

THE PERFORMANCE ELECTRONICS SOURCE

MSD[®] POWERSPORTS



2007 CATALOG

MOTORCYCLE ATV WATERCRAFT
SNOWMOBILE V-TWIN JR DRAGSTER

www.MSDPOWERSPORTS.COM

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CALL TOLL FREE: 888.258.3835

Thanks for your interest in MSD Powersports! We're sure you recognize the name MSD Ignition from our race-proven ignition systems in drag racing, circle track and road course racing. You might not know that MSD has been involved with motorcycles, ATVs, personal watercraft and other recreational (and racing!) vehicles for many years.

Whether you're a weekend warrior or professional racer, MSD Powersports has the components you need to improve your engine's overall performance. From Briggs & Stratton[®] engines to 330 mph top fuel dragsters, MSD can do it all.

Our MC-4 motorcycle ignition is used by top teams in NHRA Pro Stock Bike such as Antron Brown, Geno Scali and many others. Our Multi-Channel Ignition Controls for watercraft and snowmobiles power many of the top machines at the races, so we're not a stranger to engines with fewer cylinders.

This catalog is just the start of our ignition offerings.

You'll find a variety of products for street or dirt bikes, ATVs, racing ignition systems for snowmobiles and watercraft, even billet flywheels for Go-Peds!

Whatever your powersport, MSD is ready to bring enhanced ignition performance to the snow, water, dirt and sidewalks! Our goal is to make MSD's proven technology available to the powersports enthusiast. Throughout the race season our team of technicians and engineers will be at many events and races to find out what products you want and need to improve performance. If it has to do with performance electronics and ignitions, we'll be there.

If you have any questions about a product or your specific application, be sure to contact our customer support department at 888-258-3835 or check out www.msdpowersports.com for more information.

**Thanks,
and we'll see you at the races!**

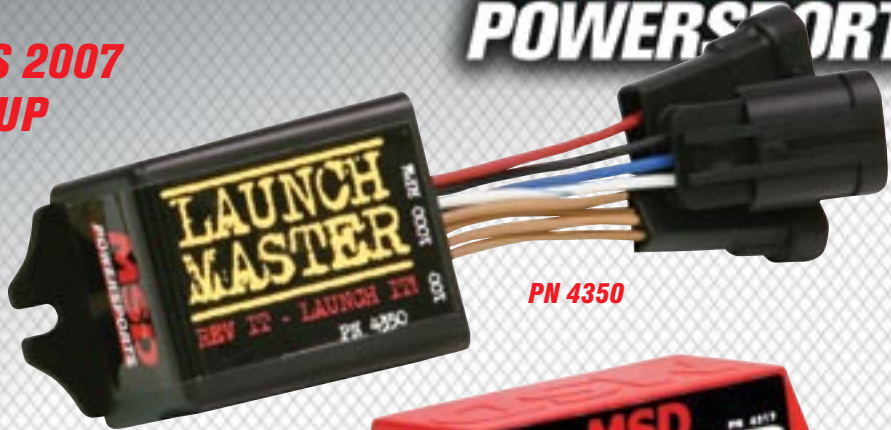


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MSD POWERSPORTS 2007 NEW PRODUCT LINEUP

Launch Master

The Launch Master provides an adjustable rev limit that you can activate through your clutch switch. This way, you can have a consistent rpm limit to help launch you and your bike - HANG ON and see page 12 for more information and applications.



PN 4350

Single Cylinder Programmable Ignition

For two or four-stroke single cylinder engines, this new advanced ignition allows you to plot two timing curves, set a launch rpm limit and other turning abilities all from your laptop! See page 22.



PN 4217

PATENT NOS.
6304814
6721648

G2X-M™ GPS

Need help getting around the track? Look no more, MSD Powersports new G2X-M™ GPS track mapping data acquisition system is an affordable system that provides advanced results!. See page 21.



PN 11500



Jet Kits

Need to fine tune your carburetor? MSD Powersports' new jet kits can help you squeeze every bit of performance out of your carbureted engine. See page 16.

V-Series™ Ignition

Looking to get the most out of your V-Twin? MSD V-Series™ ignition can help you find the performance you're looking for. MSD's new V-Series™ Ignition will help you dial-in the performance you crave from your bike. See page 9.



PN4226

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LIMITED WARRANTY

MSD Ignition warrants MSD Ignition products to be free from defects in material and workmanship under normal use and if properly installed for a period of one year from date of purchase. If found to be defective as mentioned above, it will be replaced or repaired if returned prepaid along with proof of date of purchase. This shall constitute the sole remedy of the purchaser and the sole liability of MSD Ignition. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall MSD Ignition be liable for special or consequential damages.



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MOTORCYCLES

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MC-3 Digital Motorcycle Ignition

Whether you have a street, touring or race bike, the powerful sparks of the MSD MC-3 Ignition will improve your motorcycle's overall driveability through complete combustion of the fuel mixture. If your engine is equipped with sensitive multiple carbs, the MC-3 will smooth things out in the case of less than perfect carb synchronization.

Not only does the MC-3 produce high-output sparks, but it also fires the spark plug multiple times to ensure combustion and prevent plug fouling. Unlike the stock ignition which fires the plug only once on the combustion stroke, the MC-3 uses state-of-the-art digital technology to deliver a series of hot multiple sparks at low speed where poor fuel atomization occurs. This envelope of sparks (up to 10 at idle) quickens starting, smooths out the idle and improves off-line throttle response.

A high speed RISC microprocessor accurately keeps tabs on the rpm, rev limits and timing of the ignition. The MC-3 accepts trigger signals from the stock ignition so you can retain the factory ignition curve, or for racing applications, Hall-effect pickups can also be used. The MC-3 Ignition can be used on single, two or 4-cylinder motorcycles using single or dual output coils with points or amplifier triggering.

- High output ignition control for 1, 2 or 4-cylinder engines.
- Improve performance, quicken throttle response and overall driveability.
- Easily connects to bikes with points, amplifiers or electronic ignition systems.

