

Inspired by sport compact and touring car racing worldwide, Group-A Autosports, Inc. was founded in 1994 as a racing development and performance parts distribution company, focused on selling highly specialized racing components for small numbers of racing teams and hard-core enthusiasts. In 1998, while remaining true to our racing roots and our passion for performance, we established the Skunk2 Racing line of products to meet the demands for high-quality street-based performance products. Now over a decade later, Skunk2 Racing is pleased to present our 2007 catalog. We thank all of our fans, loyal customers, and team members over the past ten years that have helped make Skunk2 Racing what it is today. We understand that in today's competitive marketplace, enthusiasts have many choices. Unfortunately, many unknowing enthusiasts are often misled by copy-cat and so-called performance companies that loosely use terms like "racing" and "engineering" as part of their marketing. Instead of trying to explain Skunk2's Racing commitment to racing development and product engineering, we felt it would be more effective to show you, as any good company should be able to. Though we are slightly larger than we were a decade ago, Skunk2 Racing is still a dynamic little company driven by the passion of enthusiasts. The images contained within this catalog are a record of our past, present, and future, which stands as a testament of our unwavering dedication to provide sport compact enthusiasts with the best parts possible.

CUNK2 RACING

WELCOME TO



# TABLE OF CONTENTS

# **SKUNK2 INTRODUCTION**

2 Welcome to Skunk2 Racing

6 Skunk2 Product Development

8 Skunk2 Technology Index



# **ENGINE TUNING**

10 Intro

**12** Pro-Series Intake Manifolds

**14** Composite Intake Manifolds

14 Composite Fuel Rails

**15** Throttle Bodies

16 Camshafts

22 Forged Valves

22 Valve Springs

23 Titanium Retainers

24 Cam Gears

25 Hondata / Skunk2 ECU

**25** ECU Conversion Harness

25 VQ35 Plenum Spacer



# **EXHAUST TUNING**

26 Intro

28 Mega Power Exhausts

30 Mega Power Apps

32 Mega Power R Exhausts

33 Universal Mufflers 33 Racing Down Pipes

33 Racing Test Pipes



# SUSPENSION & CHASSIS TUNING

34 Intro

36 Pro-Series Full Coilovers

38 Sport Shock Absorbers

38 Adjustable Coilovers

39 Lowering Springs

**40** Front Camber Kits

**42** Lower Control Arms

43 Rear Camber Kits

**43** Strut Tower Bars

43 Lower Arm Bars





Intro 44

Shift Knobs 46 **Short Shifters 47** 

Forged Lug Nuts 47

**Extended Wheel Studs 47** 

Magnetic Oil Drain Plugs 48 Billet Oil Caps 48

Radiator Caps 48 **VTEC Solenoid Cover 48** 

Cam Seals 48

**Billet Battery Tie Down 49** 

**Billet Wire Cover 49 Brake Reservoir Cover 49** 

**Promotional Products 49** 

# **SPORTSWEAR**

**Short Sleeve 50** Long Sleeve 50

**Sweatshirts** 50

**Hoodies 50** Polo 50

Caps & Beanies 50

# SKUNK2 RACE & PROJECT CARS



**Team Developed 54** 

Project Beta 56 Project Delta 58

SiR v1 60 SiR v2 62

FitR 64

RSX-T 66

**TSX** 68 RR 70

# **SKUNK2 COOK BOOK**

COOK BOOK 72





**Terms & Conditions 75** 

























PRODUCT DEVELOPMENT GROUP-A AUTOSPORTS

As part of our commitment to build the best products, Skunk2 remains actively involved in various forms of motorsports and invests heavily in technology. Our investment in technology and involvement in racing provides

metal alloys, cutting-edge manufacturing methods, and stringent quality control measures. All Skunk2 Racing

products are carefully planned and designed using the latest computer simulation and modeling techniques,

followed by careful testing in controlled laboratory environments using state of the art equipment. Furthermore,

each product is subjected to rigorous road and race testing to ensure proper performance in the most extreme

performance, Skunk2 Racing has established itself as a technology leader and a premier supplier of performance

conditions. By utilizing our broad-base of technical capabilities and constantly pushing the limits of vehicle

parts. For these reasons, top street-cars and race-cars rely on Skunk2 Racing products world wide.

us with the data and equipment necessary to produce high performance parts utilizing innovative design, advanced





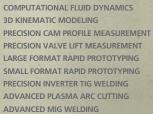


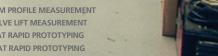


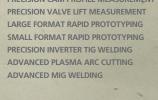
**MULTI-AXIS CNC TURNING** FLOWBENCH TESTING **ENGINE DYNO TESTING CHASSIS DYNO TESTING** 6-AXIS CMM INSPECTION 7-AXIS CMM LASER SCANNING 3D SOLID MODELING

FINITE ELEMENT ANALYSIS

5-AXIS CNC MACHINING



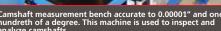












# SKUNK2 TECHNOLOGY INDEX

# MATERIALS

Ultra Lightweight. Ultra High Tensile Strength.



COMPOSITE Aerospace Thermo-Polymer. Ultralightweight. Corrosion Resistant. Does Not Absorb Heat.







# INSTALLATION LEVELS

EASY INSTALL Standard Tools / Minimal Install Time







# PROPERTIES



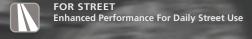




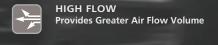
















# REQUIREMENTS



10.5+ HIGH COMPRESSION



<9.5 LOW COMPRESSION Lower Compression Required For Optimum Performance



**EXHAUST UPGRADE** Higher Exhaust Flow Required For **Optimum Performance** 



**FUEL UPGRADE** Requires Injector, Regulator, Or Pump Upgrade For Optimum Performance





Requires Modified Timing / Air-Fuel / Increased **RPM Levels For Optimum Performance** 

# ACHIEVEMENTS



**TOP RATED** Industry Recognized As Top Rated



RECORD PERFORMANCE Used On Skunk2 Record Breaking Race Cars and Project Cars



**SKUNK2 INNOVATION Product Innovated and Made Popular By** Skunk2 Racing



**EDITORS PICK Editor Tested and Recommended** 

# PROCESS



COMPOSITE CASTING Patented Process. Superior Dimensional Tolerances and Minimal Core Shift



Precision OEM Quality Shell Molding, Die Casting, Or Investment Casting



Precision Forgings For Greater Strength and Dimensional Stability



Automatic and Semi-Automatic Advanced
Welding TIG and MIG Technology



CAE ENGINEERING

3D Solid Modeling. Finite Element Analysis Computational Fluid Dynamics. Kinematic Analysis



MULTI AXIS CNC MACHINED CNC Machined Using Advanced 4 Or 5 Axis Machining Requires Expert CNC Programming Capabilities



CNC MACHINED Basic 3 Axis CNC Machining



FLOW TESTED Flow Gains Verified Using Flowbench Testing



Performance and Durability Verified On Engine and/or Chassis Dynamometers



TRACK TESTED Performance / Durability / Quality Tested At The Race Track Under The Most Extreme Conditions



STREET / ROAD TESTED Performance / Driveability / Comfort Tested On The Street In Real World Driving Conditions







# SKUNK2 ENGINE TUNING

Since 1995 we have been developing and innovating high performance engine parts. Such notable innovations include being the first US based sport compact performance company to offer CNC billet machined timing gears for Honda engines in 1995. The first US based performance company to use "chill cast" billet camshafts on Honda engines in 1999. And the introduction of the first "cast" high performance aluminum manifold for Honda engines in 2000. Today we are continuing our tradition of innovation by introducing a new line of engine components made from a proprietary aerospace thermo-polymer and also developing camshafts utilizing our Amax and Fast Ramp technologies.

At Skunk2 Racing, our goal is to provide enthusiasts with products utilizing leadingedge engine technology and advanced manufacturing. As a result of continually pushing our engine development capabilities in the racing world, we often discover many new and exciting "power secrets." These power secrets are then incorporated into the design of our engine products. For over a decade we have been investing heavily to increase our engine development capabilities. By bringing all the design and testing in-house, we are able to develop better products quicker. Today, our engine development ability is recognized and respected in both the performance and racing worlds.

Skunk2 engine parts have powered professional road racing and drag racing cars to numerous track records as well as multiple championships world wide. To make sure power increases and durability are to our standards, all components are tested extensively in-house on the dyno and at the race track. Skunk2 now offers and is actively developing high performance and racing engine parts for Nissans, Subarus, Mitsubishis, and more.



# B-SERIES MANIFOLD

- 64mm Throttle Body Opening That Can Be Port Matched To 75mm
- Increased Plenum Volume
- 8" Tapered Runners For Maximur Torque and Power Increase
- CARB EO Approved

Manifold improves airflow thus increasing horsepower by as much as 8% over stock manifolds on stock engines and even more on modified or forced-induction engines. Skunk2 manifolds significantly

Skunk2 Racing's Pro-Series Intake

PRO-SERIES

INTAKE MANIFOLOS

increase horsepower between 3000-8800 rpm; the broadest powerband increase in the industry. Our new Pro-Series design features a 22% increase in power over our previous design. Engineered with

a larger plenum and tapered runners, Skunk2 manifolds increase and accelerate airflow, and are designed to increase the effects of wave scavenging at the engine's optimum operating RPM range providing a broad overall increase in usable power. Each runner entry is also modified to balance airflow between

cylinders. Oversized throttle bodies can be used as a result of the modified

IAC opening on the flange. Like OEM factory manifolds, Skunk2 manifolds are shell molded and CNC machined, to achieve superior strength, high-quality finish, and a precise fit. Each manifold is vacuum tested to ensure quality and leakfree operation. The Skunk2 Pro-Series manifold utilizes all stock sensors and auxiliaries for a simple bolt-on installation that delivers maximum power.

- Ideal for NA and Forced Induction
- Increased Plenum and Runner Size
- Oversized Throttle Body Opening
- Made From High-Grade 356 Aluminum • OEM Quality Shell Molded Casting
- Nitrous Mounting Bungs Skunk2 Acid-Etched Nameplate
  - Broadest Usable Powerband
  - Vacuum Tested To Ensure Quality
  - Utilizes Stock Sensors

	P
<b>?</b> 🖳	

DESCRIPTION	ENGINE CODE	YEAR	HP GAIN†	TQ GAIN	PART #	CARB EO
D-SERIES	D15B7 / D16A** / D16Z6,Y8	88-00	6-8	5-7	307-05-0260	PENDING
B-SERIES GSR	B18C1-4	94-01	8-10	6-8	307-05-0270	APPROVED
B-SERIES LS/RS	B18A-B	90-01	8-10	6-8	307-05-0280	APPROVED
B-SERIES B16A / TYPE R	B16A-B / B17A / B18C5	88-01	8-10	6-8	307-05-0290	APPROVED
H-SERIES	H22A* / F20B	94-01	10-12	8-10	307-05-0300	RACE ONLY

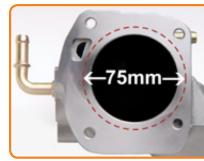
† Horsepower gains may vary due to differences in engine set-up, components, and conditions.

\* Will not work with Prelude SH factory engine management. May not work on H22A/F20B transplants in CIVIC/CRX.

\*\* 88-91 D16A 1.6L SOHC require the use of a 92-00 D16A-Z Fuel Rail.



Above is a dyno chart for the D-Series manifold indicating how the Pro-Series Manifolds show a



Pro-Series manifold for B-Series engines can use throttle bodies up to 75mm without breaking through IAC passage during port matching



All Pro-Series Manifolds include nitrous mounting bungs on the bottom of the runners for Direct Port Nitrous Injection.

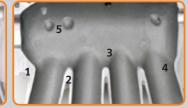
- Ideal For NA and Turbo Applications
- Large 62mm Throttle **Body Opening** Tapered 9" Runners and
- Large Plenum For Optimum • For Use With VTFC and
- Non-VTEC D-Series SOHC Engines
- CARB EO Pending

- Eliminates Secondary **Butterflies For Improved Air** Flow and Horsepower
- Large 66mm Throttle Body Opening That Can Be Ported To 75mm
- Outperforms Euro-R Manifold By Up To 8 HP and 6 TQ at Wheels
- Large Tapered 9-1/4" Runners For High-volume and Balanced Flow
- Not Compatible With Civic/CRX Engine Transplants
- Not Compatible With Prelude SH Factory ECU
- Not CARB Exempt. FOR RACING USE ONLY!

# SKUNK2 VS CLONE MANIFOLDS

There are many unscrupulous companies advertising their products as "same as Skunk2", and unknowing buyers actually believe that these clone products are the same with the only difference being the name. These clone companies know they are selling an inferior product, and actually resort to spreading ridiculous misinformation such as "their aluminum absorbs less heat; therefore stays cooler". We thought we would take this opportunity to show consumers the HARD FACTS why clone manifolds are NOT the same as Skunk2. The images we are presenting are raw photographs taken from randomly selected "off the shelf" products. If there is doubt about the authenticity of the information being presented, we invite all to do a side by side comparison on your own, or visit www.Skunk2.com for more detailed comparison photos and information.





Skunk2: 1) Smooth transition from throttle body to runner #4. 2) Smooth transition between runners, designed like an airfoil for better flow, notice how the entry of each runner is tapered like an air horn. 3) Smooth transition between plenum and runner; indicated by absence of dark shadows. 4) Smooth transition from end of plenum to runner essary protrusions into plenum.

| Skunk2: 1) Has smooth transitions from plenum to runners and clean parting lines. 2) IAC opening and passageway tas been reduced to accommodate larger throttle bodies up to 66-off/reverse tapered (especially 2 end runners). 3)

| Abrupt transitions between plenum and runner; indicated by absence of dark shadows. 4) As mooth transition from end of plenum to runner and clean parting lines. 2) IAC opening and passageway can only transition between plenum and runner; indicated by absence of dark shadows. 4) Abrupt transition from end of plenum to runner and clean plenum to runner and clean passageway has been reduced to accommodate larger throttle bodies up to 66-off/reverse tapered (especially 2 end runners). 3)

| Abrupt transition between plenum and runner; indicated by absence of dark shadows. 4) Abrupt transition from end of plenum to runner and clean passageway as been reduced to accommodate throttle bodies up to 66-off/reverse tapered (especially 2 end runners). 3)

| Abrupt transition between runners and clean parting lines. 2) IAC opening and passageway can only transition from throttle bodies up to 75mm. User will easily be able to port match opening and smoothly blend back into the plenum without the risk of breaking through the IAC passage.









Skunk2: Each Skunk2 Pro-Series manifold features an acid etched stainless steel nameplate and superior consistent smooth finish. Skunk2 uses a high quality virgin and finish. Skunk2 uses a high quality virgin and finish. While marginally heavier, using a denser high quality heavier, using a denser high quality transmitsely the state of the same of the same of the manifold including a denser high quality transmitsely the same of the same of the same of the manifold including a chining process. This black streaking is oxidation to make high quality products as used to clean the manifold are not demanded by Skunk2. Great care is rinsed off properly. The large burr taken to properly finish and machine is a result of poor materials and machine and content of the manifold including a clear of the manifold. usually recycled, aluminum being used.

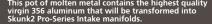




















1	MAKE	DESCRIPTION	ENGINE CODE	PART #
	HONDA	GSR	B18C1-4 (1.8L VTEC)	TBA
	HONDA	LS/RS	B18A-B (1.8L NON VTEC)	TBA
	HONDA	B16A / TYPE R	B16A-B, B17A, B18C5 (1.6-1.8L VTEC)	TBA
	HONDA	K-SERIES	K20A2-3,Z1 / K24A1-4 (2.0-2.4L iVTEC)	TBA
	HONDA	S2000	F20C, F22C (2.0-2.2L VTEC)	TBA
	MITSU	EVO VIII/ECLIPSE	4G63BT 2.0L DOHC	TBA
	NISSAN	350Z / G35	VQ35 3.5L RWD / AWD ONLY	TBA

# SKUNK2 COMPOSITE TECHNOLOGY

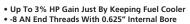
Skunk2 introduces its new series of composite intake manifolds and fuel rails. Skunk2's new composite components are made using a proprietary casting process, from a carbon reinforced aerospace thermo-polymer composite that is 33% lighter, 60% stronger, and runs up to 100°F cooler than aluminum. Keeping the air and fuel cooler results in a significant increase in horsepower and torque. This composite is also chemical resistant to all types of fuels including alcohol.



# SKUNK2 COMPOSITE MANIFOLD

Skunk2 composite intake manifolds are superior to even the best ported aluminum manifolds on the market. Skunk2 manifolds feature High-Velocity Balanced Runners for unparalleled power. Each manifold is designed using the latest in 3D modeling and CFD simulation software, and then verified on the dyno to guarantee maximum torque and horsepower.

Using a patented process, which eliminates core shift and internal stresses, Skunk2 is able to cast parts within a dimensional tolerance of +/-0.003"; in other words, Skunk2's "as cast" runners are more accurate than CNC ported manifolds. To further enhance air flow and fuel distribution, Skunk2 can cast-in varying surface finishes, from glass smooth to golf-ball dimple rough, all within the same runner.



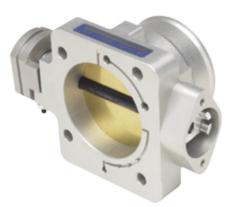
- Can Support Up To 1200 HP
- Can Be Used With Stock Fuel System
- Chemical Resistant To All Fuels Including Alcohol

# SKUNK2 COMPOSITE FUEL RAIL

Skunk2's new cutting-edge composite fuel rails are made using our proprietary carbon impregnated aerospace thermo-polymer composite. This material insulates the fuel from both radiant and conductive heat transfer under the hood. Keeping the fuel cooler results in an increase in horsepower and torque. We have seen power gains of up to 3% in real world testing. Skunk2 composite fuel rails feature a large 0.625" internal bore with radius inlets to the injectors thus improving flow characteristics. This type of radius injector inlet design is not possible with extruded and drilled aluminum fuel rails (which have sharp angles internally where the main bore meets the injector bores). Skunk2 fuel rails can be used with factory fuel lines and fuel regulators.

MAKE	MODEL	ENGINE CODE	YEAR	PART #
HONDA	B-SERIES	B16A,B / B18A-C (1.6L,1.8L DOHC VTEC, 1.8L DOHC)	88-01	TBA
HONDA	D-SERIES	D16Z6,Y8 (1.6L SOHC VTEC)	92-00	TBA
HONDA	K-SERIES	K20A2-3,Z1 / K24A1-4 (2.0 - 2.4L iVTEC)	02-06	TBA
HONDA	S2000	F20C, F22C (2.0 - 2.2L DOHC VTEC)	00-06	TBA
MITSUBISHI	EVO	4G63BT 2.0L DOHC	95-06	TBA
NISSAN	350Z / G35	VQ35 3.5L RWD / AWD ONLY	03-06	TBA
SUBARU	WRX/STI	EJ20 / EJ25	00-06	TBA





# PRO-SERIES THROTTLE BODY

The Skunk2 Racing Pro-Series Billet Throttle Body increases horsepower and torque by optimizing airflow to your engine. On forced induction applications, this quick bolt-on has shown gains of 50+HP. On high-output naturally aspirated engines, we have seen gains of 10+ hp. Our larger bore throttle bodies are capable of flowing enough air to support over 1000 hp. Skunk2 Pro-Series throttle bodies are precision CNC-machined from forged AL6061-T6 billet aluminum, vacuum tested, and hard anodized for increased durability. With greater reliability and smoother operation, Skunk2 throttle bodies exceed industry standards. We've eliminated the factory water lines for cooler operation and each throttle body features a serialized Skunk2 nameplate to ensure authenticity.



