

# 2008 PERFORMANCE IGNITION & ELECTRONICS CATALOG























www.MSDIGNITION.com

MSD Ignition is leading the pack into the future of performance electronics! We've always been known as the leader in performance ignition systems, and our goal is to be the source for all of your performance electronics needs.

MSD has always worked hard at developing new products to answer the needs of racers and performance enthusiasts. Constant research and development has kept us on the forefront of ignition technology and this has never been more prevalent than 2008. Our offerings of components for late-model engines is stronger than ever and you'll find new products for GM, Ford and Dodge engines - with many more to come.

High performance ignition for late model vehicles is a priority at MSD. This is evidenced by our offerings of Multiple Spark Coils for GM's Gen-III engine platform or our new Blaster Coil Packs for the Dodge Hemis and our DashHawk multi-gauge for most '05 and newer vehicles. For 2008, you'll also see more EFI components and controllers for complete EFI systems!

As always, strong emphasis is placed on producing the best electronic controls for all of your motorsports needs. For 2008, we're excited to deliver the next generation of 6-Series ignition with the 6AL-2. This all new ignition is a digitally controlled CD ignition with higher output, improved rpm controls and of course, multiple sparks to fire up your engine's performance. Plus, as we team up with industry leaders such as Racepak, Superchips and Edge Products, our offerings will expand and grow to provide everything you need in performance electronics.

For the performance enthusiast, this means more performance goodies for your late-model or race car. The combination of these leading companies and sharing of our technologies is going to lead to innovative and ground breaking new products that give you the edge over your competition. The year 2008 is going to be an exciting one for MSD and we still have a few things up our sleeve!

Thanks for your support! See you at the races!



#### LIMITED WARRANTY

MSD IGNITION warrants this product to be free from defects in material and workmanship under its intended normal use\*, when properly installed and purchased from an authorized MSD dealer, for a period of one year from the date of the original purchase. This warranty is void for any products purchased through auction websites. If found to be defective as mentioned above, it will be repaired or replaced at the option of MSD Ignition. Any item that is covered under this warranty will be returned free of charge using Ground shipping methods.

This shall constitute the sole remedy of the purchaser and the sole liability of MSD Ignition. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representation whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall MSD Ignition or its suppliers be liable for special or consequential damages.

\*Intended normal use means that this item is being used as was originally intended and for the original application as sold by MSD Ignition. Any modifications to this item or if it is used on an application other than what MSD Ignition markets the product, the warranty will be void. It is the sole responsibility of the customer to determine that this item will work for the application they are intending. MSD Ignition will accept no liability for custom applications.

#### Engineering Excellence

MSD Ignition was founded on engineering excellence. Our ongoing commitment to excellence is why MSD is the leader in ignition performance.

Every MSD product goes through many important stages that are imperative to our products' overall quality and performance. Electronic design, extensive bench and dyno testing, assembly and vehicle testing are all mandatory steps in producing the performance that you expect from MSD components.

#### **ELECTRONIC DESIGN**

As an advanced engineering and electronics company, MSD engineers and their staff are equipped with the latest design software. Programs such as PADS-Perform with Printed Circuit board layout programming combined with Autodesk Inventor and Mechanical Desktop, and SurfCAM give our team the upper hand in designing electrical components. This ensures the best design possible, precision measurements and quality control for production.

#### TESTING

After the initial design process, prototypes are assembled for a variety of testing procedures. Our R&D staff puts these prototypes through a number of severe trials to ensure endurance through the most challenging circumstances. A custom "shake table" subjects components to 5G's of force on three different axes! This punishment ensures that the units can handle the severe shock and vibration of a Baja truck or a tire shaking dragster.

The prototype units are subjected to thermal loading from -60°F to +275°F. This testing makes certain that the units will survive winters in Alaska or extremely high underhood temperatures in the desert Southwest. MSD also exposes new units to high doses of Electro Magnetic Interference (EMI) to make sure they don't miss a beat in these situations.

#### ASSEMBLY

Once the engineering design has proven itself, the product moves into production. Each P.C. board is filled with pretested electronic components that are soldered firmly in place by skilled assembly technicians. Before going any further, each subassembly is tested in the first of many production test stages.

After passing all intermediate testing, the boards are mounted securely in their housings then sent to the "burn-in department". This is a huge fixture with hundreds of stations that run each MSD Ignition. Each ignition is connected to a special transformer and run for up to four hours including a heat soak to simulate underhood conditions. Immediately after being turned off, each unit is hand inspected on an oscilloscope, before being sent to final assembly.

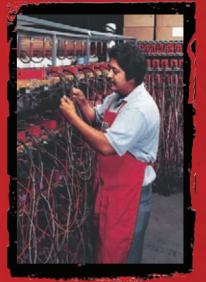
#### Engine and On-Vehicle Testing

After prototypes pass our stringent battery of laboratory tests, it's time for engine and on-vehicle testing. With a collection of engines ranging from moderate passenger car performance to race ready sprint car engines, MSD is able to thoroughly test our prototype components in a variety of applications.

Our R&D department is outfitted with five different dynamometers! Four engine dynamometer cells, including three water brake models and one eddy current, along with an in-ground Superflow chassis dyno, provide our engineering staff with plenty of important information. These dynamometers are a vital part of MSD's commitment to performance and quality.

#### FINAL TESTS

The final step in new product development occurs on the streets and tracks around the world. MSD works with dozens of top racers and engine builders that are eager to test and evaluate our latest ignition offerings. We think you'll agree with the thousands of race drivers, engine builders and performance enthusiasts that say the best ignition in the world is built by MSD. In the end, improving performance and winning races is what it is all about.







# SELECTED PRODUCTS RECEIVE CALIFORNIA ARB EXECUTIVE ORDERS



Performance aftermarket parts sold in the U.S. are subject to laws that govern which parts can be legally sold, distributed and installed on street driven

vehicles with emission controls. It is our responsibility at MSD Ignition to comply with these laws and to notify you of which MSD products have received California Air Resources Board (CARB) Executive Order numbers. As of this writing, the EPA accepts a CARB exemption as meeting the requirements of its Memorandum 1A and the Clean Air Act Amendments of 1990. Consequently, MSD Ignition parts with E.O. Numbers are legal for sale, distribution and installation in all states. Below is a brief description of the types of products we offer and how to identify which parts are legal for emission controlled vehicles.



#### LEGAL TO SELL, DISTRIBUTE AND INSTALL WITH CARB E.O. NUMBER



MSD products with a CARB Executive Order Number next to the part number indicates that this product has been assigned an

exemption E.O. number and is legal to sell, distribute and install on non-OBD II street driven vehicles in all 50 states. To identify which MSD products have an E.O. number, look for the E.O. stamp (shown) next to the product. Most exempted MSD Ignition products can be installed on OBD II vehicles through 2003. MSD has several products that are exempt for vehicles equipped with OBD II through 2003. These products are called out with an OBD II Legal symbol.



## FOR RACING AND OFF-ROAD USE ONLY

Many MSD products are intended for use on racing vehicles only and will never be used for street or highway use in any state. These products can be identified by the asterisk (\*) next to the part number which means these parts are not legal for sale or use on pollution controlled vehicles.



## LEGAL TO SELL, DISTRIBUTE AND INSTALL - E.O. NOT APPLICABLE

All other products listed in this catalog, which do not have any callout next to the part number, indicates that these parts do not require an Executive Order Number and are legal to sell, distribute and install on all vehicles.

As of this printing, the MSD Ignition products which are legal to sell, distribute and install in California, and consequently nationwide are for vehicles (including trucks) equipped with up to an 8-cylinder, spark ignited engine, a 12 volt, negative ground electrical system, an internal or external coil, and a spark ignition distributor.



MSD engineers and technicians are constantly developing and testing new products so you can have the best ignition and accessories possible. These new products are placed in their corresponding groups throughout the catalog and are highlighted with a NEW! symbol. These are just a few of our new late-model products for 2008. If you have any questions or need more information, don't hesitate to call our Customer Support Line at (915) 855-7123. You can also email your questions to msdtech@msdignition.com.

#### **6AL-2** Ignition Control

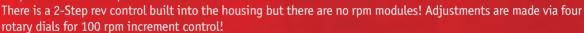
#### The next generation of the 6AL Ignition!



- All new housing, digital circuits and performance
- Built-in 2-Step rev control with rotary dials
- Higher output with up to 135mJ and 535 volts
- Accepts Hall-effect, points and mag pickup triggers
- Managed by an efficient digital controller

MSD is excited to announce the next generation of 6-Series ignition controls – the 6AL-2! The all new ignition control combines a new housing, new digital controls and more power in a sleek package.

You still receive the 20° duration of multiple sparks, combined with higher output to ensure complete combustion.



The all new capacitive discharge ignition will easily connect to nearly any 12-volt negative ground distributor system, even Hall-effect pickups. To see more on the new 6AL-2, turn to page 23.



#### 6AL-2 Ignition Control - PN 6421

#### APS STARTERS

- Stout 4.4:1 gear reduction
- 3-horsepower motor
- Plenty of torque for high compression
- Billet mounting block

The Advanced Power System Starters are now available for Ford, Chrysler and the GM LS engines! The LS and Ford APS Starters



feature a three horsepower motor combined with a 4.4:1 gear reduction to produce incredible torque. They also have a billet mounting block that can be located in different positions to allow for header and suspension clearance issues.

Ford 289/302, 351W - PN 5090 GM LS Engines - PN 5096

#### Chrysler 273-440 - PN 5098

The Chrysler version is a compact replacement for everything from small blocks to 440 engines.

CARB

#### TPS/RPM ACTIVATED SWITCH

- Program an rpm on time as well as an off rpm for engine protection
- Select a Throttle Position Sensor activation point
- Works with fly-by-wire or throttle switch
- Switches up to 25 amps

MSD is making it easy to activate a nitrous system on late model engines with the new TPS/RPM Switch. This switch is easy to use with push button programming and works with mechanical switches or flyby-wire systems.

You can easily set an rpm on for precise activation in conjunction with a TPS setting. For high rpm protection you can select an rpm to deactivate the system. The universal switch can also handle up to 25 amps so in most cases a relay and extra wiring isn't needed.



#### TPS/RPM Activated Switch - PN 8940

#### STREET FIRE CDI IGNITION

- Capacitive Discharge Technology
- Multiple sparks improve starting and idle
- Full power output at high rpm

This Street Fire CDI Ignition is perfect for budget minded enthusiasts. The ignition offers capacitive discharge technology and will fire a series of multiple sparks that lasts for 20° of crankshaft rotation when the engine is running under 3,000 rpm. This ensures combustion and produces great throttle response and smooth idle.

The CDI is built around a durable cast aluminum housing and easily connects to points, amplifiers and magnetic pickup distributors. There's even an adjustable rev limiter for overrev protection!

#### Street Fire CDI Ignition - PN 5520

#### STREET FIRE COILS

Street Fire will introduce two new coils; one for the Ford TFI systems and another for the GM Dual Connector Coils. These new coils mount directly in place of the factory coils and accept the factory connectors. Spark energy is increased thanks to improved materials and windings that were spec'd by MSD engineering.

#### Ford TFI Coil - PN 5527 GM Dual Connector Coil - PN 5526

#### STREET FIRE WIRES

The Street Fire Spark Plug Wires feature a low resistance conductor that's wrapped in a sleek and durable black sleeve. The terminals are covered in black boots that protect the conductor from engine heat to ensure spark delivery. See pages 164 through 167 for more Street Fire or go to www.street-fire.com.









When performance enthusiast think "MSD" they think about the high voltage sparks that light off the fuel mixture to the tune of singing cylinders at high rpm. However, that tune is changing to include a complete line of fuel injection!

For years, MSD has offered Competition Injectors and hard parts to complete your fuel system, but now you can get everything you need from MSD including the ECU and tuning software. Throughout 2007 the MSD EFI team was hard at work putting the finishing touches on two fuel injection systems while rounding out our support component offerings.

Following are just a few of the new components and systems offered by MSD. For more information and to see the complete fuel injection line, go to www.msdfuelinjection.com

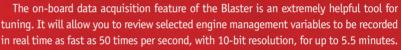
#### BLASTER EFI

MSD's Blaster EFI™ system is an affordable electronic fuel injection system that delivers wide-band oxygen sensor feedback and onboard data acquisition (without a laptop connected). This means you get a closed loop EFI system that is constantly monitoring the exhaust gases and making adjustments to achieve the best performance possible. From idle to wide open throttle, the Blaster EFI system will deliver great drive-

■ High-end EFI performance and options in an affordable and easy to install system

- Closed loop wide-band 02 sensor ensures accurate air/fuel ratio feedback
- Supplied with the ECM, Wide-Band 02 sensor and main wiring harness
- Capable of handling up to 1,000 horsepower engines for street or strip

ability and performance! The system is a bank-fire set-up so there is no cam synchronization signal needed, which simplifies installation. From there, you can tweak and tune with the easy to use software to fit your driving style and need.



Once recorded, the data can be analyzed off-line with the supplied MSD software.



#### MEF14

MSD has teamed up with Delphi to make a tunable MEFI4 available to anyone. The Delphi MEFI4 is a bullet proof race proven EFI system that has endured some of the harshest racing conditions in the world, including the Dakar Rally,

- Closed loop idle/air speed control functionality
- Uses GM MAP, TPS, coolant sensors
- Speed-density algorithms allow for easy tuning
- Drives eight high impedance injectors
- Advanced transient fueling algorithms
- Seamless decel fuel cut-off
- Compatible with 1 and 2 BAR MAP sensors

the Baja 1000, off-shore boat racing, Speed World-Challenge road racing and the salty Bonneville flats. Don't be fooled though, the MEFI4 is not just for racing. Many hot rodders love the MEFI4's small size (4 x 4 inches square!) and its ability to be mounted just about anywhere.

tuning software that gives any user full control of the MEFI's calibrations. Like other systems, the MEFI4 can be tuned LIVE, so calibration changes can be immediately felt while running the engine. The InGenius software takes tuning to a new level of simplicity that includes drop down menus and pictures to identify coils, crankshaft pickup wheels, distributors, etc. Gone are the days of complicated user interfaces that only the software developers know how to operate.

Included in the package is MSD's InGenius

LS1/LS6, with stock injectors - PN 240010\* LS1/LS6, with vette manifold - PN 240011\* LS2, 24x, with stock injectors - PN 240015\*

MUSTEREN

LS2, 24x, with Bosch injectors - PN 240016\* LS2/7, 58x crank, with stock injectors - PN 240020\* LS2/7, 58x crank, with Bosch injectors - PN 240021\*

\*Not legal for use or sale on pollution controlled vehicles.

#### 90mm Throttle Body

MSD's new Throttle Body has already been proven on GM Racing's Daytona Prototype, their SCCA Road Racing and even on their Dakar off-road Hummer! The 90mm bore is die cast from A356 aircraft aluminum alloy to achieve a parabolic bore which improves linear air flow to produce excellent drivability characteristics during part throttle and on track performance.

#### 90mm Throttle Body - PN 2240\*

- Unique bore design eliminates normal tip in hesitation associated with large bore diameter throttle bodies
- Sealed roller bearings mount the stainless steel throttle shaft
- Accepts Wiggins fittings on supercharged and turbocharged applications
- Double return spring for smooth throttle response



#### MATCHED INJECTOR SETS

MSD will be offering flowed and balanced sets of our Competition Injectors! Each set of eight will be matched to within 1%. When you're putting together a fuel injection system, these flowed injectors will ensure correct and equal performance in each cylinder.

#### **Set of 8 Matched Injectors:**

- 38-Pound-PN 20188\*
- 50-Pound PN 20138\*
- 50-Pound PN 20138\*
- 60-Pound-PN 20308\*
- 72-Pound-PN 20148\*
- 96-Pound-PN 20158\*



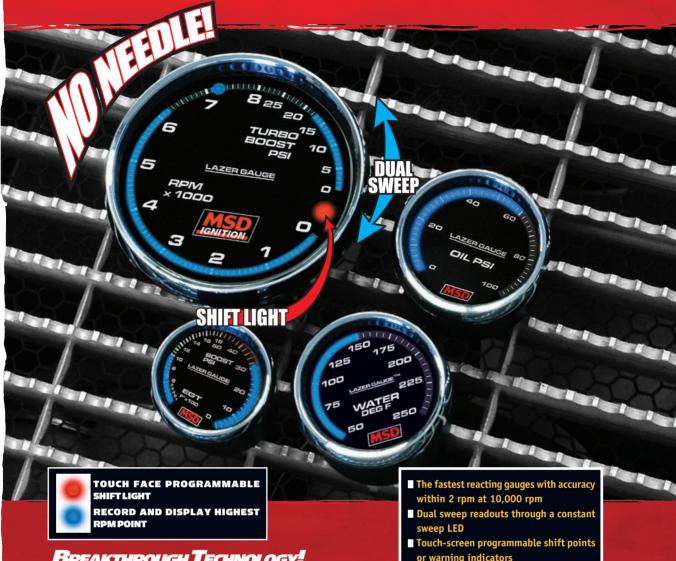
#### MEFI5

The next generation of MEFI Controller will be available with MSD's easy to program InGenius Software. The MEFI5 features sequential fueling and even has built-in diagnostics. MSD will be offering complete kits for crate LS based engines and expanding the line to include Ford and Chrysler engines in the future.

- **■** Sequential fuel control produces optimum performance
- Compatible with fly-by-wire or mechanical throttles
- Easy to tune with friendly InGenius software
- Smooth idle control and instant throttle response



<sup>\*</sup>Not legal for use or sale on pollution controlled vehicles.



#### Breakthrough Technology!

Introducing the MSD Lazer Gauge! Never before has there been such a breakthrough in gauge technology. Look closely at the face of the gauge and the first thing you'll notice is that there's no needle. Look closer and you can see that there's no visible lights or LEDs in the background. This alone gives the Lazer Gauge a fresh and welcomed appearance in the form of gauges, but there is much more to the Lazers than meets the eye.

- or warning indicators
- Backlit warning indication when over thresholds
- Unique and modern appearance like no other gauges
- Laptop programmable and built-in demo mode

#### GAUGES FROM MSD?

You may be asking "Why would an ignition company come out with gauges?". Well, MSD has always offered the best in new and exciting technology to racers and performance enthusiasts and when we designed a technology that is more accurate and faster reacting than any other gauge available, we had to bring it to the market!







Inside the gauge housing there is a small motor that spins a pointer at a fixed speed. At the tip of this pointer there is a tiny LED. A built-in digital microprocessor controls turning this LED on and off which, to the naked eye, creates an accurate trace that becomes the gauge's indicator. Due to the lightning fast response time of the microprocessor and the LED, the Lazer Gauge is extremely accurate. In fact, at 10,000 rpm, it is accurate to within 2 rpm!

This "flying LED" technology gives us the opportunity to put two gauges in one package - and with opposite sweeps! There is a new 5" Tach that also displays boost pressure but in a counterclockwise sweep! No other gauge can offer that technology.

Also, for gauges that require programming, such as with a shift light or a fuel gauge, the gauge can be set up through touch-screen programming! Simply hold your finger over a certain point on each gauge and you can program the shift light or warning point!

There are many more features available in different gauges. The introduction of these few models is just scratching the surface of what is to come.

For easy tach installation with Distributors, DIS or Coil-on-Plug systems, see our new GMR Pick-up on page 126!

Lazer Gauges, Black Face with a Blue LED Trace

#### **TACHOMETERS**

3.375", O-8,000 RPM, w/Shift Light PN 4608
3.375", O-10,000 RPM, w/Shift Light PN 4610
5", O-10,000 RPM, w/Shift Light PN 46101
5", Dual Sweep Tach and Boost,
O-8,000 RPM and O-30 PSI, w/Shift Light PN 4618

#### **Speedometers**

33/8" PN 4602 5" PN 4603 Dual Sweep, Boost PSI and EGT, 21/16" PN 4630

Dual Sweep, Boost 0-30, Vacuum 0-30 In. Hg 21/16"

Air/Fuel Monitor, Wide Band, 25/8"
Fuel Level, Programmable, 25/8"
Oil Pressure, 0-100 PSI, 25/8"
Water Temp, 50-250°F, 25/8"
Dual Sweep, Volt 8-18,

PN 46201 PN 46221 PN 46231 PN 46241

PN 4626

PN 46251

**■ Touch Face Programmable** 

Amp+/-60A, 25/8"

- **■** Works with other sending units
- **PC interface for user selectable functions**
- Output driver for controlling external lights or relays of control
- Automatic dimming user adjustable
- Multiple alarms user adjustable from front touch face









## RACEPAK G2X" GPS-BASED DATA Acquisition

The G2X is the newest member of Racepak's GPS Based Data Acquisition Systems. The technology employed in the G2X has been utilized for years in various forms of motorsports. We have logged thousands of on-track laps in creating an economical data logger that is both rugged and dependable in a wide variety of environments.

The G2X will also accept up to 12 additional Plug-n-Play sensors from Racepak as your racing progresses.

#### **RECORD AND REVIEW:**

- Lap times and numbers
- **Segment times**
- Lateral Gs
- Speed and RPM
- Track Mapping
- Acceleration Gs
- Requires no beacon transmitters

Information about braking, steering and throttle can easily be added through Racepak's V-Net Technology.

To learn more, go to www.msdignition.com or www.racepak.com.

Stop guessing and start winning! The G2X GPS Data Acquisition System from Racepak and MSD Ignition can help you improve your lap times by showing you how you and your car react in race situations.

The G2X provides accurate speed, lap and segment times through the use of Global Positioning System satellites. This means there's no need to set up track-side beacon transmitters, receivers, or their associated wiring.

The technology employed in the G2X has been utilized for years in various forms of Motorsports. We have logged thousands of on-track laps in creating an economical data logger that is both rugged and dependable in a wide variety of environments. Information about braking, steering and throttle can be easily added through Racepak's V-Net Technology.



After running a few laps, simply remove the Compact Flash card from the G2X and download the information to your PC. Racepak's Datalink software is easy to view and navigate. Once a track map is created, you'll always have it on file to use at other events.

The G2X will provide you with the information you need to win!









#### SIMPLE INSTALLATION



1. Install the G2X and the display dash.



2. Connect the power source.



3. Install the GPS Antenna.

The G2X Kit, PN 11200, is supplied with everything you need to get recording! Included are the G2X, Dash, GPS Antenna, power harness tach/power wiring and a CD with software.

#### **G2X DISPLAY DASH**

The G2X Kit is supplied with a useful dash that will provide:

- Lap numbers and times
- Acceleration and lateral g-forces
- Sequential LED shift light
- Gear and satellite indicators
- Real time mapping
- Set segment times for corner performance
- Overlay laps to compare
- Easily add other sensors to record more useful information





#### DashHawk Vehicle Information Display

PN 13100

Keep a sharp eye on your vehicle's performance and vitals with MSD's new information display, the DashHawk! Your vehicle's computer contains a wealth of information and the DashHawk lets you tap into it all!

With the DashHawk, you can truly understand how your vehicle is performing - which means you can drive more fuel efficiently on the road, race faster at the track, and spot maintenance issues before they leave you stranded. Since the DashHawk saves and records maximum values (password protected), you can also see how someone else has driven your car when you are not behind the wheel. The DashHawk displays all this information the way you want to see it, either as a bar graph or digitally.

Simply connect the DashHawk to the OBD II diagnostic port and you have access to over 150 parameters on 11 separate screens. Navigation through the screens is as simple as the push of a button. Values such as speed, engine rpm, oil pressure, coolant, oil and transmission temps, throttle position, engine load and a host of other parameters can all be viewed via the DashHawk.

As if all of that information isn't enough, the DashHawk will also record 0-60 mph times and even quarter mile times! All of this information can be recorded (up to 30 minutes!) and then downloaded to a PC. Once downloaded, you can graph the information using the software supplied.

Unlike conventional analog gauges, the DashHawk provides the ability to set both visible and audible alerts when a parameter such as speed or coolant temp reaches a certain value. Set alerts on rpm and the DashHawk also functions

as an incredibly precise shift light. The unit can be used as a diagnostic tool by displaying trouble codes (along with a description of each code so you know exactly what the problem is). The DashHawk gives you the ability to clear the code and see if it comes back, which can save a costly trip to the dealer. There's no need to worry about the DashHawk becoming obsolete either. With a simple Internet connection, MSD will be able to update your DashHawk with the latest vehicles and updated features.

**DashHawk Vehicle** Information Display **PN 13100** 



The DashHawk simply plugs into the OBD II connector under the dash and mounts easily on your console or dashboard.

- Universal OBD II multi-gauge displays over 150 parameters
- Connects to your vehicle's diagnostic port
- Display 0 60 mph and ½-mile times with up to five other parameters
- Records maximum values for speed, rpm and water temperature
- Advanced data logging for up to 30 minutes of data capture
- Backlit screen can be set to 16 million colors to match any interior
- Set visual and audible alerts for any value
- Built-in shift light capability
- Check and clear trouble codes
- Any parameter can be displayed on any screen, in any order, in any fashion!

ONE CONNECTION!

The DashHawk is designed to work on most OBD II vehicles with CAN-bus technology. Most vehicles, from 2005 and up will simply plug-in and operate. We are constantly testing the DashHawk on different applications and updating dashhawk.com with the information.

These are just a few of the vehicles that the DashHawk plugs into.

2007 Jeep 2.4L, 2.7, 3.7, 4.7 and 5.7

Commander, Compass, Grand Cherokee, Liberty, Patriot and Wrangler.

2007 and 2008 Chevy 2.2, 3.5, 3.9, 4.3, 5.3, 6.0 and 6.2

Avalanche, Cobalt, Impala, Silverado, Suburban, Tahoe, Corvette and more!

2007 Chrysler and Dodge 2.4, 3.5, 4.7, 5.7 and Hemi

300C, SRT 8, Sebring, 1500, Charger, Magnum and more!

2007 Ford 3.0, 4.6, 5.4, 6.0 and 6.4

Powerstroke, Edge, Expedition, F-150, F-350, Mustang and more!

The DashHawk also works on many import applications including Audi, BMW, Mitsubishi, Mercedes, Mazda, Subaru, Toyota and more.

# Go to DashHawk.com for software and more information!

Once you download the software from www. DashHawk.com, you'll be able to review all of your vehicle's data. This capture shows a quarter mile run with rpm, speed and 02 Sensor information. Note the 60 ft. time and mph along with the quarter mile information at the bottom of the screen capture.





#### Who needs an MSD?

That's an easy question to answer - everyone! Okay, maybe not every driver and car, but for anyone looking to improve their car's performance or driveability, an MSD should be at the top of their list of upgrades. And, since you're looking through our catalog, you must be interested in getting more performance out of your vehicle! Well, you've come to the right place.

Factory ignition systems and their components are designed to be inexpensive to produce while providing adequate performance, at best. For the majority of drivers, 'adequate' is tolerable, which leaves a lot of room for improvements and this is where MSD Ignition comes in.

An MSD Ignition uses capacitive discharge (CD) technology to produce a very high primary voltage. This high voltage is always present regardless if you're at an idle or racing down a straight away at 10,000 rpm. By introducing a powerful spark to the air/fuel mixture, the combustion event becomes much more efficient resulting in more downward force on the piston, resulting in improved overall performance. There are numerous variables that affect the quality of the combustion in the combustion chamber ranging from fuel, the condition of the spark plugs and wires, driving habits, air flow, temperatures, even the design of the head and intake manifold can work against complete combustion.

When you consider all of these variables, it is easy to see that achieving complete combustion of the air/fuel mixture every time is unlikely. When you have a high energy spark from an MSD, you can be assured that the fuel mixture is going to be fully combusted to generate the most performance possible.

If you've already added other upgrades to your vehicle such as a better air intake system or a free-flowing exhaust

system, an ignition upgrade should be next on the list. The improved spark output will actually help tie these other upgrades together resulting in overall performance benefits.

An MSD ignition installed by itself will produce benefits, but remember that spark plug wires and the coil both have important roles in the ignition system. Here too, OEM wires and coils are designed for the masses and they leave a lot of room for improvement. For instance, factory plug wires will have resistance values (the measurement of the resistance to the flow of electricity) upwards of 5,000-10,000 ohms per foot! The MSD Super Conductor plug wire has less than 50 ohms per foot - that means more energy makes it to the spark plugs, where it is needed!

Whether you're looking to up the performance to a late-model pickup, or expect a little more from your classic muscle car, the ignition system is a great place to start and the parts to accomplish this are affordable and easy to install. Keep turning the pages and you'll find just what you need to fire up your car's performance!







Race, late-model or a classic, MSD has the performance your engine needs.

#### **OPERATING VOLTAGE**

This is the amount of supply voltage required from the battery to operate the MSD Ignition at full output power. An MSD CD Ignition is designed to produce full output power (470 - 630 volts) with a supply voltage of 10 - 18 volts. The MSD will still operate below 10 volts, but the output voltage will be lower. An MSD will also accept a momentary 24 volts such as during a jump start.

#### **OPERATING CURRENT**

Capacitive Discharge Ignitions:

This is the current, or amperes, required to operate the MSD Ignition. This is shown with the rpm of the engine because more current is required as rpm increases.

**Inductive Ignitions:** 

For the MSD 5, Blaster Ignition and HEI Module, the current requirement is stated as the maximum current that is sent to the coil. It is listed as a measurement of how much energy is stored in the coil just before it fires.

#### SPARK ENERGY

This is a measure of how much "heat" is produced across the spark plug gap to initiate the combustion process of the air/fuel mixture. Spark energy is a product of voltage, current and time with the result being measured in millijoules. The specification shown with MSD CD ignitions is the amount of energy stored in the capacitor which is all delivered to the coil for every firing. For Inductive Ignitions it indicates the amount of energy that is stored

within the coil.



This is the potential maximum voltage that the ignition and coil can generate. It is the most common specification used and also the most exaggerated. Your engine will not typically require the maximum voltage given, though the ignition and coil are capable of reaching this level.

This measurement is affected by the specifications of the coil such as its construction, turns ratio, insulation as well as the type of coil used. MSD lists which coil was used to determine this specification.

#### RPM

This is the highest rpm rating that the MSD will operate at full output power. This number is always listed for V8 engines. The rpm rating is higher as the number of cylinders decrease.

#### PRIMARY VOLTAGE OUTPUT

This is the maximum amount of voltage that is delivered to the primary terminals of the ignition coil. With a CD ignition this voltage is very high because the MSD steps up and stores this voltage with its transformer and capacitor. DO NOT attempt to check for voltage on the coil terminals with a test light.

For Inductive Ignitions such as the MSD 5, Blaster Ignition and HEI Module, this is the voltage rating that the coil produces in the primary windings to jump the spark plug gap.

**SECONDARY** 

OUTPUT

#### SPARK DURATION

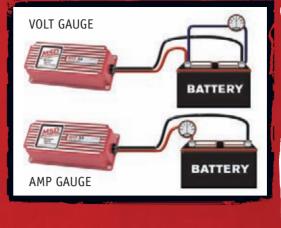
The spark duration shown is how long the series of multiple sparks lasts in crankshaft degrees. It is listed this way because the number of sparks that occur decreases as rpm increases. Most MSD Ignitions are designed to produce a spark series for at least 20° of crankshaft rotation on a V8 engine. When operating with a supply voltage of 14 volts, a general rule is one spark per millisecond.

The duration of each single spark is not listed due to the amount of variables that can affect this measurement such as the type of coil used, the ignition itself and the energy output.

# H\$ W

#### Size and Weight

The length, width and height of the units. The height is listed without vibration mounts. The weight is listed in pounds for each unit.



COIL

PRIMARY

# INFO & SPECS

Any ignition's goal is to completely burn the air/fuel ratio in the combustion chamber of each cylinder. Complete combustion of the mixture produces more force to push the piston down on the power stroke, resulting in improved performance. The chart below is designed as a quick reference to the full line of MSD Ignition Controls so you can see exactly what each ignition is capable of delivering.

The specifications given are explained on page 18. MSD uses standard measuring methods as set by the Society of Automotive Engineers (SAE) and information from the California Air Resources Board (CARB) to test our ignitions.

Note that we list the coils used with each listing of specifications. The ignition coil plays a major role in determining several specifications such as secondary voltage, current and spark energy and selecting the proper coil for your application is important. When comparing other ignition systems always be sure to examine the coil used during the tests. Different coils can be used to achieve "desired" numbers to be used for misleading advertising claims. By listing which coil MSD used for these specifications you know exactly what your ignition system is capable of producing and we are confident in the performance of our products.

| IGNITION SPECIFICATION CHART  |                      |                                     |                  |                             |                                |                                  |                                       |  |   |                    |  |
|---|----------------------|-------------------------------------|------------------|-----------------------------|--------------------------------|----------------------------------|---------------------------------------|--|---|--------------------|--|
| Ignition  | Operating<br>Voltage | Operating<br>Current<br>AMP per RPM | RPM w/<br>14.4V. | Spark<br>Series<br>Duration | Spark<br>Energy<br>Millijoules | Output<br>Primary<br>(Into Coil) | Voltage<br>Secondary<br>(Coil Output) | Weight   | Size<br>L x W x H   | Coil<br>Used       |  |
| Blaster*  |                      | 7.5A Max                            | 10,000           | Single                      | 180 mJ<br>(Stored Energy)      | 12-14V<br>430V (coil neg.)       | 36KV - 42KV                           | 1.5 lbs.   | 6" x 3.5" x 1.75"   | PN 8202            |  |
| MSD 5*  |                      | 6A Max                              | 6,000            | 20°                         | 140 mJ<br>(Stored Energy)      | 12-14V<br>375V (coil neg.)       | 35KV - 40KV                           | 1.5 lbs.   | 8" x 3.5" x 2.25"   | PN 8202            |  |
| 6A, SCI<br>6T<br>6TN<br>6AL, SCI-L<br>6ALN<br>6BTM<br>6-Offroad<br>6M-2 |                      | 1A/1,000 rpm                        | 15,000           | 20°                         | 105-115mJ                      | 460-480V                         | 45,000                                | 6A, SCI - 2.75 lbs.<br>6T - 3 lbs.<br>6TN - 4.75 lbs.<br>6AL, SCI-L - 3 lbs.<br>6ALN - 5 lbs.<br>6 BTM - 3 lbs.<br>6-Offrd 3.5 lbs.<br>6M-2 - 3.5 lbs. | 8" x 3.5" x 2.25"<br>8" x 3.5" x 2.25"<br>8" x 3.5" x 2.25"<br>8" x 4" x 2.25"<br>8" x 4" x 2.25"<br>8" x 4" x 2.25"<br>8" x 4" x 2.25"<br>8" x 3.5" x 2.25"<br>8" x 3.5" x 2.25" | PN 8202            |  |
| 6AL-2   |                      | 0.7A/1,000 rpm                      | 12,500           | 20°                         | 135 mJ                         | 535V                             | 48,000V                               | 3 lbs.   | 7" x 4" x 2"  | PN 8207<br>PN 8252 |  |
| Digital 6 Plus<br>Digital SCI Plus                                      |                      | 0.7A/1,000 rpm                      | 12,500           | 20°                         | 135 mJ                         | 535V                             | 48,000V                               | 2.856 lbs.   | 8.5" x 4.5" x 2.2"  | PN 8252            |  |
| HVC 6<br>Professional<br>Racing Ign.                                    | 12-18<br>Volt DC     | 0.7A/1,000 rpm                      | 15,000           | 20°                         | 150 mJ                         | 550V                             | 40,000V                               | 3.75 lbs.  | 8" x 3.5" x 2.25"   | PN 8250            |  |
| DIS-2 Plus<br>DIS-4 Plus  |                      | 0.7A/1,000 rpm                      | 14,000<br>14,000 | 20°                         | 105-115 mJ                     | 460-480V                         | 45,000V                               | 3 lbs.<br>3 lbs.   | 9.5" x 4.5" x 2.2"  | Stock<br>type coil |  |
| DIS-2 HO<br>DIS-4 HO  |                      | 0.8A/1,000 rpm                      | 14,000           | 20°                         | 170 mJ                         | 470V                             | 43,000V                               | 3 lbs.   | 9.5" x 4.5" x 2.2"  | Stock<br>type coil |  |
| Programmable<br>DIS-2   |                      | 1A/1,000 rpm                        | 12,500           | 20°                         | 190 mJ                         | 500V                             | 45,000V                               | 4.5 lbs.   | 9.5" x 4.5" x 2.2"  | Stock<br>type coil |  |
| Midget System   |                      | 1A/1,000 rpm                        | 15,000           | 20°                         | 190 mJ                         | 500V                             | 45,000V                               | 4.5 lbs.   | 9.5" x 4.5" x 2.2"  | MSD Coil<br>Pack   |  |
| Stacker-8   |                      | 1A/1,000 rpm                        | 15,000           | 20°                         | 120 mJ                         | 250V                             | CD Side<br>25,000V                    | 3.5 lbs.   | 8" x 3.5" x 2.25"   | Factory<br>system  |  |
| 7AL-2 Plus  |                      | 1A/1,000 rpm                        | 14,000           | 20°                         | 160 mJ                         | 570V                             | 47,000V                               | 4.75 lbs.  | 8" x 3.75" x 5.75"  | PN 8201            |  |
| 7AL-3   |                      | 1A/1,000 rpm                        | 14,000           | 20°                         | 160 mJ                         | 570V                             | 50,000V                               | 5.25 lbs.  | 8" x 3.75" x 5.75"  | PN 8201            |  |
| Digital-7 Plus<br>Programmable<br>Digital-7 Series                      |                      | 1.1A/1,000 rpm                      | 12,500           | 21°                         | 190 mJ                         | 530                              | 45,000V                               | 3 lbs.   | 9.5" x 4.5" x 2.2"  | PN 8251            |  |
| 4-Cyl<br>Programmable<br>Digital-7                                      |                      | 0.8A/1,000 rpm                      | 12,500           | 22°                         | 250 mJ                         | 530V                             | 45,000V                               | 4.7 lbs.   | 9" x 4.5" x 2.2"  | PN 8261            |  |
| MSD 8   |                      | 3A/1,000 rpm                        | 15,000           | 20°                         | 315-345mJ                      | 460-480V                         | 50,000V                               | PN 7800 - 7 lbs.   | 10" x 3.75" x 5.75"   | PN 8201            |  |
| MSD 10 Plus   |                      | 20A @ 8,000 rpm                     | 13,000           | CD-20°                      | 700 mJ                         | 630V                             | 60,000V                               | 4.75 lbs.  | 9" x 4" x 5.75"   | PN 8208            |  |
|   |                      | 8,000 rpm                           |                  | Inductive<br>20° - 30°      |                                |                                  |                                       |  |   |                    |  |



#### MSD BLASTER IGNITION"

For budget build-ups or economy daily drivers, the Blaster Ignition is a great choice. With a 7.5 amp inductive discharge, the Blaster provides a powerful spark at an affordable price. The Blaster creates a high current, long duration spark that efficiently burns the air/fuel mixture in the cylinder. The benefits are more power, easier starting, snappy throttle response and increased economy. This single spark ignition will install easily to breaker points, late model computer equipped vehicles and magnetic pick-up distributors such as the line of MSD Pro-Billet Distributors.

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 180 MJ STORED ENERGY (INDUCTIVE)

PRIMARY VOLTAGE: 420-450 VOLTS
SECONDARY VOLTAGE: 40,000 VOLTS

RPM RANGE: 10,000 RPM (8cyl.)

VOLTAGE REQUIRED: 12 VOLTS, NEGATIVE GROUND

**CURRENT DRAW:** 7.5 Amps Max **WEIGHT AND SIZE:** 1.25 LBS., 6"L x 3.5"W x 1.75"H

TESTED WITH BLASTER COIL

This product is OBDII Legal to sell, distribute or install on '03 and older vehicles in California according to Executive Order E.O.  $D-40-36; \ \ \text{Legal in all 50 states}.$ 

#### **MSD Blaster Ignition - PN 5900**



#### **FOR MORE INFORMATION ON:**

Recommended Coils, see page \_\_\_\_\_\_\_ 52
RPM Accessories, see page \_\_\_\_\_\_ 123-126
RPM Module Kits, see page \_\_\_\_\_\_ 124



#### MSD5™Economy/Performance

The MSD 5 is our entry level multiple spark ignition control. This inductive discharge ignition is designed to be used on stock vehicles with minor performance upgrades.

Below 3,000 rpm, the MSD 5 produces a series of sparks instead of just one. This ensures that the fuel is burned completely which in turn provides more power, smooth idle, quick starts and overall driveability improvements.

The MSD 5's powerful sparks are just the ticket to enhance the power of your foreign or domestic car's ignition output. The MSD 5 can be triggered using points or the electronic amplifier on late model vehicles.

NOTE: Not for use with magnetic pick-up distributors or distributorless systems. Not recommended for General Motors

HEI ignition systems.

MSD 5 Ignition Control - PN 5200



#### SELECTING AN IGNITION

Choosing an MSD may seem confusing, but making the right choice really comes down to what you plan to do with your vehicle. The following suggestions will help you choose the right ignition for your application.

#### **ALL MSD 6 SERIES IGNITIONS:**

- Deliver full power multiple sparks and use capacitive discharge circuitry
- Trigger from distributors with breaker points, amplifiers or magnetic pick-ups
- Accept an MSD Timing Accessory
- Have equivalent output (except the Digital-6 Plus and the Professional Race Ignition)



#### 6A, PN 6200, SCI, PN 6300

This is the base model multiple sparking, capacitive discharge (CD) ignition control. If you're simply looking for a hotter spark for improved driveability, this is the model for you. Remember though, there is not a rev limiter, nor can one be added. See page 25 and 29.

#### 6AL Series, SCI-L, PN 6320

If you are planning on spirited driving, grabbing gears or some form of racing, the adjustable rev control of the 6AL or SCI-L Ignitions is a wise choice. Also, you can add a Two Step Module Selector for launch rpm limit if you choose. See page 2.

#### DIGITAL-6 PLUS, PN 6520, SCI-PLUS, PN 6350

Ideal for the street and strip! There is an overrev limit, a holeshot rpm limit and one stage of retard that is perfect for a shot of nitrous. These features are adjustable with built-in rotary dials. Digital circuitry produces high energy sparks and accurate control of the ignition. See pages 27 and 29.

## 6-Offroad, PN 6470, 6M-2, PN 6460

These ignitions are fit with sealed Weathertight connectors. They do not have a built-in rev limiter, but will accept an external version. See page 28.

#### 6T, PN 6400

This ignition is the standard in circle track racing. The circuits are fit with extra internal bracing and there is a provision (4-pin connector) for an external rev control, PN 8738.

See page 30.

#### 6TN, PN 6401, 6ALN, PN 6430

The same output as the 6T but assembled specifically for circle track racing. The circuits are held secure with a clear silicone compound for vibration resistance plus there is a clear baseplate for easy tech inspection. All of the wiring is routed through NASCAR mandated Weathertight connectors too! See page 30.

#### MSD Professional Racing Ignitions

Just like the name implies, this ignition is designed for professional long duration, high-rpm racing. It features NASCAR mandated harnesses, a clear baseplate and vibration dampening silicone. This ignition uses a special Coil (PN 8250) and produces higher spark energy and voltage. See page 31.



#### THE MSD 6 SERIES ADVANTAGE

MSD was the first company to develop and offer the multiple sparking, capacitive discharge ignition for engines. The line of MSD 6 Series Ignitions are the most popular aftermarket ignitions in the world due to our race-proven performance on the track and our reliability on the street!

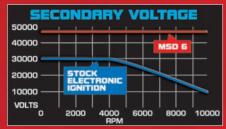
Most of the 6 Series Ignition Controls share the same output characteristics when it comes to spark energy, voltage and the spark series. The only difference is the addition of a built-in rev control such as the 6AL or the boost timing control in the 6 BTM. The increased voltage that the MSD puts across the plug gap will improve the driveability and performance of everyday drivers to Saturday night racers!

All of the MSD 6 Ignitions can be installed on 4, 6 or 8-cylinder engines equipped with a 12 volt, negative ground electrical system and a distributor. They can be triggered by points, electronic amplifiers, magnetic pick-ups and even other aftermarket distributors.

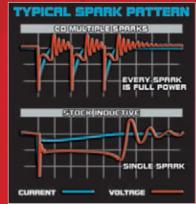
#### CAPACITIVE DISCHARGE

An MSD Ignition uses capacitive discharge (CD) technology to produce a very high primary voltage. This high voltage is always present regardless if you're at an idle or racing down a straight away at 10,000 rpm.

A special transformer that is hand wound at MSD instantly steps up the supply voltage from the battery then stores this high voltage in a large capacitor. When the ignition is triggered the capacitor releases all of this voltage to the coil so the primary voltage is at full power at any rpm. These high powered sparks ensure complete combustion of the fuel mixture at racing rpm which in turn produces more power!



MSD's proven Capacitive Discharge technology delivers high primary voltage at any rpm!



**Increased Power** 

Crisp Throttle Response

Reduced Spark Plug Fouling

Smooth Idle

MSD's multiple sparks are shown at the top. This series of sparks ensures combustion to improve power.

#### **MULTIPLE SPARKS**

All of the MSD 6 Series Ignitions produce multiple sparks up to at least 3,000 rpm. This series of sparks, whether there are two or six, will always last for 20° of crankshaft rotation. Also, each spark is at full voltage. This powerful series will improve the starting ability, idle quality and throttle response. If you have a multiple carb set up that is a little off at idle or an engine that burns a little oil, the MSD's spark series will help prevent the cylinders loading up.

At higher rpm there isn't enough time to fire the plug more than once during the combustion stroke so there is only a single, full power spark. Thanks to MSD's CD technology, this spark is always at full power even through 10,000+ rpm so you know the fuel mixture is being burned efficiently, creating maximum power!

#### WIRING

The primary wiring used on an MSD has a special tinned conductor that meets MIL-86A specifications. This allows for superior crimps and prevents corrosion. The jacket is resistant to high temperatures, abrasion and underhood chemicals.

#### SOFT TOUCH REV CONTROL

MSD Ignition first developed the adjustable rev control and we have since incorporated it into most of our ignition controls. Our Soft Touch circuitry produces an accurate and smooth limit without loading up the cylinders or excessive backfires. Even if your car is a mild street machine, a rev limiter can save you from expensive engine damage due to driveline failure or a missed shift.

#### ADD-ONS

Another great thing about the MSD Ignition line is that most all of our accessories can be added to your existing Ignition Control. You can run an MSD Ignition with your stock distributor, then upgrade to a Pro-Billet model or even a crank trigger. You don't have to buy everything at once or spend money on features that you will never use.

For instance, if you choose an MSD 6AL then in the off season add a nitrous system, you can easily install an MSD Timing Retard accessory. MSD has a variety of different timing controls, but the point is that you don't have to pay for features that you won't use when you select an MSD Ignition!

#### **COMMON QUESTIONS**

#### What's the difference between the 6A and 6AL Ignition Control?

The only difference is the addition of a rev limiter. The 6A, 6AL, 6BTM and SCI ignitions all share the same CD, multiple sparking circuitry and output power. The units also have the same wiring but with a couple different features such as the rev limiter or boost retard circuit.

#### Do the 6 Series operate on distributorless engines?

No, or you would need one ignition per coil pack! To meet these needs, MSD engineers developed our multi-channel Stacker or DIS Ignition Controls. These Ignitions are capable of firing two to four coil packs or coil per cylinder and feature our proven multiple spark design along with other built-in features.

#### Do I need to replace my points?

No. Actually, adding an MSD 6 Series Ignition will increase the life of your original breaker points. With an MSD installed the current across the points gap decreases significantly and the gap is not imperative to performance. Of course, it is important to have a distributor that is not worn out and an accurate mechanical advance aids performance.

#### Will I need a Tach Adapter?

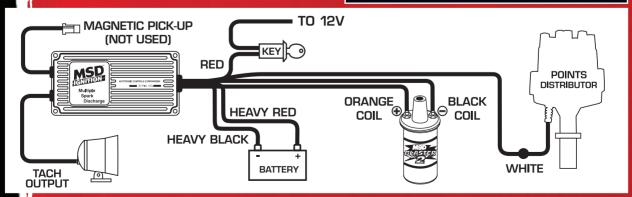
In most cases, a Tach Adapter is not necessary. Most quality aftermarket tachs will have no problem reading the MSD's tach signal. Some factory tachs, such as Fords, may need an Adapter and most import cars will need one to run.

#### Which coil is right for my application?

Coil selection depends on your performance goals. You can use your stock coil with an MSD, but an MSD Blaster Coil will ensure that you get the most output power available. MSD offers a variety of performance and racing coils and there is more information starting on page 52.

#### What's the best spark plug gap for my application?

The spark plug is the point in the ignition system where electrical energy is converted into heat, consequently, the larger the gap the greater the amount of heat available to light the air/fuel mixture. As a starting point, follow the engine builder or manufacturer's recommendation for the plug gap. With that, you can experiment with increasing the gap by .005" - .010" until the best performance is found.



MSD Ignitions install easily to a variety of applications. This diagram shows the wiring with a points distributor.



#### **6AL-2** Ignition Control

MSD is excited to announce the next generation of 6-Series ignition controls – the 6AL-2! The all new ignition control combines a new housing, new digital controls and more power in a sleek package.

Inside the new cast aluminum housing you'll find an advanced micro-controller that manages the timing and rpm of the ignition. The spark output of the new box has been turned up to 535 volts of primary voltage with spark energy reaching up to 135millijoules! The multiple sparks of the 6AL-2 burn in the cylinder for 20° of crankshaft rotation to ensure complete combustion.

Two more great features are the rev limits! There are two rev limiters; one for high end overrev protection and another you can activate off a clutch or transbrake to set a launch limit. This feature will help your car blast off the starting line! Adjustments are made via four rotary dials for 100 rpm increment control!

The all new capacitive discharge ignition will easily connect to nearly any 12-volt negative ground distributor system, even Hall-effect pickups. The ignition is supplied with wiring and vibration mounts for a complete installation. It's even compatible of 4, 6 and 8-cylinder engines.

To see more on the new 6AL-2, check out www.msdignition.com.

#### 6AL-2 Ignition Control - PN 6421



The all new 6AL-2 features rotary dials to adjust the rpm limits in 100 rpm increments. There is an engine saving overrev limit as well as a 2-Step function to set a launch rpm limit. Note the cylinder select for 4, 6 or 8-cylinders and a handy diagnostic LED.

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 135 mJ Per Spark
PRIMARY VOLTAGE: 535 Volts
SECONDARY VOLTAGE: 45.000 Volts

SPARK SERIES DURATION: 20° Crankshaft Rotation

RPM RANGE: 12,500 RPM with 14.4 Volts
VOLTAGE REQUIRED: 12-18 Volts, Negative Ground
CURRENT DRAW: .7 Amp per 1,000 RPM

WEIGHT AND SIZE: 3 lbs., 7"L x 4"W x 2"H

TESTED WITH BLASTER HVC II COIL, PN 8253

Available in May 2008

#### Available Summer '08



#### Programmable 6AL-2

Following the introduction of the 6AL-2, there will also be an even more advanced version – a laptop programmable 6AL-2!

The Programmable 6AL-2 Ignition will provide street and performance cars to take advantage of tuning-in an ignition curve or boost timing map from a PC. Also, using MSD's ProData+ software will provide simple adjustments to a two step rev limiter, step retard and more!

The Programmable 6AL-2 shares the same advanced features of the new 6AL-2 with 535 primary volts and spark energy reaching 135 mJ! Vibration mounts, wiring and a PC cable are supplied.

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 135 mJ Per Spark

PRIMARY VOLTAGE: 535 Volts
SECONDARY VOLTAGE: 45,000 Volts

SPARK SERIES DURATION: 20° Crankshaft Rotation

RPM RANGE: 12,500 RPM with 14.4 Volts

**VOLTAGE REQUIRED:** 12-18 Volts, Negative Ground

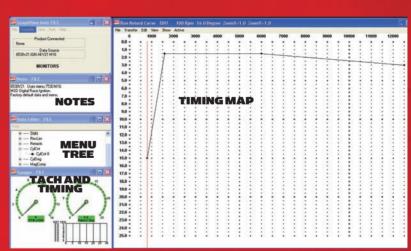
CURRENT DRAW: .7 Amp per 1,000 RPM WEIGHT AND SIZE: 3 lbs., 7"L x 4"W x 2"H

TESTED WITH BLASTER HVC II COIL, PN 8253

#### Programmable 6AL-2 PN 6530\*

#### **PRO-DATA+ SOFTWARE**

This Pro-Data+ software program is designed in-house exclusively for MSD's Programmable Ignitions and Accessories. The Pro-Data+ software can be used with any PC running Windows 95, 98, 2000, NT, XP or ME. It is available on a mini CD or can be downloaded through the MSD Ignition website at: www.msdignition.com/softdwn.htm.



The Programmable 6AL-2 lets you lock out the distributor and program a timing curve via a PC. You'll also be able to set a two step rev limiter, a retard for use with nitrous and even a boost timing curve for forced induction engines!

\*Not legal for use or sale on pollution controlled vehicles.



#### MSD 6A™ Ignition Control

The MSD 6A is the base model of the capacitive multiple spark discharge 6 Series design. Whether you have a powerful street machine, hard working truck or trick street rod, the powerful multiple sparks of the MSD 6A will ensure complete combustion. Benefits such as quicker ETs, easier starting, reduced plug fouling, more power and even increased fuel economy can be expected with the 6A's high energy multiple sparks.

Like all of the MSD 6 Series Ignitions, the 6A will work with virtually any vehicle as long as it has a 12-18 volt electrical system. It can be triggered using breaker points, a magnetic pick-up or the output of an electronic amplifier. All necessary parts and wiring instructions are included (OBD II legal on '03 and older vehicles).

#### MSD 6A, 4, 6, 8-Cylinder - PN 6200

#### **FOR MORE INFORMATION ON:**

Recommended Coils, see page \_\_\_\_\_\_ 52
RPM Accessories, see page \_\_\_\_\_\_ 123-126
RPM Module Kits, see page \_\_\_\_\_\_ 124





# MSD EMSDOAL III.

#### OPERATING SPECIFICATIONS 6A, 6AL

SPARK ENERGY: 105-115 MJ PER SPARK PRIMARY VOLTAGE: 450-480 VOLTS SECONDARY VOLTAGE: 45,000 VOLTS

PARK SERIES DURATION: 20° CRANSHAFT ROTATION RPM RANGE: 15,000 RPM WITH 14.4 VOLTS VOLTAGE REQUIRED: 12-18 VOLTS, NEGATIVE GROUND

CURRENT DRAW: 1 AMP PER 1,000 RPM
WEIGHT & SIZE PN 6200: 2.75 LBS., 8"L x 3.5"W x 2.25"H
WEIGHT & SIZE PN 6420: 3 LBS., 8"L x 4"W x 2.25"H

TESTED WITH BLASTER COIL

THESE PRODUCTS ARE OBDIT LEGAL TO SELL, DISTRIBUTE OR INSTALL ON VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-26 AND D-40-36; LEGAL IN ALL 50 STATES.

#### MSD 6AL™ IGNITION CONTROL

The 6AL shares the same proven circuitry of the 6A with the addition of a built-in adjustable rev limiter. The combination of powerful sparks with the safety of a Soft Touch Rev Control is what makes the 6AL the most popular ignition control in the world.

The rpm limit is adjustable in 100 rpm increments with MSD's plug-in modules. When the engine reaches your selected limit, the Soft Touch circuitry begins dropping the spark to various cylinders. The result is a smooth and accurate limiting action without backfires or roughness.

The Soft Touch Rev Control also opens the door for you to add rpm accessories such as a Two Step Rev Control. A Two Step allows you to set two rpm limits, one for a holeshot rpm and another for overrev protection.

The 6AL is supplied with rubber shock mounts and modules for 3,000, 6,000, 7,000 and 8,000 rpm.

MSD 6AL Ignition Control with Rev Limiter, 4, 6 (even-fire only) and 8-Cylinder - PN 6420





#### **6BTM™** Ignition Control

The 6 BTM is ideal for engines with a turbo or supercharger. Not only will the engine benefit from MSD's full power CD sparks, but there is also an adjustable boost/timing retard circuit to prevent detonation.

When your turbo or blower forces the air/fuel mixture into the engine, the cylinder pressure inside the combustion chamber increases. The result is a great increase in power but this can also lead to detonation that can result in severe engine damage. The 6 BTM lets you dial away detonation by retarding the timing in relation to the boost pressure.

A dash mounted control knob lets you adjust the amount of timing retard. It can be adjusted from 0° per pound of boost to 3° per pound (up to 15°).

The 6 BTM also shares the Soft Touch Rev Control of the 6AL Ignition for overrev protection. The BTM is supplied with rubber shock mounts and rpm modules for 3,000, 6,000, 7,000 and 8,000 rpm.

### MSD 6 BTM Ignition Control with Boost Timing Control, 4, 6 (even-fire only) and 8-Cylinder - PN 6462

NOTE: Not compatible with distributorless systems.

#### Wiring Harnesses

MSD Ignition Controls are easy to install, but we also offer several plug-in Harnesses. These are especially handy for quick installation on late model vehicles! The Harnesses plug directly into your factory coil and harness then four color coded wires plug into the corresponding wires of the MSD. Two wires go from the MSD to the battery and you're done with no cutting or splicing!

Factory Ford Harness (unplugged from col)

MSD Harness PN 8874

(unplugged from col)

To Batterye Heavy Red

Magnetic Pick-up (Not Used)

Tach Output

Tach Output

Col

MSD to Ford TFI Harness - PN 8874

MSD to GM Dual Connector Coil - PN 8876

MSD to GM '96-On Single Connector Coil - PN 8877

 $MSD\ {\rm to}\ '90\mbox{-}'97\ Dodge\ Ram\ 5.2/5.9L\ -\ PN\ 8889$ 

MSD to '98-'03 Dodge/Chrysler - PN 8884

MSD to GM HEI (internal coil) without Vacuum

Advance - PN 8875

MSD 6M-2/6-Offroad to GM Dual Connector Coil - PN 64602

This Harness comes with special Perma-Seal connectors that you install in your existing wiring to produce a plug-in installation.

**MSD Universal Harness - PN 8873** 





#### DIGITAL-6 PLUS™

The MSD Digital-6 Plus Ignition Control combines terrific power, digital accuracy and great accessories making it ideal for street/strip applications.



Every spark of the Digital-6 Plus Ignition is packed with 135 millijoules of spark energy and 535 primary volts. When used with the MSD Blaster HVC Coil, PN 8252, a spark with over 300 milliamps burns across the plug gap for 400 microseconds. Below 3,300 rpm the Digital-6 Plus produces a series of sparks that burns in the cylinder for up to 20° of crankshaft rotation. This incredible heat ensures combustion to produce great power, quick throttle response, smooth idle and quick starts.