MC-3 SPECIFICATIONS

VOLTAGE INPUT: 11-18 Volts DC, Neg. Ground
MAXIMUM RPM: 15,000 (4-Cylinder)
ENERGY OUTPUT: 110 mJ
CURRENT REQUIREMENTS: 4.3 Amps @ 10,000 RPM
MULTI SPARK DURATION: 35° (4-Cylinder)
WEIGHT & SIZE: 1.25 lbs., 6"L x 3.5"W x 1.75"H
PRIMARY VOLTAGE: 450 Volts
SECONDARY VOLTAGE: 45,000 with MSD Coil



Note: Will not work on V-Max.

Two-Step Soft-Touch Rev Control

The MC-3 features MSD's accurate rev limiter. By setting an rpm limit you can protect the engine from over-rev damage due to missed shifts or broken drivetrain. The rpm limit is adjusted with plug-in modules and the MC-3 is supplied with a 10,000, 11,000 and 12,000 RPM Module.

Not only can you set an over-rev rpm limit, there is also a feature that allows you to select a second rev limit! This is great to activate on the starting line to hold the rpm at a steady level. This will help keep your holeshots consistent and quick.

Air Shifter Ignition Interrupt

This feature produces smooth, backfire-free shifts with automated air shifters. By wiring this circuit to the shifter, the ignition output is momentarily disabled whenever the shifter is activated. This safely unloads the transmission for lightning quick shifts with no backfires!

Built-In LED

The MC-3 makes it convenient to time your engine with a built-in LED on the side. When a triggering event occurs, the LED lights up - perfect for static timing your engine plus it is helpful in troubleshooting.

MC-3 Digital Motorcycle Ignition _____ PN 4223

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**NOW LEGAL IN
NHRA
JR. DRAGSTER!**



U.S. PATENT NO.
6196208

MC-3 PRO STOCK SPECIFICATIONS

VOLTAGE INPUT: 11-18 Volts DC
MAXIMUM RPM: 15,000 (4-Cylinder)
ENERGY OUTPUT: 185 mJ
CURRENT REQUIREMENTS: 8 Amps @ 10,000 RPM
MULTI SPARK DURATION: 35° (4-Cylinder)
WEIGHT & SIZE: 1.25 lbs., 6"L x 3.5"W x 1.75"H
PRIMARY VOLTAGE: 500 Volts
SECONDARY VOLTAGE: 48,000 with MSD Coil

- Specifically designed with the power and reliability for professional pro stock drag racing.
- Incredible spark energy and voltage for dual plug per cylinder race engines.
- Long multiple spark series produces quick throttle response and a clean idle.
- Set an rpm limit for consistent holeshots and another for overrev protection.
- Shift interrupt circuit produces quick, smooth shifts.

MC-3 Pro Stock Digital Ignition

The MC-3 Pro Stock Motorcycle Ignition is specifically designed for drag racing engines equipped with dual plugs per cylinder. Like the standard MC-3, the Pro Stock Ignition is a capacitive discharge, multi-spark design that produces a series of extremely hot sparks.

The sparks of the Pro Stock Ignition are packed with 185mj of spark energy with 500 primary volts! Plenty of power for high-compression, high-rpm racing engines. The efficient CD circuits ensure that every spark, even each multiple spark, is at full power. Below 3,000 rpm, the ignition produces a series of multiple sparks that burn in the cylinder for up to 35° of crankshaft rotation. This proven technology keeps the spark plugs clean at low rpm and improves the throttle response while reducing any chance of hesitation for off-idle acceleration.

The MC-3 Pro Stock Ignition is designed for racing applications with two spark plugs per cylinder. Since it is a race-only ignition, MSD engineers included a Two-Step Rev Control and Shift Interrupt feature into the ignition. The Two-Step lets you set two rev limits; one to use for consistent holeshots and another for top end over-rev protection. The Shift Interrupt can be connected to the air shifter so when it is activated, the ignition output is momentarily disabled to unload the transmission. This produces incredibly smooth and fast shifts!

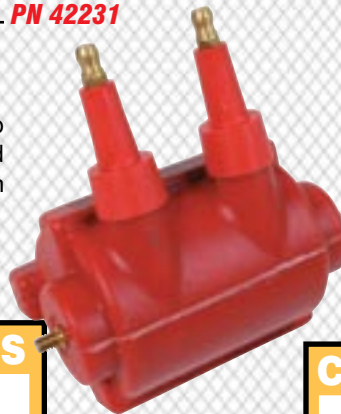
Triggering chores can be handled with MSD's Hall Effect Pickups or the stock amplifier system. Like the standard MC-3, the Pro Stock model offers a trigger signal LED and a Shift Interrupt feature. The Ignition is supplied with an 11,000, 12,000 and 13,000 rpm module.

MC-3 Pro Stock Digital Motorcycle Ignition — PN 42231

Coils

MSD offers two Coils designed for use with the Pro Stock MC-3 Ignition Control. Both coils are designed for high-output spark and are potted for vibration protection.

Twin Tower Pro Stock Coil — PN 8204
Twin Tower, Compact Pro Stock Coil — PN 4573



PN 8204

COIL SPECIFICATIONS

URNS RATIO: 40 KV
PRIMARY RESISTANCE: 1.2 Ohms
SECONDARY RESISTANCE: 100:1
MAX VOLTAGE: 11,500 Ohms



PN 4573

COIL SPECIFICATIONS

URNS RATIO: 75:1
PRIMARY RESISTANCE: 2.8 Ohms
SECONDARY RESISTANCE: 11.5k Ohms
MAX VOLTAGE: 45,000 Volts

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MC-4 Programmable Ignition Control

MSD's Programmable Digital-7 Series Ignitions have been powering the winning cars in NHRA Pro Stock, Outlaw Super Street and Pro Street classes for years. That technology is now offered to motorcycle racers with the MC-4 Ignition Control. It provides incredible output and energy, along with PC-programmable capabilities that give you great tuning opportunities.