- High Flowing Large Bore Capable Of Supporting 1000 HP
- Gains As High As 50+ HP On Forced Induction Applications
- Durable and Corrosion Resistant Hard Anodized Finish • Uses Factory Throttle Cable
- CNC Forged AL6061-T6 Billet Aluminum
- Sealed Bearings For Smooth Operation
- MAP Sensor Relocated To Bottom side For Cleaner Look • Eliminates Factory Waterlines For Cooler Operation

DESCRIPTION	ENGINE CODE	YEAR	60MM	66MM	68MM	70MM
D-SERIES	D15B7 / D16A / D16Z6 ,Y8	88-00	309-05-0020	309-05-0030	309-05-0040	309-05-0050
B-SERIES	B16A,B / B17A / B18A-C	88-01	309-05-0020	309-05-0030	309-05-0040	309-05-0050
H-SERIES	H22A / F20B	94-01	309-05-0020	309-05-0030	309-05-0040	309-05-0050
K-SERIES	K20A2-3,Z1 / K24A1-4	02-06	-	-	309-05-0070	309-05-0080
S2000	F20C / F22C	00-06	309-05-0020	309-05-0030	309-05-0040	309-05-0050
EVO / ECLIPSE	4G63BT	95-06	-	-	TBA	TBA
WRX / STI	EJ20 / EJ25	00-03	-	-	TBA	TBA



Pro-Series throttle body design has moved the MAP sensor mounting to bottom for cleaner installation.

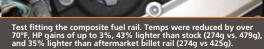


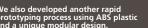
The factory throttle cable is utilized for easy and convenient installation, and reliable operation.



Pro-Series throttle bodies feature a serialized













Large 0.625" internal bores

help dampen injector pulsa-tions and can support up to

mooth interior finish and radiused injector outlets are not possible with extruded and machined aluminum

1200hp. Radiused injector inlets for maximum fuel flow.





# SKUNK2 CAMSHAFTS

Skunk2 camshafts deliver unparalleled power as a result of continual, extensive development and testing. Skunk2 camshafts maximize power across the entire RPM band. This is achieved by utilizing advanced manufacturing techniques and the latest computerized simulation and modeling design techniques. Our proprietary Amax and Fast Ramp Technologies maximize area under the lift curve and reduce seat timing which maximizes torque and cylinder pressure. These technologies allow greater gains without compromising reliability and valvetrain stability. Skunk2 Racing designs, develops and tests all of our camshafts in-house to ensure the highest quality and performance gains. Each camshaft uses newly revised camshaft blanks that have increased torsional strength, improved durability characteristics, and reduced frictional effects. They are ground to exact Skunk2 specifications using state-of-the-art CNC cam grinding machines equipped with cubic boron grinding wheels and feature a hardened wear-resistant lobe and outer surface. Skunk2 camshafts are available in our Tuner Series line and our Pro-Series line of racing camshafts, each offering exceptional performance, reliability, and quality.













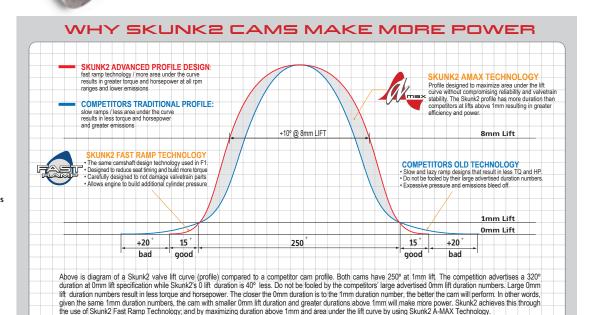


# CAMSHAFT REQUIREMENTS & RECOMMENDATIONS

- SVT OK to use Stock
- V Forged Valves
- R Titanium Retainers
- CA CARB Approved
- HC High Compression DVP Deep Valve
- PS Pro-Series Valve Springs
- VS Tuner Valve Springs FPR Fuel Pressure
- Regulator and/or **Fuel Injectors**
- VTC VTEC Controller
- ME Modified ECU H Header
- AE Aftermarket ECU

See REQUIRED and RECOMMENDED umns on cam application charts.

16



# PRO-SERIES DOHC VTEC CAMSHAFTS

Skunk2 Pro-Series professional line of racing cams are designed to optimize mid-range and top-end HP and TQ; and significantly reduce lap times. VTEC crossover is seamless allowing for the broadest possible powerband. No other line of racing cams can even come close to the performance of the Pro-Series line.

Pro-Series patent pending camshaft profiles dramatically improve horsepower, torque, engine response, and valvetrain stability. The Pro 1 cam is the BEST ALL-AROUND STREET CAM and dramatically improves horsepower, torque, engine response, and valvetrain stability. Pro-Series camshafts feature a seamless crossover between low and high speed cam lobes with patent pending profiles defined by specific lobe shapes as well as specific characteristics of lift, velocity, and acceleration. Pro-Series cams are all designed utilizing Skunk2's proprietary Fast Ramp Technology and Amax Technology. Use of these two technologies allows us to design aggressive camshaft profiles that maximize area under the valve lift curve without adversely affecting valvetrain stability or reliability. In fact, the use of Fast Ramp and Amax Technologies actually makes Pro-Series camshafts more stable and less prone to spring surge at high rpms. Pro-Series camshafts also feature our newly revised camshaft blanks that have increased torsional strength, improved durability characteristics, and reduced frictional effects; all of which are the reasons why Pro-Series camshafts are superior to all other cams. Pro-Series camshafts are available in Pro 1, Pro 2, and Pro 3 designs.

Pro 1: High Lift Street/Race cam designed to optimize mid-range and top end HP and TQ. Peak power is designed to occur at factory redline. Pro 1 cams also perform great in high-output turbo racing engines. Valvetrain upgrade required. Pro-Series valvetrain recommended.

Pro 2: High Lift Street/Race cam designed to optimize mid-range and top end HP and TQ. Peak power is increased and power band is moved 700rpm higher than Pro 1. Pro-Series valvetrain required.

Pro 3: Extreme Street/Race cam designed to optimize mid-range and top end HP and TQ. Peak power is increased and power band is moved 700rpm higher than Pro 2. No other high rpm racing cam can come close to the Pro 3. Pro-Series valvetrain required.



"I've dynoed over 30 different VTEC cams from Japan, UK, and USA. The Skunk2 Pro-Series cams are the best I've ever seen! ...the flat torque curve is amazing

# - Don Flores, DFE Enterprises

"Skunk2 did its homework with these new camshafts. That should get the blood pumping in all you Honda and Acura fanatics out there.

- Import Tuner Magazine



# B-SERIES PRO (B | 6A-B / B | 8C | 1.6 - | 1.8L DOHC VTEC)

PART NAME	PART #	INTAKE DUR/LIFT	EXHAUST DUR/LIFT	INT CENTER (ATDC)	EXH CENTER (BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED
PRO 1	305-05-5140	264° / 12.6	264° / 11.9	98 +1.5	105 +2	.007" / .008"	15-20	18-22	1500-9000	VS, R	HC, FPR, VTC, ME, PS
PRO 2	305-05-5145	270° / 12.8	276° / 12.0	99 +1.5	106 +2	.007" / .008"	20-25	18-22	1500-9400	VS, R	HC, DVP, FPR, VTC, ME, PS
PRO 3	305-05-5150	277° / 13.0	284° / 12.4	100 +1	104 +1.5	.007" / .008"	25+	18-22	1500-9800	VS, R	PS, HC, DVP, FPR, VTC, ME, PS

# H-SERIES PRO (H22A / F20B 2.0 - 2.2L D0HC VTEC)

PART NAME	PART #	INTAKE DUR/LIFT	EXHAUST DUR/LIFT	INT CENTER (ATDC)	EXH CENTER (BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED
PRO 1	305-05-5200	264° / 12.6	264° / 11.9	98 +1.5	105 +2	.007" / .008"	15-20	18-22	1500-9000	VS, R	HC, DVP, FPR, VTC, ME, PS
PRO 2	305-05-5205	270° / 12.8	276° / 12.0	99 +1.5	106 +2	.007" / .008"	20-25	18-22	1500-9400	VS, R	HC, DVP, FPR, VTC, ME, PS
PRO 3	305-05-5210	277° / 13.0	284° / 12.4	100 +1	104 +1.5	.007" / .008"	25+	18-22	1500-9800	VS, R	HC, DVP, FPR, VTC, ME, PS

NOTE: Quick Settings using Skunk2 Cam Gears are shown in RED. These are approximate settings in terms of marks on the cam gear. Actual settings may differ with various deck heights and valve sizes. It is the users obligations to check all piston-valve and valve-valve clearances. ALL PRO-SERIES CAMS ARE FOR OFF-ROAD USE ONLY! Never To Be Used On Pollution Controlled Vehicles Or On Public Highways

# PRO-SERIES IDLE TUNING TIPS

Skunk2 Pro-Series professional line of racing cams were designed to optimize mid-range and high-rpm HP and TQ; and provide a seamless transition from the low-speed cam lobe to the high-speed cam lobe. In order to achieve that, we made the low-speed lobes much larger, which results in more overlap and lower and less consistent vacuum at idle. When the ECU sees this lower vacuum, it tries to compensate by enriching the fuel mixture making the car idle rough. In order to make the engine idle smoothly, it is necessary to reduce the fuel by 20%-30% in the 0-1500 rpm range of the fuel map. To get the smoothest idle possible, we recommend tuning by throttle position. Please note that if the cams are not degreed in to their proper position, it may make getting the car to idle more difficult; therefore in order to optimize power output and minimize idling and clearance issues, we recommend that all Pro-Series cams be degreed in

For more information on how to degree camshafts and on cam timing go to page 21. For more information on cam centerlines go to page 73







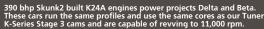












210+ whp Skunk2 built B16A engines, using Tune

head geometry must be me modelled in the CAD syster

# TUNER SERIES CAMSHAFTS

Skunk2 Tuner Series camshafts retain factory idle quality and low speed emissions and also significantly increase HP and TQ. When applicable, the VTEC crossover from primary to secondary is more dramatic for that classic VTEC surge. Many of the Skunk2 Tuner Series camshafts also feature Fast Ramp and Amax Technology which allow the engine to build more torque at lower rpms. Tuner Series camshaft profiles are less aggressive than our Pro-Series Camshafts and are designed to place more emphasis on idle quality and emissions. Tuner Series cams use the same high quality cores as our Pro-Series camshafts and are ground on the same CNC cam grinding machines equipped with CBN grinding wheels. Tuner Series camshafts are ideal for both daily street driven and racing engines.

- Stage 1: Street/Race cam designed for stock engines with bolt-on modifications. Also good for supercharged applications and aggressive turbo applications. Upgraded valvetrain recommended, but not required.
- Stage 2: Street/Race cam designed for engine with free-flowing intake and exhaust tracts, increased compression, and upgraded valvetrain.
- Stage 3: Street/Race cam designed for engines that require the top-end power to carry into higher rpms than what is possible with Stage2 cams.
- Turbo 1: Street Turbo cam designed for lower boost, low rpm levels 5-10 psi. Ideal for basic street legal turbo kits.
- Turbo 2: Street/Race Turbo cam designed for medium boost levels 10+ psi and slightly higher rpms. Ideal for custom turbo applications and supercharged applications.





# **B-SERIES DOHC VTEC CAMSHAFTS**

These are the classic Skunk2 camshafts that we first introduced to the tuner market in 1999. Vehicles equipped with Skunk2 tuner camshafts have been dominating the streets and the tracks for almost a decade. To this day our B-Series Stage 1 camshaft is the only CARB approved street legal performance camshaft in the world. The Stage 2 camshaft has reached legendary status in the tuning world. And the Stage 3 camshaft has powered Skunk2 racing cars to numerous road racing and drag racing wins. Also for 2007, the Turbo 1 and Turbo 2 camshafts have been created to offer unparalleled performance for Street Turbocharged vehicles and feature Fast Ramp and Amax Technology. All of our B-Series cams are machined from high-strength chill cast billets using a Skunk2 proprietary iron alloy. The performance of our B camshafts is further improved when used with a Skunk2 intake manifold, valvetrain, and cam gears.

B16A-B, B17A, B18C 1.6-1.8L DOHC VTEC (CIVIC / INTEGRA)

PART NAME	PART #	INTAKE DUR/LIFT	EXHAUST DUR/LIFT	INT CENTER (ATDC)	EXH CENTER (BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED
STAGE 1*	305-05-0140	264° / 11.9	259° / 11.0	97 +0	103 +0	.007" / .008"	10-15	12-16	1500-8500	SVT	FPR
STAGE 2	305-05-0145	275° / 12.4	270° / 11.9	94 +2	112 +2	.007"/.008"	15-20	16-20	1500-9000	VS, R	FPR,VTC
STAGE 3	305-05-0150	272° / 12.8	280° / 11.9	100 +1.5	105 +1.5	.007"/.008"	20-25	16-20	1500-9800	VS, R	HC, DVP, FPR, VTC, AE, PS
TURBO 1	305-05-0156	223° / 10.4	227° / 10.0	100	106	.007"/.008"	15+	20+	1500-8000	SVT	VS, R
TURBO 2	305-05-0157	231° / 11.0	236° / 10.6	104	110	.007"/.008"	25+	40+	1500-8500	SVT	VS, R

<sup>\*</sup> CARB Approved



# H-SERIES DOHC VTEC CAMSHAFTS

Skunk2's H-Series Tuner camshafts are based on the same proven profiles used on our B-Series camshafts. The Stage 1 and Stage 2 profiles are based off of camshaft profiles that were designed for Honda Prelude Pace Cars that we then modified to make more friendly for the street. New for 2007 is the introduction of the Turbo 1 and Turbo 2 camshafts that are optimized for engines running up to 8000rpm at 15psi of boost or less. All of our H-Series cams are machined from high-strength chill cast billets using a Skunk2 proprietary iron alloy. The performance of our H camshafts is further improved when used with a Skunk2 intake manifold, valvetrain, and cam gears.

H22A, F20B 2.0-2.2L DOHC VTEC (PRELUDE / ACCORD)

PART NAME	PART #	INTAKE DUR/LIFT	EXHAUST DUR/LIFT	INT CENTER (ATDC)	EXH CENTER (BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED	
STAGE 1	305-05-0200	264° / 12.3	266° / 11.3	97 +0	104 +0	.007" / .008"	10-15	12-16	1500-8500	SVT	FPR	
STAGE 2	305-05-0205	272° / 12.8	280° / 11.9	100 +2	105 +2	.007" / .008"	15-20	16-20	1500-9000	VS, R	FPR, VTC, AE	
TURBO 1	305-05-0216	223° / 10.4	227° / 10.0	100 +1.5	106 +1.5	.007" / .008"	15+	20+	1500-8000	SVT	VS, R, FPR	
TURBO 2	305-05-0217	2310 / 11 0	2360 / 10 6	104	110	007" / 008"	25+	40+	1500-8500	SV/T	V/S R EPR	

NOTE: Quick Settings using Skunk2 Cam Gears are shown in RED. These are approximate settings in terms of marks on the cam gear. Actual settings may differ with various deck heights and valve sizes. It is the

SOME TUNER CAMS ARE FOR OFF-ROAD USE ONLY! Never To Be Used On Pollution Controlled Vehicles Or On Public Highways. It is the responsibility of the end-user to check local and state laws for compliance.



# K20A2 DOHC VTEC CAMSHAFTS

Skunk2 leads the way in K-Series engine development. Skunk2 K20A2 camshafts are the direct result of our K-Series drag racing and road racing efforts. Tuner series cams for K engines feature Fast Ramp and Amax profile technology which allows us to significantly increase overall performance and unmatched response from idle to redline. These camshafts feature ultra high-strength hollow iron alloy camshaft cores and cutting edge profile design. In addition to all of our project cars and race vehicles, Skunk2 K camshafts are being used by top road racing and drag racing teams worldwide.

K20A2, K20Z1, K24A2 2.0-2.4L DOHC iVTEC (CIVIC-R / INTEGRA-R / RSX-S / ACCORD-R / TSX)

PART NAME	PART #	INTAKE DUR/LIFT	EXHAUST DUR/LIFT	INT CENTER (ATDC)	EXH CENTER (BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED
STAGE 1	305-05-0220	266° / 13.5	262° / 12.5	VARIABLE*	110 -1	.009" / .010"	12-15	15-18	1500-8200	H, AE	
STAGE 2	305-05-0225	272° / 13.6	276° / 12.6	VARIABLE*	111	.009" / .010"	19-22	23-25	1500-8800	VS, R, H, AE	
STAGE 3	305-05-0230	276° / 14.0	282° / 13.0	VARIABLE*	112	.009" / .010"	26-30	30-33	1500-9400	VS, R, H, AE	
TURBO 1	305-05-0236	245° / 12.8	250° / 11.8	VARIABLE	110	.009" / .010"	15+	25+	1500-8200	SVT	VS, R
TURBO 2	305-05-0237	251° / 12.9	254° / 11.8	VARIABLE	110	.009" / .010"	25+	35+	1500-8600	AE	VS, R

<sup>\*</sup> iVTEC Settings: Small Lobe 35° adv: Big Lobe 40° initial taper to 30° adv: VTEC crossover 5500-6500



# K20A3 DOHC VTEC CAMSHAFTS

The K20A3 engine is often overlooked in terms of its performance. At Skunk2 we found that significant power gains can easily be achieved. Taking what we know from K racing engine development, we were able to develop several highly potent camshaft combinations for the K20A3. Because there is no VTEC on the exhaust camshaft, great care was taken in selecting lift and duration specifications that allow the engine to make power and still retain a factory idle. Our K20A3 camshafts feature ultra high-strength hollow iron alloy camshaft cores and cutting edge profile design. With the proper tuning, Stage 1 cams have yielded 17+hp on K20A3 engines and we have seen gains as high 28+hp on nearly stock K24A engines using Stage 3 cams.

S2000 DOHC VTEC CAMSHAFTS

Skunk2 has painstakingly developed a series of camshafts that offers significant

improvements over an already highly-developed factory engine. These camshafts

feature ultra high-strength hollow iron alloy camshaft cores and cutting edge profile

increases in the low and mid range rpms which is an area that the S2000 severely lacks

in performance. In a properly tuned base S2000 engine, we have seen a 9lb-ft increase

design. Utilizing Amax and Fast Ramp technology, our camshafts make significant

in midrange torque and a 12hp increase in peak power using just our Stage 2 cam.

With such significant mid-range gains, you won't believe you are driving the same car.