#### MSD Digital-6 Plus Ignition Control - PN 6520

4,6 and 8-cylinder engines

#### BUILT-IN FEATURES

- Two step rev control
- Single stage retard
- Start retard
- Diagnostic LED

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 135 mJ Per Spark

PRIMARY VOLTAGE: 535 Volts
SECONDARY VOLTAGE: 45 000 Volts

SPARK SERIES DURATION: 20° Crankshaft Rotation

RPM RANGE: 12,500 RPM with 14.4 Volts

**VOLTAGE REQUIRED:** 12-18 Volts, Negative Ground

**CURRENT DRAW:** .7 Amp per 1,000 RPM

**WEIGHT AND SIZE:** 3.7 lbs., 8.5"L x 4.5"W x 2.2"H

TESTED WITH BLASTER HVC COIL, PN 8252
THIS PRODUCT IS LEGAL TO SELL, DISTRIBUTE OR INSTALL ON NON-OBD II VEHICLES IN
CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-31; LEGAL IN ALL 50 STATES.

#### **TECH TIP: TACH ADAPTERS**

If, after installing an MSD Ignition Control, your tachometer, fuel pump relay or electronic fuel injection (in foreign vehicles) doesn't operate correctly, your application may require a Tach Adapter. This is due to the trigger signal not being strong enough to trigger both the MSD and the factory's components.

There are a few Tach Adapters available and for more information see pages 152 and 153. Each Adapter is simple to wire in and will have your MSD and vehicle firing away in no time!





#### MSD 6-OFFROAD™ IGNITION CONTROL



The 6-Offroad and 6M-2 Ignitions are equipped with Weathertight connectors for locking, weatherproof connections.

The MSD 6-Offroad Ignition Control will provide your engine the spark power it needs to get you over, through, under and around any obstacles you encounter. From idle to 3,000 rpm the MSD produces multiple sparks rather than just a single spark, which is a great benefit when you're crawling over rocks or creeping up steep grades. This spark series lasts for 20° of crankshaft rotation and ensures complete combustion of the fuel mixture producing quick throttle response and a smooth idle.

To battle the harsh off-road elements, the 6-Offroad is potted with an epoxy compound creating a water and vibration resistant ignition. Weathertight connectors are also installed to provide positive locking and water resistant electrical connections.

The 6-Offroad will install to virtually any vehicle with a 12 volt electrical system and a distributor. It will connect to points, amplifiers or magnetic pick-ups on 4, 6 (even-fire) or 8-cylinder engines.

#### MSD 6-Offroad Ignition Control - PN 6470

NOTE: The MSD 6-Offroad Ignition Control features a special connector that plugs directly into an external rev limiter, the Offroad Rev Control, PN 8769.



#### MSD 6M-2™ Marine Ignition Control

The MSD 6M-2 Ignition Control is designed for performance marine applications where a high energy and reliable ignition is a necessity. The capacitive discharge (CD) design of the MSD produces full power sparks throughout your boat's entire rpm range. Below 3,000 rpm, a series of multiple sparks burn in the cylinder for 20° of crankshaft rotation ensuring complete combustion. Together, these sparks produce easier starting, great throttle response, more power and reduced plug fouling during prolonged idling.

To protect the 6M-2's electrical circuitry from marine conditions, the entire unit is potted to protect the electrical components from coming into contact with water or other chemicals that could cause damage. Weathertight Connectors with multi-ribbed seals are used to make the electrical connections to the 6M-2.

The 6M-2 can be triggered by either a magnetic pick-up (distributor or crank trigger), amplifier or by a breaker points

distributor. The cable harness has the proper connector so you can plug the 6M-2 into one of the Pro-Billet MSD Marine Distributors. Installs on 4, 6 or 8-cylinder engines.

#### MSD 6M-2 Marine Ignition - PN 6460

For more information on the 6M-2 and other MSD Marine Ignition components, see pages 159-163.

Thoroughly tested by Underwriter's Laboratory and certified to meet or exceed safety standards for marine ignitions as specified by the U.S. Coast Guard.

#### MSD 6M-2L Marine Ignition

All the same features of the 6M-2 Ignition with the addition of a Soft-Touch rev limiter.

#### MSD 6M-2L Marine Ignition

with Rev Limiter - PN 6560

28
IGNITIONS



# **MSD SCI**<sup>™</sup>**E**<sub>I</sub>**SCI-L**<sup>™</sup> **IGNITION CONTROLS**

Smaller displacement engines that run very high rpm are in dire need of a high-output CD Ignition. At higher rpm, stock inductive ignitions cannot produce full power sparks resulting in a loss of top end power or even a miss. This is even more of a problem when a turbo or nitrous is added to the mix to increase cylinder pressures.

The MSD SCI Series Ignitions feature capacitive discharge circuits that deliver powerful sparks at any rpm. Whether you're idling in traffic or ripping through the gears at race rpm, the SCI Ignitions will be at full power.

Below 3,000 rpm the SCI Ignitions produce a series of sparks that last for 20° of crankshaft rotation. These sparks will smooth the idle, produce quick starts and lightning quick throttle response.

There are two models available of the SCI Ignition; the standard SCI, PN 6300, and the SCI-L with an adjustable rev limiter, PN 6320. Both can be used on most engines with a distributor.

MSD SCI Ignition Control (OBD II legal to '03) - PN 6300 MSD SCI-L (with rev limiter) Ignition Control - PN 6320

SPARK ENERGY: 105-115 MJ PER SPAR PRIMARY VOLTAGE: 450-480 VOLTS

SECONDARY VOLTAGE: 45,000 VOLTS

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 15,000 RPM with 14.4 Volts Voltage Required: 12-18 Volts, Negative Ground

CURRENT DRAW: 1 AMP PER 1,000 RPM

**WEIGHT & SIZE PN 6300:** 2.75 LBS., 8"L x 3.5"W x 2.25"H

**WEIGHT & SIZE PN 6320:** 3 LBS., 8"L x 4"W x 2.25"H

TESTED WITH BLASTER COIL

These products are legal to sell, distribute or install on vehicles in California according to Executive Order E.O D-40-31 and D-40-33; legal in all 50 states.





#### OPERATING SPECIFICATIONS

SPARK ENERGY: 135 MJ PER SPARK

PRIMARY VOLTAGE: 535 VOLTS

SECONDARY VOLTAGE: 45,000 VOLTS
SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 12,500 RPM WITH 14.4 VOLTS

**VOLTAGE REQUIRED:** 12-18 Volts, Negative Ground

CURRENT DRAW: .7 AMP PER 1,000 RPM

**WEIGHT AND SIZE:** 3.7 LBS.,  $8.5^{\prime\prime}L$  x  $4.5^{\prime\prime}W$  x  $2.2^{\prime\prime}H$ 

#### TESTED WITH BLASTER COIL

THIS PRODUCT IS LEGAL TO SELL, DISTRIBUTE OR INSTALL ON NON-OBD II VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-31; LEGAL IN ALL 50 STATES.

#### DIGITAL SCI PLUS™ IGNITION

The Digital SCI Plus Ignition Control delivers the power and accessories that make it ideal for street/strip sport compact cars!

High-output capacitive discharge sparks ensure complete combustion of the fuel mixture, especially at high rpm. If a dose of nitrous is being injected, there is a retard stage that can be activated automatically to prevent detonation from the increased cylinder pressures. To assist with firm launches, there is also a rev

limit that can be activated, which will hold the engine at a steady rpm so you can launch at full power! The ignition installs easily to most engines equipped with a distributor.

MSD Digital SCI Plus Ignition Control - PN 6350

■ High output CD sparks are at 135 mJ and 535 volts throughout the entire rpm range

- Adjustable stage of retard automatically activates for shots of nitrous
- Select an rpm limit to use on the starting line for consistent holeshots



The MSD 6T, 6TN and 6ALN were designed with severe duty racing applications in mind. These ignitions share the same output and circuits of the other 6A Series, but have a few special features of their own.



The 6T and 6TN are equipped with a special 4-wire connector to plug into an external rev limiter, PN 8738 (see page 123).



#### MSD 6T ™ Circle Track Ignition

Even in the harshest conditions, the 6T Ignition Controls deliver race winning performance!

To withstand severe jolts and vibrations of harsh racing, the 6T's capacitor and transformer receive additional bracing for a solid mount. All of the circuits and components then receive an extra thick coating of Humi-Seal adding even more vibration protection. Top it all off with a set of sturdy vibration mounts and you have one of the toughest ignitions offered!

MSD 6T, 4, 6 (Even-Fire) and 8-Cyl. - PN 6400

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 105-115 MJ PER SPARK PRIMARY VOLTAGE: 460-480 VOLTS SECONDARY VOLTAGE: 45,000 VOLTS

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 15,000 RPM WITH 14.4 VOLTS

VOLTAGE REQUIRED: 12-18 Volts, Negative Ground
CURRENT DRAW: 1 AMP PER 1,000 RPM

**WEIGHT & SIZE PN 6400:** 3 LBS., 8"L x 3.5"W x 2.25"H **WEIGHT & SIZE PN 6401:** 4.7 LBS., 8"L x 3.5"W x 2.25"H **WEIGHT & SIZE PN 6430:** 5.1 LBS., 8"L x 4"W x 2.25"H

TESTED WITH BLASTER COIL

THIS PRODUCT IS LEGAL TO SELL, DISTRIBUTE OR INSTALL ON NON-OBD II VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-26; LEGAL IN ALL 50 STATES.

The "N" series ignition controls are supplied with Weathertight or Deutsch connectors that are approved for use in NASCAR competition.





#### MSD 6TN™ AND 6ALN™ IGNITIONS

The MSD 6TN and MSD 6ALN were designed with NASCAR racing in mind. In fact, both of the capacitive discharge high power ignitions are NASCAR approved!

The "N" Series Ignitions feature the mandatory 6-Pin Weathertight connector to meet NASCAR's ignition wiring rule, 20-6.1. This special connector provides a tight, positive locking connection with individual seals to keep dirt and moisture away from each connection. All of the MSD's primary wiring meets MIL-86A specifications with special tinned conductors for superior crimps. Inside the strong cast aluminum housing,

the multiple sparking CD circuits are encased in a clear two part silicone elastomer for the ultimate in vibration protection. A special clear base plate is also installed for easy tech inspection.

The 6TN is equipped with a special 4-Pin connector that plugs directly into an MSD Soft Touch Rev Control, PN 8738, while the 6ALN has a built-in Rev Control. These rev controls are adjustable with plug-in modules and will save your engine from overrev damage caused by missed shifts or driveline failure.

MSD 6TN, 4, 6 (Even-Fire) & 8-Cyl. - PN 6401\*
MSD 6ALN, 4, 6 (Even-Fire) & 8-Cyl. - PN 6430\*

NOTE: The 6ALN is supplied with a 3000, 6000, 7000 and 8000 rpm module. NOTE: MSD 6 Series Ignitions are not compatible with distributorless systems.

www.MSDIGNITION.com

\*Not legal for use or sale on pollution controlled vehicles.



#### MSD 6 HVC™ Series Ignitions

Professional race teams have been relying on the power and endurance of our 6 HVC Ignition Control and will be excited to see the addition of a rev limiter! The 6 HVC-L Ignition has a built-in rev limiter that will save the engine from overrev damaged caused by spins, missed shifts or driver misfortune. This means there is no need to mount an external rev control (i.e., less wiring and reduced weight)!



The advanced component design and circuitry of the 6 HVC Ignitions produce incredible voltage with high current output. Internally there is an efficient heat sync, solid component mounting and it's all encased in a clear epoxy. The rpm limit is adjustable with plug-in modules and the wiring is routed into NASCAR approved Deutsch style MSD connectors.



6 HVC Ignition Controls Weathertight Connectors - PN 6600\* Deutsch Connectors - PN 6601\*

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 150 MJ PER SPARK
PRIMARY VOLTAGE: 550 VOLTS
SECONDARY VOLTAGE: 40,000 VOLTS
SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION
RPM RANGE: 15,000 RPM WITH 14.4 VOLTS
VOLTAGE REQUIRED: 12-18 VOLTS, NEGATIVE GROUND
CURRENT DRAW: .7 AMPS PER 1,000 RPM
WEIGHT AND SIZE: 5.1 LBS., 8"L x 4"W x 2.25"H

TESTED WITH 6 HVC COIL

#### **6 HVC-L Ignition Controls**

Fast Rev Limiter, Deutsch Connectors - PN 6631\*
Soft-Touch Rev Limiter, Deutsch Connectors - PN 6632\*

#### MSD HVC™ Coil

The HVC Coil is designed exclusively for the HVC Professional Racing Ignition Control. The E-Core design of the HVC Coil is more efficient in producing more output with less loss.



- E-Core design produces more voltage and current while running 50% cooler than canister coils
- Massive laminations and windings are engineered for less energy loss
- Delivers high voltage to ionize the plug gap while the spark glows with high current



#### COIL SPECIFICATIONS

TURNS RATIO: 100:1
PRIMARY RESISTANCE: .07 OHMS
SECONDARY RESISTANCE: 360 OHMS
INDUCTANCE: 3MH



#### Programmable Midget Ignition

The Programmable Midget Ignition is a complete electronic distributorless system consisting of a powerful capacitive discharge Ignition Control, a four tower high output coil pack and uses two non-magnetic pick-ups with a trigger wheel as a crank trigger source. This takes all of the mechanical variables out of the picture to produce exact ignition timing!

Adding to the accuracy and high output of this ignition system, is the advantage of being able to precisely program the timing throughout the engine's entire rpm range. By using the optional Hand Held Programmer, PN 7550, or MSD's Pro-Data+ software package on a Windows based PC,

racers can program two different timing curves down to .1° per 100 rpm increments! Other features of the Programmable Midget Ignition include a rev limiter to protect the engine from overrev damage, a start retard and a circuit that monitors the battery supply voltage.

The Midget Ignition produces full power capacitive discharge sparks at any rpm so you can be assured of complete combustion. To control this power and the programs, a 15 MHz microcontroller analyzes the various inputs and is capable of extremely quick compensations to maintain exact timing and rpm.

The Midget Ignition is supplied with the Ignition Control, two Non-Magnetic Pick-ups, Trigger Magnet, On/Off Switch and Software.

MSD Programmable Midget Ignition - PN 6214\* Midget Coil Pack - PN 8240\*

NOTE: Coil Pack PN 8240, must be purchased separately. Crank Trigger Wheel must be fabricated for each application.

15,000 rpm in 0.1° increments

rpm in 100 rpm increments

percentage

Program a start retard to ease cranking

■ Select a rev limit from 2,000 - 15,000

A battery monitor circuit shows real time

Switch between two timing curves as

track conditions change during a race

battery voltage and a low voltage time

#### MIDGET IGNITION ACCESSORIES

#### 8.5mm Universal Midget Wire SET

MSD offers a universal set of 8.5mm Super Conductor plug wires for the Midget racers. These 50 ohms per foot resistance wires are supplied with the coil side's special locking terminal and boot crimped to the wires. The spark plug side boots and terminals are supplied loose so the wires can be routed and crimped for each application. A special mini-stripper-crimper tool is also supplied.

Midget Universal 8.5mm Wire Set PN 31689

#### MIDGET TESTER

For in the field testing of the Midget Ignition, MSD developed this handy Tester. It plugs into the Ignition Control and simulates a trigger signal to fire a test plug out of the coil to confirm the operation of the ignition and coil pack. It can also be used to confirm the timing curve you program by running it with the ignition connected to a laptop to view changes in real time!

#### Midget Tester - PN 8994

#### CRANK TRIGGER MAGNET KIT

The MSD Midget Ignition is supplied with two magnetic pick-ups to trigger the two channel ignition and coil, but a trigger wheel must be fabricated. This kit is supplied with special magnets and rivets to retain them securely in your custom trigger wheel.

4 - Magnets - PN 8614

www.MSDIGNITION.com

\*Not legal for use or sale on pollution controlled vehicles.

#### SELECTING A RACE IGNITION

MSD offers a variety of racing and performance ignition controls for a variety of engine applications. The following ignitions are generally used in drag racing, pulling and similar applications. The following suggestions will help you choose the right ignition for your application.

#### **7AL-2**™, PN 7222

The 7AL-2 has been a staple in the drag race community for years. It has now been redesigned with a 40% increase in spark energy! It also features a popular two-step rev control, LEDs for troubleshooting and convenient terminal strips for easy wiring. See page 34.

#### $7AL-3^{m}$ , PN 7230

Need a start retard? How about three rev limits? Running multiple nitrous stages? If you answered yes to any of these, the MSD 7AL-3 could be the ignition for you. It has these features and an RPM Activated Switch plus it makes a little more spark energy and voltage than the 7AL-2. See page 35.

#### **D**IGITAL- $7^{m}$ , PN 7520

Ideal for strip/street vehicles! There is an overrev limit, a holeshot rpm limit, an adjustable start retard and one stage of retard that is perfect for a shot of nitrous. These features are adjustable with built-in rotary dials. Efficient digitally controlled components create high energy sparks. See page 36.

#### Programmable Digital-7 Series

The most advanced Ignition Controls available! Incredible spark energy with an array of programming features including individual cylinder management, a run timing curve, launch timing curve, step retards, gear retards, an rpm activated switch, three rev limits plus more! All of these features are easy to program from your PC and give you an opportunity to tune in even more performance. See pages 37-40.

#### **MSD8**<sup>™</sup>, PN 7800

The MSD 8 is a favorite of tractor pullers thanks to its high spark energy and spark duration. Exotic fuels and high compression are no match for the MSD 8! See page 42.

#### **MSD 10-P**LUS<sup>™</sup>, PN 7505

This ignition is the answer for high cylinder pressures from turbos, superchargers and loads of nitrous. This unique ignition combines the benefits of a Capacitive Discharge spark with the duration of an Inductive spark with incredible results. Plus, there is a Two Step Rev limiter built-in for easy adjustments and control. See page 42.













# MSD 7AL-2 PLUS IGNITION



#### MSD 7AL-2™ Plus Ignition

You'll recognize the 7AL-2 Plus Ignition Control, as its predecessor is the most popular ignition control used in drag racing. The "Plus" model updates the original 7AL-2 with improved internal components plus our engineers added a 2-Step Rev Control and a useful diagnostic LED.

Racers will be happy to see that the updated components up the voltage output and spark energy! Over 40% more spark energy in fact!

Visually, you'll notice the two terminal strips that allow for easier wiring in your race car. The LED over the power connections will come in handy for troubleshooting as it flashes only when the coil fires. That way you know that the coil, the trigger source and ignition are all functioning properly. The mounting pattern is the same as the 7AL-2 and is supplied with vibration mounts and a few rpm modules.

NOTE: MSD 7 Series Ignitions are not compatible with distributorless systems.

#### MSD 7AL-2 Plus Ignition Control - PN 7222\*

#### OPERATING SPECIFICATIONS

SPARK ENERGY: 160 MILLIJOULES/SPARK

PRIMARY VOLTAGE: 570 VOLTS

SECONDARY VOLTAGE: 47,000 Volts

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 14,000 RPM WITH 14.4 VOLTS

VOLTAGE REQUIRED: 12 - 18 Volts, Negative Ground

**CURRENT DRAW:** 6 AMPS AT 6,000 RPM

12 AMPS AT 12,000 RPM

**WEIGHT AND SIZE:** 4.85 LBS., 8.25"L x 3.75"W x 5.75"H

TESTED WITH PRO POWER COIL, PN 8201

# The MSD 7AL-2 Ignition set the standard that other racing ignitions are still trying to reach!

engines

output diagnostics

easier wiring

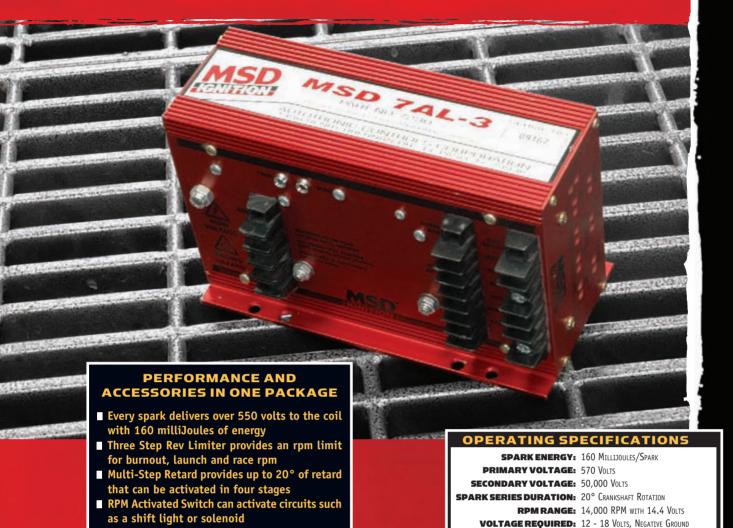
■ Troubleshooting LED for spark

Terminal strips for improved and

#### FOR MORE INFORMATION ON: Recommended Coils, see page \_\_\_\_\_\_\_

| RPM Module Kits, see page | 125     |
|---------------------------|---------|
| Timing Controls           | 115-118 |

\*Not legal for use or sale on pollution controlled vehicles.



The MSD 7AL-3™ is based off the well proven MSD 7AL-2 Plus. It features a host of the most popular drag racing accessories.

■ Retard the timing 25° during cranking to ease

starting on engines with locked-out timing

A built-in Three Step Rev Control provides three different rpm limits that can be used for the burnout, holeshot and top end overrev protection. There is also a Multi-Step Retard with four different modules that can be activated at different times. Four 0° modules and a 2°, 3° and 4° module are supplied.

Many race engines with crank trigger systems or locked-out distributors will benefit from the 7AL-3's built-in Start Retard option. During cranking the Start Retard will retard the timing 25° allowing the engine to turn over easier. When the engine starts, the timing will automatically go back to its mechanical setting.

One last option is an RPM Activated Switch that allows you to activate a solenoid or shift light at an adjustable rpm. When the engine hits the desired rpm the RAS circuit provides a ground to the component to activate it. Vibration mounts, wires and detailed instructions are supplied.

#### MSD 7AL-3 Ignition Control, V8 only - PN 7230\*

NOTE: MSD 7 Series Ignitions are not compatible with distributorless systems.

#### FOR MORE INFORMATION ON:

Recommended Coils, see page \_\_\_\_\_\_\_ 54
Flying Magnet Crank Trigger Kits, see page \_\_\_\_\_\_ 112
RPM Module Kits, see page \_\_\_\_\_\_ 125

All of the 7AL-3's rpm and retard controls are easy-to-adjust with plugin modules.



CURRENT DRAW: 6 AMPS AT 6,000 RPM

TESTED WITH PRO POWER COIL, PN 8201

**WEIGHT AND SIZE:** 4.75 LBS., 8"L x 3.75"W x 5.75"H

12 AMPS AT 12,000 RPM



## IGNITION CONTROL

For racers that don't need a lot of programming options, the Digital-7 Plus Ignition is a great choice. State-of-theart technology allows the 7 Plus to produce more power while using less current. The CD circuits combined with an

IGBT Coil driver deliver 520 - 535 volts to the primary side of the coil with up to 190 millijoules of energy at any rpm. Below 3,300 there is of course MSD's powerful series of multiple sparks, rather than a single spark. This spark series burns in the cylinder for over 20° of crankshaft rotation resulting in improved combustion and increased power.

The Digital-7 Plus provides racers with two smooth rev limits, one for top end overrev protection and another to activate with a clutch or transbrake switch for use on the starting line. Both are adjustable with rotary dials in 100 rpm increments from 2,000 – 9,900 rpm with a maximum of 12,500 rpm. For nitrous applications or for racers looking for a little more mph, there is a single stage retard circuit that is adjustable up to 9.9°. Next to the rotary dials

there is an LED that will verify that the ignition is receiving a trigger signal and will also warn you if there is problem with the supply voltage.

The Digital-7 Plus incorporates proficient EMI filter components to keep inputs and signals free from electrical interference. Combined with the fast microcontroller and a unique input feedback circuit, the ignition is well protected against EMI.

The Digital-7 Plus can be used on 4, 6 or 8-cylinder engines and must be used with the MSD HVC Pro Power Coil PN 8251, or HVC-II, PN 8261.

#### MSD Digital-7 Plus Ignition Control - PN 7520\*

| FOR MORE INFORMATION                       | ON: |
|--|-----|
| Recommended Coils, see page                | 54  |
| Flying Magnet Crank Trigger Kits, see page | 112 |

CURRENT DRAW: 1.1 AMP PER 1,000 RPM

TESTED WITH PRO POWER COIL, PN 8201

**WEIGHT AND SIZE:** 3.7 LBS., 8.5"L x 4.5"W x 2.2"H

#### Mag Pick-up Compensation Circuit

All magnetic pick-ups have an inherent characteristic that will slightly retard the timing as rpm increases. MSD's line of digital ignition controls have a feature that lets you select the style pick-up that you are using to ensure the most accurate trigger signal possible. The Magnetic Pick-up Compensation Circuit lets you program the ignition for an MSD Distributor or a Crank Trigger setup. With this, you can tailor your ignition to your trigger source for absolute trigger accuracy throughout the entire rpm range.

#### **ADJUSTABLE FEATURES**

- Two smooth, accurate rev limits are adjustable in 100 rpm increments
- Single stage retard for top end speed or nitrous systems
- Adjustable magnetic pick-up compensation for absolute trigger
- Start retard eases starting on high compression, locked-out engines



\*Not legal for use or sale on pollution controlled vehicles.



# Programmable Digital-7 Introduction

When the Programmable Digital-7 was introduced to the racing community five years ago, racers couldn't wait to get their hands on its advanced programming capabilities. It also wasn't long before they started asking for even more programming controls. We've worked closely with drag radial racers, outlaw 10.5 crazies and professional pro stock teams to make the Programmable Digital-7 series ignitions the best and only choice in programmable ignition systems.

Due to rules and different classes, there are now four main Programmable Digital-7 Ignition Controls. The Programmable with Boost Retard, PN 7535, is now our base model with the Programmable Plus, PN 7531, being the top of the line due to the rpm/time based rev limiting map. These two ignitions are not legal in some professional racing sanctions, so we developed the PN 7530T which is legal in all NHRA competition. (This ignition has the Traction Control Detection, TCD, feature.) There is also the Programmable TA, PN 75301, which offers ignition data acquisition along with the TCD technology. This ignition is accepted in all NHRA Sportsman categories. (There is also a high output 4-cylinder race-only ignition available, PN 75314. See page 40 for more information.)

All of these ignitions share the same power producing components so output levels are equal. They can also be used on 4, 6 or 8-cylinder engines, have the same dimensions and the primary wiring is the same so there is not much to change when upgrading or changing. To better understand what each ignition offers, we developed a chart that shows which units have the various features.

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 190 MILLIJOULES/SPARK

PRIMARY VOLTAGE: 535 VOLTS

SECONDARY VOLTAGE: 40,000 VOLTS

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 12,500 RPM WITH 14.4 VOLTS

VOLTAGE REQUIRED: 12 - 18 VOLTS, NEGATIVE GROUND CURRENT DRAW: 1.1 AMP PER 1,000 RPM

**WEIGHT AND SIZE:** 3 LBS., 9.5"L x 4.5"W x 2.2"H

Tested with Pro Power HVC Coil, PN 8251
The MSD Pro Power HVC Coil, PN 8251 or PN 8261, are the recommended coils.

| Programmable              |
|---------------------------|
| <b>DIGITAL-7</b> IGNITION |
| <b>O</b> PTIONS           |

| UTS |         |       |    |            |   |
|-----|---------|-------|----|------------|---|
|     | PN      | PN    | PN | P          | M |
|     | 7535,   | 7530T |    | 7531, F    |   |
|     | $P_{G}$ | 4     |    | $_{\rm G}$ |   |

| Magnetic Pick-up                             | Χ   | Χ   | Χ  | Χ | Χ        |
|--|-----|-----|----|---|----------|
| Square Wave (Points, 12V Sq.)                | Х   | Χ   | Χ  | Χ | Χ        |
| REV LIMITERS                                 |     |     |    |   |          |
| Overrev Limiter                              | Χ   | Χ   | Χ  | Χ | Χ        |
| Launch Limiter                               | Χ   | Χ   | Χ  | - | Χ        |
| Burn Out Limiter                             | Χ   | Χ   | Χ  | _ | Χ        |
| Spool Limiter (Turbo)                        | Χ   |     | L  | Χ | Χ        |
| Slew Rate Limiter (Per Gear)                 |     |     |    | Χ | Χ        |
| Auto Learning Limiter                        | Х   | Χ   | Χ  | Χ | Χ        |
| RPM/Time Based Limiter Map                   |     |     |    | Χ | Χ        |
| Time Rev Limiter (NHRA Req.)                 |     |     | Χ  | Χ |          |
| Traction Control Detection                   | L   |     | Χ  | Χ |          |
| TIMING                                       |     |     |    |   |          |
| Individual Gear Timing Map                   | Χ   | Χ   | Х  | Χ | Χ        |
| Boost Timing Map                             | Χ   | L   | L  | Χ | Χ        |
| Indivdual Cylinder Timing                    | Х   | Χ   | Х  | Х | Χ        |
| RETARDS                                      |     |     |    |   |          |
| Start Retard                                 | Х   | Χ   | -  |   | Х        |
| Launch Retard (based on time)                | Χ   | Χ   | Χ  | Χ | Х        |
| 3 Step Retards (ramp on/off)                 | Х   | Χ   | Χ  | Χ | Χ        |
| OUTPUTS                                      |     |     |    |   |          |
| Activation Switch                            |     |     |    |   |          |
| by RPM                                       | Х   | Χ   |    | Χ | Χ        |
| by Time                                      | Х   | Χ   | Х  |   | Χ        |
| by PSI                                       | Х   |     |    | Χ | Χ        |
| Sequential Shift Light                       | Χ   | Χ   |    |   | Χ        |
| Staging Light                                | Χ   | Χ   |    |   | Х        |
| Tach Output Configurable to Trigger / Timing | Х   | Χ   | Х  | Χ | Χ        |
| Configurable Cam Sync or Limiter output      | Χ   | Χ   | Χ  | Χ | Χ        |
| SENSOR                                       |     |     |    |   | .,       |
| Configurable 1, 2 & 3 Bar                    | Χ   |     |    | Χ | Χ        |
| TUNING                                       |     |     |    |   |          |
| Real Time Graphical Display for              | ļ., | ļ., | L. |   | <u>.</u> |
| Engine Monitor (W/Laptop)                    | Χ   | Χ   | Х  | Χ | Χ        |
| DATA LOGGING                                 |     |     | V  | V | V        |
| Ignition Acquisition                         |     |     | Х  | Х | Х        |



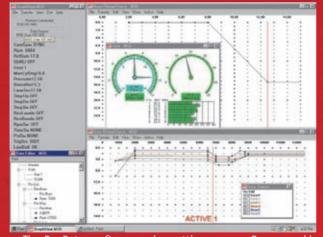
The PN 7535 is our entry level Programmable Digital-7 Ignition Control and will deliver more tuning opportunities than you thought possible! Racers running normally aspirated, nitrous oxide or forced induction systems can all take advantage of the PN 7535.

You can easily map out a timing curve for each gear (up to six), so you can match the timing exactly to the rpm and load on the engine. For nitrous applications, there are separate step retards that can even be ramped on and off over time. For blower or turbo cars, there is a separate map that lets you program a timing curve based on boost pressure. This is set in increments down to 0.25-psia for every 0.1°. If you're going the boost route you will need to purchase a MAP sensor to meet your application (see below).

The PN 7535 delivers a stout 190 millijoule spark with 535 volts of primary voltage,

so even with high boost pressures the fuel is going to get lit. All of this power and adjustments are managed by a very quick 40Mhz RISC microprocessor.

The Ignition is supplied with a wiring harness, mounting hardware, a Pro-Data+ CD and an RS232 computer cable. It will accept trigger signals from an amplifier/ECU output or a magnetic pick-up. (It is recommended to use a crank trigger.) Use HVC Coils, PN 8251 or PN 8261.



The Pro-Data+ software makes setting up your Programmable Ignition easy! There is a Gear Retard chart where you map out each curve and another chart for the boost retard curve. Just a click of your mouse adds or moves points on each curve. There is also a boost pressure gauge along with a retard dial and tach so you can view the changes in real time.

\*Not legal for use or sale on pollution controlled vehicles.

- The entry level Programmable Digital-7 Ignition
- Plot gear curves down to 0.1° every 100 rpm
- Map a timing curve based on boost pressure
- Set rpm limits for the launch, burnout, spool and
- Three retard stages for multiple nitrous applications

MSD Programmable Digital-7 with Boost Retard - PN 7535\*



#### MAP SENSOR

A MAP sensor is required for the Boost Retard feature. Be sure to know the approximate amount of boost you will be running in order to select the correct sensor.

1-BAR. 2-15 psia - PN 23111 2-BAR, 2-30 psia - PN 23121 3-BAR, 2-45 psia-PN 23131



#### PROGRAMMABLE DIGITAL-7™ WITH TCD™

This ignition is the result of working with professional racers and sanctioning bodies. Racers asked for more programmable features, while the sanctioning bodies asked for Traction Control Detection (TCD) capabilities.

The TCD circuitry monitors the magnetic pick-up input and if it senses that the signal has been modified, it will go into a rev limiting mode, set a trouble code and flash an LED indicating that a traction control has been detected. The TCD Ignition has been used successfully in NHRA pro stock racing.

The ignition offers racers the advanced controls they asked for such as timing curves for each gear, rampable step retards, individual cylinder timing and much more.

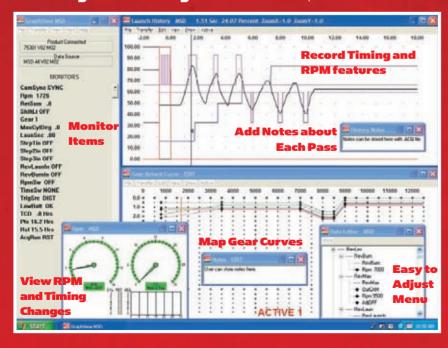
MSD Programmable Digital-7 w/TCD - PN 7530T\*

# PROGRAMMABLE DIGITAL-7 WITH TCD AND DATA Acouisition

Serious racers crave data after a run and this Programmable Ignition answers their call. We took the race-legal PN 7530T and integrated ignition data acquisition capabilities!

After a pass, you can save and then review important information such as the engine's rate of acceleration, shift points, launch rpm, timing changes and much more. The ignition has all the same features as the PN 7530T including the Traction Control Detection circuitry.

#### MSD Programmable Digital-7 with TCD and Acquisition PN 75301\*



#### \*Not legal for use or sale on pollution controlled vehicles.

# TRACTION CONTROL DETECTION

In the majority of racing sanctions and classes, traction controlling devices are illegal. MSD has never produced a traction control - and while it remains illegal, never will produce one. What we have designed is a code that will detect if an electronic traction control system is used with an HEI.

This Traction Control Detection (TCD™) technology carefully monitors and examines the signals of the ignition. If the TCD determines that any signal has been modified in any way, the ignition will be put into a low rpm rev limit mode that will immediately slow the car. Before this rev limit is imposed, the TCD goes through a list of cycles and checks to qualify that the trigger signal has been modified.

- Advanced circuitry constantly monitors the ignition's signals
- A rev limit mode will be activated if traction control is detected
- Proprietary technology is pending a U.S. Patent



# SOGRAMMABLE DIGITAL-7



#### Programmable Digital-7 Plus™

If you're a consummate engine tuner and know how to take advantage of minute changes in timing during a quarter mile pass, then the Programmable Digital-7 Plus is the ignition for you!

All of the standard programmable features such as Individual Cylinder Management, Step Retards, Rev Limits, Shift Points and more are included in the Plus version but you also get more. Much, much more.

A MAP sensor is required for the boost circuit. The Ignition is supplied with wiring harnesses, mounting hardware, an RS232 computer harness and the Pro-Data+ software on a mini CD. (The Hand Held Monitor, PN 7550, can also be used for programming.) It will accept trigger signals from a points/ECU output or a magnetic pick-up. The recommended Coils are PN 8251 or PN 8261.

#### **PRO-DATA+ SOFTWARE**

This Pro-Data+ software program is designed in-house exclusively for MSD's Programmable Ignitions and Accessories. The Pro-Data+ software can be used with any PC running Windows 95, 98, 2000, NT, XP or ME. It is available on a mini CD or can be downloaded through the MSD Ignition website at: www.msdignition.com/softdwn.htm.

The PN 7531's software allows easy editing of the ignition's parameters plus viewing the launch history record. This also has analysis tools available on the PC to perform user selected analysis of any of the stored launch record data.

# ABSOLUTE CONTROL OVER EVERY ASPECT OF YOUR IGNITION TIMING INCLUDING:

- Map a complete timing curve for every gear
- Stage retards can be set to ramp the timing
- View all ignition events in a new Launch History window including the retard sum, manifold pressure, rpm, shift points and more
- Acquire ignition data after a run including two seconds prior to launch
- \*\*Select a slew rate rpm limiter value in rpm/ seconds
- Program an rpm limit that is ramped in during the launch
- Vacuum advance and boost retard is selectable through a MAP sensor
- Cam sync output for fuel controllers or data acquisition
- Program your engine's firing order for ease of setting the cylinder-to-cylinder timing
- Automatic magnetic pick-up compensation for crank triggers or distributor pick-ups
- Output to activate a device through rpm, time or pressure inputs

\*\*PN 7531 Only

## MSD Programmable Digital-7 PluS - PN 7531\*

NOTE: For output specifications, see page 37.





#### 4-CYLINDER RACING ENGINES

MSD offers a race-only Programmable Digital-7 for 4-cylinder race engines. This Ignition, PN 75314, has all of the features of the PN 7531 while producing up to 250mJ of spark energy for use on high boost turbo engines.

#### 4-Cyl. Programmable Digital-7 Plus - PN 75314\*







For other Programmable MSD accessories, check out:

#### Programmer/Monitors

If you do not have a laptop or PC, all of the Programmable 7 Ignition Control's programs can be set with this hand held Programmer/Monitor.

The LCD will display the programming options which you can select to adjust or view the program that is already in the ignition. Adjustments are easily made with six positive-contact push buttons. The unit is easy to handle, even with race gloves on, and weighs in at under half a pound.

Programmer/Monitor-PN 7550

#### **DYNO TUNING PROGRAMMER**

This Programmer has two control dials that provide instant editing of the cylinder-to-cylinder timing, step retards and the start retard values in 0.1° increments. When a change is made it is instantly encoded within the MSD unit and stays in effect until another change is made to that specific program.

Dyno Tuning Programmer/ Monitor - PN 7553



- Ideal for tuning engines on a dynamometer
- Instant real time editing of the cylinder-to-cylinder timing, step retards and the start retard values in 0.1° increments













#### MSD LED SHIFT LIGHT

This small Light fits neatly to a steering column or on top of your dash board and stays unobtrusive but illuminates bright enough to see easily in the daylight. It plugs into our Programmable Ignitions, and can also be used with factory or other aftermarket ignition systems through an rpm activated switch such as MSD's PN 8950 or PN 8969.

LED Shift Light, Red Lens - PN 7552

#### SYNCHRONIZATION PICK-UP KITS

To take advantage of the Programmable Digital-7's Individual Cylinder Management system, a synchronization pick-up must be incorporated so the ignition knows exactly which cylinder is firing. MSD offers two ways to accomplish this.

#### SPARK PLUG WIRE SYNC KIT

This pick-up simply installs to the number one sparkplug wire and senses the trigger signal and sends this information to the Ignition through a fiber optic cable.

Spark Plug Wire Sync Kit - PN 7555

#### CAM SYNC PICK-UP

The pick-up Kit is supplied with a non-magnetic pick-up, connectors, the magnet and retainer. You will need to fabricate a bracket assembly and install the magnet to the cam gear.

Universal Cam Sync Pick-Up Kit - PN 2346

#### **MAP SENSOR**

An MSD MAP Sensor is required for the Boost Retard feature. Be sure to know the approximate amount of boost you will be running so you will get the proper sensor. MSD offers three different sensors.

- 1 Bar, 2-15 PSIA PN 23111
- 2 Bar, 2-30 PSIA PN 23121
- 3 Bar, 2-45 PSIA PN 23131



#### MANUAL LAUNCH CONTROL

This handy controller lets you change the launch rpm setting instantly for last second changes in track conditions. They plug into the RS232 computer harness and have two rotary dials for adjustments.

Manual Launch Control - PN 7551

#### MSD8™ IGNITION

The MSD 8 Ignition Control is powerful enough to burn any exotic fuel mixture even in engines with massive compression ratios. The ignition produces extremely high energy sparks combined with a long duration spark series below 3,000 rpm. A Coil Coupler is built-in to increase spark duration and protect the ignition against voltage spikes.

To protect the engine from overrev damage the MSD Engine Saver, PN 8978, can be installed. It provides two adjustable rpm limits and installs with a special Weathertight Connector. Vibration shock mounts are supplied along with a separate current filter to prevent interference from other electronic controls on the car.

#### MSD 8 Ignition, Pro Race - PN 7800\* Dual Coil MSD 8 - PN 7802\*

Designed specifically for engines running dual spark plugs per cylinder. This is a favorite among puller competitions as it takes a single trigger source to fire both spark plugs

at once.

#### MSD 8 Engine Saver - PN 8978\*

MSD offers an Engine Saver for the MSD 8. This control provides two rev limits that are adjustable with MSD's rpm modules to give you overrev protection and an rpm launch limit.

SPARK ENERGY: 315-345 MILLIJOULES/SPARK

**PRIMARY VOLTAGE: 480 VOLTS** SECONDARY VOLTAGE: 50 000 Volts Puis

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION RPM RANGE: 15,000 RPM WITH 14.4 VOLTS

**VOLTAGE REQUIRED:** 12 - 18 Volts, Negative Ground CURRENT DRAW: 36 AMPS AT 12,000 RPM

WEIGHT AND SIZE: 7 IRS., 10" Lx 3.75" W x 5.75" H

TESTED WITH PRO POWER COIL, PN 8201

#### MSD10-PLUS™ Ignition CONTROL

For racers with absurd amounts of boost pressure or nitrous being injected, the search for an ignition with the voltage and current output to match, ends with the MSD 10-PLUS.

Ignition savvy racers will note that the MSD 10-PLUS isn't exactly new as it is definitely rooted to the proven MSD 10 Ignition. Our engineers were able to take that proven performance and combine it with our patented Stacker Ignition (CD/Inductive) technology to create an ignition and single coil package with even more spark energy and voltage!

The 10-PLUS coil is designed specifically to handle the CD and Inductive sparking characteristics of the 10-PLUS. This coil is completely hand assembled in-house at MSD with a segmented Rynite bobbin and unique windings that are capable of handling the 630 volts and up to 700 mJ of spark energy that the Ignition produces. Together, the system produces a spark that glows across the plug

gap for 20°-30° and is assured to burn whatever fuel you can throw at it.

The MSD 10-PLUS features a built-in Two Step Rev Control for an easy to set launch limit and important overrev rpm limit. The Ignition is supplied with the Coil, wiring and hardware for installation.

#### MSD 10-Plus Ignition System PN 7505\*

Supplied with Ignition Control (PN 7502) and Coil (PN 8208).

NOTE: For V8 engines only.

# PN 7505

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 700 MILLIJOULES/SPARK **PRIMARY VOLTAGE: 630 VOLTS** 

SECONDARY VOLTAGE: 60,000 Volts Puis SPARK SERIES DURATION: CD: 20° CRANKSHAFT ROTATION

> INDUCTIVE: 20°-30° CRANKSHAFT RPM RANGE: 14,000 RPM WITH 14.4 VOLTS

> **VOLTAGE REQUIRED:** 12 - 18 Volts, Negative Ground CURRENT DRAW: 20 AMPS AT 8,000 RPM

**WEIGHT AND SIZE:** 4.75 LBS., 8"L x 3.75"W x 5.75"H TESTED WITH 10 PLUS COIL, PN 8208

MSD 10 components are available separately as: MSD 10-Plus Ignition Control - PN 7502 MSD 10 Plus Coil - PN 8208

\*Not legal for use or sale on pollution controlled vehicles.

www.MSDIGNITION.com



#### WHAT IS DISTRIBUTORLESS?

Late-model vehicles have incorporated ignition systems that have not used a distributor for quite a few years. Reaching back to the mid '80s, some vehicles, such as Buick's turbo V-6 models used a coil pack with six secondary terminals. This technology continued to be used on more cars and trucks rolling off the assembly line. These systems use some form of a crank sensor that produces a trigger signal to the ECU which triggers the correct channel of the ignition.

In recent years, distributorless technology has evolved into coil-per-cylinder and coil-on-plug systems that have an individual coil for each cylinder. These coils receive voltage and energy through a driver that is triggered by the ECU. These drivers are sometimes incorporated into the ECU, and other times in the coils themselves (such as the GM LS). In applications that allow the coil driver circuit to be accessed, an MSD Stacker-8 can be used (four channels for four coils, eight channels for six or eight coils).

The following info will help you get an idea of which ignition is right for your application.

#### STACKER-8, PN 7020

This unique Ignition connects to a coil-per-cylinder ignition system without disconnecting any of the factory wiring! The patented technology of the Stacker produces a powerful Capacitive Discharge spark (multiple sparks) in combination with the factory inductive spark. The Stacker will operate on most coil-per-cylinder ignition systems as long as the driver circuit of the coils can be accessed. See page 46.



#### **MSD DIS IGNITION CONTROLS**

These DIS Ignition Controls provide MSD's proven CD multiple sparks that will ignite performance into street/strip cars. The DIS-2 is designed for 4-cylinder engines with two coil packs, the DIS-4 can be used on 6 or 8-cylinder engines with coil packs (and on some 4-cylinder coil-per-cylinder systems). Both Ignitions have been updated with rotary dials to adjust its two rev limiters and step retard. See page 44.



#### FORD MODULAR IGNITION CONTROLLER

The Detroit-3 have been distributorless for nearly a decade! MSD now offers an ignition controller for each; the GM LS engines, the Ford Modulars and the new Dodge Hemi. These Controllers will connect to the factory sensors (with the accessory EFI Harnesses) and allow the user to alter the timing curve, set a launch rpm limit, program a step retard or even map a timing curve based on boost pressure. They'll also drive the coil packs when an old-school carburetor is added to the mix! Check out pages 50 and 51.



#### Programmable DIS-2, PN 6212

This Ignition delivers incredible spark energy with an array of PC programmable features including a run timing curve, launch timing curve, boost retard curve, step retards, gear retards, three rev limits plus more! All of these features are easy to program from your Windows based PC. This two channel ignition control is for race engines with two coil packs. See page 47.



# STRIBUTORLESS IGNITIONS



The mid 1980s were the beginning of the end for distributors in regard to new cars. The Buick Grand Nationals started using coil pack technology while many other GM vehicles were using dual tower coil packs sometimes known as Waste Spark systems. When Ford moved to the 4.61 Modular engine in the '96 Mustang, there were two coil

to the 4.6L Modular engine in the '96 Mustang, there were two coil packs with four towers each set up as a Waste Spark. Other common applications came from Mitsubishi and eventually Chrysler systems.

MSD's DIS Ignition Controls are designed for engines with coil pack, waste spark ignition systems. The DIS-2 has two channels, to fire two coil packs, while the DIS-4 is capable of firing up to four coil packs (or even four individual coils). Each Control delivers full power Capacitive Discharge sparks from idle through racing rpm. Below 3,000 rpm there is a series of multiple sparks that last for up to 20° of crankshaft rotation to improve idle, starting and throttle response.

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 105 - 115 MILLIJOULES/SPARK PRIMARY VOLTAGE: 460 - 480 VOLTS

SECONDARY VOLTAGE: 40,000 VOLTS

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 14,000 RPM WITH 14.4 VOLTS
VOLTAGE REQUIRED: 10 - 18 VOLTS. NEGATIVE GROUND

VOLTAGE REQUIRED: 10 - 18 VOLTS, NEGATIVE GROUND CURRENT DRAW DIS-2: 3.5 AMPS AT 10,000 RPM CURRENT DRAW DIS-4: 6.6 AMPS AT 10,000 RPM

**WEIGHT AND SIZE:** 4.5 LBS., 9.5"L x 4.5"W x 2.2"H

This product is OBDII Legal to sell, distribute or install on vehicles in California according to Executive Order E.O. D-40-36; legal in all 50 states.

The adjustable features of the DIS Ignitions have also been upgraded with rotary dials. These provide easier, and more precise adjustments of the overrev limiter and the holeshot rev limit. Also, there is now a step retard that can be wired directly to a nitrous system or switch for activation!

switches!

MSD DIS-4 Plus (For use on 6 or 8-cylinder engines with two, three or four coil packs.) - PN 62152

MSD DIS-2 Plus (For 4-cylinder engines with one or two coil packs.) - PN 62112

NOTE: Some engines will require at least one Dual Channel Ignition Adapter, see page 45.



#### DIS-4 HARNESSES

These harnesses will provide a splice-free installation of a DIS Ignition.

MSD DIS-2 to Ford Coil Pack - PN 8881 MSD DIS-4 to Dual Ford Coil Packs - PN 88812 MSD DIS-2/4 to Dodge/Mitsubishi - PN 8883



PN 88813



- Easily install two DIS-4 Ignitions on late model Ford Engines
- Easy connections with no splicing or cutting into factory wiring
- Wiring the system will take only

#### **DUAL DIS-4 HARNESS**

This harness allows an easy installation of two DIS-4 ignitions on '99 and up Fords.

# MSD Dual DIS-4 Installation Harness - PN 88813

NOTE: Complete installation on a late model Ford requires two DIS-4 Plus Ignition Controls and four Tach Adapters, PN 89121, see page 51.

that is capable of burning the majority of air/fuel mixtures. There are of course exceptions, such as full bred race engines running high boost pressures from turbos, blowers or nitrous. To answer these needs, we offer a Higher Output version of the DIS Ignition Controls.

The DIS Plus HO Ignitions produce an incredible 170 millijoules of spark energy with 470 primary volts. This increased output will light up fuel mixtures even under extreme cylinder pressures.

The DIS-HO boxes are not CARB approved and are designed for drag racing applications only.

DIS-2 Plus HO, 2-Coil Packs - PN 62113\* DIS-4 Plus HO, 2, 3 or 4-Coil Packs - PN 62153\*

- Two adjustable Rev Limits
- Diagnostic LED
- Adjustable retard stage
- **Ignition Interrupt Circuit**





#### **DUAL CHANNEL IGNITION ADAPTER**

In some instances when you install an MSD Ignition, the factory ECU may not be able to distinguish when the coil fires. This is the signal that is also responsible for firing the injectors (or the tachometer), which may cause a no-run situation.

The Dual Channel Ignition Adapter simulates the original coil trigger signal thus allowing the ECU to properly trigger both the tach and fuel injection with the MSD DIS Ignition installed. In most cases, the Adapter plugs directly into the MSD's Harness. For vehicles using an MSD DIS-2 Ignition, only one PN 8912 is required. For DIS-4 applications, two PN 8912's are required.

#### **Dual Ignition Adapter - PN 8912** Ford Coil-On-Plug and '03 and Newer Vehicles - PN 89121

#### EASY DIS INSTALLATION ACCESSORIES

The MSD DIS Ignition Controls are popular additions to GM DIS vehicles and these products will make installation easy.

#### Buick Interface Module & Harness

This Interface Module is designed for the large one piece coil unit used on Buick's popular T-Types and Grand National V6 engines. The Interface mounts between the factory ignition module and coil housing then wires easily to the MSD DIS-4 Ignition Control.

Buick Interface Module ('86-'87 only) - PN 8878

#### COIL INTERFACE MODULE

This module goes between the factory GM ignition module and coils. It has color coded wires that connect to the DIS wiring and are molded using Dupont Rynite for its high dielectric strength and connect directly to the factory terminals.

#### **GM-PN8870**

NOTE: Coil sold separately

\*Not legal for use or sale on pollution controlled vehicles.



SPARK ENERGY: 170 MILITIOULES/SPARK

**PRIMARY VOLTAGE: 470 VOLTS** 

SECONDARY VOLTAGE: 43,000 VOLTS (STOCK COIL)

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 14,000 RPM WITH 14.4 VOLTS

**VOLTAGE REQUIRED:** 10 - 18 Volts, Negative Ground CURRENT DRAW DIS-2: 5.3 AMPS AT 10,000 RPM

CURRENT DRAW DIS-4: 10 AMPS AT 10,000 RPM

**WEIGHT AND SIZE:** 3 LBS., 9.5"L x 4.5"W x 2.2"H

#### **INDIVIDUAL COILS?**

The MSD DIS Ignitions were designed primarily for dual tower, waste spark ignition systems. Some aftermarket engine management systems can adapt the DIS Ignitions to fire individual coils. In order to accomplish this with a DIS-4 Ignition, the ECU must have four outputs and a cam sync pick-up to determine when to fire number one. These systems are typically on high-end, race systems only.





#### MSD STACKER-8

A breakthrough in capacitive discharge ignition technology! The MSD Stacker-8 Ignition connects to your vehicle's wiring without disconnecting anything! Actually, the factory ignition remains in place and the Stacker delivers a powerful CD spark to improve

■ Easy to install without disconnecting factory wires

- Powerful capacitive discharge sparks improve combustion for increased performance
- Diagnostic LED confirms operation at a glance

the initial ionization of the plug gap to improve combustion in the cylinder. The two spark profiles work together to give you a great boost in ignition power in an economical ignition control.

The majority of stock ignition systems are inductive designs. This style is inexpensive to produce and is adequate

#### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 120 MILLIJOULES/SPARK

PRIMARY VOLTAGE: 250 VOLTS

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 15,000 RPM WITH 14.4 VOLTS

**VOLTAGE REQUIRED:** 12 - 18 Volts, Negative Ground

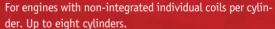
CURRENT DRAW: 1 AMP PER 1,000 RPM

**WEIGHT & SIZE PN 7020:** 3.5 LBS., 8"L x 3.5"W x 2.25"H

THIS PRODUCT IS OBDII LEGAL TO SELL, DISTRIBUTE OR INSTALL ON 2003 AND OLDER VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-36; LEGAL IN ALL 50 STATES.

for OEM vehicles. Inductive systems generally have fair spark intensity, but fall short when it comes to high rpm operation and high voltage for performance engines. The MSD Stacker-8 produces a high powered CD spark in combination with the factory inductive spark so essentially, you receive the benefits of both spark profiles!

#### MSD Stacker<sup>™</sup> Ignition, 8-Channel, Distributorless - PN 7020





NOTE: Not for use on Chevrolet LS style engines or with coils with built-in drivers.

#### SATURN CAM SYNC GENERATOR

After installing an MSD DIS-2 Series Ignition Control on the waste spark ignition system of a '96 and later Saturn, the ECM of the vehicle will not be able to receive a cam sync signal. The Cam Sync Generator produces a cam sync signal after start up for the factory ECM. This is done by detecting a cylinder that is under compression through its signal wire which is wrapped around the designated spark plug wire. (On Saturn applications, the number four spark plug wire is used for the cam sync.)

Saturn Cam Sync Generator, '96 and Later - PN 8914

#### **DUAL IGNITOR AND CPC SIGNAL CONVERTER**

In the past, adding ignition boxes and coils to factory transistorized ignitions was virtually impossible. All that has changed now that MSD has developed the Dual Coil Ignitor and CPC Signal Converter. The MSD PN 6302 and PN 6304 both allow you to install an MSD DIS-2 or DIS-4 on 4-cylinder engines with either waste spark or coil-per-cylinder ignitions. Both require MSD coils to be installed for a complete package.

DIS Dual Coil Ignitor - PN 6302 DIS CPC Signal Converter - PN 6304





SECONDARY VOLTAGE: 50,000 Volts w/ Blaster Coils

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 12,500 RPM WITH 14.4 VOLTS

**VOLTAGE REQUIRED:** 12 - 18 Volts, Negative Ground

CURRENT DRAW: 8 AMPS AT 10,000 RPM

**WEIGHT AND SIZE:** 5 LBS., 8.5"L x 4.5"W x 2.2"H

Four cylinder distributorless ignition applications (with two coil packs) will benefit from the incredible spark energy of the new MSD Programmable DIS-2 Ignition Control as well as its ignition programming capabilities!

MSD's CD circuits and state-of-the-art IGBT coil drivers work together to deliver a potent spark with 190 mj of spark energy!

Below 3,300 rpm, there are series of multiple sparks that burn in the cylinder for 20° producing a smooth idle with great throttle response.

You get to control all of this spark energy through an incredible array of timing and rpm programs. The heart of the Programmable DIS-2 is an efficient microprocessor that reviews, analyzes and manages every trigger signal and is capable of up to 15 million instructions per second! The end result is a powerful ignition control with endless programming capabilities to produce reliable performance.

#### MSD Programmable DIS-2 Ignition Control - PN 6212\*

Note: Designed for 4-Cylinder engines with one or two coil packs.

#### **PROGRAM**

Program these features from a PC with MSD's Pro-Data+ software or with the Hand Held Monitor, PN 7550.

Individual Cylinder Timing - Maximize the performance of each cylinder to compensate for differing dynamics in airflow and other variances (requires optional pick-up).

Launch Timing Curve — Program a separate timing curve exclusively for the launch!

**Boost Timing Curve** — For turbo or supercharged applications an optional MAP sensor can be installed so you can control the ignition

timing in relation to boost pressure. The timing can be programmed from  $0^{\circ}$  -  $25^{\circ}$  in proportion to boost pressure ranging from 0 - 45 psia in 0.25 psia increments.

Multi-Step Retard — Three separate stages of retard can be activated by either rpm or a separate activation wire.

Gear RPM and Retards — Program a different rpm shift point for each gear as well as a retard for every gear change.

Three Rev Limits – Set three different rev limits for the burnout, the holeshot and top end overrev protection in 100 rpm increments.

#### **PROGRAMMING OPTIONS**

To program the DIS-2, you can use the Hand Held Monitor or the Windows based Pro-Data+ software.

The Hand Held Monitor features an LCD that clearly shows the programming options and steps of each control. Adjustments are made with six positive contact push buttons.

#### **Hand Held Monitor - PN 7550**

For more Programmable accessories, see page 122.



MSD's Pro-Data+ software is a Windows based software that can be used with any PC running Windows 95, 98, NT, XP, ME or 2000. It is available on a CD or can be downloaded FREE at: www.msdignition.com

<sup>\*</sup>Not legal for use or sale on pollution controlled vehicles.



#### MSD 6LS AND 6LS-2 IGNITION CONTROLLERS

There's no denying that the hottest engine around is GM's Gen-III engine, most often referred to as the LS1, LS6 and now the LS2 and LS7. Our engineers have been working overtime to provide the components you need to fire up performance!

The 6LS and 6LS-2 Ignition Controllers can now be installed on EFI or carburetor equipped engines. While it may seem blasphemous to some, putting a carburetor on a GM Gen-III V-8 is a great option for those wanting the advantages of the aluminum small block without the headaches of wiring a modern EFI system. The controllers allow you to map a timing advance curve with MSD's easy-to-use Pro-Data+ software. Other programmable features include a two-step rev limiter, a vacuum advance curve for cruising economy and even a step retard in case you want to add a little nitrous to the mix.

