✓ 9310 alloy .210" wall pin upgrades available (except 22mm x 2.500" applications where 9310 alloy .180" wall is available) See page 120
- ✓ Pressure balance groove
- ✓ Made for +1mm valve sizes
- ✓ Premium Steel top ring sets and Round Wire locks included - NO CHARGE
- ✓ Recommended piston clearance .0035" measured 1.100" from the bottom of the oil ring

NISSAN

- VQ35DE

TOYOTA

- 2JZGTE

HYUNDAI

- THETA I4 (GENESIS)



| Part No. | Bore Size mm | Over Size | Rod Length | Stroke mm | Comp Distance | Dome Volume (cc) | Cylinder Head (cc) | Compression Ratio | Piston Type | Piston Wt / Gms | Included Ring Set |
|--|--------------|-----------|------------|-----------|---------------|------------------|--------------------|-------------------|-------------|-----------------|-------------------|
| Subaru WRX 1998-up - EJ205 .9055"/23mm x 2.500" Pin x .180" Wall | | | | | | | | | | | |
| 75mm STD STROKE | | | | | | | | | | | |
| 615000C-4 | 92.00 | STD | 5.137" | 75 | 1.285" | -12 | 48 | 8.5 | Dish | 369 | 46920-4 |
| 615005C-4 | 92.50 | +.5mm | 5.137" | 75 | 1.285" | -12 | 48 | 8.5 | Dish | 375 | 46925-4 |
| 615010C-4 | 93.00 | +1.0mm | 5.137" | 75 | 1.285" | -12 | 48 | 8.5 | Dish | 383 | 46930-4 |
| 79mm STROKER | | | | | | | | | | | |
| 620000C-4 | 92.00 | STD | 5.137" | 79 | 1.209" | -16 | 48 | 8.5 | Dish | 355 | 46920-4 |
| 620005C-4 | 92.50 | +.5mm | 5.137" | 79 | 1.209" | -16 | 48 | 8.5 | Dish | 361 | 46925-4 |
| 620010C-4 | 93.00 | +1.0mm | 5.137" | 79 | 1.209" | -16 | 48 | 8.5 | Dish | 370 | 46930-4 |
| Subaru WRX Sti 2004-up - EJ257 .9055"/23mm x 2.500" Pin x .180" Wall | | | | | | | | | | | |
| 75mm DE-STROKED | | | | | | | | | | | |
| 621000C-4 | 99.50 | STD | 5.141" | 75 | 1.285" | -18 | 51 | 8.5 | Dish | 429 | 46995-4 |
| 621002C-4 | 99.75 | +.25mm | 5.141" | 75 | 1.285" | -18 | 51 | 8.5 | Dish | 434 | 46997-4 |
| 621005C-4 | 100.00 | +.5mm | 5.141" | 75 | 1.285" | -18 | 51 | 8.5 | Dish | 438 | 461000-4 |
| 621100C-4 | 99.50 | STD | 5.141" | 75 | 1.285" | -6 | 51 | 9.8 | Dish | 442 | 46995-4 |
| 621102C-4 | 99.75 | +.25mm | 5.141" | 75 | 1.285" | -6 | 51 | 9.8 | Dish | 445 | 46997-4 |
| 621105C-4 | 100.00 | +.5mm | 5.141" | 75 | 1.285" | -6 | 51 | 9.8 | Dish | 449 | 461000-4 |
| 79mm STD STROKE | | | | | | | | | | | |
| 612000C-4 | 99.50 | STD | 5.141" | 79 | 1.209" | -22 | 51 | 8.5 | Dish | 417 | 46995-4 |
| 612002C-4 | 99.75 | +.25mm | 5.141" | 79 | 1.209" | -22 | 51 | 8.5 | Dish | 422 | 46997-4 |
| 612005C-4 | 100.00 | +.5mm | 5.141" | 79 | 1.209" | -22 | 51 | 8.5 | Dish | 425 | 461000-4 |
| 612100C-4 | 99.50 | STD | 5.141" | 79 | 1.209" | -10 | 51 | 9.8 | Dish | 419 | 46995-4 |
| 612102C-4 | 99.75 | +.25mm | 5.141" | 79 | 1.209" | -10 | 51 | 9.8 | Dish | 423 | 46997-4 |
| 612105C-4 | 100.00 | +.5mm | 5.141" | 79 | 1.209" | -10 | 51 | 9.8 | Dish | 426 | 461000-4 |
| 83mm STROKER | | | | | | | | | | | |
| 622000C-4 | 99.50 | STD | 5.141" | 83 | 1.130" | -26 | 51 | 8.5 | Dish | 382 | 46995-4 |
| 622002C-4 | 99.75 | +.25mm | 5.141" | 83 | 1.130" | -26 | 51 | 8.5 | Dish | 386 | 46997-4 |
| 622005C-4 | 100.00 | +.5mm | 5.141" | 83 | 1.130" | -26 | 51 | 8.5 | Dish | 390 | 461000-4 |
| 622100C-4 | 99.50 | STD | 5.141" | 83 | 1.130" | -14 | 51 | 9.8 | Dish | 397 | 46995-4 |
| 622102C-4 | 99.75 | +.25mm | 5.141" | 83 | 1.130" | -14 | 51 | 9.8 | Dish | 401 | 46997-4 |
| 622105C-4 | 100.00 | +.5mm | 5.141" | 83 | 1.130" | -14 | 51 | 9.8 | Dish | 404 | 461000-4 |
| Nissan 350Z, Maxima, Altima and Infiniti G35 2003-2007 .866"/22mm x 2.500" Pin x .150" Wall | | | | | | | | | | | |
| 623000C-6 | 95.50 | STD | 5.680" | 81.4 | 1.167" | -12 | 57 | 8.5 | Dish | TBA | 46955-6 |
| 623002C-6 | 95.75 | +.25mm | 5.680" | 81.4 | 1.167" | -12 | 57 | 8.5 | Dish | TBA | 46957-6 |
| 623005C-6 | 96.00 | +.5mm | 5.680" | 81.4 | 1.167" | -12 | 57 | 8.5 | Dish | TBA | 46960-6 |
| 623010C-6 | 96.50 | +1.0mm | 5.680" | 81.4 | 1.167" | -12 | 57 | 8.5 | Dish | TBA | 46965-6 |
| 623100C-6 | 95.50 | STD | 5.680" | 81.4 | 1.167" | +7 | 57 | 11.0 | Dome | TBA | 46955-6 |
| 623102C-6 | 95.75 | +.25mm | 5.680" | 81.4 | 1.167" | +7 | 57 | 11.0 | Dome | TBA | 46957-6 |
| 623105C-6 | 96.00 | +.5mm | 5.680" | 81.4 | 1.167" | +7 | 57 | 11.0 | Dome | TBA | 46960-6 |
| 623110C-6 | 96.50 | +1.0mm | 5.680" | 81.4 | 1.167" | +7 | 57 | 11.0 | Dome | TBA | 46965-6 |
| Toyota Supra Turbo 93-98 - 2JZGTE 3.0L .866"/22mm x 2.500" Pin x .150" Wall | | | | | | | | | | | |
| 609005C-6 | 86.5 | +.5mm | 5.590" | 86 | 1.338" | -14 | 45 | 8.5 | Dish | 355 | 46865-6 |
| Hyundai Genesis Coupe 2.0L Turbo Theta I4 .866"/22mm x 2.250" Pin x .150" Wall | | | | | | | | | | | |
| 616000C-4 | 86 | STD | 5.753" | 86 | 1.181" | -2.5 | | 9.3 | Dish | 325 | 46860-4 |
| 616005C-4 | 86.5 | +.5mm | 5.753" | 86 | 1.181" | -2.5 | | 9.3 | Dish | 332 | 46865-4 |

SEE PAGE 117 FOR CUSTOM PISTONS

Note: New part numbers are **ITALICIZED**.

PLATINUM SERIES PISTONS

PLATINUM PISTONS INCREMENTAL SIZES

Manley Performance will manufacture incremental bore sizes of any listed catalog piston with reasonably short lead times. The minimum quantity is eight pieces.

The ordering process is as simple as 1 - 2 - 3 !

1. Select the catalog part number you wish manufactured with the singular exception of the final bore size.
2. Tell us the bore size of your block. We will manufacture the exact piston number you have selected with proper clearance for your stated block dimension.
3. You will be billed by our forging number, not the catalog part number.

CUSTOM PLATINUM PISTONS

Manley Performance inventories the piston forgings listed below to manufacture custom pistons for original equipment engine producers, private label engine part suppliers and volume performance engine builders. We can also produce a forging within ten weeks for any other application a customer may desire.

CUSTOM BLANK FORGING NUMBERS

| Part No. | Bore Range | Description | Valve Angle | Wrist Pin Length |
|-----------------|-----------------|--|-------------|------------------|
| 581200-4 | 80.5mm - 88.0mm | Sport Compact Dish, Flat Top, Dome | Factory | 2.250" / 2.500" |
| 581400-8 | 3.900" - 4.130" | Small Block Chevy LS-1, Hemi 5.7L/6.1L Flat Top & Dish | 15° - 18° | 2.300" / 2.500" |
| 581000-8 | 4.000" - 4.155" | Small Block Chevy Flat Top | 21° - 23° | 2.300" |
| 589000-8 | 4.000" - 4.060" | Small Block Chevy Formula Won | 21° - 23° | 2.300" |
| 581500-8 | 4.000" - 4.155" | Small Block Chevy Dome | 18° - 23° | 2.300" |
| 586000-8 | 4.470" - 4.625" | Big Block Chevy Flat Top & Inverted Dome | Factory | 2.930" |
| 581100-8 | 4.500" - 4.600" | Big Block Chevy Hollow Dome | Factory | 2.930" |
| 588000-8 | 3.550" - 3.700" | Ford 4.6L and 5.4L 2618 Material | Factory | 2.500" |
| 488000-8 | 3.550" - 3.700" | Ford 4.6L and 5.4L "Street Master" Material | Factory | 2.500" |

MINIMUM QUANTITIES

Minimum quantities depend on the variance from pistons we have previously produced, but in general, reasonably small numbers such as 80 pieces can be manufactured on a one time order basis. With an annual contract, even smaller monthly releases such as 40 pieces are possible.

SELECTED PISTON PINS

Manley Performance carries in stock the following piston pins to support our custom blank forging inventory.

| Forging No. | Piston Pin Selection |
|---------------|--|
| 581200 | 42203, 42207, 42225, 42243, 42247, 42251, 42253, 42346 42353, 42543, 42546, 42551 |
| 581400 | 42200, 42203, 42204, 42207, 42209, 42215, 42216, 42217 42218, 42228, 42241, 42242, 42442, 42542 |
| 581000 | 42215, 42216, 42217, 42218, 42241, 42242, 42442, 42542 |
| 589000 | 42241, 42242 |
| 581500 | 42215, 42216, 42217, 42218, 42241, 42242, 42442, 42542 |
| 586000 | 42201, 42202, 42219, 42220 |
| 581100 | 42201, 42202, 42219, 42220 |
| 588000 | 42203, 42207, 42227, 42230 |
| 488000 | 42203, 42207, 42227, 42230 |

Please refer to page 120 for piston pin detailed information

Note: New part numbers are **ITALICIZED**.

GROOVE LOCK SPACERS

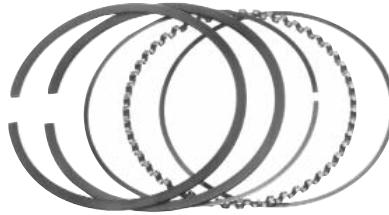
Should your custom Platinum Piston requirements necessitate the wrist pin hole break into the oil ring groove, we can widen the oil ring groove and incorporate a groove lock spacer in one of the following sizes listed below.

| Part No. | Description |
|----------------|-----------------------|
| 46387-8 | 85mm to 86mm |
| 46391-8 | 3.552" to 3.582" Bore |
| 46393-8 | 3.700" Bore |
| 46397-8 | 3.905" - 3.937" Bore |
| 46400-8 | 3.990" to 4.080" Bore |
| 46401-8 | 4.125" to 4.155" Bore |
| 46402-8 | 4.470" Bore |
| 46403-8 | 4.500" to 4.560" Bore |
| 46404-8 | 4.600" to 4.625" Bore |

PISTON RINGS

Manley Performance Products, Inc., proudly and exclusively, offers Total Seal® High Performance Piston Rings to compliment our line of Platinum Series Pistons.

Total Seal® is the leader in piston ring innovation and technology. Their quality control is unsurpassed. Total Seal® rings have superior sealing and produce maximum horsepower.



Manley stocks conventional style piston ring sets in both "Classic Race" and "AP Premium Steel top ring" versions. The Classic Race sets feature high performance ductile iron (with plasma moly in-lay) top rings, reverse twist cast iron taper face or Napier style second rings (where noted *) and 3 piece oil rings. The AP Premium Steel top ring sets incorporate Total Seal®'s unique and proprietary Advanced Profiling™ manufacturing capability. These Premium Steel top ring sets are ideal for high horsepower and forced induction/nitrous applications.

New for 2011, Manley will also offer Total Seal®'s famed Gapless® top ring packages for many of our piston applications.

All AP Premium Steel ring sets (except Sport Compact) and Gapless® top ring sets utilize Napier style second rings standard.

| Ductile Iron Part No. | Premium Steel Part No. | Gapless® Part No. | Bore Size | File Fit / Drop In | Ring Widths | Oil Ring Type |
|--|------------------------|-------------------|-----------------|--------------------|------------------------|-------------------------------|
| 3.905" CHEVROLET LS-1 | | | | | | |
| 46107-8 | 46107ST-8 | 46107GT-8 | 3.905" / 3.910" | File Fit / Drop In | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 4" CHEVROLET, 6.1L CHRYSLER HEMI & 6.2L FORD RAPTOR | | | | | | |
| 46352-8 | ----- | 46352GT-8 | 4.020" | File Fit | 1/16" x 1/16" x 3/16" | Standard Tension (18-22 lbs.) |
| 46353-8 | ----- | 46353GT-8 | 4.030" | File Fit | 1/16" x 1/16" x 3/16" | Standard Tension (18-22 lbs.) |
| 46355-8 | ----- | 46355GT-8 | 4.035" | File Fit | 1/16" x 1/16" x 3/16" | Standard Tension (18-22 lbs.) |
| 46354-8 | ----- | 46354GT-8 | 4.040" / 4.045" | File Fit / Drop In | 1/16" x 1/16" x 3/16" | Standard Tension (18-22 lbs.) |
| 46356-8 | ----- | 46356GT-8 | 4.060" | File Fit | 1/16" x 1/16" x 3/16" | Standard Tension (18-22 lbs.) |
| 46110-8 | 46110ST-8 | 46110GT-8 | 4.001" / 4.005" | File Fit / Drop In | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46111-8 | 46111ST-8 | 46111GT-8 | 4.010" / 4.015" | File Fit / Drop In | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46112-8 | 46112ST-8 | 46112GT-8 | 4.020" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46113-8 | 46113ST-8 | 46113GT-8 | 4.030" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46115-8 | 46115ST-8 | 46115GT-8 | 4.035" | Drop In | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46114-8 | 46114ST-8 | 46114GT-8 | 4.040" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46116-8 | 46116ST-8 | 46116GT-8 | 4.060" / 4.065" | File Fit / Drop In | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46117-8 | 46117ST-8 | 46117GT-8 | 4.070" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46118-8 | 46118ST-8 | 46118GT-8 | 4.080" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46123-8* | 46123ST-8 | ----- | 4.030" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (12-16 lbs.) |
| 46125-8* | 46125ST-8 | ----- | 4.035" | Drop In | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (12-16 lbs.) |
| 46124-8* | 46124ST-8 | ----- | 4.040" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (12-16 lbs.) |
| 46126-8* | 46126ST-8 | ----- | 4.060" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (12-16 lbs.) |
| 46213-8 | ----- | 46213GT-8 | 4.030" | File Fit | .043" x .043" x 3 mm | Standard Tension (9-13 lbs.) |
| 46215-8 | ----- | 46215GT-8 | 4.035" | Drop In | .043" x .043" x 3 mm | Standard Tension (9-13 lbs.) |
| 46214-8 | ----- | 46214GT-8 | 4.040" | File Fit | .043" x .043" x 3 mm | Standard Tension (9-13 lbs.) |
| 46216-8 | ----- | 46216GT-8 | 4.060" | File Fit | .043" x .043" x 3 mm | Standard Tension (9-13 lbs.) |
| 46223-8 | 46223ST-8 | ----- | 4.030" | File Fit | .043" x .043" x 3 mm | Standard Tension (12-16 lbs.) |
| 46225-8 | 46225ST-8 | ----- | 4.035" | Drop In | .043" x .043" x 3 mm | Standard Tension (12-16 lbs.) |
| 46224-8 | 46224ST-8 | ----- | 4.040" | File Fit | .043" x .043" x 3 mm | Standard Tension (12-16 lbs.) |
| 46226-8 | 46226ST-8 | ----- | 4.060" | File Fit | .043" x .043" x 3 mm | Standard Tension (12-16 lbs.) |

* Napier style second ring

Total Seal® and Gapless® are registered trademarks of Total Seal Inc.

Note: New part numbers are **ITALICIZED**.

| Ductile Iron Part No. | Premium Steel Part No. | Gapless® Part No. | Bore Size | File Fit / Drop In | Ring Widths | Oil Ring Type |
|-----------------------------|------------------------|-------------------|-------------------|----------------------------|--------------------------|-------------------------------|
| 4 1/8" CHEVROLET | | | | | | |
| 46160-8 | ----- | 46160GT-8 | 4.125" | File Fit | .043" x .043" x 3/16" | Standard Tension (18-22 lbs.) |
| 46163-8 | ----- | 46163GT-8 | 4.155" | File Fit | .043" x .043" x 3/16" | Standard Tension (18-22 lbs.) |
| 4.500" CHEVROLET | | | | | | |
| 46450-8 | ----- | 46450GT-8 | 4.500" | File Fit | .043" x .043" x 3/16" | Standard Tension (21-25 lbs.) |
| 46453-8 | ----- | 46453GT-8 | 4.530" | File Fit | .043" x .043" x 3/16" | Standard Tension (21-25 lbs.) |
| 46456-8 | ----- | 46456GT-8 | 4.560" | File Fit | .043" x .043" x 3/16" | Standard Tension (21-25 lbs.) |
| 46458-8 | ----- | 46458GT-8 | 4.600" | File Fit | .043" x .043" x 3/16" | Standard Tension (21-25 lbs.) |
| 46550-8 | 46550ST-8 | 46550GT-8 | 4.500" | File Fit | .043" x .043" x 3/16" | Standard Tension (16-20 lbs.) |
| 46553-8 | 46553ST-8 | 46553GT-8 | 4.530" | File Fit | .043" x .043" x 3/16" | Standard Tension (16-20 lbs.) |
| 46553-8 | 46556ST-8 | 46553GT-8 | 4.560" | File Fit | .043" x .043" x 3/16" | Standard Tension (16-20 lbs.) |
| 46553-8 | 46558ST-8 | 46553GT-8 | 4.600" | File Fit | .043" x .043" x 3/16" | Standard Tension (16-20 lbs.) |
| 5.7L CHRYSLER HEMI | | | | | | |
| 46120-8 | 46120ST-8 | 46120GT-8 | 99.5 mm / 3.917" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46121-8 | 46121ST-8 | 46121GT-8 | 99.6 mm / 3.922" | Drop In | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46122-8 | 46122ST-8 | 46122GT-8 | 100.0 mm / 3.937" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 4.6L & 5.4L FORD | | | | | | |
| 46600-8 | 46600ST-8 | 46600GT-8 | 3.552" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| ----- | 46605ST-8 | 46605GT-8 | 3.557" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46620-8 | 46620ST-8 | 46620GT-8 | 3.572" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46630-8 | 46630ST-8 | 46630GT-8 | 3.582" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 46670-8 | 46670ST-8 | 46670GT-8 | 3.700" | File Fit | 1.5 mm x 1.5 mm x 3 mm | Standard Tension (9-13 lbs.) |
| 5.0L FORD COYOTE | | | | | | |
| ----- | 46700ST-8 | ----- | 3.630" / 3.635" | File Fit / Drop In | 1.2 mm x 1.2 mm x 3 mm | Standard Tension (9-13 lbs.) |
| ----- | 46710ST-8 | ----- | 3.640" | File Fit | 1.2 mm x 1.2 mm x 3 mm | Standard Tension (9-13 lbs.) |
| SPORT COMPACT | | | | | | |
| ----- | 46810-4 | ----- | 81.0 mm | Drop In | 1.0 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46815-4 | ----- | 81.5 mm | Drop In | 1.0 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46840-4 | ----- | 84.0 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46845-4 | ----- | 84.5 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46850-4 | ----- | 85.0 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46855-4 | ----- | 85.5 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46860-4 | ----- | 86.0 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46865-4 | ----- | 86.5 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46870-4 | ----- | 87.0 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46920-4 | ----- | 92.0 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46925-4 | ----- | 92.5 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46930-4 | ----- | 93.0 mm | Drop In | 1.2 mm x 1.2 mm x 2.8 mm | Standard Tension (7-11 lbs.) |
| ----- | 46955-4 | ----- | 95.5 mm | Drop In | 1.2 mm x 1.2 mm x 3.0 mm | Standard Tension (7-11 lbs.) |
| ----- | 46957-4 | ----- | 95.7 mm | Drop In Top / File Fit 2nd | 1.2 mm x 1.2 mm x 3.0 mm | Standard Tension (7-11 lbs.) |
| ----- | 46960-4 | ----- | 96.0 mm | Drop In | 1.2 mm x 1.2 mm x 3.0 mm | Standard Tension (7-11 lbs.) |
| ----- | 46965-4 | ----- | 96.5 mm | Drop In | 1.2 mm x 1.2 mm x 3.0 mm | Standard Tension (7-11 lbs.) |
| ----- | 46995-4 | ----- | 99.5 mm | Drop In | 1.2 mm x 1.2 mm x 2.0 mm | Standard Tension (7-11 lbs.) |
| ----- | 46997-4 | ----- | 99.7 mm | Drop In | 1.2 mm x 1.2 mm x 2.0 mm | Standard Tension (7-11 lbs.) |
| ----- | 46100-4 | ----- | 100.0 mm | Drop In | 1.2 mm x 1.2 mm x 2.0 mm | Standard Tension (7-11 lbs.) |

Part numbers 46865, 46955, 46957, 46960, and 46965 are also available for 6 cylinder applications by changing the part number from a (-4) to a (-6).