The MC-4 provides the spark energy you expect from MSD with over 190 mJ of spark energy to each coil to fully burn the fuel mixture of high output race engines. Below 3,300 rpm the MC-4 delivers a long series of multiple sparks that burns in the cylinder for 20° to keep the engine crisp and clean at lower rpm. Every spark is at full power even through redline rpm to ensure the most power through top end.

All of this spark energy can be controlled through an array of timing and rpm controls. The MC-4 is programmable with MSD's Pro-Data+ software so you can custom tune your timing and rpm parameters. Imagine being able to plot timing curves in 0.1°

increments every 100 rpm! The window of tuning opportunity is wide open!

With the incredible power and endless programming capabilities, the MC-4 is the only choice when it comes to igniting your race bike.

MC-4 Ignition Control _____ **PN 4224**
Replacement Harness _____ **PN 42241**

Program from a PC or with an optional Hand Held Monitor



MC-4 SPECIFICATIONS

- VOLTAGE INPUT:** 11-18 Volts DC
- MAXIMUM RPM:** 15,000 (4-Cylinder)
- ENERGY OUTPUT:** 190 mJ
- CURRENT REQUIREMENTS:** 4.3 Amps @ 10,000 RPM
- MULTI SPARK DURATION:** 35° (4-Cylinder)
- WEIGHT & SIZE:** 1.25 lbs., 6"L x 3.5"W x 1.75"H
- PRIMARY VOLTAGE:** 495-505 Volts
- SECONDARY VOLTAGE:** 48,000 with MSD Coil
- TRIGGER:** Points or Hall Effect



- Extreme power and output with intricate programming capabilities.
- Incredible spark energy and voltage for dual plug per cylinder race engines.
- Map separate timing curves for the launch and top end.

ADJUSTABLE FEATURES

Timing Controls

You'll be able to program a timing curve exclusively for the holeshot along with a timing map for the rest of the pass that can also be programmed.

Individual Cylinder Timing

No more timing compromises! You can adjust the timing of each cylinder up to 5° in 0.1° increments. (A cam sync sensor is required to take advantage of this feature.)

Timed Launch Retard

Program a timing curve that can be ramped back in based on time during the holeshot to compensate for different starting line conditions.

Retards

Three step retards can be activated independently plus you can program a start retard. You can also program a retard step to occur with each gear change.

Boost Retard Curve

Control the timing in relation to boost pressure. Timing can be programmed from 0°-25° in 0.1° increments every 100 rpm ranging from boost pressures up to 45-psi. MAP sensor not supplied.

Shift Programs

Momentarily shut off the spark output for an adjustable fraction of a second to produce quick, smooth shifts.

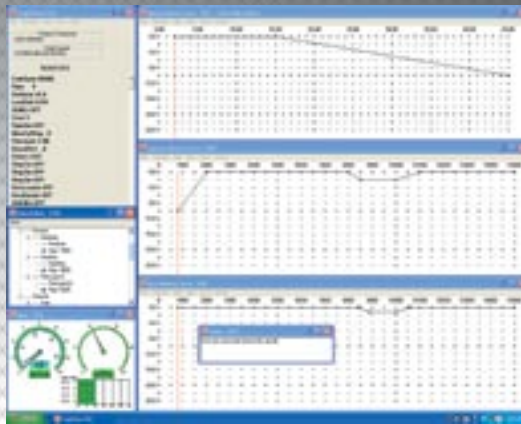
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Tuning with Pro-Data+

MSD's Pro-Data+ software is very easy to use and lets you tune your timing and rpm like you never thought possible. Once loaded, you can point and click to create timing curve maps for the holeshoot, the pass and even a curve based on boost pressure from a turbo or supercharger. An easy to follow menu on the left side of the screen makes it easy to scroll through and adjust things like the start retard, launch ramp delay, step retard off delays, gear retards, the shift kill delay and many more. You can also download any MSD updates from our website for free!



The software can be used with any PC running Windows '95 and later. It is supplied with the ignition on a CD or can be downloaded at www.msdpowersports.com.

Optional Accessories

Handheld Programmer/Monitor

If you don't have a laptop you can also use this handy Programmer to dial-in your MC-4 and single cylinder ignition, PN 4217. Simply connect the ignition to this Monitor and the LCD screen will let you walk through the programming menus.



Hand Held Programmer/Monitor — PN 7550



Motorcycle Ignition Tester

The Motorcycle Ignition Tester has the ability to test several different combinations of ignition setups. It will work on 4-cylinder, 2-cylinder, single cylinder four-strokes, and MSD Pulse ignitions. Different test programs can be selected by pushing the button on the front of the unit. The Tester can also be programmed to check the accuracy of your tachometer or rpm-activated switches for a variety of applications.

Motorcycle Ignition Tester — PN 43751



Kill Lanyard

This Lanyard uses solid state circuitry and ensures contact even in the harshest racing conditions. All of MSD's Motorcycle Ignitions will work with this reliable switch.

Lanyard Switch — PN 4379



Note: Normally open lanyard.

Cam Synchronization Pickup

To take advantage of the MC-4's Individual Cylinder Timing, a sync pickup must be used so the ignition knows exactly which cylinder is firing. This pickup kit is supplied with a non-magnetic pickup, Weathertight connectors, magnet and a retainer.



Cam Sync Pickup Kit — PN 2346

Shift Light

This compact LED shift light will illuminate brightly to alert you to shift. The MC-4 allows you to program a different shift rpm point for each gear and this shift light connects easily through a 2-pin connector.



LED Shift Light — PN 7552

Launch/Rev Limiter/Shift Light

Track conditions change at the starting line? You'll be able to change the value of the launch rev limiter from your handlebar at the starting line with the twist of a couple of dials.

There is also a built-in shift light that will turn on bright to alert you to shift. And on top of all that you can adjust your two-step control from the Launch/Rev Limiter/Shift Light!