The 6LS is designed for LS1/LS6 type engines with a 24-tooth wheel, which can be identified by its black harness connector.

The 6LS-2 is designed specifically for the LS2/LS7 and its 58-tooth wheel, which can be easily recognized by its gray harness connector. Both of these compact ignition controllers fit with matching factory connectors for a direct installation. Only a handful of connections are required; the coils, crank sensor, MAR appears of the corn corner Variables are required.

sor, MAP sensor and the cam sensor. You'll have your carb'ed LSX running in no time!

MSD 6LS Ignition Controller, for LS1/LS6 (24-tooth crank trigger) Engines - PN 6010\*

6LS-2 Ignition Controller for LS2/LS7 (58-tooth crank triggers) Engines - PN 6012\*

See page 49 for Multiple Spark Coils for Gen-III Engines!

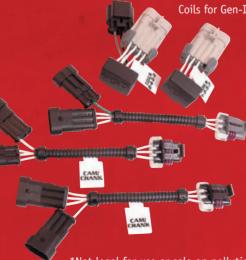
#### **QUICK ID**

LS2/LS7 - Cam Sensor in front.

Gray Crank Sensor.

LS1/LS6 - Cam Sensor in rear. Black Crank Sensor.

- Runs a carbureted LS engine without complicated EFI hardware
- Map a timing curve using Pro-Data+ software
- Programmable two-step rev limiter, vacuum advance curve and step retard
- Direct plug-in to factory components
- Programmable via a PC through MSD's Pro-Data+ software



#### **EFI HARNESSES**

These harnesses allow you to easily connect the 6LS or 6LS-2 to a factory EFI system to take advantage of timing adjustments and settings!

#### 6LS to EFI Harness, LS1/LS6 - PN 8886 6LS-2 to EFI Harness, LS2/LS7 - PN 88862

This nifty extension harness will reach the front-mounted cam sensor on an early (24-tooth trigger wheel) LS2 when installing a 6LS Ignition Controller (PN 6010).

6LS to early LS2 Cam Sensor Extension Harness - PN 88861

\*Not legal for use or sale on pollution controlled vehicles.

PN 8246

#### MULTIPLE SPARK COIL KITS

MSD Ignition's Multiple Spark Coils (MSC) will fit in place of the stock Gen-III GM coils and connect directly to the factory connectors. Once installed, you'll have the power and performance of higher energy sparks, crowned with MSD's multiple spark discharge.

Increased spark energy and voltage, along with multiple spark capabilities, help improve the combustion process of the fuel mixture to create an efficient burn. This results in improved throttle response, smooth idle and guick starts, plus increased high rpm performance!

There are two types of housings for the MSD Coils. Check your application for the visual match.



#### COIL SPECIFICATIONS

TURNS RATIO: 52:1 PRIMARY RESISTANCE: .57 OHMS SECONDARY RESISTANCE: 3.1K OHMS INDUCTANCE: 5.8 MH MAXIMUM VOLTAGE: 44,000 VOLTS PEAK CURRENT: 150 MA SPARK DURATION: 1200 US

The MSC delivers up to three times the current of the stock coils. Plus, the coils fire multiple times!

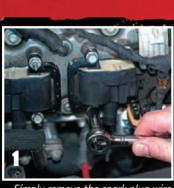
#### **IDENTIFYING YOUR COILS**

GM used a variety of coils on these engines, so the best way to identify the coil you need is through visual comparison. We've tried to break our three coils down to the most common applications:

LS1/LS6 Engines MSC Coil Kit, 8-Coils - PN 82458 MSC Coil, Individual - PN 8245

LQ Truck Series MSC II Coil Kit, 8-Coils - PN 82468 MSD II Coil, Individual - PN 8246

LS2/LS7 MSC, LS2, Coil Kit, 8-Coils - PN 82478 MSC, LS2, Individual - PN 8247



Simply remove the spark plug wire and connector, then unbolt the factory coil.



Install the new MSC with the supplied hardware and plug in the coil fire up with MSD performance. harness.



Connect the spark plug wire and



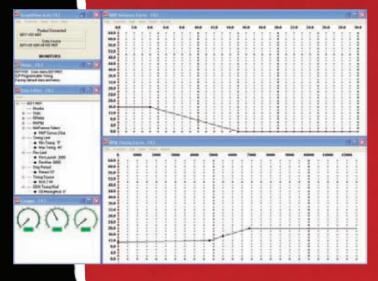
#### FORD MODULAR IGNITION CONTROLLER

New technology to go old school! When you retro-fit a Ford 4.6L or 5.4L (SOHC/DOHC) with a carbureted intake manifold, you'll need this new Controller to handle the ignition chores.

The Controller plugs into the coil packs and sensors of the engine for a direct installation. From a PC, using our Pro-Data+ software, you can program a custom timing curve, a step retard, two step rev limiter and even a vacuum advance. A great system for street rods and retro muscle cars.

- Map a timing curve and vacuum advance to meet your vehicle's needs
- Program two rev limits and set a step retard for nitrous use
- Connects directly to the coils, crank, cam and MAP sensors for an easy installation

Ignition Controller for Carbureted Ford Modular Engines - PN 6011\*



PN 88814

#### IGNITION HARNESS FOR 6-MOD CONTROLLER AND EFF

The 6-Mod Ignition Controller was originally developed for Mod Motors that were fed through a carburetor rather than an electronic fuel injection system. However, with the useful options that the 6-Mod provides, such as two rev limits, a step retard and easy control over the timing, the EFI guys wanted a way to take advantage of the adjustment. The answer lies in this new Harness Kit.

This new Harness provides a splice-free installation of the MSD 6-Mod Controller to factory equipped EFI vehicles making installation a snap. All of the connectors plug directly to the factory units so there is no cutting or splicing of your factory wires. The compact "tach adapters" ensure that the ECU and the 6-Mod receive the correct signals required to keep both systems operating as designed.

Once installed, the 6-Mod allows users to advance or retard the factory's timing curve, program a step retard for use with nitrous systems or even map out a timing curve through a laptop by using MSD's Pro-Data+ software.

> 6-Mod Harness for EFI - PN 88814

\*Not legal for use or sale on pollution controlled vehicles.

IGNITIONS

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There's no denying the performance and popularity of the late model Ford Mustang. For owners looking to improve their Ford's performance on the street or strip, MSD offers a variety of ignition upgrades to fire up your Mod Motor.

#### FORD BLASTER COIL-ON-PLUG

The improved spark energy and voltage of MSD's Blaster 2 Coils, combined with reliability, have made them a favorite for performance enthusiasts. Whether firing a restored BOSS 429 or a Saturday night circle tracker, the Blaster 2 has always gotten the job done. MSD is excited to offer Blaster coils for late model Ford engines with Coil-on-Plug technology!

The new Blaster CoPs are designed as a direct bolt-in replacement coil for many SOHC Modular Motors. The housing and installation are the same as the factory, but that's where the similarity ends. Inside the MSD red housing, engineers spec'd better material to assemble the primary and secondary windings. There is also patented dual magnet technology to step up the output. Together, this combines a coil that produces higher voltage and spark energy! The Coil-on-Plug design of the Blaster CoPs puts the spark energy right out of the coil and across the plug gap to improve the combustion and output of the engine.

The Blaster 2 CoPs are available individually or as a complete set of eight.

#### Ford Coil-on-Plug

- '99-'04, 4.6L SOHC, individual PN 8242 '99-'04, 4.6L SOHC, set of eight PN 82428 '05-On, 4.6L SOHC, individual PN 8243 '05-On, 4.6L SOHC, set of eight PN 82438

#### **DUAL DIS-4 HARNESS**

Using MSD's DIS-4 ignition systems on your coil-on-plug Ford has always been a great upgrade, but honestly, the wiring poses guite a challenge. To ease this install, we now offer a wiring harness kit that'll make the install nearly a direct plug-in!

The harness provides a splice-free installation with connectors that plug directly into the factory unit. They even have corresponding wire colors! When used in conjunction with two DIS-4 Ignitions and four Dual Ignition Adapters, PN 89121, your coil-on-plug Ford will receive all the spark it needs plus a two-step rev limit and step retard. And the best part, wiring will only take about an hour!

#### **Dual DIS-4 Installation Harness - PN 88813**

- Easily install two DIS-4 Ignitions on late model Ford Engines
- Easy connections with no splicing or cutting into factory wiring
- Wiring the system will take only an hour



operation

connectors

Patented winding

design and materials

Direct bolt-in to factory



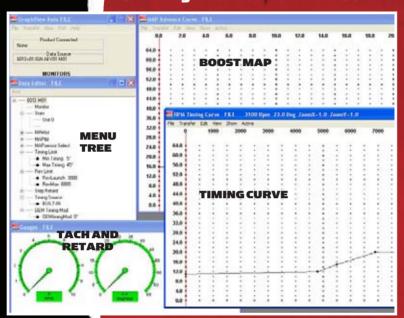
Note: Complete installation on a late model Ford requires two DIS-4 Plus Ianition Controls and four Tach Adapters, PN 89121.



#### 6-Hemi Ignition Controller

Hemi fans old and new will be excited to see that the 6-Hemi Controller will connect to factory EFI fueled Hemis or will drive the coil packs of a carbureted retro-fit engine! The Controller plugs into each coil pack along with the crank and cam sensors to provide you the ability to modify the timing curve, set a two step rev limit, nitrous retard or even a boost/timing map! The 6-Hemi Controller is designed to operate with both styled coil packs that are offered on the new engines. A wiring harness for each application is sold separately.

#### 6-Hemi Ignition Controller - PN 6013\*



When connected to a PC, you can tune your Hemi through MSD's Pro-Data+ software. It is easy to program items like two rev limits, a step retard and a timing curve through a laptop!

#### LATE MODEL BLASTER COILS FOR HEMI ENGINES

Fire up your late model Hemi with a set of MSD's Blaster Coils. The Coils are a direct bolt-in and are spec'd with superior materials and winding ratios to improve the output of the coil while retaining the factory fit.

Blaster Hemi Coils, 8-Packs Early Model, '03-'05 - PN 82568 Late Model, '06-'08 - PN 82558



\*Not legal for use or sale on pollution controlled vehicles.

- Fire the coils and control the timing on Hemis retro-fit with a carburetor or factory EFI
- Program two rev limits and a step retard
- Connects directly to the coils, crank, cam and MAP sensors for easy installation



#### 6-Hemi Harnesses

Chrysler used two different coil packs on the late model Hemi engines. For connections on a carbureted engine a Harness will be required. For EFI engines, the Harness and an Adapter will be required.

Harness: '03-'05-PN 88863 '06-'08-PN 88864

Adapter for Factory EFI: '03-'05-PN 88815 '06-'08-PN 88816

- Improved high rpm operation
- Patented winding design and materials
- Direct bolt-in to factory connectors



When it comes to late model performance parts, nothing beats bolt-on and direct connection components. These new bolt-in coils are designed with improved materials and windings to produce a stronger output. This improved spark helps burn the fuel mixture more efficiently resulting in a smooth idle and improved mid range rpm power.

MSD is pleased to offer these performance coils for the following applications. Each coil will deliver a strong spark and will connect to the factory wiring.

#### GM DIS COIL

Used on GM vehicles from the mid 1980s to late 1990s.

#### GM 2-Tower Coil Pack - PN 8224

Installation Tip: If you plan to install an MSD DIS Ignition, use Interface Modules, PN 8870 or PN 8879. See page 45.

#### GM Single Connector

Used on 1996-1999 GM vehicles.

#### **GM Single Connector** Coil - PN 8231

Installation Tip: If you plan to install an MSD Ignition with this coil, use a PN 8877 Harness for a direct plug-in installation. See page 26.

#### **DODGE COIL** Late Model Dodge, 2-Pin Connector - PN 8228

MSD now offers direct plug-in Dodge Harnesses for MSD 6 installations, see page 26.

#### FORD 4-TOWER COIL

For 1995-1998 4.6L, DOHC/SOHC.

Ford Coil Pack, 4-Tower - PN 8241

#### MITSUBISHI/NEON/TALON/MINI

MSD offers these two 4-tower coils as replacements for a variety of years

ranging from 1994-2003 on vehicles including Mitsubishis, Neons and others. The difference between the two coils is the wiring connector. Consult the photos to ensure that you receive the coil you need for your engine.

#### **Round - PN 8229** Flat Terminals - PN 8239

If you plan to run an MSD DIS-2 Ignition, see page 44 for a direct plug-in wiring harness.

# 9 9 9

TURNSRATIO: 77:1

**INDUCTANCE:** 7 mH

**PRIMARY RESISTANCE: .051 ohms** 

**SECONDARY RESISTANCE:** 12K ohms

PN 8229

#### **PRIMARY RESISTANCE: .35 ohms SECONDARY RESISTANCE:** 7.8K ohms INDUCTANCE: 4.2 mH

**COIL SPECIFICATIO** 

MAXIMUM VOLTAGE: 40,000 Volts

TURNS RATIO: 80:1

**TURNS RATIO: 80:1** 

**PRIMARY RESISTANCE: .5 ohms** 

**SECONDARY RESISTANCE:** 6.5K ohms

**INDUCTANCE:** 3.9 mH

**MAXIMUM VOLTAGE:** 40,000 Volts

#### **COIL SPECIFICATIONS**

TURNS RATIO: 70:1 **PRIMARY RESISTANCE:** 1.2 ohms

SECONDARY RESISTANCE: 13.7K ohms **INDUCTANCE:** 3.9 mH

**MAXIMUM VOLTAGE: 40,000 Volts** 

TURNS RATIO: 83:1 **PRIMARY RESISTANCE: .53 ohms** 

SECONDARY RESISTANCE: 13 7K ohms

INDUCTANCE: 3.9 mH

MAXIMUM VOLTAGE: 40,000 Volt



THESE PRODUCTS ARE LEGAL TO SELL, DISTRIBUTE OR INSTALL ON 2003 OR OLDER VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-37; LEGAL IN ALL 50 STATES.



Like our ignition controls, MSD offers a variety of performance coils designed for a number of different applications. From OEM replacement models, to Blaster 2 kits to improve spark output on stock systems and up to the HVC II Coil, MSD has a coil for most everything!

MSD hand assembles several of our high output racing coils completely in-house. This gives our engineers much more control over the output, quality and ultimately, the performance that you receive from your ignition system. The HVC II Coils (see page 56) are completely built in-house and incorporate state-of-the-art Rynite molded bobbins and special wiring for windings. This advanced technology may be over the top for many applications, but the information gained from these race coils is useful in developing all of our coils and products.

The chart below will give you a good starting point in choosing the right coil for your ignition system. If you have any questions regarding coil selection, please contact our Customer Support Department at (915) 855-7123, or email; msdtech@msdignition.com.

|   |   | COI                                       | LS   |                              |          |          |                                |                      |           |  |              |                                  |
|---|---|---|--|------------------------------|----------|----------|--------------------------------|----------------------|-----------|--|--------------|----------------------------------|
|   |   | 19 50 50 50 50 50 50 50 50 50 50 50 50 50 | SS SO STATE OF THE | वित्र के ती<br>क्षेत्र के ती |          |          | 2 2000<br>2000<br>2000<br>2000 | 2000<br>2000<br>2000 | Story St. | 20 20 60 60 60 60 60 60 60 60 60 60 60 60 60 | 100000 CONTO | 10000<br>10000<br>10000<br>10000 |
|   | Factory Points* or<br>Electronic Ignition                           | <b>✓</b>                                  |  | <b>/</b>                     | <b>/</b> |          |                                |                      |           |  |              |                                  |
|   | Blaster Ignition,<br>MSD 5, Stacker,<br>PN 7000                     | <b>✓</b>                                  | <b>/</b>   | <b>/</b>                     | <b>/</b> |          |                                |                      |           |  |              |                                  |
| G | MSD HEI Module,<br>PN 8364 and<br>PN 83645                          | <b>\</b>                                  | <b>/</b> <sup>+</sup>  | <b>/</b>                     |          |          |                                |                      |           |  |              |                                  |
| N | MSD 6A, 6AL, 6ALN,<br>6AL-2, BTM, 6T, 6TN,<br>6-Offroad, SCI, SCI-L | <b>✓</b>                                  | <b>✓</b>   | <b>✓</b>                     | <b>/</b> | <b>/</b> |                                |                      | <b>✓</b>  |  |              |                                  |
| + | Digital-6+,<br>Digital-SCI+   | <b>✓</b>                                  | <b>✓</b>   | <b>✓</b>                     | <b>/</b> | <b>/</b> |                                |                      | <b>/</b>  |  |              |                                  |
|   | 6-HVC Professional<br>Racing, PN 6600                               |   |  |                              |          |          |                                |                      |           |  | <b>✓</b>     |                                  |
| 0 | MSD 7AL-2,<br>7AL-2 Plus,<br>7AL-3                                  | <b>✓</b>                                  | <b>/</b>   |                              |          | <b>✓</b> | <b>✓</b>                       | <b>✓</b>             |           | <b>✓</b>                                     |              |                                  |
| N | Digital-7 Series  |   |  |                              |          | <b>/</b> |                                | <b>/</b>             |           | <b>✓</b>                                     |              |                                  |
| S | MSD 8   |   |  |                              |          |          | <b>✓</b>                       | <b>/</b>             |           | <b>✓</b>                                     |              |                                  |
|   | MSD-10 Plus   |   |  |                              |          |          |                                |                      |           |  |              | 1                                |

- \* Points require a ballast resistor, supplied with PN 8200 and PN 8203.
- + When used with modified cover, PN 8401 or PN 84012.

If you are looking to upgrade your stock coil or want to complement the performance of your MSD 6 Series Ignition, our Blaster Coils are the right choice.

#### FOR MSD IGNITION APPLICATIONS

The following Blaster Coils share the same special windings and high voltage output as the other Blaster 2 coils, but do not include a ballast resistor. When you are using an MSD Ignition Control, the Ignition is responsible for delivering the voltage to the coil so a ballast is not necessary.

#### Blaster 2, Red -P N 8202 **Blaster 3 - PN 8223**

The Blaster 3 Coil features an extra tall tower design to improve the coil wire attachment and spark isolation. Supplied with a 90° terminal and boot.

#### Blaster 2F - PN 8205

This coil features the same "horseshoe" connector that the stock Ford Duraspark Ignitions have so there is no need to cut the wires!

#### Blaster™ High Vibration Coil

In applications such as off-road, marine or other harsh conditions, the MSD Blaster High Vibration Coil is the best choice.

The sturdy metal housing of the High Vibration Coil is completely potted with a premium grade epoxy to completely encase the coil's primary and secondary windings. This protects the coil's internal components from high and low frequency vibrations that are commonly experienced in racing.

**High Vibration Blaster - PN 8222** 

#### BLASTER™ COILS FOR POINTS, ELECTRONIC OR MSD IGNITIONS

With a stock points style ignition, a ballast resistor must be placed in-line with the positive terminal of the coil. The following Blaster Coils are supplied with a 0.8 ohm ballast resistor plus a terminal and boot to fit most applications. Mallory Unilite applications also require the ballast resistor.

NOTE: The ballast is not necessary if an MSD 6 or 7 series Ignition Control is being used with the points distributor.

Blaster 2 Kit, Chrome - PN 8200 Blaster 2 Kit, Red - PN 8203



#### **TURNS RATIO: 100:1** PRIMARY RESISTANCE: .7 OHMS SECONDARY RESISTANCE: 4.5K OHMS PN 8200, 10K **INDUCTANCE:** 8 MH MAXIMUM VOLTAGE: 45,000 VOLTS

**PEAK CURRENT: 140 MA** SPARK DURATION: 350 uS

TESTED WITH 6AL IGNITION AT PLUG GAP THESE PRODUCTS ARE **OBDII** LEGAL TO SELL, DISTRIBUTE OR INSTALL N 2003 OR OLDER VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-37; LEGAL IN ALL 50 STATES.





#### Blaster SS™ Coil

Don't let the compact size of the Blaster SS Coil fool you, because it is packed with performance! The efficient E-core windings are designed to produce high amounts of current without sacrificing the voltage output. In fact, when used with an MSD 6 Series Ignition, the Blaster SS produces 300 milliamps with a maximum voltage output of 40,000 volts!

TURNS RATIO: 70:1

PRIMARY RESISTANCE: .355 OHMS

SECONDARY RESISTANCE: 4.4K OHMS

INDUCTANCE: 6.9 MH

MAXIMUM VOLTAGE: 40 000 Volts

PEAK CURRENT: 300 MA

SPARK DURATION: 220 HS

TESTED WITH 6AL IGNITION AT PLUG GAP

The secondary windings are wound on a segmented bobbin which reduces the chance of voltage breakdown between the primary and secondary windings. For more protection, these windings are encased in a polyurethane compound for complete protection against vibration.

The Blaster SS features brass terminals and a sturdy Rynite housing. It is supplied with a 90° boot, terminal and vibration

mounts. A great addition to CD Ignitions and some stock applications.

#### Blaster SS Coil - PN 8207

TURNS RATIO: 70:1

PRIMARY RESISTANCE: .31 OHMS

SECONDARY RESISTANCE: 9 2K OHMS

INDUCTANCE: 3.5 MH

**MAXIMUM VOLTAGE: 42,000 VOLTS** 

PEAK CURRENT: 200 MA

SPARK DURATION: 200 US

TESTED WITH 6AL IGNITION AT PLUG GAP

#### HEI COIL

HEI owners now have a choice to replace their stock coil with the MSD High Energy Unitized Coil for GM HEI Distributors. This coil is a direct replacement of the stock coil and offers increased spark energy when used with the MSD HEI Module, PN 83645.

The coil features special low induc-

tance, high temperature windings which charge faster to give you increased spark energy at higher rpm. The premium epoxy filled construction is designed to withstand harsh race applications as well as the wear and tear that daily usage dishes out, and still deliver more spark energy to the spark plugs.

PN 8227

85:1

#### HEI Coil - PN 8225

#### **SPECIFICATIONS**

PN 8226

**TURNS RATIO: 85:1** 

PRIMARY RESISTANCE: .45 OHMS

.44 OHMS **5.5K** ohms

SECONDARY RESISTANCE: 5.5K OHMS **INDUCTANCE:** 7 MH

7 MH

**PEAK CURRENT: 220 MA** 

MAXIMUM VOLTAGE: 48,000 Volts 48,000 Volts 300 MA

SPARK DURATION: 250 US

250 uS

TESTED WITH 6AL IGNITION AT PLUG GAP

#### Blaster™ TFI AND GM COIL

Top off your Ford or GM Ignition system with these great new replacement coils. The Blaster TFI and GM Coils have MSD performance in factory style housings!

MSD designed these Coils by combining our Blaster Coil

experience with E-core coil efficiency. Each coil has a unique turns ratio plus there is lower primary resistance than the stock coil. This all amounts to a boltin replacement coil that produces more output voltage. The Coils will work with stock ignition systems as well as MSD equipped cars and trucks.

Installation Tip: If you plan to install an MSD Ignition with your Blaster TFI Coil, use a PN 8874 Harness for a direct plug-in installation. For the Blaster GM Coil, use a PN 8876 Harness. See page 19.

**FOR MORE INFORMATION ON:** 

HEI Performance, see pages \_\_ 65-68

**Blaster GM Dual** Connector Coil - PN 8226

Blaster Ford TFI Coil - PN 8227

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# HIGH VOLTAGE/HIGH CURRENT PERFORMANCE COILS

Coils have always had to compromise voltage output against current output. More voltage increases the initial ionization of



the spark plug gap, but lowers the amount of current, or heat, that follows across the plug gap. When a coil is designed to produce more current, the voltage output generally suffers which taxes the ease of ionizing the gap. The MSD HVC Coils are designed to produce maximum voltage and energy!

To accomplish this combination of high voltage and current MSD uses an E-core winding design. This is a very efficient design where less loss occurs during the transfer of electricity due to the closed core of the coil.

Another benefit is that the coils run extremely cool, even at high racing rpm, thanks to the efficient design and huge laminations.







Blaster HVC, for 6-Series Ignitions - PN 8252

This product is legal to sell, distribute or install on vehicles in California according to Executive Order E.O. D-40-37; legal in all 50 states.

#### Pro Power HVC™ Coil

The Pro Power HVC Coil is designed for racing applications with an MSD 7 or 8 Series Ignition Control.

**Pro Power HVC,** for 7-Series Ignitions - **PN 8251**\* *NOTE: For use with MSD 7 or 8 Series Ignitions only.* 

#### MSD 6 HVC™ Coil

The HVC Coil is designed exclusively for the HVC Professional Racing Ignition Controls, PN 6600 and PN 6631.

MSD 6 HVC Coil (Must be used with the 6 HVC Professional Ignition) - PN 8250\*

#### PN 8252 PN 8251 PN 8250 **TURNS RATIO: 100:1** 85.1 100:1 PRIMARY RESISTANCE: .02 OHMS О4 ония .07 онмѕ SECONDARY RESISTANCE: 1.38K OHMS 86 OHMS 360 ohms INDUCTANCE: 7 MH 3 MH 1 MH **MAXIMUM VOLTAGE:** 42,000 V 45,000 V 34,000 V PEAK CURRENT: 300 MA 1.1 AMP 600 MA SPARK DURATION: 200 IIS 150 uS 200 uS PN 8252 TESTED WITH 6AL IGNITION AT PLUG GAP

 $$PN\ 8251\ Tested\ with\ 7al-2\ Ignition\ at\ plug\ gap$  The  $PN\ 8250\ coil\ must\ be\ used\ with\ the\ PN\ 6600\ Ignition\ Control.$ 







All HVC Coils weigh 3.75 lbs. fully assembled.

<sup>\*</sup>Not legal for use or sale on pollution controlled vehicles.



# ■ New coil technology to be used with the MSD 6 Series line for incredible voltage and high current

- Efficient windings and material produce incredible voltage, lightning quick rise time and lengthy spark duration
- Windings are completely potted with a fracture resistant compound for vibration resistance

#### **COIL SPECIFICATIONS**

TURNS RATIO: 100:1

PRIMARY RESISTANCE: .16 OHMS

SECONDARY RESISTANCE: 630 OHMS

INDUCTANCE: 3.5 MH

MAXIMUM VOLTAGE: 44,000 V PEAK CURRENT: 450 MA

PEAK CURRENT: 450 MA

SPARK DURATION: 450 uS WEIGHT: 3.75 LBS.

TESTED WITH DIGITAL 6-PLUS IGNITION AT PLUG GAP

#### Blaster HVCII™

The latest coil to be built entirely in-house at MSD is designed to be used with MSD 6 and SCI Series Ignition Controls.

This coil utilizes an iron U-Core design with a segmented bobbin for improved voltage distribution.

The bobbin is molded from a special

Dupont Rynite material and wound specifically to produce the most current possible with incredible voltage and lightning quick rise time.

The blue housing is also molded from high dielectric Rynite material. The brass primary terminals are spaced far apart and the secondary tower is well protected for increased spark isolation. The housing is completely potted with an epoxy compound for vibration resistance and installs with sturdy vibration mounts.

Blaster HVC II Coil, for 6 Series Ignition Controls - PN 8253\*

#### Pro Power HVCII™ Coil

#### **COIL SPECIFICATIONS**

TURNS RATIO: 70:1

PRIMARY RESISTANCE: .016 OHMS

SECONDARY RESISTANCE: 30 OHMS

INDUCTANCE: .250 MH

MAXIMUM VOLTAGE: 45 000 V

PEAK CURRENT: 2 AMPS

SPARK DURATION: 150 uS WEIGHT: 3.75 IBS.

TESTED WITH PN 7530T AT PLUG GAP

The Pro Power HVC II Coil is completely built in-house so our engineers have exclusive control over their performance and quality. The Coil utilizes an iron U-Core design with a segmented bobbin for improved voltage distribution. The bobbin is molded from Dupont Rynite FR946 material which has incredible dielectric capabilities at

high temperatures. MSD also incorporated a cutting edge winding material that has an improved insulation and is also capable of enduring extreme voltages. Together, these materials create a durable coil with incredible voltage capabilities, lightning quick rise time and lengthy spark duration.

The housing, also molded from Rynite material, features far spaced brass primary terminals and a well protected secondary tower for increased spark isolation. The housing is completely potted with an epoxy compound for vibration resistance and installs with sturdy vibration mounts. For use with MSD 7 and 8 Series Ignitions.

HVC Pro Power II Coil, for 7 Series Ignition Controls - PN 8261\*

#### COIL WIRE

If you're changing a coil or cap to a new design, you could find yourself searching for different terminals for the coil wire!

#### 8.5mm Super Conductor - PN 84049

18" long, Blaster Socket terminal and boot on one side with a Distributor Cap Socket Terminal and Boot on the other.

#### Heli-Core - PN 8403

#### 8.5mm Super Conductor:

Red-PN 84039

Black - PN 84033

18" long, 90° terminals and boots are installed on both sides to connect to an HEI style terminal. A Power Tower is also supplied to adapt a socket style cap.

\*Not legal for use or sale on pollution controlled vehicles.

www.MSDIGNITION.com

#### MSD Pro Power™ Coil

The MSD Pro Power Coil is a great choice for short duration applications such as drag racing. The special windings of the Pro Power Coil have extremely low resistance to produce the highest voltage possible with plenty of spark energy when used with an MSD 7 or 8 Series Ignition Control.

The coil wire tower rises tall above the primary terminals and uses a spark plug style terminal for a firm connection to the coil wire. The housing is molded from a high dielectric polyester material and a Ciba Arathane compound adds vibration protection to the coil windings. Vibration mounts are also supplied.

#### Pro Power Coil - PN 8201\*

This aluminum bracket is sold separately and mounts on the back of big block Chevrolet cylinder heads.

#### Billet Mount, BB Chevy - PN 8218

NOTE: Not for use with MSD 6 or Digital-7 Series Ignitions.

#### BLASTER™ SINGLE TOWER COIL

For performance applications with multi-channel coil drivers this Single Tower Blaster Coil is a great choice. The Coil will also top off your MSD DIS-HO Ignition system when it is set up for a coil-per-cylinder ignition system. The coil's low resistance and quick rise time make it ideal for high revving, multi-coil performance systems.

#### Blaster Single Tower Coil - PN 8232\*

#### **COIL SPECIFICATIONS**

TURNS RATIO: 85:1
PRIMARY RESISTANCE: .09 0 HMS
SECONDARY RESISTANCE: 988 0 HMS
INDUCTANCE: 3.7 MH
MAXIMUM VOLTAGE: 43,000 V
PEAK CURRENT: 800 MA
SPARK DURATION: 125 US

TESTED WITH CPC IGNITION AT PLUG GAP

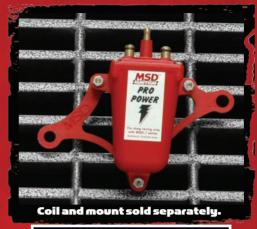
#### MSD 10 Plus™ Coil

The MSD 10 PLUS uses MSD's Patented Stacker Ignition technology to combine the best characteristics of a Capacitive Discharge Ignition with an Inductive Ignition. The result is a spark with incredible voltage and long duration and this Coil is designed exclusively to handle it all.

## MSD 10 Plus Coil, for MSD 7502 Ignition Only PN 8208\*

Note: Cannot be used with the old style dual coil MSD 10, PN 7500 or PN 7501.

\*Not legal for use or sale on pollution controlled vehicles.



#### **COIL SPECIFICATIONS**

TURNS RATIO: 100:1

PRIMARY RESISTANCE: .03 OHMS

SECONDARY RESISTANCE: 1K OHMS

INDUCTANCE: 1 MH

MAXIMUM VOLTAGE: 55,000 V

PEAK CURRENT: 800 MA

SPARK DURATION: 180 US

Tested with 7AL-2 Ignition at plug gap







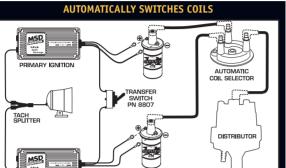
#### **AUTOMATIC COIL SELECTOR**

Running redundant ignition systems gives you piece of mind during long races, but how do you swap the coil wire to the back up ignition? The MSD Automatic Coil Selector solves this problem.

The Coil Selector has two posts that connect to the high voltage coil towers of the ignition coils while a third post connects to the distributor cap. When a racer switches from their primary ignition to the backup ignition, the Coil Selector automatically switches to the backup coil.

As the diagram shows, you must have two ignition controls, two coils and a single-pole, double throw transfer switch. All it takes is a flip of

the switch to run a completely new ignition system.



SECONDARY IGNITION

#### Automatic Coil Selector - PN 8210

NOTE: Not for use with MSD 7, 8 or 10 Series Ignitions.

#### MSD Coil Wire Retainer

The MSD Coil Wire Retainer holds the boot securely in the coil. The lower portion of the retainer snaps around the body of the coil under the flange and is held in place with a nylon tie wrap.

The MSD Coil Wire Retainer fits most of the MSD Blaster Coils (except the Blaster 3) and most aftermarket canister type coils.



#### COIL BRACKET

The MSD Coil Bracket offers easy, universal mounting for standard size ignition coils up to 2.25" in diameter. The Bracket uses a bolt and nut combination instead of the easily stripped self-tapping screw common on other brand brackets.





#### TACH SPLITTER

If you are running a dual ignition system, this little device will allow the tachometer to operate with both ignitions. Simply install the Splitter between the tach outputs and the Tachometer. Female faston connectors match common racing connections.





#### FIREWALL FEED-THRU

To prevent voltage leaks in passenger compartment mounted coil installations, MSD designed the Firewall Feed-Thru.

Molded from Rynite® and nylon, the Firewall Feed-Thru provides 1/2" of insulation to ensure that the coil's spark reaches the distributor.

Firewall Feed-Thru, Red/Black - PN 8211
Firewall Feed-Thru, Black - PN 8212





#### THE ADVANCED POWER SYSTEM

The performance of your car's ignition relies on the charging system. Since these systems go hand-in-hand, it was only time before MSD designed and offered a high output alternator.

Don't let the billet housing fool you as there's much more beneath this great looking housing. MSD engineers have spent thousands of hours testing different internal components, materials and windings. A special rectifier with 50 amp diodes

improves control and reliability while a new surface mount regulator isolates and protects from high voltage spikes. Even the bearings were hand picked to withstand heavy axial loads and high rpm.

Not only does the precision machined housing provide cool looks and great strength, but it also delivers a new universal mounting design called Slide-Loc. This technology allows one unit to be mounted to a variety of engines by selecting a bracket kit. (For speedshops, this feature means that you only need to stock one alternator!) The bracket installation kits are available separately for a growing number of different applications.

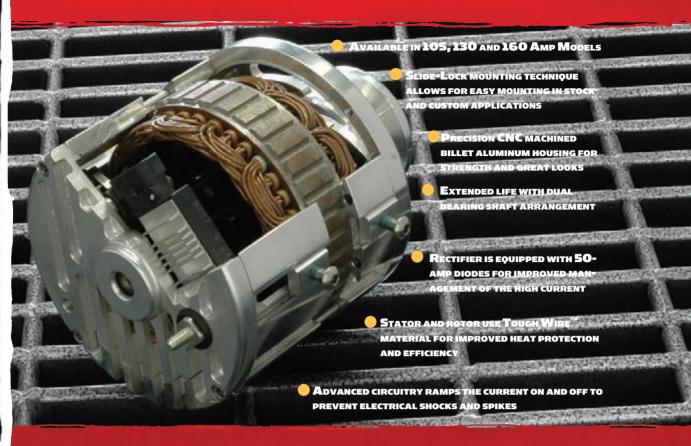
Two models are available in three outputs; a 105 amp, 130 amp and 160 amp version in either a direct plug-in installation or a one wire model. More information on the APS™ Alternator, its Bracket Kits and applications can be found at www.msdignition.com

#### **SLIDE-LOC MOUNTING**

MSD's revolutionary Slide-Loc assembly provides nearly universal mounting! Simply install the slide mounts into place then install the bracket kit for your application. More mounting kits will be available soon!







#### **Direct Plug-In Models**

(requires a mounting kit with adapter harness)

105 Amp - PN 5100 130 Amp - PN 5105 160 Amp - PN 5110

#### **One-Wire Models**

(requires mounting kit only)

105 Amp - PN 5101 130 Amp - PN 5106 160 Amp - PN 5111

#### **PRO-BILLET PULLEYS**

Each Pulley is cut from a billet of aluminum and is supplied with a great looking MSD cap to cover the mounting nut. The Pulleys are designed to give you an approximate 3:1 ratio with a standard crankshaft pulley.

#### V-Relt

Single Groove, 2.64" Diameter - PN 5192 Single Groove, 2.1" Diameter - PN 51921 Dual Groove, 2.64" Diameter - PN 5191

#### **6-Groove Serpentine Belt**

2.05" Diameter **- PN 5190**1.65" Diameter **- PN 51901** 











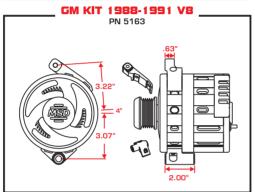
#### **ALTERNATOR BRACKET KITS**

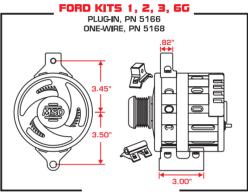
Each Bracket Kit is supplied with the necessary mounts to install your APS™ Alternator to your engine. The brackets are CNC machined to form a precise fit and strong foundation. If you are choosing a Plug-In APS model, be sure to get the Bracket Kit with the matching wiring harness for a direct plug-in connection.

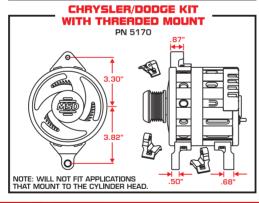
PLUG-IN, PN 5155
ONE-WIRE, PN 5159
THREADED PLUG-IN, PN 5156
THREADED ONE-WIRE, PN 5158
.63"
3.07"
3.07"
NOTE: ONLY FOR USE WITH ENGINE BRACKETS
THAT MOUNT TO FRONT OF ALTERNATOR TAB.

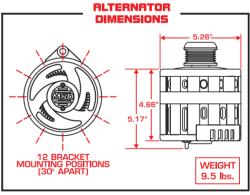
GM & IHC KITS TALL MOUNT
PLUG-IN, PN 5164
ONE-WIRE, PN 5165
THREADED PLUG-IN, PN 5157
THREADED ONE-WIRE, PN 5162

The MSD APS Alternator Mounting Kits are available to fit most GM, Ford and Chrysler engines. Detailed information on kits available for specific models such as Camaro, Chevelle, Nova, Mustang, T-Bird, Challenger, Barracuda and trucks is available from the MSD APS Alternator Application Guide. Contact MSD for more information.









#### **GM Short Mount Kit**

Plug-In - PN 5155

One-Wire **- PN 5159** 

Threaded Plug-In - PN 5156

Threaded One-Wire - PN 5158

#### GM & IHC Kits Tall Mount Plug-In,

Threaded External Regulator = PN 5157

Threaded One-Wire - PN 5162

Plug-In - PN 5164

One-Wire - PN 5165

GM Kit 1988-1991 V8 - PN 5163

#### Ford Kits 1, 2, 3, 6G

Plug-In - PN 5166

One-Wire - PN 5168

Chrysler/Dodge Kit with Threaded





#### **Advanced Power System® Starter**

Our Advanced Power System line has grown to include starters! Our new APS Starter is designed to crank over the highest compression engines on a hot day in Death Valley. Not that too many race cars are sitting in Death Valley, but it's good to know that you have the oomph to make it happen.

The APS Starter features all new components beginning with a three horsepower motor. This power is used to crank over the reduced 4.4:1 gear set to deliver great torque to the engine's ring gear to get the engine turning. The armature is balanced during assembly and is guided by two ball bearings for smooth engagement and thousands of starts.

The downsized housing clears most headers and oil pans, but just in case, we made the billet mount so it can be clocked in different positions to help in tight applications. The assembly is powder coated MSD red and will stay looking good, even though it's underneath your car.

■ Gear reduction of 4.4:1 improves torque for great cranking

MSD Performance from

START to FINISH!

- Three horsepower motor provides power for high compression engines
- Ball bearing supported armature and pinion gear
- Downsized design helps clearance issues with oil pans and exhaust
- Mount can be clocked to assist in mounting



The APS Starter features a billet aluminum mounting block that can be positioned in different locations to help clear suspension parts, the oil pan and exhaust systems.



#### **APS Starters:**

Chevy V8, 153 and 168 Tooth Flywheels **PN 5095**NOTE: Mount is for straight bolt pattern.

GM LS Series Engines - PN 5096
Ford Small Block, 289-351 - PN 5090

Chrysler 318-440 - PN 5098

The Chrysler Starter is a compact replacement for everything from Small Blocks to 440 engines.

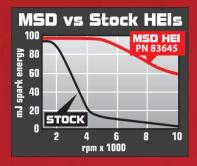


The GM HEI distributor is a favorite among performance enthusiasts due to its simplicity. The HEI's unitized coil in the distributor cap provides a complete ignition system in one package and connects with a single 12 volt wire! Sounds almost too good to be true – but it does have some downfalls.

Like most OE components the factory module and coil are not known for incredible output energy, especially at mid to higher rpm. Remember that GM built these distributors for a variety of low rpm commuter vehicles. And this is where MSD comes through!

MSD offers several performance parts and alternatives for the HEI Distributor ranging from a complete Pro-Billet Distributor to our new Extreme Output module.







- Digitally controlled module for accurate timing
- High drive currents to the coil for a powerful spark
- Adjustable rev limiter for overrev protection
- Traction Control Detection for circle track racers
- Module and Coil fit in a stock HEI distributor

#### DIGITAL HEI MODULE AND COIL

MSD offers an all new Digital HEI Module and performance coil that will fire up your stock HEI Distributor. The Module is a direct plug-in for the 4-pin HEI module and will produce up to 7.5 amps of current. This increased energy will continue through racing rpm reaching 9,000 rpm!

The Digital Module is extremely accurate in its delivery of this energy resulting in more accurate ignition timing. Another unique feature is an adjustable rev limiter. You can dial in an engine saving rev limit ranging from 5,000-10,000 rpm.

The other unique feature of this module is its patent pending technology that can detect if an illegal traction control has been installed. For street cars, you'll never know this feature is there, but for circle track racers that are breaking the rules, they'll find themselves with a low rpm limit activated! If a traction control event is detected, the Digital HEI module will go into a rev limit mode.

To get the most performance out of the Digital HEI Module, MSD offers a performance Coil as well. This Coil drops right in place of the original coil and fits under the stock coil cover.

#### Digital HEI Module - PN 83645 MSD HEI Coil - PN 8225





PN 83645

THESE PRODUCTS ARE LEGAL TO SELL, DISTRIBUTE OR INSTALL ON VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-26 AND D-40-37; LEGAL IN ALL 50 STATES.



#### TECH TIP:

Over the years, GM produced three different style HEI Modules. These are easy to identify by the number of pins or terminals they have.

The 4-Pin module is found in distributors with a vacuum advance canister (some 5-pins had vacuum advance too). The MSD HEI Module replaces 4-Pin modules only!









#### The Ultimate HEI Kit

The Ultimate HEI Kit has everthing you need to make your early model GM HEI Distributor a great performance distributor!

The kit is supplied with MSD's Digital 7.5 amp performance Module (PN 83645). By matching the Coil specifications with the module, MSD also delivers more accurate timing and dwell control - plus an adjustable rev limiter. To ensure all of this new power makes it to the plugs, the kit is supplied with an all new MSD cap, rotor and coil cover.

Don't mess around with stock appearing ignition modules and cheap overseas models. The MSD Ultimate HEI Kit delivers proven performance!

- Rebuild your GM HEI with MSD performance and reliability
- Complete kit with a Cap, Rotor, Module, Coil and Coil Cover
- Exceptional high speed coil saturation for high rpm power
- Matched Coil and Module produce the highest voltage and energy

#### Ultimate HEI Kit - PN 8501

Note: For use with non-computerized (4-pin module) HEIs only.

#### MSD SUPER HEI KIT

The MSD Super HEI Kit is one of MSD's solutions to the GM HEI's common problem of power loss and lack of response above 4,500 rpm. The kit allows you to remove or bypass the low-powered HEI module and coil and replace them with the MSD 6AL Ignition Control and the Blaster 2 high output coil. The result is more power, increased rpm range, easier starting, plus better mileage and performance.

The Kit includes an MSD 6AL Ignition, Blaster 2 Coil, coil wire, HEI dust cover and coil bracket. The 6AL has a Soft Touch Rev Control to protect your engine from over-rev damage.

Super HEI Kit II, with MSD 6AL - PN 8500

#### HEI DISTRIBUTOR KIT

If the large cap HEI Distributor won't fit in your car, this Ready-to-Run kit is your answer.

The Ready-to-Run distributor (PN 8360) features a built-in ignition module which provides a much more powerful spark than the stock HEI. MSD's race proven mechanical advance allows you to tune in an ignition curve while a vacuum advance provides street cruising economy.

An MSD Blaster SS Coil tops off the system to deliver the high voltage sparks to the distributor.

HEI Distributor Kit, Chevy V8 - PN 8474

NOTE: Replaces 4 and 5-pin HEI modules only. On 5-pin systems the Knock Sensor is not retained.

These products are legal to sell, distribute or install on vehicles in California according to Executive Order E.O. D-40-36; legal in all 50 states.



**66** 

The Chevrolet HEI Distributor is a favorite for muscle cars, street rods and even circle track racers. The integrated coil keeps underhood wiring clean, and for race cars, the idea of running one wire to the distributor keeps things simple. However, when it comes to performance, the stock HEI falls short.

MSD answers the need for a strong, accurate and high performance HEI with our Pro-Billet HEI. The distributor is supplied with our Digital HEI Module and Coil (see page 53) so there is plenty of spark energy combined with improved dwell and timing control.

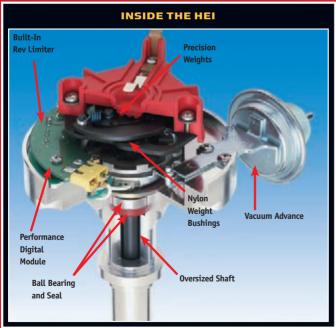
Tig welded on top of the distributor shaft is MSD's adjustable centrifugal advance assembly. Three sets of springs and four stop bushings let you dial in up to 24 different timing curves to match your driving needs. Plus, there's a vacuum advance for those concerned with economy.

All of this is assembled around a precision and great looking CNC machined housing. The distributor is supplied with our new cap, rotor and coil cover and heavy duty gear so it is ready to install in your engine!

NOTE: The PN 8365 is designed to replace GM HEI Distributors that use a 4-Pin ignition module.

#### **MSD Pro-Billet Chevrolet - PN 8365**







#### REPLACEMENT PARTS

CAP: PN 84111
ROTOR: PN 84101
GEAR: PN 8531

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

This product is legal to sell, distribute or install on vehicles in California according to Executive Order E.O. D-40-38; legal in all 50 states.

#### STREET FIRE HEI

If you're looking for a performance HEI Distributor for a great value, check out the MSD Street Fire line on pages 164-166. Street Fire is a new brand from MSD that delivers quality at an economical price. Street Fire products, including an HEI, wires and coils, are spec'd by MSD engineers.

delivers quality at an economical price. Street Fire products, including an HEI, wires and coils, are spec'd by MSD engineers and carry a one year warranty for confident performance. Check out the Street Fire HEI and more on pages 164-166.



After nearly 30 years since its introduction, who would have thought that the GM HEI distributor would still be used in thousands of cars. The aftermarket is ripe with replacement HEI modules, coils and caps, but no one has reinvented the HEI, until now!

MSD's Extreme Output HEI system features an amazing ignition module that is capable of producing up to 20 Amps to drive the coil! Yes, 20 Amps! Obviously, an oversized coil is required to handle this energy so our engineers devised an all new coil which can deliver over 150 millijoules of energy across the plug gap. All of this energy is monitored and controlled cylinder to cylinder by a 32 Mhz RISC microcontroller.

### EXTREME HEI KIT:

- Absolutely the most powerful HEI Module available
- 32 Mhz controller manages the extreme current for full output at racing rpm
- Adjustable rev limiter from 5,000 10,000 rpm
- Built-in Traction Control
  Detection technology
- Independent tach output lead provides a clean and reliable 12 volt signal
- All new, injection molded cap, rotor and coil cover

To handle all of this energy and the larger coil, a new cap and rotor had to be engineered. Our HEI Cap is molded from DuPont Rynite material which has high dielectric properties. The Cap must be used in order to fit the larger Extreme Output Coil, and it can still be installed on factory distributor housings.

Extreme Output HEI Kit, Supplied with Module, Coil, Cap, Rotor and Dust Cover - PN 8502\*



#### **INDIVIDUAL COMPONENTS:**

Extreme Output Module, 20 Amp - PN 83641\*
Extreme Output HEI Coil - PN 8220\*
MSD Extreme HEI Cap - PN 84111
MSD Extreme HEI Rotor - PN 84101

The Extreme HEI also has rev limiter that is adjustable from 5,000 to 10.000 rpm.

#### STOCK REPLACEMENTS

The Extreme HEI Cap, PN 84111, and Rotor, PN 84101, will install on a stock distributor, but the Extreme Output Coil Cover must be used and is purchased separately.

#### Extreme Output Dust Cover - PN 84022 Modified Extreme Output Coil Cover - PN 84012

Allows the use of an external coil with your new Extreme Output HEI Cap.



\*Not legal for use or sale on pollution controlled vehicles.

www.MSDIGNITION.com

#### TRACTION CONTROL DETECTION

In the majority of racing sanctions and classes, traction controlling devices are illegal. MSD has never produced a traction control - and while it remains illegal, never will produce one. What we have designed is a code that will detect if an electronic traction control system is used with an HEI.

This Traction Control Detection (TCD™) technology carefully monitors and examines the signals of the ignition. If the TCD determines that any signal has been modified in any way, the ignition will be put into a low rpm rev limit mode that will immediately slow the car. Before this rev limit is imposed, the TCD goes through a list of cycles and checks to qualify that the trigger signal has been modified.

- Advanced circuitry constantly monitors the ignition's signals
- A rev limit mode will be activated if traction control is detected
- Proprietary technology is pending a U.S. Patent

TCD Technology is available in two HEI Modules:



7.5 Amp, with Rev Limiter - PN 83645
Extreme Output, 20 Amp, with Rev Limiter - PN 83641\*

As with the multiple spark, CD ignition, MSD was the first to introduce a distributor housing machined from a billet of 6061-T6 aluminum. MSD Pro-Billet Distributors are the finest performance and racing distributors available. Every feature has been engineered to endure the rigors of high performance and racing engines. Whether you race stock cars, dragsters, boats or trucks, MSD has a distributor to put you in the winner's circle. MSD uses state-of-theart, Computerized Numerical Controlled (CNC) mills and lathes to machine each housing. After a long series of precise cuts and movements, the billet is formed into a flawless distributor housing that is accurate to within 0.001". The flex-free housings are lightweight, have no porosity or weak areas and look great on polished, show-quality engines. Whether you race stock cars, dragsters, boats or trucks, MSD has a distributor to put you in the winner's circle.

MSD's race-proven adjustable mechanical advance features a chro-moly plate and weights that are "fine blanked" for precision and balance. The weight pins are staked and TIG-welded, while nylon bushings ensure smooth movement of the weights. The entire assembly also receives a QPQ coating to reduce friction and eliminate corrosion. Three sets of advance springs and four stop bushings are supplied to dial-in a curve to match your application.

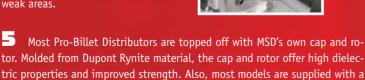


All of the MSD Distributors, except crank trigger models, use a high-output magnetic pick-up to trigger the ignition system. This triggering method is extremely accurate and reliable at any engine rpm. The stationary pick-up is mounted to the base of the distributor and creates an ignition signal as the shaft mounted reluctor passes by. This reluctor is precision manufactured and is bright zinc plated for corrosion resistance.

The top of the polished steel shaft is guided by a sealed ball bearing while an extra long, sintered steel bushing is used at the bottom of the distributor (some models use a lower bearing). This assembly will deliver accurate sparks for the life of your distributor, even in a 10,000 rpm race environment.

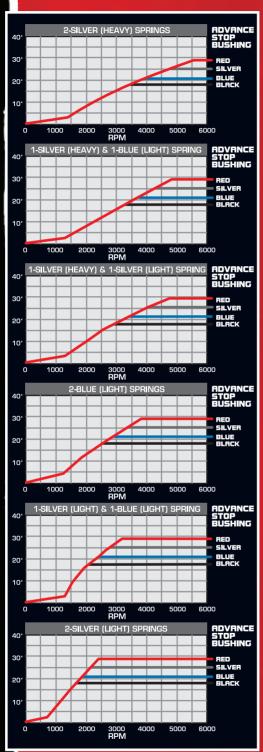
MSD's Pro-Billet Distributors offer incredible strength and stability. Each housing is CNC-machined from a billet of 6061-T6 aluminum resulting in a precise housing with no porosity or weak areas.

retainer to secure the wires.

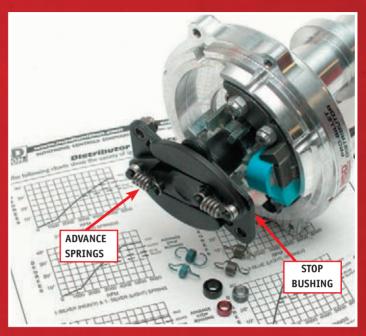


NOTE: Most MSD Distributors must be used with an MSD Ignition Control. The Ready-to-Run models and the O.E. style distributors do not require an MSD Ignition.





These charts show the variety of mechanical, or centrifugal, advance curves you can achieve with MSD's Pro-Billet Distributors.



The advance assembly is mounted on top of every MSD distributor. Each model is supplied with different advance springs and stop bushings so you can easily tune in a timing curve to match your engine and application.

One of the most important features of the MSD Pro-Billet Distributors is the adjustable mechanical advance assembly. The mechanical advance, sometimes referred to as centrifugal advance, allows you to accurately and easily modify the advance curve to match your specific application. MSD engineers have spent many hours at the dyno controls and in our labs perfecting this great distributor feature.

The advance plate and weights are made from chro-moly steel through a "fine blank" process. This produces precise and well balanced components. The weight pins are staked into this plate and TIG-welded in place for extra strength. The entire assembly then receives a QPQ plating for corrosion resistance. Nylon pads are positioned under the chro-moly weights to ensure smooth movement as the weights move outward advancing the timing as rpm increases. This assembly is mounted on top of the distributor shaft on all of our distributors to ease adjustments.

A variety of timing curves can be achieved simply by changing the advance springs and stop bushing. The stop bushing determines the amount of mechanical advance that can be achieved. Each distributor is equipped from the factory with the blue (21°) bushing installed with three other bushings included; Red allows 28°, Silver 25° and Black for 18°.

The springs determine the rate, or how fast the advance occurs. Each distributor comes with two heavy silver springs installed which give the curve the slowest advance rate. There are also two sets of springs with different tensions included; blue and light silver, which can be mixed and matched to achieve a variety of advance rates. The charts to the left illustrate the variety of ignition timing curves you can achieve by simply changing the springs and stop bushing.

#### PRO-BILLET" CHEVY V8

This is our most popular performance distributor! The housing is machined from a billet of 6061-T6 aluminum on a state-of-the-art CNC machine producing exact tolerances.

For high rpm stability, a .500" steel shaft is supported by a sealed ball bearing and a long sintered bushing. This shaft also receives a QPQ coating for friction reduction and resistance to corrosion. A precision machined reluctor is attached to the shaft which triggers the magnetic pick-up mounted in the housing.

This high output magnetic pick-up is the most accurate way to trigger your ignition. Plus, with no moving parts to wear or adjust, the pick-up is maintenance-free! Just above the pick-up is MSD's adjustable mechanical advance assembly. Different springs and stop bushings are supplied so you can tune an advance curve to match your application.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

#### Chevy V8 - PN 85551\*

#### REPLACEMENT PARTS

CAP: PN 8433 ROTOR: PN 8467 GEAR: PN 8531

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.



#### Pro-Billet™Ready-To-Run

The Pro-Billet Ready-to-Run distributor is the perfect upgrade for outdated points distributors or bulky HEIs. Simply install the distributor in the engine, connect three wires, the coil and fire it up!

A maintenance-free magnetic pick-up accurately triggers the module. The increased output of the amplifier easily outperforms stock ignitions and will smooth out the engine's idle, improve starting and provide a much higher rpm range.

The Ready-to-Run features MSD's adjustable mechanical advance which allows you to custom tailor an ignition curve to match your engine's needs. There is also a vacuum advance canister to help improve economy. For positive street performance, the Ready-to-Run is the best choice.

NOTE: Supplied with a cap, rotor and vacuum advance. If replacing a GM HEI, a Blaster coil and coil wire are required (this is available in a kit, PN 8474).

#### Ready-to-Run Chevy V8 - PN 8360

#### REPLACEMENT PARTS

CAP: PN 8433 ROTOR: PN 8467 GEAR: PN 8531

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.
THIS PRODUCT IS LEGAL TO SELL, DISTRIBUTE OR INSTALL ON VEHICLES IN
CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-38;
LEGAL IN ALL 50 STATES.



ignition module provides plenty of spark for improved performance.



\*Not legal for use or sale on pollution controlled vehicles.



#### DIGITAL E-CURVE™ CHEVY

The Digital E-Curve Distributor will drop right in your engine, easily connect to the coil and fire up! There are no external controls or boxes to mount and connect, and you can set a timing curve with the twist of a rotary dial!

That's right, no more springs or stop bushings to change. A new digital module lets you select from nearly 100 different advance curves, including a vacuum advance! Simply remove the cap and rotor to access the rotary dials and select a curve to match your application. You can also set an rpm limit that will protect your engine from overrev damage caused by a missed shift or driveline failure. This limit is adjustable from 5,000-10,000 rpm.

These adjustments are possible due to an advanced digitally-controlled ignition module. Not only does the module offer these adjustable options, it also produces a hearty jolt of energy to the coil to produce a powerful spark to fire up your engine's performance. Also, a magnetic pick-up is used for reliable and accurate trigger signals throughout the entire rpm range of your engine.

The E-Curve Distributor is topped with MSD's Rynite molded cap and rotor and is supplied with a heavy-duty gear and a matching 3-Pin Weathertight wiring harness.

#### E-Curve Chevy - PN 8394

- Digitally controlled stand-alone distributor with adjustable electronic advance
- Set a centrifugal advance and vacuum advance curve electronically
- High output ignition module produces a powerful spark for improved performance
- Simple three wire connection and you're ready-to-run
- Dial-in a rev limit to protect your engine from overrev damage



Timing curve and rev limit adjustments are made with the rotary dials beneath the rotor.

#### REPLACEMENT **PARTS**

CAP: PN 8433 ROTOR: PN 8467 **GEAR:** PN 8531 FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.