K20A3, K24A1,A3-4 2.0-2.4L DOHC iVTEC (CIVIC / RSX / ACCORD / CRV / ELEMENT)

PART NAME	PART #	INTAKE DUR/LIFT	EXHAUST DUR/LIFT	INT CENTER (ATDC)	EXH CENTER (BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED
STAGE 1	305-05-0250	233° / 11.4	233° / 11.4	VARIABLE*	110	.009" / .010"	10-12	12-15	2000-7500	SVT	VS, R, H
STAGE 2	305-05-0255	241° / 12.3	246° / 11.8	VARIABLE*	110	.009" / .010"	18-22	22-25	2000-8000	VS, R, H	AE
STAGE 3	305-05-0260	251° / 12.8	256° / 11.8	VARIABLE*	106	.009" / .010"	28-30	32-35	2500-8500	VS, R, H, AE	
TURBO 1	305-05-0265	220° / 10.4	220° / 10.4	VARIABLE	106	.009" / .010"	15+	25+	1500-7000		VS, R
TURBO 2	305-05-0266	233° / 11.4	233° / 11.4	VARIABLE	108	.009" / .010"	20+	30+	1500-7500		VS, R

<sup>\*</sup> iVTEC Settings: Small lobe 15° adv; Big lobe 15° initial taper to 5° adv; VTEC crossover 2500-3500



F20C, F22C 2.0-2.2L DOHC VTEC (\$2000)

PART NAME	PART #	INTAKE DUR/LIFT	EXHAUST DUR/LIFT	INT CENTER (ATDC)	EXH CENTER (BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED
STAGE 1	305-05-0300	266° / 13.3	270° / 12.6	98	110	.009" / .010"	8-10	8-10	1500-8800	VS, R	AE
STAGE 2	305-05-0305	272° / 13.6	276° / 12.6	99	110	.009" / .010"	12-15	15-18	1500-9100	VS, R, AE	
STAGE 3	305-05-0310	278° / 14.0	282° / 13.0	100	110	.009" / .010"	18-20	21-24	1500-9500	VS, R, AE	
TURBO 1	305-05-0315	241° / 12.3	244° / 11.8	102	110	.009" / .010"	15-20	25-30	1500-8500	SVT	VS, R, AE
TURBO 2	305-05-0320	251° / 12.8	250° / 11.8	104	112	.009" / .010"	23-25	37-45	1500-8800	VS, R, AE	





Skunk2 cams are finished using CBN wheels on prec cam grinding machines. After grinding, the surface the checked. A good finish improves power and stability









# D-SERIES SOHE VTEC CAMSHAFTS

Skunk2 D-Series camshafts are made from new high-strength chill cast iron-alloy billets. Very few companies have the technical capabilities to chill cast 20 lobes on a single camshaft and still maintain sufficient hardness across the cam. Our D-series cam features Fast Ramp and Amax technology which is key to making power while still retaining a factory like idle and low end driveability. The performance of our D camshafts is further improved when used with a Skunk2 intake manifold, valvetrain, and cam gears.

PART NAME	PART #	INTAKE DUR/LIFT	EXHAUST DUR/LIFT	INT CENTER (ATDC)	EXH CENTER (BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED
STAGE 1 (D16Z6)	305-05-0100	235° / 11.4	230° / 10.4	104	110	.007"/.008"	6-8	6-8	1500-7500	SVT	FPR, VS, R
STAGE 1 (D16Y8)	305-05-0120	235° / 11 4	230° / 10 4	104	110	007" / 008"	6-8	6-8	1500-7500	SVT	FPR VS R



# MITSUBISHI 4G63BT CAMSHAFTS

Skunk2 camshafts for Mitsubishi Evo's and Eclipses use the same proprietary high strength iron alloy and heat treatment process used on our other applications with roller finger follower systems. Our EVO and Eclipse camshafts also feature Fast Ramp and Amax technologies while retaining a smooth idle and quiet operation. We are currently actively developing several new profiles for the 4G63BT engine that we are confident will outperform all other camshafts.

PART NAME	PART #	INTAKE DUR/LIFT	EXHAUST DUR/LIFT	INT CENTER (ATDC)	EXH CENTER (BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED
STAGE 1 (EVO)	305-06-0240	264° / 11.0	272° / 12.0	102	111	HYD / HYD	15+	20+	1500 - 7500	SVT	VS, R, AE
STAGE 2 (EVO)	305-06-0245	272° / 11.0	280° / 12.0	104	112	HYD / HYD	25+	25+	IDLE - 8500	VS, R	AE
STAGE 3 (EVO)	305-06-0250	-	-	-	-	HYD / HYD	-	-	-		
STAGE 1 (ECLIPSE)	305-06-0260	264° / 11.0	272° / 12.0	105	111	HYD / HYD	10+	20+	1500 - 7500	SVT	VS, R
STAGE 2 (ECLIPSE)	305-06-0265	272° / 11.0	280° / 12.0	104	112	HYD / HYD	25+	25+	IDLE - 8500	VS, R	AE
STAGE 3 (ECLIPSE)	305-06-0270	-	-	-	-	HYD / HYD	-	-	-		



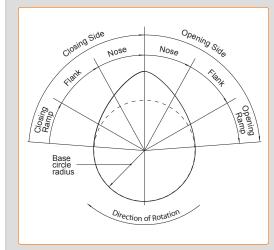
# SUBARU WRX EJ20 CAMSHAFTS

Skunk2 camshafts for Subaru EJ20 engines feature Fast Ramp and Amax technology to optimize power and driveability. When designing the profile, we carefully control the valve opening and closing velocities to make sure the profile maximizes area under the curve without running off the bucket. Furthermore, we take great care in designing a profile that maximizes the radius over the nose of the cam to ensure durability and valvetrain stability. Skunk2 EJ20 camshafts use a proprietary high strength iron alloy and heat treatment process specifically for use with direct actuation cam-over-bucket applications.

J20	2.0L	DOHC	(IMPREZA	WRX)

PART NAME	PART #	INTAKE DUR/LIFT	DUR/LIFT	(ATDC)	(BTDC)	CLEARANCE INT/EXH	HP GAINS†	TQ GAINS†	RPM RANGE	REQUIRED	RECOMMENDED	
STAGE 1	305-12-0400	220° / 9.8	220° / 9.8	110	110	.008" / .012"	10+	15+	1500-7000	SVT	AE	
STAGE 2	305-12-0405	228° / 10.2	228° / 10.2	111	111	.008" / .012"	20+	25+	1500-7500	VS, R	AE	
STAGE 3	305-12-0410	236° / 10.8	236° / 10.8	113	113	.008" / .012"	30+	35+	1500-8000	VS, R	AE	

SOME TUNER CAMS ARE FOR OFF-ROAD USE ONLY! Never To Be Used On Pollution Controlled Vehicles Or On Public Highways. It is the responsibility of the end-user to check local and state laws for compliance.



# **CAMSHAFT DEFINITIONS**

When discussing camshafts, enthusiasts often get confused with the terminology used to describe the various parts of the camshaft. We hope the diagram on the left and the definitions below will help enthusiasts better understand camshafts and the related terminology.

• RAMP: The textbook definition of ramp is the section of the cam from the base circle to where the valve physically begins to open, or finishes closing. It is also commonly referred to as a clearance ramp; or in other words the part of the cam lobe where the camshaft will close up the initial tappet clearance (lash) and the tappet/follower will make initial contact (on the opening side) or end its contact with the camshaft (on the closing side). Skunk2 defines ramp as the portion of the profile from the base circle to the point of maximum valve acceleration. Skunk2 Fast Ramp Technology helps the valve go from zero to maximum acceleration as quickly as possible and still maintain superior valvetrain stability

• FLANK: is defined as the end of the ramp section to the point where the valve reaches maximum velocity. We frequently hear people talk about "aggressive ramps" when they are actually trying to describe the flank and how quickly the valve is opening. It is important to find the balance between opening the valve too quickly and not opening the valve quick enough. If the valve is not opened quick enough, "area under the lift curve," the airflow is not optimized. If the valve is opened too quickly the camshaft may run off the tappet, and it will become difficult to slow the valve down enough as it goes over the nose.

• NOSE: is defined as the section between the maximum velocity on the opening side and maximum velocity on the closed side, or rather the section of the cam where the valve spring forces are keeping the valvetrain from separating from the cam surface. Controlling valve accelerations over the nose is critical to preventing valve float and high-rpm valvetrain stability. Skunk2 Amax Technology allows us to design the flank and nose section of the cam to maximize area under the curve and still maintain valvetrain stability.

# HOW TO DEGREE CAMSHAFTS OVERVIEW



One of the keys to making power is to properly set camshaft timing; in other words, when valves open and close in relationship to the position of the piston and crankshaft is critical to the performance of the engine. The process of properly setting the camshaft position is referred to as "Degreeing the Cam". Many beginner tuners mistakenly believe that to degree cams means setting the cam gears at a certain position such as "+1 intake & -2 exhaust". Though this information may be useful at times, these settings may not be accurate on all motors. For example when the deck of a head or block is machined, it will retard the cam timing. So the cam gear setting method may only apply to engines using the same type of cam gears with exact same head and block heights; and this also assumes that the given cam gear settings are the correct location for the cams. The most accurate way to set camshaft position is to properly "degree the cams"; this way you can be sure the cams are in the right position regardless of engine variations, deck heights, and cam gear marks. The method we are introducing is a simple method for setting cam positions using peak lift measurements. Cam degreeing can also be used to check valve opening and closing positions, durations at various lifts, and peak lift measur



Step 1: Install a Degree Wheel onto the end of the crankshaft, and bolt a pointer onto the block. The pointer can be a sharpened piece of welding rod or coat hanger that can be bent to change the position of the pointer. Rotate the crankshaft to TDC, you can use a dial indicator inserted down the spark plug hole or the piston stop method; the piston stop method is more accurate. When the crankshaft is at TDC, move the pointer so it points to TDC / 0 degree on the degree wheel

Step 2: Set-Up dial indicator with the tip on the retainer, not the rocker arm. To get an accurate reading, It is important to make sure that the axis of the indicator is parallel with the axis of the valve. Make sure the rocker is on the base circle of the camshaft, in other words, make sure the valve is completely closed, and zero out the dial indicator. We recommend that you degree the cam with the lash set at 0.000."

Step 3: Rotate the crankshaft. When the cam starts to open the valve, the dial indicator will show the amount of valve lift. Rotate the crankshaft and stop when the pointer is pointing at the specified peak lift/center line position. Loosen the cam gear bolts and rotate the



camshaft until the indicator is showing that the cam is at peak lift. Tighten the cam gear bolts. Rotate the engine two more rotations, stopping when the dial indicator reaches peak lift, look down at the degree wheel to make sure the position of the crankshaft is in the correct location. If not, repeat step 3

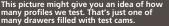
Step 4: Move the dial indicator to the other side of the head, and repeat steps 2 and 3. When peak lift positions of both the intake and exhaust cams are set in the proper locations, the cams are considered to be degreed in.

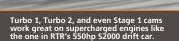
Helpful Tip 1: When degreeing a camshaft, make sure that you rotate the crankshaft in the direction the engine normally runs. If you over shoot the position the crankshaft is supposed to be in, do not rotate the engine backwards, it will throw off your numbers because the tensioner only works properly in one direction.

Helpful Tip 2: If you are having a hard time finding the centerline because the cam dwells at peak lift, you can take a reading of the degree wheel when the cam reaches max lift less 0.003" before and after peak lift. The middle of those two positions will be the centerline.



ultimate test for our cams is on the dyno. Productior haft designs are carefully selected from various pinations of prototype cams.











# VALVETRAIN COMPONENTS

Skunk2 designs, develops and tests all of our valvetrain components in-house to ensure the highest quality and greatest performance gains. During development, all valvetrain components are tested in engines both on the dyno and on the road. Manufactured from the best materials available, our valvetrain components provide exceptional performance, reliability, and quality. Skunk2 valvetrain components are standard issue on all the project cars and race cars we build and support, and are available in our premium Pro-Series line and our Tuner Series line, both offering exceptional performance, reliability, and quality.















been proven in 9,500 RPM



Skunk2 Valvetrain have been proven in 11,000 RPM drag racing engines.



Skunk2 Valvetrain have been proven in 17,000 RPM superbike engines.

# ONE-PIECE FORGED VALVES

Made from lightweight EV8 stainless steel one-piece forgings that are heat treated using a proprietary heat treatment process for exceptional strength and durability. Skunk2 valves feature a special hardened tip which will not deform or gall when used with high-lift camshafts. Though many aftermarket valves look similar, Skunk2 forged valves feature specially designed valve head profiles to optimize airflow when used with stock or performance valve jobs. After CNC-machining and polishing, a black nitride coating is applied to reduce friction and increase wear resistance. Skunk2 Racing valves are available in stock and over sizes in both standard and high compression styles.

				OVERSIZE		
STYLE	DESCRIPTION	ENGINE CODE	STOCK SIZE	+.05MM	+1.0MM	
STD COMP	HONDA D-SERIES	D16Z6 / D16Y8	310-05-2410	310-05-2430	-	
STD COMP	HONDA B-SERIES	B16A-B / B18C1-5	310-05-2310	310-05-2330	-	
STD COMP	HONDA H-SERIES	H22A / F20B	310-05-2350	310-05-2370	310-05-2390	
STD COMP	HONDA K-SERIES	K20A2-3,Z1 / K24A1-4	310-05-2535	310-05-2537	310-05-2539	
STD COMP	HONDA F-SERIES	F20C / F22C	310-05-2535	310-05-2537	310-05-2539	
STD COMP	MITSU EVO / ECLIPSE	4G63BT	TBA	TBA	TBA	
STD COMP	NISSAN 350Z / G35	VQ35	TBA	TBA	TBA	
STD COMP	SUBARU WRX / STI	EJ20 / EJ25	TBA	TBA	TBA	
HI COMP	HONDA D-SERIES	D16Z6 / D16Y8	310-05-2420	310-05-2440	-	
HI COMP	HONDA B-SERIES	B16A-B / B18C1-5	310-05-2320	310-05-2340	-	
HI COMP	HONDA H-SERIES	H22A / F20B	310-05-2360	310-05-2380	310-05-2400	
HI COMP	HONDA K-SSERIES	K20A2-3,Z1 / K24A1-4	310-05-2540	310-05-2543	310-05-2545	
HI COMP	HONDA F-SERIES	F20C / F22C	310-05-2540	310-05-2543	310-05-2545	
HI COMP	MITSU EVO / ECLIPSE	4G63BT	TBA	TBA	TBA	
HI COMP	NISSAN 350Z / G35	VQ35	TBA	TBA	TBA	
HI COMP	SUBARU WRX / STI	EJ20 / EJ25	TBA	TBA	TBA	
NOTE III I		1 0005 111 111 1	1 1 1 45			

NOTE: High compression valves increase compression by 0.3-0.5 points by reducing chamber volume by 1.5cc or more. Same weight as stock valves Standard compression valves recommended as high quality, direct replacement part. 3-10g lighter than stock valves.

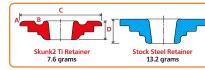
# HIGH-REV DUAL VALVE SPRING KITS

For vehicles factory equipped with "single" valve springs, Skunk2 offers a high-rev dual-valve spring kit. Dual valve springs are superior to single valve springs at high rpm because the inner and the outer valve springs have different natural harmonic frequencies that help dampen each other and prevent spring surge. Each kit comes complete with new springs bases, valve springs, and titanium retainers.

TYPE	DESCRIPTION	ENGINE	SEAT OPEN	SEAT CLOSED	BIND	PART #
TUNER	EVO / ECLIPSE (2.0L DOHC)	4G63BT	50 lbs @ 1.510"	200 lbs @ 1.010"	0.980"	311-06-0390
PRO	EVO / ECLIPSE (2.0L DOHC)	4G63BT	65 lbs @ 1.510"	210 lbs @ 1.010"	0.910"	311-06-5390
TUNER	WRX / STI (2.0 - 2.5L DOHC)	EJ20 / EJ25	50 lbs @ 1.410"	200 lbs @ 0.910"	0.890"	311-12-0400
PRO	WRX / STI (2.0 - 2.5L DOHC)	EJ20 / EJ25	65 lbs @ 1.410"	210 lbs @ 0.910"	0.810"	311-12-5400
TUNER	350Z / G35 (3.5L DOHC)	VQ35	TBA	TBA	TBA	311-07-0450
PRO	350Z / G35 (3.5L DOHC)	VQ35	75 lbs @ 1.340"	220 lbs @ 0.840"	0.790"	311-07-5450



ANATOMY OF A SKUNKE RETAINER





# B I 8C VALVE SPRING COMPARISON

Coil Bind: 0.833" Max Travel: 0.485"	Coil Bind: 0.783" Max Travel: 0.535"	Coil Bind: 0.68 Max Travel: 0.6
Max Travel: 0.485	iviax Travei: 0.535	iviax i ravei: 0.0
	The same of the sa	
Stock Spring	Tuner-Series	Pro-Series
48 grams	46 grams	42 grams



# PRO-SERIES TITANIUM RETAINERS

Skunk2 Pro-Series titanium retainers are CNC-machined in-house from certified medical grade titanium that is milled in the USA. Skunk2 retainers are designed to significantly reduce overall valvetrain mass and are machined to extremely close tolerances in order to ensure properly installed spring heights and pressures. Skunk2 has been supplying titanium retainers to professional racecars and street cars for nearly a decade, and are used on all Skunk2 race and project cars.

MAKE	ENGINE CODE	ENGINE TYPE	PART #
HONDA	D16Y-Z	1.6L SOHC VTEC	308-05-0200
HONDA	B16A-B18C / H22A / F20B	1.6 - 2.2L DOHC VTEC	308-05-0300
HONDA	C30 / C32	3.0 - 3.2L VTEC	308-05-0300
HONDA	B18A-B / B20B-Z	1.8 - 2.0L DOHC	308-05-0400
HONDA	K20A1-3,Z1 / K24A1-4	2.0 - 2.4L DOHC i-VTEC	308-05-0410
HONDA	F20C / F22C	2.0 - 2.2L DOHC VTEC	308-05-0420
HONDA	K20A1-3,Z1 / K24A1-4 / F20C / F22C	Spring Base Kit	312-05-0010
MITSU	4G63BT	<ul> <li>SEE HIGH-REV VALVESPRING</li> </ul>	KIT APP CHART
NISSAN	VQ35	<ul> <li>SEE HIGH-REV VALVESPRING</li> </ul>	KIT APP CHART
SUBARU	EJ20 / EJ25	•SEE HIGH-REV VALVESPRING	KIT APP CHART

# TUNER SERIES VALVE SPRINGS

Skunk2 Racing valve springs have been developed as a result of our experiences in drag racing and touring car racing. Tuner Series springs are made from super clean chrome silicone wire milled in Japan. By using inner and outer valve springs with very different natural frequencies and also using a slight interference fit between the two springs, tuner series valve springs prevent valve float and maintain valvetrain stability at over 10,000 rpms. Tuner Series valve springs are designed for use with Skunk2 Ti Retainers on Street/Race vehicles running moderate to high lift cams.