Launch Control and Shift Light — PN 4360

MOTORCYCLES

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New!

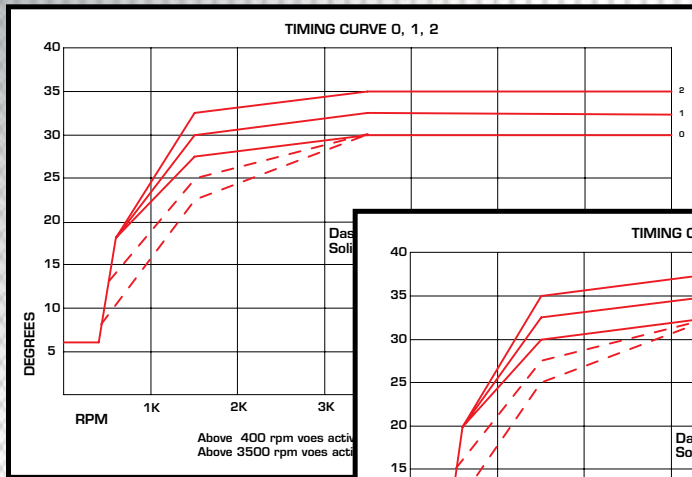
V-Series™ Ignition

The V-Series™ Ignition will get your Harley-Davidson® fired up! It allows you to select your own timing curve for a smoother idle and snappy throttle response. You can also choose between single fire or dual fire modes, and it gives you the choice of kick or electric start. A programmable rev-limiter keeps things under control should you miss a shift or break the driveline.

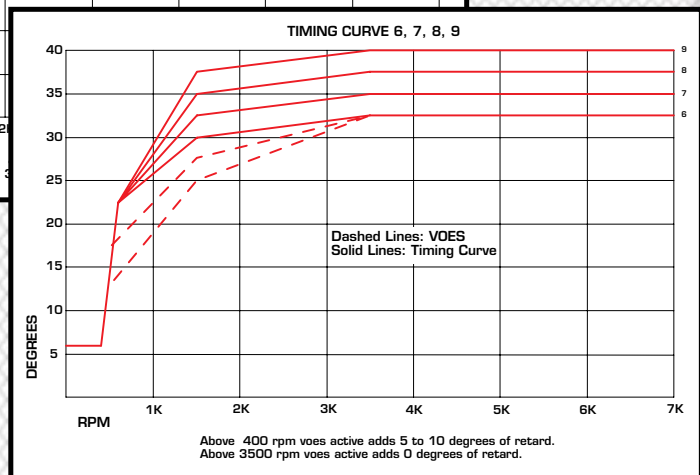
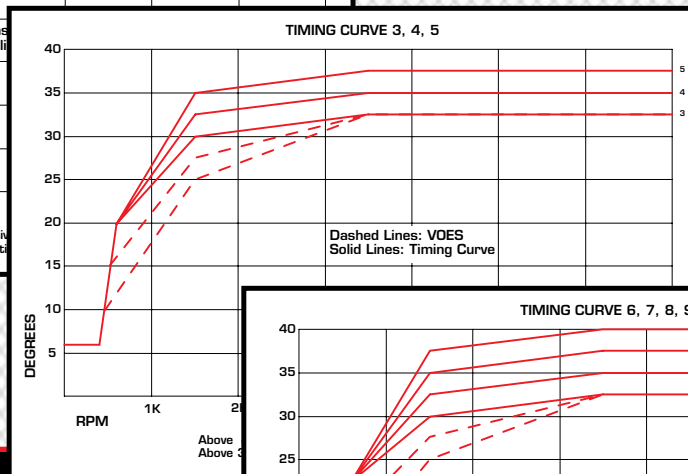


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Nose Cone Ignition for Harley Davidson® _____ PN 4226



Note: For 1970-1999 Shovelhead and Big Twin (except fuel injected) and 1971-1997 Sportster (except 1998-2007 1200s).



- Selectable timing curves.
- Accurate timing for smoother idle and quicker throttle response.
- Selectable VOES curves.
- Selectable RPM rev-limiter.
- Single fire or dual fire mode.
- Tach output.
- Easier starting.
- Kick start or electric start mode.

Dual Output Single Fire Blaster Coil for Harley-Davidson®

The V-Series™ single fire coil is a great coil to use with our new V-Series nose cone ignition system and an ideal upgrade for your Twin-Cam engine.

Dual Output Single Fire Blaster Coil for Harley-Davidson® _____ PN 42953

PN 42953



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Pulse Ignition

Evolution, Shovelhead, Panhead and Knucklehead engines will all benefit from the power of the MSD Pulse Ignition!

Wake up your Harley-Davidson[®] with a powerful spark from MSD! The multiple sparking capacitive discharge design of this ignition ensures combustion of the fuel mixture in each cylinder improving the power and output of the engine.

Below 3,000 rpm, the MSD fires each spark plug multiple times during the combustion stroke. This series of full power sparks burns in the cylinder for up to 45° of crankshaft rotation. These sparks result in quick starts, smooth idle and lightning quick throttle response!

The Pulse Ignition is a complete bolt-on replacement kit and is supplied with the Ignition, individual fire coil pack, Hall Effect Trigger Pickup and 8.5mm Super Conductor Spark Plug Wires.

- Improved Throttle Response.
- Increased Pulling Power and Mid Range.
- Smooth Idle and Quick Starts.

Pulse Ignition Kit for Harley-Davidson[®] V-Twin Motorcycles PN 42210



US PATENT NO. 6196208

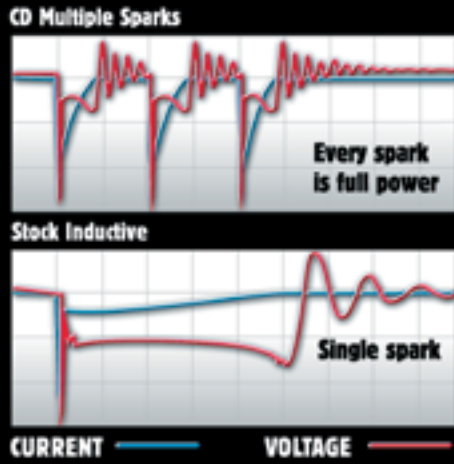
Note: Does not work with twin cam engines.