Note: New part numbers are **ITALICIZED**.

WRIST PINS & LOCKS

WRIST PINS

- ✓ Straight and taper wall construction
- ✓ Large O.D. chamfer pins requiring round wire locks
- ✓ Exacting size control and perfect concentricity
- ✓ Inside of each pin is totally free of tooling marks



| Part No. | Quantity | Description | Diameter | Wall Type | Material | Length | Wall Thickness | Lock Rings | Wgt / Grams |
|----------|----------|----------------|----------------|-----------|---------------------|--------|----------------|-------------------------|-------------|
| 42215-8 | 8 pcs. | SB Chevy | .927" | Straight | Premium Chrome Moly | 2.300" | .095" | Spiral | 74 |
| 42216-8 | 8 pcs. | SB Chevy | .927" | Straight | Premium Chrome Moly | 2.300" | .130" | Spiral | 96 |
| 42241-8 | 8 pcs. | SB Chevy | .927" | Straight | Premium Chrome Moly | 2.300" | .095" | Round Wire | 72 |
| 42242-8 | 8 pcs. | SB Chevy/Hemi | .927" | Straight | Premium Chrome Moly | 2.300" | .130" | Round Wire | 95 |
| 42442-8 | 8 pcs. | SB Chevy/Hemi | .927" | Straight | Premium Chrome Moly | 2.300" | .150" | Round Wire | 110 |
| 42542-8 | 8 pcs. | SB Chevy/Hemi | .927" | Straight | 9310 | 2.300" | .170" | Round Wire | 118 |
| 42229-8 | 8 pcs. | SB Chevy | .927" | Straight | Standard | 2.450" | .150" | Round Wire | 117 |
| 42204-8 | 8 pcs. | SB Chevy | .927" | Straight | Premium Chrome Moly | 2.500" | .095" | Spiral | 79 |
| 42200-8 | 8 pcs. | SB Chevy | .927" | Straight | Premium Chrome Moly | 2.500" | .125" | Spiral | 100 |
| 42228-8 | 8 pcs. | SB Chevy | .927" | Straight | Premium Chrome Moly | 2.500" | .125" | Round Wire | 96 |
| 42209-8 | 8 pcs. | SB Chevy | .927" | Straight | Standard | 2.500" | .150" | Spiral | 119 |
| 42210-8 | 8 pcs. | SB Chevy | .927" | Straight | Premium Chrome Moly | 2.750" | .125" | Spiral | 110 |
| 42211-8 | 8 pcs. | SB Chevy | .927" | Taper | Premium Chrome Moly | 2.750" | .105" - .140" | Spiral | 116 |
| 42231-8 | 8 pcs. | SB Chevy | .927" | Straight | Premium Chrome Moly | 2.750" | .125" | Round Wire | 109 |
| 42213-8 | 8 pcs. | SB Chevy | .927" | Straight | Premium Chrome Moly | 2.950" | .125" | Spiral | 117 |
| 42214-8 | 8 pcs. | SB Chevy | .927" | Taper | Premium Chrome Moly | 2.950" | .100" - .140" | Spiral | 122 |
| 42217-8 | 8 pcs. | SB Chevy LS-1 | .945" / 24 mm | Straight | Premium Chrome Moly | 2.300" | .120" | Spiral | 91 |
| 42218-8 | 8 pcs. | SB Chevy LS-1 | .945" / 24 mm | Straight | Premium Chrome Moly | 2.300" | .120" | Round Wire | 90 |
| 42219-8 | 8 pcs. | BB Chevy | .990" | Straight | Premium Chrome Moly | 2.930" | .150" | Spiral | 147 |
| 42220-8 | 8 pcs. | BB Chevy | .990" | Straight | Premium Chrome Moly | 2.930" | .180" | Spiral | 170 |
| 42201-8 | 8 pcs. | BB Chevy | .990" | Straight | Premium Chrome Moly | 2.930" | .150" | Round Wire | 146 |
| 42202-8 | 8 pcs. | BB Chevy | .990" | Straight | Premium Chrome Moly | 2.930" | .180" | Round Wire | 169 |
| 42247-4 | 4 pcs. | Sport Compact | .9055" / 23 mm | Straight | Premium Chrome Moly | 2.500" | .150" | Tru Arc/Subaru Rnd Wire | 115 |
| 42346-4 | 4 pcs. | Sport Compact | .9055" / 23 mm | Straight | Premium Chrome Moly | 2.500" | .180" | Tru Arc/Subaru Rnd Wire | 132 |
| 42546-4 | 4 pcs. | Sport Compact | .9055" / 23 mm | Straight | 9310 | 2.500" | .210" | Tru Arc/Subaru Rnd Wire | 147 |
| 42253-4 | 4 pcs. | Sport Compact | .9055" / 23 mm | Straight | Premium Chrome Moly | 2.250" | .150" | Round Wire | 103 |
| 42353-4 | 4 pcs. | Sport Compact | .9055" / 23 mm | Straight | Premium Chrome Moly | 2.250" | .180" | Round Wire | 119 |
| 42553-4 | 4 pcs. | Sport Compact | .9055" / 23 mm | Straight | 9310 | 2.250" | .210" | Round Wire | 132 |
| 42225-4 | 4 pcs. | Sport Compact | .866" / 22 mm | Straight | Premium Chrome Moly | 2.250" | .120" | Round Wire | 79 |
| 42251-4 | 4 pcs. | Sport Compact | .866" / 22 mm | Straight | Premium Chrome Moly | 2.250" | .150" | Round Wire | 96 |
| 42551-4 | 4 pcs. | Sport Compact | .866" / 22 mm | Straight | 9310 | 2.250" | .210" | Round Wire | 125 |
| 42227-8 | 8 pcs. | Ford 4.6, 5.4L | .866" / 22 mm | Straight | Premium Chrome Moly | 2.500" | .120" | Spiral | 89 |
| 42230-8 | 8 pcs. | Ford 4.6, 5.4L | .866" / 22 mm | Straight | Premium Chrome Moly | 2.500" | .150" | Spiral | 107 |
| 42203-8 | 8 pcs. | Ford 4.6, 5.4L | .866" / 22 mm | Straight | Premium Chrome Moly | 2.500" | .120" | Round Wire | 88 |
| 42207-8 | 8 pcs. | Ford 4.6, 5.4L | .866" / 22 mm | Straight | Premium Chrome Moly | 2.500" | .150" | Round Wire | 106 |
| 42507-8 | 8 pcs. | Ford 4.6, 5.4L | .866" / 22 mm | Straight | 9310 | 2.500" | .180" | Round Wire | TBA |
| 42243-4 | 4 pcs. | Sport Compact | .827" / 21 mm | Straight | Premium Chrome Moly | 2.250" | .150" | Round Wire | 91 |
| 42543-4 | 4 pcs. | Sport Compact | .827" / 21 mm | Straight | 9310 | 2.250" | .210" | Round Wire | 117 |

WRIST PIN LOCKS

| Part No. | Quantity | Type | Pin Diameter | Description | Weight / Grams Per Lock |
|----------|----------|------------------|----------------|--|-------------------------|
| 42296-16 | 16 pcs. | .072" Spiral | .927" | Small Block Chevrolet | 1.8 |
| 42262-16 | 16 pcs. | .061" Round Wire | .927" | Small Block Chevrolet | 1.0 |
| 42272-16 | 16 pcs. | .072" Round Wire | .927" | Small Block Chevrolet | 1.4 |
| 42271-32 | 32 pcs. | .042" Spiral | .990" | Big Block Chevrolet & Small Block Chrysler | 1.2 |
| 42275-16 | 16 pcs. | .072" Round Wire | .990" | Big Block Chevrolet | 1.5 |
| 42212-8 | 8 pcs. | .054" Round Wire | .9055" / 23 mm | Factory Subaru | 1.0 |
| 42297-8 | 8 pcs. | .042" Tru Arc | .9055" / 23 mm | Sport Compact | 1.0 |
| 42269-32 | 32 pcs. | .042" Spiral | .867" | Ford 4.6L / 5.4L | 1.0 |
| 42270-16 | 16 pcs. | .061" Round Wire | .22 mm / .867" | Ford 4.6L / 5.4L, Sport Compact | 0.8 |

Note: New part numbers are **ITALICIZED**.

CUBIC INCH CONVERSION CHART (8 CYLINDER ENGINE) STROKE LENGTH

| | 3.000 | 3.125 | 3.250 | 3.375 | 3.500 | 3.562 | 3.625 | 3.750 | 3.875 | 4.000 | 4.125 | 4.250 | 4.375 | 4.500 | 4.625 | 4.750 | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| B O R E D I A M E T E R | 3.875 | 283.0 | 2.948 | 306.6 | 318.4 | 330.2 | 336.1 | 342.0 | 353.8 | 365.6 | 377.4 | 389.2 | 401.0 | 412.8 | 424.6 | 436.4 | 448.1 |
| | 3.937 | 292.2 | 304.4 | 316.6 | 328.8 | 340.9 | 347.0 | 353.1 | 365.3 | 377.5 | 389.7 | 401.8 | 414.0 | 426.2 | 438.4 | 450.5 | 462.7 |
| | 4.000 | 301.6 | 314.2 | 326.7 | 339.3 | 351.9 | 358.1 | 364.4 | 377.0 | 389.6 | 402.1 | 414.7 | 427.3 | 439.8 | 452.4 | 464.9 | 477.5 |
| | 4.030 | 306.4 | 318.8 | 331.9 | 344.7 | 357.4 | 363.5 | 370.2 | 383.0 | 395.7 | 408.5 | 421.3 | 434.0 | 446.4 | 459.2 | 471.9 | 484.7 |
| | 4.062 | 311.1 | 324.1 | 337.0 | 350.0 | 362.9 | 369.4 | 375.9 | 388.9 | 401.8 | 414.8 | 427.8 | 440.7 | 453.7 | 466.6 | 479.6 | 492.6 |
| | 4.125 | 320.7 | 334.1 | 347.5 | 360.8 | 374.2 | 380.9 | 387.6 | 400.9 | 414.3 | 427.6 | 441.0 | 454.4 | 467.7 | 481.1 | 494.5 | 507.8 |
| | 4.155 | 325.6 | 339.2 | 352.8 | 366.3 | 379.9 | 386.4 | 393.5 | 407.1 | 420.6 | 434.2 | 447.8 | 461.4 | 474.6 | 488.1 | 501.7 | 515.2 |
| | 4.187 | 330.5 | 344.3 | 358.1 | 371.8 | 385.6 | 392.5 | 399.4 | 413.2 | 426.9 | 440.7 | 454.5 | 468.3 | 482.0 | 495.8 | 509.6 | 523.3 |
| | 4.250 | 340.5 | 354.7 | 368.8 | 383.0 | 397.2 | 404.3 | 411.4 | 425.6 | 439.8 | 454.0 | 468.1 | 482.3 | 496.5 | 510.7 | 524.9 | 539.1 |
| | 4.312 | 350.6 | 365.2 | 379.8 | 394.4 | 409.0 | 416.3 | 423.6 | 438.2 | 452.8 | 467.4 | 482.0 | 496.6 | 511.2 | 525.8 | 540.4 | 555.0 |
| | 4.375 | 360.8 | 375.8 | 390.9 | 405.9 | 420.9 | 428.4 | 436.0 | 451.0 | 466.0 | 481.1 | 496.1 | 511.1 | 526.2 | 541.2 | 556.2 | 571.2 |
| | 4.437 | 371.2 | 386.6 | 402.1 | 417.6 | 433.0 | 440.8 | 448.5 | 464.0 | 479.4 | 494.9 | 510.4 | 525.8 | 541.3 | 556.8 | 572.2 | 587.7 |
| | 4.500 | 381.7 | 397.6 | 413.5 | 429.4 | 445.3 | 453.3 | 461.2 | 477.1 | 493.0 | 508.9 | 524.8 | 540.7 | 556.7 | 572.6 | 588.4 | 604.3 |
| | 4.562 | 392.4 | 408.7 | 425.1 | 441.4 | 457.8 | 466.0 | 474.1 | 490.5 | 506.8 | 523.2 | 539.5 | 555.9 | 572.2 | 588.6 | 604.9 | 621.3 |
| | 4.625 | 403.2 | 420.0 | 436.8 | 453.6 | 470.4 | 478.8 | 487.2 | 504.0 | 520.8 | 537.6 | 554.4 | 571.2 | 588.0 | 604.8 | 621.6 | 638.4 |
| | 4.687 | 414.2 | 431.4 | 448.7 | 465.9 | 483.2 | 491.8 | 500.5 | 517.7 | 535.0 | 552.2 | 569.5 | 586.7 | 604.0 | 621.3 | 638.5 | 655.8 |
| | 4.750 | 425.3 | 443.0 | 460.7 | 478.5 | 496.2 | 505.0 | 513.9 | 531.6 | 549.3 | 567.1 | 584.8 | 602.5 | 620.2 | 637.9 | 655.6 | 673.4 |

CUBIC INCH FORMULA: .7854 X Number of cylinders X Stroke X Bore X Bore (All Others)

METRIC CONVERSION CHART

| Quantity | Metric Unit | Symbol | Approximate Conversion Factor(s) |
|---------------------|-------------------|-----------------|--|
| Length | millimeter | mm | 1 mm = 0.039 in 1 in = 25.4mm |
| | kilometer | km | 1 km = 0.62 mile 1 mile = 1.61 km |
| Mass | gram | g | 1 g = 0.035 oz 1 oz = 28.4 g |
| | kilogram | kg | 1 kg = 2.2 lb 1 lb = 0.45 kg |
| Area | square millimeter | mm ² | 1 mm ² = 0.002 in ² 1 in = 645 mm ² |
| | square centimeter | cm ² | 1 cm ² = 0.15 in ² 1 in = 6.45 cm ² |
| Volume | cubic centimeter | cm ³ | 1 cm ³ = 0.06 in ³ 1 in = 16.4 cm ³ |
| Volume (Liquids) | Liter | L | 1L = 0.22 gal. 1 gal = 4.55 L |
| | cubic inch | in ³ | 1 in ³ = .01639 liter 1 liter = 61.2545 in ³ |
| Flow | liter/sec | l/s | 1 l/s = 0.22 gal/sec 1 gal = 4.55 l/s |
| Force | Newton meter | Nm | 1 Nm = 8.85 lb in 1 lb in = 0.11 Nm 1 Nm = 0.74 lb ft 1 lb ft = 1.36 Nm |
| Pressure | kilopascal | kPa | 1 kPa = 0.15 lb/in 1 lb/in = 6.89 kPa |
| Vacuum | kilopascal | kPa- | 1 kPa = 0.30 in Hg 1 in/Hg = 3.39 kPa |
| Spring Rate | newton/millimeter | N/mm | 1 N/mm = 5.7 lb in 1 lb in = 0.10 N/mm |
| Temperature | °C (Celsius) | °C | °C - 5/9 (°F - 32) °F = 9/5 °C + 32 |

ENGINE DISPLACEMENT

Calculating Cubic Inches

Multiply bore x bore x stroke x number of cylinders x .7854
Example: 4.030 x 4.030 x 3.480 x 8 x .7854 = 355.1 cubic inches

Converting Cubic Inches To Liters

Multiply the cubic inches by .01639
Example: 427 x .01639 = 6.997 liters

Converting Cubic Centimeters (cc's) To Cubic Inches

Multiply the cubic centimeters by .06102
Example: 1500cc x .06102 = 91.53 cubic inches

FUEL FLOW

Converting Cubic Centimeters Per Minute To Pounds Per Hour

Divide the cc/min. by 10.5
Example: 400 ÷ 10.5 = 38 lbs. per hour

Converting Pound Per Hour Into Gallons Per Hour

Divide the lbs./hr. by 6
Example: 300 lbs./hr ÷ 6 = 50 GPH

Convert Cubic Centimeters Per Minute To Gallons Per Hour

Multiply the cc/min. by .015873

Example: 400 x .015873 = 11.17 GPH

AIR FLOW

CFM – Carburetor Air Flow Requirement (4 Stroke Engine)

Multiply CID x RPM x VE and Divide by 3456
is displacement, RPM is engine speed, VE is volumetric efficiency
Example: 427 x 6000 x 1 ÷ 3456 = 741 CFM
note: racing engines use VE of 1, street engines use a VE of .85)

STEEL CONNECTING RODS

MANLEY PERFORMANCE STEEL CONNECTING RODS

...OFTEN COPIED, BUT NEVER DUPLICATED!!!



SPORTSMASTER® SERIES

The perfect rod for stock replacement, mild performance applications; particularly where class rules require a "stock appearing" rod. Aircraft quality 4340 alloy forgings, machined cap and outer beam and ARP cap screws make this Manley rod an ideal choice for many budget conscious racers. Lightweight and affordable.



H-BEAM SERIES

- ✓ "R" SUFFIX - ARP 2000 bolt upgrades
- ✓ H-LITES - Lightweight versions with 3/8" ARP 2000 bolts
- ✓ H-PLUS SERIES FOR SPORT COMPACTS - with ARP 625+ cap screws

Don't be fooled; not all H-BEAMS are created equal. Manley H-BEAMS are not only very "economically" priced, but they are finished to the same exacting tolerances and high quality standards as our Sportmaster® and Pro Series rods. Final hone size, thread detail, bend and twist - these are attributes we take very seriously. You will find the Manley H-BEAM rods superior to others on the market.