MAKE	ENGINE CODE	ENGINE TYPE	SEAT PRESSURE	OPEN PRESSURE	BIND	PART #
HONDA	D16Z6,Y8	1.6L SOHC VTEC (NA)	30lbs @ 1.929"	120lbs @ 1.535"	1.141"	311-05-0340
HONDA	D16Z6,Y8	1.6L SOHC VTEC (TURBO)	50lbs @ 1.929"	160lbs @ 1.535"	1.299"	311-05-0345
HONDA	B16A,B / B18C1-5	1.6 - 1.8L DOHC VTEC	50lbs @ 1.320"	210lbs @ .820"	0.800"	311-05-0350
HONDA	H22A / F20B	2.0 - 2.2L DOHC VTEC	50lbs @ 1.400"	205lbs @ .900"	0.880"	311-05-0360
HONDA	B18A-B / B20B-Z	1.8 - 2.0L DOHC NO-VTEC	50lbs @ 1.320"	210lbs @ .820"	0.800"	311-05-0370
HONDA	K20A1-3,Z1 / K24A1-4	2.0 - 2.4L DOHC iVTEC	60lbs @ 1.600"	220lbs @ 1.100"	1.000"	311-05-0380
HONDA	F20C / F22C	2.0 - 2.2L DOHC VTEC	60lbs @ 1.600"	220lbs @ 1.100"	1.000"	311-05-0410
MITSU	4G63BT	EVO / ECLIPSE (2.0L DOHC)	•SEE HIGH-RE	V VALVESPRING KIT	APP CHA	ART
NISSAN	VQ35	350Z / G35 (3.5L DOHC)	•SEE HIGH-RE	V VALVESPRING KIT	APP CHA	ART
SUBARU	EJ20 / EJ25	WRX / STI (2.0 - 2.5L DOHC	<ul><li>SEE HIGH-RE</li></ul>	V VALVESPRING KIT	APP CHA	ART

# PRO-SERIES VALVE SPRINGS

Skunk2 Pro-Series valve springs are simply the best valve springs in the sport compact market. Pro-Series valve springs are designed to handle the demands of extreme lift camshafts running at the prolonged high rpms of professional championship level racing. We have tested the Pro-Series valves springs up to 11,000 rpm. The Japanese milled super clean chrome silicone wire is 100% eddy-current inspected before coiling. After the spring is coiled, it is heat treated, shot-peened, and further enhanced with an advanced proprietary chemical polishing and nitriding process. The end result is a lightweight valve spring that will safely accommodate high lifts and has superior resistance to load loss even under extreme operating conditions. This type of performance is only possible because of the additional processing and stress relieving that goes into Pro-Series valve springs allowing us to use less coils. The Skunk2 Pro-Series valve spring is the only valve spring designed for use with Skunk2 Pro-Series camshafts.

MAKE	ENGINE CODE	ENGINE TYPE	SEAT PRESSURE	OPEN PRESSURE	BIND	PART #
HONDA	B16A,B / B18C1-5	1.6 - 1.8L DOHC VTEC	60lbs @ 1.320"	210lbs @ .820"	0.720"	311-05-5350
HONDA	K20A1-3,Z1 / K24A1-4	2.0 - 2.4L DOHC iVTEC	70lbs @ 1.600"	230lbs @ 1.100"	0.870"	311-05-5380
HONDA	F20C / F22C	2.0 - 2.2L DOHC VTEC	70lbs @ 1.600"	230lbs @ 1.100"	0.870"	311-05-5410
MITSU	4G63BT	EVO / ECLIPSE (2.0L DOF	IC) •SEE HIGH-RE	EV VALVESPRING KIT	APP CHA	ART
NISSAN	VQ35	350Z / G35 (3.5L DOHC)	•SEE HIGH-RE	EV VALVESPRING KIT	APP CHA	ART
SUBARU	EJ20 / EJ25	WRX / STI (2.0 - 2.5L DOI	HC) •SEE HIGH-RE	EV VALVESPRING KIT	APP CHA	ART

# THE IMPORTANCE OF VALVETRAIN WEIGHT REDUCTION

Many enthusiasts may wonder why Skunk2 spends so much time and effort into designing valvetrain components with reduced weight. Why is it so important for us to chase after grams? Without getting into the mathematics we thought we would try to provide enthusiasts with a simple explanation. By replacing Stock valvetrain components with Skunk2 Valves, Valve Springs, and Retainers reciprocating mass can be reduced by an average of 12-14 grams. 1 gram is equivalent to the weight of a paper clip, which may not seem like much weight, but at 9000 rpm, 14g result in a force of approximately 32kg or 70lbs. Reducing the force that the spring needs to control greatly improves valvetrain stability, high rpm performance, and power output.



STD-COME



MAKE

HONDA

MITSU

MODEL

PRELUDE

FVO VIII

HONDA ACCORD

CIVIC / CRX / DFI SOI HONDA CIVIC / DEL SOL / INTEGRA / PRELUDE

RSX / CIVIC / ACCORD / TSX (INTAKE ONLY)

HONDA RSX / CIVIC / ACCORD / TSX (EXHAUST ONLY)





YEAR

88-01

02-06

03-05

2.0L4G63BT DOHC

# **SKUNK2** ADJUSTABLE CAM GEARS

In order to maximize horsepower, it is critical that camshafts are set at the proper position relative to crankshaft position. Skunk2 cam gears enable serious tuners to optimize horsepower and torque by adjusting camshaft timing, and to place power where they need it most. Using the laser etched timing and directional marks, precise camshaft adjustments can be made quickly and easily. Skunk2 cam gears feature CNC precision machined and hard anodized teeth to reduce premature wear; and our signature 6-bolt design eliminates any chance of the gear slipping. Skunk2's lightweight designs reduce rotational inertia resulting in increased engine response and acceleration. Skunk2 cam gears have been proven on racecars in the most extreme conditions for over a decade.



# PRO-SERIES CAM GEARS

Pro-Series cam gears feature a super lightweight design and are CNC machined from 7075-T6 billet aluminum. Each gear has laser etched timing marks with +/-10 cam degrees of adjustment and feature Skunk2's proven 6-bolt design. The outer gear is hard anodized for durability and the center hub is Titanium anodized for that racing look. Pro-Series cam gears are 5% lighter than our already ultra-lightweight Tuner Series cam gears.

- CNC Machined 7075 Aluminum
- +/- 10 Cam Degrees of Adjustment
- Hard Anodized Outer Gear • Industry Leading 6-Bolt Design
- 35% Lighter Than Factory Gears • 5% Lighter Than S2 Tuner Series







Hard anodized outer gear Tuner Series: 218 grams

and Titanium anodized inner gear with precision Laser-

# TUNER SERIES CAM GEARS

Skunk2 cam gears allow engine tuners to optimize horsepower and torque by adjusting camshaft timing. All Tuner Series adjustable cam gears are CNC Machined from 6061-T6 billet aluminum. These Skunk2 designs have been proven over the last 10 years. The 6-bolt design eliminates any possibility of slippage, while the hard anodized finish prevents wear.

304-06-5265

Pro-Series: 208 grams.

- CNC Machined 6061 Aluminum
- Hard Anodized Outer Gear • Industry Leading 6-Bolt Design
- +/- 10 Cam Degrees of Adjustment • 31% Lighter Than Factory Gears
- · Available in Red. Blue, or Silver

	I ICO SEIGES		I OITER SERVES	
ENGINE CODE	TITANIUM	BLUE	RED	SILVER
D15, D16A-Z 1.5 - 1.6L SOHC	304-05-5170	304-05-0150	304-05-0160	304-05-0170
B16A-B / B17A / B18A-C / H23A 1.6 - 2.3L DOHC	304-05-5202	304-05-0180	304-05-0190	304-05-0200
H22A / F20B 2.0-2.2L DOHC	304-05-5225	304-05-0210	304-05-0220	304-05-0225
F22A / F23A 2.2-2.3L SOHC	-	304-05-0230	304-05-0240	304-05-0245
K20A1-3,Z1 / K24A1-4 2.0 - 2.4L DOHC	304-05-0270	-	-	-
K20A1-3,Z1 / K24A1-4 2.0 - 2.4L DOHC	304-05-0275	-	-	-
2.0L 4G63BT DOHC	304-05-5265	304-06-0250	304-06-0260	304-06-0265







# HONDATA / SKUNK2 ECU

Skunk2 has made arrangements with our long-time development partner Hondata to offer plug-n-play programmable Honda/Acura ECU's with data logging features. These ECU's are essentially the same as Hondata's proven S300 ECU and K-PRO ECU; but come pre-installed with Skunk2 developed base maps. Included with the ECU's are a specialized Skunk2 CD containing extensive fuel and timing maps for various engine combinations utilizing Skunk2 Racing parts. These maps have been carefully developed and optimized on our engine and chassis dynos. Tuning updates will also be available as Skunk2 continues to develop new products and engine combinations.



MAKE	ENGINE TYPE	YEAR	PART #
ACURA	INTEGRA	92-01	202-05-5000
ACURA	RSX	02-04	202-05-5010
HONDA	ACCORD	90-01	202-05-5000
HONDA	CIVIC	92-00	202-05-5000
HONDA	CIVIC SI	02-05	202-05-5010
HONDA	CIVIC TYPE-R (JDM)	02-05	202-05-5010
HONDA	CIVIC TYPE-R (EURO)	02-05	202-05-5010
HONDA	INTEGRA TYPE-R (JDM)	02-05	202-05-5010
HONDA	PRELUDE	92-05	202-05-5000

NOTE: Core Ecu In Good Working Condition Required FOR OFF-ROAD USE ONLY! Never To Be Used On Pollution Controlled Vehicles Or On Public Highways

# ECU CONVERSION HARNESS

This harness offers an alternative for owners of 1996-2001 Honda/Acura vehicles hindered by the OBD2 ECU. Along with an OBD1 ECU, this harness will convert the vehicle to OBD1. No cutting or soldering is needed. For optimum results, use with Hondata/Skunk2 ECU's.



MAKE	MODEL	YEAR	PART #
ACURA	INTEGRA	96-99	201-05-0120
ACURA	INTEGRA	00-01	201-05-0130
HONDA	CIVIC	96-98	201-05-0120
HONDA	DEL SOL	96-97	201-05-0120
HONDA	ACCORD	96-99	201-05-0120
HONDA	PRELUDE	96-99	201-05-0120
HONDA	CIVIC	99-00	201-05-0130
HONDA	ACCORD	00-01	201-05-0130
HONDA	PRELUDE	00-01	201-05-0130

FOR OFF-ROAD USE ONLY! Never To Be Used On Pollution Controlled Vehicles Or On Public Highways

# VO35 PLENUM SPACER

This Nissan/Infiniti intake manifold plenum spacer is dyno proven and road tested to outperform all other manifold plenum spacers currently being sold. The Skunk2 spacer effectively increases plenum volume, lowers intake air temperatures, and allows front cylinders to breath more efficiently resulting in gains of up to 10+ hp to the wheels, and increased throttle response, and over 2MPG increase in fuel efficiency. Unlike other spacers on the market, Skunk2 spacers are made from a special aerospace thermo-polymer composite that offers superior thermal insulation characteristics over aluminum spacers with aramid or other types of heat insulating gaskets. No fancy names or stages to describe or sell our spacer, just the simple fact that Skunk2 spacers keep the plenum cooler than the competition. Skunk2's spacer is easy to install and includes all necessary hardware; including the hardware needed to bypass the water lines that heat the throttle body.



MODEL	ENGINE TYPE	YEAR	PART #
350Z / INFINITI G35	VQ35 RWD / AWD ONLY	03-05	307-07-0400

NOTE: Factory Plastic Plenum Cover And Strut Tower Bar Cannot Be Used In Some Applications













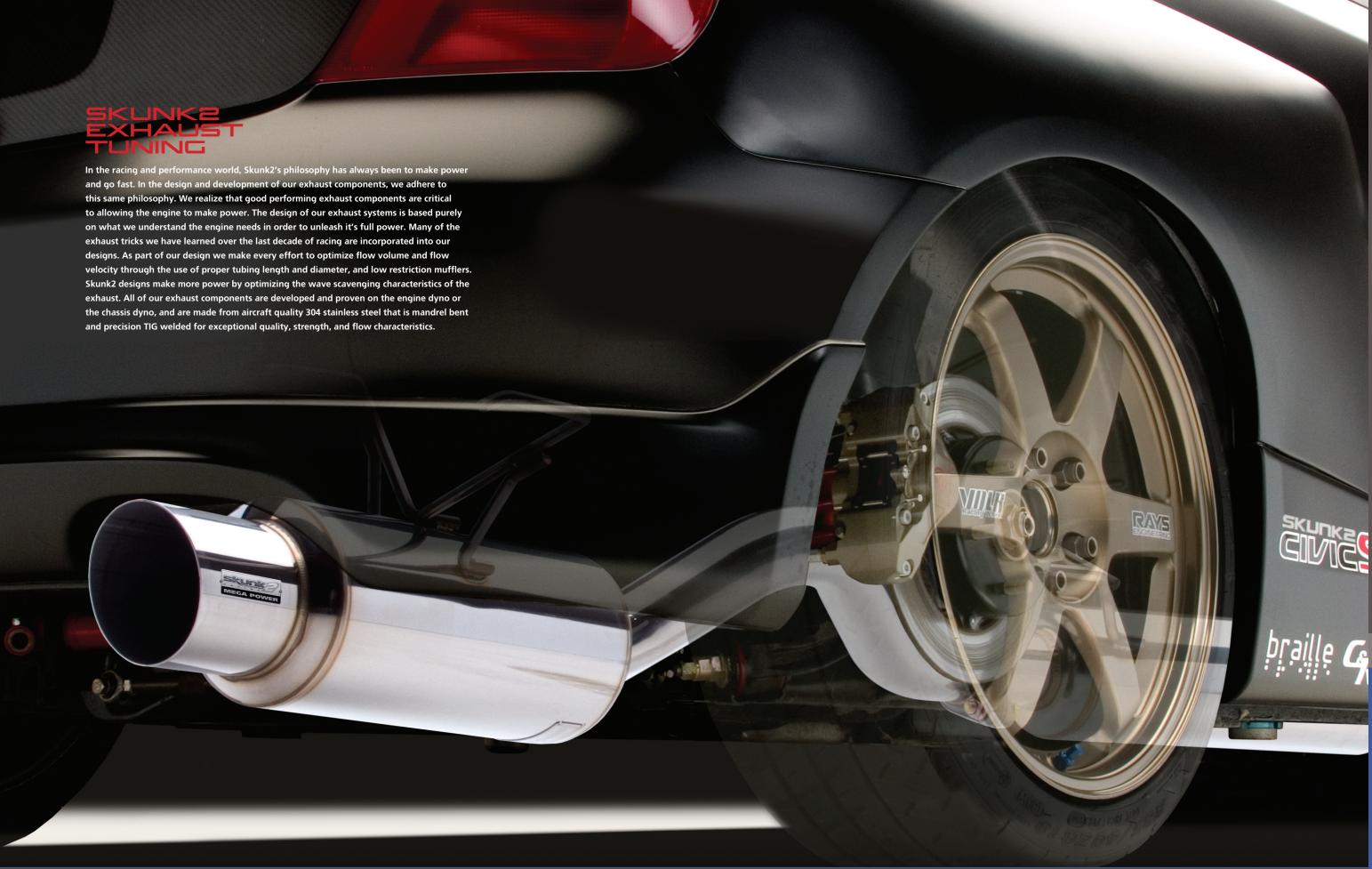








We have been using Hondata ECU's for many years. We are proud to include them in our product line. Each ECU comes with maps developed specifically for use with Skunk2 parts.



• JDM Super N1 Styling

• Robtically TIG Welded

• T-304 Stainless Steel

• 110mm Diameter Tip

• Serialized Nameplate

Optimized Free-Flow Design

• Precision CNC Mandrel Bent

• Super Low Restriction Muffler

• Optimizes Usable HP and TQ

• Includes Removable Silencer

• Acid-Etched Mega Power Badge

• Heavy-Duty Stainless Flanges

# MEGA POWER EXHAUST SYSTEMS

Dyno-proven for maximum horsepower, Skunk2 Racing Mega Power cat-back systems are constructed from T-304 stainless steel and feature Japanese Super N1 styling. Skunk2 cat-back exhaust systems unleash your car's power by optimizing the velocity and flow from your engine. Each Mega Power exhaust is precision CNC mandrel bent using application specific tubing sized for maximum performance and is finished off with a straight through low-restriction racing muffler for uninterrupted flow. CNC mandrel bending allows the tubing to maintain a constant diameter throughout the bend which allows the exhaust gases to flow through the system more efficiently. All Skunk2 systems are robotically TIG welded and come with stainless steel flanges. Each system has a fully polished muffler and resonator with semi-finished satin tubing. Skunk2 mufflers feature a 110mm diameter polished tip with an acid etched Mega Power badge and a serialized nameplate. A Skunk2 removable silencer and all necessary hardware are also included. Skunk2 exhaust systems offer more performance, build-quality, and better sound than all other exhaust systems comparably priced.





Above is a dyno chart for the CRX Si Mega Power exhaust showing a significant gain across the entire power band. This is typical of most Skunk2 exhaust systems.



Mega Power exhaust systems feature an acid etched Mega Power exhaust systems feature satin stainless steel Skunk2 serialized nameplate for authenticity. Notice the high quality TIG welding.



welded to heavy duty stainless steel flanges

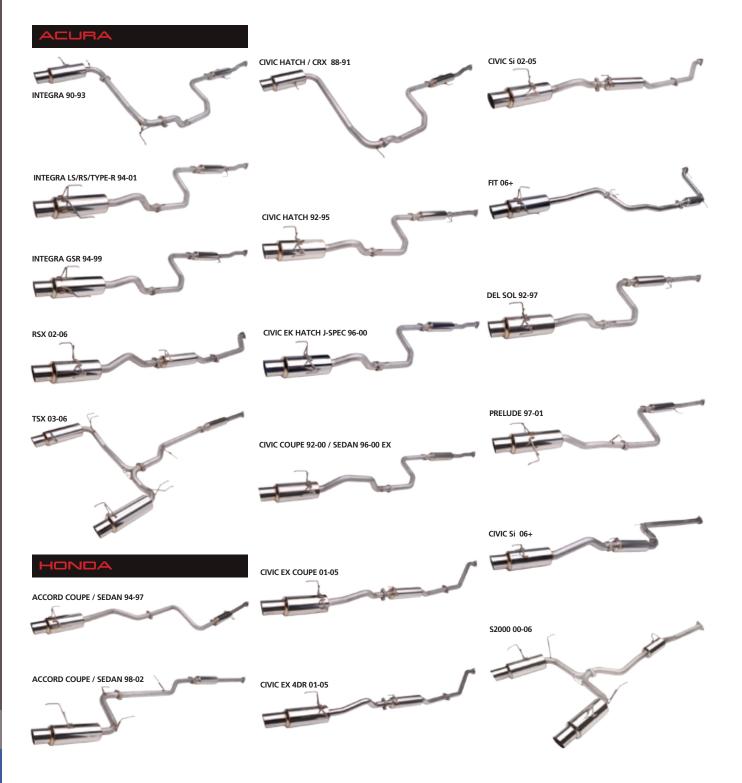






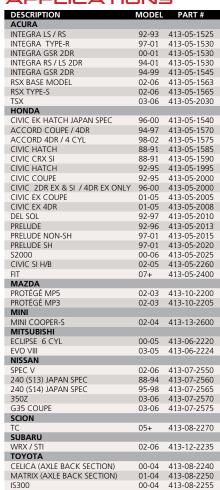


























Honda Civic Si Exhaust

Mitsubishi EVO Exhaust

Nissan 350Z Exhaust

Toyota Matrix Exhaust

Honda S2000 Exhaust

Subaru WRX STi Exhaust



# MEGAPOWER R

Skunk2 MegaPowerR exhaust systems are based off of the exhaust systems we custom build for our road race and time attack cars. These systems are designed for highly modified or turbocharged applications that require more exhaust flow than what is achievable with the standard Mega Power exhaust systems. We built these systems purely for power, so if you want a quiet exhaust, the MegaPowerR exhaust is not for you. Each system is designed with oversized tubing and mufflers to achieve the additional flow that is required for high horsepower vehicles. MegaPowerR exhausts are perfect for very high-output naturally aspirated vehicles and basic turbocharged and supercharged vehicles.