A 3/16" vacuum port is located on the bottom of the billet base so it doesn't interfere with wiring or mounting.

### PRO-BILLET EFI READY-TO-RUN

GM late-model performance enthusiasts will be happy to see this Pro-Billet Distributor. The distributor, PN 8366, is a drop-in replacement for GM V8s using the small cap distributor with a dual connector coil found in cars from 1987-1993 and trucks from 1987-1995.

The entire housing is CNC-machined to exact tolerances for incredible strength (not to mention cool looks). For improved lubrication there is an extra oil tract machined into the bottom of the housing that delivers oil directly to the cam and distributor gears.

Inside, a polished steel shaft receives guidance from a sealed ball bearing and an extra-long sintered bushing adds stability. This 0.500" shaft also receives a QPQ coating for increased friction reduction and corrosion resistance.

A factory-style ignition module is supplied with the distributor so your factory wiring will plug directly in. Triggering this module is the responsibility of a high output magnetic pick-up.

Topping it all off is a heavy-duty rotor and a red MSD cap with brass terminals to ensure full spark delivery. For late model engine swaps or bolt-on

strength, this distributor is the answer.

Late Model GM: V8 - PN 8366 4.3L - PN 8367

### **REPLACEMENT PARTS**

CAP/ROTOR KIT: PN 8406 (V8) CAP/ROTOR KIT: PN 8430 (V6) GEAR: PN 8531

For more distributor accessories see pages 103-111.

Note: These are OEM replacement distributors and are legal to install in all states.

### **CHEVY CRATE IGNITION KITS**

These kits make it easy to add MSD performance to your new crate engine. Two kits are available; one with our Pro-Billet HEI (PN 8365) for applications that have enough room to take advantage of an internal coil and large cap. If you need something smaller, the other kit is supplied with our Readyto-Run (PN 8360) Distributor along with a powerful Blaster SS Coil.

Both kits are complemented with a set of 8.5mm Super Conductor Wires, Pro-Clamp separators and even a Billet Hold-Down Clamp!

### Crate Engine Ignition Kits: Ready-to-Run Distributor Kit - PN 84741 HEI Distributor Kit - PN 84742

- Everything you need to fire up your new crate engine!
- Pro-Billet HEI or Ready-to-Run Distributor
- 8.5mm Super Conductor Plug
  Wires and Pro-Clamp separators
- Billet Hold-Down Clamp is also supplied





### Street Pro-Billet V8

The Street Pro-Billet is a popular route for people looking for proven race performance for their street cars. A vacuum advance canister provides economy and the proven MSD mechanical advance gives you the opportunity to dial-in a timing curve to fit your needs.

Inside, an oversized steel shaft is QPQ-coated for low friction and rides in a sealed ball bearing at the top of the distributor with an extra-long sintered bushing at the bottom. This combination keeps the shaft steady creating accurate spark delivery at any rpm.

The Street Pro-Billet relies on a magnetic pick-up to trigger the MSD Ignition Control which delivers the powerful sparks to the coil. This pick-up is extremely accurate and never needs adjusting.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Supplied with cap and rotor.

### **Chevy V8-PN 8361**

### **REPLACEMENT PARTS**

**CAP:** PN 8433 ROTOR: PN 8467 **GEAR:** PN 8531

For more distributor accessories see pages 103-111 THIS PRODUCT IS LEGAL TO SELL, DISTRIE ACCORDING TO EXECUTIVE ORDER E.O. D-40-38; LEGAL IN ALL 50 STATES



### FLAT-TOP PRO-BILLET™

Having a huge huffer mounted on top of your engine is cool, but can lead to limited choices for a distributor. We decided to morph our Crab Cap crank trigger distributor with a standard Chevy model to come up with the Flat-Top!

This distributor sits low in the engine block, then is topped with our special Crab Cap that positions the spark plug terminals horizontally to give you plenty of clearance. The distributor incorporates a mechanical advance assembly that you can easily tune with the supplied springs and stop bushings.

For trigger accuracy, a maintenance-free magnetic pick-up is used. This pick-up plugs directly into an MSD Ignition Control. The Flat-Top Distributor is supplied with our Dupont, Rynite molded distributor cap and rotor along with a heavy duty gear for long life in your engine.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Supplied with cap and rotor.

### Flat-Top Chevy V8 - PN 84891\*

- Crab cap will clear cowlings, exotic intakes and air
- Mechanical advance is easy to adjust for your engine
- Maintenance-free magnetic pick-up provides accurate trigger signals

### REPLACEMENT PARTS

**CAP:** PN 8541 **ROTOR:** PN 84673 **GEAR:** PN 8531

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111

\*Not legal for use or sale on pollution controlled vehicles.

### Pro-Billet™ Small Diameter

This Distributor was designed for racers and street rodders that have space limitations due to firewall interference, blowers or oversized intake manifolds such as tunnel rams. The distributor is 3/8" narrower and almost 1" shorter than a standard distributor.

Proven performance features include a high output magnetic pick-up and precision machined reluctor for accurate ignition triggering. A fully adjustable mechanical advance allows you to tailor the advance curve to your specific application. Topping it all off is our own small diameter cap. This is molded out of durable Rynite® material and comes with an optional wire retainer.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Ignition.

### Small Diameter Chevy - PN 8570\*

### **REPLACEMENT PARTS**

CAP: PN 8431 ROTOR: PN 8467 GEAR: PN 8531

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.



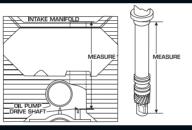


### SLIP COLLAR BENEFITS

The adjustable slip collar allows you to compensate for machining of the engine block, intake manifold or heads. The adjustable

collar will ensure that you obtain the correct gear mesh as well as

the oil pump to distributor shaft overlap. Once adjusted, the slip collar locks securely in place around the distributor housing.



### Pro-Billets with Slip Collar

If you have a slightly taller block or have decked the heads, the distance between the distributor mounting pad and the cam gear/oil pump drive may be different. MSD offers these Distributor with an adjustable slip collar with 1.5" of adjustment so you can be sure the distributor is installed correctly.

The distributor shares the same features of the standard Pro-Billet Chevrolet model including a ball bearing guide, long sintered lower bushing and an oil seal. To trigger the MSD Ignition a maintenance-free magnetic pick-up is secured in

the billet base of the distributor. Just above this pick-up assembly is an adjustable mechanical advance assembly.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

### REPLACEMENT PARTS

CAP: PN 8433 ROTOR: PN 8467 GEAR: PN 8531

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

### Slip Collar Chevy - PN 85561\*

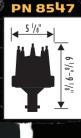
Designed for racing blocks with maximum increased deck height such as Alan Root, Merlin and Rocket Blocks. Nearly three inches of adjustment.

### Extra Tall Slip Collar Chevy - PN 8547\*

\*Not legal for use or sale on pollution controlled vehicles.

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CHEVY DISTRIBUTORS

CHEVY DISTRIBUTORS



### Pro-Billet Locked-Out

This strong, billet aluminum distributor is set up for engines that run locked-out timing or an MSD Timing Computer. With no advance assembly, the rotor plate is welded directly to the oversized shaft. A sealed ball bearing guides the top of the shaft while an extra long sintered bushing stabilizes the lower portion.

Trigger signals are produced via a high-output magnetic pick-up. This pick-up is extremely accurate and never requires adjustment. Since this distributor is designed primarily for race engines, an oversized (+.006") bronze gear is installed along with an adjustable slip collar for modified blocks, heads or intake manifolds.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

Pro-Billet w/Locked-Out Timing, Chevy V8 - PN 85501\*



The Adjustable Slip Collar of the PN 85501 allows you to adjust the distributor's height. This is great for engines with modified intakes and deck heights.

### REPLACEMENT PARTS

**CAP:** PN 8433 **ROTOR:** PN 8467 **GEAR:** PN 8472 (Bronze)

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

### Ready-to-Run<sup>™</sup> 348/409

If you're a 348/409 fan, you'll be excited to learn that you can get a high performance distributor for your classic Chevy engine!

This distributor is Ready-to-Run meaning that you simply need to install it in the engine and connect three wires to fire up the engine. No external ignition controls are required with this distributor because it has a powerful module built into the housing. This module produces a stout inductive spark that will improve the overall driveability and performance of your classic Chevy.

Just above the maintenance-free magnetic pick-up there is a chro-moly mechanical advance assembly that provides smooth advance of the timing and is easy to adjust. There is also a vacuum canister for cruisers. If you're concerned about looking stock, the distributor accepts a stock-style points distributor cap.

### Ready-to-Run Chevy 348/409 - PN 8393

- An ideal distributor for restored 409s or for nostalgia racers
- Maintenance-free magnetic pick-up never requires adjusting
- Built-in ignition module delivers a powerful spark
- Simple and clean three wire installation



### REPLACEMENT PARTS

CAP: PN 8433 ROTOR: PN 8467 GEAR: PN 8531

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.
THIS PRODUCT IS LEGAL TO SELL, DISTRIBUTE OR INSTALL ON VEHICLES IN
CALIFORNIA ACCORDING TO EXCUTIVE ORDER E.O. D-40-38;
LEGAL IN ALL 50 STATES.

\*Not legal for use or sale on pollution controlled vehicles.

### Adjustable Cam Sync Distributors

Some aftermarket EFI management systems fire the fuel injectors in the same order as the engine's firing order. These are called synchronization systems and are found in most high performance applications. These systems require a sync signal to know when the number one cylinder is firing.

These MSD Distributors feature an adjustable cam sync pick-up so you can set it to your ECU's requirements (up to 60° BTDC). Two models are offered; one with a nonmagnetic sync pick-up and a new version with a Hall-effect switch.

All of MSD's Pro-Billet Distributor features are built into each model including a ball bearing guide, QPQ-coated shaft and a durable Rynite molded cap and rotor.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Supplied with a cap, rotor and gear.

**Chevy V8 Sync Distributors:** Non-Magnetic Sync Pick-Up - PN 2345\* Hall-Effect Sync Pick-Up -PN 23451\*

### Adjustable Cam-Sync DISTRIBUTOR

This distributor has an adjustable cam-sync pick-up and a trigger pick-up for an MSD Igni-

tion. It has a small diameter cap, rotor and iron gear.

### Chevy V8 with Slip Collar - PN 2345\*

### CAM-SYNC HALL-EFFECT

Our new Cam-Sync Distributor offers a magnetic pick-up to trigger the ignition and now has a Hall-effect pick-up to set up the cam synchronization for most EFI systems.

What is really special about the MSD Hall-effect pick-up is that it features a built-in LED that illuminates when the sync signal is detected making set up simple!

The distributor also features an adjustable rotor to help set phasing! Supplied with cap and rotor.

### Cam Sync Distributor, Chevy V8 - PN 23451\*

### HALL-EFFECT PICK-UP WITH LED

Hall-Effect Pick-Up with LED Cam Sync Distributor - PN 2348

Available separately and can replace the nonmagnetic pick-up of the PN 2345 and PN 2340 distributors.



**CAP:** PN 8431 ROTOR: PN 8467

**GEAR:** PN 8531

### Universal Cam-Sync Pick-Up

This Universal Cam-Sync pick-up Kit is supplied with a non-magnetic pick-up and a magnet that you install to any part that operates at camshaft speed. When the magnet passes the pick-up, a signal is created to alert the ECU of the position and firing order of the engine. Matching connectors are supplied and the magnet measures .250" x .200". You will need to fabricate a bracket assembly and install the magnet.

### Universal Cam-Sunc Pick-Up Kit - PN 2346

\*Not legal for use or sale on pollution controlled vehicles.





# PN 8571

### Corvette Pro-Billet Tach Drive

Corvette owners can now replace their worn out Magna-Pulse distributors with this precision Pro-Billet Tach Drive Distributor. Advantages such as an accurate magnetic pick-up, oversized shaft, vacuum advance and a billet aluminum housing are just a few of the MSD advantages.

Inside the billet housing, a sealed ball bearing and long sintered bushing guide a 0.500" steel shaft for high rpm accuracy. A special reluctor is mounted to this shaft and is responsible for triggering the magnetic pick-up.

An adjustable mechanical advance assembly allows you to get the most performance out of your Vette's engine by custom tailoring a timing curve to fit your application.

The tach drive assembly is compact to clear the firewall and linkage. It can be repositioned easily to fit different applications plus has a grease fitting for lubrication.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

Corvette with Vacuum Advance, '63-'74 Applications - PN 8572

### **REPLACEMENT PARTS**

CAP: PN 8433 ROTOR: PN 8467 GEAR: PN 8531

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

THIS PRODUCT IS LEGAL TO SELL, DISTRIBUTE OR INSTALL ON VEHICLES IN CALIFORNIA ACCORDING TO EXCLUSIVE ORDER F.O. D-AO-38: LEGAL IN ALL 50 STATES.



### BILLET TACH DRIVE

If your race car requires a distributor with a mechanical tach drive, this is the one you need. The PN 8571 Tach Drive Distributor has all of the same features as the Corvette Distributor, except it does not have a vacuum advance.

### Adjustable Slip Collar Tach Drive

The PN 8454 Billet Distributor shares all of the above features, plus has an adjustable slip collar for engines that have had the deck height modified or use exotic intake manifolds. The distributor also features a Rynite base.



NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

PN 8454

These Distributors use a maintenance-free magnetic pick-up and advance assembly.

Tach Drive Distributors:
Pro-Billet Chevy V8 - PN 8571\*
Billet Chevy V8 with Slip Collar - PN 8454\*

\*Not legal for use or sale on pollution controlled vehicles.

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PN 8454

### Pro-Billet T1

Leave it to MSD to build an all-out performance distributor to replace the OEM GM LT1 Optispark! We machine an entire billet block of aluminum down into a precise housing that fits in place of the factory piece. Then, we fill it with a reliable new pick-up assembly, a trick timing adjustment mechanism and top it off with an all new MSD distributor cap!

The pick-up is an advanced optical encoder, a different style of optical pick-up than the OEM. This type of pick-up has proven to be very reliable and stable through extreme rpm and conditions. The rotor is bolted to a drive assembly that is indexed to the shaft and is stabilized through the use of a large ball bearing assembly.

Once installed, you have the ability to adjust the ignition timing – the only distributor that offers timing adjustability! An adjustment screw allows the timing to be tweaked up to +/-5°. The distributor is equipped with a fresh air vent and has an extra thick mounting surface for the cap to eliminate leaks.

The distributor is supplied complete with our heavy duty LT1 Cap, Rotor and the components required for installation.

### Pro-Billet LT1 Distributors:

'94-'96 Late Model - PN 83811\*

'92-'94 Early Model, supplied with fresh air hoses - PN 8381\*

- Advanced optical encoder trigger design for accuracy and reliability
- Easily adjust the timing up to +/-5°
- Improved housing design and extra bolt eliminates leaks
- Fresh air vented and sealed to keep the elements out
- Large ball bearing stabilizes timing through 10,000 rpm
- Rotor drive design is positively indexed and cannot slip

For Cap and Rotor kits, see page 105.

### Pro-Billet™6-Cylinder

Starting on the inside, a 0.500" oversized steel shaft spins in a sealed ball bearing and sintered bushing for long endurance and accurate spark delivery throughout the entire rpm range. Mounted on top of the shaft is an easy-to-adjust chro-moly mechanical advance assembly. Different advance springs and stop bushings are supplied so you can choose from 24 curves.

A maintenance-free magnetic pick-up provides accurate trigger signals to your MSD Ignition Control. A precision-manufactured reluctor that is connected to the shaft is responsible for triggering the pick-up.

The distributor is topped off with a high quality black cap and Race Rotor.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Supplied with a Cap and Rotor.

### **Pro-Billets:**

90° V6, Even-Fire, 4.3L - PN 8597\* Inline-6, 194, 230, 250, 292 - PN 8515

New MSD caps with HEI terminals are available for V6 engines!

### **REPLACEMENT PARTS**

PN 8014, Clip Down PN 8016, Bolt Down

**ROTOR:** PN 8467 **4.3L GEAR:** PN 8531

For more distributor accessories see pages 103-111.

This product is legal to sell, distribute or install on vehicles in California according to Executive Order E.O. D-40-38; legal in all 50 states.

\*Not legal for use or sale on pollution controlled vehicles.







### Ready-to-Run Pro-Billet Fords

MSD's Ready-to-Run Ford Distributors are the perfect upgrade for bulky DuraSpark systems or ancient breaker point models. These distributors come complete and ready-to-run. All you need to do is drop it in the engine, connect three wires and fire the engine. Each distributor features an ignition module that produces a powerful inductive spark to improve combustion of the fuel mixture resulting in quick starts, smooth idle and increased performance.

The billet aluminum housings of these distributors are 5/8" smaller in diameter to accommodate induction setups and tight engine compartments. A maintenance-free magnetic pick-up is responsible for triggering the high voltage sparks while a sealed ball bearing guides an oversized shaft.

Beneath the bolt down cap and MSD Race Rotor you'll find MSD's accurate mechanical advance assembly. Different advance springs and stop bushings are supplied so you can easily tune a curve to match your needs. Plus, there is a vacuum advance canister to increase economy on long drives.

### Readu-to-Run Ford Distributors: 289.302 - PN 8352

351W - PN 8354 351C-460 - PN 8350





### **REPLACEMENT PARTS**

CAP: PN 8431 ROTOR: PN 8467 GEAR: PN 85812 (351C -460) PN 85832 (289-302) PN 85852 (351W)

For more distributor accessories see pages 103-111. This product is legal to sell, distribute or install on vehicles in Californi according to Executive Order E.O. D-40-32; legal in all 50 states.



### Pro-Billet for Late Model Fords

When you start making serious power with your EFI Ford, the stock distributor shaft is one of the weak links of the engine. These Pro-Billet models answer the need for an affordable replacement in a strong and great looking package.

Each distributor starts as a solid billet that is secured into a state-of-theart Computer Numerical Control (CNC) machine where it is transformed into a precision housing.

Inside each housing there is a sealed ball bearing at the top of the shaft. This design is responsible for accurately guiding the oversized polished steel shaft throughout the entire rpm range of your engine. The shaft is also QPQ-coated for friction reduction and corrosion resistance.

The Pro-Billet Distributors use a stock-style trigger pick-up to accept factory connectors. For installation, you simply remove the stock distributor and bolt the Pro-Billet MSD in place! Each model is supplied with a high-quality cap with brass terminals for full spark delivery, heavy-duty rotor and a special gear to work with the factory camshafts.

### 5.OL EFI Pro-Billet Distributors:

1986 - 1993 **- PN 8456** 1994 - 1995 **- PN 8455** 

### 5.8L EFI Pro-Billet Distributors:

w/Module, non-roller cam - PN 8453 w/Module, steel gear for factory roller-cam - PN 8452 for remote Modules, steel gear for factory roller-cam - PN 8451

### **REPLACEMENT PARTS**

CAP: PN 8408 ROTOR: PN 8070

**GEAR:** SEE PAGE 110

RIBUTOR ACCESSORIES SEE PAGES 103-111. NOTE: THESE ARE OEM REPLACEMENT DISTRIBUTORS AND ARE LEGAL TO INSTALL IN ALL STATES.

### BILLET FORD

For Ford enthusiasts that are serious about performance! Just under the brass terminals of the MSD cap and rotor is an easy-to-adjust mechanical advance assembly. The assembly is fine blanked from chro-moly steel, TIG-welded for strength plus receives a QPQ coating. The precision weights glide on nylon bushings for smooth advancement and different springs and stop bushings are supplied so a variety of advance curves can be tuned.

The steel shaft that spins the advance and reluctor receives a friction reducing coating plus is guided by a sealed ball bearing and long sintered bushing. This combination provides stable timing signals and spark delivery at any rpm. Triggering chores are handled by MSD's race proven, maintenance-free magnetic pick-up.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

NOTE: PN 8580 will not clear some factory-style Shaker Hood Scoops.

### Ford Billet Distributors:

351C, 351M, 400, 429, 460 - PN 8580\*

289, 302 with Steel Gear for Hydraulic Roller Cams - PN 8598\*

289, 302 - PN 8582\*

289, 302 w/out gear - PN 85821\*

351W - PN 8584\*

351W for use with Edelbrock Victor Jr. Intake Manifold - PN 85805\*

351W with steel gear for hydraulic roller cams - PN 85840

351W locked timing with bronze gear - PN 85842

### **REPLACEMENT PARTS**

CAP: PN 8408

ROTOR: PN 8423

**GEAR:** PN 85812 (351C -460) PN 85832 (289-302) PN 85852 (351W)

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

### BILLET 2.3L FORD

This distributor features an aluminum housing that is CNC machined for closer tolerances than any conventional cast distributor.

On top of the distributor base sits the adjustable mechanical advance which can be easily tailored to any engine by changing the stop bushing and advance springs.

Triggering the MSD Ignition system is the same high-output magnetic pickup that is used in our racing distributors. This pick-up produces an extremely accurate trigger signal and is maintenance-free.

### 2.3L Ford - PN 8473\*

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

### REPLACEMENT PARTS

CAP: PN 8434 ROTOR: PN 8470

For more distributor accessories see pages 103-111.

\*Not legal for use or sale on pollution controlled vehicles.





These Ford Distributors use a maintenance-free magnetic pick-up and advance assembly.



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FORD DISTRIBUTORS



### Pro-Billet Small Diameter Ford

MSD engineers fit all of their high performance distributor experience into a special compact housing designed to be less obtrusive for Ford engines.

The diameter of the special cap and housing are 5/8" smaller than stock Ford distributors providing extra room in front of the engine. The new MSD cap features spark plug style terminals and is firmly screwed down to the housing.

The distributor relies on MSD's race proven magnetic pick-up and precision reluctor to deliver accurate trigger signals to the MSD Ignition throughout high rpm. The reluctor assembly is turned by a hardened steel shaft which rides in a sealed ball bearing for high rpm stability and endurance.

Mounted to the top of this shaft is a fully adjustable mechanical advance assembly. The rate at which the chro-moly assembly advances the timing is easily controlled by changing the supplied advance springs and stop bushing for total advance.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Supplied with cap and rotor.

Ford Small Diameter Distributors: 351C-460 - PN 8577\* 351W - PN 8578\* 289.302- PN 8579\*







### FORD STREET PRO-BILLET

The Street Pro-Billet Distributors are the perfect choice for powerful engines that see plenty of street time. The Street models share the same features as the small diameter models shown above, plus feature a vacuum advance. This canister provides improved economy and an accurate mechanical advance lets you dial-in an advance curve to match your driving needs. A magnetic pick-up produces accurate trigger signals that remain stable throughout the entire rpm range of your engine and is completely maintenance-free.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition Control. Supplied with cap and rotor.

Street Pro-Billet Distributors: 351C-460-PN 8477 351W-PN 8478 289, 302-PN 8479

### REPLACEMENT PARTS CAP: PN 8431

CAP: PN 8431

ROTOR: PN 8431

GEAR: PN 85812 (351C -460)
PN 85832 (289-302)
PN 85852 (351W)

For more distributor accessories see pages 103-111.

These products are legal to sell, distribute or install on vehicles in Califor nia according to Executive Order E.O. D-40-32; legal in all 50 states.



\*Not legal for use or sale on pollution controlled vehicles.

### READY-TO-RUN FE AND Y-BLOCKS

MSD is excited to offer two Ready-to-Run Distributors for two classic Ford engines! These distributors are the answer to weak breaker points or rebuilt aftermarket models.

Inside the billet housing there is a high-output ignition module. When the maintenance-free magnetic pick-up signals the module to fire, up to 7.5 amps is sent to the coil where a powerful spark is created. This improved spark output results in guick starts, snappy throttle response and terrific driveability.

The distributors are equipped with a vacuum advance canister for cruising economy. Plus, there is a mechanical advance assembly that is mounted on top of the distributor shaft making it easy to adjust the advance to meet your needs.

Another great feature of the Ready-to-Run Distributors is their simple installation! All you need to do is connect three wires and you'll be cruising!

### **Pro-Billet Ready-to Run Fords:**

FE. 332. 352. 360. 390. 406. 410. 427. 428 - PN 8595

Y-Block. 239. 272. 292. 312 - PN 8383

(may hit firewall seam on '57-'59 full size cars)



### REPLACEMENT PARTS

**CAP:** PN 8431 ROTOR: PN 8467 **GEAR:** PN 85812

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111. These products are legal to sell, distribute or install on vehicles in Califor nia according to Executive Order E.O. D-40-38; legal in all 50 states.





### Pro-Billet Ford FE

Racers and nostalgic Ford enthusiasts using the famous Ford FE engine now have access to a distributor that is truly equal to the performance level of their engine.

A magnetic pick-up triggers your MSD Ignition Control accurately at any rpm. Above this pick-up the mechanical advance assembly is positioned so it can be adjusted without disassembling the distributor. In addition, the specially ground advance cam is tig-welded to the 9/16" hardened shaft and the weight pins are staked and TIG-welded to the advance plate.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Supplied with cap and rotor. Does not accept a vacuum advance or Cap-A-Dapt.

Ford FE, 332, 352, 360, 390, 406, 410, 427, 428 - PN 8594\*

### **REPLACEMENT PARTS**

**CAP:** PN 8433 ROTOR: PN 8467 **GEAR:** PN 85812

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.





### PN 8351 PN 8353 PN 8573 The 8-BA Flathead Distributors are supplied with a special die to help set up the hold down clamp. FORD DISTRIBUTORS

### Pro-Billet Front Mount Flathead

Early Flathead racers and cruisers alike will be excited to see these front mount Flathead Distributors! These distributors are built around a CNC-machined billet aluminum housing for precise tolerances.

The distributor is topped off with our own Crab Cap with spark plug style terminals for improved wire connections. Just under the cap and Rynite race rotor is MSD's adjustable mechanical advance. This assembly features chromoly construction with TIG-welded weight pins to secure the precision fine blanked weights. MSD supplies different advance springs and stop bushings so you can dial-in an advance curve to meet your Flathead's specs.

Just under the advance is MSD's race-proven magnetic pick-up. This pick-up, combined with a reluctor, produces accurate trigger signals that are responsible for firing the MSD Ignition Control. Bring your Flathead up-to-date with MSD performance.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

Flathead Front Mounts: 2-Bolt, 42-48 - PN 8351\* 3-Bolt, 32-41 - PN 8353\*

### **REPLACEMENT PARTS**

**CAP:** PN 8541 **ROTOR:** PN 84673

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

### READY-TO-RUN 8-BA FLATHEAD

If you have a later model Flathead, manufactured from '49-'53, MSD also has you covered!

This distributor is built around a CNC-machined billet aluminum housing and features a maintenace-free magnetic pick-up so there are no points to worry about. A precision reluctor is mounted to a QPQ-coated steel shaft which is guided by a sealed ball bearing for accurate timing signals throughout the entire rpm range.

The distributors also offer an easy-to-adjust mechanical advance assembly. Chro-moly weights move smoothly on nylon pads and different advance springs and stop bushings are supplied so you can custom tailor a timing curve to match your engine's requirements. Both distributors are supplied with a depth setting die, gear, cap and rotor.

The best thing about this distributor is that it features an ignition module that is built into the billet aluminum housing. This distributor drops in the engine and connects with only three wires!

Ready-to-Run Flathead, '49-'53 - PN 8573

### **REPLACEMENT PARTS**

**CAP:** PN 8433 **ROTOR:** PN 8467

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

This product is legal to sell, distribute or install on vehicles in Californi according to Executive Order E.O. D-40-38; legal in all 50 states.



\*Not legal for use or sale on pollution controlled vehicles.

### DIGITAL E-CURVE™ PRO-BILLET

The E-Curve Distributor will drop right in your Ford 289/302 and fire up its performance.

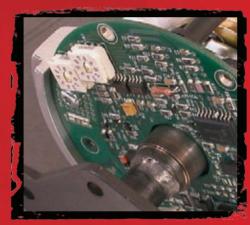
The E-Curve Distributor features a digital control module that manages the timing curve replacing the centrifugal advance springs and weights. This module lets you select from nearly 100 different advance curves, including a vacuum advance by turning two rotary dials! You can also set an rpm limit that will protect your engine from overrev damage cause

limit that will protect your engine from overrev damage caused by a missed shift or driveline failure.

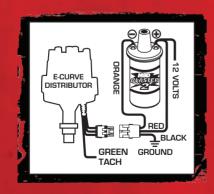
These distributors are also fit with a high-output ignition module so there is no need to run an external ignition box. This combination makes these distributors ideal for restored muscle cars and street rods to keep a stock or clean appearance under the hood.

The E-Curve Distributor is topped with MSD's Rynite molded cap and rotor and is supplied with a heavy-duty gear and a matching 3-Pin Weathertight wiring harness.

### Digital E-Curve Distributor Ford 289/302 PN 8503



Timing curve and rev limit adjustments are made with the rotary dials beneath the rotor.





- Digitally controlled, stand-alone distributor
- Adjustable electronic advance with vacuum advance
- Select up to 100 different curves through two rotary dials
- High output ignition module for a powerful spark
- Set a rev limit to protect your engine from overrev damage
- Simple three wire connection and you're ready-to-run





A 3/16" vacuum port is located on the bottom of the billet base so it doesn't interfere with wiring or mounting.

**8**5



### Billet Chrysler Small Block

Remove the MSD cap and Race Rotor and you'll find easy access to the adjustable mechanical advance assembly. This advance is designed for accuracy and strength with TIG-welded weight pins, nylon pads for smooth movement of the weights and a QPQ coating for friction reduction. Different advance springs and stop bushings are supplied so you can custom tailor a timing curve to fit your Chrysler's needs.

Supporting the advance assembly is a hardened, polished steel shaft. Two ball bearing guides are used to support the shaft producing incredible stability. Precision paddles of a zinc-plated reluctor pass a maintenance-free magnetic pick-up creating a trigger signal that tells the MSD to fire.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Ignition Control. Does not accept a vacuum advance.

### **REPLACEMENT PARTS**

CAP: PN 8433 ROTOR: PN 8467

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

Chrysler Billet, 273, 318, 340, 360 - PN **8534**\*

### Pro-Billet Small Diameter Chrysler

Since many Chrysler enthusiasts use the B1 head or aftermarket valve covers, these Pro-Billet Chrysler Distributors have been designed with a small diameter housing. This allows the distributors to fit tight block and head combinations.

Chrysler Pro-Billet: 383.400 - PN 8545\* 440.426-PN 8546\*

### REPLACEMENT PARTS

CAP: PN 8431 **ROTOR:** PN 8467

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

### Digital **E-C**urve™ **C**hrysler

The Digital E-Curve Distributor will drop right in your engine, easily connect to the coil and fire up! There are no external controls or boxes to mount and connect, and you can set a timing curve with the twist of a rotary dial!

That's right, no more springs or stop bushings to change. A new digital module lets you select from nearly 100 different advance curves, including a vacuum advance! Simply remove the cap and rotor to access the rotary dials and select a curve to match your application. You can also set an rpm limit that will protect your engine from overrev damage caused by a missed shift or driveline failure. This limit is adjustable from 5,000-10,000 rpm.

These adjustments are possible due to an advanced digitally-controlled ignition module. Not only does the module offer these adjustable options, it also produces a hearty jolt of energy to the coil to produce a powerful spark to fire up your engine's performance. Also, a magnetic pick-up is used for reliable and accurate trigger signals throughout the entire rpm range of your engine.

The E-Curve Distributor is topped with MSD's Rynite molded cap and rotor and is supplied with a heavy-duty gear and a matching 3-Pin Weathertight wiring harness.

E-Curve, 318, 340, 360 - PN 8504

**CAP:** PN 8433 **ROTOR:** PN 8467

For more distributor accessories see pages 103-111







rev limit adjustments are made with the rotary dials beneath the rotor.

\*Not legal for use or sale on pollution controlled vehicles.

### READY-TO-RUN CHRYSLER

MSD's Ready-to-Run Pro-Billet Distributors for Chrysler engines are the perfect upgrade from breaker points or weak electronic ignitions.

These distributors feature a maintenance-free magnetic pick-up that accurately triggers the built-in powerful ignition module. This module produces a high-output spark which improves combustion in the cylinder, resulting in quick starts, a smooth idle and great performance.

Just beneath the race rotor is a mechanical advance assembly so a timing curve can easily be tailored to match your application. The QPQ-coated shaft is guided by a sealed ball bearing assembly for stability and endurance while a vacuum advance canister helps increase economy on those long cruises.

The Ready-to-Run Distributors are also a breeze to install. Simply drop it in the engine and connect three wires and you're ready-to-run to your favorite cruise! The front engine mount models are designed in a special small diameter housing to clear aftermarket heads and valve covers.

Ready-to-Run Chrysler Distributors: 273,318,340,360 - PN 8388 383,400 - PN 8386 426,440 - PN 8387







### **REPLACEMENT PARTS**

CAP FOR PN 8386, 8387: PN 8431 CAP FOR PN 8391, 8388, 8389: PN 8433 ROTOR: PN 8467

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

THIS PRODUCT IS LEGAL TO SELL, DISTRIBUTE OR INSTALL ON NON-OBD-II VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-35; LEGAL IN ALL 50 STATES.

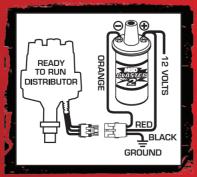
### Pro-Billet Early Hemi

Street rods look great with matching era power plants and the early Hemi engines are a great fit! More rodders are turning to these engines and MSD is excited to offer these Ready-to-Run Distributors to bring their ignitions up to date!

### Ready-to-Run Hemi Distributors: 331, 354 - PN 8391

392 - PN 8389

The Ready-to-Run Distributor earns its name with simple wiring. One wire to 12 volts, one to coil negative and another to ground. That's it! A matching harness with a 3-pin Weathertight connector is supplied.





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### READY-TO-RUN PRO-BILLET V8

Finally an answer for your AMC's worn out breaker points distributor! This Ready-to-Run Pro-Billet Distributor has a built-in inductive module that produces up to 7.5 amps to create a high voltage spark at the plug. This spark improves combustion of the fuel mixture resulting in quick starts, a smooth idle and great performance

Since this distributor has its own ignition module there is no need to run an MSD Ignition Control. Installation of the distributor is simple with only three wires to connect with the supplied Weathertight harness.

Under the MSD cap there is a mechanical advance assembly that can easily be tuned to your engine's specifications. Different advance springs and stop bushings are supplied, giving you 24 curves to choose from.

The Ready-to-Run AMC Distributor also has a vacuum advance canister and is supplied with everything you need for installation!

290, 304, 343, 360, 390, 401 - PN 8523







### PRO-BILLET AMC

There is a big following of AMC enthusiasts that are cruising a 401 equipped Javelin or trail blazing in a rock crawling Jeep with an inline 6-cylinder! MSD offers two Pro-Billet Distributors to deliver accurate trigger signals and are maintenance-free!

Under the brass terminal cap of each distributor is MSD's race proven magnetic pick-up. This pick-up never requires adjustment and simply plugs right into an MSD Ignition Control. Just above it and under our strong race rotor is an adjustable mechanical advance assembly. The chro-moly weights of this assembly slide on nylon bushings producing smooth movement of the timing. You can easily adjust the curve to match your engine's requirements with the supplied springs and stop bushings.

Each precision CNC-machined billet aluminum housing features a sealed ball-bearing and long sintered bushing for stability at any rpm and increased endurance. An oversized steel shaft receives a QPQ coating to reduce friction and prevent corrosion.

Both distributors are supplied with a high quality cap, rotor and gear. There is even a vacuum advance canister for street cruising economy!

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

290, 304, 343, 360, 390, 401 - PN 8519 Jeep I-6, 232, 258 - PN 8516

### **REPLACEMENT PARTS**

V8 CAP: PN 8433 6 CYL.CAP: PN 8014 ROTOR: PN 8467

These products are legal to sell, distribute or install on vehicles in Californi according to Executive Order E.O. D-40-38; legal in all 50 states.



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### READY-TO-RUN BUICK

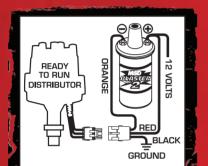
If you're looking for a performance distributor to replace your Buick's worn breaker points or even HEI distributor your search is over!

MSD's Ready-to-Run Distributor incorporates a magnetic pick-up that never wears out! Plus, the distributor has a built in ignition module so there is no need to mount an external MSD Ignition Control. Not only do you get the benefits of electronic triggering, but your engine will awaken with the powerful sparks from the ignition module. This module delivers up to 7.5 amps to the coil creating a stout inductive spark. This improves combustion of the fuel mixture resulting in quick starts, a smooth idle and great performance!

Another advantage of an MSD Distributor is the accurate and adjustable mechanical advance assembly. The advance curve is easy to adjust with different advance springs and stop bushings which are included. To top it off there is a vacuum advance canister and MSD's strong cap and wire retainer.

The Ready-to-Run Distributor comes with a matching 3-pin harness making installation simple. All that it takes is routing two wires to the coil and one to ground!

### 400, 430,455 - PN 8552





The Ready-to-Run Distributor earns its name with simple wiring. One wire to 12 volts, one to coil negative and another to ground. That's it! A matching harness with a 3-pin Weathertight connector is supplied.

This product is legal to sell, distribute or install on vehicles in California according to Executive Order E.O. D-40-38; legal in all 50 states.

### PRO-BILLET BUICK

This distributor uses a high-output magnetic trigger to fire an MSD Ignition Control. Accurate trigger signals and spark delivery are the responsibility of the QPQ-coated steel shaft. A sealed ball bearing and long sintered bushing hold this shaft stable at any rpm.

An adjustable mechanical advance mechanism is mounted on top of the shaft. Nylon pads ensure smooth movement of the fine balanced weights for accurate timing advancement. A variety of advance stop bushings and springs are supplied so you can dial-in a custom curve.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

400. 430. 455 - PN 8517\* 215, 300, 340, 350 - PN 8548\*

### EPLACEMENT PARTS **CAP:** PN 8433 ROTOR: PN 8467 FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

\*Not legal for use or sale on pollution controlled vehicles.





### BILLET BUICK V6

This distributor is designed for severe duty racing applications using the Buick V6 even-fire engine.

The distributor features a billet housing machined from a solid piece of aluminum for closer tolerances and higher strength.

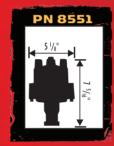
Other features include a 0.500" QPQ-coated steel shaft and two ball bearings for smooth operation. A high-output magnetic pick-up provides extremely accurate timing signals and never requires adjustment.

A heavy-duty cap features brass terminals for full spark delivery. This cap also bolts down to prevent breakage caused by excessive vibration.

There is an adjustable mechanical advance assembly. MSD provides a selection of advance springs and stop bushings so you can create a timing curve for your Buick.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Does not accept a vacuum advance.

V6 90° Even-Fire - PN 8551\*



### **REPLACEMENT PARTS**

CAP: PN 8553 ROTOR: PN 8467

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

### READY-TO-RUN NAILHEAD

The Buick Nailhead is one of the most sought after nostalgic engines for rods and is still providing the smooth power to plenty of Buicks. Nailhead fans can finally get a state-of-the-art distributor to provide the fire!

MSD's Nailhead Distributor is a Ready-to-Run design which means that it doesn't require an external ignition box. This is because inside the billet aluminum housing there is a powerful ignition module capable of producing a highoutput spark. This design also makes installation an easy affair with only three wires to connect!

Just under the custom MSD cap and retainer is an accurate mechanical advance assembly. MSD supplies different advance springs and stop bushings so you can tune a timing curve to match your Nailhead's needs!

A sealed ball bearing supports a polished steel shaft to provide endurance and stability. To top it off there is a vacuum advance canister which can help economy on long drives.

The Ready-to-Run Distributor is supplied with everything you need to drop it in and fire up your Nailhead!

**Ready-to-Run Nailhead,** 322, 364, 401, 425 • PN 8524

### REPLACEMENT PARTS

**CAP:** PN 8433 **ROTOR:** PN 8467

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-112.

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\*Not legal for use or sale on pollution controlled vehicles.

### Pro-Billet Oldsmobile

Sharing the CNC machining techniques with the rest of the MSD Distributor line, the Olds housing is machined from high quality 6061-T6 aluminum. Adding to this strength are two sealed ball bearings that guide the 0.500" shaft accurately through 10,000+ rpm.

TIG-welded on top of the polished steel shaft is MSD's adjustable mechanical advance assembly. To accurately trigger the ignition, a high-output magnetic pick-up is bolted to the base. This trigger pick-up produces a precise trigger signal. An MSD red cap with brass terminals and Race Rotor are supplied.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Does not accept a vacuum advance.

Oldsmobile V8, 260, 307, 330, 350, 400, 403, 425, 455 - PN 8566\*

### READY-TO-RUN OLDSMOBILE

Diehard Oldsmobile enthusiasts have been asking about a Readyto-Run Distributor and here it is! Ready-to-Run means just that, drop it in the engine, connect three wires and fire up your Olds.

Inside the billet aluminum housing there is a high-output inductive ignition module that lights the spark.

Since there are no points to wear or adjust, the distributor will always be at full output!

A polished steel shaft spins in the center of this module and is quided by a sealed ball bearing for great stability.

Another great benefit of the MSD Ready-to-Run distributor is the mechanical advance. The weights and assembly are fineblanked from chro-moly for absolute precision resulting in smooth timing changes. You can set up a timing curve to match your engine's specifications easily with the supplied advance springs and bushings plus there is a vacuum advance for economy.

The Distributor is supplied with the MSD Cap, Race Rotor, wire retainer and gear.

**Ready-to-Run,** 260, 307, 330, 350, 400, 403, 425, 455 - PN 8529

### **REPLACEMENT PARTS**

**CAP:** PN 8433 **ROTOR:** PN 8467

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111. This product is legal to sell, distribute or install on vehicles in Califo ACCORDING TO EXECUTIVE ORDER E.O. D-40-38; LEGAL IN ALL 50 STATES.



### **GM HEI**

If you're looking to upgrade your Olds HEI Distributor, see pages 66 for MSD's Ultimate HEI kit and more!

\*Not legal for use or sale on pollution controlled vehicles.







### PRO-BILLET PONTIAC

MSD's Pro-Billet Pontiac V8 Distributor for Pontiac engines built for either street performance or hard core racing applications.

Special features include a fully adjustable mechanical advance assembly. For all-out racing, the advance mechanism can also easily be locked-out.

For stable timing, a high-output magnetic trigger pick-up is used to supply the ignition with a trigger signal. Additional stability is achieved via the 0.500" hardened distributor shaft that is supported by sealed ball bearings.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Supplied with cap and rotor. Does not accept a vacuum advance.

Pontiac V8, 326, 350, 389, 400, 421, 428, 455 - PN 8563\*



### READY-TO-RUN PONTIAC

Do yourself and your Poncho a favor and replace your points distributor with a Ready-to-Run model. You'll never have to adjust or replace the points again and your car will run better thanks to the hot MSD sparks.

Inside the CNC-machined billet housing there is an ignition module that produces a much hotter spark which will improve the performance of your engine. Also, since timing advance is important to Pontiac engines, the mechanical advance can easily be adjusted with the supplied advance springs and stop bushings. Plus, there's a vacuum advance canister to help economy at moderate cruise speeds.

Triggering the module is the responsibility of a magnetic pick-up that will never wear or require adjusting.

The Ready-to-Run Distributor is easy to wire with only three wires! If you're determined to keep your engine looking stock, you could even remove the high quality MSD cap and clip a stock unit in place!

**Ready-to-Run Pontiac,** 326, 350, 389, 400, 421, 428, 455 **- PN 8528** 





### REPLACEMENT PARTS

**CAP:** PN 8433 **ROTOR:** PN 8467

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

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\*Not legal for use or sale on pollution controlled vehicles.

### Pro-Billet Cadillac

Cadillac cruisers will be excited about this new Pro-Billet Distributor for the 368, 425, 472 and 500 cubic inch engines.

The Distributor begins life as a billet of 6061-T6 aluminum before being CNC-machined to precise dimensions. The sturdy, flex-free housing is fitted with a sealed ball-bearing and long sintered bushing for high-rpm accuracy.

MSD's race proven magnetic pick-up supplies a trigger signal that is accurate to within one degree at any rpm. Mounted above this pick-up is an adjustable mechanical advance and is supplied with different springs and stop bushings for a number of curves. For street cruising economy, as if there's any such thing in a Caddy, there is a vacuum advance canister.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

368, 425, 472, 500 - PN 8363

### **REPLACEMENT PARTS**

**CAP:** PN 8433 ROTOR: PN 8467

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111. This product is legal to sell, distribute or install on vehicles in Califo ACCORDING TO EXECUTIVE ORDER E.O. D-40-35; LEGAL IN ALL 50 STATES



### VW Type I BILLET

Using technology gained from building distributors for off-road and NASCAR racers, MSD offers this Billet Distributor for the popular Type 1 engine.

A maintenance-free magnetic pick-up is responsible for triggering the MSD Ignition. This pick-up is accurate to within 1° at any rpm so you won't have to worry about points float or "burbles" at top end speeds. The pick-up is triggered by a precision reluctor that is attached to a hardened steel shaft. For increased stability, a sealed ball bearing is used to guide the shaft. Since every engine application is different, the MSD Billet Distributor features an easy-to-adjust mechanical advance assembly. By simply changing the advance springs and stop bushing you can tune in 24 different advance curves.

NOTE: Must be used with an MSD 6, SCI or 7 Series Ignition. Does not accept a vacuum advance.

NOTE: Different style spark plug terminals and boots are required or use MSD's custom sets, PN 3193 or PN 31939.

Air Cooled - PN 8485\*

### **REPLACEMENT PARTS**

ROTOR: PN 8470

For more distributor accessories see pages 103-111.

\*Not legal for use or sale on pollution controlled vehicles.







- CNC-machined billet aluminum housing for precision
- Dual ball bearing guides for accurate and stable high rpm operation
- Powerful, multiple sparking external ignition module
- External coil for increased voltage output

### **REPLACEMENT PARTS**

CAP: PN 84314 **ROTOR:** PN 84674

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.



### Pro-Billet Honda

Finally, a performance distributor for Honda and Acura engines! This all new Pro-Billet Distributor is designed for the popular Honda/Acura '96-'01 JDM/USDM 1.6/1.8L B-Series DOHC VTEC engine platform.

The Pro-Billet Distributor is designed for performance from the insideout starting with a precise billet aluminum housing. Inside this strong new housing is a ball bearing guide for high rpm stability. Hall-effect pick-up assemblies are used to improve trigger signals and are also compatible with the factory ECU.

The Distributor uses a small external ignition module that creates a much higher energy spark to the Blaster SC coil. This inductive spark also has longer spark duration and even fires multiple times at lower rpm. This increased spark output improves combustion resulting in improved performance through the entire rpm range.

### Honda/Acura '96-'01 JDM/DSDM 1.6/1.8L **B-Series DOHC VTEC Engines - PN 8488\***

Ignition Driver, required with Distributor - PN 6305\*

Blaster SC Coil, recommended with Distributor - PN 8235\*

NOTE: External Ignition Module and Coil must be purchased separately.

### Honda/Acura OBD II to OBD I DISTRIBUTOR ADAPTER CABLE

This Cable adapts the OBD II distributor to an OBD I engine harness. To make it even easier, we make it a direct plug-in installation! This harness will

allow a direct plug-in installation of our PN 8488 Distributor on an OBD I vehicle.

### Adapter Cable PN 8864



### EcoTec Sync Distributor

When a GM EcoTec engine is being built for drag racing, you'll need a way to synchronize the camshaft position with the fuel injection system. Also, with the Programmable 7-Plus Ignition in place you'll need a way to distribute its high energy sparks. The answer lies within this Billet Distributor.

This Distributor bolts in place of the factory power steering pump on EcoTec engines. There is a stationary magnetic pick-up under the Rynite cap that supplies a cam sync signal to the aftermarket EFI system. Thanks to a special rotor plate design, the pick-up can be phased to the ECU's specification while rotor phasing can still be set properly.

A special injection molded Rynite cap, rotor and wire retainer are supplied along with a hold-down clamp.

### EcoTec Sync Distributor - PN 8498\*

Requires Plug Wire Set - PN 32769

### EcoTec 8.5mm Super Conductor Wires

With your Programmable Ignition installed on your EcoTec race engine, you'll need a new set of spark plug wires. We made a special set of wires with the correct lengths to reach the terminals of the new distributor cap.

### Race Wire Set - PN 32769

\*Not legal for use or sale on pollution controlled vehicles.

### MSD HVC™ Series Professional

### RACING DISTRIBUTOR

Through our close relationships with top racing teams, our engineers were able to develop a distributor that will accurately trigger a racing ignition through miles of 9,000 +rpm. Inside, there are two Hall-effect style pick-ups that can be switched for redundant systems. These pick-ups are stacked so any individual cylinder timing will not be affected between pick-ups. Also, the secondary pick-up is adjustable +/-8° so teams can easily tune to their needs.

The timing is locked out on these distributors and for stability there is a 1.58" diameter precision ball bearing which also holds the endplay at zero. Engine pressures are sealed off through a double seal assembly and the large Dupont Rynite injection molded distributor cap is securely bolted to the billet base.

The HVC Distributors are supplied with a cap and rotor. A 6-foot harness is available separately, PN 8857, to connect the distributor to the ignitions. Also, a gear is not installed and must be purchase separately.

**Pro-Billet HVC Series Distributors:** Chevrolet - PN 83921\* Chevrolet RO7 - PN 83925\* Ford 351W - PN 83922\* Chrysler R5 - PN 83923\* Chrysler R6/P8 - PN 83926\* Toyota - PN 83924\*



NOTE: The HVC Distributors are not supplied with a gear. See page 110 for gears.

- Engineered specifically for professional circle track racing
- Dual Hall-effect pick-ups are stacked, with an adjustable secondary pick-up
- 1.58" ball bearing guide for stability
- Approved Deutsch connectors for secure, solid connections
- Less rotating mass

The HVC Distributors incorporate a new style Hall-effect pick-up for the most accurate signal possible. Two pick-ups are stacked atop each other so if a driver switches to the secondary ignition any custom firing or timing will be unaffected.

The secondary pick-up is also adjustable +/-8° for increased tuning.

### **HVC Distributor Support Pieces:**

Lower Pick-Up Assembly, cw - PN 87571

Lower Pick-Up Assembly, ccw - PN 87572

Upper Pick-Up Assembly, cw - PN 87573

Upper Pick-Up Assembly, ccw - PN 87574

Reluctor, Steel, Finished - PN 8349

Reluctor, Steel, un-Finished - PN 83491

Rotor - PN 8484

Installation Tool, Reluctor - PN 83492

Two 6-foot Pickup Harnesses - PN 8857

Secondary Pick-Up **Primary Pick-Up** 

PN 83921 PN 83922 PN 83924

\*Not legal for use or sale on pollution controlled vehicles.

CNC'd

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**HVC RACING DISTRIBUTO** 

HVC RACING DISTRIBUTORS



## ACCURATE REDUNDANT TRIGGER SYSTEM ADJUSTABLE CYLINDER TRIGGER TABS

### Zero-Cross Chevy

Engineered for absolute performance from the inside out, the Zero-Cross Distributor provides you with separate cylinder timing adjustability in a housing that is designed exclusively for high rpm, long duration racing.

With the tight engine restrictions in many race organizations, every ounce of power needs to be extracted for a race engine to be competitive. Since individual cylinders do not have the exact same requirements for ignition timing due to variables such as rpm, airflow, uneven manifold distribution and more, ideal ignition timing has always had to be a compromise. Until now!

The reluctor assembly of the Zero-Cross distributor features eight individual magnet tabs - one for each cylinder. Each one of these tabs has magnets that trigger the distributor's primary and secondary pick-ups. The position of each reluctor tab can be adjusted up to 6° in accurate steps with feeler gauges to produce a custom timing trigger for each cylinder.

The Zero-Cross Distributor has two independent pick-ups and harnesses. Each pick-up must run through an Interface Control Box, PN 83581, and an MSD Ignition Control. The distributors are supplied with the Cap, Wire Retainer, Rotor and an oversized bronze gear.

### Chevrolet Zero-Cross Pro-Billet Distributor - PN 83971\*



Note: Each pick-up requires an Interface Control Box, PN 83581, and an MSD Ignition Control.

- Easily adjust the ignition timing of each cylinder
- Zero-Cross trigger technique delivers accurate timing at any rpm with reliable solid state pick-ups
- Adjustable secondary pick-up +/- 4°
- Zero shaft endplay and oversized bearing assembly
- Double sealed shaft controls crankcase pressures

### SINGLE CHANNEL INTERFACE CONTROL BOX

This compact control translates the Zero-Cross signal for the MSD Ignition Control. There are two LEDs to assist in setting up the distributor's individual cylinder timing. Two boxes are required to run a redundant ignition system.

### Single Channel Interface Control Box - PN 83581\* Cap & Rotor Kit - PN 8119



Thorough engine sealing is accomplished with two seals installed back to back to control crankcase pressures or maintain vacuum in the engine. A precision 1.587" diameter bearing ensures total stability throughout high rpm and provides zero shaft endplay.

\*Not legal for use or sale on pollution controlled vehicles.

### **DUAL PICK-UP DISTRIBUTORS**

These distributors are designed specifically for circle track racing. Not only do they all feature a strong, billet aluminum housing and large steel shafts, they also offer two magnetic pick-ups! With two mag pick-ups, racers can have a complete redundant ignition system which can be activated at the flip of a switch. The pick-ups are placed precisely 180° apart so when you switch to the secondary ignition, the timing remains constant!

### DUAL PICK-UP PRO-BILLET CHEVY

The Chevrolet housing has several racing features that racers will appreciate. At the base of the CNC machined housing there are two 0-ring grooves. These seals prevent oil in the lifter gallery from leaking through the oil passage. If the engine deck, heads or intake have been modified, there is an adjustable slip collar which allows you to set the correct installation depth.

A fine-blanked advance cam is TIG-welded on top of the 0.500" QPQ-coated shaft.

Added to the advance plate are chro-moly weight pins which are staked and TIGwelded in place. The advance weights are specially coated to reduce friction and
nylon pads are mounted on the advance plate to allow the weights to react quickly
to rpm changes. This style advance assembly is fully adjustable or can easily be
locked out.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

Dual Pick-Up Pro-Billet Distributor, Chevy V8 - PN 8356\*

### REPLACEMENT PARTS

CAP: PN 8433 ROTOR: PN 8467 GEAR: PN 8531

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

### DUAL PICK-UP PRO-BILLET FORDS

For demanding Ford racing applications, MSD's Pro-Billet Dual Pick-Up Distributors are the answer. Each distributor features a billet housing that is machined from 6061-T6 aluminum using computer controlled CNC machining technology.

Additional features include a fully adjustable mechanical advance consisting of a hardened advance cam, chro-moly weights and weight pins that are TIG-welded to the advance plate. The advance assembly can also be locked-out with no welding.

Two high output magnetic trigger pick-ups are bolted to the billet base of the distributor so you can have a secondary ignition trigger source for a backup ignition and coil.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition.

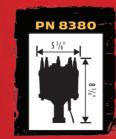
Ford Pro-Billet Distributors: V8,351C,351M, 400, 429,460 - PN 8380\* V8,289,302 - PN 8382\* V8,351W - PN 8384\*

### **REPLACEMENT PARTS**

CAP: PN 8408 ROTOR: PN 8423

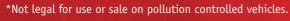
GEAR: PN 85812 (351C -460) PN 85832 (289-302) PN 85852 (351W)

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.









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DUAL PICK-UP DISTRIBUTORS



### **REPLACEMENT PARTS**

**CAP:** PN 8408 **ROTOR:** PN 8423

For more distributor accessories see pages 103-111.

### CHRYSLER DUAL PICK-UP PRO-BILLET

Chrysler racers that are loyal to their brand will be happy about this Dual Pick-Up Pro-Billet Distributor for engines that use a dry sump oil system.

Inside the two-piece CNC-machined billet aluminum housing are two race-proven magnetic pick-ups. The pick-ups are triggered by a precision reluctor that is mounted to the oversized shaft. Guiding the distributor shaft is the responsibility of two sealed ball bearings for incredible endurance and high end stability.

There is also an accurate mechanical advance assembly mounted on top of the distributor. This assembly is made for racing and is TIG-welded for strength, QPQ-coated and can be easily adjusted or locked out.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition. Supplied with a cap and rotor.

NOTE: For use on Chrysler engines with a dry sump system only.

Chrysler Dual Pick-Up Distributors: 318, 340, 360 - PN 8533\*
R5 - PN 8538\*

### BILLET RELUCTOR

To obtain maximum performance, many engine builders actually modify the distributor's reluctor to obtain different timing for each specific cylinder.

This Billet Reluctor is designed for these extreme applications. The Reluctor is CNC-machined from a billet of steel for absolutely precise dimensions and strength. The steel allows for extra machining without losing strength.



Billet Reluctor for MSD Distributors - PN 8415

### DUAL PICK-UP CHEVROLET BASE

This is a replacement base for the Pro-Billet Dual Pick-Up Chevrolet Distributor, PN 8356. It features two high-output magnetic trigger pick-ups spaced 180° apart so a complete backup ignition system can be used.

NOTE: Only for use with Chevrolet Distributor PN 8356.

### Pick-Up Base - PN 83561\*

NOTE: In order to have your tachometer operate with your primary and secondary ignition, see our Tach Splitter on page 60.

## TRANSFER SWITCH PN 8807 RED GRANGE GRANTION GRANTIC COIL SELECTOR PN 8210 DUAL MAGNETIC PN 8350 PN 8350 PN 8350 WHITE (NOT USED)

The wiring diagram above shows an example of wiring a complete dual ignition system.



\*Not legal for use or sale on pollution controlled vehicles.

The MSD Billet Crank Trigger Distributors are designed for racing engines that use a crankshafttriggered ignition. Since most race engines use custom tunnel rams or blowers that limit the space for a distributor, these Crank Trigger Distributors are designed to fit in tight quarters and still accurately deliver the sparks.

### CHEVY V8 Low-Profile

The unique design of these distributors fit tight intake systems while still transferring the high voltage of the MSD racing ignition to the spark plugs.

The high voltage carrying capabilities are the result of several features which have been designed

into these Low-Profile Distributors. This includes a large diameter cap with wide spaced terminals and an injection molded Rynite rotor with thick vanes to stir up the air inside the cap. The high dielectric Rynite base also prevents arcing to the billet housing.

Since these distributors are used primarily in racing applications, an oversized steel shaft is responsible for delivering the sparks. This shaft is QPQ-coated for friction reduction and receives guidance from a sealed ballbearing assembly and an extra long, precision sintered bushing for smooth operation.

NOTE: Must be used with an MSD Crank Trigger and Ignition Control.

**Low Profile Billet Crank Trigger** Distributor Chevy V8 - PN 84697\*

### GM DRCE BLOCK

With the development of GM's DRCE racing block, racers demanded a high quality, low pro-file distributor and MSD delivers it! This distributor is designed around a billet aluminum housing that is CNC-machined to precise dimensions.