PRO SERIES I-BEAM

- ✓ DIRT SERIES (300M ALLOY)
- ✓ TURBO TUFF DESIGN FOR SPORT COMPACTS
- ✓ "NHRA LEGAL" SUPER STOCK
- ✓ TOUR LITES®

The Manley Pro Series I-BEAM rod has become the benchmark for fully machined/billet style high end connecting rods in the performance industry. Lightweight and standard weight designs targeting specific markets combined with our finely tuned manufacturing process renders a truly outstanding product. Whether it be our 300M alloy "DIRT SERIES" rod in a 900 HP DLM engine, 4340 material "lightweight" design in a twin turbo Chevy LS or our "TURBO TUFF" design in a 1000+ HP Mitsubishi EVO, Manley has the right connecting rod for you!!!

NOTE: You will see that we list "horsepower ratings" for each different series/application of Manley connecting rods. However, it is very important to understand that these "ratings" are somewhat subjective. The critical factors that significantly influence the fatigue life of connecting rods (and the horsepower rating) are RPM, stroke and piston weight. In certain cases, our horsepower ratings may be conservative.

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET “H” BEAM RODS STANDARD WEIGHT SERIES

- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are premium 7/16" ARP 8740 or optional ARP 2000 cap screws
- ✓ Horsepower range for these rods: 725 H.P (ARP 8740), 775 H.P (ARP 2000)



Horsepower range is affected by rpm, stroke and piston weight.

| ARP 8740 Part No. | ARP 2000 Part No. | Length | Journal Size | Center-to Center | Big End Bore | Pin Bore | Gram Weight |
|----------------------|----------------------|--------------|--------------|------------------|--------------|----------|-------------|
| 14050-8 | 14050R-8 | Stock | Large | 5.700" | 2.225" | .9281" | 630 |
| 14054-8 | 14054R-8 | .300" Longer | Large | 6.000" | 2.225" | .9281" | 640 |
| 14055-8 | 14055R-8 | .425" Longer | Large | 6.125" | 2.225" | .9281" | 664 |
| 14056-8 | 14056R-8 | .425" Longer | Small | 6.125" | 2.125" | .9281" | 642 |
| 14051-8 | 14051R-8 | .025" Longer | Large | 6.125" | 2.225" | .9281" | 647 |
| | | LS-1 | No Offset | | | | |
| 14053-8 | 14053R-8 | .025" Longer | Large | 6.125" | 2.225" | .9457" | 643 |
| | | LS-1 | No Offset | | | | |

P/N 14051-8 and 14053-8 are for Small Block Chevy LS-1 engines with pistons ready to accept 6.125" length rods. Stock LS-1 rods are 6.100" long. Note the pin bore on the 14051-8 is .9281". Stock LS-1 pins are .945" diameter.



P/N 14050-8 is NHRA Legal for Stock & Super Stock.



P/N 14054-8 is NHRA Legal for Olds 307, 350, 403.

H-LITE SERIES

- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are premium 3/8" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 600 H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Length | Journal Size | Center-to Center | Big End Bore | Pin Bore | Gram Weight |
|----------|--------------|--------------|------------------|--------------|----------|-------------|
| 14034-8 | .300" Longer | Large | 6.000" | 2.225" | .9281" | 595 |
| 14031-8 | .025" Longer | Large | 6.125" | 2.225" | .9281" | 605 |
| | LS-1 | No Offset | | | | |
| 14033-8 | .025" Longer | Large | 6.125" | 2.225" | .9457" | 601 |
| | LS-1 | No Offset | | | | |

P/N 14031-8 and 14033-8 are for Small Block Chevy LS-1 engines with pistons ready to accept 6.125" length rods. Stock LS-1 rods are 6.100" long. Note the pin bore on the 14031-8 is .9281". Stock LS-1 pins are .945" diameter.

COMMON FEATURES

| Attribute | Dimension |
|------------------------|-----------|
| Crankpin Small Journal | 2.000" |
| Crankpin Large Journal | 2.100" |
| Big End Width | .941" |
| Pin End Width | 1.060" |

Private brand identification available.



P/N 14031-8 is NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|--------------------------------------|
| 42350-4 | 4 pcs. | 3/8" ARP 2000 Cap Screws 1.500" UHL |
| 42354-4 | 4 pcs. | 7/16" ARP 8740 Cap Screws 1.450" UHL |
| 42361-4 | 4 pcs. | 7/16" ARP 8740 Cap Screws 1.600" UHL |
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws 1.450" UHL |
| 42249-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws 1.600" UHL |
| 42384-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws 1.650" UHL |
| 42315-8 | 8 pcs. | Ampco Pin Bushings |
| 42395L-8 | 8 pcs. | Ampco Pin Bushings (14031, 14051) |
| 42274-16 | 16 pcs. | Dowel Bushings 3/8" |
| 42316-16 | 16 pcs. | Dowel Bushings 7/16" |

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET SPORTSMASTER® RODS

- ✓ Forged from aircraft quality 4340 material
- ✓ Entire beam and cap area is profiled to remove stress risers and render the lightest possible rod
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 3/8" ARP 8740 cap screw
- ✓ Premium Ampco pin bushings
- ✓ Horsepower range for these rods is 550 H.P. at 8000 rpm

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Length | Journal Size | Center-to Center | Big End Bore | Pin Bore | Gram Weight |
|----------|--------------|--------------|------------------|--------------|----------|-------------|
| 14101C-8 | Stock | Large | 5.700" | 2.225" | .9281" | 555 |
| 14101-8 | Stock | Large | 5.700" | 2.225" | .9281" | 555 |
| 14104-8 | Stock | Large | 5.700" | 2.225" | .8758" | 570 |
| 14112-8 | Stock | Large | 5.700" | 2.225" | Press | 564 |
| 14112A-8 | Stock | Large | 5.700" | 2.225" | Press | 564 |
| 14116-8 | .150" Longer | Large | 5.850" | 2.225" | .9281" | 573 |
| 14103-8 | .300" Longer | Large | 6.000" | 2.225" | .9281" | 578 |
| 14106-8 | .400" Longer | Large | 6.100" | 2.225" | .9281" | 593 |
| 14114-8 | .400" Longer | Large | 6.100" | 2.225" | .9457" | 592 |
| 14113-8 | .425" Longer | Large | 6.125" | 2.225" | .9281" | 595 |
| 14105-8 | Stock | Small | 5.700" | 2.125" | .9281" | 571 |
| 14108-8 | Stock | Small | 5.700" | 2.125" | .8758" | 579 |
| 14109-8 | Stock | Small | 5.700" | 2.125" | Press | 568 |
| 14109A-8 | Stock | Small | 5.700" | 2.125" | Press | 568 |
| 14107-8 | .300" Longer | Small | 6.000" | 2.125" | .9281" | 575 |

P/N 14106-8 and 14114-8 have no offset on the crank journal, same as the stock LS-1 connecting rods.

COMMON FEATURES

| Attribute | Dimension |
|-------------------|-----------|
| Crankpin Sm. Jnl. | 2.000" |
| Crankpin Lg. Jnl. | 2.100" |
| Big End Width | .940" |
| Pin End Width | .980" |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------------------|
| 42383-4 | 4 pcs. | 3/8" ARP 8740 Cap Screws |
| 42310-8 | 8 pcs. | .927" Ampco Pin Bushings (.990" O.D.) |
| 42366-8 | 8 pcs. | .927" Ampco Pin Bushings (.997" O.D.) |
| 42308-8 | 8 pcs. | .875" Ampco Pin Bushings |
| 42385-16 | 16 pcs. | Dowel Bushings 3/8" |



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P/N 14101C-8 is CASCAR Legal



P/Ns 14101-8, 14104-8, 14112-8, 14105-8, 14106-8, 14108-8, 14109-8 and 14114-8 are NHRA Legal for Stock & Super Stock



P/Ns 14101-8, and 14104-8 are legal for Chevy 4.3 V-6.

P/N 14103-8 is legal for Olds 307, 350, & 403



P/Ns 14106-8 and 14114-8 are NHRA Legal for Small Block Chevy LS-1.

P/N 14116-8 is NHRA Legal for AMC 390 - 401



P/Ns 14109A-8 and 14112A-8 are APBA Legal

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET NHRA LEGAL SUPER STOCK PRO SERIES "I" BEAM RODS

- ✓ Manufactured from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 3/8" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 700+ H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Length | Journal Size | Center-to Center | Big End Bore | Pin Bore | Gram Weight |
|----------|------------|--------------|---------------------------------|---------------|------------------|-------------|
| 14340-8 | Stock 350 | Honda/IRL | 350 CHEVROLET 5.700" | 2.008"/2.015" | .8671" to .9281" | 540 |
| 14440-8 | Stock 350 | Small | 5.700" | 2.125" | .8761" to .9281" | 560 |
| 14441-8 | Stock 350 | Large | 5.700" | 2.225" | .8761" to .9281" | 550 |
| 14439-8 | Stock 400 | Large | 400 CHEVROLET 5.565" | 2.225" | .8761" to .9281" | 544 |
| 14442-8 | Stock LS-1 | Large | LS-1 CHEVROLET 6.100" | 2.225" | .8761" to .9281" | 600 |
| 14443-8 | Stock LS-1 | Honda/IRL | 6.100" | 2.008"/2.015" | .8671" to .9281" | 585 |

P/N's 14340 and 14443 REQUIRE use of one of the connecting rod bearings listed below. To order rods finished to the exact size for Federal Mogul bearings, affix an "F" after the rod part number. For rods finished to exact size for Clevite® bearings, affix a "C" after the rod part number. In addition, you MUST specify which Clevite® bearing will be used.

You must specify the exact final size pin bore desired.

BEARING CHART

| Bearing Type | Part No. | Big End Bore | Crank Pin |
|---------------|----------|--------------|---------------|
| Federal Mogul | 7195CH | 2.008" | 1.8885" Honda |
| Clevite® | CB1456P | 2.008" | 1.8885" Honda |
| Clevite® | CB1663 | 2.015" | 1.8885" Honda |
| Clevite® | CB1664 | 2.008" | 1.8500" IRL |

COMMON FEATURES

| Attribute | Dimension |
|--------------------|-----------------|
| Crankpin Honda/IRL | 1.8885"/1.8500" |
| Crankpin Sm. Jnl. | 2.000" |
| Crankpin Lg. Jnl. | 2.100" |
| Big End Width | .940" |
| Pin End Width | 1.000" |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|--------------------------------------|
| 42350-4 | 4 pcs. | 3/8" ARP 2000 Cap Screws (1.500 UHL) |
| 42351-4 | 4 pcs. | 3/8" ARP 2000 Cap Screws (1.600 UHL) |
| 42345-8 | 8 pcs. | Ampco Pin Bushings for .875" pin |
| 42393-8 | 8 pcs. | Ampco Pin Bushings for .927" pin |
| 42380-16 | 16 pcs. | Dowel Bushings 3/8" (14340) |
| 42385-16 | 16 pcs. | Dowel Bushings 3/8" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |



Allan Patterson
Patterson Racing

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET TOUR LITE® "I" BEAM RODS 4340 MATERIAL

- ✓ Forged from 4340 aircraft quality material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ 3/8" ARP 2000, ARP 625+, 3/8" ARP 3.5, or 3/8" CARR cap screws
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Horsepower range is 600 H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Length | Journal Size | Center-to Center | Big End Bore | Gram Weight |
|----------|--------------|--------------|------------------|-----------------|-------------|
| 14340-8 | Stock Length | Honda / IRL | 5.700" | 2.008" / 2.015" | 540 / 548 |
| 14344-8 | .300" Longer | Honda / IRL | 6.000" | 2.008" / 2.015" | 540 / 548 |
| 14345-8 | .425" Longer | Honda / IRL | 6.125" | 2.008" / 2.015" | 545 / 553 |

Above rods REQUIRE use of one of the connecting rod bearings listed below. To order rods finished to the exact size for Federal Mogul bearings, affix an "F" after the rod part number. For rods finished to exact size for Clevite® bearings, affix a "C" after the rod part number. In addition, you MUST specify which Clevite® bearing will be used.

Above rods are supplied with 1.600" under head length 3/8" ARP 2000 cap screw fasteners P/N 42351. Upgraded 3/8" ARP Custom Age 625+ cap screws P/N 42321, 3/8" ARP 3.5 cap screws P/N 42358 or 3/8" CARR cap screws P/N 42357 are available. To order upgraded fasteners, affix an "R6" for the ARP Custom Age 625+, "RA" for the ARP 3.5 or an "R" for the CARR after the rod part number.

| Part No. | Length | Journal Size | Center-to Center | Big End Bore | Gram Weight |
|----------|--------------|--------------|------------------|--------------|-------------|
| 14240-8 | Stock Length | Small | 5.700" | 2.125" | 517 |
| 14242-8 | .150" Longer | Small | 5.850" | 2.125" | 521 |
| 14244-8 | .300" Longer | Small | 6.000" | 2.125" | 527 |
| 14245-8 | .425" Longer | Small | 6.125" | 2.125" | 530 |
| 14140-8 | Stock Length | Large | 5.700" | 2.225" | 516 |
| 14142-8 | .150" Longer | Large | 5.850" | 2.225" | 517 |
| 14144-8 | .300" Longer | Large | 6.000" | 2.225" | 524 |
| 14145-8 | .425" Longer | Large | 6.125" | 2.225" | 529 |

All connecting rods above are supplied with 1.600" under head length 3/8" ARP 2000 cap screw fasteners P/N 42351. Upgraded 3/8" ARP 3.5 cap screws P/N 42358 or 3/8" CARR cap screws P/N 42357 are available. To order upgraded fasteners, affix an "RA" for the ARP 3.5 or an "R" for the CARR after the rod part number.

Lengths other than these typical sizes may become popular after publication of this catalog. Please inquire about lengths not listed as we may have subsequently added applications. Also, we can manufacture 40 pieces of these rods at special lengths for no additional charge.

BEARING CHART

| Bearing Type | Part No. | Big End Bore | Crank Pin |
|---------------|----------|--------------|---------------|
| Federal Mogul | 7195CH | 2.008" | 1.8885" Honda |
| Clevite® | CB1456P | 2.008" | 1.8885" Honda |
| Clevite® | CB1663 | 2.015" | 1.8885" Honda |
| Clevite® | CB1664 | 2.008" | 1.8500" IRL |

COMMON FEATURES

| Attribute | Honda / IRL | Small Journal | Large Journal |
|---------------|-------------------|---------------|---------------|
| Crankpin | 1.8885" / 1.8500" | 2.000" | 2.100" |
| Pin Bore | .9281" | .9281" | .9281" |
| Big End Width | .940" | .940" | .940" |
| Pin End Width | .980" | .980" | .980" |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|-------------------------------------|
| 42351-4 | 4 pcs. | 3/8" ARP 2000 Cap Screws |
| 42321-4 | 4 pcs. | 3/8" ARP Custom Age 625+ Cap Screws |
| 42358-4 | 4 pcs. | 3/8" ARP 3.5 Cap Screws |
| 42357-4 | 4 pcs. | 3/8" CARR Cap Screws |
| 42310-8 | 8 pcs. | Ampco Pin Bushings .975" long |
| 42393-8 | 8 pcs. | Ampco Pin Bushings .995" long |
| 42380-16 | 16 pcs. | Dowel Bushings 3/8" .900" long |
| 42398-16 | 16 pcs. | Dowel Bushings 3/8" .960" long |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |



P/N 14340 is NHRA Legal for Stock & Super Stock.

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET PRO SERIES "I" BEAM RODS LIGHTWEIGHT

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 7/16" ARP 2000 or optional 7/16" ARP Custom Age 625+ cap screws
- ✓ Horsepower range for these rods is 750 H.P.



Horsepower range is affected by rpm, stroke and piston weight.

| Part No. | Length | Journal Size | Center-to Center | Big End Bore | Gram Weight |
|----------|----------------------|--------------------|------------------|--------------|-------------|
| 14450-8 | Stock | Small | 5.700" | 2.125" | 597 |
| 14452-8 | .150" Longer | Small | 5.850" | 2.125" | 603 |
| 14454-8 | .300" Longer | Small | 6.000" | 2.125" | 606 |
| 14455-8 | .425" Longer | Small | 6.125" | 2.125" | 612 |
| 14350C-8 | Stock | Large | 5.700" | 2.225" | 599 |
| 14350-8 | Stock | Large | 5.700" | 2.225" | 599 |
| 14352-8 | .150" Longer | Large | 5.850" | 2.225" | 605 |
| 14354-8 | .300" Longer | Large | 6.000" | 2.225" | 607 |
| 14355-8 | .425" Longer | Large | 6.125" | 2.225" | 609 |
| 14359-8 | .025" Longer LS-1 | Large No Offset | 6.125" | 2.225" | 609 |

P/N 14359-8 is for Small Block Chevy LS-1 engines with pistons ready to accept 6.125" length rods. Stock LS-1 rods are 6.100" long. Note the pin bore is .9281". Stock LS-1 pins are .945" diameter. The 14359-8 has no offset on the crank journal, same as the stock LS-1 connecting rods.

All connecting rods on this page are supplied with 1.450" under head length 7/16" ARP cap screw fasteners P/N 42390. Upgraded 7/16" ARP Custom Age 625+ cap screws P/N 42252 are available. To order upgraded fasteners, affix "R6" after the rod part number.

Lengths other than these typical sizes may become popular after publication of this catalog. Please inquire about lengths not listed as we may have subsequently added applications. Also, we can manufacture 40 pieces of these rods at special lengths for no additional charge.

COMMON FEATURES

| Attribute | Small Journal | Large Journal |
|---------------|---------------|---------------|
| Crankpin | 2.000" | 2.100" |
| Pin Bore | .9281" | .9281" |
| Big End Width | .940" | .940" |
| Pin End Width | 1.000" | 1.000" |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|--|
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42252-4 | 4 pcs. | 7/16" ARP Custom Age 625+ Cap Screws |
| 42393-8 | 8 pcs. | Ampco Pin Bushings (Except 14355, 14359) |
| 42307-8 | 8 pcs. | Ampco Pin Bushings (14355, 14359) |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |



P/N 14350C-8 is CASCAR Legal.



P/N 14350, 14359, & 14450-8 are NHRA Legal for Stock & Super Stock.

P/N 14354-8 is NHRA Legal for Olds 307, 350 and 403.

P/Ns 14352 & 14452 are NHRA Legal for AMC 343 - 390

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET PRO SERIES "I" BEAM RODS STANDARD WEIGHT

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 7/16" ARP 2000 or optional 7/16" ARP Custom Age 625+ cap screws
- ✓ Horsepower range for these rods is 850 H.P.



Horsepower range is affected by rpm, stroke and piston weight.

| Part No. | Length | Journal Size | Center-to Center | Big End Bore | Gram Weight |
|----------|--------------|--------------|------------------|--------------|-------------|
| 14254-8 | .300" Longer | Small | 6.000" | 2.125" | 663 |
| 14255-8 | .425" Longer | Small | 6.125" | 2.125" | 665 |
| 14256-8 | .500" Longer | Small | 6.200" | 2.125" | 667 |
| 14150C-8 | Stock | Large | 5.700" | 2.225" | 655 |
| 14150-8 | Stock | Large | 5.700" | 2.225" | 655 |
| 14152-8 | .150" Longer | Large | 5.850" | 2.225" | 675 |
| 14154-8 | .300" Longer | Large | 6.000" | 2.225" | 664 |
| 14155-8 | .425" Longer | Large | 6.125" | 2.225" | 668 |

All connecting rods on this page are supplied with 1.450" under head length 7/16" ARP cap screw fasteners P/N 42390. Upgraded 7/16" ARP Custom Age 625+ cap screws P/N 42252 are available. To order upgraded fasteners, affix "R6" after the rod part number.

Lengths other than these typical sizes may become popular after publication of this catalog. Please inquire about lengths not listed as we may have subsequently added applications. Also, we can manufacture 40 pieces of these rods at special lengths for no additional charge.

COMMON FEATURES

| Attribute | Small Journal | Large Journal |
|---------------|---------------|---------------|
| Crankpin | 2.000" | 2.100" |
| Pin Bore | .9281" | .9281" |
| Big End Width | .940" | .940" |
| Pin End Width | 1.000" | 1.000" |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|--------------------------------------|
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42252-4 | 4 pcs. | 7/16" ARP Custom Age 625+ Cap Screws |
| 42393-8 | 8 pcs. | Ampco Pin Bushings |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |



P/N 14150C-8 is CASCAR Legal.