MAKE	MODEL	YEAR	PART #
ACURA	INTEGRA RS / LS 2DR (70MM)	94-01	413-05-5105
ACURA	INTEGRA TYPE-R / GSR 2DR (70MM)	97-01	413-05-5105
ACURA	RSX TYPE-S (70MM)	02-06	413-05-5115
HONDA	FIT (60MM)	07+	413-05-2410
HONDA	CIVIC COUPE (70MM)	92-00	413-05-5005
HONDA	CIVIC HATCH (70MM)	92-95	413-05-5010
HONDA	CIVIC HATCH (JAPAN SPEC) (70MM)	96-00	413-05-5015
HONDA	CIVIC SI (70MM)	02-05	413-05-5020
HONDA	CIVIC SI (70MM)	06+	413-05-5025

- Optimizes Usable HP and TQ
- Ideal for Highly Modified NA Vehicles
- Ideal for Turbocharged Vehicles
- JDM Super N1 Styling
- Optimized Free-Flow Design
- Oversized Tubing • Super Low Restriction Oversized Muffler
- Robotically TIG Welded
- T-304 Stainless Steel
- Precision CNC Mandrel Bent
- Includes Removable Silencer



Above is a dyno chart of the MegaPowerR Exhaust showing a significant gain over a competitor's performance exhaust on a car equipped with a street legal turbo kit.





# UNIVERSAL MUFFLER

Skunk2 offers several universal muffler options for the performance enthusiast looking to modify their existing exhaust system, or construct their own. Our universal mufflers are manufactured to the same high quality specs and materials as our Mega Power cat-back exhaust systems and come standard with a 4"tip.

- Optimized for MAX HP Robotically TIG Welded
- Removable Silencer IncludedMega Power BadgeSerialized Nameplate

- DESCRIPTION UNIVERSAL EXHAUST MUFFLER (2.25" 415-99-1470 UNIVERSAL EXHAUST MUFFLER (3.00") 415-99-1480 5.25" DIAMETER UNIVERSAL EXHAUST MUFFLER JDM Spec (3.00") 415-99-1490 6.50" DIAMETER EXHAUST SILENCER 415-99-1485 UNIVERSAL



# RACING DOWN PIPES

Designed to significantly improve exhaust flow allowing the turbo to spool up and build boost quicker. Made from mandrel bent 304 stainless steel, TIG welded, features sensor bung, and heavy-duty flanges. Mounting hardware and bung plug included.

- Averages 15+ HP Full Stainless Steel
- Sensor Bung Heavy Duty Flanges

MAKE	MODEL	YEAR	PART #
MITSUBISHI	EVO VIII	03-05	414-06-0150
SUBARU	IMPREZA WRX	02-05	TBA

FOR OFF-ROAD USE ONLY! Never To Be Used On Pollution Controlled Vehicles Or On Public Highways

# RACING TEST PIPES

Skunk2 test pipes are designed to dramatically improve engine performance and increase horsepower by significantly reducing exhaust flow restriction. Made from mandrel-bent aircraft quality 304 stainless steel and precision TIG welded. Skunk2 test pipes features a sensor bung, heavy-duty flanges, and Skunk2 Racing acidetched stainless steel badge. Mounting hardware and bung plug included.

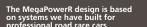
•Averages 15+ HP •Full Stainless Steel

•Sensor Bung •Heavy Duty Flanges

MAKE	MODEL	YEAR	PART #
ACURA	INTEGRA GSR*	94-01	414-05-0050
ACURA	INTEGRA LS / RS & TYPE R (USDM)*	94-01	414-05-0055
ACURA	INTEGRA TYPE R / 2.50" JDM SPEC*	97-01	TBA
HONDA	CIVIC / CRX*	88-91	414-05-0010
HONDA	CIVIC HATCH*	92-95	414-05-0010
HONDA	CIVIC (ALL)*	92-95	414-05-0020
HONDA	CIVIC 2DR EX & SI / 4DR EX ONLY*	96-00	414-05-0020
MITSUBISHI	EVO VIII*	03-05	414-06-0100

FOR OFF-ROAD USE ONLY! Never To Be Used On Pollution Controlled Vehicles Or On Public Highways















Forged Spherical Bearing Housing With Adjustable Camber Plate

Super Finished Precision Ground Shaft

SAE9254V Racing

Triple Upper Seals For Leak Proof

2

Distinct 12-Way Adjustable Valving

**Precision Machined** Stainless Steel Piston and Precision Spring Steel Shims

**Highest Quality Shock** Oil For Consistent Performance At **Extreme Temperatures** High and Low

Triple Lower Seal For Leak Proof

Lower Nitrogen Gas Pre-Load Chamber

# PRO-SERIES FULL COILOVERS

Skunk2 Pro-Series high performance coilovers are based on over a decade of racing and suspension tuning experience. The advanced technology we have used in numerous road racing and drag racing championships is now being applied to our new line of Pro-Series coilover suspensions. Skunk2's track and street tested valving offers the perfect balance for the daily drive or for spirited performance driving. Pro-Series coilovers feature shortened shock bodies and shortened shaft strokes so suspension travel can be maintained on lowered vehicles for improved performance and comfort. With Skunk2 coilovers, enthusiasts can quickly and precisely set ride heights and corner weights to improve the vehicle's handling response, cornering ability, stability, and balance. Our full coilover suspension is offered in our nonadjustable dual-tube PRO-S design, or our PRO-C adjustable mono-tube design. Skunk2 coilovers include hard anodized CNC-machined forged 6061-T6 spring perches and Skunk2 CNC-wound racing springs made from SAE9254V spring steel.

Al St	g6[[		<b>⊕[</b> ##	7	
-------	------	--	--------------	---	--

VEHICLE	YEAR	PRO-S	PRO-C
ACURA			
INTEGRA (ALL)	90-93	541-05-5717	541-05-6717
INTEGRA (ALL)	94-01	541-05-5720	541-05-6720
RSX (ALL)	02-04	541-05-5730	541-05-6730
RSX (ALL)	05-06	541-05-5735	541-05-6735
TSX	03-06	541-05-5880	541-05-6880
HONDA			
ACCORD (ALL)	90-97	541-05-5510	541-05-6510
ACCORD 4-CYL (ALL)	98-02	541-05-5520	541-05-6520
ACCORD 6-CYL (ALL)	98-02	541-05-5530	541-05-6330
ACCORD 4-CYL (ALL)	03-04	541-05-5540	541-05-6540
ACCORD 6-CYL (ALL)	03-04	541-05-5545	541-05-6545
CIVIC / CRX (ALL)	88-91	541-05-5715	541-05-6715
CIVIC / DEL SOL (ALL)	92-95	541-05-5720	541-05-6720
CIVIC (ALL)	96-00	541-05-5725	541-05-6725
CIVIC EX (COUPE&SEDAN)	01-04	541-05-5740	541-05-6740
CIVIC EX (COUPE&SEDAN)	05	541-05-5745	541-05-6745
CIVIC Si	02-05	541-05-5740	541-05-6740
CIVIC Si	06+	541-05-5750	541-05-6750
FIT	06+	541-05-5990	541-05-6990
***	97-01	541-05-5550	541-05-6550
PRELUDE (ALL) S2000	00-06	341-03-3330	541-05-6400
MAZDA	00-06		341-03-0400
MAZDA 3	04-05	541-10-5100	541-10-6100
MAZDA 3	03-05	541-10-5100	541-10-6105
MITSUBISHI	03-03	541-10-5105	341-10-0103
FCLIPSE GSX	05.00	541-06-5310	541-06-6310
	95-99		
ECLIPSE RS / GS / GST	95-99	541-06-5310	541-06-6310
EVO VIII	03-06		541-06-6300
NISSAN	00.04	544.07.5270	544 07 6270
240 (S13)	88-94	541-07-5270	541-07-6270
240 (S14)	95-98	541-07-5275	541-07-6275
350Z	03-06		541-07-6200
G35 COUPE	03-06		541-07-6210
SENTRA (ALL)	02-05	541-07-5260	541-07-6260
SPEC V	02-06	541-07-5260	541-07-6260
SCION			
TC	05-06	541-08-5100	541-08-6100
xA / xB	03-05	541-08-5120	541-08-6120
TOYOTA / LEXUS			
CELICA	00-05	TBA	TBA
MATRIX	01-04	TBA	TBA
YARIS / VITZ	06+	541-08-5150	541-08-6150
SUBARU			
WRX / STI	02-06		541-12-6400



# PRO-C COILOVERS

Skunk2 PRO-C full dampers offer the latest advanced shock technology featuring an adjustable race inspired mono-tube design for dramatically improved handling and cornering performance. The mono-tube design coupled with oversized shafts and pistons help make the PRO-C damper extremely responsive and durable. Each PRO-C kit features precise 12-way adjustable valving and come with CNC-machined forged top mounts with spherical bearings or polyurethane bushings for maximum performance and feel; and have been tested extensively on the street and track. PRO-C dampers features shortened shock bodies and shafts to maintain proper suspension travel on lowered vehicles. Most PRO-C shock bodies are adjustable to allow additional height and preload adjustment and allow the driver to dial in all aspects of the vehicle balance and feel.

- Large Diameter Mono Tube Design 12-way Adjustable Precision Valving
- Shortened Shock Body and Stroke
- Adjustable Shock Length
- Adjustable Spring Preload
  Adjustable Ride Height
  SAE9254V Racing Springs
  Forged Upper Mounts



12-way adjustable valving dials in vehicle balance and feel.





Ball Camber plate in



Length and Spring

# PRO-S COILOVERS

PRO-S dampers are the perfect basic high-performance full coilover suspension. PRO-S dampers are designed for drivers who are seeking an integrated coilover and shock set-up. PRO-S dampers feature pre-determined precision valving and carefully selected springs that are designed to dramatically improve handling performance by significantly increasing corner grip and reducing body roll, allowing the driver to feel greater control and stability at all speeds. Skunk2 springs are CNC-wound using the highest quality SAE9254V spring steel. Each spring is designed to optimize the balance between performance and comfort, and are custom matched to PRO-S dampers. PRO-S dampers provide an average drop from 1" to 3" for a sporty yet aggressive look. The PRO-S suspension offers dramatic improvements to handling while retaining an entry-level price.

- Dual Tube Design
   Non-Adjustable Precision Valving

- Shortened Shock Body and Stroke
- One-Piece Machined Bodies
- Uses Factory Upper Mount me Kits include Forged Mounts
- SAE9254V Racing Springs



top mount included



Piece shock body with



Helper springs in select kits to reduce





Skunk2 Sport Shocks is our new line of high-performance factory replacement shocks that use many of the same technologies and manufacturing processes as some of our more advanced damper systems. The dual-tube design features a hardened, chromeplated and super finished ground shaft, and precision valving resulting in added durability, reliability, long seal life, and smooth operation. By offering the Sport Shock, Skunk2 is taking an integrated approach to suspension tuning even at the most basic level. Sport Shocks are specially designed to work in conjunction with Skunk2 Lowering Springs and coilovers. Sport Shocks are designed with shorter shock bodies and short strokes so they will perform better and have more travel and be more durable at lowered ride heights. When used with Skunk2 Lowering Springs or Coilovers, Sport Shocks offer exceptional control, handling performance, balance, and comfort at a price that can't be beat.



MAKE/MODEL	YEAR	PART #
ACURA		
INTEGRA (ALL)	90-93	541-05-1000
INTEGRA (ALL)	94-01	541-05-1010
RSX (ALL)	02-06	541-05-1020
HONDA		
ACCORD (ALL)	90-93	541-05-1100
ACCORD (ALL)	94-97	541-05-1110
ACCORD (ALL)	98-02	541-05-1120
ACCORD (ALL)	03-04	541-05-1130
CIVIC / CRX (ALL)	88-91	541-05-1200
CIVIC / DEL SOL (ALL)	92-95	541-05-1210
CIVIC (ALL)	96-00	541-05-1220
CIVIC (COUPE / SEDAN)	01-05	541-05-1230
CIVIC SI	02-05	541-05-1240
CIVIC SI	06+	541-05-1250

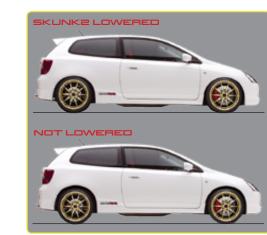
MAKE/MODEL	YEAR	PART #
HONDA		
PRELUDE (ALL)	97-01	541-05-1300
MITSUBISHI		
ECLIPSE	95-99	541-06-1400
NISSAN		
240 (S13)	88-94	541-07-1500
240 (S14)	95-98	541-07-1510
SENTRA (ALL)	02-05	541-07-1520
SCION		
TC	05-06	541-08-1600
XA / XB	03-05	541-08-1610
TOYOTA / LEXUS		
CELICA	00-05	541-08-1620
MATRIX	01-04	541-08-1630
YARIS / VITZ	06	541-08-1640

ADJUSTABLE COILOVERS
With over 10 years of experience in spring technology and suspension the race inspired Skunk2 Adjustable Coilover system design provides ar

With over 10 years of experience in spring the race inspired Skunk2 Adjustable Coilover affordable yet aggressive system that allows you to tune the balance and handling performance of your car by adjusting its ride height. Whether your vehicle is set up for street driving, or weekend track days, the Skunk2 Adjustable Coilover kit is the solution. Designed to be used with stock or aftermarket shocks, Skunk2 Adjustable Coilovers enable you to upgrade your shocks and springs in separate stages. Each coilover kit features hardanodized CNC-machined aluminum sleeves, forged spring perches, SAE 9254V racing springs, and mounting hardware that allows up to a 3-inch drop (sometimes more). When applicable, we recommend using Skunk2 Adjustable Coilovers in combination with Skunk2 Sport Shocks for the ultimate bang for the buck.

				SPRING RAT		
MAKE	MODEL		YEAR	FRONT	REAR	PART #
ACURA	INTEGRA		90-01	558	446	517-05-0720
ACURA	INTEGRA (DRA	G)	90-01	558	1004	517-05-0730
ACURA	CL		96-01	558	335	517-05-1680
ACURA	TL		99-01	558	335	517-05-1680
ACURA	RSX		02-04	558	335	517-05-1690
ACURA	RSX		05-06	558	335	517-05-1695
ACURA	TSX		04+	558	446	517-05-1870
DODGE	AVENGER		95-99	558	558	517-03-1740
HONDA	A PRELUDE		92-01	558	446	517-05-0700
HONDA			90-97	558	558	517-05-0710
HONDA			88-00	446	335	517-05-0740
HONDA	CIVIC / CRX / D	EL SOL (DRAG)	88-00	558	1004	517-05-0730
HONDA	A ACCORD 4CYL		98-02	558	335	517-05-1700
HONDA			98-02	558	446	517-05-1705
HONDA			01-04	446	335	517-05-1710
HONDA	CIVIC DX / LX		01-04	446	335	517-05-1712
HONDA			97-01	558	558	517-05-1720
HONDA			02-05	558	446	517-05-2470
MAZDA			02-03	446	446	517-10-1770
MITSUE			95-99	558	558	517-06-0750
MITSUE		E TALON (DRAG)	95-99	558	1004	517-06-0755
MITSUE			00-03	446	446	517-06-1780
MITSUE			95-98	558	558	517-06-1800
MITSUE			99-01	446	446	517-06-1810
MITSUE			02-03	335	335	517-06-1860
NISSAN	SENTRA SPEC	1	00-03	446	446	517-07-2460
TOYOT			00-04	446	335	517-08-1840
TOYOT			98-02	446	335	517-08-1850
TOYOT			03-04	446	335	517-08-1855
TOYOT			01-04	446	335	517-08-2450
TOYOT		JS	99-04	391	335	517-08-2455
SUBARI	J WRX		02-04	335	335	517-12-1830





# LOWERING SPRINGS

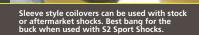
Skunk2 Lowering Springs are designed to dramatically improve handling performance and driver feel by significantly increasing corner grip and reducing body roll. Skunk2 springs are CNC-wound using the highest quality SAE9254V spring steel, shot peen stress relieved, and corrosion protected using phosphate and powder coatings. Each spring is designed to optimize the balance between performance and comfort. The result is a spring that offers racecar like handling, yet maintains smooth and comfortable ride characteristics. Skunk2 Lowering Springs can be used with factory or aftermarket shock absorbers and look great on vehicles with stock or aftermarket wheels. Average drop is approximately 1.5" - 1.75". When applicable, we recommend using Skunk2 Lowering Springs with Skunk2 Sport Shocks and other fine Skunk2 suspension components.