A large Ford-style cap with brass terminals clamps firmly down to the base. A Rynite-molded rotor is responsible for transferring the high voltage to the correct terminal at the precise moment. The rotor is fastened to a 0.500" QPQ-coated steel shaft which is supported by a sealed ball bearing and long sintered bushing. This combination provides accurate spark delivery throughout high engine rpm. A bronze gear is responsible for turning the shaft.

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition and Crank Trigger.

**GM DRCE Block, Low Profile Crank Trigger** Distributor - PN 84698\*

### TALL BLOCK MODEL

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111 The Tall Block Distributor has the same features as our standard Low-Profile Distributor plus a unique slip collar design. This allows the PN 8558 to fit in most tall block engines that have had the deck height modified.

Chevy Billet Dist., V8, Low Profile, Tall Block, Crank Trigger - PN 8558\*

\*Not legal for use or sale on pollution controlled vehicles.

**Crank Trigger Distributors** are designed to be used with a crank trigger only. The distributors have no magnetic pick-up or advance assemblies.

**HEIGHT OF** 

PN 84697 IS 11.875".

**REPLACEMENT PARTS** 

**CAP:** PN 8408 ROTOR: PN 8457

Slip Collar

PN 8558 Only.



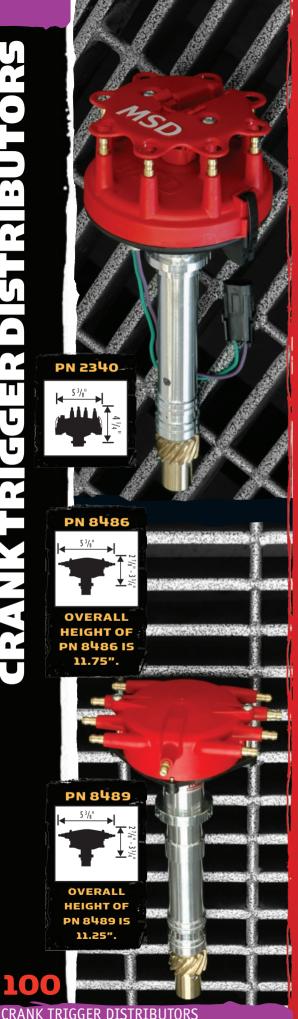
**OVERALL HEIGHT OF** PN 84698 IS 10".



OVERALL **HEIGHT OF** PN 8558 IS 13.125"

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CRANK TRIGGER DISTRIBUTORS



### EFI Sync Distributor

If your EFI system has limited space in the back of the engine due to the intake combination or firewall, this low-profile distributor is for you!

The sync pick-up of this distributor is fixed at 45° BTDC on the number one cylinder. This signal will reliably alert your ECU as to when the number one cylinder is preparing to fire.

The distributor uses a wide, Ford style cap to improve voltage distribution and to reduce the chances of ionization and spark scatter. A 0.500" polished steel shaft is responsible for spinning the rotor and is guided by a sealed ball bearing guide and bushing. The distributor is ready to drop in your race engine from the bronze gear to the brass terminals of the cap.

### **Sunc Signal Billet Distributor** Chevrolet V8 - PN 2340\*

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition and Crank Trigger.

### MSD'S EFI

For more information on MSD's EFI components go to www.msdfuelinjection.com

### REPLACEMENT PARTS

**CAP:** PN 8408 ROTOR: PN 8457 **GEAR:** PN 8471

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

### CHEVY CRAB CAP DISTRIBUTORS

The MSD Crab Cap Distributors are built specifically for racing engines with almost no room for a distributor due to tunnel rams or blowers. The distributor is equipped with a special low-profile crab style distributor cap to allow it to fit in extremely tight areas.

The housing features two optional O-rings at the bottom that improve oil control by preventing oil pressure loss. Also, a small oil bleed hole located in the base sprays oil on the distributor and camshaft gears to prevent excessive wear. Since this is a racing distributor, there is an adjustable slip collar to make up for engines that have had the distance between the mounting surface and the gear modified.

Crowning this distributor is MSD's own Crab Cap! This cap incorporates spark plug style terminals for a better connection and grip to the plug wires.

### Billet Crab Cap Distributor Chevy - V8 PN 8489\*

The Super Tall Crab Cap model has all of the same features, plus is taller to fit special racing blocks such as the Allen Root or Rocket Blocks.

### **Billet Super Tall Block Crab Cap Distributor** Chevy V8 - PN 8486\*

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition and Crank Trigger.

CAD: PN 8541 ROTOR: PN 8567 **GEAR:** PN 8471

For more distributor accessories see pages 103-111

\*Not legal for use or sale on pollution controlled vehicles.

### FORD CRANK TRIGGER

Blue oval racers will be happy to see these Crank Trigger Distributors. The housing of these three distributors are standard-height Ford Distributors so they will work with cast intake manifolds.

These distributors have a low-profile cap assembly to clear busy intake set-ups and are topped with MSD's new Rynite-molded Ford-style cap and wire retainer. The low design is accomplished because the only thing under the cap is a rotor! These distributors don't have an advance assembly or pick-up so they must be used with

Since these distributors are designed for racing applications, a ball bearing is pressed into the housing to guide the polished steel shaft. Each distributor is supplied with a bronze gear.

Ford Crank Trigger Distributors: 289/302-PN 8379\* 351W-PN8378\* 351C/M-460-PN8377\*

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition and Crank Trigger.









### FORD V8

The MSD Low-Profile Ford Crank Trigger Distributor is designed specifically for dual carb sheet metal intakes and must be used with an MSD Flying Magnet Crank Trigger system.

The Low Profile distributor uses a large diameter distributor cap which allows it to carry the high voltage outputs of an MSD race ignition. For high-rpm stability, the Low Profile Distributor's housing is CNC machined from a solid billet of 6061-T6 aluminum. Inside this precision housing, a heat-treated 9/16" diameter distributor shaft is guided by an upper sealed ball bearing for high rpm endurance and stability.

### Sheet Metal Intake, 351C-460 - PN 8569\*

NOTE: Must be used with an MSD 6, 7, 8 or 10 Series Ignition and Crank Trigger.



<sup>\*</sup>Not legal for use or sale on pollution controlled vehicles.



MSD's Pro-Billet Front Drive Distributor is the solution for race engines that don't have room for a standard distributor due to firewall clearance or intake combinations.

The MSD Front Drive Distributor is belt-driven from a pulley installed on the camshaft. For increased strength and durability a 9mm belt is used which is wider than any other drive assembly. The distributor head is CNC-machined from a billet of aluminum and is secured to a strong precision bracket. This system is an extremely accurate way to distribute the spark energy from your MSD Ignition!

We revised the front drive with our standard Ford-style cap and rotor. This creates a downsized package for an easier fit in tight engine compartments. The Front Drive Distributor is supplied with mounting bolts, cam pulley and drive belt.

NOTE: Must be used with a Jesel Camshaft Belt Drive Kit and an MSD Flying Magnet Crank Trigger.

### **Pro-Billet Front Drive** Chevrolet Distributors Small Block - PN 8510\* Big Block - PN 8520\*

(Will not fit raised cam big blocks such as Merlin,

Donovan or Dart blocks or Gen V or Gen VI.)

### Universal - PN 8511\*

Universal kit is supplied with billet aluminum mounting bracket that requires machining to fit your application.

LS Series Engines - PN 8712\*



The MSD Front Drive Distributors are the only models available with an adjustment for belt tension.



PN 8511

- Band clamp mount allows easy rotor phasing adjustment
- The only front drive distributor with adjustable belt tension
- The MSD Cap and Rotor are injection molded from strong Dupont Rynite material
- Billet aluminum bracket and lower housing for strength
- Supplied with cam gear, hardware and extra wide 9mm belt

### REPLACEMENT BELTS

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.

**STANDARD:** PN 8722 .119 CENTER DISTANCE: PN 8724

CAP: PN 8408

ROTOR: PN 8423

### Pro-Billet Oil Plugs

Our Chevrolet Front Drive Distributors brought the need for a distributor plug. Both are billet aluminum and feature a slip collar to ensure correct installation depth.



**Wet Sump Oil** Plug - PN 8513\* Dry Sump Oil Plug - PN 8512\*

PN 8512

\*Not legal for use or sale on pollution controlled vehicles.

www.MSDIGNITION.com

FRONT DRIVE DISTRIBUTORS

### MSD CAPS

MSD molds our most popular V8 distributor caps in-house. These caps are injection molded from DuPont® Rynite material and feature spark plug-style terminals. These terminals offer improved locking connections and the Rynite material is extremely strong with excellent dielectric properties. Plus, most caps have an optional wire retainer that is supplied with these caps to lock the wires in place.



### MSD GM Points Style Cap Red - PN 8433

Black - PN 84333

If you are upgrading from a points socket style cap you will need to change your boots and terminals. MSD offers a set of nine as PN 8849.



### MSD Ford Style and Cap-A-Dapt Red-PN 8408

Black-PN 84083

The Ford-style Cap has a provision for the coil wire to be routed in separately!



### MSD Small Diameter Distributor Cap Red - PN 8431

Black - PN 84313

MSD Small Diameter Marine Cap - PN 84316



### 4-Cylinder for Dist. PN 8490 and EcoTech, PN 8498 - PN 8424

(use rotor PN 8467)

### Crab Cap Distributor - PN 8541

(Crank Trigger Distributor, use PN 8567, Flat Top and Flathead Distributors, use PN 8 $^4$ 673)



### GM/MSD 6-Cylinder Cap - PN 8014

(use rotor PN 8467)

### GM/MSD 6-Cylinder Cap - PN 8016

(use rotor PN 8467)

### GM Marine V8, Bolt Down Style - PN 8565

(use rotor PN 8467)

### STOCK STYLE CAP AND ROTOR FOR GM HEI DISTRIBUTORS

**Stock Style Components** 

Replacement Cap - PN 8411

Replacement Rotor - PN 8410 Stock Coil Cover - PN 8402

Stock Coil Cover - PN 8402 Modified Coil Cover - PN 8401



### CAP AND ROTOR KITS

The cap and rotor of any ignition system must be considered maintenance items. Just as you change the oil and filter of your car, you should always replace the cap and rotor as a set. To make things easy, we now offer these Cap and Rotor Replacement Kits.

GM V8 EFI, External Coil - PN 8406 GM V6 EFI, 4.3L - PN 8430 GM V8 HEI, Internal Coil, OE - PN 8416 MSD/GM Points Style Socket Cap - PN 8442 Ford V8 TFI - PN 8482

Ford V8 Duraspark - PN 8450
Ford V8 Duraspark with Spacer - PN 8414
MSD Extreme HEI, Internal Coil - PN 84023

Too New for Photos
MSD Cap (PN 8433) and Race Rotor - PN 84335
Small Diameter MSD Cap (PN 8431) and Race
Rotor - PN 84315

Large Cap Ford (PN 8408) and MSD Rotor PN 84085









### MSD GM LT1 DISTRIBUTOR CAP/ROTOR

Finally a high quality Cap and Rotor for the front mount LT1 distributor! LT1 fans have been searching for a cap that could deliver the performance of the LT1 and MSD is happy to bring it to them.

Remember, changing the cap and rotor on this engine is no walk in the park. So when you do it, you want to make sure to install the best parts possible and the MSD Cap and Rotor deliver.

The all-new cap housing is injection molded from a special DuPont material that provides extreme strength and high dielectric properties resulting in less chance of breakdown causing a misfire. The terminal paths are encased in a durable epoxy compound for even more protection. The rotor is also an all-new molded piece with a brass/stainless rotor tip design.

Two models are available to cover all your LT1 needs!

### LT1 Distributor Cap and Rotor Kit '93-'94, with Fresh Air Vacuum Kit - PN 8481 LT1 Distributor Cap and Rotor Kit '94-'97 - PN 84811

Be sure to see the Pro-Billet LT1 Distributor on page 79.

### MSD HEI COMPONENTS

With the introduction of our 20 Amp Extreme HEI Module, we needed an HEI Cap and Rotor that could withstand the

### **TECH TIP:**

A Low Resistance Rotor Bushing must be used with a high output ignition system. See page 111 for more information.

high output. The answer was to mold our own HEI Cap, Rotor and Coil Cover. The Cap and Rotor will fit our HEI Pro-Billet Distributor, PN 8365, plus will work on stock applications.

V8 HEI Cap - PN 84111 Rotor - PN 84101 Coil Cover - PN 84022 Modified Coil Cover - PN 84012 Low Resistance Rotor Bushing - PN 8412



### MSD Coil Covers for Stock HEI Caps

People like the functional wire retainer and the looks of our HEI Coil Cover, so we molded one that will work with stock size V8 HEI Caps.

Coil Cover for Stock HEI
Caps - PN 84021
Modified for External
Coil Applications - PN 84011

www.MSDIGNITION.com



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### MSD CAP-A-DAPTS™

If the new Pro-Cap doesn't work on your application, these MSD Cap-A-Dapts will do the trick.

The MSD Cap-A-Dapt adapts a large, Ford style cap onto your MSD distributor. This large cap spaces the spark plug terminals farther apart which lessens the chances of cross-fire and ionization occurring. Spark plug-style terminals are used on the cap for tight connections that will not vibrate loose.

The rotor is injection molded out of Rynite® for incredible strength and resistance to spark. Thick vanes are incorporated to stir up the air in the cap for even more ionization prevention. Three Cap-A-Dapts are available; two with a fixed rotor and another with an adjustable, two piece rotor.

The Two-Piece Rotor allows you to adjust the rotor tip to cap terminal alignment so you can adjust the rotor phasing. All of the MSD Distributors are phased at the factory, but if you are running a Multi-Step Retard or Timing Controller, having the ability to adjust the rotor phasing is beneficial.

The Cap-A-Dapts will install on most MSD Pro-Billet Distributors (except the Ford FE, PN 8594). Both kits are supplied with a high quality cap with brass terminals, rotor and cap spacer.

Cap-A-Dapt, Fixed Rotor - PN 8445 Cap-A-Dapt, Adjustable Rotor - PN 8420 Cap-A-Dapt, Small Diameter Distributors - PN 8441

### REPLACEMENT **PARTS**

CAP: PN 8408 FIXED DIST. ROTOR: PN 8423 ADJUSTABLE ROTOR: PN 8421 **CAP SPACER:** PN 8446 (except PN 8441)



### Adjustable Race Rotor

When you install EFI on your engine, most systems will require the ignition timing to be advanced for the ECU. This can cause issues with rotor phasing, but the new Adjustable Rotor remedies this issue! The Rotor is based on MSD's popular PN 8467 Race Rotor so it will install on most any MSD distributor with a PN 8433 cap. The Rotor offers up to 20 degrees of advance or retard and is easy to set up with accurate one degree detent adjustments.

Adjustable Race Rotor - PN 84211 (Nall)













The Pro-Cap has a big five inch diameter with two full inches between each terminal! This ensures accurate spark delivery and far less chance of spark scatter inside the cap. The entire assembly is injection molded from Dupont® Rynite™ material for incredible strength and high dielectric properties.

The Rotor features a deep skirt and thick vanes to stir up the air to prevent ionization and the rotor screws are even overmolded with Rynite for increased spark

isolation. The extra thick rotor tip can easily handle high heat and is indexed and firmly secured with two screws. The Pro-Cap is crowned with a screw-down retainer to keep all of the plug wires firmly attached to each terminal.

Pro-Cap for most MSD Distributors - PN 7445

### ROTOR KIT

The directional rotor tip is designed to handle large amounts of retard in high voltage applications.



### Pro-Cap Rotor Rebuild Kit - PN 7411

### DISTRIBUTOR CAPS

All MSD Extra Duty Distributor Caps are designed with performance in mind and are molded from high quality, voltage insulating material and use low resistance terminals.

> **GM/Buick V6,** Socket - PN 8447

(use rotor PN 8467)

GM/Buick V6 (Billet), **Bolt Down Style** PN 8553

(use rotor PN 8467)





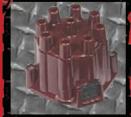






**Chevy V8 Vented** PN 8438

(use rotor PN 8467)



**Chevy V8 Standard** PN 8437 Socket (use rotor PN 8467)

Late Model HEI, External Coil (MSD PN 8366) - PN 8426 (use rotor PN 8427)



Ford V8, Socket PN 8062 (use rotor PN 8072)

### EXTREME HONDA POWER CAPS

One of the best upgrades you can make with a Honda engine is to bypass the weak internal coil. These new caps allow you to take advantage of an external coil and ensure all of the new high voltage reaches the plugs.

The caps are injection molded from DuPont Rynite material producing a strong cap with high dielectric properties. While we were at it, our engineers incorporated brass spark plug style terminals to the cap for a better connection to the plug wire terminal. Refer to chart below for applications.



### OE Extreme Power Caps

These caps feature the same great build-up of the Extreme Caps, but do not accept an external coil. Designed as a factory replacement. This caps still utilize the same Rynite material and brass terminals.



### EXTREME HONDA ROTOR

All new Rynite injected rotors for MSD's Honda/Acura Caps! Refer to chart below for applications.



### Honda Power Cap & Rotor Kits

MSD's Honda and Acura Modified Distributor Kits are specially constructed to allow the use of a powerful external Blaster Series Coil.

Each cap is specially fitted with an MSD Power Tower to accept the high voltage of an MSD Blaster Coil. The spark plug socket features brass terminals for improved conductivity. A low resistance 8.5mm Super Conductor coil wire and crimp tool are supplied so you can custom fit the wire to your application. A new rotor is also supplied to finish off the new kit!

Refer to chart below for applications.



| Year             | Model                          | Engine    | Notes                    | Cap/Rotor<br>Kit      | Red Power<br>Cap | Extreme    | OE Extreme | Extreme<br>Rotors |  |
|------------------|--------------------------------|-----------|--------------------------|-----------------------|------------------|------------|------------|-------------------|--|
| ACURA            |                                |           |                          |                       |                  |            |            |                   |  |
| '97 (Only)       | CL                             | 2.2L      | w/Hit. Dist              | PN 82913              |                  |            |            |                   |  |
| '88-'91          | Integra                        | 1.6L/1.8L | w/Tec Dist               | PN 82903              | PN 82901         | PN 82902   | PN 8295    | PN 8090           |  |
| '92-'93          | Integra (All)                  | 1.71/1.81 | w/Tec Dist               | PN 82923              | PN 82921         | PN 82922   | PN 8296    | PN 8092           |  |
| '94-'01          | Integra (All)ntegra GS, LS, RS | 1 81      | w/Tec Dist:              | PN 82923              | PN 82921         | PN 82922   | PN 8296    | PN 8092           |  |
| '9 <i>4</i> -'01 | Integra GS-R/Type-R            | 1 RI      | w/Tec Dist<br>w/Tec Niet | DN 82033              | 11 02321         | I N 02322  | 14 0230    | DN 8092           |  |
| HONDA            | integra us-n/ type-n           | I.UL      | W/ ICC DISC              | FN 02333              |                  |            |            | FN 0032           |  |
|                  | Account                        | 0.01      | /Too Died                | DN 00000              | DN 00004         | DN 00000   | DM 0000    | DN 0000           |  |
| '90-'91          | Accord                         | Z.ZL      | w/ iec dist              | PN 82923              | PN 82921         | PN 82922   | PN 8296    | PN 8U9Z           |  |
|                  | Accord EX                      |           |                          |                       |                  |            |            |                   |  |
|                  | Accord DX (Only)               |           |                          |                       | PN 82921         | PN 82922   | PN 8296    | PN 8092           |  |
| '98-'02          | Accord EX, LX, SE              | 2.3L      | w/Hit. Dist              | PN 82943              |                  |            |            |                   |  |
| '88-'91          | Civic, CRX                     | 1.5L/1.6L | w/Tec Dist               | PN 82903              | PN 82901         | PN 82902   | PN 8295    | PN 8090           |  |
| '93-'97          | Civic Del Sol                  | 1.5L/1.6L | w/Tec Dist               | PN 82923              | PN 82921         | PN 82922   | PN 8296    | PN 8092           |  |
|                  | Civic/Si (Exc. '96-'00 HX)     |           |                          |                       |                  |            |            |                   |  |
| '96-'00          | Civic HX (Only)                | 1.61      | w/Hit Dist               | PN 82913              | 0_0              |            | 0_00       |                   |  |
| '97-'01          | CRV                            | 2 NI      | w/Toc Diet               | DN 82923              | DN 82921         | DN 82922   | DN 8296    | DN 2092           |  |
| '05-'07          | Odyssey                        | 2.01      | w/lit Dist               | I N 02323<br>DN 92012 | 11 02321         | 1 14 02322 | 14 0230    | 11 0032           |  |
|                  |                                |           |                          |                       |                  |            |            |                   |  |
| ່ອດ (Only)       | Odyssey                        | 4.JL      | W/ MIL. DIST             | PN 02343              | BN 00004         | BN 00000   | BN 00000   | DN 0000           |  |
| ′92-′01          | Prelude                        | 2.2L/2.3L | w/ iec                   | PN 82923              | PN 82921         | PN 82922   | PN 82926   | PN 8U92           |  |

### RACING ROTORS

These rotors are designed with high rpm and performance in mind which is why they are standard on most MSD Pro-Billet Distributors. Both rotors are injection molded from Rynite material for incredible strength and high dielectric properties. Plus the stainless steel/brass rotor tip is also screwed in place so it can handle extreme rpm and high heat conditions.

The rotors feature deep molded vanes to stir up the air inside the cap to prevent spark ionization. The rotor screws are set deep in the housing to prevent spark scatter.



### Racing Rotor, for MSD and GM Distributors with Window Caps - PN 8467

NOTE: Will not fit PN 84891, PN 8351, PN 8353 and PN 8473 Distributors, use rotor PN 84673.

### MSD Ford Distributors and Cap-A-Dapts PN 8441. 8445 - PN 8423

### REPLACEMENT ROTORS

MSD Distributor Rotors are molded from high quality, voltage insulating material to resist carbon tracking while ensuring that the ignition spark reaches the spark plug terminals. For optimum voltage carrying capabilities the rotor tips are made from low resistance brass for maximum voltage transfer.

### Rotors:

VW. PN 8485. and Ford 2.3L. PN 8473, Distributors only - PN 8470 GM and MSD HEI, OE - PN 8410 GM & MSD Small Cap HEI (PN 8366) - PN 8427 Ford & MSD 5.OL Late Model - PN 8070 Ford Large Cap, Duraspark - PN 8407 Ford Socket Cap - PN 8072

### CRANK TRIGGER DISTRIBUTOR ROTORS

Molded from strong, durable Rynite material these rotors are designed specifically for MSD Crank Trigger Distributors. The rotor tip is secured with a screw for high rpm racing applications.

**Rotor for Crab Cap Distributor - PN 8567** Rotor Base for Crab Cap Distributor - PN 8568 Rotor and Base for Low Profile Distributor - PN 8457

# MSD TIMING TAPES

Accurate ignition timing is one of the most vital adjustments you can make to your engine. Proper timing can mean the difference between winning and losing a race or even blowing an engine (as a worst case scenario). Recognizing the importance of the timing, MSD offers these Timing Tapes.

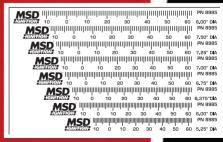
The MSD Timing Tape comes with eight different tapes to fit common balancers ranging from 5.25" to 8" in diameter. The tapes are marked off in one degree increments from 14° ATDC to 64° BTDC and are printed on a tough, chemical resistant material.

Not only do the MSD Timing Tapes help you get an exact timing setting, they allow you to see exactly where the Total timing is set. Remember, the Total timing is just as critical as the initial timing and the MSD Timing Tape will help you ensure that it is set accurately.

**MSD Timing Tapes - PN 8985** 

PN 8470 (For Distributors PN 8485 and PN 8407 PN 8410 PN 8473 only.) PN 8427 PN 8070 PN 8072





MSD Timing tapes will help you set your timing exactly where you want it!

A distributor's performance is only as good as its drive gear. MSD Ignition has put a great deal of effort into researching and testing a variety of metallurgical compositions, heat treating and coatings to provide you with a durable, accurate and strong distributor gear.

MSD engineers have built test fixtures and spent hundreds of hours testing and evaluating the metallurgy of our gears. The result is a special iron alloy gear that is treated to a low-friction coating process. To you this means long life, an easy break-in period and reliable performance!

These two gears were run at 7,200 rpm with an oil pressure of 85 psi. The MSD gear on the left ran for 12 hours and shows only a slight chaffing on the teeth. The other gear lasted only four minutes and is destroyed.



# control allowing MSD engineers the ability to maintain the exact conditions that they want for gear tests. Severe loads can be placed on the gear and the fixture can spin up to 10,000 rpm (crankshaft). Equipment and quality procedures like this are a big advantage to our customers and MSD.

This Gear Test Fixture features variable rpm and oil pressure

### **MSD IRON GEARS FEATURE:**

- Increased outer hardened layer thickness (RC 55-60)
- Micro polished surface for smooth contact
- Proprietary formulated ductile iron
- Melonite QPQ coated reduces friction and initial wear
- Interstitial carbide concentration improves wear resistance and running properties

### IRON GEARS

Iron Chevy Gear, .500" ID - PN 8531 Iron Chevy Gear, .500" ID,

Oversize 0.006" OD - PN 8532

Iron Chevy Gear, Melonized, Marine Applications, .500" ID - PN 8561

Iron Gear, Ford 351W, .531" ID - PN 85852

Iron Gear, Ford 289, 302, .468" ID - PN 85832

Iron Gear, Ford 351C, 351M, 400, 429, 460, FE, .531" ID - PN 85812

Distributor Gear, AMC - PN 8005 Cam Gear, AMC - PN 8007

NOTE: Some Ford Gears do not have roll pin holes.

### **Special Ford Applications:**

There are different versions of the Ford 302 engine that may require a special gear. The 302 engines with a roller camshaft require a special steel gear.

Non-EFI 302 with Roller Cam, 0.468" ID - PN 85833 EFI 302 with Roller Cam.

(replacement for MSD PN 8455 and 8456), also for MSD 351W Distributors, 0.531" shaft- PN 85834



MSD Bronze Distributor gears are machined from quality AMPCO 45 aluminum bronze containing 5% nickel. This special combination creates high-strength gear teeth that are less prone to wear even with high-volume oil pumps.

### Gears:

Chevy, .500" ID - PN 8471 Pontiac V8, .500" ID - PN 85631 Oldsmobile V8, .500" ID - PN 85661 Ford 289, 302, .466" ID - PN 8583 Ford 351C, 351M, 400, 429, 460, FE, .530" ID - PN 8581 Ford 351W, .530" ID - PN 8585 AMC V8 - PN 8006 Gear, Chrysler R5 - PN 8525

### Bronze Oversize Gears

Absolute timing accuracy cannot be achieved until every mechanical detail is handled. MSD's new bronze oversized gears help obtain perfect timing by meshing to the camshaft gear properly.

### **MSD Chevrolet Distributors:**

+0.006" - PN 8472

+0.009" - PN 84722

+0.012" - PN 84723

+0.015" - PN 84724



### VACUUM ADVANCE

This is the replacement canister for MSD distributors equipped with vacuum advance (except the PN 8365 and PN 8362 HEI Distributors.)

Vacuum Advance Mechanism - PN 8463



Advance Kits



### Advance Kit, All MSD Distributors - PN 8464

### VACUUM ADVANCE LOCKOUT

This bracket allows you to easily remove the vacuum advance from MSD distributors that are CW rotation (except PN 8365 and PN 8362).

**Vacuum Advance** 



### MAGNETIC PICK-UP

The MSD Magnetic Pick-Up replacement is the same high output assembly that is currently found in all MSD Distributors. It is supplied with the two pin connector installed.

NOTE: Not for use as a replacement on OEM Distributors.



\*MSD cast aluminum distributors are discontinued.

### Low Resistance HEI Bushing

The carbon rotor button in a stock HEI distributor cap has very high resistance. When the high voltage of an MSD 7 Series Ignition is added, this resistance builds up heat and can actually melt the distributor cap. The solution to this problem is the use of the MSD Low Resistance HEI Bushing which will pass the secondary voltage from the distributor cap to the rotor without excessive heat buildup.

**Low Resistance HEI** Bushing - PN 8412



### TACH DRIVE ADAPTER

The standard tach drive for MSD Tach Drive Distributors is a 3/16" tang drive cable. In most cases this type of drive will work, but for those who require the 0.104" square drive (Corvette style), MSD offers a Tang to Square Drive Adapter to fit all MSD Tach Drive Distributor assemblies.

### Tach Drive Adapter.

Tang to Square Drive - PN 8491



NOTE: This is included with each MSD Tach Drive Distributor.

### DISTRIBUTOR CLAMPS

MSD's Billet Distributor Hold Down Clamps are strong enough to keep the timing locked in place whether you are using an MSD Billet Distributor or Pro Mag. The MSD Hold Down Clamp is CNC machined from steel and fits all MSD Pro-Billet Chevrolet distributors and the Pro Mags. Each clamp includes the mounting stud, lock washer and nut.

**MSD Billet Hold Down Clamps:** Chevrole - PN 8110 Ford - PN 8010



### SHIM KIT

With this Shim Kit you will achieve proper endplay or help in positioning the gear-to-cam mesh. Shims are supplied to go between the gear and housing or the upper shaft next to the advance collar. A variety of shims are supplied including: 0.010", 0.015", 0.020", 0.025", 0.030" for the top and a brass 0.063" shim or 0.031" steel shim for the bottom.

Distributor Shim Kit - PN 8495 Lower End Shim Kit - PN 8497

### **DISTRIBUTOR SERVICE ITEMS**

The following service items for MSD distributors are available direct from the factory by special order. Contact the Customer Support Department at (915) 855-7123 for pricing and availability on these items.

- Advance Weight Kit, MSD Pro-Billet Distributors, PN 8628
- O-Ring Kit, Billet Chevy Distributors, PN 8494
- Adjustable Collar, All Slip Collar Distributors, PN 8539
- Screw kit for bolt down caps
- **Distributor reluctors**
- Spiral roll pins used on distributor gears
- Weight plate assemblies
- Standard rotation tach drive gears

# FLYING MAGNET CRANK TRIGGERS



For a long time, racers have known that one of the best things to do to an engine to improve its performance is to stabilize the ignition timing. The MSD Flying Magnet Crank Trigger system does exactly that by using four magnets embedded in an aluminum wheel. Although similar in appearance to other crank triggers, the MSD Flying Magnet design works on a different principle.

Strong rare earth magnets used in the trigger wheel are riveted in place.

Most crank triggers have a wheel, with steel studs sticking out, bolted to the harmonic balancer. As the crankshaft turns, the studs pass by a stationary magnetic pick-up, triggering the ignition. This pick-up can be triggered by other bolts, debris or even vibrations which will cause a loss of power or engine damage. The MSD Flying Magnet Crank Trigger uses four magnets secured in the aluminum trigger wheel that pass by a stationary non-magnetic pick-up to trigger the ignition. This "flying magnet" design produces accurate trigger signals and the non-magnetic pick-up cannot be false triggered.

Each Flying Magnet Crank Trigger includes a two-piece mounting bracket for the non-magnetic pick-up that in most cases will work on either the passenger side or driver's side of the engine (the SB Chrysler and SB Ford brackets mount on only one side). The CNC-machined aluminum bracket securely holds the pick-up in place and is slotted to provide a wide range of timing adjustment. Spacers are included so you can mount the bracket on engines with standard motor mounts or engines with a .25" motor plate. These systems will trigger MSD 6, 7, 8 and 10 Series Ignitions and all MSD Timing Accessories.

### FLYING MAGNET DESIGN PREVENTS FALSE TRIGGERS

The Flying Magnet Crank Trigger is named for the four magnets that are embedded in the aluminum wheel. As the engine is rotating, these magnets move past the stationary non-magnetic pick-up, creating the trigger signal for the ignition. This design eliminates false triggering because only the moving magnets can trigger the nick-up and ignition control.



### Flying Magnet ™ Crank Trigger Kits

SB Chevy, 6.25" Balancer - PN 8600\*

SB Chevy, 7" Balancer - PN 8610\*

SB Chevy, 8" Balancer - PN 8615\*

BB Chevy, 8" Balancer - PN 8620\*

SB Chrysler, 7.25" Balancer - PN 8633\*

BB Chrysler, 7.25" Balancer - PN 8636\*

Chrysler New Generation Hemi - PN 8705\*

**5B Ford,** 289, 302, 351W**, 6.562" Balancer - PN 8640**\*

BB Ford (except Cleveland block), 7.25" Balancer - PN 8644\*

Pontiac V8, 7" Balancer - PN 8650\*

The MSD Flying Magnet Crank Trigger kits are supplied complete with CNC machined brackets, spacers and hardware.

### Universal Crank Trigger Kit

Racers have always been inventive and willing to fabricate the parts they need if nothing is available. Building a crank trigger system is not an easy task but there has been an increasing number of unique front hub systems and distributorless ignitions that require one. MSD's Universal Flying Magnet Crank Trigger Kit will give you a head start in fabbing a custom kit for your application.

This kit is supplied with everything you'll need to get you going in the right direction. A 7" billet aluminum

wheel is supplied that has magnet positions for 4, 6, 8, 10 or even 12-cylinder engines. An oversized bracket arm is supplied that can be cut down to your specs and an "L" shaped holder is also supplied that can be machined for the 3/4" or 3/8" pick-up.

### Universal Crank Trigger Kit - PN 8655\*

\*Not legal for use or sale on pollution controlled vehicles.

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www.MSDIGNITION.com

### NON-MAGNETIC PICK-UP

MSD's Non-Magnetic Pick-Ups are engineered for extreme applications. In fact, this Pick-Up was designed and tested on 300+ mph top fuel dragsters! To live up to MSD's demand-



ing expectations in these extreme applications, we took it upon ourselves to design and build the Pick-Ups in-house. This way we can control every aspect of their assembly and quality.

Each Pick-Up is hand wound on a special bobbin and terminated to our tinned conductor, teflon jacketed wiring. These wires are also routed through a strain relief for protection. This assembly is then installed into the precision housing and is potted with a fracture resistant epoxy compound. To ensure that the windings are entirely encased in epoxy, the Pick-Ups undergo a vacuum procedure to remove any air inside the housing.

All of these procedures are necessary to produce the strongest, most reliable non-magnetic Pick-Up available.

### Non-Magnetic Pick-Up for MSD Flying Magnet Crank Trigger Kits (3/4" X 16 X 2.25") - PN 8276

### CRANK TRIGGER EZ-ADJUST™

Making small, precise timing changes with a crank trigger is simple with the new EZ-Adjust! This accessory installs to most MSD Flying Magnet Crank Trigger brackets. Adjustments are made by turning a bolt rather than loosening the entire Pick-Up assembly and moving it. Once your adjustments are made the Adjuster locks in place.

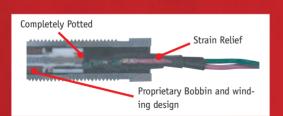
NOTE: Will not work with the Buick V6 Kit, PN 8630, the Chevy small block, 6.25" kit, PN 8600, or small Ford, PN 8640.

NOTE: Bracket not included.

### Crank Trigger EZ-Adjust Kit - PN 8605

### COMPACT NON-MAGNETIC PICK-UPS

The Non-Magnetic Pick-Ups are available in two housing sizes. The 3/4" model is used with MSD's Flying Magnet Crank Trigger Kits. The 3/8" diameter Pick-Ups are used with MSD's Sprint Car Crank Trigger systems as well as the professional racing kits from RCD and PSI.



**36" Shielded Harness** 3/8" X 24 X 1.5" - PN 8159

32" Harness - PN 8154

Small Armor Braided 3/8" X 24 X 1.5" 22" Harness - PN 8153

Small, Universal 72" Shielded Harness .375" X 24 X 1.25" - PN 8275

Small, 90° Pick-Up 26" Shielded Harness.375" X 24 X .75" - PN 8169







If a crank trigger system is not available for your engine or space is a problem, MSD offers these Magnetic Studs that can be installed in the flywheel. For a V8 engine, four studs would need to be precisely machined into the flywheel at 90° intervals and a pick-up bracket would need to be fabricated to the non-magnetic pick-up, PN 8276. For V6 even-fire applications, three studs at 120°, four cylinders would require two studs at 180°.

Magnetic Stud, .375" X 16 threads - PN 8277

### MAGNETIC PICK-UP

This is a replacement pick-up for older style crank trigger systems that require a magnetic pick-up. This pick-up is magnetic and must be used with a trigger wheel equipped with steel studs to create a signal. The pick-up is  $.75'' \times 16'' \times 2.25''$ .

Magnetic Pick-Up (for old style crank triggers only) - PN 8505

CRANK TRIGGERS

www.MSDIGNITION.com





- Adjust the timing with a simple twist!
- Advance the ignition timing up to 9°
- Select a step retard up to 18° for nitrous use
- Twist in a boost retard from .1° to 1.9° per pound of boost
- Available for GM LS1 and LS2 platforms, Chrysler Hemi and late model Fords

### TIMING TWISTER

If you need to adjust and control the timing of your late-model GM or Ford, you need a Timing Twister! User friendly control

plugs into the stock wiring harness and gives you the ability to adjust the engine's timing with the twist of a dial.

The Timing Twister has four rotary dials that give you the ability to advance the timing curve, set up a step retard or even select a retard rate based on boost pressure. Control over the timing can help improve economy, improve performance and help tune the engine for other modifications.

The Timing Twister does not modify ignition timing at idle, but becomes active above 1,800 rpm. Once above that rpm, the entire timing curve can be advanced up to 9° in 1° increments. There is another setting for a wire-activated step retard, primarily designed for use with nitrous oxide. Another great feature is for the forced induction crowd. When used with the optional MAP sensor, you can easily dial in a retard that is based on boost pressure. Twist in .1° - 1.9° of timing per pound of boost to retard the timing up to 30°.

If you ever need to bypass the modified timing settings, there's a dial to twist and the factory curve will be used. How easy is that! Go ahead, give your timing a twist!

TIMING TWISTERS ARE AVAILABLE FOR: GM LS1/LS - PN 8625\* GM LS2/LS7 - PN 86251\* Ford 4.6L, '96-'04 - PN 86252\*

### Hemi Retard Controller

The easiest way to retard the ignition timing of a new Hemi! The Hemi Retard Controller plugs directly inline to the factory cam and crank sensors then lets you simply dial-in an amount of retard. This is especially handy in times of nitrous or in the case of a forced induction system you can set a boost/retard rate (requires a MAP sensor).



Adjustments to the timing are easily made with a twist of a rotary dial.

- Easily set a timing retard stage
- Program a retard rate based on boost pressure
- Direct plug-in to factory sensors

Hemi Retard Controller - PN 8684\*





MSD Timing Controls are designed so engines with locked out timing or crank triggers can take advantage of a customized ignition curve. The weights and springs inside your existing distributor are removed and the mechanical advance is locked out so the timing is controlled entirely by the MSD Timing Control.

By controlling the ignition electronically, the timing curves can be set faster, more accurately, and with more adjustability than mechanical advances. The Timing Controls provide reliable operation throughout the rpm range, and must be used with an MSD 6, 7, 8, 10 or SCI Series Ignition Control.

### TIMING COMPUTER-FIXED

The PN 8980 Timing Computer has a pre-programmed timing curve that eliminates the need for a mechanical advance.

Accurate electronic timing curveAdjustable high speed retard

When you start the car, the Timing Computer retards the timing 20° from the set mechanical timing. This provides smooth idle. The timing begins to advance when the engine speed reaches 1,000 rpm and continues until 3,000 rpm when the total timing is reached.

The Timing Computer also has a separate high-speed retard circuit. This allows you to activate a retard amount via a switch to retard the timing during times of nitrous or high rpm. The retard amount is adjustable with plug-in modules and 2°, 3° and 4° modules are supplied. Page 102 has a full selection of modules and selectors.

The Timing Control installs easily and can be used on 4, 6 or 8-cylinder engines. It must be used with an MSD Ignition Control.

### Timing Computer - PN 8980\*

### Adjustable Timing Control

The MSD Adjustable Timing Control puts you in control of your ignition timing from the driver's seat! A dash-mounted control knob allows you to adjust the ignition timing to compensate for changes in altitude, low octane gas, or heavy loads. For cars driven every day but raced occasionally on the weekends, this control is perfect. Increased fuel mileage and performance are just some of the benefits as the ignition timing can be advanced or retarded to prevent engine detonation.

The control knob mounts to the dash board for easy and accurate timing adjustments up to 15°. The Control can be used on 4, 6 and 8-cylinder engines and must be used with an MSD Ignition Control.

- Easily connects to your MSD Ignition
- Adjust the timing 15° from the driver's seat!

# Adjustable Timing Control, MSD Ignition - PN 8680



THIS PRODUCT IS LEGAL TO SELL, DISTRIBUTE OR INSTALL ON NON-OBD II VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-28; LEGAL IN ALL 50 STATES.



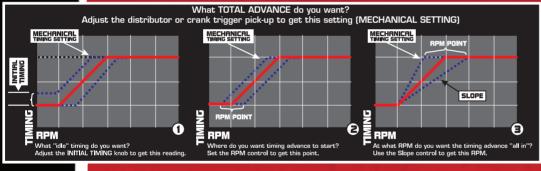
### Programmable Timing Computer

The MSD Programmable Timing Computer has several features in common with the pre-programmed PN 8980 Timing Computer. Both are adjustable for 4, 6 and 8-cylinder operation and both models have a High Speed Retard function.

The difference between the two models is that the PN 8981 Programmable

Timing Computer has an adjustable timing curve whereas the PN 8980 is fixed. The Programmable Computer allows you to adjust the start point, rate and total amount of the advance curve to fit your application.

First, the idle or initial timing must be set with the Initial Timing potentiometer. This can be adjusted up to 20° from full advance (total timing). Second, the rpm level where the timing advance will begin needs to be set. This can be set from 1,000 to 3,000 rpm. The last adjustment is the slope, or how fast you want the timing to advance. The range of adjustment for this feature is from 1/2° per 1,000 rpm to 20° per 1,000 rpm. All of these timing adjustments are made with locking potentiometers located on the side of the unit.



### PROGRAMMABLE FOR:

- **Advance Rate**
- **Initial Timing**
- RPM/Advance Start Point

The PN 8981 must be used with an MSD Ignition Control and is supplied with a 2°, 3° and 4° module. Page 117 lists a full selection of retard modules and selectors.

Programmable Timing Computer PN 8981\*

### STARTER SAVER WITH SIGNAL STABILIZER

When you install a crank trigger system, having locked out timing may put a strain on the starter and flywheel. This compact controller provides a retard that automatically retards the timing during cranking to ease the pressure.

The MSD Starter Saver measures only 1.5" X 3.5" X 2" and wires into your ignition system with only four wires. It can be programmed to retard the timing 10° or 20° during cranking only. The retard is activated when the engine begins cranking and is deactivated once the engine reaches over 800 rpm. (If the engine rpm drops below 500 rpm it will activate again.)



The Starter Saver receives the trigger signal through an MSD Crank Trigger Pick-Up or the Distributor's magnetic pick-up. This Control has a very accurate pick-up compensation circuit resulting in rock steady timing throughout the entire rpm range of your engine. There is also an LED that illuminates with each trigger signal to confirm operation and the circuitry is completely potted in a polyurethane compound for extreme vibration resistance.

### Starter Saver with Signal Stabilizer - PN 8984\*

NOTE: The Starter Saver can only be used on V8 applications using an MSD Distributor or Crank Trigger.

### START/RETARD CONTROL

This timing control is the direct result of MSD being at the races and listening to what racers want. With the large number of engines running locked-out timing, racers wanted a simple way to retard the timing during cranking plus have a single stage of retard available for high rpm or nitrous.

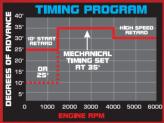
The Start/Retard Control lets you choose either 10° or 25° of retard during cranking only. The timing will retard only while cranking and returns to the set mechanical timing once the engine starts and you release the key or until the engine reaches 1,300 rpm.

Along with the start retard feature, this Control also has a single stage of retard. This retard can

be activated when nitrous is in use to prevent detonation or at high rpm to achieve a little more top end. The amount of retard is adjustable with plug-in modules and is activated by a single wire that can be connected directly to a nitrous solenoid or a micro switch on the shifter.

The Start/Retard Control is easy to install and program and is supplied with 2°, 3° and 4° modules. It must be used with an MSD 6, SCI, 7, 8 or 10 Ignition Control.





### Start/Retard Control - PN 8982\*

### DIGITAL MULTI-RETARD

The Digital Multi-Retard provides four different stages of retard along with an adjustable start retard feature - all of this with no modules!

The MSD Multi-Retard uses a high speed RISC microcontroller to direct

the timing functions. This controller can make extremely quick compensations to the timing while maintaining accuracy to within 1°. There is also an innovative Magnetic Pick-Up Compensation circuit built-in to allow for rock-steady timing with a variety of different mag pick-ups.

There are four separate retard stages that can be activated independently or together for a total sum of retards. Each stage is adjustable from 0° - 9° and a maximum of 20° of retard can be pulled out. On top of these great features, there is also an optional start retard circuit that can be programmed to retard the timing 5°, 10°, 15° or 20° during cranking. The Digital Multi-Retard can be used on 4, 6 or 8-cylinder engines and must be used with an MSD Ignition Control.

### Digital Multi-Retard - PN 8975\*

Four stages of retard

■ Magnetic pick-up compensation circuit

Adjustable start retard



<sup>\*</sup>Not legal for use or sale on pollution controlled vehicles.



Three Stage Retard Control

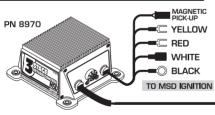
The Three Stage Retard Control allows you to retard your ignition timing in three different stages. You can activate one retard for a nitrous stage and another at top end in high gear for more mph and still have another module left over for dual stage nitrous systems. When activated together, the retard amounts are cumulative so you get the total of the three. For example, if you pull 2°, then 4° on the second stage and another 2° at top end, the total retard is 8° (2+4+2=8).

In addition to the individual retard stages, the Three Stage Retard Control has an optional start retard function that retards the timing 10° or 25° while cranking the engine.

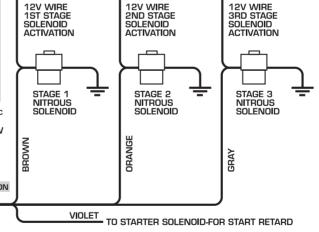
The Three Stage Retard Control connects easily to your MSD Ignition and can be triggered from points, electronic ignitions, crank triggers or magnetic pick-up distributors. It is supplied with a 2°, 3° and 4° module and must be used with an MSD 6, SCI, 7, 8 or 10 Series Ignition.

### **APPLICATION WITH MULTIPLE STAGE NITROUS**

Drag racers using multiple stage nitrous systems on their engines can connect the Three Stage Retard Control directly to their nitrous system simply by tapping into the 12 volt solenoid wires. When installed this way, every time a nitrous stage is activated, a different retard module will be activated.



### Three Stage Retard Control - PN 8970\*



### RETARD MODULE SELECTOR

The Retard Module Selectors allow you to select between 12 retard amounts with the turn of a dial. The Selectors plug into the retard module receptacle of any MSD Timing Controls.

### Retard Module Selector, 0°-11° - PN 8676 **Retard Module Selector,**

0°/10°-20° - PN 8678

\*Not legal for use or sale on pollution controlled vehicles.

### RETARD MODULES

MSD Retard Module Kits give you a full selection of retard modules to be used with your Timing Controls.

ZERO

### **Retard Module Kits:**

11°, 12°, 13°, 14°, 15° - PN 8774 16°. 17°. 18°. 19°. 20° - PN 8775 5°, 6°, 7°, 8°, 9°, 10° - PN 8776

1°. 2°. 3°. 4°. 5° - PN 8777

Zero Degree Module - PN 8773

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Increasing the boost pressure on your turbo or supercharged engine increases performance, but detonation could put an end to your engine. When the supercharger or turbo forces more air into the cylinder the pressure in the combustion chamber increases. This higher pressure often causes detonation. MSD Boost Timing Masters control the ignition timing according to the boost pressure so the engine can operate on the verge of detonation, where maximum performance occurs. By adjusting a dash-mounted control knob, you can match the amount of ignition retard to the boost pressure being produced.

PN 8762

### **BOOST TIMING MASTER FOR MSD IGNITIONS**

The Boost Timing Masters allow you to adjust the amount of ignition retard from 1° per pound of boost to 3° per pound via a control knob that you mount on the dashboard. This way you can make adjustments on the fly to prevent detonation as fuel quality or altitude and air quality changes up to a maximum of 15° retard. You can also set a boost pressure point to start the retard. There is a boost pressure port to connect to your manifold and the BTM wires easily to the MSD Ignition Control.

NOTE: This unit must be used with an MSD 6, SCI, 7, 8 or 10 Series Ignition.

### BTM for MSD Ignitions - PN 8762

- Adjust the timing from the driver's seatPrevent detonation by turning a dial
- THIS PRODUCT IS LEGAL TO SELL, DISTRIBUTE OR INSTALL ON NON-OBD II VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-28; LEGAL IN ALL 50 STATES.



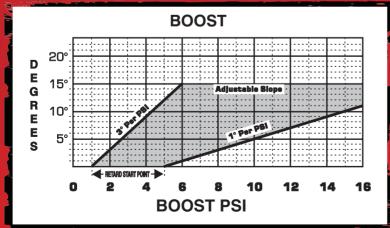
### BTM WITH VACUUM ADVANCE

This unit has all of the features of the BTM, plus it allows you to adjust up to 15° of advance under vacuum conditions (idle or cruising speeds).

BTM with Vacuum Advance - PN 8962\*

NOTE: This unit must be used with an MSD 6, SCI, 7, 8 or 10 Series Ignition.





The shaded area of this chart shows the adjustability of the timing in relation to boost pressure.

\*Not legal for use or sale on pollution controlled vehicles.



2

### Universal Boost Timing Master

The Universal Boost Timing Master allows you to adjust the ignition timing in relation to the boost pressure, plus it has a built-in inductive ignition. You can adjust the dash mounted control knob to retard the timing 1° - 3° per pound of boost, up to 15°. You can also set a boost pressure point to start the retard. The increased spark output of the BTM helps burn the fuel mixture more efficiently resulting in more power - a definite advantage when boost pressure is increasing.

The Universal BTM is designed to work with most single coil factory or aftermarket ignition amplifiers and points-type distributors.



Universal Boost Timing Master (non MSD lanitions) - PN 5462

CARB APPROVED LEGAL FOR USE N ALL STATES D 4028

- Retard timing in relation to boost pressure
- High output built-in ignition

This product is legal to sell, distribute or install on non-OBD II vehicles in California according to Executive Order E.O. D-40-28; legal in all 50 states.

### Programmable Turbo Launch Controller



This stand-alone microprocessor boost controller is exactly what-over-the-top turbo powered cars need. This Control uses an extremely fast microcontroller to control boost pressure via an electronically operated waste gate valve.

Through each to use Pro Data coffware you can

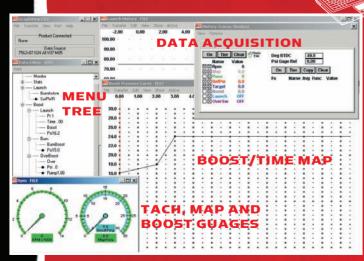
Through easy to use Pro-Data+ software, you can control the amount of boost pressure used during the burnout and map a boost curve based on time for the launch and entire run. Control over the boost pressure is achieved through a PWM output that controls a three-way electrically operated air valve that is installed between the turbo and the waste gate actuator. (This can also be programmed to your particular actuator.)

To help in setting up and tuning the Controller, there is also an acquisition file that records the engine rpm, manifold pressure and the pulse width modulator output. After a pass you can save and download the file to review each pass.

# Programmable Turbo Controller - PN 7562\*



- Absolute control over a turbo's boost pressure during the launch through advanced programming
- Map a boost pressure curve based on time from a PC
- Ideal to control boost pressures during the holeshot to aid in getting the tires hooked
- Program boost pressure that is used during the burnout
- Record and review 20 seconds of pressure and rpm information



\*Not legal for use or sale on pollution controlled vehicles.

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### MSD Multi-Function Ignition Controllers

- Connects to your standard MSD Ignition
- Absolute control over your ignition timing
- Plot a timing curve down to 0.1° every 100 rpm
- Control each cylinder's ignition timing
- Different rpm shift points for each gear shift
- Set an amount of retard to ramp back in during the launch
- Three stages of retard for multi-stage nitrous systems





The Multi-Function Ignition Controller plugs right into your PC!

MSD engineers incorporated the favorite controls of the race-proven Programmable Digital-7 Ignition into an accessory for racers already using an analog MSD Ignition Control with a rev limiter such as the MSD 6AL, SCI-L or 7AL-2.

The Controllers are loaded with easy to program adjustments. The Controller lets you adjust the timing of every cylinder, map a complete timing curve, pull timing out during the launch, set rev limits, shift points, start retard and much more.

Don't let all of these functions worry you. MSD developed two very easy ways to program the Controllers. For PC users, MSD offers the Pro-Data+ software or for the non-computer racers, there is a hand-held Programmer Monitor.

The Multi-Function Ignition Controllers can be triggered with a points/ECU trigger, magnetic pick-up in a distributor or the non-magnetic pick-up of a crank trigger. It must be used with an MSD Ignition Control and can be used on 4, 6 or 8-cylinder engines. Each is supplied with Pro-Data+ software CD, PC harness, vibration mounts, wiring and thorough instructions.

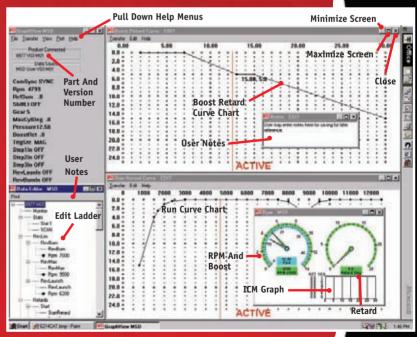
# Multi-Function Ignition Controller - PN 8979\*

# Multi-Function Ignition Controller with Boost Retard - PN 8977\*

NOTE: Not for use with the MSD 7AL-3 or 10-Plus Ignitions.



The PN 8977 has a boost pressure inlet on the side of the unit that allows you to create a programmable boost retard curve.



The Pro-Data+ software can be used with any PC running Windows 95, 98, 2000, ME, XP or NT. It is available on a mini CD or can be downloaded through the MSD Ignition website at: www.msdignition.com

<sup>\*</sup>Not legal for use or sale on pollution controlled vehicles.

As the MSD line of Programmable Ignitions and Controls grows, so do the accessories offered for these components! The following products are for use with the Programmable Digital-7, Programmable DIS-2, Multi-Function Ignition Controllers, Multi-Channel Controllers, Midget Ignition and Pro Mag Controller.



### Manual Launch Control and Shift Light

This handy Controller lets you change the launch rpm setting of MSD's Programmable Controls for last second changes with the turn of a dial. This way, if you're in the staging lanes you can compensate for changing track conditions quickly.

### Manual Launch Control - PN 7551\*

NOTE: For use with MSD Programmable Digital Controls.



### MSD LED SHIFT LIGHT

This compact new Shift Light features a bright LED that will alert you to shift your desired rpm point. The small Light fits neatly to a steering column or on top of a dash board and stays unobtrusive but illuminates bright enough to see easily in the daylight.

This Light has two wires that plug directly into MSD's line of Programmable Digital Ignition Controls. It can also be used with factory or other aftermarket ignition systems through an rpm activated switch such as MSD's PN 8950.



### MSD LED Shift Light, Red LED - PN 7552

### Programmer/Monitor

If you do not have a PC, all of the Programmable Controls can be programmed with this lightweight Hand Held Programmer/Monitor. It plugs directly into the Control and features an LCD monitor that displays all of the programming options which you can select and scroll through. Adjustments are made with six positive-contact push buttons.





### Dyno Tuning Programmer/Monitor

This Programmer has two control dials that provide instant editing of the cylinder-to-cylinder timing, step retards and the start retard values in 0.1° increments. When a change is made it is instantly encoded within the MSD unit and stays in effect until another change is made to that specific program.

### Dyno Tuning Programmer/Monitor - PN 7553

### SYNCHRONIZATION PICK-UPS

In order to incorporate the Individual Cylinder Management functions of the Programmable Controls, a synchronization pick-up must be used so the ignition knows when the number one cylinder is firing.

Instant real time editing of the cylinder-to-cylinder timing, step retards and the start retard values in 0.1° increments.



### INDUCTIVE SPARK PLUG WIRE SYNC KIT

This pick-up simply installs on the number one spark plug wire. Much like a timing light pickup, it senses the spark and relays this information through a fiber optic cable to the Controller. By using a fiber optic cable, there is absolutely no chance of EMI or interference.





### Non-Magnetic Pick-up

This Pick-up Kit is supplied with a non-magnetic pick-up, a trigger magnet, and a retainer. The magnet must be installed in the cam gear and a bracket for the pick-up will need to be fabricated. The Weathertight connector plugs into a matching connector coming from the Controller.

Non-Magnetic Cam Sync - PN 2346

### PROGRAMMABLE LAUNCH REV LIMITER

Too much power can actually be a hindrance when it comes to hooking up a small tire or the prop of a drag boat. For anyone with this "problem" the Programmable Launch Limiter is the answer.

This microprocessor controlled Limiter plugs in place of an rpm module in an MSD Ignition or Soft Touch unit. You can then go in and program a launch-based rpm

ramp based on rpm and time. This is set in 100 rpm steps down to 0.001-second increments by using MSD's Pro-Data+ software on a PC or with the optional Hand Held Monitor, PN 7550. There is also an adjustment that sets a delay time before the rpm limit activates. This way, when you launch the rpm limit will kick in

- Improve your 60-foot times through precise timing and rpm control
- Easy to program from a PC with MSD's Pro-Data+ Windows based software or with the optional Hand Held Monitor
- Quick microcontroller produces a smooth rev limiting action

exactly when you want it to and ramp up to your race rpm for the rest of the run.

This Limiter can be used with most of MSD's Ignitions or Rev Controls (except the 7AL-3 and 10-Plus) that use the plug-in rpm modules. The Pro-Data+ software is supplied or can be downloaded free at www.msdignition.com.







### Programmable Launch Limiter - PN 75611\*

### SOFT TOUCH REV CONTROL™

### For points and OEM Ignition systems.

The Soft Touch Rev Control, PN 8728, is designed to be used on standard points ignition or inductive ignition systems. This means that the PN 8728 can be installed on engines with a GM HEI Ignition, Ford or Chrysler electronic ignition, any standard breaker points systems or even with an MSD 5 or Blaster Ignition (non-CD ignitions).

The Soft Touch Rev Control is adjusted with plug-in modules and is supplied with 6,000, 7,000 and 8,000 rpm modules. When the engine reaches your set rpm, the Soft Touch circuitry kicks in and drops the spark to certain cylinders. This limiter produces very accurate and smooth, backfire-free rev limits.