P/N 14150-8 is NHRA Legal for Stock & Super Stock.

P/N 14152 is NHRA Legal for AMC 343 - 390

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

DIRT SERIES - 300 M ALLOY

- ✓ Forged from 300 M aircraft quality material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ 7/16" ARP 2000 or 7/16" ARP Custom Age 625+ cap screws
- ✓ Horsepower range is 900 H.P.

Horsepower range is affected by rpm, stroke and piston weight.

| Part No. | Length | Journal Size | Center-to Center | Big End Bore | Gram Weight |
|----------|--------------|--------------|------------------|--------------|-------------|
| 15552-8 | .150" Longer | Small | 5.850" | 2.125" | 630 |
| 15554-8 | .300" Longer | Small | 6.000" | 2.125" | 635 |
| 15555-8 | .425" Longer | Small | 6.125" | 2.125" | 645 |
| 15556-8 | .500" Longer | Small | 6.200" | 2.125" | 650 |
| 15542-8 | .150" Longer | Large | 5.850" | 2.225" | 635 |
| 15544-8 | .300" Longer | Large | 6.000" | 2.225" | 640 |
| 15545-8 | .425" Longer | Large | 6.125" | 2.225" | 650 |
| 15546-8 | .500" Longer | Large | 6.200" | 2.225" | 655 |



All Dirt Series connecting rods are supplied with 7/16" ARP 2000 cap screw fasteners P/N 42390. Upgraded 7/16" ARP Custom Age 625+ cap screws P/N 42252 are available. To order upgraded fasteners, affix an "R6" after the rod part number.

| Part No. | Length | Journal Size | Center-to Center | Big End Bore | Gram Weight |
|----------|--------------|--------------|------------------|-----------------|-------------|
| 15564-8 | .300" Longer | Honda / IRL | 6.000" | 2.008" / 2.015" | 662 / 660 |

Above rods REQUIRE use of one of the connecting rod bearings listed in the Bearing Chart. To order rods finished for Federal Mogul bearings, affix an "F" after the rod part number. For rods finished for one of the Clevite® bearings listed, affix a "C" after the rod part number.

BEARING CHART

| Bearing Type | Part No. | Big End Bore | Crank Pin |
|---------------|----------|--------------|---------------|
| Federal Mogul | 7195CH | 2.008" | 1.8885" Honda |
| Clevite® | CB1456P | 2.008" | 1.8885" Honda |
| Clevite® | CB1663 | 2.015" | 1.8885" Honda |
| Clevite® | CB1664 | 2.008" | 1.8500" IRL |

CUSTOM 300 M RODS

Manley Performance will manufacture 300 M Dirt Series, Tour Lite® or Pro Series "I" Beam connecting rods on a custom order basis in lots of 40 identical pieces. We require a signed blueprint before production.

COMMON FEATURES

| Attribute | Honda / IRL | Small.Journal | Large Journal |
|---------------|----------------|---------------|---------------|
| Crankpin | 1.8885"/1.850" | 2.000" | 2.100" |
| Pin Bore | .9281" | .9281" | .9281" |
| Big End Width | .940" | .940" | .940" |
| Pin End Width | .950" | .950" | .950" |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---|
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42252-4 | 4 pcs. | 7/16" ARP Custom Age 625+ Cap Screws |
| 42395-8 | 8 pcs. | Ampco Pin Bushings .945" Long |
| 42352-16 | 16 pcs. | Dowel Bushings 7/16" Large Jrl, Honda Jrl |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" Small Journal |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |



Dan Schlieper
Pro Power Racing

STEEL CONNECTING RODS

BIG BLOCK CHEVROLET "H" BEAM RODS

- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% individually magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are premium 7/16" ARP 8740 or optional ARP 2000 cap screws
- ✓ Horsepower range for these rods: 900 H.P. (ARP 8740), 1200 H.P. (ARP 2000)

Horsepower range is affected by rpm, stroke and piston weight.



| ARP 8740 Part No. | ARP 2000 Part No. | Description | Center-to-Center | Big End Bore | Crank Pin | Pin Bore | Gram Weight |
|-------------------|-------------------|--------------|------------------|--------------|-----------|----------|-------------|
| 14060-8 | 14060R-8 | Stock | 6.135" | 2.325" | 2.200" | .9911" | 793 |
| 14062-8 | 14062R-8 | .250" Longer | 6.385" | 2.325" | 2.200" | .9911" | 810 |
| 14066-8 | 14066R-8 | .400" Longer | 6.535" | 2.325" | 2.200" | .9911" | 823 |
| 14072-8 | 14072R-8 | .565" Longer | 6.700" | 2.325" | 2.200" | .9911" | 835 |

COMMON FEATURES

| Attribute | Dimension |
|---------------|-----------|
| Big End Width | .991" |
| Pin End Width | 1.125" |



P/N 14060-8 is NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------|
| 42361-4 | 4 pcs. | 7/16" ARP 8740 Cap Screws |
| 42249-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42327-8 | 8 pcs. | Pin Bushings |
| 42316-16 | 16 pcs. | Dowel Bushings |

SPORTSMASTER® RODS

- ✓ Forged from aircraft quality 4340 material
- ✓ Entire beam and cap are profiled to remove stress risers and render the lightest possible rod
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 7/16" ARP 8740 cap screws
- ✓ Premium Ampco pin bushings
- ✓ Horsepower range for these rods is 800 H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Description | Center-to-Center | Big End Bore | Pin Bore | Gram Weight |
|----------|--------------|------------------|--------------|----------|-------------|
| 14131-8 | Stock | 6.135" | 2.325" | .9911" | 798 |
| 14132-8 | .250" Longer | 6.385" | 2.325" | .9911" | 825 |

COMMON FEATURES

| Attribute | Dimension |
|---------------|-----------|
| Crankpin | 2.200" |
| Big End Width | .990" |
| Pin End Width | 1.060" |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------|
| 42239-4 | 4 pcs. | 7/16" ARP 8740 Cap Screws |
| 42394-8 | 8 pcs. | .990" Ampco Pin Bushings |
| 42387-16 | 16 pcs. | Dowel Bushings 7/16" |



P/N's 14131-8 & 14135-8 are NHRA Legal for Stock & Super Stock.

STEEL CONNECTING RODS

BIG BLOCK CHEVROLET PRO SERIES "I" BEAM RODS

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 7/16" ARP 2000 cap screws
- ✓ Horsepower range for these rods is listed below

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Description | Center-to-Center | Big End Bore | Crank Pin | Pin Bore | Gram Weight | Horsepower Oval Track | Horsepower Drag Race |
|-------------------------------|--|------------------|---------------------|--------------|----------|-------------|-----------------------|----------------------|
| 14160-8 | Stock Length | 6.135" | 2.325" | 2.200" | .9911" | 778 | 850 | 1,000 |
| 14162-8 | .250" Longer | 6.385" | 2.325" | 2.200" | .9911" | 736 | 850 | 1,000 |
| 14166-8 | .400" Longer | 6.535" | 2.325" | 2.200" | .9911" | 755 | 850 | 1,000 |
| 14167-8 | .400" Longer Marine Duty | 6.535" | 2.325" | 2.200" | .9911" | 847 | 1,000 | 1,500 |
| 14168-8 | .500" Longer | 6.635" | 2.325" | 2.200" | .9911" | 830 | 1,000 | 1,500 |
| 14170-8 | .525" Longer | 6.660" | 2.325" | 2.200" | .9911" | 835 | 1,000 | 1,500 |
| 14172-8 | .565" Longer | 6.700" | 2.325" | 2.200" | .9911" | 866 | 1,000 | 1,500 |
| 14272-8 | .565" Longer | 6.700" | 2.325" | 2.200" | .9911" | 777 | 850 | 1,000 |
| Stroker version of the 14172. | | | | | | | | |
| 14173-8 | .665" Longer | 6.800" | 2.325" | 2.200" | .9911" | 873 | 1,000 | 1,500 |
| 14266-8 | .400" Longer w/ SBC Lg. Jnl. Big End | 6.535" | 2.225" | 2.100" | .9911" | 735 | 850 | 1,000 |
| 14446-8 | Stock Length Super Stock w/ Honda Jnl. Big End | 6.135" | 2.008"/2.015" Honda | 1.885" Honda | .9281" | 770 | 850 | 1,000 |

P/N 14167, 14168, 14172, 14173, and 14266 can be fitted with ARP Custom Age 625+ bolts. To order these rods with upgraded bolts, affix an "R6" to the part number.

COMMON FEATURES

| Attribute | Dimension |
|------------------------------|-----------|
| Big End Width (14446) | .940" |
| Big End Width (Except 14446) | .990" |
| Pin End Width | 1.125" |



P/N 14160-8, 14446-8 are NHRA Legal for Stock & Super Stock.
P/N 14168-8 is NHRA Legal for Ford 429, 460
P/N 14168-8 is NHRA Legal for Pontiac 350-455.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|--|
| 42384-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws (14160, 14162, 14166, 14170, 14272, 14446) |
| 42391-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws (14167, 14168, 14172, 14173) |
| 42397-4 | 4 pcs. | 7/16" ARP Custom Age 625+ Cap Screws (14167R6, 14168R6, 14172R6, 14173R6) |
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws (14266) |
| 42252-4 | 4 pcs. | 7/16" ARP Custom Age 625+ Cap Screws (14266R6) |
| 42304-8 | 8 pcs. | Ampco Pin Bushings (14446) |
| 42327-8 | 8 pcs. | Ampco Pin Bushings (Except 14446) |
| 42352-16 | 16 pcs. | Dowel Bushings 7/16" (14160,14162,14166,14170) |
| 42387-16 | 16 pcs. | Dowel Bushings 7/16" (14167,14168,14172,14173) |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" (14272, 14266, 14446) |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |

STEEL CONNECTING RODS

CHRYSLER 360 SPORTSMASTER® RODS & PRO SERIES "I" BEAM RODS

- ✓ Forged from aircraft quality 4340 material
- ✓ Entire Sportmaster® beam is profiled to remove stress risers and render the lightest possible rod
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners for 14139C-8 are 3/8" ARP 8740 cap screws
- ✓ Cap fasteners for 14355C-8 are 7/16" ARP 2000 cap screws
- ✓ Premium Ampco pin bushings
- ✓ Horsepower range for 14139C-8 rods is 550 H.P.
- ✓ Horsepower range for 14355C-8 rods is 750 H.P.

Horsepower range is affected by rpm, stroke and piston weight.



Sportmaster® Pro Series Lightweight
"I" Beam

| Part No. | Description | Center-to Center | Big End Bore | Big End Width | Crank Pin | Pin End Width | Pin Bore | Gram Weight |
|---------------------------------|---|------------------|--------------|---------------|-----------|---------------|----------|-------------|
| SPORTSMASTER® RODS | | | | | | | | |
| 14139C-8 | Sportmaster® | 6.125" | 2.250" | .933" | 2.125" | 1.000" | .9848" | 570 |
| PRO SERIES "I" BEAM RODS | | | | | | | | |
| 14355C-8 | Pro Series Lightweight Standard width SB Chevy bearing | 6.125" | 2.225" | .940" | 2.100" | 1.000" | .9848" | 609 |

CHRYSLER 360 NHRA LEGAL STOCK & SUPER STOCK PRO SERIES "I" BEAM

- ✓ Forged from aircraft quality 4340 material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 3/8" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 700+ H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Length | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|----------|--------|------------------|--------------|---------------|---------------|------------------|-------------|
| 14445-8 | Stock | 6.125" | 2.250" | .933" | 1.000" | .8761" to .9848" | 668 |

You must specify the exact final size pin bore desired.



P/N 14445-8 is NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------------------|
| 42383-4 | 4 pcs. | 3/8" ARP 8740 Cap Screws (14139C) |
| 42350-4 | 4 pcs. | 3/8" ARP 8740 Cap Screws (14445) |
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws (14355C) |
| 42307-8 | 8 pcs. | Ampco Pin Bushings (14139C,14355C) |
| 42268-8 | 8 pcs. | Ampco Pin Bushings (14445) |
| 42385-16 | 16 pcs. | Dowel Bushings 3/8" (14139C,14445) |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" (14355C) |
| 40172 | 1 pc. | Rod Bolt Assembly Lube (14355C,14445) |

STEEL CONNECTING RODS

CHRYSLER 5.7L & 6.1L HEMI

"H" BEAM RODS STANDARD WEIGHT SERIES

- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are premium 7/16" ARP 8740 or optional ARP 2000 cap screws
- ✓ Horsepower range for these rods: 725 H.P. (ARP 8740), 775 H.P. (ARP 2000)



Horsepower range is affected by rpm, stroke and piston weight.

| ARP 8740 Part No. | ARP 2000 Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|-------------------|-------------------|---|------------------|--------------|---------------|---------------|----------|-------------|
| 14085-8 | 14085R-8 | 5.7/6.1L Stock Length w/ SB Chevy .927" pin | 6.240" | 2.252" | .933" | 1.000" | .9281" | 682 |
| 14086-8 | 14086R-8 | 5.7L Stock Length w/ 24mm pin | 6.240" | 2.252" | .933" | 1.000" | .9457" | 681 |
| 14087-8 | 14087R-8 | 6.1L Stock Length w/ 25mm pin | 6.240" | 2.252" | .933" | 1.000" | .9848" | 679 |
| 14055-8 | 14055R-8 | 5.7/6.1L Stroker w/ SB Chevy 2.100" crank journal and .927" pin | 6.125" | 2.225" | .941" | 1.060" | .9281" | 664 |
| 14056-8 | 14056R-8 | 5.7/6.1L Stroker w/ SB Chevy 2.000" crank journal and .927" pin | 6.125" | 2.125" | .941" | 1.060" | .9281" | 642 |
| 14057-8 | 14057R-8 | 5.7/6.1L Stroker w/ SB Chevy 2.000" crank journal and .866" pin | 6.125" | 2.125" | .941" | .930" | .8671" | 640 |

CHRYSLER 5.7L & 6.1L HEMI

PRO SERIES "I" BEAM RODS LIGHTWEIGHT



- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 7/16" ARP 2000 or optional 7/16" ARP Custom Age 625+ cap screws
- ✓ Horsepower range for these rods is 750+ H.P.

Horsepower range is affected by rpm, stroke and piston weight.

NOTE: For part number 14460-8 please specify the wrist pin diameter you intend to run when placing your order. The stock 5.7 HEMI uses a 24mm/.945" wrist pin and the 6.1 HEMI uses a 25mm/.984" wrist pin from the factory. The pistons you are using must have floating pins with a diameter of .927", 24mm/.945", or 25mm/.984".

| Part No. | Description | Center-to Center | Big End Bore | Crank Pin | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|----------|---|------------------|--------------|-----------|---------------|---------------|--------------------------|-------------|
| 14460-8 | 5.7/6.1L Stock Length | 6.240" | 2.252" | 2.126" | .933" | 1.000" | .9281", .9457" or .9848" | 595 |
| 14461-8 | 392 Hemi Drag Pak Crate Engine w/ SB Chevy 2.100" crank journal and .927" pin | 6.200" | 2.225" | 2.100" | .940" | 1.000" | .9281" | 610 |

The above connecting rods are supplied with 1.450" under head length 7/16" ARP 2000 cap screw fasteners P/N 42390. Upgraded 7/16" ARP Custom Age 625+ cap screws P/N 42252 are available. To order upgraded fasteners, affix "R6" after the rod part number.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|--------------------------------------|
| 42354-4 | 4 pcs. | 7/16" ARP 8740 Cap Screws |
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42252-4 | 4 pcs. | 7/16" ARP Custom Age 625+ Cap Screws |
| 42307-8 | 8 pcs. | Ampco Pin Bushings |
| 42244-8 | 8 pcs. | Ampco Pin Bushings (14057) |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |



P/N 14460-8 is NHRA Legal for Stock & Super Stock for the Chrysler/Dodge 5.7L Hemi.



P/N 14461-8 is NHRA Legal for Stock & Super Stock for the Chrysler/Dodge 392 Hemi Drag Pak crate engine.

Note: New part numbers are **ITALICIZED**.

STEEL CONNECTING RODS

CHRYSLER 426 - 440 "H" BEAM RODS

- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are premium 7/16" ARP 8740 or optional ARP 2000 cap screws
- ✓ Horsepower range for these rods: 850 H.P. (ARP 8740), 1200 H.P. (ARP 2000)

Horsepower range is affected by rpm, stroke and piston weight.

| ARP 8740 Part No. | ARP 2000 Part No. | Description | Center-to Center | Big End Bore | Pin Bore | Gram Weight |
|---------------------|-------------------|---|------------------|--------------|----------|-------------|
| CHRYSLER 440 | | | | | | |
| 14074-8 | 14074R-8 | Stock Length w/ .990" pin | 6.765" | 2.500" | .9911" | 887 |
| 14076-8 | 14076R-8 | Stock Length w/ 1.094" pin | 6.765" | 2.500" | 1.0951" | 867 |
| CHRYSLER 426 | | | | | | |
| 14077-8 | 14077R-8 | Stock Length w/ 1.031" pin | 6.865" | 2.500" | 1.0321" | 891 |
| 14080-8 | 14080R-8 | Stock Length w/ .990" pin | 6.865" | 2.500" | .9911" | 903 |
| 14081-8 | 14081R-8 | .235" Longer w/ 1.031" pin and BB Chevy rod journal | 7.100" | 2.325" | 1.0321" | 875 |
| 14082-8 | 14082R-8 | .235" Longer w/ .9911" pin and BB Chevy rod journal | 7.100" | 2.325" | .9911" | 885 |

COMMON FEATURES

| Attribute | Dimension |
|---------------|-----------|
| Big End Width | 1.015" |
| Pin End Width | 1.250" |

Private brand identification available.

P/Ns 14074-8, 14076-8, 14077-8 & 14080-8 are NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|-----------------------------------|
| 42239-4 | 4 pcs. | 7/16" ARP 8740 Cap Screws |
| 42391-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42362-8 | 8 pcs. | Ampco Pin Bushings for 1.031" pin |
| 42381-8 | 8 pcs. | Ampco Pin Bushings for .990" pin |
| 42363-8 | 8 pcs. | Ampco Pin Bushings for 1.094" pin |
| 42316-16 | 16 pcs. | Dowel Bushings 7/16" |

CHRYSLER 426 PRO SERIES "I" BEAM RODS

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 7/16" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 1000+ H.P.

Horsepower range is affected by rpm, stroke and piston weight.

| Part No. | Description | Center-to Center | Big End Bore | Pin Bore | Gram Weight |
|----------|---|------------------|--------------|----------|-------------|
| 14177-8 | Stock Length w/ 1.031" pin | 6.865" | 2.500" | 1.0321" | 905 |
| 14184-8 | .235" Longer w/ 1.031" pin | 7.100" | 2.500" | 1.0321" | 940 |
| 14185-8 | .235" Longer w/ .990" pin | 7.100" | 2.500" | .9911" | 945 |
| 14186-8 | .235" Longer w/ 1.031" pin and BB Chevy rod journal | 7.100" | 2.325" | 1.0321" | 935 |
| 14187-8 | .235" Longer w/ .990" pin and BB Chevy rod journal | 7.100" | 2.325" | .9911" | 940 |

The Big Block Chrysler "I" Beam rods listed above can be fitted with ARP Custom Age 625+ bolts P/N 42397. To order these rods with upgraded bolts, affix an "R6" to the part number.