The MSD Pulse Ignition System for Harley-Davidsons[®] will smooth out your bike's idle and produce great top end power!
See page 35 for our 8.5mm Wire Sets for your bike!

BUILT-IN FEATURES

- Breakerless Triggering
- Individual Fire
- Multiple Spark Series
- Electronic Advance
- 2-Step Rev Limiter
- High Speed Retard

TYPICAL SPARK PATTERN



Mounting Kits

Real estate on motorcycles is a prime commodity. To ease mounting the Pulse controller on your Harley, we offer these two mounting kits that wrap around the frame tube. Two diameters are available for varying tube sizes.

Mounting Strap Kits

1" PN 4393
1.25" PN 43931



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Nitro Programmable Ignition

Nitro V-Twin racing bikes push these bikes to the extreme and MSD has the ignition to provide the power! The MSD Programmable Nitro Ignition system for Harley engines combines the benefits of a Capacitive Discharge Ignition with the best features of an Inductive Ignition. The result is an incredible 800 millijoules of spark energy and a long duration spark of 400 microseconds.

Two ignition control units are required for this kind of power; one to house the CD circuits and programming controls and another with the inductive circuitry. When the two controls are triggered they send their unique spark to two Hybrid Coils. These coils must be used with the Nitro Ignition and combine the two sparks to work as one. The CD side is primarily responsible for ionizing the spark plug gap while the current from both coils produce a high level of current and sustained spark to burn any fuel you throw at it.

The Nitro Ignition also provides racers with incredible tuning opportunities through advanced programming from your PC! MSD's Pro-Data+ software is easy to use and allows you to program timing curves down to 0.1° per 100 rpm. You'll also be able to program shift points, retard stages and different rpm limits.

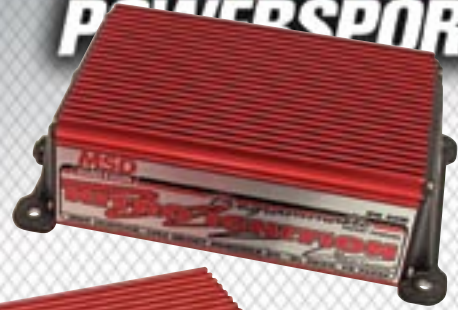
The Ignition, coil pack, trigger pickups and rotor must be purchased separately.

Nitro Programmable Ignition Controls for V-Twin _____ **PN 4215**

Nitro Ignition Components for V-Twin Ignition Controls _____ **PN 4216**
Nitro Coil Pack _____ **PN 4285**

For more information or to download the MSD Pro-Data+ Software for FREE go to www.msd-powersports.com!

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6741925



PROGRAMMABLE FEATURES:

- Launch Retard/Time Ramp
- Run Timing Curve
- Boost Retard Curve
- Multi-Step Retard
- Shift Counting
- RPM/Time Delay Activated Switch
- Start Retard
- Individual Cylinder Timing
- Latching Overrev Shut Off
- RPM Activated Switch



Custom 8.5mm Super Conductor Spark Plug Wires

Refer to page 35 for applications.



- Copper alloy conductor with less than 50 ohms per foot.
- High suppression characteristics.
- Durable outer sleeve and special Dual Crimp terminals.

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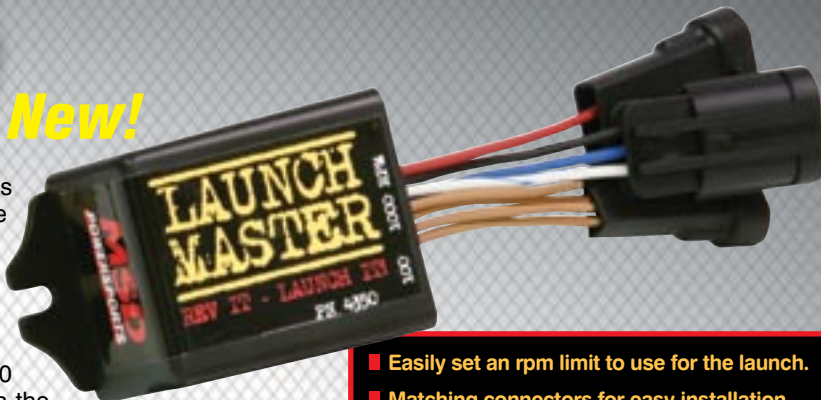
MOTORCYCLES

New!

Launch Master

The MSD Powersports Launch Master is a universal low RPM limiter. It will provide consistent launches and quicker 60-foot times by setting an rpm limit to stage with. Once the green light comes on, release the clutch and take off - but be sure to hold on!

The rpm is adjusted with two built-in rotary dials ranging from 1,800 - 9,900 rpm in 100 rpm increments. A handy LED shows when the launch rev limit is active.



- Easily set an rpm limit to use for the launch.
- Matching connectors for easy installation.
- Delivers firm, consistent holeshots.

Launch Master for coil on plug engines _____ **PN 4350**

Launch Master for 4-cylinder 2-coil engines _____ **PN 4351**

Launch Master for single fire Harley-Davidson® _____ **PN 4352**

Launch Master Harness for Suzuki 4-coil _____ **PN 43501**

Launch Master Harness for 2-coil wasted spark & H-D single-fire _____ **PN 43502**

Launch Master Harness for 4-coil system w/4350 _____ **PN 43503**

Digital Shift Light

MSD's new compact Digital Shift Light is the most universal, easy to use light available! The tiny digital controller inside the compact housing gives you the ability to program the rpm activation point through the easy to view LED panel and two programming buttons. When the engine reaches the activation rpm, the six retina-scorching red LEDs alert you to grab the next gear. The Digital Shift Light works with all stock or high-powered aftermarket ignition systems.