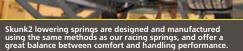
- CNC-Wound
- SAE9254V Spring Steel
- Shot Peen Stress Relieved
- Corrosion Resistant Powder Coating
- 1.5" 1.75" Average Drop
- Excellent Ride Characteristics
- Significantly Increases Corner Grip
- Use With Stock or Aftermarket Wheels

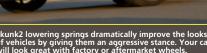
	MODEL	DROP EL YEAR FRONT REAR			FRONT RATE		REAR RATE			
MAKE					TENDER		TENDER		PART #	
ACURA	INTEGRA (ALL)	90-93	2.0	2.0	369	559	134	419	519-05-164	
ACURA	INTEGRA (ALL)	94-01	2.0	1.8	173	520	106	291	519-05-156	
ACURA	RSX TYPE S / BASE MODEL		1.4	1.3	123	260	156	312	519-05-167	
ACURA	RSX TYPE S / BASE MODEL		1.4	1.3	123	260	156	312	519-05-167	
ACURA	TL	04-05	2.0	1.8	363	520	138	215	519-05-171	
ACURA	TL	99-03	2.2	1.5	222	509	92	276	519-05-171	
ACURA	TSX	03-05	1.3	1.2	334	450	101	210	519-05-170	
CHEVROLET		95-03	1.6	1.4	142	213	60	159	519-02-220	
DODGE	NEON	95-02	1.5	1.4	151	380	84	352	519-03-160	
FORD	FOCUS	04-04	2.0	1.8	120	303	103	358	519-04-159	
HONDA	ACCORD (ALL)	90-97	2.2	2.0	246	486	76	291	519-05-163	
HONDA	ACCORD 4-CYL (ALL)	03-04	2.0	1.7	325	440	105	218	519-05-161	
HONDA	ACCORD 4-CYL (ALL)	98-02	2.0	1.9	224	414	101	291	519-05-161	
HONDA	ACCORD 6CYL (ALL)	03-04	2.0	1.7	303	465	121	201	519-05-161	
HONDA	ACCORD 6CYL (ALL)	98-02	2.0	1.7	224	475	95	279	519-05-162	
HONDA	CIVIC / CRX (ALL)	88-91	2.0	2.0	257	559	112	485	519-05-165	
HONDA	CIVIC / DEL SOL	92-95	2.2	2.0	173	520	106	291	519-05-148	
HONDA	CIVIC / DEL SOL	96-00	2.2	2.0	173	520	106	291	519-05-155	
HONDA	CIVIC	01-05	1.3	1.3	123	260	156	313	519-05-157	
HONDA	CIVIC SI	02-05	1.4	1.3	123	260	156	313	519-05-157	
HONDA	CIVIC (ALL)	06+	1.5	1.4	135	184	125	273	519-05-158	
HONDA	ELEMENT	03-04	1.5	1.4	134	253	320	574	519-05-169	
HONDA	FIT	06+	1.8	1.4	125	165	173	307	519-05-175	
HONDA	PRELUDE (ALL)	92-01	1.8	1.6	190	402	112	341	519-05-166	
HONDA	S2000	00-06	1.0	1.0	168	380	161	243	519-05-168	
HYUNDAI	TIBURON	03-05	1.4	1.3	97	130	67	134	519-14-226	
MAZDA	MAZDA 3	04-05	1.3	1.2	142	208	116	159	519-10-211	
MAZDA	MAZDA 6	03-05	1.4	1.3	224	270	160	203	519-10-212	
MAZDA	PROTÉGÉ / MP3 / MP5	99-04	1.3	1.3	123	236	58	134	519-10-210	
MITSUBISHI	ECLIPSE AWD	95-99	2.0	1.8	211	240	86	374	519-06-180	
MITSUBISHI	ECLIPSE RS / GS / GST	95-99	2.0	1.8	211	240	86	374	519-06-180	
MITSUBISHI	ECLIPSE V6	00-05	1.4	1.3	123	192	101	151	519-06-183	
MITSUBISHI	EVO VIII	03-06	1.4	1.3	117	256	253	516	519-06-183	
VISSAN	240 (S13)	88-94	1.3	1.3	123	260	137	241	519-07-190	
VISSAN	240 (S14)	95-98	1.4	1.3	136	241	137	146	519-07-190	
VISSAN	350Z	03-05	1.3	1.0	238	381	237	395	519-07-192	
VISSAN	G35 COUPE	03-05	1.1	1.0	238	381	237	395	519-07-193	
NISSAN	G35 SEDAN	03-05	1.3	1.2	238	381	237	395	519-07-193	
NISSAN	SENTRA ALL MODELS	02-05	1.5	1.4	149	149	119	264	519-07-191	
SATURN	ION	03-05	1.4	1.3	142	202	85	162	519-15-222	
SATURN	SC1/SC2	96-02	1.4	1.3	92	290	109	268	519-15-221	
SCION	TC	05+	2.4	2.0	123	175	248	451	519-08-205	
SCION	XA / XB	03-05	1.5	1.4	117	162	63	120	519-08-203	
SUBARU	WRX	02-03	1.5	1.4	123	190	68	171	519-12-223	
SUBARU	WRX / STi	04-05	1.4	1.3	175	175	104	220	519-12-223	
TOYOTA	ALTEZZA / LEXUS IS300	01-05	1.4	1.3	225	379	194	265	519-08-204	
TOYOTA	CELICA	00-04	1.4	1.4	84	190	117	229	519-08-159	
TOYOTA	COROLLA (ALL)	98-02	1.3	1.3	133	172	81	119	519-08-200	
TOYOTA	COROLLA (ALL)	03-04	2.0	2.0	105	199	103	194	519-08-200	
TOYOTA	MATRIX	02-04	1.3	1.2	128	185	166	205	519-08-202	











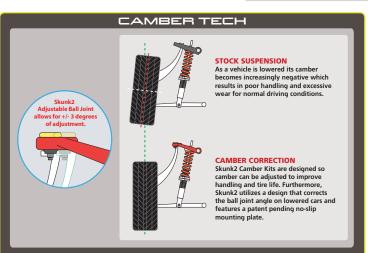
# ADJUSTABLE FRONT **CAMBER KITS** Skunk2 has been making and selling camber kits

since 1995. To accommodate the needs of the market, we made a significant change in 1998 by adding an oversized rectangular shaped top mount for increased positive camber adjustment. In 2000 we pioneered the use of a one-piece forged ball joint. And in 2004 we introduced the patent pending Pro-Series ball joint. Today this same design has become the industry reference standard.

The Skunk2 Camber Kits are the number one choice of many pro racing teams and have been on Honda Factory road race cars since 1997. By replacing your factory upper control arms with our camber kits, you gain the ability to correct negative camber that results from lowering your vehicle. Skunk2 front camber kits allow tuners to accurately dial in their suspension settings utilizing guick adjustment sliding ball joints. With over +/- 3 degrees of adjustment our camber kits can minimize the effects of negative camber, help reduce abnormal tire wear, and increase stability at high speeds. Skunk2 camber kits are ideal for race or street applications. Available in Pro-Series Plus, Pro-Series, and Tuner Series.



MAKE	MODEL	YEAR	PRO PLUS	PRO	TUNER
ACURA	94-01	INTEGRA (ALL)	516-05-5675	516-05-5670	516-05-0670
ACURA	02-06	RSX (ALL)	516-05-5695	-	-
ACURA	03-06	TSX	TBA	-	-
HONDA	92-95	CIVIC / DEL SOL (ALL)	516-05-5675	516-05-5670	516-05-0670
HONDA	96-00	CIVIC (ALL)	516-05-5685	516-05-5680	516-05-0680
HONDA	01-05	CIVIC (ALL)	516-05-5695	-	-
HONDA	06+	CIVIC	516-05-5705	-	-
MITSUBISHI	02-06	EVO	516-06-5850	-	-
NISSAN	03-06	350Z / G35	516-07-5805	-	-
SUBARU	02-06	WRX / STI	516-12-5900	-	-



PRO-SERIES PLUS







PRO-SERIES PLUS

response, feel, and performance.



This is our flagship camber kit for enthusiasts that are serious about performance. Each camber

kit comes with our one-piece forged patent pending Pro-Series balljoint. The Pro-Series balljoint features a low profile top plate for additional clearance and higher clamping loads for no-slip

performance; and can quickly be adjusted from the bottom-up. The Pro-Plus camber kit also

includes 3-piece low-deflection polyurethane bushings that dramatically improve handling



Skunk2 Pro-Plus front camber kits feature high quality low-deflection polyurethane bushings that eliminate the pre-load found with rubber bushings and act like bearings, allowing the arm to pivot freely; which results in superior handling, improved feel, and enhanced response

# PRO-SERIES

This is what we recommend as a good entry-level camber kit. The Pro-Series camber kit features the same one-piece forged Pro-Series balljoint used in the Pro-Plus kit, but instead of polyurethane bushings, the Pro uses standard high quality rubber bushings. Though the Pro kit is slightly more expensive than the Tuner series, the benefits and convenience offered by the Pro-Series ball joint provide excellent value.



quick and easy bottom up camber adjustment. This is especially useful stroke shock absorbers.



a lower profile that provides 5mm more clearance between the top of the camber kit and bottom of the strut tower. The Pro-Series ball joint also features cadmium plating for additional corrosion resistance and a trick racing look.

For the budget minded enthusiast we offer the Tuner Series; which is the same classic design that we have been offering to enthusiasts for over a decade. Each arm includes our standard one-piece forged ball joint, and uses standard rubber bushings. The Tuner series also includes our patent pending "square" washer plate for improved clamping performance and durability. Not only does the Tuner Series offer more features and superior quality over "clone" camber kits, it is also competitively priced. If you can have Skunk2, why settle for less?



The Tuner Series features our industry standard one-piece forged ball joint that we pioneered the



The new "square" washer plates tie the two bolts together to improve clamping and prevent distortion of the bolt slots.



Less clamping force possible when using four separate bolts and washers. Bolt slots will also distort when over tightened.













2001: Taz Harvey's SCCA Pro Racing World Challenge '00 Civic Si's use Skunk2 camber kits.

2000: Roger Foo's SCCA Pro Racing World Challenge '95 Civic Si using Skunk2 Camber kits.



- High-Quality CNC Machining
- Forged 2024 Aircraft Aluminum
- Adjustable Sway Bar Mounting Holes
- Polyurethane Bushings That Act As Bearings
- Available In JDM Gold and Hard Anodized Finish



Skunk2 lower control arms mounting locations that allow





ow deflection Polyurethane
ushings with bearing-like action
lowing the arm to move and
ivot freely; resulting in improved
andling response and feel.

MAKE	MODEL	YEAR	HARD	GOLD
ACURA	INTEGRA (DA/DC ALL)	90-01	542-05-0100	542-05-0110
ACURA	RSX (DC5 ALL)	02-06	542-05-0200	542-05-0210
HONDA	CIVIC / CRX / DELSOL (EF/EG ALL)	88-95	542-05-0100	542-05-0110
HONDA	CIVIC (EK ALL)	96-00	542-05-0120	542-05-0130
HONDA	CIVIC (EM / EP ALL)	02-05	542-05-0140	542-05-0150
	ACURA ACURA HONDA HONDA	,	ACURA         INTEGRA (DA/DC ALL)         90-01           ACURA         RSX (DC5 ALL)         02-06           HONDA         CIVIC / CRX / DELSOL (EF/EG ALL)         88-95           HONDA         CIVIC (EK ALL)         96-00	ACURA         INTEGRA (DA/DC ALL)         90-01         542-05-0100           ACURA         RSX (DC5 ALL)         02-06         542-05-0200           HONDA         CIVIC / CRX / DELSOL (EF/EG ALL)         88-95         542-05-0100           HONDA         CIVIC (EK ALL)         96-00         542-05-0120

and also feature low deflection polyurethane bushing which act

as bearings for quicker response and a more positive feel. By

eliminated the tearing and unseating commonly found

Control Arm is used in conjunction with Skunk2 Rear

Camber Kits, Lower Arm Bars, and Strut Tower Bars. Skunk2 Lower Control Arms are available in JDM Gold or Hard Anodized

allowing the arm to rotate freely about the bushing, Skunk2

with fixed rubber bushings. Rear suspension performance

and feel is further enhanced when the Skunk2 Rear Lower

# LOWER ARM BARS

Skunk2 Racing Rear Lower Arm Bars are constructed of aircraft quality AL606 and are designed to tie into the rear suspension with easy installation. Skunk2 Racing's Lower Arm Bar increases chassis rigidity and performance handling characteristics by connecting the suspension points to prevent chassis distortion while under hard cornering and aggressive driving. There is even a more dramatic improvement in rear suspension performance and feel when used in conjunction with Skunk2 Lower Arms, Rear Camber Kits, and Rear Strut Tower Bar. Available in clear or hard anodized finishes and includes all mounting hardware.



MAKE	MODEL	YEAR	CLEAR	HARD
ACURA	INTEGRA (ALL)	90-93	518-05-0780	518-05-0790
ACURA	INTEGRA (ALL)	94-01	518-05-0790	518-05-0790
ACURA	RSX (ALL)	02-05	518-05-1860	518-05-1865
ACURA	TSX	03+	518-05-1950	518-05-1960
HONDA	CIVIC / CRX / DEL SOL (ALL)	88-95	518-05-0780	518-05-0790
HONDA	CIVIC / DEL SOL (ALL)	96-00	518-05-0800	518-05-0810
HONDA	CIVIC SI H/B	02-05	518-05-1860	518-05-1865
HONDA	CIVIC (COUPE / 4DR)	01-05	518-05-1900	518-05-1905
HONDA	CIVIC	06+	518-05-1910	518-05-1920
HONDA	PRELUDE (ALL)	92-96	518-05-1779	-
HONDA	ACCORD (ALL)	94-97	518-05-1869	-

# REAR CAMBER KITS

The design of Skunk2 Rear Camber Kits is based on camber kits that we have been using in our race cars for many years. Skunk2 Rear Camber Kits are a must if you want to fine tune your rear suspension. With the ability to adjust positive and negative camber, you can reduce tire wear and significantly improve your vehicle's handling. Made from forged alloy steel and aircraft quality AL7075 aluminum, Skunk2 Rear Camber Kits feature low deflection polyurethane bushings. The bushings act as a bearing allowing your camber kit to pivot smoothly without the harsh side effects of using actual spherical bearings. Unlike the steel and rubber bushings that are found on low quality rear camber kits, these will not tear or break free. The Skunk2 Rear Camber Kit is the perfect choice for street and race applications, and works even better when used in conjunction with Skunk2 Rear Lower Arms, Arm Bars, Strut Bars, and Front Camber Kits.





88-00 CIVIC

• CNC Machined AL7075

• Polyurethane Bushings

• Hard Anodized Finish

• High-Strength Forged Ends

3-Piece Low Deflection Polyurethane bushings are nounted in a CNC machined



Skunk2 Camber kit ends are forged out of high strength steel and then plated for excellent corrosion resistance



inferior components such as steel and rubber bushings pressed into welded ends.

MAKE	MODEL	YEAR	PART #
ACURA	INTEGRA (ALL)	90-01	516-05-0500
ACURA	RSX (ALL)	02-06	516-05-0510
ACURA	TSX	03-06	TBA
HONDA	CIVIC / CRX / DEL SOL (ALL)	88-00	516-05-0500
HONDA	CIVIC (ALL)	01-05	516-05-0510
HONDA	CIVIC (ALL) HARD ANODIZED	06+	516-05-0520
HONDA	CIVIC (ALL) GOLD ANODIZED	06+	516-05-0525

# STRUT TOWER BAR

By tying in the upper suspension points at the shock towers, the strength and rigidity of the chassis increases while the overall handling performance of the vehicle improves. Skunk2 Racing Strut Tower Bars are made from ultra strong and lightweight AL6061 and offer the highest strength-to-weight ratio of any strut bar on the market. Each bar is highly polished and features anodized aluminum brackets and a Skunk2 nameplate. The performance of the Skunk2 Strut Tower Bar is further enhanced when used in conjunction with other Skunk2 suspension components such as Skunk2 Lower Tie Bars, Lower Control Arms, and Camber Kits.

94-01

92-00



ACURA

HONDA







FRONT	REAR
522-05-0840	522-05-1940
522-05-0840	522-05-0850
522-05-0840	522-05-1940
522-05-0840	522-05-0850

CIVIC / DEL SOL (ALL) \* WILL NOT FIT VEHICLES EQUIPPED WITH ABS BRAKES
\*\* WILL NOT FIT VEHICLES WITH SINGLE-POINT THROTTLE BODY INJECTION

INTEGRA (ALL)

CIVIC / CRX \*:











Skunk2 Shift Knobs are machined from billet stainless steel and feature a PVD titanium coating that resists scratching and wear. Skunk2 Shift Knobs are custom-weighted to over 400-grams and designed to be used in conjunction with the Skunk2 Racing Short-Throw Shifters. The added weight of the shift knob helps promote smoother and more positive shifting. This combination provides the ultimate in positive shift engagement for high-performance drag racing, road racing, and street performance applications. The Skunk2 Racing Shift Knob also provides a great enhancement to any shift lever application with a 10 X 1.5, 10 X 1.25 or 12 X 1.25 thread pitch in 5 or 6 speed applications. Skunk2 Shift Knobs and Short Shifters are available separately.



- CNC-Machined From Billet Stainless Steel
- Custom-Weighted to over 400g
- Scratch and Wear Resistant PVD Titanium Coating
- Available In 5 or 6 Speed
- S2 Knob and Shifter for Perfect Combination
- Smoother and More Positive Shift Feel

TYPE	5 SPEED	6 SPEED	WEIGHT
HONDA 10 X 1.5			
BILLET	627-99-0080	627-99-0081	APPROX. 440 GRAMS
10TH ANNIVERSARY	627-99-5080	627-99-5081	APPROX. 440 GRAMS
TOYOTA 12 X 1.25			
BILLET	627-99-0085	627-99-0086	APPROX. 440 GRAMS
10TH ANNIVERSARY	627-99-5085	627-99-5086	APPROX. 440 GRAMS
NISSAN, MAZDA, MITSUBISHI	10 X 1.25		
BILLET	627-99-0090	627-99-0091	APPROX. 440 GRAMS
10TH ANNIVERSARY	627-99-5090	627-99-5091	APPROX. 440 GRAMS



Don't be fooled by cheap imitations of real Skunk2 Shift Knobs! Only Skunk2 Shift Knobs feature a titanium finish that resists scratching, and are precision CNC machined to exacting manufacturing standards.



Skunk2's limited edition 10th Anniversary Shift Knob celebrates a decade of excellence. Features laser-etched limited edition 10th Anniversary logo. Available in 5 or 6 speed configuration. Limited quantities available.



Skunk2 Short Shifters are available in single or dual bend configurations, and are constructed from high-strength alloy steel for maximum durability and reliability. Unlike even the best aluminum shifters, Skunk2 Racing steel shifters will not break. The added weight of the shifter helps to make shifting smoother and more positive. Each short shifter utilizes sealed bearings and a low friction coating to ensure smooth precise shifting without binding.



TYPE	ENGINE TYPE	DESCRIPTION	PART#
ACURA	1990-93 INTEGRA (ALL)	SINGLE-BEND	628-05-0100
ACURA	1994-01 INTEGRA (ALL)	DUAL-BEND	628-05-0090
HONDA	1988-91 CIVIC, CRX (ALL)	SINGLE-BEND	628-05-0100
HONDA	1992-00 CIVIC, DEL SOL (ALL)	SINGLE-BEND	628-05-0100



Skunk2 short shifters feature laser etched logo for outstanding detail and authenticity.



Sealed bearing and a low friction coating ensure the ultimate in smooth and precise

# FORGED LUG NUTS & WHEEL STUDS

Skunk2 Racing Lug Nuts are forged from AL7075 and hard anodized with knurled ends for better grip. Skunk2 Racing Lug Nuts are ultra-lightweight, strong and have been proven in all forms of racing. Use with Skunk2 Racing Extended Wheel Studs for best performance. Skunk2 Extended Wheel Studs are designed to meet the needs of racing safety requirements. Wheel studs are constructed of high-strength alloy steel and can also be used for high performance street applications. We recommend tack welding the wheel studs in place for additional reliability.













ГҮРЕ	INDIVIDUAL	SET OF 16	SET OF 25
2 x 1.5 FORGED LUG NUT	520-99-0820	520-99-0825	520-99-0845
2 x 1.25 FORGED LUG NUT	520-99-0821	520-99-0826	520-99-0846
XTENDED WHEEL STUD - 12 x 1.5	524-05-0830	524-05-0835	520-99-0855











**AVAILABLE IN SINGLE-BEND** 

**AVAILABLE IN 5 OR 6 SPEED** 











# MAGNETIC OIL DRAIN PLUG SET

Skunk2's Magnetic Oil Drain Plug Set is more than just a casual accessory. Used in all forms of motorsports worldwide, magnetic oil drain plugs serve an important function to attract and help remove fine metal particles from your crankcase oil. High performance race and street engines rely on these as an added safeguard. Manufactured from high quality materials and is drilled for securing with safety wire.



PART #	DESCRIPTION	APPLICATIONS
657-05-0030	MAGNETIC OIL PLUG	HONDA, ACURA, MITSU, FORD, & GM MANUAL TRANS

# BILLET OIL CAP

Skunk2 Billet Oil Caps are precision CNC machined to be lightweight. Each oil cap is hard anodized and features a contrasting, acid-etched stainless steel Skunk2 Racing logo or Limited Edition 10th Anniversary stainless steel badge.