COMMON FEATURES

| Attribute | Dimension |
|---------------|-----------|
| Big End Width | 1.015" |
| Pin End Width | 1.180" |

P/N 14177-8 is NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|--|
| 42391-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42397-4 | 4 pcs. | 7/16" ARP Custom Age 625+ Cap Screws |
| 42305-8 | 8 pcs. | Ampco Pin Bushings for .990" pin |
| 42388-8 | 8 pcs. | Ampco Pin Bushings for 1.031" pin |
| 42387-16 | 16 pcs. | Dowel Bushings 7/16" (14177, 14184, 14185) |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" (14186, 14187) |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |

STEEL CONNECTING RODS

FORD 2.3L SPORTSMASTER® RODS ESSLINGER TYPE

| Part No. | Description | Center-to-Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|----------|---|------------------|--------------|---------------|---------------|----------|-------------|
| 14117-4 | Modified Ford 2.3 L Esslinger type w/ .927" pin | 5.700" | 2.172" | .990" | .980" | .9281" | 584 |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|--------------------------|
| 42383-4 | 4 pcs. | 3/8" ARP 8740 Cap Screws |
| 42310-8 | 8 pcs. | Ampco Pin Bushings |
| 42385-16 | 16 pcs. | Dowel Bushings 3/8" |



FORD 351 W CASCAR RACING SERIES PRO SERIES "I" BEAM RODS



| Part No. | Description | Center-to-Center | Big End Bore | Crank Pin | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|----------|---|------------------|--------------|-----------|---------------|---------------|----------|-------------|
| 14354C-8 | 351 W Ford Pro Series "I" Beam - Lightweight with standard width SB Chevy bearing | 6.000" | 2.225" | 2.100" | .940" | 1.000" | .9131" | 607 |



P/N 14354C-8 is CASCAR Legal.



REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------|
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42345-8 | 8 pcs. | Ampco Pin Bushings |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |



FORD 429 PRO SERIES "I" BEAM RODS 6.800" CENTER-TO-CENTER

| Part No. | Description | Center-to-Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|----------|-------------|------------------|--------------|---------------|---------------|----------|-------------|
| 14173-8 | Ford 429 | 6.800" | 2.325" | .990" | 1.125" | .9911" | 848 |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------|
| 42391-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42327-8 | 8 pcs. | Ampco Pin Bushings |
| 42387-16 | 16 pcs. | Dowel Bushings 7/16" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |



STEEL CONNECTING RODS

FORD 4.6L MODULAR V-8

"H" BEAM RODS

- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are 3/8" ARP 8740 or optional ARP 2000 cap screws
- ✓ Horsepower range for these rods is 750 H.P.

Horsepower range is affected by rpm, stroke and piston weight.

| ARP 8740 Part No. | ARP 2000 Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|-------------------|-------------------|---|------------------|--------------|---------------|---------------|----------|-------------|
| 14042-8 | 14042R-8 | 4.6 L Stock Length w/ 22 mm pin | 5.933" | 2.239" | .940" | .940" | .8671" | 602 |
| 14043-8 | 14043R-8 | 4.6 L Stock Length w/ .912" pin | 5.933" | 2.239" | .940" | .940" | .9131" | 598 |
| 14044-8 | 14044R-8 | 4.6 L Stroker w/ 22 mm pin and a 2.000" crank journal | 5.850" | 2.125" | .940" | .940" | .8671" | 612 |

Private brand identification available.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---|
| 42383-4 | 4 pcs. | 3/8" ARP 8740 Cap Screws |
| 42350-4 | 4 pcs. | 3/8" ARP 2000 Cap Screws |
| 42302-8 | 8 pcs. | Ampco Pin Bushings for 22 mm and .912" Pins |
| 42260-8 | 8 pcs. | Ampco Pin Bushings (14044) |
| 42274-16 | 16 pcs. | Dowel Bushings 3/8" |

 P/Ns 14042-8 & 14043-8 are NHRA Legal for Stock & Super Stock.



PRO SERIES "I" BEAM

LIGHTWEIGHT

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% magnafluxed
- ✓ Cap fasteners are 7/16" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 800+ H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|----------|---|------------------|--------------|---------------|---------------|----------|-------------|
| 14318-8 | Stock Length w/ 22 mm pin | 5.933" | 2.239" | .940" | .940" | .8671" | 602 |
| 14320-8 | 4.6 L Stroker w/ 22 mm pin and a 2.000" crank journal | 5.850" | 2.125" | .940" | .940" | .8671" | 603 |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------|
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42302-8 | 8 pcs. | Ampco Pin Bushings |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |

 P/N 14318-8 is NHRA Legal for Stock & Super Stock.



STEEL CONNECTING RODS

FORD 5.4L MODULAR V-8 “H” BEAM RODS



- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are 3/8" ARP 8740 or optional ARP 2000 cap screws
- ✓ Horsepower range for these rods is 750 H.P.

Horsepower range is affected by rpm, stroke and piston weight.

| ARP 8740 Part No. | ARP 2000 Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin Bore | Gram Weight |
|-------------------|-------------------|---------------------------------|------------------|--------------|---------------|----------|-------------|
| 14040-8 | 14040R-8 | 5.4 L Stock Length w/ 22 mm pin | 6.657" | 2.239" | .940" | .8671" | 636 |
| 14041-8 | 14041R-8 | 5.4 L Stock Length w/ .912" pin | 6.657" | 2.239" | .940" | .9131" | 629 |

P/N 14040 will also work for the 6.8L V10 modular.

Private brand identification available.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---|
| 42383-4 | 4 pcs. | 3/8" ARP 8740 Cap Screws |
| 42350-4 | 4 pcs. | 3/8" ARP 2000 Cap Screws |
| 42302-8 | 8 pcs. | Ampco Pin Bushings for 22 mm and .912" Pins |
| 42274-16 | 16 pcs. | Dowel Bushings 3/8" |

P/Ns 14040-8 & 14041-8 are NHRA Legal for Stock & Super Stock.



Ford GT Powered by 5.4L Supercharged Modular Engine with Manley H-Beam Steel Connecting Rods

PRO SERIES “I” BEAM RODS LIGHTWEIGHT



- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 7/16" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 800+ H.P.

Horsepower range is affected by rpm, stroke and piston weight.

| Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|----------|---|------------------|--------------|---------------|---------------|----------|-------------|
| 14319-8 | Stock Length w/ 22 mm pin | 6.657" | 2.239" | .940" | .940" | .8671" | 628 |
| 14321-8 | Stock Length w/ 22 mm pin Heavier beam for forced induction applications | 6.657" | 2.239" | .940" | .940" | .8671" | TBA |

P/N 14319 and 14321 will also work for the 6.8L V10 modular.

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------|
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42302-8 | 8 pcs. | Ampco Pin Bushings |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |

P/N 14319-8 is NHRA Legal for Stock & Super Stock.



John Mihovetz

Note: New part numbers are **ITALICIZED**.

STEEL CONNECTING RODS

FORD 5.0L DOHC "COYOTE" V-8

"H" BEAM RODS

- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are 3/8" ARP 8740 or optional ARP 2000 cap screws
- ✓ Horsepower range for these rods is 750 H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| ARP 8740 Part No. | ARP 2000 Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|-------------------|-------------------|---------------------------|------------------|--------------|---------------|---------------|----------|-------------|
| 14042-8 | 14042R-8 | Stock Length w/ 22 mm pin | 5.933" | 2.239" | .940" | .940" | .8671" | 602 |

PRO SERIES "I" BEAM

LIGHTWEIGHT

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% magnafluxed
- ✓ Cap fasteners are 7/16" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 800+ H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|----------|---------------------------|------------------|--------------|---------------|---------------|----------|-------------|
| 14318-8 | Stock Length w/ 22 mm pin | 5.933" | 2.239" | .940" | .940" | .8671" | 602 |

H-BEAM REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|--------------------------|
| 42383-4 | 4 pcs. | 3/8" ARP 8740 Cap Screws |
| 42350-4 | 4 pcs. | 3/8" ARP 2000 Cap Screws |
| 42302-8 | 8 pcs. | Ampco Pin Bushings |
| 42274-16 | 16 pcs. | Dowel Bushings 3/8" |

I-BEAM REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------|
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42302-8 | 8 pcs. | Ampco Pin Bushings |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |

FORD 6.2L SOHC "RAPTOR" V-8

"H" BEAM RODS

- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are 7/16" ARP 8740 or optional ARP 2000 cap screws
- ✓ Horsepower range for these rods is 750 H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| ARP 8740 Part No. | ARP 2000 Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|-------------------|-------------------|---------------------------|------------------|--------------|---------------|---------------|----------|-------------|
| 14045-8 | 14045R-8 | Stock Length w/ .927" pin | 6.200" | 2.239" | .978" | .978" | .9281" | TBA |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------|
| 42354-4 | 4 pcs. | 7/16" ARP 8740 Cap Screws |
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42307-8 | 8 pcs. | Ampco Pin Bushings |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" |

STEEL CONNECTING RODS

FORD 6.2L SOHC "RAPTOR" V-8 PRO SERIES "I" BEAM RODS LIGHTWEIGHT

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining to Mil specs and 100% magnafluxed
- ✓ Cap fasteners are 7/16" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 800+ H.P.

Horsepower range is affected by rpm, stroke and piston weight.



| Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|----------|---------------------------|------------------|--------------|---------------|---------------|----------|-------------|
| 14322-8 | Stock Length w/ .927" pin | 6.200" | 2.239" | .978" | .978" | .9281" | TBA |

REPLACEMENT PARTS

| Part No. | Quantity | Description |
|----------|----------|---------------------------|
| 42390-4 | 4 pcs. | 7/16" ARP 2000 Cap Screws |
| 42307-8 | 8 pcs. | Ampco Pin Bushings |
| 42392-16 | 16 pcs. | Dowel Bushings 7/16" |
| 40172 | 1 pc. | Rod Bolt Assembly Lube |

FORD POWERSTROKE / GM DURAMAX PRO SERIES "I" BEAM RODS

The operating parameters of Hi-Performance Diesel engines bare little resemblance to their OEM counterparts. OEM engines are designed to provide a specific engine output with long-term durability a paramount criterion. Hi-Performance Diesels, on the contrary, are designed to extract the maximum power of a particular engine package. To do so, two key operating parameters are significantly effected; peak cylinder pressure and maximum engine speed. OEM rods are just not designed to handle the stresses that these modified parameters impart on this critical component.

Manley Pro Series "I" Beam rods are designed to survive in this harsh environment. Every aspect, from the pin end surround, to the beam sections and architecture, to the crank bore surround as well as the selection of fasteners and pin bushing material insures these rods are up to the task at hand.

- ✓ Manufactured from 4340 forgings
- ✓ Fully machined to provide the correct balance of strength and weight
- ✓ Shot peened after machining to MIL specs and 100% individually magnafluxed
- ✓ Cap fasteners are either 7/16" ARP-2000 or ARP Custom Age 625+
- ✓ AMPCO 45 wrist pin bushings resist deformation at high cylinder pressures



FORD 7.3L POWERSTROKE

| ARP 2000 Part No. | ARP 625+ Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|-------------------|-------------------|---------------------------|------------------|--------------|---------------|---------------|----------|-------------|
| 14161-8 | 14161R6-8 | Stock Length w/ Stock pin | 7.130" | 2.691" | 1.231" | 1.171" | 1.309" | TBA |

GM 6.6L DURAMAX

| ARP 2000 Part No. | ARP 625+ Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin End Width | Pin Bore | Gram Weight |
|-------------------|-------------------|---------------------------|------------------|--------------|---------------|--|----------|-------------|
| 14163-8 | 14163R6-8 | Stock Length w/ Stock pin | 6.420" | 2.638" | 1.230" | 1.280" Top 1.535" Bottom Trapezoidal Profile | 1.359" | TBA |

STEEL CONNECTING RODS

FORD / HONDA / ACURA / MITSUBISHI / NISSAN / SUBARU / TOYOTA
“H” BEAM & H-PLUS RODS

- ✓ Manufactured from 4340 forgings
- ✓ Heat treated, stress relieved, shot peened and 100% individually magnafluxed
- ✓ Weight matched sets \pm 1.5 grams
- ✓ Cap fasteners are 3/8" ARP 2000 for the "H" Beam and 3/8" ARP Custom Age 625+ for the H-Plus
- ✓ Horsepower range for these rods is 600+ for the H-Beam and 800+ for the H-Plus



| H Beam Part No. | H-Plus Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin Diameter | Pin Bore | Gram Weight |
|-----------------|------------------|---|------------------|--------------|---------------|------------------|----------|-------------|
| 14017-6 | 14017R6-6 | Ford BA Falcon XR6 Turbo 4.0L | 6.058" | 2.239" | .990" | .866" (22mm) | .8671" | TBA |
| 14025-4 | ----- | Integra LS 1.8 non V-Tec DOHC (B18A / B18B 1990-up) | 5.394" | 1.890" | .935" | .827" (21 mm) | .8281" | 520 |
| 14026-4 | ----- | Integra GSR 1.8 V-Tec DOHC (B18C 1994-up) | 5.433" | 1.890" | .858" | .827" (21 mm) | .8281" | 505 |
| 14021-4 | 14021R6-4 | Mitsubishi Eclipse GS, GST, GSX & Eagle Talon TSi 2.0 (6 Bolt 4G63, 4G63T 1990-1993.5) Recommended bearings to be used: ACL 4B1146/H or Clevite® CB-1120AL | 5.905" | 1.890" | 1.115" | .827" (21 mm) | .8281" | 573 |
| 14022-4 | 14022R6-4 | Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006) Recommended bearings to be used: ACL 4B1185/H or Clevite® CB-1643P | 5.905" | 1.890" | 1.038" | .866" (22 mm) | .8671" | 554 |
| 14020-4 | 14020R6-4 | Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) .237" / 6 mm Longer Mitsubishi Evolution VIII, IX (4G63T 2003-2006) | 6.142" | 1.890" | 1.038" | .866" (22 mm) | .8671" | 575 |
| 14029-4 | 14029R6-4 | Mitsubishi EVO X 4B11T (2008-Up) | 5.656" | 2.165" | .860" | .9055" (23 mm) | .9063" | 527 |
| 14023-4 | 14023R6-4 | Nissan 2.0 SR20DE, SR20DET (1991-2002) | 5.365" | 2.008" | .900" | .866" (22 mm) | .8671" | 512 |
| 14028-6 | 14028R6-6 | Nissan RB25DE(T), RB26DETT (Stock 21 mm pin) | 4.783" | 2.008" | .857" | .827" (21 mm) | .8281" | 473 |
| 14018-6 | 14018R6-6 | Nissan RB30E/T | 5.995" | 2.087" | .850" | .827" (21 mm) | .8281" | TBA |
| 14019-6 | 14019R6-6 | Nissan VQ35DE(T) (2002-Up Altima/Maxima and 2003-Up 350Z) | 5.680" | 2.165" | .820" | .866" (22 mm) | .8671" | 510 |
| 14024-4 | 14024R6-4 | Subaru WRX EJ205/STi EJ257 | 5.137" | 2.165" | .840" | .905" (23 mm) | .9063" | 535 |
| 14027-6 | 14027R6-6 | Toyota Supra 3.0 2JZG (1993-1998) | 5.590" | 2.167" | 1.015" | .866" (22 mm) | .8671" | 552 |

CONNECTING RODS

Private brand identification available.

Note: New part numbers are **ITALICIZED**.

STEEL CONNECTING RODS

ACURA / HONDA / DODGE / HYUNDAI / MITSUBISHI / NISSAN / SUBARU / TOYOTA / VW PRO SERIES "I" BEAM RODS TURBO TUFF DESIGN FOR SPORT COMPACTS

- ✓ Forged from 4340 aircraft quality vacuum degassed material (P/N 15403-4 made from 300M material)
- ✓ Shot peened after machining to Mil specs and 100% individually magnafluxed
- ✓ Specifically designed to handle high horsepower applications when using turbos and / or nitrous.
- ✓ Cap fasteners are 3/8" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 1,000+ H.P. (Except P/N 14307-6 which is 600 H.P.)



| Part No. | Description | Center-to Center | Big End Bore | Big End Width | Pin Diameter | Pin Bore | Gram Weight |
|----------|---|-----------------------------|--------------|----------------------|--------------|----------|-------------|
| 14404-4 | Acura RSX 2.0 V-Tec DOHC (K20 2002-up) | 5.472" | 2.008" | .780" .866" (22 mm) | .8671" | .8671" | 550 |
| 14412-4 | Integra LS 1.8 non V-Tec DOHC (B18A / B18B 1990-up) | 5.394" | 1.890" | .935" .827" (21 mm) | .8281" | .8281" | 555 |
| 14414-4 | Integra GS-R 1.8 V-Tec DOHC (B18C 1994-up) | 5.433" | 1.890" | .858" .827" (21 mm) | .8281" | .8281" | 547 |
| 14415-4 | Honda 1.6 V-Tec DOHC (B16A 1992-up) | 5.290" | 1.890" | .935" .827" (21 mm) | .8281" | .8281" | 548 |
| 14405-4 | Honda CRV 2.4 V-Tec DOHC (K24 2002-up) | 5.984" | 2.008" | .780" .866" (22 mm) | .8671" | .8671" | 590 |
| 14417-4 | Honda Prelude 2.2 V-Tec DOHC (H22 1992-up) | 5.636" | 2.008" | .935" .866" (22 mm) | .8671" | .8671" | 614 |
| 14420-4 | Dodge Neon SRT-4 2.4 I4 DOHC | 5.945" | 2.087" | 1.015" .866" (22 mm) | .8671" | .8671" | 697 |
| 14410-4 | Hyundai Genesis Coupe 2.0L Turbo Theta I4 | 5.753" | 2.008" | .860" .866" (22 mm) | .8671" | .8671" | 637 |
| 14413-4 | Mitsubishi Eclipse GS, GST, GSX & Eagle Talon TSi 2.0 (6 Bolt 4G63, 4G63T 1990-1993.5) | 5.905" | 1.890" | 1.115" .827" (21 mm) | .8281" | .8281" | 690 |
| 14403-4 | Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006) | 5.905" | 1.890" | 1.038" .866" (22 mm) | .8671" | .8671" | 675 |
| 15403-4* | Same as the 14403 except made from 300M material | 5.905" | 1.890" | 1.038" .866" (22 mm) | .8671" | .8671" | 685 |
| 14400-4 | Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006) Stroker, lighter weight straight beam design. | 5.905" | 1.890" | 1.038" .866" (22 mm) | .8671" | .8671" | 637 |
| 14421-4 | Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006) | 6.142" .237" / 6 mm Longer | 1.890" | 1.038" .866" (22 mm) | .8671" | .8671" | 694 |
| 14422-4 | Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006) | 6.378" .473" / 12 mm Longer | 1.890" | 1.038" .866" (22 mm) | .8671" | .8671" | 703 |
| 14409-4 | Mitsubishi EVO X 4B11T (2008-Up) | 5.656" | 2.165" | .860" .9055" (23 mm) | .9063" | .9063" | 620 |
| 14408-4 | Nissan 2.0 SR20DE, SR20DET (1991-2002) | 5.365" | 2.008" | .900" .866" (22 mm) | .8671" | .8671" | 574 |
| 14401-4 | Nissan KA24 DE (1991-1999) | 6.495" | 2.086" | .973" .827" (21 mm) | .8281" | .8281" | 656 |
| 14411-6 | Nissan RB25DE(T), RB26DETT (Stock 21 mm pin) | 4.783" | 2.008" | .857" .827" (21 mm) | .8281" | .8281" | 610 |
| 14418-6 | Nissan RB25DE(T), RB26DETT (22 mm pin) | 4.783" | 2.008" | .857" .866" (22 mm) | .8671" | .8671" | 608 |
| 14406-6 | Nissan VQ35DE(T) (2002-Up Altima/Maxima and 2003-Up 350Z) | 5.680" | 2.165" | .820" .866" (22 mm) | .8671" | .8671" | 605 |
| 14416-4 | Subaru WRX EJ205/STI EJ257 | 5.141" | 2.165" | .840" .9055" (23 mm) | .9063" | .9063" | 613 |
| 14419-4 | Toyota Scion 2.4 2AZFE | 5.886" | 2.008" | .784" .866" (22 mm) | .8671" | .8671" | 582 |
| 14402-6 | Toyota Supra 3.0 2JZG (1993-1998) | 5.590" | 2.167" | 1.015" .866" (22 mm) | .8671" | .8671" | 705 |
| 14307-6 | Volkswagen VR6 2.8L Lighter weight design utilizing 5/16" ARP 2000 cap fasteners | 6.460" | 2.237" | 786" .787" (20 mm) | .7874" | .7874" | 542 |

All Turbo Tuff series rods (except P/N 14307-6) can be fitted with ARP 625+ bolts. To order, affix an "R6" to the part number. Horsepower range for these rods is 1,200 H.P.