- Installs with distributors, coil packs or coil-on-plug systems ranging from single to 12-cylinders.
- Programmable from 100 - 15,900 rpm down to 10 rpm increments.
- Six bright LEDs are easy to view in daylight and can be dimmed at night.
- Supplied with an easy to install GMR pickup!

Digital Shift Light _____ **PN 89631**

Tach Signal GMR Pick-Up

Just think of things you can easily accomplish with our GMR Pick-Up! This little device simply attaches, no splicing or cutting, to a current carrying wire and turns that information into a 12-volt rpm signal. This signal can be used to activate a shift light, rpm activation switch or a tachometer.

One example is on an engine equipped with a coil-on-plug ignition system. One of the coil's primary current wires is simply routed into the pickup clip and the GMR converts this pulsing into a 12 volt square wave to trigger a shift light or tachometer.

GMR Pick-Up _____ **PN 8918**

**Clip to
Coil (+) Wire**



- Clip to a coil pack's voltage wire to produce a common 12-volt signal for a tach, shift light or rpm device.
- Operates with 5-24 volt input for universal applications.

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Trigger Pickup Assemblies

MSD's electronic trigger pickups are designed to handle the high temperatures and vibration in motorcycle engines. They utilize electronic circuitry that eliminates the excessive retard which is common to a lot of aftermarket electronic triggers pickups. When used with high quality Samarium cobalt magnets, accurate ignition timing in excess of 10,000 rpm can be produced with MSD's electronic triggers.

Trigger Pickups for Kawasaki® ,
KZ 900, 1000, 1100 _____ **PN 42301**

Trigger Pickups for Suzuki® ,
'88-'89 GSXR _____ **PN 42302**

Trigger Pickups for Suzuki® GS _____ **PN 42303**

Timing Rotor for Suzuki® GS _____ **PN 42314**

Trigger Pickups for Harley-Davidson® _____ **PN 42305**

Note: Fits all, except distributor and 88ci Harleys.

Universal Trigger Kit,
two pickups and magnet _____ **PN 42306**



PN 42301

PN 42302



PN 42303

PN 42314

Digital RPM Window Switch

This advanced RPM Window Switch will activate a circuit at your desired rpm, then turn it off at another rpm! This Switch will accept an input rpm signal from a coil negative terminal (for stock ignitions), a tach output from an ignition control, an ECU tach output or even a 5 volt tach signal. Another great feature is that no rpm modules are needed! The rpm activation points are programmed by simply scrolling through the LED display to your desired rpm amounts.

The switch has two outputs; one Normally Open, the other is Normally Closed. It can be programmed from 200 rpm to 15,000 rpm in 100 rpm increments. It can be used with an input voltage of 9-18 volts.

Digital RPM Window Switch _____ **PN 8969**



PN 8969

RPM Activated Switches

These RPM Activated Switches will perform a variety of different functions from turning on a bulb or solenoid to activating an MSD timing retard at a desired rpm.

The RPM Activated Switch, PN 8950, has two activation wires; one to ground a circuit and the other to open a circuit. Simply plug in an rpm module and wire the Switch to the circuit you want to activate. When the engine rpm reaches that value, the circuit is activated and will remain on until the rpm falls below that value.

The RPM Window Switch, PN 8956, has two rpm adjustments; one to activate a circuit, while the other deactivates the same circuit. This Switch will supply then remove ground to a circuit. This is a great feature to deactivate nitrous before the engine's rev limit is reached.

Both Switches can be used with stock inductive ignitions or an MSD Ignition and can handle up to 1.5 amps. No rpm modules are supplied.



PN 8950

PN 8956

Note: To activate circuits that require over 1.5 amps, see the information on page 11 on MSD Relays.

RPM Activated Switch
1-Cyl. 4 stroke 720° _____ **PN 89501**

2-Cyl. 4 stroke 360° and

1-Cyl. 2 Stroke 360° _____ **PN 89502**

4-Cyl. _____ **PN 8950**

RPM Window Switch
1-Cyl. 4 stroke 720° _____ **PN 89561**

4-Cyl. _____ **PN 8956**

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MOTORCYCLES

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MSD High Current Relays

MSD's High Current Relays are what you need to activate accessories that draw high current. The SPDT High Current



Relay is rated at 30 amps with an input voltage of 12 volts DC. The relay is ideal for use with the MSD RPM Activated Switch when 12 volts is responsible for activating a high current device such as a nitrous solenoid.

The DPDT relay is also rated at 30 amps with a 12 volt input voltage. This Relay is the best choice when 12 volts is required to activate multiple high current devices at the same time such as multiple stage nitrous solenoids.

- Single-Pole Double-Throw 30 Amp/12 VDC _____ PN 8961
- Double-Pole Double-Throw 30 Amp/12 VDC _____ PN 8960

Module Selectors

MSD's Module Selectors allow you to choose two or three different rpm limits that can be activated at different times. The Module Selector simply plugs into the rpm receptacle of the MC-3 Ignition, then you route an activation wire up to the handle bar. This way, you can activate one rpm limit to be active while you're staged at the starting line. When the green light turns on and you release the button, the Selector switches to the overrev rpm limit. The 3-Step provides you with another rpm limit to use during the burnout. For use with MC-3 only.

- 2-Step Module Selector _____ PN 8739
- 3-Step Module Selector _____ PN 8737



PN 8739

PN 8737

RPM Selectors

These Selectors give you the ability to change the rpm value with the twist of a dial.

- 3,000-5,200 _____ PN 8670
- 4,600-6,800 _____ PN 8671
- 6,000-8,200 _____ PN 8672
- 7,600-9,800 _____ PN 8673
- 9,000-11,200 _____ PN 8674
- 10,600-12,800 _____ PN 8675



PN 8673

MSD Shift Light

The MSD Shift Light will turn on to "remind" you to shift when the engine reaches your specified rpm. You select the rpm using the same plug-in modules that are used with your MSD Soft Touch Rev Control. The Shift Light features a bright cluster of LEDs (light emitting diode) making it easily visible, even in bright daylight. The light will also turn on for a second or two when the ignition switch is first turned on to inform you that the light is functioning properly.