Can be used on 4, 6 or 8-cylinder engines with inductive ignitions.

NOTE: Not for use with CD Ignitions.

Soft Touch Rev Control, Non CD Ignitions - PN 8728





# SOFT TOUCH REV CONTROL - MSD 6T, 6TN, 6HVC

This rev limiter is designed exclusively for the MSD 6T, 6TN and 6-HVC Ignition Controls. It has a special 4-wire connector that plugs into the MSD Ignition. The Soft Touch is a very smooth rev limiting action that "holds" the engine at the selected rpm limit without backfires, extreme roughness or engine damage. The rpm limit is adjusted with plug-in modules and 6,000, 7,000 and 8,000 modules are supplied.

NOTE: Must only be used with an MSD 6T, 6TN or MSD 6 HVC Ignition and is adjustable for 4, 6 and 8-cylinder operation.

Soft Touch Rev Control, MSD 6T/6TN, MSD 6 HVC Ignition - PN 8738

\*Not legal for use or sale on pollution controlled vehicles.

More modules
page 125!

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NALL STATES
D 4029



HESE PRODUCTS ARE LEGAL TO SELL, DISTRIBUTE OR INSTALL ON NON-OBD II VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-29; LEGAL IN ALL 50 STATES.





# Two and Three Step Module Selectors™

The MSD Module Selectors allow you to choose two or three different rpm limits that can be activated at different times. With this ability, the possibilities are endless.

As an example, we'll use a drag car with a Three Step Module Selector plugged into the rpm socket of a 7AL-2 Ignition. The different rpm modules are activated when 12 volts are applied to a corresponding wire. By connecting one wire to the line-lock circuit, one module will be activated during the burnout. This helps keep tire temperatures consistent. When the line-lock button is released, the limit turns off. When you're on the starting line, you can activate the second limit through the clutch or trans switch. This provides a steady and consistent rpm for firm holeshots every time. When no modules are selected, the remaining high limit is active to protect the engine in the event of driveline failure. The Two Step works the same, but only with two different limits.

The Module Selectors can also be used with an MSD Timing Control. By plugging the Selector into a retard module socket, you can activate different retard amounts at select times. This is a great feature for engines being upgraded to a multi-stage nitrous system. With the addition of an RPM Activated Switch, you can use the Two Step to activate a shift light at different rpm.

The Module Selectors must be used with an MSD Soft Touch Rev Control or a Timing Controller with a high-speed retard module. No rpm or retard modules are supplied.

# Two Step Module Selector - PN 8739 Three Step Module Selector - PN 8737

### LAUNCH CONTROL MODULE SELECTOR

To help drag racers achieve even more consistency, our engineers have incorporated an adjustable low rpm stage into a Three Step Module Selector! This allows you to make adjustments in 100 rpm increments from the driver's seat!

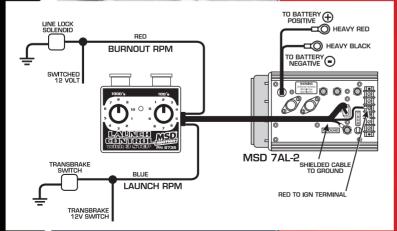
The Launch Control Module features a shielded harness for increased protection against EMI so it can be mounted within easy reach of the driver. This way, as track conditions change while you're waiting in the staging lanes, you can easily compensate the launch rpm.

The Launch Control also features two other rpm limits; one for top

end overrev protection and another to use during the burnout to achieve consistent tire temperatures. These limits are adjustable with MSD's plug-in modules. No rpm modules are supplied.

Launch Control Module Selector, MSD 6 & 7 Series - PN 8735

See page 125 for RPM module kits!



### RPM Module Kits

RPM Module Kits include five modules in 200 rpm increments. Each kit is within a 1,000 rpm range. For example, the PN 8745 is supplied with: 5,000, 5,200, 5,400, 5,600, 5,800 modules.

### **EVEN INCREMENTS**

**3,000-3,800:** PN 8743 **4,000-4,800:** PN 8744 **5,000-5,800:** PN 8745 **6,000-6,800:** PN 8747 **8,000-8,800:** PN 8748 **9,000-9,800:** PN 8750 **11,000-11,800:** PN 8752

### ODD INCREMENTS

**3,100-3,900:** PN 87431 **4,100-4,900:** PN 87441 **5,100-5,900:** PN 87451 **6,100-6,900:** PN 87471 **8,100-8,900:** PN 87481 **9,100-9,900:** PN 87501 **11,100-11,900:** PN 87511





THESE PRODUCTS ARE LEGAL TO SELL, DISTRIBUTE OR INSTALL ON NON-OBD II VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-29; LEGAL IN ALL 50 STATES.

### MSD Adjustable Low RPM Module

With this module, the user can dial-in any rpm between 1,000 and 3,000 rpm by simply turning a potentiometer. Ideal for vehicles with automatic transmissions that are using the MSD Two Step Module Selector to leave the starting line below 3,000 rpm.

Adjustable Module, 1,000-3,000 RPM - PN 8677



### Module Holders

The MSD Module Holders are exactly what you need to keep track of your MSD RPM or Retard Modules. Available in two styles: machined from a solid piece of aluminum or a new flexible plastic piece.

Module Holder - PN 8755
Flexible Module Holder - PN 87551



PN 87551



# RPM Module Selectors

The RPM Module Selector plugs directly into the rpm module socket on all MSD Soft Touch Rev Controls and accessories that use plug-in modules. The user can then select between twelve different rpm limits by simply turning the knob.

Six models are available to cover a range from 3,000 rpm to 12,800 rpm in 200 rpm increments.

Module Selector, 3,000-5,200 - PN 8670\*
Module Selector, 4,600-6,800 - PN 8671\*
Module Selector, 6,000-8,200 - PN 8672\*
Module Selector, 7,600-9,800 - PN 8673\*
Module Selector, 9,000-11,200 - PN 8674\*
Module Selector, 10,600-12,800 - PN 8675\*

### TECH TIP - RPM MODULES

All MSD race modules (color coded White) and RPM Module Selectors will work with any of the MSD products listed below:

MSD 6AL: PN 6420 MSD 6BTM: PN 6462

MSD SCI-L: PN 6320

MSD 7AL-2 PLUS, 7AL-3: PN 7222/7230

SOFT TOUCH REV CONTROL: PN 8728

**SOFT TOUCH REV CONTROL:** PN 8738

THREE STEP MODULE SELECTOR: PN 8737
TWO STEP MODULE SELECTOR: PN 8739

LAUNCH CONTROL MODULE SELECTOR: PN 8735

SOFT TOUCH ENGINE CONTROL: PN 8968

**ENGINESAVER:** PN 8978

RPM ACTIVATED SWITCHES: PN 8950, 8956

SHIFT LIGHT: PN 8952

MAGNETO RPM ACTIVATED SWITCHES: PN 8957

<sup>\*</sup>Not legal for use or sale on pollution controlled vehicles.



### TPS/RPM ACTIVATED SWITCH

MSD is making it easy to activate a nitrous system on late model engines with the new TPS/RPM Switch. This switch is easy to use with push button programming and works with mechanical switches or fly-by-wire systems.

You can easily set an rpm on for precise activation in conjunction with a TPS setting. For high rpm protection you can select an rpm to deactivate the system. The universal switch can also handle up to 25 amps so in most cases a relay and extra wiring isn't needed.

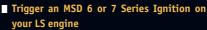
### TPS/RPM Activated Switch - PN 8940

- Program an rpm on time as well as an off rpm for engine protection
- Select a Throttle Position Sensor activation point
- Works with fly-by-wire or throttle switch
- Switches up to 25 amps

### LSx Trigger Converter

The GM LS Series engines are being built for a lot of different performance and racing applications. You can see good ol' hot rodder ingenuity taking place as racers are running carburetors and even using distributors on these engines!

This device plugs into the factory crank sensor of an LS1/LS6 engine and converts the factory trigger signal into a 12-volt square wave signal to trigger an MSD Ignition Control such as a 6 or 7 series ignition control. For racers that are incorporating a front mount distributor to their LS engines, this means you don't need to run an external crank trigger.



■ Converts the factory crank sensor signal to a 12 volt square wave

# LSx Trigger Converter PN 6301\*

Note: A distributor is required, such as MSD's new Front Mount race distributor, PN 8712.



### 2-Step for Ford Mod Motors

This 2-Step connects right to your late model Ford to produce consistent launches and quicker 60-foot times by setting an rpm limit to stage with. When activated, the rpm will be held at a steady rpm and once the green light comes on, release the clutch and take off - but be sure to hold on! The rpm is adjusted with two built-in rotary dials ranging from 1,800 - 9,900 rpm in 100 rpm increments. A handy LED shows when the launch rev limit is active.

### 2-Step, Ford Mod Motors - PN 8734\*

- Easily set a launch rpm for consistent holeshots
- Connects to the factory coils for easy installation
- The best way to launch hard

Note: For use on Coil-on-Plug systems only.

### RPM ACTIVATED SWITCHES

These RPM-Activated Switches will perform a variety of different functions from turning on a bulb or solenoid to activating an MSD Timing Control at a desired rpm.

The RPM-Activated Switch, PN 8950, has two activation wires; one to ground a circuit and the other to open a circuit. Simply plug in an rpm module and wire the Switch to the circuit you want to activate. When the engine rpm reaches that amount, the circuit is activated and will remain on until the rpm falls below that amount.

The RPM Window Switch, PN 8956, has two rpm adjustments; one to activate a circuit, while the other deactivates the same circuit. This Switch will supply then remove ground to a circuit. This is a great feature to deactivate nitrous before the engine's rev limit is reached.

Both Switches can be used with stock inductive ignitions or an MSD Ignition and can handle up to 1.5 amps. No rpm modules are supplied so they must be ordered from the selection of Modules shown on page 124. For use on 4, 6, or 8-cylinder engines.

NOTE: To activate circuits that require over 1.5 amps, see the information below on MSD Relays.

# RPM Activated Switch - PN 8950 RPM Activated Window Switch - PN 8956

MSD also offers an RPM Activated Switch to be used with Magnetos. A 12 volt source is required.

### **Magneto RPM Activated Switch - PN 8957**

### DIGITAL RPM WINDOW SWITCH

Are you looking for an RPM Switch that will turn a circuit on, then off at a different rpm? How about one for your late model coil-per-cylinder ignition system? Or, something for your car with dual coil packs? Maybe one for a Viper or even a Harley Davidson? Look no further, our new Digital RPM Window Switch will do it all!

This Switch will accept an input rpm signal from a coil negative terminal (for stock ignitions), a tach output from an ignition control, an ECU tach output or even a 5 volt tach signal. Another great feature is that no rpm modules are needed! The rpm activation points are programmed by simply scrolling through the LED display to your desired rpm amounts.

The switch has two outputs; one Normally Open, the other is Normally Closed. It can be programmed from 200 rpm to 15,000 rpm in 100 rpm increments. It can be used with an input voltage of 9-18 volts.

### Digital RPM Window Switch - PN 8969

### **MSD HIGH CURRENT RELAYS**

MSD's High Current Relays are what you need to activate accessories that draw high current. These Relays are very reliable due to the fully automated manufacturing process and sophisticated coil winding procedure.

The SPST High Current Relay is rated at 30 amps with an input voltage of

12 volts DC. The relay is ideal for use with the MSD RPM Activated Switch when 12 volts are responsible for activating a high current device such as a nitrous solenoid.

The DPST relay is also rated at 30 amps with a 12 volt input voltage. This Relay is the best choice when 12 volts are required to activate multiple high current devices at the same time such as multiple stage nitrous solenoids.

Single-Pole Double-Throw 30 Amp/12 VDC - PN 8961
Double-Pole Double-Throw 30 Amp/12 VDC - PN 8960



### **FOR MORE INFORMATION ON:**

A full selection of RPM Module Kits or Selectors, see page \_\_\_\_ 125
Heavy Duty Switches \_\_\_\_\_ 150



127



- Activate two different circuits based on time such as a boost or nitrous controller
- Digital read out and buttons for easy programming
- Provide a ground or remove the ground for circuit activation
- Program the time activation down to 0.01 second increments



- Activate a device from 0-100% of a sensor's voltage output signal
- Connects to a wide range of sensors such as a TPS, MAP, MAF, temperature (oil or water), nitrous or boost pressure
- Built-in LEDs assist in calibration and switch activation points
- Activate a circuit by supplying a ground or a 12 volt source



- Clip to a coil pack's voltage wire to produce a common 12-volt signal for a tach, shift light or rpm device
- Connect to a diesel injector wire to provide an easy tach installation
- Operates with 5-24 volt input for universal applications

### DUAL TIME DELAY SWITCH

Do you need to activate a timing retard for a split second to get your small tire drag car to hook up? Or what about activating a nitrous solenoid 0.8-seconds into a run? Our new Dual Time Delay Switch can accomplish both of these needs!

The Dual Time Delay Switch allows you to provide a ground, or remove a ground to a circuit or control relay to two different circuits. The Switch can easily be programmed in 0.01-second increments using the touch screen and the LED readout.

### Dual Time Delay Relay - PN 7563

Note: Max Drive is 2 amps per switch.

### MSD SMART SWITCH

This is truly a Smart Switch! Not only can you choose between supplying ground or 12 volts to activate a circuit, but you can do it through the use of a long list of vehicles sensors! As long as the sensor is within 0-5 volts DC with a minimum signal difference of 0.5 volt, such as TPS, MAP, MAF, water temperature, oil pressure, boost pressure, etc... the Smart Switch can be used!

The switch can be calibrated to 'learn' the sensor and it can be programmed to activate at a certain percentage of the sensor's signal range. Such as activating a nitrous solenoid when the TPS sensor reaches 95% or when the coolant temp sensor reaches a certain level to turn on an electric fan.

### MSD Smart Switch - PN 8966

### TACH SIGNAL GMR PICK-UP

Just think of things you can easily accomplish with our GMR Pick-Up! This little device simply attaches, no splicing or cutting, to a current carrying wire and turns that information into a 12-volt rpm signal. This signal can be used to activate a shift light, rpm activation switch or a tachometer.

One example is to connect the GMR, which stands for Giant Magnetoresistive, to a diesel injector current wire. This will produce a signal that can be used to trigger a tachometer or a shift light! Another example is on a late-model engine equipped with a coil-on-plug ignition system. One of the coil's primary current wires is simply routed into the Pick-Up clip and GMR converts this pulsing into a 12-volt signal for a shift light!

GMR Pick-Up - PN 8918

Easily Install a Tach on your Diesel!



### DIGITAL SHIFT LIGHT

The most universal and easy to use shift light available! Our new compact Digital Shift Light can be installed on everything from 1-cylinder points-triggered engines to Modular Ford engines with coil-on-plug technology.

The tiny digital controller inside the compact housing gives you the ability to program the rpm activation points through the easy-to-view LED panel and two programming buttons. When the engine reaches the activation rpm, the six red LEDs illuminate brightly to alert your senses into throwing the shifter at the exact rpm. The DSL can be installed on single cylinder engines up through 12-cylinders on stock ignitions or high-powered aftermarket systems.

NOTE: Supplied with the new GMR Pick-Up (see previous page.) This makes installation even easier on diesels, points, coil-on-plug and most any other application!

Installs with distributors, coil packs or coil-on-plug systems ranging from single to 12-cylinders

- Programmable from 100 15,900 rpm down to 10 rpm increments
- Six bright LEDs are easy to view in daylight and can be dimmed at night
- Supplied with an easy to install GMR Pick-Up!

Digital Shift Light, Sync Shift - PN 8963 Digital Shift Light, Single RPM Point - PN 89631

### MSD LED SHIFT LIGHT

This small Light fits neatly to a steering column or on top of a dash board and stays unobtrusive but illuminates bright enough to see easily in the daylight. It can also be used with factory or other aftermarket ignition systems through an rpm-activated switch such as MSD's PN 8950.

### MSD LED Shift Light, Red LED - PN 7552

### MSD SHIFT LIGHT

The MSD Shift Light will turn on to "remind" you to shift when the engine reaches your specified rpm. You select the rpm using the same plug-in modules that are used with your MSD Soft Touch Rev Control. The Shift Light features a bright cluster of LEDs making it easily visible, even in bright daylight. The light will also turn on for a second or two when the ignition switch is first turned on to inform you that the light is functioning properly.

The Shift Light will work on 2, 4, 6 or 8-cylinder engines and will plug directly into the tach output on MSD 6, SCI, 7, 8 and 10 Series Ignitions or can be connected to the negative coil terminal when used with points or inductive-type ignitions. The MSD Shift Light is 4.5"L x 3.5"H with a 1.5" diameter lens. No rpm modules are supplied.

Shift Light - PN 8952

# Great for Mustangs, LSX Engines and Powersports!



### Program Consistency!

These two Programmable Controls will help performance through consistent control and accurate programming. Both can be used with MSD's Pro-Data+ software or the optional Hand Held Monitor, PN 7550.

### Programmable Shifter

The MSD Programmable Shift Controller allows you to program different rpm points to trigger the shift solenoids. Any transmission configuration may be used up to a six speed trans along with any 4, 6 or 8-cylinder engine. It can be used with either 12 volt activated solenoids or pulse signal activated solenoids. The output wires to the solenoids are protected by a 20 amp fuse.

Each solenoid activation is programmed in 100 rpm increments. Once the car is launched, the Control knows it is in first gear and when your desired rpm is reached, the second solenoid is activated. There is also a shift inhibit circuit to compensate for tire spin. LEDs on

the side of the control illustrate each circuit (gear).

The Programmable Shifter is a stand-alone control and can be used with most any ignition system that can provide a tach signal.



- Easy to program from a PC with MSD's Pro-Data+ Windows based software or with the optional Hand Held Monitor (PN 7550)
- Quick microcontroller analyzes input and output signals for accuracy
- LEDs display the channel being activated as well as assist in troubleshooting



### Programmable Shifter - PN 7559\*

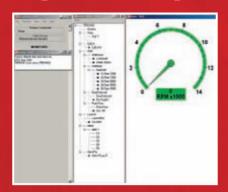
### 5-Stage Delay Timer

If you want certain circuits to be activated at a precise time during a run, the Programmable 5-Stage Delay is the answer.

The Delay has five different outputs that can be timed in sequence to activate different circuits or solenoids. Each of the outputs can be programmed to activate or deactivate a circuit from 0.001 - 5.000 seconds. The outputs consist of individual Smart-FET drivers which are monitored by the microcontroller for overload or short circuits. In this event, an LED will show an alert. Each Delay also has an LED to show its activity.

The Programmable 5-Stage Delay is a stand-alone control and can be used with most any ignition system.

### Programmable 5-Stage Delay - PN 7560\*



MSD's Pro-Data+ software is a Windows based software that can be used with any PC running Windows 95, 98, XP, NT, ME or 2000. It is available on a mini CD or can be downloaded FREE at: www.msdignition.com





To program the Shift Controller or the 5-Stage Delay, you can use the Hand Held Monitor or the Windows based Pro-Data+ software.

The Hand Held Monitor features an LCD that clearly shows the programming options and steps of each control. Adjustments are made with six positive contact push buttons.

Hand Held Monitor \_\_\_\_\_ PN 7550



### FUEL PUMP BOOSTER

Adding a turbo or supercharger to your engine is a great way to improve the power of your car. But you have to remember that when more air is being pushed into the engine, the need for additional fuel raises proportionally. Meeting these new fuel demands could mean larger injectors or ECU programming, both which can be pricey. This Fuel Pump Booster is the economical (and easy) answer for your engine's new fuel demands.

As boost pressure increases in the manifold, the MSD Booster will increase the voltage to the electric fuel pump to maintain the fuel volume. The amount of voltage is adjustable with a potentiometer from a range of an additional 1.5 volts to a maximum output of 22 volts over a range of 5 – 30 psia.

# PN 2350

### Fuel Pump Boost - PN 2350

NOTE: The Fuel Pump Booster cannot be used on fuel systems without a return line (pulse-modulated pumps).

- Maintains fuel volume in relation to boost pressure by stepping up the supply voltage to the electric fuel pump
- Voltage output is adjustable up to 22 volts at 15 psi of boost
- For use with stock electric fuel pumps or secondary booster pumps
- Affordable and effective alternate to replacing all of the injectors or ECU modifications

| Adjustment        | Manifold PSIA       | Output Volt/Amps            | Input Volt/Amps         |
|-------------------|---------------------|-----------------------------|-------------------------|
| CW                | . 5 PSIA            | .15.7 Volts/7.5A            | .13 Volts/10.5A         |
| CCW               | . 5 PSIA            | .14.4 Volts/ 6.9A           | .13 Volts/8.8A          |
| CW                | .30 PSIA            | .22 Volts/10.5A             | .13 Volts/21.9A         |
|                   |                     | .16.3 Volts/7.7A            |                         |
| Maximum power out | put is 230 watts co | ntinuous. Max input power i | s 275 watts continuous. |

This chart shows the range of adjustment the Fuel Pump Booster offers.

### FIBER OPTIC TO TACH OUTPUT CONVERTER

When it comes to advance engine tuning and acquisition capabilities, this Fiber Optic Converter will be a great help. By using our Inductive Spark Plug Wire Pick-Up, this device will convert the signal created when the spark fires through the plug wire into a 5 volt signal that can be read in data acquisition equipment or an ECU.

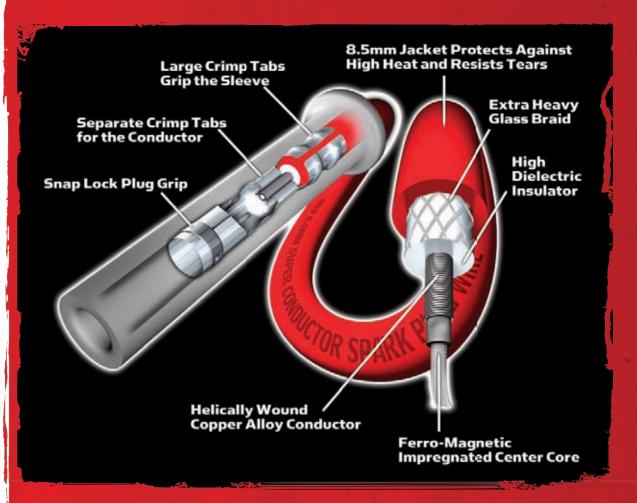
This information can provide the most accurate cylinder timing, engine rpm comparison or be noted for coil firings.

### Fiber Optic to Tach Output Converter - PN 8921



### Great for Advanced dyno testing!

- Converts the pulse through a spark plug wire to a 12 volt signal
- Useful for data acquisition information to monitor cylinder timing, rpm or coil firings
- Easy to install with MSD Inductive Pick-Up, PN 7555



Spark plug wires are one of the most important pieces of the ignition system. You can have the best ignition control and coil possible (and with MSD, you will), but if the plug wires aren't up to snuff, all the energy will just be wasted.

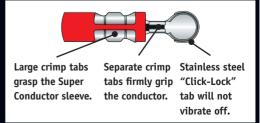
Not only do plug wires need to carry extremely high voltages, but they have to do it in a harsh environment. Wires must be able to handle extreme heat, abrasion, and even getting whipped around from racing speeds. Also, the crimps and connections must be secure and live up to being pulled off in the pits during tune-up sessions.

MSD offers two different spark plug wires that meet and exceed these requirements! Our economically-priced blue Heli-Core® wire and the 8.5mm Super Conductor® perfomance and racing wire (red or black). Both wires feature a lower resistance spiral wound conductor to ensure full spark delivery while suppressing Electro Magnetic Interference (EMI). Plus, they are engineered with strong crimps, high-temp sleeving and heavy-duty boots to deliver the performance enthusiasts and racers expect from MSD Ignition. A variety of custom, universal and bulk wire lengths are available.

### **DUAL CRIMP™ TERMINALS**

The MSD spark plug terminals now feature "Dual Crimp" terminals. As the name implies, the terminals feature two crimps; one for the sleeve of the wire and another separate crimp to grasp the conductor.

By having separate crimps, the conductor doesn't need to be bent 180° and get squeezed between the terminal and sleeve. This individual conductor crimp produces a more secure crimp and there is less chance of spark arcing to the engine block or exhaust manifold through the boot!





# EMI NOISE LEVEL 100 80 80 40 40 20 MMSM 8.5MM 8

### MSD 8.5mm Super Conductor

The MSD 8.5mm Super Conductor is the ultimate performance wire! Its extremely low-resistance combined with the ability to suppress Electro Magnetic Interference is a combination that defies the common laws of physics.

Less resistance means more energy is going to make it to the spark plug to ignite the air/fuel mixture. The Super Conductor uses a copper alloy conductor resulting in less than 50 ohms per foot of wire! This ensures that the most energy possible makes it to the spark plug.

This combination is encased in a heavy duty sleeve that will withstand abrasion and high temperatures. Cap off each end with our Dual Crimp Terminals and you have the best wire available!

- Copper alloy conductor has a resistance value of less than 50 ohms per foot for superior spark
- Ferro-magnetic impregnated core creates an effective EMI choke
- Forty feet of conductor is wound into a single foot of wire for high EMI suppression
- Conductor core features Dupont Kevlar material for increased tensile strength
- Durable outer sleeve is a proprietary compound for resistance to high heat or abrasion

### EMI INFO

Electro Magnetic Interference (EMI) is a magnetic field that radiates from all spark plug wires. This field can interfere with other electronic equipment such as rev limiters, ignitions, EFI systems and can even be heard through your speakers.

The OEMs suppress EMI by having wires with extremely high resistance. In racing applications, high resistance wires are not going to cut it. To deliver low resistance with EMI suppression, MSD's plug wires are helically wound.

By helically winding (sometimes called spiral wound) the conductor around a special center core, we are able to produce a highly effective choke to keep the EMI inside the wire and away from other important electronics. We go to great lengths to ensure that you get the best of both worlds with MSD wires.

### Heli-Core Spark Plug Wire

The 8mm Heli-Core Wires are a great economical performance upgrade. The stainless steel conductor provides lower resistance and it is wound around a glass inner core to create high EMI suppression capabilities. There is also a woven glass layer that serves as a strong dielectric insulator that aids the tough high temperature blue jacket in protecting the sparks.

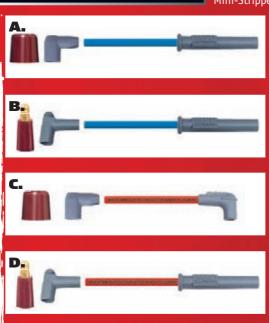




Routing spark plug wires is an art form. It takes patience and time to route your wires away from the headers, through separators and to the distributor cap. Some wire sets fit perfect, but a lot of people want to build their own so they can route them exactly how they see fit.

### **PART NUMBER KEY**

Blue - Heli-Core Wires: 4 Digit Part Number Red- Super Conductor: 5 Digit ending with a 9 Black - Super Conductor: 5 Digit ending with a 3 MSD's Universal wire sets come with the spark plug terminal and boot installed with the other end open. Distributor cap boots and terminals are included so you can cut the wire to the desired length, then install the terminal with the supplied Mini-Stripper-Crimper. It's a little more work, but in the end it will be worth it!



**A.** For engines with early type (socket) distributor caps. Multi-angle boots and terminals installed on one end with 90° distributor socket boots and terminals included.

प-Cylinder Engine - PN 3104 6-Cylinder Engine - PN 3106 8-Cylinder Engine - PN 3108

**B.** For engines with GM HEI type ("spark plug top") distributor caps. Multi-angle boots and terminals installed on one end with 90° distributor boots and terminals included.

4-Cylinder Engine - PN 3114 6-Cylinder Engine - PN 3116 8-Cylinder Engine - PN 3118

**C.** For engines with early type (socket) distributor caps that need 90° distributor boots and terminals. 90° boots and terminals are installed on spark plug side.

6-Cylinder Engine - PN 31079 8-Cylinder Engine - PN 3110

**D.** For engines with late-model type (HEI "spark plug top") distributor caps. Multi-angle boots and terminals installed on one end. 90° distributor boots and terminals included.

### 8-Cylinder Engine - PN 31183, PN 31189

**E.** For engines with late-model type (HEI "spark plug top") distributor caps (Ford Duraspark or MSD Cap-A-Dapt). 90° spark plug boots installed with 90° distributor boots and terminals included.

### 8-Cylinder Engine - PN 3122, PN 31223, PN 31229

**F.** For street engines with "HEMI" style cylinder heads. Straight boots with insulators factory installed on one end. Includes HEI style and 90° socket boots and terminals.

### Chrysler HEMI V-8, Street - PN 3128, PN 31289

**G.** For late model GM LT1 Engines, this set comes with the LT1 Boots and Terminals installed and 90° spark plug boots and terminals loose.

8-Cylinder, Straight LT1 Boot - PN 32129 8-Cylinder, 90° LT1 Boot - PN 32139

**H.** For race Hemi engines, this kit is supplied with MSD's Hemi tubes and HEI style boots and terminals for the distributor cap.

8-Hemi Single plug set, Red Tubes - PN 31529
8-Hemi Single plug set, Black with Black tubes - PN 31523
16-Hemi Dual plug set - PN 31559

■ For GM Gen-III engines such as the LS1 or LS6, these wires are perfect when you relocate the coils. Both 90° and MA boots supplied.

### LS1/LS6 Engines - PN 32079

**▶** For Ford fans, these wires are designed for Ford Modular engines.

Ford Modular, 4.6/5.4L DOHC-PN 31889 Ford Modular, 4.6/5.4L SOHC-PN 31879



### Two-in-One Universal Wire Sets

To cover all your bases, these wire sets are supplied with both the boot and terminals that fit older, socket style distributor caps, as well as the ones for spark plug-style terminals.

**A.** Set includes terminals for engines with early type (socket) and late type (HEI "spark plug top") distributor caps. Multi-angle boots and terminals factory installed on one end.

**4-Cylinder Engine - PN 3115, PN 31153, PN 31159** 

6-Cylinder Engine - PN 3117, PN 31179 8-Cylinder Engine - PN 3119, PN 31193, PN 31199

**B.** Set includes terminals for engines with early type (socket) and late type (HEI "spark plug top") distributor caps. 90° boots and terminals factory installed on one end.

8-Cylinder Engine - PN 3123, PN 31233, PN 31239





### **PART NUMBER KEY**

Blue - Heli-Core Wires: 4 Digit Part Number Red- Super Conductor: 5 Digit ending with a 9 Black - Super Conductor: 5 Digit ending with a 3



### **BOOT KEY**

The wire sets listed on the following pages are ready to install. Letters are used to describe which boot is installed.



### Wire Length and Boot Description by Cylinder

Blue - Heli-Core Wires: 4 Digit PN • Red - Super Conductor: 5 Digit ending with a 9 • Black - Super Conductor: 5 Digit ending with a 3 Cyl. Description PN Cyl. 1 Cyl. 2 Cyl. 3 Cyl. 4 Cyl. 5 Cyl. 6 Cyl. 7 Cyl. 8 Coil Wire Year Style V8 AMC Socket A, C A, C A, C A, C <u>A,</u> C A, C <u>A,</u> C B, C, F A, C 8 V8 AMC HEI 35859 26" 26" 28" 28" 32" 32" 34" 38" 24" A, D A, D A, D A, D A. D A. D A. D A. D D. F All 173(2.8L), 184(3.0L), 231(3.8L), 1975w/HEI 3172 32" 32" 25" 35" 27" 29" 14" 6 252(4.1L) Century, Regal, Electra, 1988 A, D A, D A, D A, D A, D D. D A, D LeSabre, Riviera, Skylark, w/Dist. w/HEI Buick Grand National, 3.8L Turbo. AII 3186 30' 23' 24' 24' 23' 27' **Distributorless** 31869 A, D A, D A, D A, D A, D A, D All 265, 301, 307, 350, 403, Riviera, 8 1975 w/HEI 38" 40" 3136 22" 22" 36" 27" 32" 25" Electra. LeSabre 1987 31363 A. D A. D A. D A, D A. D A. D A. D A. D 31369 w/HEI All 267, 305(5.0L), 350, Century 1977-3140 41" 45" 45" 41" 37" 37" 22" 29" Regal. Electra 1986 31409 A. D B. D A. D A. D A. D A. D B. D A. D All 252, Deville, Eldorado, Seville 1981w/HEI 25" 6 3172 32" 32" 35" 27" 29" 14" 1982 <u>A,</u> D D. D A, D A, D A, D A, D A, D All 350, 350R 1975w/HEI 3136 22" 22" 36" 27" 32" 25" 38" 40" A, D A, D A, D A, D A, D A, D 31369 1980 A. D A. D 31363 CHEVROLET/GMC 31" Camaro, 3.4L 1993-32069 29' 19" 21' 34" 21" 1995 A.B A.B A. B A. B \*. B A. B w/HEI Chevy Truck, 4.3L 1988-3163 97 33' 31" 25' 27 25' 25' 1991 A. G B. G B. G B. G B. G A. G B. G Chevy Truck, C&K, 4.3L 32549 6 1998 28' 24" 23" 24" 22' 22" 16" B. I B. I K. K A. I A. I A, I A. I GM Full Size Truck. 4.3L. non-Vortech 1992w/HEI 36" 33" 26" 28" 27 27 12 B, G 1997 A, G B, G B, G B, G A, G B, G All 173 (2.8L), 231 (3.8L), Camaro, w/HEI 1979 3172 32" 32" 25" 35" 27' 29" 14" Malibu, Monte Carlo w/Distributor A, D A, D A, D 1985 A, D A, D D. D A, D Vortech, 4.3L 32833 1996 29" 24" 24" 23" 24" 22" 16" 2002 32839 A. I B. I RI RI B. I K. K A. I 6 **GMC Typhoon/Syclone,** 1990 31849 35" 29" 24" 26" 25" 25" 9" 4.3L V6 1993 A. G B. G B. G B. G B. G B. G A. G 8 307, 327, 350, Cars/Trucks (with 1971-Socket 3165 38" 38" 34" 34" 27" 28" 27" 25" 12" wires over valve covers) 1974 31653 B. C C. F 31659 307, 327, 350, Cars/Trucks (with 1971· w/HEI 38" 38" 34" 34" 28" 25" 12" 8 3565 27" 27" 35653 B, D B. D B, D B. D wires over valve covers) 1974 B. D B. D B, D B, D D. F 35659 8 267, 305, 350, 400, Cars/Trucks 1975w/HEI 34" 38' 34" 27 24' 27" 24" 24" 3135 (with wires over valve covers) 1982 31353 B, D 31359 8 All 350 Corvette (with long wires 1975w/HEI 3176 54' 54' 47' 44" 28' 28' 22" 25" below exhaust manifold) 1982 31763 B, D B. D 31769 All 305(5.0L), 350(5.7L) Cars/Trucks 1983<sup>-</sup> w/HEI 3179 35" 37" 45" 29" 35" 41" 36" 22" A, D B, D A, D (Left wires below exhaust, right wires 1985 B, D B, D 31799 B. D B. D B. D over valve covers) Malibu. Monte Carlo. Camaro w/HEI 45" 22" 29' 8 All 267, 305, 350, Car/Trucks 1978-3140 41' 45 41 37 37 Blazer, Camaro, Malibu 1982 A. D B. D A. D A. D A. D A. D B. D A. D All 454 Chevy, GMC, Car/Trucks 8 w/HEI 1974-3136 22" 22" 36" 27" 32" 25" 38" 40" 31363 A, D A, D A, D 1976 A, D A, D A, D A, D A, D 31369 8 All 366, 426, 454, Cars/Trucks 1977 w/HEI 3177 31" 39" 37" 28" 28" 29" 27" 29" 31773 A, D 1987 A, D 31779 All 366, 396, 427, 454, Car/Trucks 1969· Socket 39' 39' 36" 36' 29" 18" R 3137 29 28 27' 1974 31373 A, C C, F 31379 All 366, 396, 427, 454, Car/Trucks 1969w/HEI 39" 39" 36" 36" 29" 28" 27" 29" 18" 8 3537 1974 35379 A, D D, F

\*Factory Style Boot. Not listed.

# WIRE LENGTH AND BOOT DESCRIPTION BY CYLINDER Blue - Heli-Core Wires: 4 Digit PN • Red - Super Conductor: 5 Digit ending with a 9 • Black - Super Conductor: 5 Digit ending with a 3

| Blue | - Heli-Core Wires: 4 Digit PN • Red - S                   | Super Co      | nductor: | 5 Digit 6      | ending v    |             |             |             |             |             | ending      |             |             |
|------|---|---------------|----------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Cyl. | Description   | Year          | Style    | PN             | Cyl. 1      | Cyl. 2      | Cyl. 3      | Cyl. 4      | Cyl. 5      | Cyl. 6      | Cyl. 7      | Cyl. 8      | Coil Wire   |
|      | EVROLET   | 455           |          |                |             |             |             |             | 65"         |             |             |             |             |
| 8    | Chevy Corvette 350 TPI                                    | 1984-         | w/HEI    | 3145           | 45"         | 41"         | 41"         | 33"         | 26"         | 28"         | 26"         | 26"         |             |
|      |   | 1991          |          | 31453<br>31459 | B, D        | A, D        | B, D        | B, D        |             |
| 8    | Truck 305, 350  | 1985-         | w/HEI    | 31459          | 38"         | 36"         | 37"         | 31"         | 29"         | 28"         | 28"         | 27"         | 9"          |
| ď    | aan 000, 000  | 1995          | W/ IIEI  | 31413          | B, G        | B. G        | D, G        |
|      |   | .500          |          | 31419          | ,           | -, •        | -, -        |             | ,           | -, "        |             | ,           | -, -        |
| 8    | Chevy Truck 366, 454(7.4L), with                          | 1978-         | w/HEI    | 3180           | 39"         | 48"         | 38"         | 36"         | 27"         | 31"         | 25"         | 32"         | 9"          |
|      | internal or external coil                                 | 1989          |          | 31803          | A, D        | D, D        |
|      |   |               |          | 31809          |             |             |             |             |             |             |             |             |             |
| 8    | Chevy Caprice, Camaro, Monte                              | 1988          | w/HEI    | 3183           | 31"         | 33"         | 30"         | 29"         | 35"         | 26"         | 22"         | 25"         | 9"          |
|      | Carlo   | on            |          | 31833          | B, G        | D, G        |
|      |   |               |          | 31839          | 1.50        |             |             |             |             |             |             |             |             |
| 8    | Caprice, Impala SS  | 1994-         | LT1      | 3215           | 16"         | 15"         | 21"         | 19"         | 24"         | 22"         | 35"         | 31"         | 13"         |
|      | LT1 and V8  | 1996          |          | 32153<br>32159 | B, I        | B, K        | B, I        |
| 8    | Camaro, LT1   | 1993-         | LT1      | 32143          | 16"         | 18"         | 18"         | 22"         | 24"         | 28"         | 36"         | 32"         | 10" B, I    |
| ű    | ominio, El I  | 1997          | "''      | 32149          | B, I        | 10" I, K    |
| 8    | Truck, 454  | 1996-         |          | 32109          | 34"         | 36"         | 30"         | 33"         | 25"         | 30"         | 22"         | 25"         | 12"         |
|      | <del></del>   | 2000          |          |                | A, I        | I, I        |
| 8    | Truck, 8.1L   | 2001-         |          | 39843          | 13"         | 13"         | 13"         | 13"         | 13"         | 13"         | 13"         | 13"         | <u> </u>    |
|      |   | 2005          |          | 39849          | A, N        |             |
| 8    | GM Pickup, Vortech 350 5.7 L                              | 1996-         |          | 32163          | 28"         | 26"         | 28"         | 26"         | 23"         | 20"         | 21"         | 18"         | 13"         |
|      |   | 2000          |          | 32169          | B, I        | I, I        |
| 8    | Corvette, LT1   | 1992-         |          | 32173          | 24"         | 24"         | 25"         | 26"         | 32"         | 35"         | 34"         | 35"         | 16"-I, K    |
|      | Occupation 7D 4   | 1996          | -        | 32179          | B, I        | A, I        | B, I        | A, I        | 16"B, I     |
| 8    | Corvette, ZR-1  | 1990-         |          | 32809          | 37"         | 37"         | 27"         | 39"         | 33"         | 31"         | 41"         | 31"         |             |
| 8    | Chevy Big Block Truck                                     | 1995<br>1990- | HEI      | 32119          | G, M<br>37" | G, M<br>41" | G, M<br>35" | G, M<br>31" | G, M<br>29" | G, M<br>28" | G, M<br>28" | G, M<br>26" | 12"         |
| °    | Glievy bly block littlek                                  | 1995          | ""       | 32113          | B, A        | B, G        |
| 8    | LS1 Vette, Camaro   | 1997-         | LS1      | 32813          | 8"          | 8"          | 8"          | 8"          | 8"          | 8"          | 8"          | 8"          | , u         |
|      |   | on            |          | 32819          | A, N        |             |
| 8    | LS1 Truck   | 1999-         | LS1      | 32823          | 12"         | 12"         | 12"         | 12"         | 12"         | 12"         | 12"         | 12"         |             |
|      |   | on            |          | 32829          | A, N        | <u> </u>    |
| 8    | Camaro, Firebird 3.8L V6                                  | 1996-         | w/HEI    | 32799          | 22"         | 40"         | 28"         | 36"         | 32"         | 32"         |             |             |             |
|      |   | 1999          |          |                | B, B        |             |             |             |
| 4    | S-10/Sonoma 2.2L  | 1998-         |          | 32779          | 35"         | 36"         | 39"         | 42          |             |             |             |             |             |
|      |   | 2004          |          |                | A, R        | A, R        | A, R        | A, R        |             |             |             |             |             |
| 6    | Camaro/Firebird 3.8L                                      | 2000-         |          | 32089          | 22"         | 25"         | 28"         | 30"         | 34"         | 38          |             |             |             |
| 6    | 3.1L Lumina, Malibu,                                      | 2002          |          | 32559          | A, B<br>24" | A, B<br>36" | A, B<br>25" | A, B<br>33" | A, B<br>26" | A, B<br>36" |             |             | -           |
| 0    | 3.1L Lumina, Mailbu,<br>3.4L Monte Carlo, Venture, Impala | 2000-         |          | 32333          | A, B        | A, B        | A, B        | 33"<br>A, B | 26"<br>A, B | A, B        |             |             |             |
| 6    | 3.1L Lumina. Monte Carlo.                                 | 1995-         |          | 32569          | 19"         | 31"         | 21"         | 31"         | 23"         | 35"         |             |             |             |
| ű    | <b>Corsica (1994-1996)</b>                                | 1999          |          | 52300          | A, B        |             |             |             |
| 6    | 3.1L Malibu   | 1997-         |          | 32569          | 19"         | 31"         | 21"         | 31"         | 23"         | 35"         |             |             |             |
|      |   | 1999          |          |                | A, B        |             |             |             |
| CH   | RYSLER  |               |          |                |             |             |             |             |             |             |             |             |             |
| 6    | Jeep Cherokee, Wrangler 4.0L                              | 1991-         | 90°      | 32233          | 10"         | 17"         | 15"         | 16"         | 14"         | 11"         |             |             | 9"          |
|      |   | 1998          |          | 32239          | A, D        |             |             | B, D        |
| 6    | Dodge Dakota, 3.9L  | 1992-         |          | 32969          | 24"         | 31"         | 21"         | 24"         | 15"         | 20"         |             |             | 34"         |
| -    | Podgo Pokoto E OL/E OL                                    | 2003          | -        | 20072          | A, B        | A, B<br>29" | A, B        | A, B        | A, B        | A, B        | 24"         | 21"         | B, B<br>38" |
| 8    | Dodge Dakota, 5.9L/5.2L                                   | 1999-<br>2002 |          | 32973<br>32979 | 31"<br>A, R | 29"<br>A, R | 20"         | 20"<br>A, R | 33"<br>A, R | 33"<br>A, R | 24"<br>A, R | 21"<br>A, R | 38"<br>R, R |
| 8    | 318, 340, 360, Cars and Trucks                            | _             | Socket   | 3130           | 30"         | 29"         | A, R<br>32" | 23"         | 29"         | 30"         | 21"         | 21"         | 15"         |
| ű    | Stock Distributors  | on            | Jounet   | 31303          | A, E        | F, E        |
|      |   | "             |          | 31309          | , -         | , -         | , -         | , -         | , -         | , -         | , _         | , -         | -, -        |
|      |   |               |          |                | •           |             |             |             |             |             |             |             |             |

\*Factory Style Boot. Not listed.

WIRE LENGTH AND BOOT DESCRIPTION BY CYLINDER

Blue - Heli-Core Wires: 4 Digit PN • Red - Super Conductor: 5 Digit ending with a 9 • Black - Super Conductor: 5 Digit ending with a 3

| Blu  | e - Heli-Core Wires: 4 Digit PN • Red - | Super C | onducto. | r: 5 Digit | ending   | with a 9 | • Black  | - Super C | onducto    | or: 5 Dig  | ıt endıng | j with a | . 3       |
|------|---|---------|----------|------------|----------|----------|----------|-----------|------------|------------|-----------|----------|-----------|
| Cyl. | Description                             | Year    | Style    | PN         | Cyl. 1   | Cyl. 2   | Cyl. 3   | Cyl. 4    | Cyl. 5     | Cyl. 6     | Cyl. 7    | Cyl. 8   | Coil Wire |
| 8    | 318, 340, 360, Cars and Trucks          |         | HEI      | 32749      | 30"      | 29"      | 32"      | 23"       | 29"        | 30"        | 21"       | 21"      | 15"       |
|      | MSD Distributors, PN 8534, PN 8388      |         |          |            | A, D     | A. D     | A, D     | A, D      | A, D       | A, D       | A, D      | A, D     | D, F      |
| 8    | 383, 400, 440, Cars and Trucks          | 1973-   | Socket   | 3131       | 29"      | 24"      | 36"      | 51"       | 43"        | 44"        | 55"       | 55"      | 18"       |
|      | Stock Distributor                       | on      |          | 31313      | A, C     | A, E     | A, E     | A, C      | A, C       | A, C       | A, C      | A, C     | C, F      |
|      | Otook Biotilbatoi                       | 0       |          | 31319      | ","      | , -      | , -      | "", "     | 71, 0      | 1., 0      | 1.,0      | 1., 0    | J 5, 1    |
| 8    | 383, 400, 440, Cars and Trucks, MSD     |         | HEI      | 32739      | 29"      | 24"      | 36"      | 51"       | 43"        | 44"        | 55"       | 55"      | 18"       |
| ľ    | Distributors, PN 8386, PN 8546, PN 8545 |         | ""       | 32733      | A, D     | A, D     | A, D     | A, D      | A, D       | A, D       | A, D      | A, D     | D, F      |
| 8    | Dodge Ram, 318, 360                     | 1994-   | _        | 32183      | 31"      | 32"      | 28"      | 30"       | 20"        | 26"        | 21"       | 21"      | 38"       |
| o l  | Douge nam, 310, 300                     |         |          |            |          |          | l -      |           |            |            |           |          |           |
|      |   | 2000    |          | 32189      | A, D     | A, D     | A, D     | A, D      | A, D       | A, D       | A, D      | A, D     | B, D      |
| 8    | Jeep Cherokee                           | 1996-   |          | 32249      | 30"      | 31"      | 26"      | 30"       | 19"        | 24"        | 20"       | 20"      | 38"       |
|      |   | 1997    |          |            | A, D     | A, D     | A, D     | A, D      | A, D       | A, D       | A, D      | A, D     | B, D      |
| Cyl. | Description                             | Year    | PN       | Cyl. 1     | Cyl. 2   | Cyl. 3   | Cyl. 4   | Cyl. 5    | Cyl. 6     | Cyl. 7     | Cyl. 8    | Cyl. 9   | Cyl. 10   |
| 8    | Dodge, 5.7L Hemi                        | 2003-   | 32039    | 37"        | 35"      | 35"      | 37"      | 35"       | 37"        | 37"        | 35"       |          |           |
|      |   | 2005    | 32033    | S, T       | S, T     | S, T     | S, T     | S, T      | S, T       | S, T       | S, T      |          |           |
| 10   | Dodge Viper, Convertible                |         | 32259    | 37"        | 53"      | 36"      | 34"      | 45"       | 42"        | 35"        | 40"       | 20"      | 20"       |
|      |   |         |          | A, D       | A, D     | A, D     | A, D     | A, D      | A, D       | A, D       | A, D      | A, D     | A, D      |
| 10   | Dodge Viper GTS                         |         | 32269    | 36"        | 45"      | 36"      | 42"      | 32"       | 37"        | 22"        | 25"       | 26"      | 22"       |
|      | -                                       |         |          | A, D       | A, D     | A, D     | A, D     | A, D      | A, D       | A, D       | A, D      | A, D     | A, D      |
| 10   | Dodge Truck V-10                        | 1994-   | 32299    | 42"        | 12"      | 41"      | 10"      | 52"       | 10"        | 52"        | 10"       | 58"      | 11"       |
|      |   | 1999    |          | A, B       | A, B     | A, B     | A, B     | A, B      | A, B       | A, B       | A, B      | A, B     | A, B      |
| 10   | Dodge SRT-10                            | 2003-   | 32059    | 43"        | 42"      | 44"      | 40"      | 39"       | 36"        | 33"        | 47"       | 29"      | 41"       |
| 10   | 20090 0111 10                           | 2003    | 02000    | A, R       | A, R     | A, R     | A, R     | A, R      | A, R       | A, R       | A, R      | A, R     | A, R      |
| 0-4  | Description                             |         | Chulo    | _          |          |          |          |           |            |            |           |          |           |
| Cyl. | Description (A)                         | Year    | Style    | PN         | Cyl. 1   | Cyl. 2   | Cyl. 3   | Cyl. 4    | Cyl. 5     | Cyl. 6     | Cyl. 7    | Cyl. 8   | Coil Wire |
|      | (Probe and Focus see page 141)          |         |          | 04050      | 00"      | 0011     | 0011     | 0011      |            |            |           |          | 40"       |
| 4    | Ford 2300                               |         |          | 31259      | 32"      | 32"      | 32"      | 29"       |            |            |           |          | 16"       |
| _    |   |         |          |            | A, B     | A, B     | A, B     | A, B      |            |            |           |          | B, R      |
| 4    | Ford, Dual Plug, 2.3L                   | 1990-   |          | 32959      | 11", 22" | 17", 22" | 17", 28" | 31", 22"  |            |            |           |          |           |
|      | (2.5L, '99)                             | 1997    |          |            | *, A     | *, A     | *, A     | *, A      |            |            |           |          |           |
| 6    | Ford Ranger, 4.0L                       | 1990-   |          | 31119      | 14"      | 14"      | 13"      | 32"       | 29"        | 24"        |           |          |           |
|      |   | 1996    |          |            | J, *     | J, *     | J, *     | J, *      | J, *       | J, *       |           |          |           |
| 6    | 3.0L                                    | 1990-   | w/HEI    | 3112       | 24"      | 27"      | 20"      | 28"       | 19"        | 24"        |           |          | 33"       |
|      |   | on      |          |            | A, R     | A, R     | A, R     | A, R      | A, R       | A, R       |           |          | R, D      |
| 8    | 302(5.0L) Car/Trucks, Mustang,          | 1977-   | w/HEI    | 3132       | 24"      | 23"      | 37"      | 31"       | 25"        | 37"        | 28"       | 34"      | 26"-B, R  |
|      | Thunderbird, LTD, Granada               | 1993    | -        | 31323      | A, R     | A, R     | A, R     | A, R      | A, R       | A, R       | A, R      | A, R     | 25"-F, R  |
|      | , ——, <del>————</del>                   | -355    |          | 31329      | ,        | -7       | ,        | ,         | ,          | ,          | ,         | ,        | ,         |
| 8    | (5.0L) Mustang                          | 1994-   | w/HEI    | 3220       | 19"      | 21"      | 20"      | 27"       | 23"        | 23"        | 28"       | 27"      | 8"        |
| "    | (o.or) musumg                           | 1995    | **/ 1111 | 32203      | A, R     | A, R     | A, R     | A, R      | 23<br>A, R | 23<br>A, R | A, R      | A, R     | B, R      |
|      |   | 1999    |          | 32203      | A, N     | A, N     | , A, N   | , A, N    | A, N       | A, N       | A, N      | , n      | , D, N    |
|      | DEE SEAM (E DI) Core/Travelse           | 1070    | /!!!     | _          | 24"      | 23"      | 2777     | 31"       | 25"        | 37"        | 28"       | 34"      | 26"-B. R  |
| 8    | 255, 351W (5.8L) Cars/Trucks,           | 1979-   | w/HEI    | 3132       |          |          | 37"      |           |            |            |           |          | , ,       |
|      | Mustang, Thunderbird, Granada           | 1985    |          | 31323      | A, R     | A, R     | A, R     | A, R      | A, R       | A, R       | A, R      | A, R     | 25"-F, R  |
|      |   |         | L        | 31329      |          |          |          |           |            |            |           |          |           |
| 8    | 351M, 400, Cars/Trucks, LTD,            | 1975-   | w/HEI    | 3133       | 30"      | 30"      | 30"      | 32"       | 31"        | 40"        | 30"       | 30"      | 14"       |
| Ш    | LTD II, Thunderbird                     | 1979    |          | 31339      | A, R     | A, R     | A, R     | A, R      | A, R       | A, R       | A, R      | A, R     | F, R      |
| 8    | 351W '77-'78, All 460 Cars,             | 1976-   | w/HEI    | 3134       | 27"      | 25"      | 29"      | 35"       | 25"        | 33"        | 31"       | 33"      | 23"       |
|      | Trucks                                  | 1979    |          | 31343      | A, R     | A, R     | A, R     | A, R      | A, R       | A, R       | A, R      | A, R     | F, R      |
|      |   |         | <u> </u> | 31349      | <u> </u> |          | <u> </u> | L         |            |            |           |          |           |
| 8    | 302cid Cars, Light Trucks               | 1970-   | Socket   | 3139       | 31"      | 30"      | 30"      | 28"       | 32"        | 36"        | 26"       | 28"      | 15"       |
|      |   | 1976    |          | 31393      | A, C     | A, C     | A, C     | A, C      | A, C       | A, C       | A, C      | A, C     | C, F      |
|      |   |         |          | 31399      | ′-       | ′-       | ′-       | ′         | , -        | ′-         | ′-        | ′-       | ′         |
| 8    | 302cid Cars. Light Trucks w/ HEI Cap    | 1970-   | HEI      | 3539       | 31"      | 30"      | 30"      | 28"       | 32"        | 36"        | 26"       | 28"      | 15"       |
| "    | Jozofa Garo, Egit Hacks W Hill Cap      | 1976    | """      | 35399      | A, D     | A, D     | A, D     | A, D      | A, D       | A, D       | A, D      | A, D     | D, F      |
| 8    | 351C, 351W, 352, 390, 400, 429,         | 1965-   | Socket   | 3138       | 30"      | 35"      | 35"      | 33"       | 32"        | 35"        | 33"       | 33"      | 16"       |
| °    |   |         | SULKEL   |            |          |          |          |           |            |            |           |          |           |
|      | 460 Car                                 | 1976    |          | 31383      | A, C     | A, C     | A, C     | A, C      | A, C       | A, C       | A, C      | A, C     | C, F      |
|      |   | 1       | I        | 31389      | I        | ı        | I        |           |            | 1          | 1         | 1        | ı         |

\*Factory Style Boot. Not listed.