* Horsepower range for these rods is 1,300+ H.P. with ARP 2000 fasteners and 1,500 H.P. with ARP 625+ fasteners

CRANKSHAFTS & ROTATING ASSEMBLIES

350-400-454 CHEVROLETS (2 PIECE REAR SEAL)

4340 NON-TWIST FORGINGS

LIGHTWEIGHT DESIGN

400 SB, 454 BB DESIGNED FOR INTERNAL BALANCE

- ✓ Heat Treated, Stress Relieved, Shot Peened, Nitrided, and 100% Magnafluxed
- ✓ Micro Polished Large .125" Radius Journals (Narrowed Rod Bearings Required)

| Part No. | Engine Type | Stroke | Minimum Rod Length | Main Journal Diameter | Rod Journal Diameter | Bobweight (grams) | Total Weight (lbs.) |
|----------------------------------|-------------|--------|--------------------|-----------------------|----------------------|-------------------|---------------------|
| 350 MAIN JOURNAL DIAMETER | | | | | | | |
| 190190 | 350 | 3.480" | 6.000" | 2.450" | 2.100" | 1750 | 45-47 |
| 190150 | 350/400 | 3.750" | 6.000" | 2.450" | 2.100" | 1800 | 49-51 |
| 190130 | 350/400 | 4.000" | 6.000" | 2.450" | 2.100" | 1800 | 49-51 |
| 454 MAIN JOURNAL DIAMETER | | | | | | | |
| 190170 | 454 | 4.000" | 6.135" | 2.750" | 2.200" | 2350 | 64-66 |
| 190140 | 454 | 4.250" | 6.385" | 2.750" | 2.200" | 2350 | 64-66 |
| 190220 | 454 | 4.500" | 6.385" | 2.750" | 2.200" | TBA | 65-67 |

350-400-454 CHEVROLETS COMPETITION ROTATING ASSEMBLIES

- ✓ Lightweight 4340 Forged Steel Crankshaft, 400 SB and 454 BB Designed for Internal Balance
- ✓ 4340 Forged Steel "H" Beam Connecting Rods with 7/16" ARP 8740 or optional ARP 2000 Cap Screws*
- ✓ 2618 Forged Aluminum Platinum Series Pistons with Premium Chrome Moly Wrist Pins
- ✓ Total Seal® Piston Rings & High Performance Clevite® "H" Series Rod (narrowed) and "P" Series Main Engine Bearings
- ✓ SB Chevy Horsepower range is 750 with the ARP 8740 and 1,500 with the optional ARP 2000 Cap Screws
- ✓ BB Chevy Horsepower range is 900 with the ARP 8740 and 1,500 with the optional ARP 2000 Cap Screws

* Kit number 2908 is supplied with our Pro Series Lightweight I Beam with 7/16" ARP 2000 Cap Screws.

NOTE: The 350 and 400 Small Block rotating assemblies listed below are unbalanced. For a balanced assembly please also order part number 04000.

NOTE: The Big Block 4.000" and 4.250" stroke rotating assemblies are balanced. The 4.500" stroke rotating assemblies are unbalanced.

For a balanced assembly please also order part number 04000.

| Part No. | Engine Type | CID | Crank Stroke @ .030 | Crank Number | Rod Length | Rod Number | Piston Type | STD. Bore | Piston Number | Bore Sizes Available | Compression Ratio | Piston Ring Numbers | Piston Ring Package |
|---|-------------|--------|---------------------|--------------|------------|------------|-------------|-----------|---------------|----------------------|-------------------|---------------------|---------------------|
| 350 BLOCK WITH 350 MAIN JOURNAL DIAMETER | | | | | | | | | | | | | |
| 2907 | 350 | 3.480" | 355 | 190190 | 6.000" | 14054 | Flat -4cc | 4.000" | 5906 | 30 35 40 | 9.8 | 9.2 | 8.2 4635 3 54 |
| 2908 | 350 | 3.480" | 355 | 190190 | 6.000" | 14354 | Flat -4cc | 4.000" | 5906 | 30 35 40 | 9.8 | 9.2 | 8.2 4635 3 54 |
| 2900 | 350 | 3.750" | 383 | 190150 | 6.000" | 14054 | Dish -15cc | 4.000" | 5909 | 30 35 40 | 10.4 | 9.8 | 8.8 4635 3 54 |
| 2901 | 350 | 3.750" | 383 | 190150 | 6.000" | 14054 | Flat -4cc | 4.000" | 5908 | 30 35 40 | 11.9 | 11.0 | 9.7 4635 3 54 |
| 2909 | 350 | 3.750" | 383 | 190150 | 6.000" | 14054 | Dome +10cc | 4.000" | 5914 | 30 35 40 | 14.5 | 13.2 | 11.3 4622 3 54 |
| (Gas Ported) | | | | | | | | | | | | | |
| 400 BLOCK WITH 350 MAIN JOURNAL DIAMETER | | | | | | | | | | | | | |
| 2902 | 400 | 4.000" | 434 | 190130 | 6.000" | 14054 | Dish -20cc | 4.125" | 5939 | 00 30 | 11.0 | 10.4 | 9.3 4616 0 3 |
| 2903 | 400 | 4.000" | 434 | 190130 | 6.000" | 14054 | Dome +4cc | 4.125" | 5938 | 00 30 | 14.7 | 13.6 | 11.8 4616 0 3 |
| BIG BLOCK CHEVROLET | | | | | | | | | | | | | |
| 2904 | BBC | 4.000" | 516 | 190170 | 6.135" | 14060 | Dome +2cc | 4.500" | 6968 | 00 30 | 9.4 | 9.0 | 8.7 4645 0 3 |
| 2905 | BBC | 4.250" | 548 | 190140 | 6.385" | 14062 | Dish -20cc | 4.500" | 6967 | 00 30 60 | 8.7 | 8.4 | 8.1 4645 0 3 6 |
| 2906 | BBC | 4.250" | 548 | 190140 | 6.385" | 14062 | Dome +42cc | 4.500" | 6978 | 00 30 60 | 14.2 | 13.3 | 12.5 4655 0 3 6 |
| (Gas Ported) | | | | | | | | | | | | | |
| 2910 | BBC | 4.500" | 580 | 190220 | 6.535" | 14066 | Flat -3cc | 4.500" | 6961 | 00 30 60 | 10.2 | 9.8 | 9.4 4645 0 3 6 |
| 2911 | BBC | 4.500" | 580 | 190220 | 6.535" | 14066 | Dome +42cc | 4.500" | 6975 | 00 30 60 | 15.2 | 14.2 | 13.4 4655 0 3 6 |
| (Gas Ported) | | | | | | | | | | | | | |

Add an "R" to the assembly part number to order the optional ARP 2000 rod bolt upgrade.

BEARING CHART

| Engine Type | Clevite® "H" Series Rod Bearings | Clevite® "P" Series Main Bearings |
|-------------|----------------------------------|-----------------------------------|
| SB Chevy | 30010 | 33010 |
| BB Chevy | 30040 | 33040 |

Note: New part numbers are **ITALICIZED**.

CHEVROLET "LS" CRANKSHAFTS

Manley Performance is proud to introduce our new line of "PRO SERIES" crankshafts specifically designed for the CHEVROLET LS market... The perfect compliment to our existing product range of LS pistons and connecting rods. Why shop anywhere else when you can bullet-proof your LS engine's bottom-end with quality Manley components?

- ✓ Lightweight (LW) and Super Lightweight (SLW) designs
- ✓ 4340 material forgings
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Micro polished large .125" radius journals (narrowed bearings required)
- ✓ Available with either 24 or 58 tooth reluctor wheel
- ✓ Gun drilled mains and lightened rod journals for weight reduction
- ✓ Counterweights fully profiled

| Part No. | Design LW or SLW | Reluctor Wheel 24 or 58 Tooth | Stroke | Minimum Rod Length | Main Journal Diameter | Rod Journal Diameter | Bobweight (grams) | Total Weight (lbs.) |
|--------------------------|---------------------|----------------------------------|--------|-----------------------|--------------------------|-------------------------|----------------------|------------------------|
| LIGHTWEIGHT | | | | | | | | |
| 190024 | LW | 24 | 4.000" | 6.125" | 2.559" | 2.100" | 1730 | 50-52 |
| 190058 | LW | 58 | 4.000" | 6.125" | 2.559" | 2.100" | 1730 | 50-52 |
| SUPER LIGHTWEIGHT | | | | | | | | |
| 190124 | LW | 24 | 4.100" | 6.125" | 2.559" | 2.100" | 1730 | 50-52 |
| 190158 | LW | 58 | 4.100" | 6.125" | 2.559" | 2.100" | 1730 | 50-52 |
| 190324 | SLW | 24 | 4.000" | 6.125" | 2.559" | 2.100" | 1686 | 46-48 |
| 190358 | SLW | 58 | 4.000" | 6.125" | 2.559" | 2.100" | 1686 | 46-48 |



CUSTOM ROTATING ASSEMBLIES

With the introduction of our outstanding new line of Pro Series LS crankshafts, we have the ability to offer our customers complete rotating assemblies utilizing Manley Platinum Series pistons and Manley H-Beam or Pro Series I-Beam connecting rods.

Ordering a Manley LS rotating assembly is as easy as 1-2-3.....

1. Choose your crankshaft part number based on stroke, weight, and reluctor wheel and order the corresponding Rod and Main bearing part numbers shown.
2. Choose your connecting rod part number.
3. Choose your piston part number based on bore size and desired compression ratio and the corresponding piston ring part number.

Ordering all of the required components for your LS rotating assembly from Manley will result in extra \$ savings. Please contact your Manley representative for more details.

Order P/N 04000 if you require Manley to perform balancing.

CRANKS

- ✓ Super Lightweight and Lightweight 4340 material forgings
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Micro polished large .125" radius journals
- ✓ Available with either 24 or 58 tooth reluctor wheels
- ✓ Gun drilled mains and lightened rod journals for weight reduction
- ✓ Counterweights fully profiled

RODS

- ✓ Lightweight design 4340 material forgings
- ✓ Fully machined, heat treated, stress relieved, shot peened, and 100% magnafluxed
- ✓ Big and small end bores are final honed to a tolerance of $\pm .0002"$
- ✓ Bend and twist is tightly controlled
- ✓ Weight matched to +/- 1.5 grams
- ✓ H-Lite comes standard with 3/8" ARP 2000 bolts
- ✓ H-Beam comes standard with 7/16" ARP 8740 bolts (affix an R suffix for ARP 2000 bolt upgrade)
- ✓ I-Beam comes standard with 7/16" ARP 2000 bolts (affix an R6 suffix for ARP 625+ bolt upgrade)

PISTONS

- ✓ High strength 2618 alloy forgings
- ✓ Exacting ring groove squareness to cylinder wall provides maximum horsepower.
- ✓ Offset wrist pin design
- ✓ Moly coated skirts

RINGS

- ✓ 1.5 x 1.5 x 3mm Total Seal (moly in-lay tops standard)
- ✓ Premium steel top rings are optional (affix ST suffix)

BEARINGS

- ✓ Premium Clevite® "H" Series narrowed rod bearings and "P" Series main bearings

SMALL BLOCK CHEVROLET LS SERIES

SUPER LIGHTWEIGHT 1686gm. BOBWEIGHT 4.000" STROKE CRANKS

| Crank P/N Reluctor Wheel | Piston Part No. | Piston Description | Ring Part No. | Compression 64cc | Compression 66cc | Compression 70cc | Compression 72cc | Balance Req. (Y/N) H-Lite |
|--|---|--|---|---------------------|---------------------|---------------------|---------------------|------------------------------|
| 190324 24 Tooth or 190358 58 Tooth | 592207C-8 592605C-8 592630C-8 592670C-8 | 3.905/-4cc F/T 4.005/-4cc F/T 4.030/-4cc F/T 4.070/-4cc F/T | 46107-8 46110-8 46113-8 46117-8 | 11.2 | 11.0 | 10.4 | 10.2 | Y |
| | 592300C-8 592305C-8 | 4.125/-5cc F/T 4.130/-5cc F/T | 46360-8 46360-8 | 12.3 | 12.0 | 11.5 | 11.3 | N |
| | 592701C-8 592705C-8 | 4.001/-10cc Dish 4.005/-10cc Dish | 46110-8 46110-8 | 10.8 | 10.6 | 10.1 | 9.9 | Y |
| | 592730C-8 592765C-8 592770C-8 | 4.030/-10cc Dish 4.065/-10cc Dish 4.070/-10cc Dish | 46113-8 46116-8 46117-8 | 11.1 | 10.8 | 10.3 | 10.1 | N |
| 14031-8 6.125" H-Lite | 592400C-8 592405C-8 | 4.125/-11cc Dish 4.130/-11cc Dish | 46360-8 46360-8 | 11.5 | 11.3 | 10.8 | 10.6 | N |
| | 592807C-8 592805C-8 592830C-8 592865C-8 592870C-8 | 3.905/-29cc Dish 4.005/-29cc Dish 4.030/-29cc Dish 4.065/-29cc Dish 4.070/-29cc Dish | 46107-8 46110-8 46113-8 46116-8 46117-8 | 8.7 | 8.5 | 8.2 | 8.1 | Y |
| 30010 Rod & 33030 Main | 592900C-8 592905C-8 | 4.125/-29cc Dish 4.130/-29cc Dish | 46360-8 46360-8 | 9.6 | 9.4 | 9.1 | 9.0 | N |

CUSTOM ROTATING ASSEMBLIES

SMALL BLOCK CHEVROLET LS SERIES

LIGHTWEIGHT 1730gm. BOBWEIGHT 4.000" STROKE CRANKS

| Crank P/N Reluctor Wheel | Piston Part No. | Piston Description | Ring Part No. | 64cc | Compression 66cc | Ratio 70cc | 72cc | Balance H-Beam | Req. (Y/N) I-Beam |
|--|--------------------|-----------------------|------------------|------|---------------------|---------------|------|-------------------|----------------------|
| 190024 24 Tooth or 190058 58 Tooth | 592207C-8 | 3.905/-4cc F/T | 46107-8 | 11.2 | 11.0 | 10.4 | 10.2 | Y | Y |
| | 592605C-8 | 4.005/-4cc F/T | 46110-8 | 11.7 | 11.4 | 10.9 | 10.7 | N | N |
| | 592630C-8 | 4.030/-4cc F/T | 46113-8 | 11.9 | 11.6 | 11.1 | 10.9 | N | N |
| | 592670C-8 | 4.070/-4cc F/T | 46117-8 | 12.1 | 11.8 | 11.3 | 11.1 | N | N |
| Rod P/N Description | 592300C-8 | 4.125/-5cc F/T | 46360-8 | 12.3 | 12.0 | 11.5 | 11.3 | N | N |
| | 592305C-8 | 4.130/-5cc F/T | 46360-8 | 12.4 | 12.1 | 11.6 | 11.4 | N | N |
| 14051-8 6.125" H-Beam or 14359-8 6.125" I-Beam | 592701C-8 | 4.001/-10cc Dish | 46110-8 | 10.8 | 10.6 | 10.1 | 9.9 | N | N |
| | 592705C-8 | 4.005/-10cc Dish | 46110-8 | 10.9 | 10.7 | 10.2 | 10.0 | N | N |
| | 592730C-8 | 4.030/-10cc Dish | 46113-8 | 11.1 | 10.8 | 10.3 | 10.1 | N | N |
| | 592765C-8 | 4.065/-10cc Dish | 46116-8 | 11.3 | 11.0 | 10.5 | 10.3 | N | N |
| | 592770C-8 | 4.070/-10cc Dish | 46117-8 | 11.4 | 11.1 | 10.6 | 10.4 | N | N |
| Bearing P/N Description | 592400C-8 | 4.125/-11cc Dish | 46360-8 | 11.5 | 11.3 | 10.8 | 10.6 | N | N |
| | 592405C-8 | 4.130/-11cc Dish | 46360-8 | 11.6 | 11.4 | 10.9 | 10.5 | N | N |
| 30010 Rod & 33030 Main | 592807C-8 | 3.905/-29cc Dish | 46107-8 | 8.7 | 8.5 | 8.2 | 8.1 | Y | Y |
| | 592805C-8 | 4.005/-29cc Dish | 46110-8 | 9.1 | 8.9 | 8.6 | 8.5 | N | Y |
| | 592830C-8 | 4.030/-29cc Dish | 46113-8 | 9.2 | 9.0 | 8.7 | 8.6 | N | N |
| | 592865C-8 | 4.065/-29cc Dish | 46116-8 | 9.3 | 9.1 | 8.8 | 8.7 | N | N |
| | 592870C-8 | 4.070/-29cc Dish | 46117-8 | 9.4 | 9.2 | 8.9 | 8.8 | N | N |
| | 592900C-8 | 4.125/-29cc Dish | 46360-8 | 9.6 | 9.4 | 9.1 | 9.0 | N | N |
| | 592905C-8 | 4.130/-29cc Dish | 46360-8 | 9.7 | 9.5 | 9.2 | 9.1 | N | N |

SMALL BLOCK CHEVROLET LS SERIES

LIGHTWEIGHT 1730gm. BOBWEIGHT 4.100" STROKE CRANKS

| Crank P/N Reluctor Wheel | Piston Part No. | Piston Description | Ring Part No. | 64cc | Compression 66cc | Ratio 70cc | 72cc | Balance H-Beam | Req. (Y/N) I-Beam |
|--|--------------------|-----------------------|------------------|------|---------------------|---------------|------|-------------------|----------------------|
| 190124 24 Tooth or 190158 58 Tooth | 596505C-8 | 4.005/-10cc Dish | 46110-8 | 11.1 | 10.9 | 10.5 | 10.3 | N | Y |
| | 596565C-8 | 4.065/-10cc Dish | 46116-8 | 11.4 | 11.2 | 10.7 | 10.5 | N | N |
| | 596570C-8 | 4.070/-10cc Dish | 46117-8 | 11.5 | 11.3 | 10.8 | 10.6 | N | N |
| Rod P/N Description | 596600C-8 | 4.125/-11cc Dish | 46360-8 | 11.6 | 11.4 | 10.9 | 10.7 | N | N |
| | 596605C-8 | 4.130/-11cc Dish | 46360-8 | 11.7 | 11.5 | 11.0 | 10.8 | N | N |
| 14051-8 6.125" H-Beam or 14359-8 6.125" I-Beam | 596705C-8 | 4.005/-31cc Dish | 46110-8 | 9.1 | 9.0 | 8.7 | 8.5 | N | Y |
| | 596765C-8 | 4.065/-31cc Dish | 46116-8 | 9.3 | 9.2 | 8.9 | 8.7 | N | N |
| | 596770C-8 | 4.070/-31cc Dish | 46117-8 | 9.4 | 9.3 | 9.0 | 8.8 | N | N |
| | 596800C-8 | 4.125/-31cc Dish | 46360-8 | 9.6 | 9.4 | 9.1 | 9.0 | N | N |
| | 596805C-8 | 4.130/-31cc Dish | 46360-8 | 9.7 | 9.5 | 9.2 | 9.1 | N | N |
| Bearing P/N Description | | | | | | | | | |
| 30010 Rod & 33030 Main | | | | | | | | | |

CRANKSHAFTS & ROTATING ASSEMBLIES

CHRYSLER 5.7L/6.1L HEMI

4340 FORGED CRANKSHAFTS

Manley Performance is proud to introduce our “PRO SERIES” stroker crankshaft designed for the small block HEMI engine... Manufactured from a premium 4340 steel forging, these cranks feature a 4.050" stroke which can turn your 5.7L into a 392 c.i. engine and your 6.1L into a 426 c.i. engine. The Manley 4.050" stroke HEMI crankshaft features small block Chevy small journal (2.000") crank pin diameters and widths. This provides taller “side walls” on the crankshaft rod journals for better oil control and reduced windage. The counterweights are profiled for 6.125" length connecting rods. All crankshafts are shipped with either a 32 tooth or 58 tooth reluctor wheel installed.