The Shift Light will work on 2, 4 or 6-cylinder engines and will plug directly into the tach output on MSD Ignitions or can be connected to the negative coil terminal when used with points or inductive-type ignitions. The MSD Shift Light is 4.5"L x 3.5"H with a 1.5" diameter lens. No rpm modules are supplied.

- Shift Light _____ PN 8952

RPM Module Kits

RPM Module Kits include five modules in 200 rpm increments. Each kit is within a 1,000 rpm range. For example, the PN 8745 is supplied with: 5,000, 5,200, 5,400, 5,600, 5,800 modules.



EVEN INCREMENTS

- 3,000-3,800: PN 8743
- 4,000-4,800: PN 8744
- 5,000-5,800: PN 8745
- 6,000-6,800: PN 8746
- 7,000-7,800: PN 8747
- 8,000-8,800: PN 8748
- 9,000-9,800: PN 8749
- 10,000-10,800: PN 8750
- 11,000-11,800: PN 8751
- 12,000-12,800: PN 8752
- 13,000-13,800: PN 8753

ODD INCREMENTS

- 3,100-3,900: PN 87431
- 4,100-4,900: PN 87441
- 5,100-5,900: PN 87451
- 6,100-6,900: PN 87461
- 7,100-7,900: PN 87471
- 8,100-8,900: PN 87481
- 9,100-9,900: PN 87491
- 10,100-10,900: PN 87501
- 11,100-11,900: PN 87511
- 12,100-12,900: PN 87521
- 13,100-13,900: PN 87531

MOTORCYCLES

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MOTORCYCLES/ATVS

New!

Fuel Enhancers™

The new Fuel Enhancers™ from MSD Ignition allow you to optimize your fuel mixture to match your engine's modifications. You can choose from three tuning zones to get perfect throttle response and maximum power. And the best part? They're plug-n-play, so you don't have to spend a bunch of time wiring!

Yamaha Raptor® 700K, 2007 _____ **PN 4171**
Suzuki LT-R 450®, 2006 _____ **PN 4172**
Harley-Davidson Softtail®, 2001-2006 _____ **PN 4176**
Harley-Davidson Twin cam®, 2002-2005 _____ **PN 4177**
Honda VTX 1800®, 2002-2005 _____ **PN 4178**



- Optimize your engine's overall driveability.
- Control the fuel mixture in three tuning zones.
- Dial in a tune up to match modifications.
- Direct plug-n-play installation.

Dual Time Delay Switch

Do you need to activate a timing retard for a split second or activate a nitrous solenoid 0.8-seconds into a run? Our new Dual Time Delay Switch can accomplish both of these tasks!

The Dual Time Delay Switch allows you to provide a ground, or remove a ground to a circuit or control relay to two different circuits. The Switch can easily be programmed in 0.01-second increments using the touch screen and the LED readout.

- Activate two different circuits based on time such as a boost or nitrous controller.
- Digital read out and buttons for easy programming.
- Provide a ground or remove the ground for circuit activation.
- Program the time activation down to 0.01 second increments.



Note: Max Drive is 2 amps per switch.

Dual Time Delay Relay _____ **PN 7563**

MSD Smart Switch

This is truly a Smart Switch! Not only can you choose between supplying ground or 12 volts to activate a circuit, but you can do it through the use of a long list of vehicles sensors! As long as the sensor is within 0-5 volts DC with a minimum signal difference of 0.5 volt, such as TPS, MAP, MAF, water temperature, oil pressure, boost pressure, etc...the Smart Switch can be used!

The switch can be calibrated to 'learn' the sensor and it can be programmed to activate at a certain percentage of the sensor's signal range. Use it to activate a nitrous solenoid when the TPS sensor reaches 95% or when the coolant temp sensor reaches a certain level to turn on an electric fan.

- Activate a device from 0-100% of a sensor's voltage output signal.
- Connects to a wide range of sensors such as a TPS, MAP, MAF, temperature (oil or water), nitrous or boost pressure.
- Built-in LEDs assist in calibration and switch activation points.
- Activate a circuit by supplying a ground or a 12 volt source.



MSD Smart Switch _____ **PN 8966**

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New!

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Jet Kits

Optimize the performance of your ATV by using MSD's dyno-tuned Jet Kits. A must for modified applications, the MSD Jet Kits correct notoriously lean stock jetting. More applications under development.

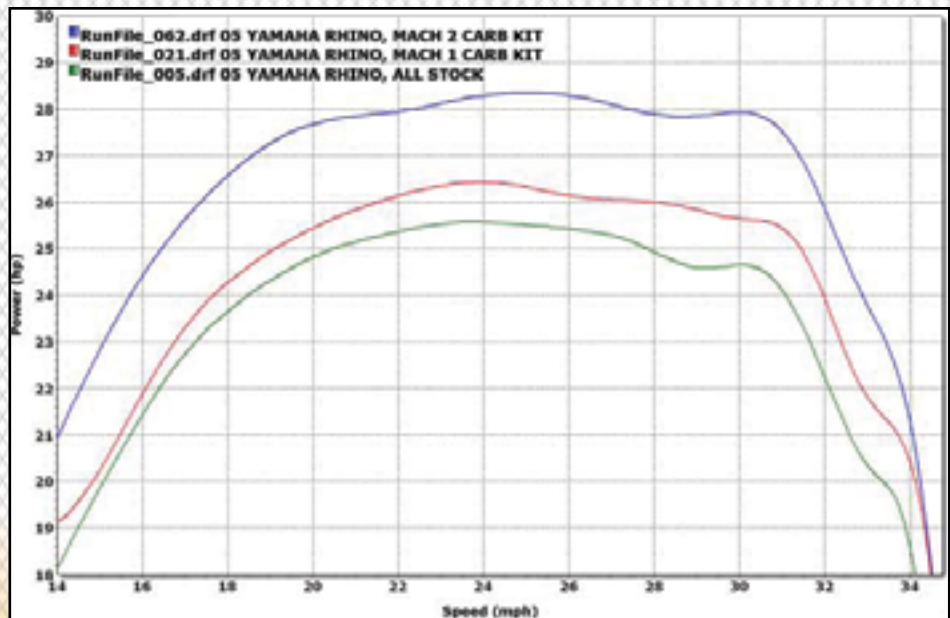


- Better throttle response.
- Improved top end power.
- All kits developed on dyno for proven performance gains.