# WIRE LENGTH AND BOOT DESCRIPTION BY CYLINDER Blue - Heli-Core Wires: 4 Digit PN • Red - Super Conductor: 5 Digit ending with a 9 • Black - Super Conductor: 5 Digit ending with a 3

|  | e - Heli-Core Wires: 4 Digit PN • Red -  |   |                     |   |   |  |   |  |  |  |                          |                          |             |
|--|--|---|---------------------|---|---|--|---|--|--|--|--------------------------|--------------------------|-------------|
| Cyl.   | Description  | Year  | Style               | PN  | Cyl. 1  | Cyl. 2   | Cyl. 3  | Cyl. 4   | Cyl. 5   | Cyl. 6   | Cyl. 7                   | Cyl. 8                   | Coil Wire   |
| 8  | 351C, 351W, 352, 390, 400, 429,  | 1965-   | HEI                 | 3538  | 29"   | 35"  | 35"   | 33"  | 32"  | 32"  | 33"                      | 33"                      | 16"         |
|  | 460 Car w/ HEI Cap   | 1976  |                     | 35383<br>35389  | A, D  | A, D   | A, D  | A, D   | A, D   | A, D   | A, D                     | A, D                     | D, F        |
| 8  | 4.6L F150, Expedition, Town Car  | 1997  |                     | 32579   | 22"   | 44"  | 26"   | 52"  | 35"  | 41"  | 25"                      | 32"                      | l           |
|  |  | 1998  |                     |   | *, *  | *,*  | *,*   | *, *   | *,*  | *, *   | *, *                     | *,*                      |             |
| 8  | Ford 460 Truck   | 1996-   | w/HEI               | 32199   | 34"   | 25"  | 30"   | 33"  | 24"  | 34"  | 36"                      | 29"                      | 18"         |
|  |  | 1997  |                     |   | A, R  | A, R   | A, R  | A, R   | A, R   | A, R   | A, R                     | A, R                     | B, R        |
| 8  | F150, Lightning  | 1993-   | 90°                 | 32099   | 21"   | 18"  | 22"   | 28"  | 21"  | 25"  | 29"                      | 27"                      | 14"         |
|  |  | 1995  |                     | -   | A, R  | A, R   | A, R  | A, R   | A, R   | A, R   | A, R                     | A, R                     | B, R        |
| 6  | 3.8L Mustang   | 1994-   | 90°                 | 32289   | 15"   | 20"  | 26"   | 27"  | 36"  | 37"  |                          |                          | 1           |
|  |  | 1998  | <u> </u>            |   | *, A  | *, A   | *, A  | *, A   | *, A   | *, A   | <u> </u>                 | $\vdash$                 |             |
| 6  | 3.8L Mustang   | 2001-   |                     | 32889   | 48"   | 42"  | 38"   | 15"  | 14"  | 14"  |                          |                          | 1           |
|  | 0.01.11  | 2004  | 000                 | 00000   | *, J  | *, J   | *, J  | *, J   | *, J   | *, J   | <u> </u>                 | $\vdash$                 | <u> </u>    |
| 6  | 3.8L Mustang   | 1999  | 90°                 | 32999   | 48"   | 46"  | 42"   | 20"  | 15"  | 17"  |                          |                          | 1           |
|  | 4 Ol Muselous  | 2000  | <u> </u>            | 20040   | J, *  | J, *   | J, *  | J, *   | J, *   | J, *   |                          | $\vdash$                 | igwdapper   |
| 8  | 4.0L Mustang   | 2005  |                     | 32049   | 29"   | 19"  | 31"   | 21"  | 35"  | 21"  |                          |                          | <b>!</b>    |
| 8  | 4.6L Mustang SOHC  | 1996-   | 90°                 | 32043<br>32223  | A, *  | A, *<br>25"  | A, *<br>24"   | A, *<br>47"  | A, *   | A, *<br>35"  | 23"                      | 32"                      | <u> </u>    |
| o  | 4.61 Mustang SUNC<br>Linc. (not for Crown Vic)   | 1996-   | 90                  | 32223   | 18"<br>  *, *   | 25"<br>*,*   | *, *  | *, *   | 33″<br>  *,*   | 35″<br>*, *  | 23"<br>* *               | 32"<br>* *               | <b>!</b>    |
| 8  | 4.6L Cobra DOHC  | 1998  | 90°                 | 32229   | 28"   | 36"  | 30"   | ^, ^<br>46"  | 39"  | ^, ^<br>39"  | ^, ^<br>29"              | ^, ^<br>35"              | <u> </u>    |
| o l  | 7.UL CUBIA DUNG  | 1996-   | 90                  | 32213   | 28"<br>  *, *   | 36"<br>*, *  | 30"<br>*, *   | 46″<br>*, *  | 39″<br>  *, *  | 39″<br>*, *  | 29"<br>*, *              | 35"<br>  *, *            | <b>!</b>    |
| 6  | 4.2L F-150   | 1996  | 90°                 | 32929   | 43"   | 35"  | 30"   | 35"  | 33"  | 27"  | ,                        | 1,                       |             |
| ľ  | 4.2L F-190<br>E-150  | 2000  | ""                  | 25253   | J, *  | J, *   | J, *  | J, *   | J, *   | J, *   |                          |                          | <b>!</b>    |
| BU   |  | _ 2000  |                     |   | ٠,,   | ٠,٠,٠  | , s,  | _ J,   | , <u>,</u>   | ٥,   |                          |                          |             |
| 6  | 3.1L Regal, Century (97-99), Skylark   | 1995-   |                     | 32569   | 19"   | 31"  | 21"   | 31"  | 23"  | 35"  |                          |                          |             |
| ľ  | (94-98)  | 1999  | l                   | 22000   | A, B  | A, B   | A, B  | A, B   | A, B   | A, B   |                          |                          | <b>!</b>    |
| 6  | 3.1L Century, Regal  | 2000-   | $\vdash \vdash$     | 32559   | 24"   | 36"  | 25"   | 33"  | 26"  | 36"  |                          | $\vdash \vdash \vdash$   | $\vdash$    |
| "  | vonui y, nogui   | 2005  |                     | 02300   | A, B  | A, B   | A, B  | A, B   | A, B   | A, B   |                          |                          | <b>!</b>    |
| .OL  | DSMOBILE   |   |                     | _   | , -   | ,  |   | , -  | ,  | ,  |                          |                          |             |
|  |  |   |                     |   |   |  |   |  |  |  |                          |                          |             |
| 6  | All 173(2.8L), 231(3.8L), 252(4.1L),   | 1977  | w/HEI               | 3172  | 31"   | 31"  | 24"   | 34"  | 26"  | 28"  |                          |                          | 14"         |
|  |  | 1977<br>1983  | w/HEI               | 3172  | 31"<br>A, D   | 31"<br>A, D  | 24"<br>A, D   | 34"<br>A, D  | 26"<br>A, D  | 28"<br>A, D  |                          |                          | 14"<br>D, D |
|  | All 173(2.8L), 231(3.8L), 252(4.1L),   | I   | w/HEI               | 3172  | 1 '   |  |   |  |  |  |                          |                          |             |
|  | All 173(2.8L), 231(3.8L), 252(4.1L),<br>Cutlass, Ciera, Toronto, Delta '88,  | I   | w/HEI               | 3172<br>3136  | 1 '   |  |   |  |  |  | 38"                      | 40"                      |             |
| 6  | All 173(2.8L), 231(3.8L), 252(4.1L),<br>Cutlass, Ciera, Toronto, Delta '88,<br>Delta '98, Omega, Starfire w/Dist.  | 1983  |                     |   | A, D  | A, D   | A, D  | A, D   | A, D   | A, D   | 38"<br>A, D              | 40"<br>A, D              |             |
| 6  | All 173(2.8L), 231(3.8L), 252(4.1L),<br>Cutlass, Ciera, Toronto, Delta '88,<br>Delta '98, Omega, Starfire w/Dist.<br>All 260, 307, 350, 403, 455, Cutlass  | 1983<br>1974-   |                     | 3136  | A, D<br>22"   | A, D<br>22"  | A, D<br>36"   | A, D<br>27"  | A, D   | A, D<br>25"  |                          | I '' I                   |             |
| 6  | All 173(2.8L), 231(3.8L), 252(4.1L),<br>Cutlass, Ciera, Toronto, Delta '88,<br>Delta '98, Omega, Starfire w/Dist.<br>All 260, 307, 350, 403, 455, Cutlass  | 1983<br>1974-   |                     | 3136<br>31369   | A, D<br>22"   | A, D<br>22"  | A, D<br>36"   | A, D<br>27"  | A, D   | A, D<br>25"  |                          | I '' I                   |             |
| 8  | Ali 173(2.8L), 231(3.8L), 252(4.1L),<br>Cutlass, Ciera, Toronto, Delta '88,<br>Delta '98, Omega, Starfire w/Dist.<br>Ali 260, 307, 350, 403, 455, Cutlass<br>Delta, Toronado   | 1983<br>1974-<br>1983   | w/HEI               | 3136<br>31369<br>31363  | A, D<br>22"<br>A, D   | A, D<br>22"<br>A, D  | A, D<br>36"<br>A, D   | A, D<br>27"<br>A, D  | A, D<br>32"<br>A, D  | A, D<br>25"<br>A, D  | A, D                     | A, D                     |             |
| 8  | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976-   | 1983<br>1974-<br>1983<br>1978-  | w/HEI               | 3136<br>31369<br>31363<br>3140  | A, D  22" A, D  40"   | A, D<br>22"<br>A, D<br>44"   | A, D<br>36"<br>A, D<br>44"  | A, D<br>27"<br>A, D<br>40"   | A, D<br>32"<br>A, D<br>36"   | A, D<br>25"<br>A, D<br>36"   | A, D<br>22"              | A, D                     |             |
| 8  | All 173(2.8L), 231(3.8L), 252(4.1L),<br>Cutlass, Ciera, Toronto, Delta '88,<br>Delta '98, Omega, Starfire w/Dist.<br>All 260, 307, 350, 403, 455, Cutlass<br>Delta, Toronado<br>All 267, 305, (5.0L), Except 1976-<br>1979 Omega   | 1983<br>1974-<br>1983<br>1978-<br>1986  | w/HEI               | 3136<br>31369<br>31363<br>3140<br>31409   | A, D  22" A, D  40" A, D  | A, D<br>22"<br>A, D<br>44"<br>B, D   | A, D<br>36"<br>A, D<br>44"<br>A, D  | A, D  27" A, D  40" A, D   | 32"<br>A, D<br>36"<br>A, D   | A, D 25" A, D 36" A, D   | A, D<br>22"              | A, D                     |             |
| 8  | All 173(2.8L), 231(3.8L), 252(4.1L),<br>Cutlass, Ciera, Toronto, Delta '88,<br>Delta '98, Omega, Starfire w/Dist.<br>All 260, 307, 350, 403, 455, Cutlass<br>Delta, Toronado<br>All 267, 305, (5.0L), Except 1976-<br>1979 Omega   | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-   | w/HEI               | 3136<br>31369<br>31363<br>3140<br>31409   | A, D  22" A, D  40" A, D  19"   | A, D  22" A, D  44" B, D  31"  | A, D 36" A, D 44" A, D 21"  | A, D  27" A, D  40" A, D  31"  | A, D  32" A, D  36" A, D  23"  | A, D  25" A, D  36" A, D  35"  | A, D<br>22"              | A, D                     |             |
| 8 8 6  | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass  3.4L Alero, Silohette   | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999   | w/HEI               | 3136<br>31369<br>31363<br>3140<br>31409<br>32569  | A, D  22" A, D  40" A, D  19" A, B  | A, D  22" A, D  44" B, D  31" A, B   | A, D 36" A, D 44" A, D 21" A, B   | A, D  27" A, D  40" A, D  31" A, B   | 32"<br>A, D<br>36"<br>A, D<br>23"<br>A, B  | A, D  25" A, D  36" A, D  35" A, B   | A, D<br>22"              | A, D                     |             |
| 6<br>8<br>8<br>6<br>6                          | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004  | w/HEI               | 3136<br>31369<br>31363<br>3140<br>31409<br>32569  | A, D  22" A, D  40" A, D  19" A, B  24" A, B  | A, D  22" A, D  44" B, D  31" A, B  36" A, B   | A, D  36" A, D  44" A, D  21" A, B  25" A, B  | A, D  27" A, D  40" A, D  31" A, B  33" A, B   | A, D  32" A, D  36" A, D  23" A, B  26" A, B   | 25" A, D  36" A, D  35" A, B  36" A, B   | A, D<br>22"              | A, D                     | D, D        |
| 8 8 6  | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L),  | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004  | w/HEI               | 3136<br>31369<br>31363<br>3140<br>31409<br>32569  | A, D  22" A, D  40" A, D  19" A, B  24" A, B  | A, D  22" A, D  44" B, D  31" A, B  36" A, B   | A, D  36" A, D  44" A, D  21" A, B  25" A, B  | A, D  27" A, D  40" A, D  31" A, B  33" A, B   | A, D  32" A, D  36" A, D  23" A, B  26" A, B   | 25" A, D 36" A, D 35" A, B 36" A, B  | A, D<br>22"              | A, D                     | D, D        |
| 8<br>8<br>6<br>6                               | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist.  | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004  | w/HEI               | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559   | A, D  22" A, D  40" A, D  19" A, B  24" A, B  | A, D  22" A, D  44" B, D  31" A, B  36" A, B   | A, D  36" A, D  44" A, D  21" A, B  25" A, B  | A, D  27" A, D  40" A, B  31" A, B  33" A, B   | A, D  32" A, D  36" A, D  23" A, B  26" A, B   | 25" A, D 36" A, D 35" A, B 36" A, B  | A, D<br>22"<br>B, D      | A, D<br>28"<br>A, D      | D, D        |
| 6<br>8<br>8<br>6<br>6                          | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo   | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-  | w/HEI               | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559   | A, D  22" A, D  40" A, D  19" A, B  24" A, B  31" A, D  22"   | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D   | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36"   | A, D  27" A, D  40" A, B  31" A, B  33" A, B  34" A, D  27"  | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, B   | 25" A, D 36" A, D 35" A, B 36" A, B 28" A, D   | A, D 22" B, D            | A, D<br>28"<br>A, D      | D, D        |
| 8<br>8<br>6<br>6                               | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist.  | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004  | w/HEI               | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559<br>3172   | A, D  22" A, D  40" A, D  19" A, B  24" A, B  | A, D  22" A, D  44" B, D  31" A, B  36" A, B   | A, D  36" A, D  44" A, D  21" A, B  25" A, B  | A, D  27" A, D  40" A, B  31" A, B  33" A, B   | A, D  32" A, D  36" A, D  23" A, B  26" A, B   | 25" A, D 36" A, D 35" A, B 36" A, B  | A, D<br>22"<br>B, D      | A, D<br>28"<br>A, D      | D, D        |
| 8<br>8<br>6<br>6<br>PON<br>6                   | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992  | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31363<br>31369                    | A, D  22" A, D  40" A, B  24" A, B  31" A, D  22" A, D  | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D   | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  | A, D  27" A, D  40" A, B  31" A, B  33" A, B  27" A, D   | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, B   | 25" A, D 36" A, D 35" A, B 36" A, B 28" A, D   | A, D  22" B, D  38" A, D | A, D<br>28"<br>A, D      | D, D        |
| 8<br>8<br>6<br>6                               | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird,   | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992  | w/HEI               | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31369<br>3140                     | A, D  22" A, D  40" A, B  24" A, B  31" A, D  22" A, D  | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D   | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  | A, D  27" A, D  40" A, B  33" A, B  34" A, D  27" A, D   | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D   | 25" A, D  36" A, D  35" A, B  36" A, B  28" A, D  25" A, D                               | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |
| 8<br>8<br>6<br>6<br>8                          | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird, Grand-Am, Grand Prix, Lemans  | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992  | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31369<br>3140<br>31409            | A, D  22" A, D  40" A, B  24" A, B  31" A, D  40" A, D  | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D   | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  | A, D  27" A, D  40" A, B  33" A, B  34" A, D  27" A, D   | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D   | 25" A, D 36" A, D 35" A, B 36" A, B 28" A, D 25" A, D                                    | A, D  22" B, D  38" A, D | A, D<br>28"<br>A, D      | D, D        |
| 8<br>8<br>6<br>6<br>PON<br>6                   | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird,   | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992<br>1981-<br>on<br>1997-  | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31369<br>3140                     | A, D  22" A, D  40" A, B  24" A, B  31" A, D  40" A, D  13"   | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D  44" B, D  42"                          | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  44" A, D                                | A, D  27" A, D  40" A, B  33" A, B  34" A, D  27" A, D  40" A, D   | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D  32" A, D   | 25" A, D  36" A, D  35" A, B  36" A, B  28" A, D  25" A, D  44"                          | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |
| 8<br>8<br>6<br>6<br>8<br>8                     | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird, Grand-Am, Grand Prix, Lemans  Pontiac Grand Prix 3.8L Supercharged  | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992<br>1981-<br>on<br>1997-<br>2000                                    | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31369<br>3140<br>31409<br>32789   | A, D  22" A, D  40" A, B  24" A, B  24" A, B  40" A, D  13" A, D                                    | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D  44" B, D  44" B, D                     | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  44" A, D  40" A, D                      | A, D  27" A, D  40" A, B  33" A, B  34" A, D  27" A, D  40" A, D  40" A, B                               | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D  34" A, D   | 25" A, D 36" A, D 35" A, B 36" A, B 28" A, D 25" A, D 44" A, B                           | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |
| 8<br>8<br>6<br>6<br>8                          | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird, Grand-Am, Grand Prix, Lemans  | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992<br>1981-<br>on<br>1997-<br>2000<br>1994-                           | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31369<br>3140<br>31409            | A, D  22" A, D  40" A, B  24" A, B  31" A, D  22" A, D  40" A, D  13" A, B  19"                     | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D  44" B, D  42" A, B  31"                | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  44" A, D  20" A, B  21"                 | A, D  27" A, D  40" A, B  33" A, B  34" A, D  27" A, D  40" A, D  40" A, B  31"                          | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D  32" A, D  32" A, D                               | 25" A, D 36" A, D 35" A, B 36" A, B 28" A, D 25" A, D 44" A, B 35"                       | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |
| 8<br>8<br>6<br>6<br>8<br>8<br>8                | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass  3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird, Grand-Am, Grand Prix, Lemans  Pontiac Grand Prix 3.8L Supercharged  3.1L Grand-Am, Grand Prix ('95-'99)  | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992<br>1981-<br>on<br>1997-<br>2000<br>1994-<br>1999                   | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31369<br>3140<br>31409<br>32789   | A, D  22" A, D  40" A, B  24" A, B  31" A, D  22" A, D  40" A, D  13" A, B  19" A, B                | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D  44" B, D  42" A, B  31" A, B           | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  44" A, D  20" A, B  21" A, B            | A, D  27" A, D  40" A, B  33" A, B  34" A, D  27" A, D  40" A, D  40" A, B  31" A, B                     | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D  32" A, D  34" A, B                               | 25" A, D 36" A, D 35" A, B 36" A, B 28" A, D 25" A, D 44" A, B 35" A, B                  | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |
| 8<br>8<br>6<br>6<br>8<br>8                     | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass  3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird, Grand-Am, Grand Prix, Lemans  Pontiac Grand Prix 3.8L Supercharged  3.1L Grand-Am, Grand Prix ('95-'99)  3.1L Grand-Am, Grand Prix ('95-'09)                         | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992<br>1981-<br>on<br>1997-<br>2000<br>1994-<br>1999<br>2000-          | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>3140<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31369<br>3140<br>31409<br>32789   | A, D  22" A, D  40" A, D  19" A, B  24" A, B  31" A, D  22" A, D  40" A, D  13" A, B  19" A, B      | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D  44" B, D  42" A, B  31" A, B  31" A, B | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  44" A, D  20" A, B  21" A, B            | A, D  27" A, D  40" A, B  33" A, B  34" A, D  27" A, D  40" A, D  40" A, B  31" A, B  33"                | A, D  32" A, D  36" A, B  26" A, B  26" A, D  32" A, B  26" A, B  26" A, B   | 25" A, D  36" A, D  35" A, B  36" A, B  28" A, D  25" A, D  44" A, B  35" A, B  36" A, B | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |
| 8<br>8<br>6<br>6<br>8<br>8<br>8<br>6           | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird, Grand-Am, Grand Prix, Lemans  Pontiac Grand Prix 3.8L Supercharged  3.1L Grand-Am, Grand Prix ('95-'99)  3.1L Grand-Am, Grand Prix ('00-'03), Transport               | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992<br>1981-<br>on<br>1997-<br>2000<br>1994-<br>1999<br>2000-<br>2004  | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31363<br>31409<br>32789<br>32569          | A, D  22" A, D  40" A, D  19" A, B  24" A, B  31" A, D  22" A, D  13" A, B  19" A, B                | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D  44" B, D  42" A, B  31" A, B  36" A, B | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  44" A, D  20" A, B  21" A, B  25" A, B  | A, D  27" A, D  40" A, B  33" A, B  34" A, D  27" A, D  40" A, B  31" A, B  31" A, B  33" A, B           | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D  34" A, D  34" A, D  35" A, D  36" A, D  36" A, D | 25" A, D  36" A, D  35" A, B  36" A, B  28" A, D  25" A, D  44" A, B  35" A, B  36" A, B | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |
| 8<br>8<br>6<br>6<br>8<br>8<br>8                | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass  3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird, Grand-Am, Grand Prix, Lemans  Pontiac Grand Prix 3.8L Supercharged  3.1L Grand-Am, Grand Prix ('95-'99)  3.1L Grand-Am, Grand Prix ('95-'09)                         | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992<br>1981-<br>on<br>1997-<br>2000<br>1994-<br>1999<br>2000-          | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31363<br>31409<br>32789<br>32569<br>32559 | A, D  22" A, D  40" A, B  24" A, B  31" A, D  22" A, D  40" A, D  13" A, B  19" A, B  19" A, B  13" | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D  44" B, D  42" A, B  31" A, B  36" A, B | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  44" A, D  20" A, B  21" A, B  225" A, B | A, D  27" A, D  40" A, D  31" A, B  33" A, B  27" A, D  40" A, D  40" A, B  31" A, B  31" A, B  33" A, B | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D  34" A, D  24" A, B  24" A, B                     | 25" A, D  36" A, D  35" A, B  36" A, B  28" A, D  25" A, D  44" A, B  35" A, B  36" A, B | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |
| 8<br>8<br>6<br>6<br>8<br>8<br>8<br>6<br>6<br>6 | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird, Grand-Am, Grand Prix, Lemans  Pontiac Grand Prix 3.8L Supercharged  3.1L Grand-Am, Grand Prix ('95-'99)  3.1L Grand-Am, Grand Prix ('00-'03), Transport Grand Prix GT | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992<br>1981-<br>on<br>1997-<br>2000-<br>2004<br>1999-<br>2000-<br>2004 | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31369<br>31409<br>32789<br>32569<br>32569 | A, D  22" A, D  40" A, B  24" A, B  31" A, D  22" A, D  40" A, D  13" A, B  19" A, B  19" A, B      | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D  44" B, D  42" A, B  31" A, B  36" A, B | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  20" A, B  21" A, B  25" A, B            | A, D  27" A, D  40" A, B  33" A, B  34" A, D  27" A, D  40" A, B  31" A, B  34" A, B  40" A, B  40" A, B | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D  36" A, D  24" A, B  26" A, B                     | 25" A, D  36" A, D  35" A, B  36" A, B  28" A, D  25" A, D  44" A, B  36" A, B  44" A, B | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |
| 8<br>8<br>6<br>6<br>8<br>8<br>8<br>6           | All 173(2.8L), 231(3.8L), 252(4.1L), Cutlass, Ciera, Toronto, Delta '88, Delta '98, Omega, Starfire w/Dist. All 260, 307, 350, 403, 455, Cutlass Delta, Toronado  All 267, 305, (5.0L), Except 1976- 1979 Omega 3.1L Achieva, Cutlass 3.4L Alero, Silohette  TIAC  All 172(2.8L), 231(3.8L), 252(4.1L), Firebird, Phoenix, Sunbird, w/Dist. All 260, 265, 301, 350 w/out Turbo Firebird, Grand-Am, Lemans  All 267, 305(5.0L), Firebird, Grand-Am, Grand Prix, Lemans  Pontiac Grand Prix 3.8L Supercharged  3.1L Grand-Am, Grand Prix ('95-'99)  3.1L Grand-Am, Grand Prix ('00-'03), Transport               | 1983<br>1974-<br>1983<br>1978-<br>1986<br>1995-<br>1999<br>2000-<br>2004<br>1976-<br>1988<br>1975-<br>1992<br>1981-<br>on<br>1997-<br>2000<br>1994-<br>1999<br>2000-<br>2004  | W/HEI  W/HEI  W/HEI | 3136<br>31369<br>31363<br>31409<br>32569<br>32559<br>3172<br>3136<br>31363<br>31363<br>31409<br>32789<br>32569<br>32559 | A, D  22" A, D  40" A, B  24" A, B  31" A, D  22" A, D  40" A, D  13" A, B  19" A, B  19" A, B  13" | A, D  22" A, D  44" B, D  31" A, B  36" A, B  31" A, D  22" A, D  44" B, D  42" A, B  31" A, B  36" A, B | A, D  36" A, D  44" A, D  21" A, B  25" A, B  24" A, D  36" A, D  44" A, D  20" A, B  21" A, B  225" A, B | A, D  27" A, D  40" A, D  31" A, B  33" A, B  27" A, D  40" A, D  40" A, B  31" A, B  31" A, B  33" A, B | A, D  32" A, D  36" A, D  23" A, B  26" A, B  26" A, D  32" A, D  32" A, D  34" A, D  24" A, B  24" A, B                     | 25" A, D  36" A, D  35" A, B  36" A, B  28" A, D  25" A, D  44" A, B  35" A, B  36" A, B | 38"<br>A, D              | A, D  28" A, D  40" A, D | D, D        |

### RACE TAILORED WIRE SETS

The MSD Race Tailored Heli-Core and 8.5mm Super Conductor Wire Sets are designed specifically to fit race engines equipped with headers or an MSD Distributor.

### **PART NUMBER KEY**

Blue - Heli-Core Wires: 4 Digit Part Number Red- Super Conductor: 5 Digit ending with a 9 Black - Super Conductor: 5 Digit ending with a 3

### WIRE LENGTH AND BOOT DESCRIPTION BY CYLINDER

| Cyl. | Description                              | Style  | PN    | Cyl. 1 | Cyl. 2 | Cyl. 3 | Cyl. 4 | Cyl. 5 | Cyl. 6 | Cyl. 7 | Cyl. 8 | Coil<br>Wire |
|------|--|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------------|
| CHEV | Y  |        |       |        |        |        |        |        |        |        |        | WING         |
| 8    | All SB Chevy w/Low Profile Distributor,  | 90°    | 3124  | 39"    | 36"    | 33"    | 30"    | 24"    | 25"    | 25"    | 18"    | 24"          |
|      | PN 84697, 84997, 8558 (wires below       |        | 31243 | B, D   | B, B   | B, D         |
|      | header/exhaust manifold)                 |        | 31249 |        |        |        |        |        |        |        |        |              |
| 8    | All BB Chevy w/Low Profile Distributor   | 90°    | 3129  | 37"    | 40"    | 33"    | 33"    | 28"    | 27"    | 23"    | 25"    | 38"          |
|      | PN 84697, 84997, 8558 (wires below       |        | 31293 | B, B         |
|      | header/exhaust manifold)                 |        | 31299 |        |        |        |        |        |        |        |        |              |
| 8    | All SB Chevy w/new Crab Cap PN 8541      | HEI    | 30479 | 38"    | 40"    | 32"    | 29"    | 24"    | 25"    | 20"    | 18"    | 24"          |
|      | with HEI terminals (wires below          |        |       | B, G         |
|      | header/exhaust manifold)                 |        |       |        |        |        |        |        |        |        |        |              |
| 8    | All BB Chevy w/new Crab Cap PN 8541      | HEI    | 30829 | 39"    | 40"    | 36"    | 30"    | 24"    | 29"    | 20"    | 20"    | 32"          |
|      | with HEI terminals (wires below          |        |       | B, G         |
|      | header/exhaust manifold)                 |        |       |        |        |        |        |        |        |        |        |              |
| 8    | All SB Chevy w/Socket Distributor Cap    | Socket | 3159  | 37"    | 39"    | 35"    | 32"    | 33"    | 29"    | 27"    | 28"    | 12"          |
|      | (wires below header/exhaust manifold)    |        | 31593 | B, C   | C, F         |
|      |  |        | 31599 |        |        |        |        |        |        |        |        |              |
| 8    | All SB Chevy w/HEI style Distributor Cap | HEI    | 3559  | 37"    | 39"    | 35"    | 32"    | 33"    | 29"    | 27"    | 28"    | 12"          |
|      | (wires below header/exhaust manifold)    |        | 35599 | B, D   | D, F         |
|      |  |        | 35593 |        |        |        |        |        |        |        |        |              |
| 8    | All BB Chevy w/Socket Distributor Cap    | Socket | 3160  | 42"    | 42"    | 34"    | 34"    | 28"    | 31"    | 24"    | 24"    | 24"          |
|      | (wires below header/exhaust manifold)    |        | 31603 | B, C   | C, F         |
|      |  |        | 31609 |        |        |        |        |        |        |        |        |              |
| 8    | All BB Chevy w/HEI style Distributor Cap | HEI    | 3560  | 42"    | 41"    | 34"    | 34"    | 28"    | 31"    | 24"    | 23"    | 24"          |
|      | (wires below header/exhaust manifold)    |        | 35609 | B, D   | D, F         |
|      |  |        | 35603 |        |        |        |        |        |        |        |        |              |
| 8    | Chevy SB with 180° Headers               | Socket | 31279 | 37"    | 40"    | 48"    | 38"    | 50"    | 47"    | 53"    | 50"    | 36"          |
|      |  |        |       | B, C   | C, F         |
| 8    | Chevy SB w/ MSD Front Drive              | 90°    | 32859 | 19"    | 24"    | 27"    | 25"    | 30"    | 33"    | 33"    | 34"    | 36"          |
|      | Distributor, PN 8710                     |        |       | B, D   | D, B, F      |
| 8    | Chevy BB w/ MSD Front Drive              | 90°    | 32869 | 22"    | 24"    | 30"    | 25"    | 34"    | 33"    | 37"    | 35"    | 36"          |
|      | Distributor, PN 8720                     |        |       | B, D   | D, B, F      |
| VOLK | SWAGEN                                   |        |       |        |        |        |        |        |        |        |        |              |
| 4    | Volkswagen Wire Set for VW Billet        | 90°    | 3193  | 32"    | 32"    | 23"    | 23"    |        |        |        |        | 16"          |
|      | Distributor, PN 8485                     |        | 31939 | D, H   | D, H   | D, H   | D, H   |        |        |        |        | D, F         |

\*Factory Style Boot. Not listed.

### PROFESSIONAL RACING BOOTS

These spark plug boots are designed for extreme racing applications. Using a proprietary blend of materials, the boots can handle much higher temperatures over an increased amount of time. Three designs are available; straight, 115° and a 90° boot are supplied with MSD durable Dual Crimp Terminals.

## PROFESSIONAL RACING BOOTS

- Designed exclusively for extreme duty racing conditions
- Proprietary rubber compound has a higher devulcanizing rating
- Composition absorbs less infrared radiation



90° Pro Temp Boots

2 per Card - PN 3325
Pack of 8 - PN 8852



**Straight Boots** 

2 per Card **- PN 3327** Pack of 8 **- PN 8854** 



115° Pro Race Boots

2 per Card **- PN 3326** 

Pack of 8 - PN 8853

140

# **8.5MM SUPER CONDUCTOR FOR SPORT COMPACT** These sets are specifically designed for sport compact engines.

|             | VEHICLE  | YEAR    | DESC.         | ENGINE      | RED      | BLACK    |
|-------------|--|---------|---------------|-------------|----------|----------|
| ACURA       | CL   | '98-'99 | SOHC 16V VTEC | 2.3L        | PN 32379 | PN 32373 |
| , noonn     | CL   | '97-'99 | V-6 VTEC      | 3.OL        | PN 32419 |          |
|             | Integra LS, RS, GS   |         |               |             |          |          |
|             | Integra LS, RS, GS   | '90-'01 | DOHC 16V      | 1.8L 1834cc | PN 32329 | PN 32323 |
|             | Integra GS-R   |         |               |             |          |          |
|             | Integra GS-R   |         |               |             |          |          |
|             | Integra GS-R, Type R   | '96-'01 | DOHC 16V VTEC | 1.8L 1834cc | PN 32349 | PN 32343 |
| DODGE/      | Cirrus, Sebring  |         |               |             |          | PN 32273 |
| CHRYSLER    | Cirrus, Sebring  |         |               |             |          | PN 32723 |
| OIIIIISEEII | Avenger, Caravan, Stratus                                      |         |               |             |          | PN 32273 |
|             | Avenger, Caravan, Stratus                                      |         |               |             |          | PN 32723 |
|             | Neon SRT-4, PT Cruiser   |         |               |             |          |          |
|             | PT Cruiser   | '03-'05 | 4-Cyl         | 2.4L        | PN 32689 | PN 32683 |
| FORD        | Focus  | '99-'04 | 4V            | 2.OL        | PN 32949 |          |
| TOND        | Focus  |         |               |             |          |          |
|             | Focus, with MSD Coil, PN 8241                                  |         |               |             |          |          |
|             | Probe GT   | '93-'94 |               | 2.5L        | PN 32989 |          |
|             | ZX-2   |         |               |             |          |          |
| HONDA       | Accord EX, LX Coupe, Sedan                                     | '98-'02 | SOHC 16V VTEC | . 2.3L      | PN 32379 | PN 32373 |
| iionb/i     | Accord DX, SE, VP Coupe, Sedan                                 |         |               |             |          |          |
|             | Accord EX, EXL   |         |               |             |          |          |
|             | Accord EX, LX  |         |               |             |          |          |
|             | Accord EX, LX  |         |               |             |          |          |
|             | <b>Accord Anniversary Edition Sedan</b>                        |         |               |             |          |          |
|             | Accord DX, Coupe 2DR   |         |               |             |          |          |
|             | Accord DX, Sedan 4DR   |         |               |             |          |          |
|             | Accord EX, Wagon 4DR   |         |               |             |          |          |
|             | Accord EX, Coupe 2DR/Sedan 4DR                                 |         |               |             |          |          |
|             | Accord LX, Wagon 4DR   |         |               |             |          |          |
|             | Accord LX, Coupe 2DR/Sedan 4DR                                 |         |               |             |          |          |
|             | Accord SE, Coupe 2DR   |         |               |             |          |          |
|             | Accord SE, Sedan 4DR   |         |               |             |          |          |
|             | Civic 4WD Wagon 4DR  | '88-'91 | SOHC 16V VTEC | 1.6L 1590cc | PN 32319 | PN 32313 |
|             | Civic CX, Hatchback 3DR  |         |               |             |          |          |
|             | Civic CX, Hatchback 3DR<br>Civic DX, Coupe 2DR                 |         |               |             |          |          |
|             |  |         |               |             |          |          |
|             | Civic DX, Sedan 4DR/HB 3DR<br>Civic DX, Coupe 2DR/Sedan 4DR/HB |         |               |             |          |          |
|             | Civic EX, Sedan 4DR  |         |               |             |          |          |
|             | Civic EX, Seuali 4DR<br>Civic EX, Coupe 2DR/Sedan 4DR          |         |               |             |          |          |
|             | Civic Hatchback 3DR  |         |               |             |          |          |
|             | Civic LX, Sedan 4DR  |         |               |             |          |          |
|             | Civic LX, Sedan 4DR  |         |               |             |          |          |
|             | Civic HX, Coupe 2DR  |         |               |             |          |          |
|             | Civic Si Hatchback 3DR   |         |               |             |          |          |
|             | Civic Si   |         |               |             |          |          |
|             | Civic VX Hatchback   |         |               |             |          |          |
|             | Civic Del Sol VTEC   |         |               |             |          |          |
|             | Civic Del Sol S  |         |               |             |          |          |
|             | Civic Del Sol S, Coupe 2DR                                     |         |               |             |          |          |
|             | Civic Del Sol Si, Coupe 2DR                                    |         |               |             |          |          |
|             | CRX DX, HF, Hatchback 3DR                                      |         |               |             |          |          |
|             | CRX Si, Hatchback 3DR  |         |               |             |          | PN 32313 |
|             | Prelude Si, Si 4WS Coupe 2DR                                   | '88-'91 | SOHC 16V      | 2.0L 1958cc | PN 32409 |          |
|             |  |         |               |             |          |          |

|             | VEHICLE                       | YEAR             | DESC.         | ENGINE      | RED      | BLACK    |
|-------------|-------------------------------|------------------|---------------|-------------|----------|----------|
| HONDA       | Prelude ALB Coupe 2DR         |                  |               |             |          |          |
| (continued) | Prelude S, Coupe 2DR          |                  |               |             |          | PN 32363 |
| (Continued) | Prelude Si, Coupe 2DR         |                  |               |             |          |          |
|             | Prelude Si 4WS, Coupe 2DR     |                  |               |             |          |          |
|             | Prelude SE, Coupe 2DR         |                  |               |             |          |          |
|             | Prelude VTEC Coupe 2DR        |                  |               |             |          | PN 32383 |
|             | Prelude Type SH, Coupe 2DR    | '97-'01          | DOHC 16V VTEC | 2.2L 2157cc | PN 32389 | PN 32383 |
|             | Wagon, Wagovan 4DR            |                  |               |             |          | PN 32313 |
|             | CRV LX, EX                    |                  |               |             |          | PN 32323 |
| HYUNDAI     | Accent                        |                  |               |             |          |          |
|             | Tiburon, Elantra              |                  |               |             |          |          |
| EAGLE       | Talon                         |                  |               |             |          | PN 32273 |
| LAGEL       | Talon                         |                  |               |             |          | PN 32723 |
|             | Talon, Turbo                  |                  |               |             |          | PN 32713 |
| MAZDA       | Mazda RX7                     |                  |               |             |          |          |
|             | Mazda RX7                     |                  |               |             |          |          |
|             | Mazda MX6, 626                |                  |               |             |          |          |
|             | Mini Cooper                   |                  |               |             |          |          |
|             | Miata                         |                  |               | 1.6/1.8L    | PN 32599 |          |
| MITSURISH   | Eclipse                       | '05 <u>-</u> '00 | DOUC 1CV      | 2 01        | DM 29970 | DM 22272 |
| WII9npi9u   | Diamante/GT3000               |                  |               |             |          | PN 32210 |
|             | Eclipse                       |                  |               |             |          |          |
|             | EclipseEclipse                |                  |               |             |          | PM 22712 |
|             |                               |                  |               |             |          | PN 32713 |
| PLYMOUTH    | Neon, Voyager                 | '95-'98          | DOHC 16V      | . 2.0/2.4L  | PN 32279 | PN 32273 |
|             | Neon, Voyager                 |                  |               |             |          | PN 32723 |
| SATURN      | Saturn SC, SC-I, SL, SL-L     |                  |               |             |          |          |
|             | Saturn SC-2, SL-2,            |                  |               |             |          |          |
|             | Saturn SC, SC-I, SL, SL-I     |                  |               |             |          |          |
|             | Saturn SC-2, SL-2             |                  |               |             |          |          |
| TOYOTA      | Corolla/GeoPrism              |                  |               |             |          |          |
| 10.0        | Toyota Trucks                 |                  |               |             |          |          |
|             | MR-2 Turbo                    |                  |               |             |          | 1        |
|             | Supra                         |                  |               |             |          | 1        |
|             | Supra                         |                  |               |             |          | 1        |
|             | Supra Turbo                   |                  |               |             |          |          |
|             | 4-Runner & Pickup             |                  |               |             |          |          |
|             | Tacoma, T100, 4-Runner        | '95-'97          |               | 2.4L/2.7L   | PN 32659 |          |
|             | Toyota Tacoma, T100, 4-Runner |                  |               |             |          |          |
|             |                               |                  |               |             |          |          |

NOTE: Vehicles equipped with 8.5mm Spark Plug Wires will require Plug Wire Adapter Towers, PN 8405, to install MSD's 8.5mm wire. Wire set PN 32649, PN 32659, PN 32609 and PN 32669 are supplied with these Adapters (see page 144).

### Universal Import Wire Sets

MSD Universal Kits are supplied with the spark plug terminal and boot installed, but the coil/distributor side is left open. This way you can route the wires differently or move the coil pack to a better location. MSD supplies terminals and boots for socket or spark plug-style terminals along with a Mini-Stripper-Crimper Tool to help assemble the wires.

Integra, 1.8L VTEC '96-'01 - PN 32449

Replacement universal wire set for PN 32349.

Honda Civic 1.6L '92-'00 - PN 32459

Replacement universal wire set for PN 32359.

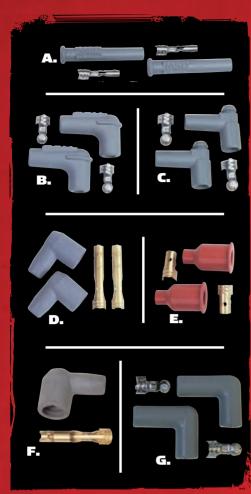
Chrysler, Mitsu 2.0L DOHC - PN 32479

Replacement universal wire set for PN 32279.

Mitsu/Eclipse Turbo 2.0L '90-'99 - PN 32499

Replacement universal wire set for PN 32699 and PN 32719.

Honda/Acura, K-Series, '02-'05 - PN 32469



### REPLACEMENT BOOTS AND TERMINALS

MSD boots are designed with longevity in mind. Each boot provides excellent heat resistance as well as maximum protection against spark loss.

A. Multi-Angle Boots and Terminals, 2/Card - PN 3301

B. 90° MSD Boots and Terminals, 2/Card - PN 3311

C. HEI Style 90° Boots and Terminals, 2/Card - PN 3320

D. 90° Socket Boots and Terminals, 2/Card - PN 3321

E. Straight Socket Boots and Terminals, 2/Card - PN 3322

F. Blaster 2 Coil Boot and Terminal, 1/Card - PN 3331

**G. 90° Non-Logo** Boots and Terminals, 2/Card **- PN 3323**Not shown:

LT1 Straignt Boots and Terminals, 2/Card - PN 3302 LT1 90° Boots and Terminals, 2/Card - PN 3303

LS1 45° Boots and Terminals, 2/Card - PN 3304

### **BOOT AND TERMINAL SETS**

If you're making a custom set of spark plug wires these sets are for you. Each set is supplied with nine high-temperature boots and their matching terminal.

H. 90° Socket Boots and Brass Terminals - PN 8851

L. 90° MSD Boots and Dual Crimp Terminals - PN 8850

J. 90° Boots and Dual Crimp Terminals - PN 8847

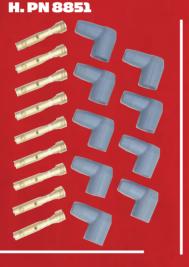
K. HEI Boots for Retainers and Dual Crimp

Terminal - PN 8849

I. PN 8850

ONE

L. Short 90° Boots and Dual Crimp Terminals - PN 8848





K.PN8849

L. PN 8848

JUE

### Power Tower™ Wire Adapters

MSD Power Towers are designed to allow the use of 8mm or 9mm spark plug wires on 7mm distributor caps. Power Towers also convert your conventional socket-style distributor cap to the "snap-type" spark plug style connector for a tighter connection and superior spark isolation.

(Use with PN 8850, PN 8848 or PN 8849 Boot Kit.)

Power Towers, Set of 9 - PN 8805

### BULK WIRE

MSD offers both the Heli-Core and 8.5mm Super Conductor Wire in bulk. Sets are sold in 6′, 25′, 100′ and 300′ lengths.

| Length   | Heli-Core | 8.5mm Red | 8.5mm Black |
|----------|-----------|-----------|-------------|
| 6 feet   | PN 3403   | PN 34039  | PN 34033    |
| 25 feet  | PN 3401   | PN 34019  | PN 34013    |
| 100 feet | PN 3404   | PN 34049  | PN 34043    |
| 300 feet | PN 3405   | PN 34059  | PN 34053    |

### ADAPTER TOWER

To benefit from MSD's 8.5mm Super Conductor Plug Wires, applications that were originally equipped with 5mm wires will require these Adapter Towers. They fit firmly into your stock cap and accept MSD's Dual Crimp Terminal and wire to improve delivery of the spark!

Adapter Tower, Set of 8 - PN 8405



### Hemi Tubes

MSD's Hemi Tubes are molded from Rynite for incredible strength and high spark isolation properties. For easy assembly and disassembly we incorporated a new twist-lock cap at the base. The redesigned tubes meet NHRA's requirements. The Tubes are available in a set of 16 with eight red and eight black.

MSD Hemi Tubes, Set of 16 - PN 3475



### BULK BOOTS AND TERMINALS

If you plan on building a lot of custom sets of wires for special applications, you can now get MSD Boots and Terminals in bulk sets of 100.

### 100 TERMINALS

A. Multi-Angle Dual Crimp Terminals - PN 34605

B. 90° Plug Style Dual Crimp Terminal - PN 34615

C. 90° Socket Cap Terminals - PN 34635

D. Straight Socket Cap Terminals - PN 34625

### 100 BOOTS

E. Multi-Angle - PN 34565

F. 90° Spark Plug Style - PN 34515

G. 90° Socket Cap - PN 34525

H. HEI Style w/Nipple - PN 34555

I. Straight Socket Cap - PN 34535

J. 90° Non-Logo Boot, Quantity 50 - PN 34575



### Pro-Crimp Tool™

If you make numbers of plug wires or do a lot of custom wiring, the Pro-Crimp Tool is a must for your toolbox. The Pro-Crimp features interchangeable jaws allowing for a variety of different style crimps with one heavy-duty tool.

The Pro-Crimp features a hardened steel frame with comfortable molded hand grips. The slick ratchet action provides secure, factory quality crimps every time. The Tool is supplied with precision crimping/stripping jaws for MSD's spark plug wire terminals.

Pro-Crimp Tool II - PN 35051

### Pro-Crimp Dies

These dies are for use with Pro-Crimp Tools, PN 3505 or PN 35051.

Amp Pin Terminal Dies - PN 3506
Amp Lug Terminal Dies - PN 3507
Plug Wire Terminal Dies - PN 3508
Weathertight Terminal Dies - PN 3509
Deutsch Terminal Dies - PN 3510





### COIL WIRE REPLACEMENT

This Super Conductor Coil Wire is 18" long.

Coil Wire Replacement HEI boots, Red - PN 84039 HEI boots, Black - PN 84033 Blaster Socket boot, Red - PN 84049



### MINI-STRIPPER CRIMPER

This special tool is an inexpensive way to make a set of custom plug wires. It provides a "die" to strip either 8mm Heli-Core or 8.5mm Super Conductor Wire, then can be used in a vise to provide a solid terminal crimp to the wire.

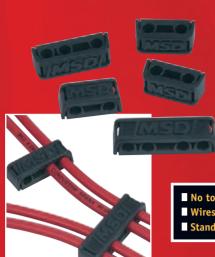
Mini-Stripper-Crimper - PN 3503

### REPLACEMENT SPARK PLUG WIRES

The MSD Universal Replacement wire is 48" long and has a multi-angle terminal and boot on one end with a 90° HEI style terminal on the other side. A 90° socket terminal and boot is also supplied with a Mini-Stripper-Crimper so the wire can be custom tailored to your application.

Heli-Core Wire, Blue - PN 3406 8.5mm Super Conductor Wire, Red - PN 34069 8.5mm Super Conductor Wire, Black - PN 34063





### Pro-Clamp™ Separators

The Pro-Clamp will keep the plug wires in a tidy order and away from engine heat sources. Each Separator features secure grooves for each wire and a top bracket snaps in place to sandwich the wires in place. Each base has a hole for a retaining screw if desired and a tab that will help hold it in position.

The kit is supplied with two 4-wire assemblies, two 3-wire assemblies and four 2-wire assemblies.

### Pro-Clamp Separators - PN 8843

- No tools needed to open
- Wires stay in place when cover is removed
- Stand alone or can be bolted down

### Wire Separators

Not only do separators have to keep spark plug wires away from engine heat sources, they also have to keep the plug wires far enough apart to prevent inductive crossfire and actual spark loss. MSD Wire Separators will clean up your wire installation and last the duration of your vehicle.







A. Dual Plug Wire Separators, 8-8.5mm Wires, Set of 16 - PN 8841

B. Dual Plug Wire Separators, Wires w/Sleeve, Set of 16 - PN 8842

C. Wire Separator Set, Carded, 8-Cyl. - PN 8845

D. Wire Separator Kit, Carded, 8-Cyl. - PN 8846



### SHRINK SLEEVE WITH NUMBERS

This Sleeving simply slides over the spark plug boot or other connection and will shrink tightly around it for a secure connection. Best of all, these sleeves have the cylinder numbers on them so each wire is clearly marked preventing any confusion during thrashes in the pits.

### Numbered Shrink Sleeve - PN 3415

### CYLINDER MARKERS

These great little markers will save you time and ensure that the plug wires are always in the right place. They will withstand high underhood temperatures and are available in two sizes. The Markers are also supplied on a trick tool that makes installation effortless.

Cylinder Markers, 8mm Wire - PN 3413 Cylinder Markers, 8.5mm Wire - PN 3414

### PRO-HEAT GUARD

This tough sleeving is made up of a thick glass woven core that resists temperatures up to 1,000°F. Silicone rubber coating surrounds the core adding protection against abrasion and heat. The sleeving has a 3/8" inner diameter so it easily slides over most spark plug wires.

### **Pro-Boot Guard**

MSD's Pro-Boot Guard is designed to protect spark plug boots from excessive heat. The slide-on sleeve features a fiberglass woven inner sleeve which is then coated with a specially compounded silicone rubber. This combination produces a thick sleeve that can withstand extreme temperatures. Slides over most plug boots.

### SELF-VULCANIZING TAPE

Made of silicone rubber with high red oxide content, this tape will protect electrical connections, hoses, spark plug boots and more from extremely high temperatures. The self-vulcanizing process automatically begins when the two sides of the tape are put into contact. A catalyst on one side of the tape begins the bonding process as soon as wrapping takes place.

### SHRINK SLEEVING

MSD Shrink Sleeving can be used to protect connections throughout the vehicle as well as spark plug wires. Simply install the Shrink Sleeving over the connection and apply heat. The sleeving will shrink tightly around the wire and protect it. MSD Shrink Sleeving will not split and is designed to withstand high underhood temperatures.

No-Split Shrink Sleeving,
Set of 10 - PN 3409
Shrink Sleeving for Pro-Heat Guard
Set of 18 - PN 3407

### HEAT GUARD

The Kit features two special heat resistant sleevings that are woven from layered quartz-glass fiber. One sleeve protects the wire while another sleeve protects the spark plug boot. Special glass cords and no-split shrink sleeving are used to secure the sleevings on the wire.

### SPARK GUARD™

MSD's Spark Guard is a dielectric grease that solves many common ignition troubles. It stops voltage leaks, eases boot removal, prevents moisture buildup inside the spark plug wire boots, and even helps protect against radio noise (EMI). It also simplifies the installation of MSD Universal Spark Plug Wire Sets. Spark Guard will not dry up or harden so it will retain its spark isolating capabilities indefinitely.





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### **DEUTSCH CONNECTORS**

There is absolutely no excuse for losing a race due to a poor wiring connection. MSD's Deutsch Connectors are sealed and lock together making them perfect for harsh racing applications.

The compact housing of the connectors are molded from a durable plastic material that will not harden or crack. Each housing is indexed to prevent any chance of mismatching the ends plus they have a molded channel to secure another connector for a tidy appearance.

The terminals grip to the wire with strong crimp tabs then lock into position inside the housing. The connections are protected with thick seals that will keep water, mud and debris away from the contacts. These terminals can handle more current than conventional connectors and do not require special tools. Supplied with terminals, seals and housings.

2-Pin Connector, 16 gauge - PN 8183
4-Pin Connector, 16 gauge - PN 8181
6-Pin Connector, 16 gauge - PN 8180
8-Pin Connector, 16 gauge - PN 8185
12-Pin Connector, 16 gauge - PN 8186
2-Pin Connector, 12-14 gauge - PN 8184
4-Pin Connector, 12-14 gauge - PN 8187



See page 145 for Crimp Tools.

### WEATHERTIGHT SEALED CONNECTORS

If you need electrical connectors that are unaffected by water, chemicals, vibration, temperature or dirt, and that will not come apart accidently, then you need MSD Weathertight Connectors.

The Weathertight connectors are molded from a special nylon material to withstand temperatures from -40° to +257°F and are indexed to prevent mismatching. Positive locks let you know when the connectors are completely joined by producing an audible CLICK. No click means no connection.

For maximum electrical isolation, each terminal has its own tower so there is no chance of shorting between the wires. Each terminal tower utilizes self-lubricating silicone seals for protection against water, dust, oil, and other engine compartment fluids.



See page 145 for Crimp Tools.



### PN 8170

### PN 8171

### PN 8172

PN 8173

PN 8174

### Pin Extraction Tool - PN 8193

This Tool allows you to remove the terminal from the Weathertight Connector if you need to make repairs or change your wiring.

10 Male Pins and Seals - PN 8190 10 Female Pins and Seals - PN 8191 Standard Crimping Tool - PN 8175

### **CONNECTORS**

| Mate Tower/remate Simoud with Fins and Seats |            |            |  |  |  |
|--|------------|------------|--|--|--|
| Connector                                    | Individual | Pack of 10 |  |  |  |
| 6-Pin  | PN 8170    | PN 81705   |  |  |  |
| 4-Pin  | PN 8171    | PN 81715   |  |  |  |
| 3-Pin  | PN 8172    | PN 81725   |  |  |  |
| 2-Pin  | PN 8173    | PN 81735   |  |  |  |
| 1-Pin  | PN 8174    | PN 81745   |  |  |  |
|  |            |            |  |  |  |

### **JEEP WIRING KIT**

If your 4 or 6-cylinder Jeep has an integrated ignition module/coil assembly, this kit will provide you with an easy installation of an MSD Ignition Control. The Kit includes jumpers and spacers that modify the module to accept a splice-free installation. Switching back to the stock ignition is easy with two supplied jumpers.

Jeep Installation Kit, 2.5L and 4.0L, '87-'91
Integrated Coil/Module Assembly - PN 8813



This Shielded Magnetic pick-up Cable will help protect the trigger signal from the distributor or crank trigger pick-up from Electro Magnetic Interference (EMI). The pick-up wires are wound together and routed through a special aluminum skinned sleeve that connects to ground. This provides a ground shield around the trigger wires. The Harness is six feet long and is equipped with matching 2-Pin connectors. Recommended with MSD Digital Ignitions and aftermarket EFI racing systems.

Shielded Magnetic Pick-Up Cable, 6' - PN 8862



When the time comes to replace those worn out or burned cables, MSD offers a complete selection of cables to fit your needs. Use these harnesses to connect your MSD to your distributor, MSD 7 Series Ignition or the MSD Marine and 6-Offroad Ignition.

6' Cable Harness, 2 Wire Magnetic Trigger - PN 8860 6-Offroad Ignition Cable Harness - PN 64601



Adapts MSD Distributor to harness on GM Ignition, MSD 6M-2 PN 6460, MSD 6-Offroad PN 6470 or MSD 8 Ignition PNs 7800, 7802. **PN 8866** 

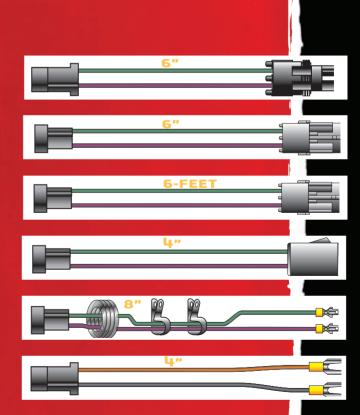
This six-inch cable adapts the MSD Marine Distributor PNs 8560, 8562, 85806 or GM Distributor to the PN 8860 magnetic pick-up cable on MSD 6 or 7 Series Ignitions. PN 8867

This six-foot cable adapts the MSD Marine Distributor PNs 8560, 8562, 85806 or GM Distributor directly to an MSD 6 or 7 Series Ignition. **PN 8868** 

This adapter cable allows you to plug your MSD 6 or 7 Series Ignition or Timing Accessory directly into a Ford Duraspark Connector. **PN 8869** 

The MSD GM HEI Module Bypass Cable Assembly allows you to plug an MSD 6 or 7 Series Ignition or Timing Accessory directly into the magnetic trigger inside a GM HEI distributor. **PN 8361** 

This two wire adapter cable adapts the mag (+) and mag (-) terminals on an MSD 7 Series Ignition to the PN 8860 Magnetic Trigger Cable. **PN 8859** 





### Four-Pole Double-Throw

The Four-Pole Double-Throw Switch is commonly used to switch between two MSD Ignitions or between a standard points ignition and an MSD. Features include a silicone rubber seal to stop contaminants, hot tin-dipped screw terminals and a positive snap-acting rocker mechanism. Rated at 20A 28VDC, 10A 115 VAC.

Four-Pole, Double-Throw Switch - PN 8808

### Two-Pole Double-Throw

The Two-Pole Double-Throw Switch is like having two Single-Pole Double-Throw Switches operated by one lever. Possible uses include switching between two sets of points or two magnetic pick-ups.

Rated 20A 28VDC, 10A 115VAC.

Two-Pole Double-Throw Switch - PN 8809

### SINGLE-POLE DOUBLE-THROW

The Single-Pole Double-Throw Switch has a center terminal that is "common". This switch is commonly used to select between two electrical devices such as ignitions, electric fuel pumps, fans or even magnetic pick-ups. The switch is rated at 20A 28VDC, 10A 115VAC.

Single-Pole Double-Throw Switch - PN 8807

### **ALTERNATE ACTION SWITCH**

This switch is designed to be used as an auxiliary ignition On/Off button. It can be mounted to the steering wheel within easy reach of the driver and can be used in a Normally Open or Normally Closed position. Assembled and constructed for harsh racing conditions.

**Alternate Action Switch - PN 8812** 

### Single-Pole Single-Throw

The Single-Pole Single-Throw Switch is a heavy duty on-off switch.

Single-Pole Single-Throw Switch - PN 8806

### Micro Switch

This Single-Pole Double-Throw lever operated switch can be wired in either a normally open or a normally closed position. A spring loaded lever makes the Micro Switch perfect for operating the high-speed retard function of the MSD Timing Computers. Many drag racers mount the Micro Switch so when they shift into high gear, the shifter activates the switch and retards the timing.

Micro Switch, SPDT - PN 8820

### Noise Filter

If you experience radio noise after installing the MSD Ignition, you may need to install an MSD Noise Filter. Electro Magnetic Interference (EMI) is occasionally generated from the MSD power cables and can be easily eliminated by installing the Noise Filter on the heavy power supply wires coming from the MSD. When the MSD draws current, it will draw through the Noise Filter instead of directly from the battery, so all other accessories that operate off 12 volts, like the radio, fuel pump, or the engine computer, will be unaffected by the MSD.

The Noise Filter will also prevent damage to the MSD during jump-starts and will keep a vehicle's 12-volt line "clean" by removing any voltage and current surges that could interfere with the operation of some MSD accessories such as the Soft Touch Rev Control or the Two Step Module Selector. It is recommended that the Noise Filter be used on installations with the MSD 7 and 8 Series Ignitions to prevent this interference.

# MSD Noise Filter w/Cover, 26 kufd - PN 8830 MSD Noise Filter Cover,

(supplied with the PN 8830) - PN 8829

### Two Pin Connector

MSD's Two Pin Connector Kit replaces damaged connectors or aids in custom wiring. This is the same connector used on MSD's magnetic pick-up harnesses. Each kit comes with two connectors and four pins.

### MSD Two Pin Connector - PN 8824

### **VIBRATION MOUNTS**

In many performance applications such as off-road, drag race, marine and oval track racing, strong vibration forces can be transmitted through the chassis to the MSD unit. To protect the MSD from excessive vibration, we recommend the use of these vibration mounts. MSD offers three types of vibration mounts, one for the MSD 5 and 6 Ignitions, one for the MSD 7, 8 and 10 Series, and one for the Pro Power Coil.

## Vibration Mounts, 7AL-2, 7AL-3, 8 and 10 Series,

1" x .75", 4/Card - PN 8800

Vibration Mounts, 5 and 6, SCI, Digital 7 Series,

.75" x .63", 4/Card - PN 8823

Vibration Mounts, Pro Power Coil,

.44" x .50", 3/Card **- PN 8825** 

### TERMINAL STRIP

The MSD Terminal Strip can be used for virtually any wiring installation to provide a clean, professional appearance. The Terminal Strip features four separate terminals that use 6-32 screws to hold 12 gauge or smaller wires. The terminals also accept wire lugs that are .312" wide and have a "wall" between each terminal to prevent arcing and electrical shorts. It is electrically rated at 300V-20A.

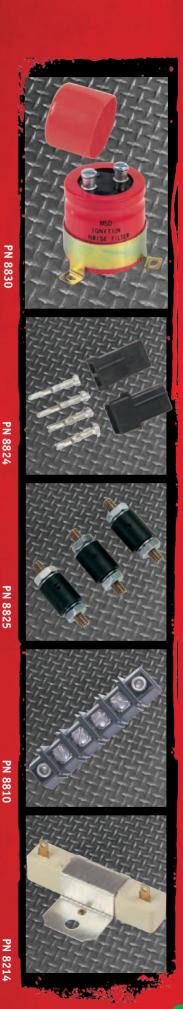
Terminal Strip, 4 Post, 1/Card - PN 8810

### BALLAST RESISTOR

For use with an MSD Blaster Coil when connected to a stock points ignition system.

0.8 ohm Ballast Resistor - PN 8214

www.MSDIGNITION.com



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### TACHOMETER/FUEL INJECTION ADAPTERS

If your tachometer, fuel injection, fuel pump relay or even aftermarket water injection does not work properly after installing an MSD Ignition, you may need an MSD Tach Adapter. There are basically two types of tachometers: voltage-triggered and current-triggered. Voltage-triggered tachs are the most common and most aftermarket tachs, fuel injection systems, fuel pump relays and water injection systems are voltage triggered.