- ✓ 4340 material forging
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Micro polished large .125" radius journals (narrowed rod bearings required)
- ✓ Dual keyed post for supercharger drive pulleys
- ✓ Gun drilled mains and lightened rod journals for weight reduction
- ✓ Counterweights fully profiled

| Part No. | Reluctor Wheel 32 or 58 Tooth | Stroke | Bobweight (grams) | Total Weight (lbs.) |
|----------|----------------------------------|--------|----------------------|------------------------|
| 191832 | 32 | 4.050" | 1700 | 49-51 |
| 191858 | 58 | 4.050" | 1700 | 49-51 |

NOTE: All 2008 and earlier 5.7L and all 6.1L have a 32 tooth reluctor wheel. All 2009 and later 5.7L have a 58 tooth reluctor wheel.



With the introduction of our new “PRO SERIES” 4.050" stroke small block HEMI crankshaft, we have the ability to offer our customers complete rotating assemblies utilizing Manley Platinum Series pistons and Manley H-Beam or Pro Series I-Beam connecting rods.

ORDERING INFORMATION

Ordering a Manley SB HEMI rotating assembly is as easy as 1-2-3...

1. Choose your crankshaft part number based on required reluctor wheel for your vehicle and order the corresponding rod and main bearing part numbers shown.
2. Choose your connecting rod part number.
3. Choose your piston part number based on bore size and desired compression ratio and the corresponding piston ring part number.

Ordering all of the required components for your SB HEMI rotating assembly from Manley will result in extra \$ savings. Please contact your Manley representative for more details.

Order P/N 04000 if you require Manley to perform balancing.

CUSTOM ROTATING ASSEMBLIES

CRANKS

- ✓ Lightweight 4340 material forging
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Micro polished large .125" radius journals
- ✓ Available with either 32 or 58 tooth reluctor wheels
- ✓ Gun drilled mains and lightened rod journals for weight reduction
- ✓ Counterweights fully profiled

RODS

- ✓ Lightweight design 4340 material forgings
- ✓ Fully machined, heat treated, stress relieved, shot peened, and 100% magnafluxed
- ✓ Big and small end bores are final honed to a tolerance of $\pm .0002"$
- ✓ Bend and twist is tightly controlled
- ✓ Weight matched to +/- 1.5 grams
- ✓ H-Beam comes standard with 7/16" ARP 8740 bolts (affix an R suffix for ARP 2000 bolt upgrade)
- ✓ I-Beam comes standard with 7/16" ARP 2000 bolts (affix an R6 suffix for ARP 625+ bolt upgrade)

PISTONS

- ✓ High strength 2618 alloy forgings
- ✓ Exacting ring groove squareness to cylinder wall provides maximum horsepower.
- ✓ Offset wrist pin design
- ✓ Moly coated skirts

RINGS

- ✓ 1.5 x 1.5 x 3mm Total Seal (moly in-lay tops standard)
- ✓ Premium steel top rings are optional (affix ST suffix)

BEARINGS

- ✓ Premium Clevite® "H" Series narrowed rod bearings and "P" Series main bearings

SMALL BLOCK CHRYSLER 5.7L HEMI SERIES

LIGHTWEIGHT 1700gm. BOBWEIGHT 4.050" STROKE CRANKS

| Crank P/N Reluctor Wheel | Piston Part No. | Piston Description | Ring Part No. | Compression Ratio | | | Balance Req. (Y/N) | |
|---|--------------------|-----------------------|------------------|-------------------|-------|--------|--------------------|-----------|
| | | | | 85cc | 65cc | 74.5cc | H-Beam | LW I-Beam |
| 191832 32 Tooth or 191858 58 Tooth | 597200C-8 | 3.917/-1.5cc F/T | 46120-8 | 9.63 | 12.00 | 10.73 | Y | N |
| | 597205C-8 | 3.922/-1.5cc F/T | 46121-8 | 9.65 | 12.03 | 10.75 | Y | N |
| | 597220C-8 | 3.937/-1.5cc F/T | 46122-8 | 9.72 | 12.11 | 10.83 | Y | N |
| Rod P/N Description | 597300C-8 | 3.917/-14cc Dish | 46120-8 | 8.60 | 10.39 | 9.45 | Y | Y |
| | 597305C-8 | 3.922/-14cc Dish | 46121-8 | 8.62 | 10.41 | 9.47 | Y | Y |
| | 597320C-8 | 3.937/-14cc Dish | 46122-8 | 8.68 | 10.48 | 9.53 | Y | N |
| 14056-8 6.125" H-Beam or 14455-8 6.125" LW I-Beam | Bearing P/N | Description | | | | | | |
| | 30020 | Rod | | | | | | |
| | 33050 | Main | | | | | | |

SMALL BLOCK CHRYSLER 6.1L HEMI SERIES

LIGHTWEIGHT 1700gm. BOBWEIGHT 4.050" STROKE CRANKS

| Crank P/N Reluctor Wheel | Piston Part No. | Piston Description | Ring Part No. | Compression Ratio | | Balance Req. (Y/N) | |
|---|--------------------|-----------------------|------------------|-------------------|--------|--------------------|-----------|
| | | | | 74.5cc | 74.5cc | H-Beam | LW I-Beam |
| 191832 32 Tooth or 191858 58 Tooth | 597860C-8 | 4.060/-1.5cc F/T | 46116-8 | 11.07 | | N | N |
| | 597865C-8 | 4.065/-1.5cc F/T | 46116-8 | 11.10 | | N | N |
| | 597880C-8 | 4.080/-1.5cc F/T | 46118-8 | 11.17 | | N | N |
| Rod P/N Description | 597960C-8 | 4.060/-31cc Dish | 46116-8 | 8.49 | | N | N |
| | 597965C-8 | 4.065/-31cc Dish | 46116-8 | 8.50 | | N | N |
| | 597980C-8 | 4.080/-31cc Dish | 46118-8 | 8.56 | | N | N |
| 14056-8 6.125" H-Beam or 14455-8 6.125" LW I-Beam | Bearing P/N | Description | | | | | |
| | 30020 | Rod | | | | | |
| | 33050 | Main | | | | | |

CRANKSHAFTS

MITSUBISHI 4G63/4G64 7 BOLT CRANKSHAFTS

FORGED "RACE SERIES" FOR STREET / STRIP

- ✓ Premium heat treated forgings
- ✓ Special teardrop, diagonal oiling features not found on stock OEM style cranks
- ✓ Better performance at High RPM
- ✓ Stress Relieved & Shot Peened
- ✓ Nitrided ✓ 100% Magnafluxed



| Forged Part No. | Stroke | Weight |
|-----------------|--------|----------|
| 190100 | 88mm | 33.5 lbs |
| 190120 | 100mm | 37 lbs |

FULLY MACHINED "TURBO TUFF SERIES" BILLET FOR HIGH HORSEPOWER / HIGH BOOSTED APPLICATIONS

- ✓ 4340 Billet
- ✓ Multi-step heat treatment process
- ✓ Stress Relieved and Shot Peened
- ✓ Nitrided
- ✓ 100% Magnafluxed
- ✓ Special teardrop diagonal oiling
- ✓ Knife-edged counterweights



| Billet Part No. | Stroke | Weight |
|-----------------|--------|----------|
| 190110B | 94mm | 32.5 lbs |
| 190120B | 100mm | 33.5 lbs |

MITSUBISHI 4B11T (EVO X) STROKER CRANKSHAFTS

FULLY MACHINED "TURBO TUFF SERIES" BILLET FOR HIGH HORSEPOWER / HIGH BOOSTED APPLICATIONS

| Billet Part No. | Stroke | Weight |
|-----------------|--------|--------|
| 190230B | 94mm | 33 lbs |

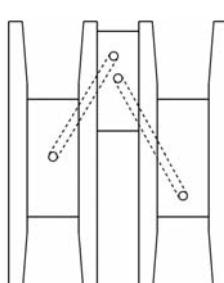


SUBARU EJ20/EJ25 CRANKSHAFTS

FULLY MACHINED "TURBO TUFF SERIES" BILLET FOR HIGH HORSEPOWER/HIGH BOOSTED APPLICATIONS

- ✓ 4340 Billet
- ✓ Multi-step heat treatment process
- ✓ Stress Relieved and Shot Peened
- ✓ Nitrided
- ✓ 100% Magnafluxed
- ✓ Knife-edged counterweights
- ✓ Center gun drilled
- ✓ "Direct Shot" dual main priority rod journal oiling
- ✓ Gun drilled crank pin and counterweights

| Part No. | Stroke | Weight |
|----------|--------|-----------|
| 190160B | 75mm | 19.5 lbs |
| 190040B | 79mm | 19.75 lbs |
| 190060B | 83mm | 21 lbs |



Create your own "Bullet-Proof" Mitsubishi and Subaru Rotating Assemblies with Manley H-Beam, H-Plus or Turbo Tuff Connecting Rods and Manley Platinum Series Pistons

CUSTOM ROTATING ASSEMBLIES

Ordering a Manley Mitsubishi or Subaru Rotating Assembly is as easy as 1-2-3....

1. Choose your Crankshaft part number based on stroke and style (for Mitsubishi either Forged Race Series or Turbo Tuff Billet) and order the corresponding Rod and Main bearing part numbers shown.
2. Choose your connecting rod part number.
3. Choose your piston part number based on desired bore size and compression ratio (piston pins, locks and rings are included).

Ordering all of the required components for your rotating assembly from Manley will result in extra \$ savings. Please contact your Manley representative for more details.

CRANKS

- ✓ Premium heat treated forgings or lightweight 4340 billet
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Fully profiled knife-edged counterweights on the billet forgings

RODS

- ✓ 4340 material forgings or aircraft quality 300M material for extreme boost
- ✓ Fully machined, heat treated, stress relieved, shot peened, and 100% magnafluxed
- ✓ Big and small end bores are final honed to a tolerance of ± .0002"
- ✓ Bend and twist is tightly controlled
- ✓ Weight matched to +/- 1.5 grams
- ✓ H-Beam comes standard with 3/8" ARP 2000 bolts
- ✓ H-Plus comes standard with 3/8" ARP 625+ bolts
- ✓ I-Beam and 300M comes standard with 3/8" ARP 2000 bolts
(affix an R6 suffix for ARP 625+ bolt upgrade)

PISTONS

- ✓ High strength 2618 alloy forgings
- ✓ Exacting ring groove squareness to cylinder wall provides maximum horsepower
- ✓ Offset wrist pin design
- ✓ Moly coated skirts

RINGS

- ✓ 1.2 x 1.2 x 2.8mm 4G63/4G64/EJ20
- ✓ 1.2 x 1.2 x 2.0mm EJ25
- ✓ Total Seal steel tops standard
- ✓ Rings included in piston kits

BEARINGS

- ✓ Premium ACL Race Series with narrowed rod bearings

MITSUBISHI 4G63 7 BOLT STD STROKE SERIES 2.0L FORGED "RACE SERIES" 88MM STROKE CRANK w/ 150MM RODS

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio | |
|-------------------------|--|--|--|--|-------------------|----------|
| | | | | | 47cc DSM | 43cc EVO |
| 190100 Forged | 14022-4 150mm H-Beam or 14022R6-4 | 30060 Rod & 33060 | 606000C-4 606005C-4 606010C-4 606015C-4 606020C-4 | 85mm/-12cc Dish 85.5mm/-12cc Dish 86mm/-12cc Dish 86.5mm/-12cc Dish 87mm/-12cc Dish | 8.5 | 9.0 |
| | 150mm H-Plus or 14400-4 | Mains w/o Thrusts or 33060T | 606100C-4 606105C-4 606110C-4 606115C-4 606120C-4 | 85mm/-8cc Dish 85.5mm/-8cc Dish 86mm/-8cc Dish 86.5mm/-8cc Dish 87mm/-8cc Dish | 9.0 | 9.5 |
| | 150mm LW I-Beam or 14403-4 | | 606200C-4 606205C-4 606210C-4 606215C-4 606220C-4 | 85mm/-2.5cc Flat Top 85.5mm/-2.5cc Flat Top 86mm/-2.5cc Flat Top 86.5mm/-2.5cc Flat Top 87mm/-2.5cc Flat Top | 10.0 | 10.5 |
| | 150mm TT I-Beam or 15403-4 | | | | | |
| | 150mm 300M I-Beam | | | | | |
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MITSUBISHI 4G63 7 BOLT STD STROKE SERIES 2.0L FORGED "RACE SERIES" 88MM STROKE CRANK w/ 156MM RODS

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio | |
|-------------------------|--|--|--|---|-------------------|----------|
| | | | | | 47cc DSM | 43cc EVO |
| 190100 Forged | 14020-4 156mm H-Beam or 14020R6-4 | 30060 Rod & 33060 | 617000C-4 617005C-4 617010C-4 617015C-4 617020C-4 | 85mm/-12cc Dish 85.5mm/-12cc Dish 86mm/-12cc Dish 86.5mm/-12cc Dish 87mm/-12cc Dish | 8.5 | 9.0 |
| | 156mm H-Plus or 14421-4 | Mains w/o Thrusts or 33060T | 617020C-4 | | | |
| | 156mm TT I-Beam | | | | | |
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NOTE: "LW" signifies "Lightweight" design rod and "TT" signifies "Turbo Tuff" design rod

Note: New part numbers are **ITALICIZED**.

CUSTOM ROTATING ASSEMBLIES

MITSUBISHI 4G63 7 BOLT STROKER SERIES 2.1L

"TURBO TUFF" BILLET 94MM STROKE CRANKS w/ 150MM RODS

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 47cc DSM | 43cc EVO |
|-------------------|---|--|--|---|---|---|
| 190110B Billet | 14022-4 150mm H-Beam or 14022R6-4 150mm H-Plus or 14400-4 150mm LW I-Beam or 14403-4 150mm TT I-Beam or 15403-4 150mm 300M I-Beam | 30060 Rod & 33060 Mains w/o Thrusts or 33060T Mains w/ Thrusts | 618000C-4 618005C-4 618010C-4 618015C-4 618020C-4 618200C-4 618205C-4 618210C-4 618215C-4 618220C-4 | 85mm/-17cc Dish 85.5mm/-17cc Dish 86mm/-17cc Dish 86.5mm/-17cc Dish 87mm/-17cc Dish 85mm/-8cc Dish 85.5mm/-8cc Dish 86mm/-8cc Dish 86.5mm/-8cc Dish 87mm/-8cc Dish | 8.5 8.5 8.5 8.5 8.5 10.0 10.0 10.0 10.0 10.0 | 9.0 9.0 9.0 9.0 9.0 10.5 10.5 10.5 10.5 10.5 |

MITSUBISHI 4G63 7 BOLT STROKER SERIES 2.1L

"TURBO TUFF" BILLET 94MM STROKE CRANKS w/ 156MM RODS

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 47cc DSM | 43cc EVO |
|-------------------|---|--|--|---|---|---|
| 190110B Billet | 14020-4 156mm H-Beam or 14020R6-4 156mm H-Plus or 14421-4 156mm TT I-Beam | 30060 Rod & 33060 Mains w/o Thrusts or 33060T Mains w/ Thrusts | 619000C-4 619005C-4 619010C-4 619015C-4 619020C-4 619200C-4 619205C-4 619210C-4 619215C-4 619220C-4 | 85mm/-17cc Dish 85.5mm/-17cc Dish 86mm/-17cc Dish 86.5mm/-17cc Dish 87mm/-17cc Dish 85mm/-8cc Dish 85.5mm/-8cc Dish 86mm/-8cc Dish 86.5mm/-8cc Dish 87mm/-8cc Dish | 8.5 8.5 8.5 8.5 8.5 10.0 10.0 10.0 10.0 10.0 | 9.0 9.0 9.0 9.0 9.0 10.5 10.5 10.5 10.5 10.5 |

MITSUBISHI 4G63 7 BOLT STROKER SERIES 2.3L

FORGED "RACE SERIES" & "TURBO TUFF" BILLET 100MM STROKE CRANKS w/ 150MM RODS

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 47cc DSM | 43cc EVO |
|---|---|--|--|---|---------------------------------|---------------------------------|
| 190120 Forged or 190120B Billet | 14022-4 150mm H-Beam or 14022R6-4 150mm H-Plus or 14400-4 150mm LW I-Beam or 14403-4 150mm TT I-Beam or 15403-4 150mm 300M I-Beam | 30060 Rod & 33060 Mains w/o Thrusts or 33060T Mains w/ Thrusts | 608000C-4 608005C-4 608010C-4 608015C-4 608020C-4 | 85mm/-22cc Dish 85.5mm/-22cc Dish 86mm/-22cc Dish 86.5mm/-22cc Dish 87mm/-22cc Dish | 8.5 8.5 8.5 8.5 8.5 | 9.0 9.0 9.0 9.0 9.0 |

Note: New part numbers are **ITALICIZED**.

CUSTOM ROTATING ASSEMBLIES

MITSUBISHI 4G64 7 BOLT DE-STROKED SERIES 2.1L
FORGED "RACE SERIES" 88MM STROKE CRANK W/ 156MM RODS



| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 47cc DSM | 43cc EVO |
|------------------|--|---|--|--|--|--|
| 190100 Forged | 14020-4 156mm H-Beam or 14020R6-4 156mm H-Plus or 14421-4 156mm TT I-Beam | 30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts | 606015C-4 606020C-4 606115C-4 606120C-4 606215C-4 606220C-4 | 86.5mm/-12cc Dish 87mm/-12cc Dish 86.5mm/-8cc Dish 87mm/-8cc Dish 86.5mm/-2.5cc Flat Top 87mm/-2.5cc Flat Top | 8.5 8.5 9.0 9.0 10.0 10.0 | 9.0 9.0 9.5 9.5 10.5 10.5 |

MITSUBISHI 4G64 7 BOLT DE-STROKED SERIES 2.1L
FORGED "RACE SERIES" 88MM STROKE CRANK W/ 162MM RODS



| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 47cc DSM | 43cc EVO |
|------------------|----------------------------|---|------------------------|--------------------------------------|----------------------------|------------|
| 190100 Forged | 14422-4 162mm TT I-Beam | 30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts | 617015C-4 617020C-4 | 86.5mm/-12cc Dish 87mm/-12cc Dish | 8.5 8.5 | 9.0 9.0 |

MITSUBISHI 4G64 7 BOLT DE-STROKED SERIES 2.2L
"TURBO TUFF" BILLET 94MM STROKE CRANK W/ 156MM RODS



| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 47cc DSM | 43cc EVO |
|-------------------|--|---|--|--|----------------------------|----------------------------|
| 190110B Billet | 14020-4 156mm H-Beam or 14020R6-4 156mm H-Plus or 14421-4 156mm TT I-Beam | 30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts | 618015C-4 618020C-4 618215C-4 618220C-4 | 86.5mm/-17cc Dish 87mm/-17cc Dish 86.5mm/-8cc Dish 87mm/-8cc Dish | 8.5 8.5 10.0 10.0 | 9.0 9.0 10.5 10.5 |

MITSUBISHI 4G64 7 BOLT DE-STROKED SERIES 2.2L
"TURBO TUFF" BILLET 94MM STROKE CRANK W/ 162MM RODS



| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 47cc DSM | 43cc EVO |
|-------------------|----------------------------|---|--|--|----------------------------|----------------------------|
| 190110B Billet | 14422-4 162mm TT I-Beam | 30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts | 619015C-4 619020C-4 619215C-4 619220C-4 | 86.5mm/-17cc Dish 87mm/-17cc Dish 86.5mm/-8cc Dish 87mm/-8cc Dish | 8.5 8.5 10.0 10.0 | 9.0 9.0 10.5 10.5 |

NOTE: "TT" signifies "Turbo Tuff" design rod

CUSTOM ROTATING ASSEMBLIES



MITSUBISHI 4G64 7 BOLT STD STROKE SERIES 2.4L FORGED "RACE SERIES" & "TURBO TUFF" BILLET 100MM STROKE CRANKS W/ 150MM RODS