ı	PART#	DESCRIPTION	NOTES
	626-99-0070	HONDA BILLET OIL CAP	M33 x 2.8
	626-99-5070	HONDA 10TH ANNIVERSARY BILLET OIL CAP (LIMITED EDITION)	M33 x 2.8
	626-99-0075	TOYOTA BILLET OIL CAP	M37 x 2.5 / TBA

# RADIATOR CAP

The Skunk2 Radiator Cap increases internal radiator pressure, thus physically raising the coolant boiling point and increasing cooling efficiency. The open valve pressure is 1.3kg/cm compared to the normal 1.1kg/cm. The Skunk2 Radiator Cap demonstrates its effectiveness under high-load situations such as racing or circuit driving. The Skunk2 radiator cap works equally well on street applications.



PART #	DESCRIPTION	APPLICATIONS	
359-99-0010	RADIATOR CAP	HONDA, TOYOTA, SUBARU	
359-99-0020	RADIATOR CAP	NISSAN, MITSUBISHI	
359-99-0020	RADIATOR CAP		

# VTEC SOLENOID COVER

The Skunk2 VTEC Solenoid Cover is precision CNC machined from aircraft quality AL6061 billet aluminum and features a durable gun metal anodized finish. A laseretched Skunk2 logo wrap and "Skunk2 Inside" logo on top will accent your engine along with other Skunk2 accessories.



DESCRIPTION	ENGINE	YEAR	PART #
VTEC SOLENOID CAP	B/H/D SERIES ENGINES	92-00	658-05-0210
VTEC SOLENOID CAP	B16 JAPAN-SPEC	88-91	658-05-0220

# **CAM SEAL**

The Skunk2 Cam Seal is precision CNC machined from aircraft quality AL6061 billet aluminum and is gun metal anodized for a durable finish. The Skunk2 Cam Seal features three o-rings for a superior fit and seal compared to the factory plastic seal which has no o-rings. Laser-etched Skunk2 logo makes the Skunk2 Cam Seal a perfect addition to finish off your engine along with other Skunk2 accessories.



ENGINE TYPE	PART #
HONDA B / H / D / F SERIES ENGINES	658-05-0200



# BILLET BATTERY TIEDOWN

The Skunk2 Billet Battery Tiedown works with stock mounts and OEM or aftermarket batteries. It is constructed of precision CNC-machined billet aluminum and features laser-etched Skunk2 Racing logos on opposing sides to accent your engine bay.



MAKE	MODEL	YEAR	PART#
HONDA	CIVIC	92-00	625-05-0060
ACURA	INTEGRA	94-01	625-05-0060



# BILLET WIRE COVER

The Skunk2 Billet Wire Cover is precision CNC-machined billet aluminum to be extra lightweight. Each wire cover is fully polished and features a contrasting, acid-etched Skunk2 Racing logo.



PART#	APPLICATION	NOTES
632-05-2090	B16A-B, B17A, B18C1-5 (HONDA / ACURA)	VTEC ONLY



# BRAKE RESERVOIR COVER

The Skunk2 brake and clutch reservoir cover is made from fireproof material and features an embroidered Skunk2 logo. It absorbs brake fluid that may escape from the master cylinder reservoir under hard braking and prevents the brake fluid from getting all over the engine bay or onto the racetrack.

PART #	DESCRIPTION	
660-99-0010	RESERVOIR COVER	





# SKUNK2 PROMO

**License Plate Frame:** Make sure people know what 'you got in your car' when you pass them by!

**Shop Banner:** The bright yellow Skunk2 Shop Banner is the perfect way to dressup your garage. Grab one from a local racing event, or buy one from a Skunk2 Racing dealer!

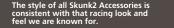
**Decal Packet:** Features three 3-color die-cut vinyl decals. Includes 1x windshield banner and 2x 12" side decals.

**Sticker Sheet:** Various Skunk2 logo designs and sizes on an 11" x 17" die-cut sheet. Stick 'em on your car, toolbox, or whatever you'd like.

PART #	DESCRIPTION
836-99-1440	6 FT. TYVEK SHOP BANNER
838-99-1450	LICENSE PLATE FRAME
837-99-1460	DECAL PACKET (1x WINDSHIELD VISOR, 2 x SIDE DECALS)
837-99-1465	SKUNK2 STICKER SHEET















# 951.808.9888





RACE TRACK TEE / BLACK





TT TT

# RAYTANG / BLACK





TT MMT S2 B-POWERED / BLACK

В



TT MMT





10TH ANNIVERSARY TEAM CAP

B-POWERED

**工工 (1) (1)** 

SKUNK2 RACING

TT MMT

RACE TRACK TEE / WHITE









MENS

WOMENS

IN LONG SLEEVE

T-SHIRT POLO

HOODED SWEATSHIRT

TEAM POLO

0





TT MMT



S2 LOGO SWEATSHIRT

TT MMT



LADIES	COLOR	SMALL	MEDIUM
RACE TRACK LADIES BABY-T	WHITE/PINK	735-99-0365	735-99-0366
RACE TRACK LADIES BABY-T	BLACK/RED	735-99-0363	735-99-0364

HEAD GEAR	COLOR	SMALL/MED	LARGE/XL
TEAM BASEBALL CAP	BLACK	731-99-0380	731-99-0381
TEAM BASEBALL CAP	RED	731-99-0382	731-99-0383
10TH ANNIV. TEAM BASEBALL CAP	BLACK	731-99-5380	731-99-5381
10TH ANNIV. TEAM BASEBALL CAP	RED	731-99-5382	731-99-5383
CVI INIV 2 VNIT DE ANIE	DIACK	721 00 020/	721 00 020/











Beauty and the beast. The lovely Kristina keeping the hood of the RR warm at the Nopi Nationals Show.

Putting Skunk2 Race Cars together with Skunk2 Models is always a hit.

VEAR

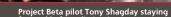
Hanging out at the track with our big yellow "office" in the background.

ESPN interviewing the race team in between elimination rounds.

Pretty girls throwing out free stuff is another good way to draw crowds.

The "Raytang" shirt was created to show support for one of our own who was called to active duty.











Skunk2 sponsored Kensai Racing, these guys are responsible for the fastest Acuras in Grand Am Cup.

Team Skunk2 in one of their many post-race winning poses.





valvetrain, and various susp



TEAM DEVELOPED SKUNK2 RAC

In 1996 we developed parts for several championship touring car teams in Asia; supplying them with racing cams,

in the Speedvision World Challenge series. Also in 1997, the decision was made to build Project Beta (aka the Skunk2 Integra), a road-race car converted into an All-Motor drag race car utilizing the parts we had developed for touring car racing. Little did we know that Beta would help pioneer the All-Motor class and revolutionize import drag racing. In 1999 we continued in drag racing with a perfect season. Then in 2000, the Skunk2 Integra was the first naturally aspirated car to run 10 seconds; it would take another year and a half for the competition to do the same. 2000 also marked the beginning of our active involvement in World Challenge racing. In 2000, 2001, and 2002 all Hondas finishing on the podium in World Challenge utilized Skunk2 parts or Skunk2 engines. In 2003 we moved to a new state-of-the-art facility in Southern California that marked the birthplace of the potent Civic RR and SiR. The introduction of Project Delta and K-Power engines marked the return of Skunk2 to the drag racing; as we finished the year with 4 wins out of 5 races with 4 new records. 2005 marked the return of Project Beta and the Skunk2 Team once again redefined the standard of speed and performance by smashing its own records. For 2006 Skunk2 introduced the M3 Killer TSX, the 650 whp RSX-T, the race bred Civic SiR2 Time Attacker, and the wicked little Fit R. 2007 promises to be another amazing year as Skunk2 prepares to unveil several new and exciting project vehicles.

on parts. In 1997 we began supplying parts to Honda touring cars in the USA, racing





Acura Integra engine type K24A DOHĆ IVTEC displacement 2.55 liter bore & stroke 90.5 x 99 compression ratio 15.0:1 350 whp horsepower 225 wtq 100.5" torque wheelbase

weight 1725 lbs w/driver wheels Weld Racing tires BFGoodrich Skunk2 Pro-C shocks pistons Wiseco GRP con rods Genuine Honda crank cylinder head Skunk2 CNC Port

camshafts Skunk2 Stage 3 Skunk2 Pro Series cam gears valve springs Skunk2 Racing Pro Series valves Skunk2 Forged Stainless retainers Skunk2 Titanium Skunk2 Prototype 4-1 header Individual Throttle Bodies intake Genuine Honda 6-speed transmission Brembo Race brakes

Braille (light-weight) battery sparkplugs NGK Iridium Driveshaft Shop axles injection **RC Injectors** ignition MSD DIS-4 ecu Motec data acquisition Motec ADL lubricants Torco Oil race seat Braille / Recaro SPG Racer

steering wheel Sparco

Simpson















Driver Tony Shagday. From a 19 year old street racer to a veteran drag racer with over 20 All Motor wins in Beta.

Yes they are all the same car. Believe it or not, Project Beta was originally red from the factory.

Great genetics! Project Beta and younge brother Project Delta kickin' it at home.

# PROJECT

# SPECIFICATIONS

Acura RSX

2.55 liter

90.5 x 99

15.0:1

K24A DOHC iVTEC

engine type displacement bore & stroke compression ratio horsepower torque

350 whp 225 wtq wheelbase 101.2" weight 1725 lbs w/driver carbon **Southwest Performance** wheels Weld Racing BFGoodrich **Moton Shocks** 

shocks Wiseco pistons GRP con rods Genuine Honda crank

cylinder head Skunk2 CNC Port camshafts Skunk2 Prototype Pro Series cam gears Skunk2 Pro Series

valve springs Skunk2 Racing Pro Series Skunk2 Forged Stainless Skunk2 Titanium valves retainers Skunk2 Prototype 4-1 header Individual Throttle Bodies intake Genuine Honda 6-speed transmission Brembo Race brakes Braille (light-weight)

NGK Iridium Driveshaft Shop sparkplugs axles injection RC Injectors MSD DIS-4 ignition Motec ecu data acquisition Motec ADL lubricants Torco Oil

race seat Braille/Recaro SPG Racer

steering wheel Sparco harness Simpson

















engine type displacement bore & stroke compression horsepower torque con rods crank cylinder head camshafts cam gears valves valve springs retainers header intake airbox custom radiator radiator enclosure engine mounts flywheel clutch injection ignition

chassis mods integrated cage data acquisition K20A2 DOHC IVTEC 2.18L 88.5 x 88.5 12.5 : 1 260 whp @ 7800 rpm 175 wtq @ 6100 rpm Wiseco Cunningham Genuine Honda Skunk2 CNC Port Skunk2 Stage 2 Skunk2 Pro Series Skunk2 Pro Series Skunk2 Pro Series Skunk2 Titanium Skunk2 Prototype 4-2-1

Skunk2 Prototype Carbon Fiber

Genuine Honda 6-Speed

Tilton 5.5" Twin Disc Carbon

C&R Racing

Carbon Fiber

Hasport

RC Injectors MSD DIS-4

Hondata

Tilton

alloy lug nuts air jacks

brakes

springs wheels

tires shocks

camber kit front strut bar

rear strut bar

lower arm bar

rear sway bar

steering wheel driver seat passenger seat safety harness pedals door panels

exterior paint interior paint rear hatch hood

Brembo Racing Skunk2 Racing Volk Racing TE-37 BF Goodrich Moton Shocks Skunk2 Racing Skunk2 Racing Skunk2 Racing Skunk2 Racing 38mm prototype Skunk2 Racing

AP Racing AIM/MyChron Recaro/Braille SPG Racer Ribtect Carbon/Glass

Willans Tilton Carbon Fiber Carbon Fiber

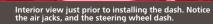
S2R Stealth Black Gunmetal Carbon/Glass Carbon/Glass



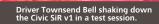


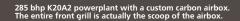












Collecting tire temperature data in between sessions to give feedback to the Michelin engineers.



engine type **K20Z1 DOHC IVTEC** 2.18 liter displacement bore & stroke 88.5 x 88.5 compression horsepower 12.5 : 1 255 whp @ 7800 torque 191 wtq @ 6100 pistons con rods Wiseco Cunningham crank cylinder head camshafts Genuine Honda Skunk2 CNC Port Skunk2 Stage 2 cam gears Skunk2 Pro Series valves

**Skunk2 Forged Stainless** Skunk2 Pro Series valve springs Skunk2 Titanium
Skunk2 Prototype 4-2-1
Custom Ported Genuine Honda
Genuine Honda 6-Speed retainers header intake transmissio

Tilton 5.5" Twin Disc Carbon clutch injection ignition RC Injectors MSD DIS-4 ecu lubricants

CHASSIS chassis mods

brakes

springs wheels

tires

shocks coilovers

Skunk2 Skunk2 integrated cage Skunk2 Volk Racing TE-37 BFG Goodrich Skunk2 Pro-C Skunk2 Racing Skunk2 Racing Skunk2 Racing lower arm bar alloy lug nuts

driver seat

safety harness exterior paint interior paint

Recaro/Braille SPG Carbon/Kevlar Willans

S2R Stealth Black Gunmetal















Pre-Preg Carbon Fiber radiator ducting significantly improves the cooling systems efficiency.

Preparing the SiR2 for a test day at the track. Kensai Racing RSX in the background after coming back from Laguna Seca.

SiR2 during testing at Buttonwillow Raceway Park in central California.

Interior view of the SiR2 with Braille/Recaro SPG seats and NASCAR style door bars for added protection.

Loading up the Civic SiR2 after a long day of testing at the track.

axles

clutch

Stock / S2 Turbocharged 1.5 liters bore & stroke 73 x 89.4 220 whp @ 10 lbs @ 6100 rpm 185 wtq @ 6000 rpm Skunk2 turbocharger Innovative Turbo Systems

ACT

**SPECIFICATIONS** 

Skunk2 Skunk2 RC Injectors Skunk2 / PWR Skunk2 / PWR Skunk2 Pro-Series 68mm Skunk2 Mega Power R MSD DIS-4 Quaife LSD Driveshaft Shop level 5 ACT

ECU catalytic converter battery sparkplugs lubricants

front

springs

wheels

lug nuts

tires

WHEELS/TIRES

shocks

rear

CHASSIS

modifications BRAKES

Brembo GT/12" Skunk2 Rear Disc Conversion SUSPENSION

Hondata

Magnaflow

NGK Iridium

Torco

Braille Lightweight

Skunk2 Skunk2

Volk Racing GT-7: 18 X 7.5 +44 BFG g-Force Sport 215/35 ZR18 Skunk2 Lightweight Alloy

seats harnesses harness bar dash cluster shift knob

**Lightening /Structural Integrity** 

custom widebody custom paint paint

STEREO installation

custom installation Skunk2

EXTERIOR

Auto Werks Auto Werks

Sony Xplod

INTERIOR

Form N Function RaceTech RT1000 RaceTech RTMAG4 RacePak UltraDash

Skunk2

House of Kolor Vinyl Mayhem

Form N Function









Skunk2 Pro Series

Skunk2 Titanium

Golden Eagle

Skunk2

engine type

Skunk2 Fully Built K20A 2.399 liter bore & stroke 89 x 96.5 Skunk2 CNC Port Skunk2 Turbo 2 Skunk2 Pro Series cam gears Skunk2 Forged Stainless

valves valve springs retainers sleeved block pistons turbocharger system exhaust manifold

Skunk2 Custom Tubular intake manifold Skunk2 Custom turbocharger Tial Tial wastegate blow-off valve Tial boost controller Blitz i-Color fuel rail Golden Eagle

injection EMS RC Injectors 1000cc AEM **AEM Wideband** O2 sensor AEM map sensor Skunk2 Custom MegaPowerR exhaust Skunk2 Custom 6-Speed transmission

clutch ACT Xtreme / 6-Puck Race Disc Quaife LSD Driveshaft Shop limited slip axles intercooler radiator PWR / Skunk2 PWR / Skunk2 ignition plug wires MSD DIS4 MSD spark plugs NGK Iridium Torco Braille Lightweight lubricants battery air filter K&N

K&N

**CHASSIS / SUSPENSION** shocks

oil filter

Skunk2 Pro-S Skunk2 Lightweight lug nuts Skunk2 Extended wheel study BRAKES

AP Racing Brakes
ASPEC Slotted Rotor front rear

Volk CE28N 18x8.5" BFG R-Compound

custom interior Stitchcraft seats Sparco Pro 2000 Sparco 5-Point 3" harness bar Skunk2 Sparco Carbon Fiber pedals gauges Blitz 2006 Honda Civic Si steering wheel dash **Custom Carbon Fiber** interior trim A-Spec Carbon Fiber floor mats A-Spec Floor A-Spec A-Spec shift knob

Pioneer AVD-W6210 6.5" Widescreen Touch Panel LCD Pioneer AVG-VDP1 Real Time Vehicle Dynamics Processor

EXTERIOR

C-West Full Aero Kit C-West Carbon Fiber GT Wing Xetronic HID Xenon Lighting System Seibon Carbon Fiber Hood & Hatch Paint By Autowerks



66











As Skunk2's first turbocharged project car, the RSX-T received rave reviews from the media and loyalists.

Pierre Kleinubing and Dr. Charles at the dyno. Two wickedly fast drivers and all-around great guys.

Interior amenities include a host of upgrades that provide the necessary driver support for extreme high performance driving.

Champion driver, Pierre Kleinubing, does a last minute check prior to taking to the track.

The Skunk2 RSX-T pulls up to the starting line of the Acura RSX Challenge held at California Speedway.









Skunk2 cams, header, exhaust, intake, and ECU program increased horsepower by 65whp.



Sport Compact car posts a 68.2 on the slalom course compared to BMW M3's 69. And that was before the engine mods.



The Skunk2 Pro-S coilover equipped TSX scored a .92g on the skidpad compared to the BMW M3's .91g.

engine type displacement bore & stroke compression horsepowe torque pistons rods crankshaft head camshafts valves valve springs

retainers exhaust header injectors radiator motor mounts Hasport

coilovers lower arm bar strut tower bar

**K24A2 DOHC VTEC** 2.354 liter 87 x 99 11.0 : 1 254 whp @ 7600 rpm

190 wtq @ 6000 rpm Wiseco . Cunningham Forged

Genuine Honda Skunk2 Ported Skunk2 Stage 1 Skunk2 Forged Stainless Skunk2 Pro Series

Skunk2 Titanium Skunk2 Mega Power Skunk2 Custom 4-2-1 **RC Injectors** Hondata C&R Racing

wheels Volk CE28 18 X 7.5 Michelin Pilot Sport Cup

Brembo GT 13" Genuine Honda front rear

# EXTERIOR body kit

Honda HFP

custom interior Stitchcraft shift knob Skunk2 Sparco Competition Sparco Roadster driver seat passenger seat Sparco Lap 3 Skunk2 Quick Release steering wheel steering wheel hub







# SKUNK2 RACING COOK BOOK

Enthusiasts frequently ask us how much power their engines will make, but because there are so many different variables and combinations, it is nearly impossible for us to provide exact numbers. Fortunately at Skunk2 we have the opportunity to develop and test numerous different engine combos and determine what components and modifications will result in good performance gains.