On stock systems that use voltage-triggered tach/fuel injection systems, the tach or fuel injector control picks up an rpm signal from the negative coil (-) terminal. With the MSD installed, the coil (-) terminal can no longer be used as a trigger signal for tachometers. The MSD is equipped with a tach output terminal

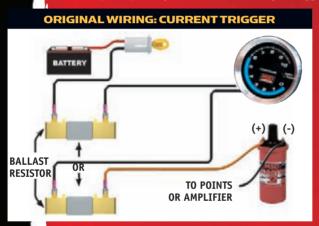


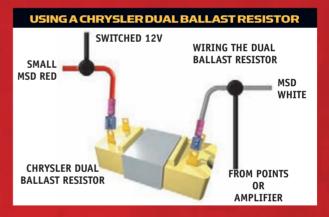
which you should try connecting your tach's trigger wire to first. In most instances, this will trigger the tach/fuel injection. If not, an MSD Tach Adapter may be necessary.

The second type of tachs are current-triggered tachs. These are usually factory installed and wired in-line with the positive side of the coil (+). They are triggered by the amount of current that is passed through them. These tachs will require a PN 8920 Tach Adapter or Ballast Resistor.

### **CURRENT-TRIGGERED TACHS**

If you are using a current-triggered tach and use the White wire to trigger the MSD unit, you can use a Chrysler Dual Ballast Resistor (used on 1973-1976 vehicles), available at your local auto parts store. If using the magnetic pick-up wire (Green and Violet wires) to trigger the MSD, you need a PN 8920 Adapter.

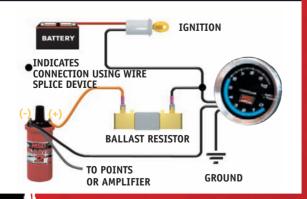




### Voltage-Triggered Tachs

If you are using a voltage-triggered tach and using the White wire to trigger the MSD Ignition Unit, you need a PN 8910 Tach Adapter. If using the Magnetic pick-up (Green and Violet wires) to trigger the MSD, you need a PN 8920 Adapter.

### **ORIGINAL WIRING: VOLTAGE TRIGGERED**



### **GM TACHOMETER**

GM vehicles have an in-line filter that should be bypassed if the factory tachometer drops back to zero as the engine rpm increases. The drawings below show what the filter might look like. For correct operation, disconnect both wires from the filter and leave them disconnected. Connect the wire going to the tachometer to the MSD Ignition unit tach output terminal.



### Points Or Amplifier (Factory Ignition Module)

If you are triggering an MSD Blaster, 5, 6, SCI, or 7 Series Ignition with its white wire or points terminal, you will need the PN 8910 Tach Adapter. The PN 8910 will correct the operation of most voltage-triggered tachometers or fuel injection systems that do not work directly off the tach output terminal of the MSD Ignition Unit.

### Tach Adapter - PN 8910

For use on non-current limiting ignitions, originally equipped with a ballast resistor.

### Tach Adapter - PN 8910-EIS

Designed for current-limiting ignition systems (non-ballast resistor systems).

NOTE: For applications using an MSD DIS Ignition see page 44.

### MAGNETIC PICK-UP

If you are using the magnetic pick-up input (green and violet wires) to trigger your MSD Ignition, you will need the PN 8920 Tach Adapter. The PN 8920 will correct the operation of most voltage-triggered tachometers that do not work directly off the tach output terminal of the MSD Control. This Adapter should also be used on current-triggered tachs (hooked in series with the ignition switch).



Tach/Fuel Adapter, Magnetic Trigger Installations or Current Triggered Tachometers - PN 8920

### TACHOMETER COMPATIBILITY LIST

| Aftermarket<br>Tachometer | White Wire<br>Trigger | Magnetic Trigger<br>Connector |
|---------------------------|-----------------------|-------------------------------|
| AUTOGAGE                  | 8910                  | 8920                          |
| AUTOMETER                 | NONE                  | NONE                          |
| FORD MOTORSPORTS          | NONE                  | NONE                          |
| MALLORY                   | NONE                  | NONE                          |
| STEWART                   | 8910                  | 8920                          |
| S.W. & BI TORX            | NONE                  | NONE                          |
| SUN                       | 8910                  | 8920                          |
| VDO                       | NONE                  | NONE                          |
| AMC (JEEP)                |                       | 8920                          |
| CHRYSLER                  |                       |                               |
| FORD                      |                       | 8920                          |
| GENERAL MOTORS            |                       |                               |
| IMPORTS                   | 8910/8910-EIS         | 8920                          |

NOTE: On the List above, the trigger wire on tachometers that are marked NONE may be connected to the Tach Output Terminal on the MSD 6 and SCI Series Ignition Unit using the supplied Female Faston Receptacle. For more information on the installation/applications of MSD Tach Adapters, please call our Customer Support Department at (915) 855-7123.

### DISTRIBUTORLESS TACH DRIVER

Ever wonder how you can install an aftermarket tachometer on a vehicle with no distributor and multiple coil packs? MSD has the answer with the Distributorless Tach Driver!

The compact Tach Driver measures only 1.5" x 3.5" x 2" and is potted with a polyurethane compound for vibration and water protection so it can easily be mounted under the hood. It wires inline on the coils' 12 volt supply wire where it senses the current going through this wire and converts this information into a 12 volt output signal that most aftermarket tachometers use as a trigger signal. It can be used on 4, 6 or 8-cylinder engines.

NOTE: Not for use on odd-fire engines.

Distributorless Tach Driver - PN 8913







### 3-In-1 Distributor Set-Up Tool

The MSD 3-In-1 Distributor Set-Up Tool is actually three tools in one. First, by inserting it into the engine before the oil pump is attached, you will be able to determine the correct oil pump intermediate shaft length that will be needed for your engine's particular combination. This becomes very useful whenever the engine block or heads have been decked or machined causing the distance between the oil pump and distributor drive to change. Second, the distributor tool can be used to determine the proper position for the slip collar on any of the MSD Chevy Pro-Billet Distributors with a slip collar. This setting changes whenever the engine's deck height is changed due to milling the head surface on the block or intake manifold. Finally, once the engine is assembled, the Distributor Set-Up Tool can also be used for oil pump priming and prelubing the bearings on the newly assembled engine.

### 3-In-1 Distributor Set Up Tool, Chevy - PN 8599

### MSD TIMING LIGHT

This MSD Timing Light is constructed with solid state circuitry and uses a Silicon Controlled Rectifier (SCR) that provides accurate and stable timing signals from 0 to 8,000 rpm. Also, a linear Xenon flash tube and a focused Fresnel lens provide a light that is bright enough for use in broad daylight.

This rugged timing light is built to work in rough environments such as racing pits or professional mechanic shops. The MSD Timing Light's heavy chrome-plated metal housing is very strong and easy to clean. A durable, rubber nose cone is also added to protect the Fresnel lens.

The MSD Timing Light uses a metal inductive pick-up that will not melt if accidentally touched against an exhaust header. A six-foot lead set is included that is long enough to reach from the battery to most timing marks. The battery clamps are color-coded and insulated for tight, safe connections.

### MSD Timing Light, Inductive - PN 8990

- **Detachable Leads**
- Secure pick-up
- No retard as RPM Increases

# Self-Powered Timing Light

An accurate timing light is extremely important to the performance of your engine. MSD's new Self-Powered Timing Light is a tool every performance tuner should have.

A great feature of the Self-Powered Timing Light is that it does not require 12 volts. This means less wires are hanging over the engine compartment and makes for quick, easy checks. For power, the Light uses six AAA batteries.

The lightweight assembly is injection molded for great durability and produces an intense strobe that is easy to view through 5,000 rpm. The inductive pick-up is detachable for easy storage.

Self-Powered Timing Light - PN 8991



If a race engine hesitates or burbles on the track, the first thing that is suspected is the ignition system. MSD offers two ignition testers to assist racers when troubleshooting in the pits.

Both Testers allow you to check the operation of the ignition control and coil without removing them from the car! You can also confirm rev limits, shift points, tachometer accuracy and more by varying the rpm with the two control knobs. Every racer's toolbox should have an MSD Ignition Tester!

### **EASILY CHECK AND TEST:**

- Operation of the Ignition and Coil
- Rev Limits and Shift Lights
- RPM Switch Operation
- Tachometer Accuracy

### MSD Single Channel Digital Ignition Tester

This Tester will check the operation of all of MSD's single-channel CD Ignition Controls. Once the ignition tests good, you can continue troubleshooting and find the culprit

The Tester produces a simulated trigger signal that fires the ignition just as if the engine was running. A special, load-producing clip-on spark plug is included to connect to the coil wire. If the spark is unable to jump the gap of the tester, there is an ignition problem and you can track it down.

For racers with our Digital Programmable 7 Ignition Controls that are using a non-

WHITE NOT USED

TEST
PLUG
CONNECTOR
GROUND

TO 12 YOUTS

magnetic pick-up as sync signal for Individual Cylinder Management, the Tester has a circuit to check its operation too.

The Tester has an LCD display that clearly shows the simulated rpm. This also allows you to test the accuracy of any rpm limits, rpm-activated switches, shift light operation and your tachometer. The Tester operates on 4, 6 or 8-cylinder engines and will simulate up to 16,000 rpm.

### MSD Single Channel Digital Ignition Tester - PN 8998

### Multi-Channel Digital Ignition Tester

This Tester can be used with all of MSD's CD Ignition Controls as well as our line of DIS multi-channel ignitions.

There are four points-style output wires that can be used to trigger the four channels of the DIS-4 Ignitions, or a single channel can be used for ignitions such as the MSD 7 Series. There is also a magnetic pick-up connector for racers using an MSD Distributor or Flying Magnet Crank Trigger.

The Tester is easy to connect with firm grip alligator style terminals and matching ends for trigger inputs. The LCD Alphanumeric readout displays the simulated rpm so you can easily confirm rev limits or the operation of an rpm-activated switch. For use on 4, 6 or 8-cylinder engines with a distributor or with coil packs.

# Multi-Channel Digital Ignition Tester-PN 8996





### RICH/LEAN INDICATOR

The Rich/Lean Indicator (RLI) makes tuning your engine a simple job. By measuring the amount of oxygen in the exhaust, the RLI will tell you whether your engine is running on the rich or lean side of stoichiometry (14.7:1 air/fuel ratio). This can be especially helpful in tuning after making carburetor, fuel injection or intake manifold changes.

The Indicator uses a heated titanium oxygen sensor to measure the oxygen content in the exhaust. This sensor screws into a special 7/8" boss that you weld into the exhaust.

**Rich/Lean Indicator** with Heated O2 Sensor, Includes Mounting Boss, Plug and Harness - PN 8933

NOTE: Will not work with leaded fuels.

### REPLACEMENT PARTS

O2 SENSOR BOSS AND PLUG, 7/8" DIAMETER: PN 8934 HEATED O2 SENSOR: PN 8935



### ELECTRONIC ENGINE GOVERNOR

Installing a rev limiter on your commercial vehicle will prove beneficial by protecting the engine from overrev damage.

When the selected rpm limit is reached, special circuitry drops the spark to different cylinders, then fires that same cylinder on the next cycle. The Electronic Engine Governor is designed to be used in applications such as delivery trucks that operate under 5,000 rpm. The rpm limit is easily adjusted with plug-in modules and is supplied with 3,600, 3,800 and 4,000 rpm modules.

**Electronic Engine Governor - PN 8725** 



### ENGINE KNOCK ALERT

One of an engine's worst enemies is detonation. Detonation is caused by a number of different items such as low octane fuel, changing altitudes and excessively advanced timing. Sometimes however, the pinging noise may be hard to recognize due to well insulated interiors, engine compartments or excessive road noise. The MSD Engine Knock Alert listens to what's going on in the engine for you.

As detonation occurs, the warning light first shows green then turns yellow as the detonation becomes stonger. When the knocking is extremely severe the light reaches the red stage. Like the warning light, the alerting beep grows louder as the severity of the detonation increases. There is also an overall volume control for the beep alert.

The Knock Alert is easy to install and features matching Weathertight connectors for firm connections. It will work on all 4, 6 and 8cylinder engines with 12 volt electrical systems and comes complete with the sensor, adapter and controller.

Engine Knock Alert - PN 8964

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www.MSDIGNITION.com

MSD's Performance Towing Products are specifically designed to meet the needs of heavily worked vehicles, trailer towing rigs and everyday passenger cars. To meet the special needs of these hard working vehicles, every MSD Performance Towing Product must meet these criteria: Reliability, Economy and Performance.

### Universal Adjustable Timing Control/Ignition

The Universal Timing Control is designed to fit virtually all vehicles with a 12 volt, negative ground distributor-style ignition system. The Control can be used with breaker points, electronic amplifiers plus there is also a special input circuit for magnetic pick-up distributors.

This Universal Timing Control also features a powerful ignition enhancer. Race proven MSD circuitry produces three times more spark power. This hot spark ensures complete combustion of the air/fuel mixture which increases power, smooths out the idle, eases starting and improves gas mileage.



The dash-mounted control knob pro-

vides easy adjustment of the timing. Up to 15° of timing adjustment allows you to dial away detonation which could lead to engine damage. This adjustability, combined with the improved ignition output, will give your tow rig overall performance improvements.

### Universal Adjustable Timing Control & Ignition - PN 8782

- Increased spark energy
- Adjust the timing from the driver's seat
- Improved performance and economy

# PERFORMANCE TOWING BENEFITS

- Increase Performance
- Easy Starting, Smooth Idle
- Improve Fuel Economy



THESE PRODUCTS ARE LEGAL TO SELL, DISTRIBUTE OR INSTALL ON NON OBD-II VEHICLES IN CALIFORNIA ACCORDING TO EXECUTIVE ORDER E.O. D-40-28; LEGAL IN ALL 50 STATES.

### GM HEI/FORD TFI IGNITION EQUIPPED VEHICLES

For vehicles equipped with the conventional GM HEI distributor (with vacuum advance), large cap HEI with vacuum advance or a Ford TFI Ignition, the PN 8682 Adjustable Timing Control is the correct model. Special terminals are supplied, which permit this unit to be connected directly to the existing distributor wires. This simple and clean installation will require less than twenty minutes to perform!

The Adjustable Timing Control's dash-mounted control knob gives the driver full control over the ignition timing. The knob allows up to 15° of adjustment and can improve mileage and performance while preventing detonation.









If you have the GM distributor or Ford Coil shown, the PN 8682 Timing Control is the correct choice.



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### CUSTOM MOTORHOME SPARK PLUG WIRE SETS



Motorhomes need all the spark they can get and MSD offers several sets of the 8.5mm Super Conductor wire sets for common motorhome engines.

The 8.5mm wire features the lowest resistance available of any helically-wound wire which ensures that more spark makes it to the cylinder to burn the fuel completely. The outer sleeve of the Super Conductor is just as strong as the wire itself. A propriety combination of silicone and synthetic material produce a tough, heat-resistant sleeve.

For more information on MSD Spark Plug Wires and Accessories, see pages 132-147.

Chevrolet 454 Motorhome with Internal and External HEI Coil, Red - PN 31809
Ford 400, 460 Motorhome,
Red - PN 31349

### CUSTOM MARINE PLUG WIRE SETS

Reliability is just as important as performance in marine applications and MSD's spark plug wires are up for the task. MSD wires are designed with a tough, high heat sleeve that also provides excellent abrasion protection. Dual Crimp terminals provide the strongest connections to the wire and lock to the spark plug terminal.

Two wires are offered; the economical upgrade Heli-Core wires and the premier 8.5mm Super Conductor wire. Both are offered in custom sets for Chevrolet Marine applications.

BB Chevy, Short HEI boot at Distributor 90°

at plug Heli-Core - PN 3148

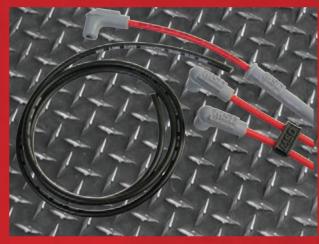
Heli-Core, BB Marine

with HEI - PN 3548

8.5mm Super Conductor, Red - PN 31489

BB Chevy, Socket boot at Dist. 90° at plug Heli-Core - PN 3149

Big Block, Marine with HEI Boot - PN 35489





### Pro-Clamp™ Separators

The Pro-Clamp will keep the plug wires in a tidy order and away from engine heat sources. Each Separator features secure grooves for each wire and a top bracket snaps in place to sandwich the wires in place. Each base has a hole for a retaining screw if desired and a tab that will help hold it in position.

The kit is supplied with two 4-wire assemblies, two 3-wire assemblies and four 2-wire assemblies.

### Pro-Clamp Separators - PN 8843

- No tools needed to open
- Wires stay in place when cover is removed
- Stand alone or can be bolted down

For more information on MSD Spark Plug Wires, see pages 132-147.

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Over the years, specific ignition needs have developed for automobile-style engines in boats. One of these needs has been for a complete ignition system that is powerful enough to prevent loading up of the plugs while idling yet tough enough to withstand the demanding requirements of the marine environment. The MSD Marine Ignition System, which consists of an MSD 6M-2 Ignition Control, a Soft Touch Rev Control and Marine Distributors, is designed to meet and exceed these needs. Whether you have a high-performance jet boat, a pleasure inboard/outboard, or an all-out offshore

- Low Temperature Ignition must function at -13° F
- High Temperature Ignition must function at 212° F
- Voltage Entire assembly tested to withstand 500 volts
- Vibration Must function after 24 hours on vibration table
- Shock Struck 5000 times with 10 g force
- Ignition Protection Must extinguish ignited fuel inside of the distributor cap
- Chemical Resistance Submerged five hours in swelling oil
- Salt Spray Must withstand 96 hours under salt spray

race boat, the MSD Marine Ignition System will greatly improve the performance and driveability of your boat in many ways.

### What Makes The MSD Better?

### MARINE IGNITION

The heart of the MSD Marine Ignition System is the MSD 6M-2 Ignition Control. The MSD 6M-2 is a capacitive discharge ignition that provides the spark plugs with high-energy, multiple sparks. This multi-sparking feature ensures that the air/fuel mixture inside the combustion chamber is ignited completely to prevent loading up the plugs while idling out of the "no wake" zone. In addition to the multi-spark feature, the MSD 6M-2's hot capacitive discharge spark occurs for a full 20° of crankshaft rotation to improve power throughout the entire rpm range.

### MARINE DISTRIBUTOR

To trigger the 6M-2 Ignition, MSD engineers designed a distributor built entirely around the definition of reliability. To ensure complete reliability in the marine environment, the distributor is built around a billet aluminum housing that is cut out of a solid piece of aluminum. A sealed ball bearing assembly is used to guide the .500" hardened shaft and precision advance assembly through the engine's rpm range. Special features include a base with flame arrestor holes, sealed Rynite distributor cap and Weathertight connectors on all wires.

We also offer a line of Ready-to-Run Distributors for marine applications. These distributors have a built-in ignition module and don't require an MSD Ignition Control.





### MSD 6M-2™ MARINE IGNITION CONTROL

The MSD 6M-2 Ignition Control is designed for performance marine applications where a high energy and reliable ignition is a necessity. The capacitive discharge (CD) design of the MSD produces full power sparks throughout your boat's

entire rpm range. Below 3,000 rpm, a series of multiple sparks burn in the cylinder for 20° of crankshaft rotation ensuring complete combustion. Together, these sparks produce easier starting, great throttle response, more power and reduced plug fouling during idling.

Weathertight Connectors with multi-ribbed seals are used to make the electrical connections to the 6M-2. These connectors securely lock together to provide reliable connections that are unaffected by water, oil, gasoline and most other chemicals associated with boats.

### **OPERATING SPECIFICATIONS**

SPARK ENERGY: 105-115 m.] Per Spark **PRIMARY VOLTAGE:** 460-480 Volts **SECONDARY VOLTAGE: 45,000 Volts** 

SPARK SERIES DURATION: 20° Crankshaft Rotation

RPM RANGE: 15,000 RPM with 14.4 Volts **VOLTAGE REQUIRED:** 12-18 Volts, Negative Ground **CURRENT DRAW:** 1 Amp per 1,000 RPM

**WEIGHT & SIZE:** 3.5 lbs., 8"L x 3.5"W x 2.25"H

TESTED WITH BLASTER COIL

To protect the 6M-2's electrical circuitry from marine conditions, the entire unit is potted with a Ciba polyurethane compound. This material prevents the electrical components from coming into contact with water or other chemicals.

The 6M-2 can be triggered by either a magnetic pick-up (distributor or crank trigger), amplifier or by a breaker point distributor. The cable harness has the proper connector so you can plug the 6M-2 into one of the Pro-Billet MSD Marine Distributors.

### MSD 6M-2 Marine Ignition - PN 6460

Both the 6M-2 and 6M-2L are thoroughly tested by Underwriter's Laboratory and certified to meet or exceed safety standards for marine ignitions as set out by the U.S. Coast Guard.



Weathertight connectors are used on all MSD marine ignitions.

### 6M-2L Marine Ignition with Rev Limiter

What do you get when you add a rev limiter to the MSD's already bullet-proof 6M-2 Marine Ignition? The MSD 6M-2L!

The MSD 6M-2L has the same mounting footprint as the original unit, so it will easily fit into existing brackets. The proven Soft-Touch rev limiting action is set using our marine rpm modules so you'll be able to set a rev limit exactly where your engine needs it.

Supplied with a 4,000, 6,000 and 8,000 rpm module. More modules are on page 161.

- MSD's popular 6M-2 with a built-in rev-limiter
- Multiple sparks improve starting, throttle response and idle quality
- ☐ Circuitry is potted for a weather-proof housing
- Weathertight connectors protect wiring from water and chemicals



### Marine Engine Protector Universal

The name Engine Protector says exactly what this advanced electronic rpm controller can do. The Protector selectively drops cylinders then refires that cylinder on the next power cycle. This produces an ultra-smooth, backfire-free rev-limiting action. This selective limiting feature prevents excessive fuel from building up in the cylinder resulting in fouled plugs. The rpm limit is adjustable with a variable potentiometer and has an rpm range of 3,000-8,000 rpm.

NOTE: The Marine Engine Protector is for applications that do not use an MSD Ignition and is not U.L. approved.

Marine Engine Protector, Universal - PN 5468\*



### Additional RPM Module Kits

Each RPM Module Kit provides five modules within a range of 1,000 rpm. Example: PN 87456 Module Kit includes a 5,000, 5,200, 5,400, 5,600 and 5,800 rpm module.

NOTE: These modules can only be used with the Soft Touch Marine Rev Control, PN 8768, 6M-2L, or the Offroad Rev Control, PN 8769.

Module Kit 4,000 RPM Series - PN 87446 5,000 RPM Series - PN 87456 6,000 RPM Series - PN 87466



7,000 RPM Series - PN 87476 8,000 RPM Series - PN 87486

### Soft Touch™ Marine Rev Control

The Marine Rev Control plugs directly into the 6M-2 Marine Ignition and will protect your engine from over-revving caused by broken drive components or when the boat's drive mechanism comes out of the water. Circuitry in the Soft Touch drops the spark from one cylinder at a time and then fires that cylinder on the next cycle for a smooth limiting action without backfires or roughness.

The rpm that the limiting action occurs at is adjusted with plug-in modules and is supplied with modules for 4,000, 6,000 and 8,000 rpm.

Marine Rev Limiter, for MSD 6M-2 Ignition PN 8768



### GM to MSD EFI Marine Harness

There are a lot of boats fit with Chevy big blocks that are running EFI systems. To make installation of an MSD 6M-2 even easier we offer this Harness! The Harness fits the factory style dual connector coil with matching connectors, then plugs directly into the 6-pin weathertight connector of the MSD Ignition Control. No cutting or splicing is necessary.

### Marine EFI Harness, GM-to-MSD - PN 64602

NOTE: Also works with the MSD 6-Offroad Ignition.

\*Not U.L. approved for marine use.



### Pro-Billet™ Marine Distributors

Marine environments place rigorous demands on every component of the ignition system, especially the distributor. The combination of water spray, salt exposure, full throttle acceleration and harsh vibrations all take their toll.

The MSD Pro-Billet Distributor is the strongest and most accurate distributor you can put in your boat. The housing is CNC machined from a billet of 6061-T6 aluminum creating a housing with no porosity. Internally, a QPQ coated shaft is guided by a sealed ball bearing and an extra long sintered bushing for high-speed stability.

Each distributor uses MSD's race-proven magnetic pick-up to trigger the ignition control. Mounted just above the pick-up is a mechanical advance assembly that is easy to adjust so you can dial-in an ignition curve to match your boat's application (except PN 8366).

For marine use, the distributor cap is bolted to the aluminum base. There are two flame arrestor holes with brass screens machined into the base of the distributor to prevent ignition of gas fumes that may build up in the engine compartment. A special Weathertight Connector is supplied to provide a positive-lock and water resistant connection.

The Marine Pro-Billet Distributors have been tested by Underwriter's Laboratory and are certified to meet or exceed safety standards for marine ignition systems as set by the U.S. Coast Guard.

Marine Pro-Billet, V8 Chevy - PN 8560+ Marine Pro-Billet, V8 Chevy, with Adjustable Slip Collar - PN 8562+

Late Model GM, EFI V8 - PN 8366 Marine Pro-Billet, V8 Ford, 351C, 351M, 400, 429, 460 - PN 85806+

+Must be used with an MSD 6M-2 Ignition Control.



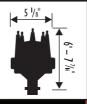
The PN 8562 Chevrolet model features an adjustable slip collar. This allows you to adjust the collar position for engines that have been decked or modified.

### **REPLACEMENT PARTS**

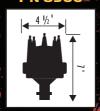
**CAP:** PN 8565, PN 8426 (for PN 8366) **ROTOR:** PN 8467, PN 8427 (for PN 8366) **GEAR:** PN 8531 (Chevy), PN 85812 (Ford)

FOR MORE DISTRIBUTOR ACCESSORIES SEE PAGES 103-111.





PN 8366



PN 85806



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# EADY-TO-RUN MARINE

### Marine Ready-to-Run™ Pro-Billet Distributors

MSD's Ready-to-Run Marine Distributors are the perfect upgrade for boats that are relying on worn-out breaker points or weak ignition systems. These new distributors feature a powerful ignition module built into the billet aluminum housing. This module produces a stout inductive spark that will improve combustion of the fuel mixture for better driveability.

Beneath the durable bolt-down, injection-molded cap, a maintenance-free magnetic pick-up produces accurate trigger signals while an oversized shaft is guided by a sealed ball bearing. An easy-to-adjust mechanical advance allows you to custom tailor a timing curve to match your application.

The Ready-to-Run Distributors are a breeze to install. Simply drop it in the engine and connect three wires and you're ready-to-run across the lake! Supplied with a cap, rotor, gear and Weathertight wiring harness.

Marine Ready-to-Run Distributors Chevrolet V8 - PN 83606 Ford 351C-460 - PN 83506 Oldsmobile 455 - PN 85296

- Only three wires to connect for a simple installation
- High output ignition module produces quick starts, smooth idle and improved mid range performance
- Accurate and maintenance-free magnetic pick-up never needs adjustment
- Easily adjust the mechanical advance with the supplied springs and stop bushings to fit your boat's needs



All of our Marine Distributors are equipped with flame arrestor holes machined into their CNC machined aluminum housings.









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Street Fire is a new brand from MSD that delivers quality at a budget price. All of the Street Fire components are spec'd by MSD engineers and designed to provide performance for the price. The quality of each part is backed up with a one year warranty!

- Quality components at a low price with confidence
- All new components spec'd by MSD engineers
- One year warranty on all Street Fire products
- Watch for more accessories coming soon



### STREET FIRE CDI

The Street Fire Capacitve Discharge Ignition is perfect for performance enthusiasts with a tight budget. The ignition offers capacitive discharge technology and will fire a series of multiple sparks that last for 20° of crankshaft rotation when the engine is running under 3,000 rpm. This ensures combustion of the air/fuel mixture and produces great throttle response and smooth idle.

The CDI is built around a durable cast aluminum housing and easily connects to points, amplifiers and magnetic pickup distributors. An adjustable rev limiter will protect the engine in the event of driveline failure. This rpm is adjustable with plug-in rpm modules, available in 100 rpm increments. If you have a 4, 6 or 8-cylinder engine, the Street Fire CDI will connect and fire it up!

Street Fire CDI Ignition - PN 5520

- **Capacitive Discharge Technology**
- Multiple sparks improve starting and idle
- Full power output at high rpm
- Easily connects to points, amplifiers and magnetic pickup distributors
- Adjustable rev limiter for overrev protection

### OPERATING SPECIFICATIONS STREET FIRE CDI

SPARKENERGY: 105-115 MJ PER SPARK

PRIMARY VOLTAGE: 470 VOLTS

SECONDARY VOLTAGE: 45,000 VOLTS

SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION

RPM RANGE: 15,000 RPM WITH 14.4 VOLTS

VOLTAGE REQUIRED: 10-18 Volts, Negative Ground CURRENT DRAW: .7 AMP PER 1,000 RPM

**WEIGHT & SIZE** 1.5 LBS., 6"L x 3.5"W x 1.75"H

TESTED WITH BLASTER COIL

■ All new components, including the coil, spec'd by MSD engineers

■ The only value priced HEI with a full

■ Heavy duty distributor gear for dura-

Welded weight pins and heavy duty

Adjustable vacuum advance helps tune

one year warranty

bility

construction

it to each engine

### STREET FIRE HEI DISTRIBUTOR

Street Fire is the value-line brand of MSD Ignition. Street Fire components offer a quality designed alternative to the bottom bargain parts that are springing up all over. We're so assured with the quality of our new Street Fire HEI Distributor that we provide a one year warranty with it!

We know the importance of a centrifugal advance in a distributor so our engineers made sure that the Street Fire received an advance assembly with coated weights and welded weight pins (not just pressed in like other models). Another area that you cannot afford to scrimp on is with a distributor gear. The Street Fire is fit with the same gear that is used on our Pro-Billet models. The metallurgy of this gear has been refined for years to perform through the harshest conditions.

Inside, the ignition module and coil work together to produce a stout spark to light the fuel mixture for great performance. The high voltage is transferred through a new rotor to the brass terminals of the distributor cap and out to the plugs. The Street Fire Distributor is the first product to come from our new value branded ignition line.

### Street Fire HEI Distributor - PN 8362



### REPLACEMENT **PARTS**

**CAP:** PN 8411 ROTOR: PN 8410 COIL COVER PN 8402



Custom tailor a vacuum advance curve to match your engine and driving needs.



PN 8362

One of the best parts of the Street Fire Distributor is the heavy duty MSD gear!



The Street Fire HEI is supplied with the module and coil. The HEI features all brand new parts!

### STREET FIRE HEI ADVANCE KIT

This kit will help you achieve the solid ignition timing you need! The Kit comes with new advance weights, springs to set the rate of advance and new bushings. This is designed for the Street Fire HEI and stock style HEI Distributors. (Not for use with MSD's PN 8365 Pro-Billet HEI.)

**HEI Advance Kit - PN 8428** 



### STREET FIRE WIRES

The Street Fire Spark Plug Wires feature a low resistance conductor that's wrapped in a sleek and durable black sleeve. The terminals are covered in black boots that protect the conductor from engine heat to ensure spark delivery.

- Helically wound conductor suppresses electro and radio noise
- Kevlar core combination for great strength and durability
- Heavy duty terminals for secure connection
- ■8mm silicone and synthetic jacket resists heat and abrasion
- 500 Ohms per foot resistance for improved spark delivery and power
- Silicone boots protect against high exhaust temps

### USA Made!



### CHEVY

PN 5554...Small Block Chevy, 350 HEI

PN 5560...Chevy 454, '74-'76 HEI

PN 5561...Chevy 366-454, Socket

PN 5562...Chevy Truck 305-350, '85-0n

PN 5563...'84-'91, Corvette, 350TPI

PN 5564...SBC, Socket Cap, under Manif.

PN 5565...SBC, Socket Dist. Cap over VC

PN 5566...'75-'82, Corvette 305-350 HEI

PN 5567...Chevy 454, '75-On HEI

PN 5568...Chevy C-30, '83-'84 HEI

PN 5569...Chevy 454, '88-0n

PN 5570...Chevy Caprice/Camaro, '88-On

PN 5571...Chevy Pickup, BB EFI, '90-'97

### **CHRYSLER**

PN 5530...'73-0n, 318-360, Socket

PN 5531...'73-0n, 383-440, Socket

PN 5532...Dodge Ram, '94-'97, 318-360

### **FORD**

PN 5540...Ford 351W, 400, 460, '77-0n HEI

PN 5541...Ford 302, 351W, HEI

PN 5542...Ford 351C-460, Socket

PN 5543...Ford 289-302, Socket

PN 5544... Mustang 5.0L, '94-0n

### UNIVERSAL

PN 5550...Multi-Angle Plug, HEI Cap

PN 5551...8 Cyl. Multi-Angle, Socket/HEI

PN 5552...8 Cyl. 90°, Plug/90° Plug

PN 5553...8 Cyl. 90°, Socket/HEI Cap

### STREET FIRE COILS

Street Fire introduces the first two coils of the line with the popular Ford TFI and the GM Dual Connector Coil. These new coils mount directly in place and accept the factory connectors. Improved materials and windings help improve the output of the coils.

Ford TFI Coil - PN 5527
GM Dual Connector Coil - PN 5526

One year warranty!

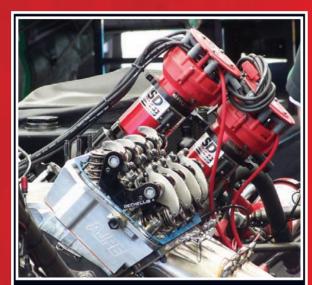


### Pro Mag®

The MSD Pro Mags are known for their incredible power and superior reliability! There are no magnetos that can come close to the performance of the Pro Mag 12 and 44 Amp series magnetos.

Two series of Pro Mags are offered: the Pro Mag 12 for gas and alcohol engines and the 44 Amp version for nitro gulping, ground pounding applications. The Pro Mags burn more fuel, hold the timing solid and are always consistent in their power, leaving more time to tune other aspects of the car.

The entire Pro Mag system, including the external Electronic Points Box and Coil, is designed to perform and endure the harshest of racing situations. Once you feel the Pro Mag difference, you will never go back.



The MSD Pro Mag is designed to deliver incredible power with the durability to handle the abuse of hardcore racing.

For a FREE Pro Mag Catalog, contact MSD at (915) 855-7123 or check out: www.msdpromag.com

### **MAINTENANCE-FREE**

- No Points to Adjust The Pro Mags use a high output magnetic pick-up to fire the magneto
- No Batteries to Replace The Pro Mag creates and uses its own power to run the Electronic Points Box
- Magnets Never Require Recharging Powerful Rare Earth magnets never lose their charge





### Pro Mag 12LT

Designed with Sprint cars in mind, the Pro Mag 12LT offers light weight and incredible power. The compact housing also sits an inch lower for improved clearance of the fuel injection plus features a band clamp mount for easier timing adjustments.

The Electronic Points Box is the brain of the Pro Mag 12. It controls the spark duration and the unique full-power firing sequence of the Pro Mag 12. The energy from the generator is controlled with Field Effect Transistor (FET) technology which is far superior to mags still using points as a trigger source.

Each Pro Mag 12LT is supplied with a bronze gear, band clamp, cap and rotor.

Chevrolet - PN 7908\*

Chrysler SB - PN 7910\*

Ford 351W - PN 7915\*

Ford 351C - PN 7916\*

Band Clamp Mount CW Rotation - PN 8150\*

Band Clamp Mount CCW Rotation - PN 8160\*

Electronic Points Box - PN 8106

The 12 Amp Points Box has a built-in Soft Touch Rev Control that is adjusted with plug-in rpm modules. The smooth rev limiting circuitry will save your expensive engine from overrev damage in the event of driveline failure or missed shifts.

### Pro Mag 44

The Pro Mag 44 is the King of all magnetos. With no points to replace, no magnets to recharge and by producing an amazing 44 amps of primary current, it's no wonder that the 44 is the only choice in nitro-gulping top fuel racing!

The 44 requires an external Electronic Points box to manage the primary current through the accurate triggering of the magnetic pick-up. A special coil is required to handle this hit of current and pumps it up to 50,000 volts with over 1 Amp of energy firing across the plug gap.

For racers with serious boost pressures and fuel, the Pro Mag 44 is the only way to go.

### Pro Mag 44 Generator

Clockwise Rotation - PN 8130\*

Counterclockwise Rotation - PN 8140\*

**Pro Mag 44 Coil PN 8142\*** 

Pro Mag 44 Points Box Standard - PN 8145\*

Pro Mag 44 Points Box with Rev Limiter PN 8147\*

\*Not legal for use or sale on pollution controlled vehicles.

www.MSDIGNITION.com

### MSD DECALS



2"x4" - PN 9300

3.5" x 7.5" - PN 9299

4"x8"-PN 9310

10" x 20" - PN 9301

12" x 24" - PN 9302

Multi-Size - PN 9303

2.25" x 5.5" - PN 9306



4" x 9" **- PN 929**1



2.75" x 6" - PN 9293



4" x 9" - PN 9309



4" x 9" - PN 9296



2.75" x 6" - PN 9311



4" x 9" - PN 9294 2.75" x 6" - PN 9295



6" x 7" - PN 93041

MSD DieCut Decal, 2.5" x 5.5" - PN 9298
MSD DieCut Decal, 4" x 8" - PN 9297

### MSD BANNER

Let customers know you carry MSD Ignition products by displaying our giant 3' x 5' banner inside your store, at the races or during your cruise night. The MSD Banner will give your store that "speed shop" look and will bring attention to the MSD line of products with the red and black MSD logo. There's also a smaller banner available!

MSD Banner, 3' x 5' - PN 9420 Mini Banner, 1' 11" x 2' 11" - PN 9421



MSD EFI Banner, 3'x5' - PN 9422
MSD EFI Mini Banner, 1'm"x2'm" - PN 9423

### HEADER CARDS

MSD Ignition header cards are ideal for peg board displays, plan-o-grams and promotional displays. The Header Cards are available in two versions; flat for direct wall mounting or a self-standing triangle for the top of a gondola. They feature MSD's theme "Performance That Pros Count On" in eye grabbing Red and Black Graphics.

MSD "Performance That Pros Count On" Header, 8" x 2' Flat Mount - PN 9416 MSD "Performance That Pros Count On" Header, 8" x 2' Triangle Mount - N 9417

### MSD 2008 CATALOG CD

This CD is full of text and product photos and will come in handy to help our dealers when doing catalog ads and websites. PC and Mac Compatible.



MSD Catalog CD - PN 9606 Our Technical Notes are written to clarify common ignition-related questions and concerns that our Customer Support Department and field representatives receive. Each Tech Brief is designed to help our customers understand the operation of ignition components better so they can improve the performance of their own ignition system. There are a variety of subjects to choose from. For a copy, call our Customer Support Department, (915) 855-7123.

# MSD Wiring Diagrams and Tech Notes

### MSD Wiring Diagrams and Tech Notes Book - PN 9615 Wiring CD - PN 9607

No race garage or trailer should be without this MSD bible. This comprehensive book covers current MSD components and shows you how to install them to a variety of different engines and ignition systems. There are pages of technical information including specifications, coil applications, wiring tips and troubleshooting. Countermen will find this book extremely helpful when customers are searching for an ignition system or asking tough technical questions.



### **Rotor Phasing - FRM 28392**

The importance of rotor phasing and how to check it.

# Radio and Electronic Noise - FRM 23758

How to recognize and prevent frustrating radio and engine electronic noise.

### Timing Lights - FRM 14056

Everything and even more that you need to know about timing lights.

# Top Ten Ignition Questions - FRM 19955

Complete answers to our most asked questions.

### MSD and Batteries - FRM 14046

What to use and how to use it.

### Magnetic Pick-Up Tips FRM 28388

Suggestions to help you get the most from your magnetic pick-up.

### **CATALOGS AND BROCHURES**

MSD also offers a variety of products for specialty markets and has brochures to supply more information to each market.

### MSD Mini Catalog - PN 9610

This pocket sized catalog gives customers a look at a variety of MSD's product line.

### Racepak G2X - FRM 28968

Advanced and affordable GPS based Data Acquisition.

### MSD for GM Gen-III - FRM 28835

Everything MSD offers for LSX based engines!

### **Apparel Brochure - FRM 25750**

Check out our latest offering in hats, shirts and jackets!

# 8.5mm Super Conductor Wire Brochure - FRM 25373

This full-color brochure covers most of the 8.5mm applications and shows all of the performance features of this great plug wire.

### MSD Pro Mag Catalog - FRM 28203

This catalog is full of race winning MSD Pro Mag information including parts, technical information and specifications.

### **HEI Distributor - FRM 23750**

### MSD Offroad Brochure - FRM 18071

Components designed for serious off-road applications.

### Marine Brochure - FRM 14051

A close look at our U.L. approved products for your boat.

### Digital-6 Plus Ignition - FRM 20000

Technical info on our new Digital-6 Plus Ignition Control.

# MSD Sport Compact and Import FRM 27553

Highlights our new line of ignition components designed specifically for small displacement, high-revving engines.



### EMPTY BOX PLAN-O-GRAM

One of the best ways to boost your MSD product sales is to maximize the amount of exposure your customer receives from MSD products. With the MSD Plan-O-Gram Display you can do just that by putting MSD Packaging directly in front of your customers! The MSD Plan-O-Gram will generate sales for you and is available to MSD dealers at no cost. The Plan-O-Gram is supplied with empty boxes for MSD Ignition Controls, Spark Plug Wire, Billet Distributor, carded coil and accessories plus a 8" x 2' header card. It measures approximately 2' x 4' and comes with information cards.

### MSD Plan-O-Gram, 2'x4'-PN 9444

### Spark Persuader

The Spark Persuader actually runs the ignition while your customer controls the rpm. A spark jumps from a Blaster Coil to a terminal that can be opened to simulate increased cylinder pressures. With the flip of a switch you can see and hear the difference between a stock spark and the power of an MSD spark! There is also a terminal strip on the back of the unit to easily connect a customer's ignition for testing.

### Spark Persuader - PN 9200

### MSD STOCK CAR

This limited edition die cast 1:24 scale Monte Carlo features fine detailing right down to the redundant MSD Ignition Controls on the transmission tunnel. Perfect for any collection.

### MSD Stock Car - PN 9395

### MSD CAPS AND BEANIES

A cap with the MSD logo displayed prominently on the front is just what you need to stay cool and look sharp at those hot races. Comes with a sewn-in adjustable strap so that one size fits all. Keep your noggin warm on those cool nights at the races with an MSD Beanie!

### **MSD BASEBALL CAPS & BEANIES:**

Black Twill - PN 9342

Two Tone (Natural and Black) - PN 9344

Khaki with buckle closure - PN 9351

Black with Patriotic Flames - PN 9352

Black with Red Flames - PN 9353

Red Beanie - PN 9354

Black Beanie - PN 93541

### MSD HAT PIN

The MSD Hat Pin is a precision die-struck pin with the MSD Ignition logo permanently embedded in the popular MSD Red and Black colors. Trimmed in gold finish for that extra special look and poly-coated for wear resistance, the Pin is supplied with a military clutch fastener.

### MSD Hat Pin - PN 9313

### MSD APRON

Ideal for working on your engine or to protect your clothes while barbecuing after a successful day at the races. A special blend of cotton/polyester with duracote finish makes this apron super durable. MSD logo displayed proudly on the front. One size fits all.

### MSD Apron Red - PN 9328

### MSD GAL KEY CHAIN

You would think this miniature MSD 6AL would run a model plane engine, but instead it will hold your keys.

Key Chain - PN 9390

NAL would run a model plane engine, but

www.MSDIGNITION.com



# Available at www.msdignition.com.

MSD T-SHIRT

Let everyone know that you use the best ignition components available with these high quality, 100% cotton MSD T-shirts. There are several designs available; stock car, sprint cars, pro street and drag racing.



### T-SHIRTS

A. RACING, WHITE Child, 6-8 - PN 93571 Child, 10-12 - PN 93581 Child. 14-16 - PN 93591 Adult Medium - PN 9541 Adult Large - PN 9542 Adult XL - PN 9543

**B. RACING, BLACK** Adult Medium - PN 95416 Adult Large - PN 95426 Adult XL - PN 95436 Adult XXL - PN 95446

C. STREET CAR Adult Medium - PN 95411 Adult Large - PN 95421 Adult XL - PN 95431 Adult XXL - PN 95441

**D. DRAG RACING** Adult Medium - PN 95412 Adult Large - PN 95422 Adult XL - PN 95432 Adult XXL - PN 95442

### E. SPORT COMPACT

Adult Medium - PN 95413 Adult Large - PN 95423 Adult XL - PN 95433 Adult XXL - PN 95443

F. PRO MAG, WHITE Adult Medium - PN 95414 Adult Large - PN 95424 Adult XL - PN 95434 Adult XXL - PN 95444

G. PRO MAG. BLACK Adult Medium - PN 95415 Adult Large - PN 95425 Adult XL - PN 95435 Adult XXL - PN 95445

### H. BLACK "FASTEST ON THE STRIP" SHIRT

This shirt is subtle and stylish and features the MSD Fastest on the Street-Fastest on the Strip logo on the sleeve.

Medium - PN 95314 Large - PN 95324 XL - PN 95334 XXL - PN 95344

### BLACK POLO

You'll be stylin' in the MSD polo shirt at the races, in the office or on the golf course. The shirts are 100% combed cotton material so they'll stay soft and looking good even after numerous washes. Adult sizes only.

Large - PN 93270 X-Large - PN 93271



### **DENIM LONG** SLEEVE

Н

Stitched from high quality cotton denim material and has the MSD Ignition Racing logo embroidered above a handy pocket.

Small - PN 9379 Medium - PN 9380 Large - PN 9381

XL - PN 9382 XXL - PN 9383

### MSD PATCH

The MSD Patch is the perfect way to let everyone know that you and your team use the best ignition system available. Ideal for firesuits, jackets, hats of all types and other sportswear, the MSD Ignition Patch can easily be sewn onto all types of materials, and is completely washable. The revised patch is embroidered in bright red, black and white and measures 2" x 4.5"

MSD Patch, 2" x 4.5" - PN 9312



### Retro T-Shirt

Go Retro! While most of MSD's hottest new products are state of the art, these new T-Shirts are strictly old school. Based on an idea by our Graphic Designer Robert Martin, these great shirts feature the original MSD logo and are guaranteed to make you the coolest cat at the track! Available in Medium through XX-Large.

### **Retro T-Shirts**

Medium - PN 95417

Large - PN95427

X-Large - PN 95437

XX-Large - PN 95447



### LIGHT WEIGHT JACKETS

These wind breakers will keep you warm whether you're sitting up in the stands or walking through the pits. The black nylon supplex material is divided with sharp red and white stripes and the MSD logo is embroidered across the back and on the front. A high collar will protect your neck from sudden gusts and there is elastic around the sleeves and waistband ensuring a good fit.

# LIGHT WEIGHT JACKET ADULT SIZES ONLY.

Medium - PN 9360

Large - PN 9361

X-Large - PN 9362

### MSD SWEATSHIRT

Stay warm with our super soft, cotton

sweatshirt! The MSD logo is embroidered on the front and will keep you cozy!

# MSD BLACK SWEATSHIRT ADULT SIZES ONLY.

Medium - PN 9384

Large - PN 9385

X-Large - PN 9386

XX-Large - PN 9387

# LONG SLEEVE T-SHIRT ADULT SIZES ONLY.

Small - PN 9373

Medium - PN 9374

Large - PN 9375

X-Large - PN 9376

XX-Large - PN 9377







### www.RACEPAK.com

Racepak with MSD Ignition. Could you think of a better combination? This is a match made in racing heaven. Racepak is the leader in performance data acquisition systems and also offers components to the powersports market. In fact, we've worked closely with Racepak on Top Fuel Dragsters and Funny Cars for many years.

With a 20 year history of data acquisition that began with a single data logger on a Fuel Funny Car, Racepak has expanded their product line to include data loggers for most every form of motorsports. The Avenger series data loggers lead the way in snowmobile and watercraft acquisition systems, while the extremely popular V300 and V500 systems are utilized in virtually every class of drag racing along with pulling, dyno and industrial systems. These Vnet series of data loggers provide the

unique ability to utilize a single cable to transmit the data from up to 32 sensors, while also interfacing with Racepak's lineup of gauges. The Pro Series systems are the choice for blown and unblown nitro and alcohol applications.



In keeping with this trend of cutting edge development, in the late 1990s, Racepak introduced the use of GPS-based data acquisition systems to NASCAR and other top level racing sanctions. This has led to the development of GPS-based data systems for circle track, road racing, boat racing, autocross and other forms of motorsports that require mapping and timing data using GPS information.



Racepak's advanced technology in acquisition and cutting edge electronic data information is going to lead to other exciting new ignition and electronic products. Combined with MSD's experience in motorsports and ignitions, this is a combination that will help racers stay on the leading edge of performance!

Race Pak's V300SD and V500 Series Data Logger systems are used in a variety of motorsports. These systems use a single cable to relay data from up to 32 sensors.



www.SUPERCHIPS.com

Superchips, the leader in plug-in tuning for your late model domestic car or truck, was welcomed into the MSD performance electronics family in early 2005. This combination is already working to bring more advanced electronics and tuning to the performance industry.

Superchips provides the easiest way to improve your late model's performance through advanced drivetrain tuning. We're talking overall performance, from idle to full throttle, including transmission adjustments. A Superchips calibration is created with years of experience and many hours of testing on dynos and you can feel the difference as soon as you plug one in! These calibrations improve power, up to 12%-hp in gas vehicles, with up to 150-hp gains in turbo diesels! But it's not just the numbers, it's the overall driveability benefits that really shine. Less downshifting while pulling steep hills, improved midrange pull and quick throttle response are all benefits that arise from a Superchips Tune. This can also lead to gains in fuel efficiency and all round performance benefits.

- Plug-in Performance without opening the hood
- Up to 150 hp on a diesel, 12% improvements on gas engines
- Models available for most domestic late model applications



# FRODUCTS

www.EDGEPRODUCTS.com

Since its inception, Edge has been known for the power its modules and programmers produce. Edge Products builds modules that out-perform competitors' chips by using more of the factory ECM signals. Our modules improve performance by monitoring all applicable operating parameters. Edge manufactures modules and programmers for all major truck manufacturers - including Ford, Chevy and Dodge. Extensive monitoring capabilities is what sets Edge's products apart from its competitors. Edge's ability to display multiple engine parameters, and to provide associated safety features for those parameters on its stylish in-cab monitors, has revolutionized the industry. The Edge philosophy is that all products should install in less than ten minutes. The end user should have maximum adjustability and the ability to monitor real time data. Edge is committed to offer the highest quality, the best product on the market, at a competitive price.



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### **RECOMMENDATION FORM**

MSD Ignition

from MSD Ignition.

**NOTE:** Technical information is available by mail, phone or the internet.

| 1490 Henry Brennan Dr.                                       |                                      | 7 a.m 6 p.m. Mountain Standard Time       | <u>)</u>     |
|--|--------------------------------------|---|--------------|
| El Paso, Texas 79936   |                                      | Monday through Friday                     |              |
| Attn: Customer Service Dep                                   | t.                                   | E-mail: msdtech@msdignition.com           |              |
| N  |                                      |   |              |
| Name:  |                                      |   |              |
| City   | Ctat                                 |   | 7in.         |
|  |                                      | e:  | Σιμ:         |
| Tetephone.   |                                      |   |              |
|  | nation below concerning your app     | olication:                                |              |
| Vehicle Model, Make & Year:                                  |                                      |   |              |
|  | H                                    | How many Cylinders:                       |              |
| Computer Controlled? □Y                                      | ∕es □ No                             |   |              |
| Compression Ratio:   |                                      |   |              |
|  | all that apply, list model, brand an |   |              |
|  |                                      | N0 <sub>2</sub> :                         |              |
|  |                                      | Boost Pressure:                           |              |
| What Type of Cam Do You Ha                                   |                                      |   |              |
| _  | Solid Lifter □                       |   |              |
|  | Other (Specify):                     |   | DDM          |
| Type of Exhaust: Stock                                       | Lloadors                             | To<br>Other                               | КРМ          |
| Approx. Weight of Car:                                       |                                      |   |              |
| Transmission Type: Automa                                    |                                      |   |              |
| Stall Speed of Torque Conve                                  | rtor•                                |   |              |
| What Type of Fuel Do You He                                  | se:                                  |   |              |
| mat type of fact be fea of                                   |                                      |   |              |
| 2. How will this engine be                                   | e used?                              |   |              |
| ☐ Economy/Street   |                                      | ☐ Marine: Pleasure ☐ Race ☐               | ☐ Drag Race: |
|  |                                      | ☐ Recreational Vehicle                    | What Class?  |
| <ul><li>□ Performance/Street</li><li>□ Tow Vehicle</li></ul> | ☐ Street Rod                         | ☐ Off-Road                                |              |
|  | ☐ Oval Track: Dirt ☐ Asphalt ☐       | ☐ Other                                   |              |
| •  | •                                    |   |              |
| 3. What type of ignition a                                   | are you currently using:             | Spark Plug Wires:                         |              |
| Distributor:   |                                      | Tachometer:                               |              |
|  |                                      | Accessories, ie. Timing Control, Rev Con  |              |
|  |                                      | Accessories, ic. Tilling control, her con |              |
| 4. Please list any addition                                  | nal information you feel should I    | oe considered for your application.       |              |
|  |                                      |   |              |
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|  |                                      |   |              |

Telephone: (915) 855-7123, Fax: (915) 857-3344

When completed, please mail this form to the address at the top left of page. Additional copies of this form are available

### www.MSDPOWERSPORTS.com

### Now Available Through Your MSD Dealer

MSD has been involved with motorcycles, ATVs, personal watercraft and other recreational vehicles for many years. This line was distributed to a small segment of the industry but it is now available to every MSD dealer! Now you can fire up the power of your performance car as well as your motorcycle! These are just a few of the components and ignition systems available.



### CHARGE SPEED ENHANCER

The Yamaha Rhino is the most popular side-by-side and MSD is making it easy to give you the performance edge over your buddies. The Charge features a direct plug-in installation and will increase your Rhino's speed by up to 10-mph! The housing is compact and sealed to take on the offroad elements.



### LAUNCH MASTER

The MSD Powersports Launch Master is a universal low RPM limiter. It will provide consistent launches and quicker 60-foot times by setting an rpm limit to stage with. Once the green light comes on, release the clutch and take off - but be sure to hold on! The rpm is adjusted with two built-in rotary dials ranging from 1,800 - 9,900 rpm in 100 rpm increments. A handy LED shows when the launch rev limit is active. Available for Coil-on-Plug or Dual Coil Pack engines.



### IGNITION

The V-Series™ Ignition will get your Harley-Davidson® fired up! It allows you to select your own timing curve for a smoother idle and snappy throttle response. You can also choose between single fire or dual fire modes, and it gives you the choice of kick or electric start. A programmable rev-limiter keeps things under control should you miss a shift or break the driveline.



# PROGRAMMABLE SINGLE CYLINDER IGNITION

MSD's Single Cylinder Programmable Ignition gives you flexibility you could never imagine with a single cylinder engine. It is fully laptop programmable and allows you to change timing curves on the fly. Not only do you get great programming abilities, but the Capacitive Discharge design delivers high output sparks! The ignition accepts either a magnetic pickup or a Hall-Effect input. Also included are adjustable launch rpm and rev limiters.

We know that ignitions and electronic products are quite technical and can lead to many questions about installation, recommendations and service. MSD believes that Customer Support is just as important as producing the best ignitions available and we are proud to offer top notch customer support!

Our Customer Support Techs are experts in the automotive ignition world plus they're all enthusiasts! When they're not at MSD or on the road, they're in their garage putting the finishing touches on their own cars. They know first hand the amount of work it takes to build a performance car and understand the need for a clear, straightforward answer to your questions.

MSD Ignition attends every NHRA

National event along with other races and shows across the country every year. We have our own support semi on the road as well as sharing other contingency and truck programs. The Yearwood Speed and Custom trailer travels to many street rod functions while the Jim Conner Racing program displays and promotes off-road racing across the country! Even circle track racers can receive technical assistance at many of the NASCAR Nextel Cup events.

MSD's Support Semi criss-crosses the country following the drag racing circuits. Not only is this semi a rolling warehouse of MSD Ignition products, but it also serves as a state-of-the-art testing facility. At the races and events the trailer attends there are MSD Ignition specialists on hand to assist racers with troubleshooting, testing ignitions and Pro Mag magneto systems or simply to answer any questions.

Being at the races gives us a chance to talk with our customers one on one to answer any product questions you may have about your application. Also, we want your opinions and ideas on how you use our products or what you would like to see. Receiving your input is important to us so we can continue to bring the best performing ignitions available. Next time you're at a racing event, be sure to stop by and say "Hello"!



The MSD Racing Services trailer provides racer support with test equipment and product displays.



MSD offers the best staffed Customer Support Team in the industry!



Jim Conner Racing is at most desert and short course off-road events across the country and supports the MSD Ignition line.



The Yearwood Speed and Custom trailer displays at many street rod events and has many MSD Distributors and Ignitions on hand.

### SERVICE HELP

MSD Techs are available from 7-6 (MST) at 915-855-7123 or you can email your questions to: msdtech@msdignition.com and you'll receive a quick answer! When you buy an MSD, you're buying performance and support!

# THE #1 IGNITION ON THE #1 CARS!



NMRA Pro 5.0/Engine Masters











SCORE Trophy Truck & 1600 Class



NMRA SSO









Formula Drift



SCORE Trophy Truck & CORR Pro-2











































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### Trademarks & Associations

 ${\sf MSD}^{^{\otimes}}$  Ignition Controls, Soft Touch  $^{^{\bowtie}}$  Rev Controls, Pro  ${\sf Mag}^{^{\otimes}}$ , Blaster  $^{^{\bowtie}}$  2 Coil, Blaster  $^{^{\bowtie}}$  3 Coil, Super Conductor® Wires, Heli-Core® Wires, Spark Guard™, Heat Guard™, Weathertight™ Connectors, Flying Magnet  $^{\bowtie}$  Crank Trigger System, Cap-A-Dapt  $^{\bowtie}$  Kits, Pro-Billet  $^{\bowtie}$ Distributors, APS™ Alternator, Digital Propane Injection DPI™, Street Fire®, Lazer Gauge™, 8<sup>™</sup>, MSD 10 Plus<sup>™</sup>, Stacker<sup>™</sup>, Blaster<sup>™</sup>, Pro-Power HVC<sup>™</sup>, Pro Power<sup>™</sup>, Advanced Power System $^{\circ}$ , Slide-Loc $^{\circ}$ , E-Curve $^{\circ}$ , E-Z Adjust $^{\circ}$ , TCD $^{\circ}$ , Two Step Module Selector $^{\circ}$ , Three Step Module Selector™, Dual Crimp™, Pro Crimp™, Pro Clamp™, Ready-to-Run™, Racepak®, Superchips, Edge Products. All other trademarks used herein are the property of their

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