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio |
|---|--|--|--|--|--|
| | | | | | 47cc DSM 43cc EVO |
| 190120 Forged or 190120B Billet | 14022-4 150mm H-Beam or 14022R6-4 150mm H-Plus or 14400-4 150mm LW I-Beam or 14403-4 150mm TT I-Beam or 15403-4 150mm 300M I-Beam | 30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts | 613000C-4 613005C-4 606015C-4 606020C-4 | 86.5mm/-23.5cc Dish 87mm/-23.5cc Dish 86.5mm/-12cc Dish 87mm/-12cc Dish | 8.5 9.0 8.5 9.0 10.0 10.5 10.0 10.5 |

MITSUBISHI 4G64 7 BOLT STD STROKE SERIES 2.4L FORGED "RACE SERIES" & "TURBO TUFF" BILLET 100MM STROKE CRANKS W/ 156MM RODS

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio |
|---|--|--|--|--|--|
| | | | | | 47cc DSM 43cc EVO |
| 190120 Forged or 190120B Billet | 14020-4 156mm H-Beam or 14020R6-4 156mm H-Plus or 14421-4 156mm TT I-Beam | 30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts | 608015C-4 608020C-4 617015C-4 617020C-4 | 86.5mm/-22cc Dish 87mm/-22cc Dish 86.5mm/-12cc Dish 87mm/-12cc Dish | 8.6 9.1 8.6 9.1 10.0 10.5 10.0 10.5 |

MITSUBISHI 4B11T (EVO X) STROKER SERIES 2.2L "TURBO TUFF" BILLET 94MM STROKE CRANKS w/ 143.66MM RODS



| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio |
|-------------------|---|---|------------------------|--------------------------------------|-------------------|
| | | | | | 49cc |
| 190230B Billet | 14029-4 143.66mm H-Beam or 14029R6-4 143.66mm H-Plus or 14409-4 143.66mm TT I-Beam | 30090 Rod & 33090 Mains w/o Thrusts or 33090T Mains w/ Thrusts | 624000C-4 624005C-4 | 86mm/-11cc Dish 86.5mm/-11cc Dish | 9.0 9.0 |

NOTE: "LW" signifies "Lightweight" design rod and "TT" signifies "Turbo Tuff" design rod

CUSTOM ROTATING ASSEMBLIES

SUBARU EJ20 STD STROKE SERIES "TURBO TUFF" BILLET 75MM STROKE CRANK

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 48cc |
|----------------|--|---|-------------------------------------|---|------------------------|
| 190160B Billet | 14024-4 130.5mm H-Beam or 14024R6-4 130.5mm H-Plus or 14416-4 130.5mm TT I-Beam | 30070 Rod & 33070 Mains w/ #5 Thrust or 33080 Mains w/ #3 Thrust | 615000C-4 615005C-4 615010C-4 | 92mm/-12cc Dish 92.5mm/-12cc Dish 93mm/-12cc Dish | 8.5 8.5 8.5 |

SUBARU EJ20 STROKER SERIES "TURBO TUFF" BILLET 79MM STROKE CRANK

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 48cc |
|----------------|--|---|-------------------------------------|---|------------------------|
| 190040B Billet | 14024-4 130.5mm H-Beam or 14024R6-4 130.5mm H-Plus or 14416-4 130.5mm TT I-Beam | 30070 Rod & 33070 Mains w/ #5 Thrust or 33080 Mains w/ #3 Thrust | 620000C-4 620005C-4 620010C-4 | 92mm/-16cc Dish 92.5mm/-16cc Dish 93mm/-16cc Dish | 8.5 8.5 8.5 |

SUBARU EJ25 DE-STROKED SERIES "TURBO TUFF" BILLET 75MM STROKE CRANK

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 51cc |
|----------------|--|---------------------------------|--|---|--|
| 190160B Billet | 14024-4 130.5mm H-Beam or 14024R6-4 130.5mm H-Plus or 14416-4 130.5mm TT I-Beam | 30070 Rod & 33070 Main | 621000C-4 621002C-4 621005C-4 621100C-4 621102C-4 621105C-4 | 99.5mm/-18cc Dish 99.75mm/-18cc Dish 100mm/-18cc Dish 99.5mm/-6cc Dish 99.75mm/-6cc Dish 100mm/-6cc Dish | 8.5 8.5 8.5 9.8 9.8 9.8 |

SUBARU EJ25 STD STROKE SERIES "TURBO TUFF" BILLET 79MM STROKE CRANK

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 51cc |
|----------------|--|---------------------------------|--|--|--|
| 190040B Billet | 14024-4 130.5mm H-Beam or 14024R6-4 130.5mm H-Plus or 14416-4 130.5mm TT I-Beam | 30070 Rod & 33070 Main | 612000C-4 612002C-4 612005C-4 612100C-4 612102C-4 612105C-4 | 99.5mm/-22cc Dish 99.75mm/-22cc Dish 100mm/-22cc Dish 99.5mm/-10cc Dish 99.75mm/-10cc Dish 100mm/-10cc Dish | 8.5 8.5 8.5 9.8 9.8 9.8 |

SUBARU EJ25 STROKER SERIES "TURBO TUFF" BILLET 83MM STROKE CRANK

| Crank P/N Type | Rod P/N Description | Bearing P/N Description | Piston P/N | Piston Description | Compression Ratio 51cc |
|----------------|--|---------------------------------|--|--|--|
| 190060B Billet | 14024-4 130.5mm H-Beam or 14024R6-4 130.5mm H-Plus or 14416-4 130.5mm TT I-Beam | 30070 Rod & 33070 Main | 622000C-4 622002C-4 622005C-4 622100C-4 622102C-4 622105C-4 | 99.5mm/-26cc Dish 99.75mm/-26cc Dish 100mm/-26cc Dish 99.5mm/-14cc Dish 99.75mm/-14cc Dish 100mm/-14cc Dish | 8.5 8.5 8.5 9.8 9.8 9.8 |

NOTE: "TT" signifies "Turbo Tuff" design rod

TOOLS

MANLEY APPAREL

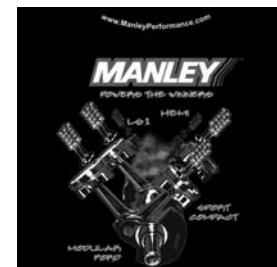
- ✓ Attractive black cotton/polyester with Manley logo in red on the front and a large full size design on the back.

| Size | Short Sleeve T Shirt Part No. | Non-Hooded Sweatshirt Part No. | Hooded Sweatshirt Part No. |
|-----------|-------------------------------------|--------------------------------------|----------------------------------|
| Small | 00005 | 00105 | 00205 |
| Medium | 00004 | 00104 | 00204 |
| Large | 00003 | 00103 | 00203 |
| X Large | 00002 | 00102 | 00202 |
| XX Large | 00001 | 00101 | 00201 |
| XXX Large | 00000 | ----- | ----- |

T-shirts are also available in the following colors: Gray, Maroon, Denim Blue, and Purple. See your salesman for P/N's.



Front Left Chest Logo



Full Back Design

4 OZ. EXTREME PRESSURE LUBE #3

- ✓ The assembly lubricant preferred by top engine builders
- ✓ Can be used as a rod bolt lubricant

| Part No. | Quantity | Description |
|----------|----------|--------------------------|
| 40177 | 1 | Extreme Pressure Lube #3 |



ASSEMBLY LUBE

FOR CONNECTING ROD BOLTS

- ✓ Provides superior lubrication for rod bolt assembly

| Part No. | Quantity | Description |
|----------|----------|-----------------------------------|
| 40172 | 1 oz. | Pro Series "I" Beam Assembly Lube |



2 OZ. MOLY LUBE

- ✓ Molybdenum disulfide is excellent as a break in coating for camshafts, lifters, pushrod ends and rocker balls.

| Part No. | Quantity | Description |
|----------|----------|-------------|
| 40199 | 1 | Moly lube |



MIRACLE SEAL EPOXY

- ✓ Two part adhesive is best for repairing small defects in exhaust ports

| Part No. | Quantity | Description |
|----------|----------|--------------------|
| 40180 | 1 | Miracle Seal epoxy |



MAGIC SEAL EPOXY

- ✓ Use for intake ports and manifolds where there is lower temperature present
- ✓ Consistency of silly putty for easy shaping

| Part No. | Quantity | Description |
|----------|--------------------------------|------------------|
| 40187 | "A" - 1/2 lb. "B" - 1/2 lb. | Magic Seal epoxy |



EMBROIDERED MECHANICS APRON

- ✓ Attractive black cotton/polyester with embroidered Manley logo in red and white
- ✓ Large twin front pockets

| Part No. | Quantity | Description |
|----------|----------|-----------------|
| 42014 | 1 | Mechanics apron |



PUSHROD LENGTH CHECKER

- ✓ Long valves, milled heads, cut blocks, small base circle camshafts all move rocker geometry far from optimum
- ✓ Correct length pushrods keep rockers centered on the valve tip and reduce stem and guide wear
- ✓ Checker tells the engine builder instantly what length pushrod is required

| Part No. | Quantity | Description |
|----------|----------|---|
| 42137 | 1 | Small Block Chevys w/ 3/8" studs |
| 42132 | 1 | Small Block Chevys w/ 7/16" studs |
| 42133 | 1 | Big Block Chevys (intakes and exhausts) |



VALVE SPRING CHAMFERING TOOL

- ✓ Detailing valve springs is crucial to preserving retainer life
- ✓ ID chamfering of springs provides clearance and distributes stress along flat surface of retainer step rather than the corner radii

| Part No. | Quantity | Description |
|----------|----------|-------------------------------------|
| 40174 | 1 | Chamfering tool w/ 4 abrasive cones |
| 40175 | 12 pcs. | Replacement abrasive cones |
| 40176 | 25 pcs. | Replacement abrasive cones |



VALVE SPRING COMPRESSOR TOOLS

- ✓ Sturdy black oxide tools for changing valve springs
- ✓ Rated for 350 lbs. maximum open spring pressure

| Part No. | Quantity | Description |
|----------|----------|--|
| 41830 | 1 | Compressor tool for all Chevys, Fords and Pontiacs |
| 41870 | 1 | Compressor tool for all Chryslers and Fords with rocker shafts |



PISTON RING END GAPPING TOOL

- ✓ Custom tailor the end gap of your piston rings for tighter fit and greater combustion seal.

| Part No. | Quantity | Description |
|----------|----------|-----------------------|
| 41833 | 1 | End gap grinding tool |



REPLACEMENT BLADE END GAPPING TOOL

- ✓ Replacement blade for above tool
- ✓ Carbide coated for long life and quick cutting ability

| Part No. | Quantity | Description |
|----------|----------|----------------------------------|
| 41817 | 1 | Carbide coated replacement blade |



ALL PURPOSE CYLINDER-TYPE SCALE

- ✓ Very accurate and includes tell-tale ring feature
- ✓ Check piston ring tension, transmission shift linkage pressure

| Part No. | Quantity | Description |
|----------|----------|---------------------------------------|
| 42013 | 1 | 25 lb. capacity cylinder - type scale |
| 42012 | 1 | 50 lb. capacity cylinder - type scale |



MANLEY HISTORY

DID YOU KNOW...?

... in 1929 you could purchase a Manley 25 ton hydraulic press for \$115.00 or a 2 1/2 ton hydraulic jack for \$48.00. Both products were invented by Robert E. Manley then operating the Manley Manufacturing Company of Bridgeport, Connecticut.

... in 1931 the Eastern Valve Company of Hanover, Pennsylvania was purchased by Robert E. Manley, moved to York, Pennsylvania and renamed the Manley Products Corporation.

... in 1934 you could purchase Manley replacement Model T engine valves for \$8.00 - per 100 pieces.

... in 1940 the price of Model T valves had actually dropped to \$7.55 per 100 pieces. Depression!

... in 1950 Model T valves were sold for about \$16.00 per 100 pieces.
Post war inflation!

... in 1966 Manley Performance Products, Inc. was founded by Henry D. Manley III. Forged pistons were sold for \$50.72 per set.

... in 1968 the Manley line included stainless valves, camshafts, lifters, vanadium valve springs, push rods and timing chain kits.

... in 1969 the race cars of Don Garlits, Bo Laws, and Joe Mondello appeared on the cover of the Manley Performance catalog.

... in 1971 Bill Jenkins' Grumpy's Toy made the first of ten appearances on the cover of the Manley Performance catalog.

... in 1983 Manley introduced its line of aluminum connecting rods. The jobber price was \$394.56 per set.

... in 1986, Manley's 20th year, "H" beam steel connecting rods were introduced at \$788.00 per set jobber price.

... in 1988 Manley Performance moved the factory from 13 Race Street in Bloomfield, NJ, to its present location in Lakewood, NJ.

... in 1997 Manley Performance introduced its Platinum Series of pistons.

... in 1998 an expansion of the factory doubled the manufacturing floor-space.

... in 2000 The Manley Performance "Gen II" custom stainless steel valve program is born and revolutionizes the custom valve market.

... in 2001 Manley Performance celebrated its 35th year of serving the racing and performance industry. Thank you to all our customers and

... in 2002 Manley entered the high performance passenger car

in 2004. Mustang will now be in the OEM market as an OEM supplier of connecting rods for the 2005 / 2006 Ford SVT Mustang Cobra.

connecting rod supplier for the Ford GT. In addition, Manley also sold the first set of their popular "Turbo Tuff" connecting rods for the Mitsubishi 4G63 engine. The first of many to come!

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JOBBER TOPICS

December, 1934

Robert E. Manley

ANNOUNCES

A Real Jobber Line

ROBERT E. MANLEY, for many years President of the Manley Manufacturing Company and now President of Manley Products Corporation, announces "The Royal Quality Line" of motor valves to be sold through Automotive jobbers. A line of quality valves with which the jobber can profitably meet all competition on Ford, Chevrolet and Plymouth business.

"The Royal Quality Line" is destined to be the sales feature of 1935 among Automotive jobbers.

Write immediately for details.

MANLEY PRODUCTS CORP.

York, Pa.

... in 2005 Manley adds Platinum Series Mitsubishi pistons to the line.

... in 2006 Manley introduces "Turbo Tuff" connecting rods for the Subaru WRX/STi. Manley also celebrates its 40th anniversary in the performance aftermarket.

... in 2008 Manley significantly expands its Platinum Series piston line for Chevy LS engine applications to compliment their connecting rod, valve and valve train offerings for this market segment.

... in 2010 Manley introduces a line of superior crankshafts and rotating assemblies for traditional SB, BB, and LS Series Chevrolets, Chrysler Hemis and Sport Compacts.

... in 2011, our 45th year in business, Manley develops a host of new products for the Ford 5.0L "Coyote" and 6.2L "Raptor" engines, adds Mitsubishi EVO X crankshafts and introduces connecting rods for diesel applications.

| | | | |
|---|--|--|--|
| <input type="checkbox"/> WITH HARD TIP P/N _____ | | USE BLANK P/N _____ | THIN FILM COATING OPTIONS |
| <input type="checkbox"/> WITHOUT HARD TIP | | CYLINDER HEAD _____ | SOLID STEM |
| | | <input type="checkbox"/> CONVENTIONAL | <input type="checkbox"/> MOLY STEM WITH SEAT COATING |
| | | <input type="checkbox"/> BEAD LOC® (STD. R.055") | <input type="checkbox"/> STEM AND SEAT COATING |
| | | <input type="checkbox"/> OTHER - SPECIFY _____ | |
| | | <input type="checkbox"/> ROOT DIAMETER _____ | <input type="checkbox"/> HOLLOW STEM |
| | | <input type="checkbox"/> RADIUS _____ | <input type="checkbox"/> STEM COATING ONLY |
| | | <input type="checkbox"/> GROOVE WIDTH _____ | <input type="checkbox"/> STEM AND SEAT COATING |
| | | | |
| ORDER INFORMATION | | | |
| CUST. NO.: _____ CUST. NAME: _____ DATE: _____ | | | |
| P.O.#: _____ QTY.: _____ DUE DATE: _____ SHIP VIA: _____ | | | |
| PLEASE FILL IN ALL DIMENSIONS AND ORDER INFORMATION | | | |
| MANLEY PERFORMANCE PRODUCTS 1960 SWARTHMORE AVE. LAKEWOOD, NJ 08701 PHONE: 732-905-3366 FAX: 732-905-3010 | | | |

Decimal Conversion Chart

| | | | | | |
|-----------------|-------|-----------------|-------|-----------------|-------|
| $\frac{1}{64}$ | .0156 | $\frac{23}{64}$ | .3593 | $\frac{45}{64}$ | .7031 |
| $\frac{3}{64}$ | .0312 | $\frac{3}{8}$ | .375 | $\frac{23}{32}$ | .7187 |
| $\frac{5}{64}$ | .0468 | $\frac{25}{64}$ | .3906 | $\frac{47}{64}$ | .7343 |
| $\frac{7}{64}$ | .0625 | $\frac{13}{32}$ | .4062 | $\frac{3}{4}$ | .750 |
| $\frac{9}{64}$ | .0781 | $\frac{27}{64}$ | .4218 | $\frac{49}{64}$ | .7656 |
| $\frac{11}{64}$ | .0937 | $\frac{7}{16}$ | .4375 | $\frac{25}{32}$ | .7812 |
| $\frac{13}{64}$ | .1093 | $\frac{29}{64}$ | .4531 | $\frac{13}{16}$ | .7968 |
| $\frac{15}{64}$ | .125 | $\frac{15}{32}$ | .4687 | $\frac{1}{2}$ | .8125 |
| $\frac{17}{64}$ | .1406 | $\frac{31}{64}$ | .4843 | $\frac{27}{32}$ | .8281 |
| $\frac{19}{64}$ | .1562 | $\frac{33}{64}$ | .5156 | $\frac{55}{64}$ | .8437 |
| $\frac{21}{64}$ | .1718 | $\frac{17}{32}$ | .5312 | $\frac{7}{8}$ | .8593 |
| $\frac{23}{64}$ | .1875 | $\frac{35}{64}$ | .5468 | $\frac{29}{32}$ | .875 |
| $\frac{25}{64}$ | .2031 | $\frac{37}{64}$ | .5625 | $\frac{57}{64}$ | .8906 |
| $\frac{27}{64}$ | .2187 | $\frac{19}{32}$ | .5781 | $\frac{15}{16}$ | .9062 |
| $\frac{29}{64}$ | .2343 | $\frac{39}{64}$ | .5937 | $\frac{31}{32}$ | .9218 |
| $\frac{31}{64}$ | .250 | $\frac{41}{64}$ | .6093 | $\frac{15}{16}$ | .9375 |
| $\frac{33}{64}$ | .2656 | $\frac{21}{32}$ | .625 | $\frac{31}{32}$ | .9531 |
| $\frac{35}{64}$ | .2812 | $\frac{43}{64}$ | .6406 | $\frac{63}{64}$ | .9687 |
| $\frac{37}{64}$ | .2968 | $\frac{11}{16}$ | .6562 | 1 | .9843 |
| $\frac{39}{64}$ | .3125 | | .6718 | | 1.000 |
| $\frac{41}{64}$ | .3281 | | .6875 | | |
| $\frac{43}{64}$ | .3437 | | | | |

Metric Conversion Chart

0.1mm = 0.00394"
 0.2mm = 0.00787"
 0.3mm = 0.01181"
 0.4mm = 0.01575"
 0.5mm = 0.01969"
 0.6mm = 0.02362"
 0.7mm = 0.02756"
 0.8mm = 0.03150"
 0.9mm = 0.03543"

1mm = 0.03937"
 2mm = 0.07874"
 3mm = 0.11811"
 4mm = 0.15748"
 5mm = 0.19685"
 6mm = 0.23622"
 7mm = 0.27559"
 8mm = 0.31496"
 9mm = 0.35433"
 10mm = 0.39370"

20mm = 0.78740"
 30mm = 1.18110"
 40mm = 1.57480"
 50mm = 1.96850"
 60mm = 2.36220"
 70mm = 2.75590"
 80mm = 3.14960"
 90mm = 3.54330"
 100mm = 3.93700"

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