By publishing the test results of various engine combinations, we hope to provide our customers and enthusiasts with a benchmark for results they might expect with similar combinations. Though actual results may vary with differences in component selection, quality of modifications, and tuning capabilities; the information below can serve as a good reference in developing effective combinations.

	<b>B16A</b>	DYNOTEST	MULE	ENGINE
--	-------------	----------	------	--------

MODIFI	CATIONS	HP GAIN	I Q GAIN	NOTES
STEP 1	Skunk2 Custom Header Skunk2 Stage 1 Cams Skunk2 Custom Short Ram Intake Skunk2 Exhaust	165 → 190	110 → 115	81mm X 77.4mm 1.6L DOHC VTEC 11:1 Comp
STEP 2	Skunk2 Pro-Series Intake Manifold Skunk2 Stage 2 or Pro 1 Cams S2 Valves, S2 Springs & S2 Retainers Skunk2 / Hondata ECU	190 → 218	115 → 126	
STEP 3	Skunk2 Ported Head Skunk2 Stage 3 or Pro 2 Cams Skunk2 Thottle Body Comp Ratio Increased to 11:1	218 → 232	126 → 134	
	STEP 1	Skunk2 Custom Short Ram Intake Skunk2 Eshaust STEP 2 Skunk2 Pro-Series Intake Manifold Skunk2 Stage 2 or Pro 1 Cams S2 Valves, S2 Springs & S2 Retainers Skunk2 / Hondata ECU STEP 3 Skunk2 Ported Head Skunk2 Stage 3 or Pro 2 Cams Skunk2 Thottle Body	STEP 1 Skunk2 Custom Header Skunk2 Stage 1 Cams Skunk2 Stage 1 Cams Skunk2 Exhaust Step 2 Skunk2 Exhaust Step 2 Skunk2 Fro-Series Intake Manifold Skunk2 Stage 2 or Pro 1 Cams S2 Valves, 52 Springs & 52 Retainers Skunk2 Hondata ECU STEP 3 Skunk2 Ported Head Skunk2 Stage 3 or Pro 2 Cams Skunk2 Stage 3 or Pro 2 Cams Skunk2 Thottle Body	STEP 1     Skunk2 Custom Header     165 → 190     110 → 115       Skunk2 Stage 1 Cams     Skunk2 Custom Short Ram Intake     Skunk2 Exhaust       Step 2     Skunk2 Exhaust     190 → 218     115 → 126       Skunk2 Stage 2 or Pro 1 Cams     52 Valves, 52 Springs & 52 Retainers     52 Valves, 52 Springs & 52 Retainers       Skunk2 Hondata ECU     Stage 3 or Pro 2 Cams     128 → 232     126 → 134       Skunk2 Stage 3 or Pro 2 Cams     Skunk2 Thottle Body

180	WD40	2 01	R-SF	RIFS	CHAI	LENGE	ENGI	NE

MODIFI	CATIONS	HP GAIN	TQ GAIN	NOTES
STEP 1	Skunk2 Custom Header Skunk2 Stage 2 or Pro 1 Cams Skunk2 Custom Short Ram Intake Skunk2 Exhaust	205 → 230	135 → 158	84mm X 90mm 2.0L DOHC VTEC 11:1 Comp
STEP 2	Skunk2 Intake Manifold Ported Skunk2 Stage 2 Cams or Pro 2 Cams S2 Valves, S2 Springs & S2 Retainers Skunk2 Hondata ECU Skunk2 Thottle Body	230 → 255	158 → 171	
STEP 3	Skunk2 Ported Head Skunk2 Pro 3 Cams	255 → 277	171 → 187	

# K20A2 / K20Z1 DYNOTEST MULE ENGINE

IVIC	DIFICATIONS	HP GAIN	I Q GAIN	NOTES
STE	P 1 Skunk2 Custom Header Skunk2 Hondata ECU Skunk2 Stage 1 Cams Skunk2 Custom Short Ram Intake Pipe Skunk2 Exhaust	200 → 236	145 → 160	86mm X 86mm 2.0L DOHC iVTEC 11:1 Comp
STE	P 2 Skunk2 Prototype Intake Manifold Skunk2 Stage 2 Cams S2 Valves, S2 Springs & S2 Retainers Skunk2 Throttle Body	236 → 254	160 → 172	
STE	P 3 Skun2 Ported Head Skunk2 Stage 3 Cams Comp Ratio Increased to 11:1	254 → 274	172 → 194	

# **K20A2 SKUNK2 CIVIC SIR2**

MOD	IFICATIONS	HP GAIN	TQ GAIN	NOTES
STEP	Skunk2 Custom Header     Skunk2 Hondata ECU     Skunk2 Stage 1 Cams     Skunk2 Custom Cold Air Intake     Skunk2 MegaPowerR Exhaust	200 → 240	145 → 162	88.5mm X 88.5mm 2.2L DOHC iVTEC 11:1 Comp
STEP	2 Skunk2 Prototype Intake Manifold Skunk2 Stage 2 Cams S2 Valves, S2 Springs & S2 Retainers Skunk2 Throttle Body	240 → 260	162 → 178	
STEP	3 Skunk2 Ported Head Skunk2 Stage 3 Cams Comp Ratio Increased to 11:1	260 → 292	178 → 202	

# K24A1.3.4 DR. CHARLES' WAGOVAN ENGIN

ı	MODIFI	CATIONS	HP GAIN	TQ GAIN	NOTES
	STEP 1	Header Skunk2 Prototype Intake Manifold Skunk2 ECU Skunk2 Stage 1 Cams Skunk2 Custom Short Ram Intake	170 → 205	184 → 190	87mm X 99mm 2.4L DOHC iVTEC K20 Oil Pump 10.5:1 Comp
	STEP 2	Skunk2 Custom Exhaust Skunk2 Stage 2 Cams S2 Valves, S2 Springs & S2 Retainers	205 → 228	190 → 195	
	STEP 3	Skunk2 Throttle Body Skunk2 Ported Head Skunk2 Stage 3 Cams Comp Ratio Increased to 10.5:1	228 → 257	195 → 204	

K20A2 / K2071 CARR EXEMPT TURROCHARGED ENGINE

MODIFICATIONS	HP GAIN	TQ GAIN	NOTES
STEP 1 Smog Legal Turbo Kit Performance Exhaust	183 → 236	178 → 217	86mm X 86mm 2.0L DOHC iVTEC
STEP 2 Skunk2 70mm MegaPowerR Exhaust STEP 3 Skunk2 Turbo 1 Cams	236 → 252 252 → 283	217 → 222 222 → 233	Turbo 7lbs

## K24A2 SKUNK2 M3 KILLER TSX & CIVIC RR ENGINE

MODIF	ICATIONS	HP GAIN	TQ GAIN	NOTES
Stage 1	. Skunk2 Custom Header Skunk2 Intake Manifold Skunk2 Hondata ECU	200 → 240	184 → 190	87mm X 99mm 2.4L DOHC iVTEC 11:1 Comp
	Skunk2 Stage 1 Cams Skunk2 Custom Short Ram Intake Skunk2 Exhaust			K20A2 Oil Pump
STEP 2	Skunk2 Stage 2 Cams S2 Valves, S2 Springs & S2 Retainers Skunk2 Throttle Body	240 → 265	190 → 195	
STEP 3	Skunk2 Ported Head Skunk2 Stage 3 Cams Comp Ratio Increased to 11:1	265 → 280	195 → 215	

I	MODIFICATIONS	HP	TQ	NOTES
	Skunk2 Custom Racing Header	385	265	90mm X 101mm
	Skunk2 Hondata ECU or Motec M800			2.6L DOHC
	Skunk2 Stage 3 Cams			15:1 Comp Ratio
	Skunk2 Custom Individual Throttle Bodies			E98 Ethanol
	S2 Valves, S2 Springs & S2 Retainers			5-Stage Dry Sump
	Clusted Chic Bertal Hand			. , ,

# H22A DYNOTEST MULE FNGIN

MODIF	CATIONS	HP GAIN	TQ GAIN	NOTES
STEP 1	Header Skunk2 Stage 1 Cams or S2 Pro 1 Skunk2 Intake Manifold Skunk2 Exhaust	195 → 225	160 → 190	87mm X 90.7mm 2.2L DOHC VTEC 11:1 Comp
STEP 2	Skunk2 Ported Head Skunk2 Stage 2 or S2 Pro 2 Cams Skunk2 Hondata ECU S2 Valves, S2 Springs & S2 Retainers Comp Ratio Increased to 11:1	225 → 270	190 → 220	

# D16Z6.Y8 DYNOTEST MULE ENGIN

MODIF	ICATIONS	HP GAIN	TQ GAIN	NOTES	
STEP 1	Header Skunk2 Stage 1 Cams Skunk2 Intake Manifold Skunk2 Exhaust Skunk2 Throttle Body	From 145 → 165	From 128 → 136	75.5mm X 90mm 1.6L SOHC VTEC	

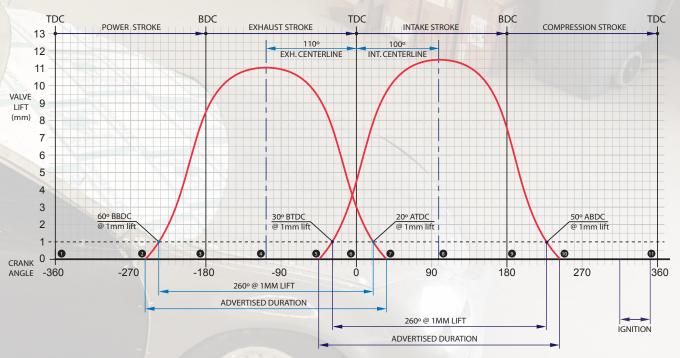
# **F20C HONDA TUNING MAGAZINE S2000 ENGI**

MODIFICATIONS		HP GAIN	TQ GAIN	NOTES
Step 1	AEM EMS Skunk2 Stage 1 Cams	240 → 257	154 → 172	87mm X 84mm 2.0L DOHC VTEC
	Skunk2 Custom Short Ram Intake Skunk2 Exhaust and Test Pipe			11.5:1 Comp
Step 2	Skunk2 Custom Header Skunk2 Stage 2 Cams	257 → 268	172 → 180	
	S2 Valves, S2 Springs & S2 Retainers Skunk2 Throttle Body			
Step 3	Skunk2 Custom Ported Head Comp Ratio increased to 11.5:1	268 → 280	180 → 190	

# 4G63T DYNOTEST MULE ENGIN

MODIF	ICATIONS	HP GAIN	TQ GAIN	NOTES
STEP 1	Skunk2 Stage 1 Cams Skunk2 Downpipe Skunk2 Mega Power Exhaust	315 → 350	290 → 305	85mm X 88mm 2.0L DOHC
STEP 2	Skunk2 Prototype Stage 2 Cams AEM EMS ECU Tuning Skunk2 Turbo Elbow 52 Valves 52 Springs & 52 Retainers	350 → 390	305 → 340	

\*All figures are flywheel Horsepower and Torque obtained on DTS Engine Dyno. Results may vary. \*Wheel Horsepower and Torque figures will be approximately 14-18% lower for B and H series \*Wheel Horsepower and Torque figures will be approximately 7-10% lower for K series.



# CAM TIMING EVENTS AND 4-STROKE ENGINE OPERATION

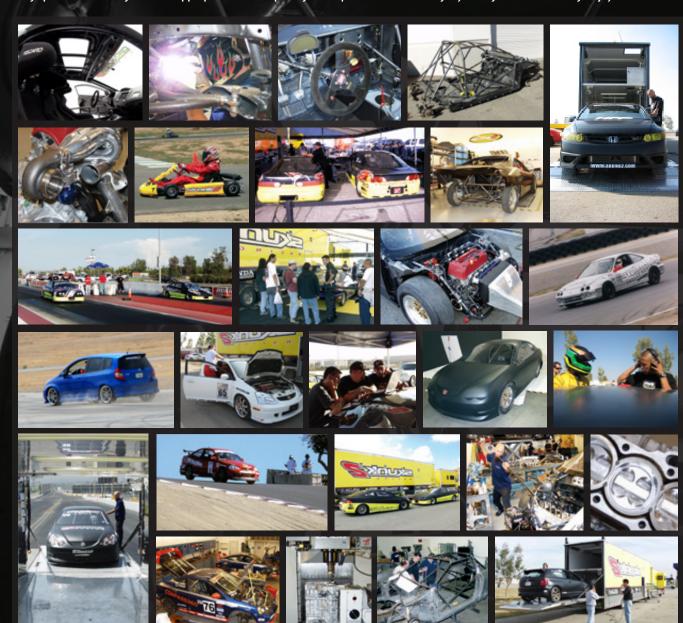
Cam Timing, or rather when valves open and close in relation to piston and crank position, is critical to making power. The graph above and the explanation below are an attempt to explain what goes on inside a four-stroke engine, define key terms used when describing cam set-up, and help you better understand the importance of proper cam timing.

- 1: Piston is at the top of the bore or Top Dead Center (TDC) and both valves are closed. Ignition occurred about 20°-40° before. The piston is being pushed down by the combustion pressure.
- 2: By 90° after top dead center (ATDC) the cylinder pressure is already starting to decrease and the exhaust valve can begin to open safely before the piston reaches its lowest point or Bottom Dead Center (BDC). The combustion cylinder pressure pushes the burnt fuel mixture/exhaust gases
- 3: The piston then changes direction after it reaches BDC and begins to help push out the remaining exhaust gases. It is important for the valve to open early enough so the exhaust valve is nearly wide open when the exhaust stroke begins. This reduces the resistance, known as pumping losses, caused by the piston trying to push against the exhaust pressure. Opening the valve earlier will give the engine more time to blow down
- 4: The exhaust valve is at its maximum opening or peak lift. This is the exhaust centerline position, or rather how many degrees peak lift occurs before top dead center (BTDC). It is important that the peak exhaust lift occurs when the piston is near its maximum velocity on the exhaust stroke
- 5: Before the exhaust stroke is complete and the piston reaches TDC, the intake valve begins to open as the exhaust valve continues to close. The exhaust gases traveling out the exhaust port create a suction that helps to draw in the intake charge. This phenomenon is commonly referred to as "scavenging". When to open the valve is critical because it will determine how much the valve is open when the piston is at maximum velocity on the intake stroke; thus increasing volumetric efficiency (VE).
- 6: As the piston reaches TDC, both the intake and the exhaust valves are open. The period of time between #5 and #7 is commonly referred to as the overlap period. On low rpm engines the overlap period lasts around 20°-30°. On high rpm race engines overlap may be as long a 50° - 100°. This much overlap causes the engine to run rough, and the intake charge to go right out the exhaust ports at low speeds.
- 7: As the piston is moving downward, the exhaust valve closes shut. The later the valve is closed may help with high rpm performance, but will result in poor low rpm operation and emissions
- 8: The intake valve reaches its maximum opening or peak lift. This is the intake centerline position, or rather how many degrees peak lift occurs after top dead center (ATDC). It is important for the centerline to be near peak piston velocity on the intake stroke in order to optimize cylinder
- 9: The piston reaches BDC and begins to travel upward. Notice that the intake valve is still open. Even though the piston is pushing upwards, the inertia generated by the speed and mass of the air/fuel causes the mixture to continue to rush in and fill the cylinder. This phenomenon is called a "supercharging" effect and is the reason why some naturally aspirated engines can even fill the cylinder up to 130% of its volume.
- 10: The intake valve closes shut before the piston reaches maximum velocity on the compression stroke. When the intake valve is closed ultimately determines the optimum operating rom range and also the dynamic compression ratio of the engine. Closing the valve early results in good low rpm operation, but limits power output and rpm. Early valve closing also results in higher cylinder pressures and increased pumping losses during the compression stroke.
- 11: Before the piston reaches TDC the spark plug ignites the compressed charge. The higher the rpm, the earlier the ignition must begin. More efficient engines do not require as much timing advance. After the piston reaches TDC, the combustion pressure pushes down on the piston beginning the power stroke once again. Back to 1.

# PHOTOS WE DIDN'T WANT TO LEAVE DUT

During production of this 2007 catalog we had the opportunity to view the vast amount of photos collected in our archives. The tough part was selecting the most appropriate and compelling

photos to tell our story. It became evident that we had more great photos than we had space. Here are some of our other photos that we thought you might find interesting. Enjoy!



# TERN

A vehicle modified with Skunk2 Racing competition and/or racing performance products may not meet the legal requirements for operation on public roads and highways. It is the purchaser's responsibility to check and comply with all local, state, and federal laws before operating vehicle. Installation and use of performance products may also affect or void vehicle manufacturer warranty and insurance policy. SOME PRODUCTS MAY NOT BE LEGAL ON POLLU-TION CONTROLLED VEHICLES OPERATING ON PUBLIC HIGHWAYS.

# WARRANTY

Group-A Autosports warrants all products to be free of defects in materials and workmanship for normal use and service for a period of 90 days from retail purchase. Parts returned must be determined of 90 days from retail purchase. Parts returned must be determined by Group-A Autosports to be defective before any warranty credit or replacement is issued. Group-A Autosports' obligation under warranty shall be limited to repairing or replacing, at its option, any part proven defective. The customer must prepay transportation charges. Final determination of the suitability of the products for the use contemplated by the buyer is the sole responsibility of the buyer. Group-A Autosports shall not be liable for any special, direct, indirect incidental progressive determined. indirect, incidental, or consequential damages, that might be claimed as a result of the failure of any part, including claims for delay, loss of profits, or labor. Group-A Autosports shall not be liable for any damage or injury to persons or property resulting from improper installation or misuse of any part subject to this warranty. There are no other warranties expressed or implied extending beyond those

se contact your local Skunk2 Racing product dealer or distributor. up-to-date dealer locator is provided on www.skunk2.com. For a detailed listing, please contact Group-A Autosports, Inc.

# PRICING POLICY

All prices are subject to change without notice.

# DEALER OUALIFIC

All prospective dealers are required to submit the following information for review:

- Copy of dealer's business license
- Completed dealer application & bank inquiry form
- Signed Copy of dealer's resale card
- Photos of business

All orders within the continental United States can be shipped prepaid or C.O.D. Payment for C.O.D. orders must be by cashier's check or money order; except for established accounts with satisfactory dealer application and credit approval, which may pay by company check. For convenience, the following credit cards are being accepted: Visa, MasterCard, Discover, American Express. Special order items may require a nonrefundable deposit of up to 50%. For overseas and international orders, please call for details. A \$25.00 USD service charge will be applied to any returned check, and all future shipments will be sent C.O.D-Certified Funds Only.

Merchandise cannot be returned without a Returned Goods Authorization (RGA). All returned merchandise must be in 'like-new' and resellable condition. A 20% restocking fee will be charged on all returned merchandise. Freight must be prepaid on all returned merchandise. Special order items cannot be returned or cancelled.

# ECHNICAL SUPPORT

Technical support will be provided to dealers for Skunk2 Racing, and any other products distributed by Group-A Autosports, Inc.

2050 5th Street Norco, CA 92860 USA

Tel: 951.808.9888 Fax: 951.808.9889 E-mail: info@skunk2.com

WWW.SKUNK2.COM

© 2007 GROUP-A AUTOSPORTS, INC.