Jet Kits:

| | | | |
|--|-------------------|--|-------------------|
| Arctic Cat '04 400 DVX _____ | PN 2010501 | Polaris® '02-'06 Sportsman 700 Twin _____ | PN 2411201 |
| Arctic Cat '05-'07 400 DVX _____ | PN 2010601 | Suzuki® '03-'07 LT-Z250 _____ | PN 2510101 |
| Arctic Cat '03-'07 AS500i 4x4 Auto _____ | PN 2010801 | Suzuki® '05-'07 LT-Z400 _____ | PN 2510201 |
| Arctic Cat '06 AC 650 HI Prowler _____ | PN 2011101 | Suzuki® '03-'04 Z400 QuadSport _____ | PN 2510501 |
| Honda '97-'05 Recon 250D _____ | PN 2210001 | Yamaha® '04-'06 350 Raptor _____ | PN 2610601 |
| Honda '01-'05 250 EX _____ | PN 2210101 | Yamaha® '06-'07 YFZ450 _____ | PN 2611201 |
| Kawasaki® '05-'06 Brute Force _____ | PN 2310301 | Yamaha® '01-'05 YFM660R Raptor _____ | PN 2611301 |
| Kawasaki® '03-'07 KFX700 _____ | PN 2310501 | Yamaha® '02-'07 YFM660R Grizzly _____ | PN 2611401 |
| Polaris® '01-'06 Sportsman 500 H.O. _____ | PN 2410901 | Yamaha® '04-'06 YXR660 Rhino _____ | PN 2611501 |
| Polaris® '03-'06 500 Predator 500 _____ | PN 2411001 | | |

MSD's new Jet Kits are designed to deliver optimum performance gains. Each kit is tested and proven on a chassis dyno to ensure performance.



MOTORCYCLES/ATVS

MSD's Enhancer™ Kits will spark up the performance of your Quad!

See page 15 for ATV Fuel Enhancers!

CALL TOLL FREE: 888.258.3835

Enhancer™ for Honda® 400EX



The MSD Enhancer™ for the Honda 400EX replaces the stock CDI and coil and allows you to optimize the ignition timing to get the most performance possible.

Once your initial timing is set up you can alter the timing curve between 22° and 29° with the dip switches instead of having to open up the engine to move the stator.

The built-in Hole-shot feature allows you to set a lower rpm limit when you're staged at the starting line of a race. This produces more consistent launches and lets you concentrate on the holeshoot.

The MSD produces a hotter spark than the factory ignition resulting in crisp throttle response, no starting line bogs and great top end power. The kit comes complete with the ignition, coil, 8.5mm Super Conductor Spark plug wire and mounting hardware.

- Replaces the stock CDI and Coil.
- Doubles the spark energy.
- Built-in holeshoot feature.
- Adjustable Timing Advance.
- 2 Degree High Speed Retard.
- Adjustable rev-limiter.

Enhancer Kit for the Honda® 400EX _____ PN 42130

Enhancer™ for Honda® ATC/TRX 250R



MSD's Enhancer™ for the Honda Fourtrax 250R replaces the stock CDI igniter and coil, yet your Fourtrax's lighting system will still function normally. The spark energy of the Enhancer is four times the output of the stock ignition. That means you'll be burning

all the fuel in the cylinder, and that'll get you up to top speed faster and a lot more efficiently. The Enhancer lets you tune the timing curve with an adjustable potentiometer. Now you'll be able to feel the power from the aftermarket parts you've

put on your Fourtrax! The stator and flywheel must have a simple modification done - which is explained in the instruction manual that comes with it. The rechargeable NiCad battery has a run life of 10 to 12 hours before it needs recharging. The kit consists of: the Enhancer, MSD coil, 8.5mm Spark Plug Wire, MSD boots, connectors and 7.2-volt NiCad battery.

- Four times more spark energy over stock.
- Adjustable timing curve for improved tuning.
- Replaces stock CDI and coil.

Enhancer Kit for the Honda® ATC/TRX 250R _____ PN 42020



Enhancer™ for the Yamaha® Banshee



The MSD Enhancer™ for the Yamaha Banshee allows you to optimize the ignition timing curve to get the most performance you can out of the engine. The Enhancer installs easily and plugs directly into the stock wiring, replacing the Yamaha CDI under the rear fender and coils.

Once your initial timing is set-up you can change the timing curve between 21° and 28° with the dip switches instead of having to open up the engine and manually move the stator. The built-in Holeshoot feature allows predictable launches at the starting gate by providing an rpm limit.

This is an MSD Ignition so you can expect a hotter spark - twice as much spark energy compared to the stock ignition! A 7.2-volt battery will power the ignition for about 2 hours before it needs recharging.

An optional MSD NiCad fast charger is also available. The complete kit is supplied with the Enhancer, MSD coil, 7.2-volt NiCad battery and mounting bracket.

- Doubles the spark energy to improve performance.
- Replaces the stock CDI and coil.
- Holeshoot feature for consistent launches.
- Adjustable timing curve.

Enhancer Kit for the Yamaha® Banshee _____ PN 42040
Stock Improved Coil for Kawasaki® and Yamaha _____ PN 4294
Charging Harness for the Yamaha® Banshee _____ PN 4214

This optional wiring harness will connect to the stock charging system of your Banshee. This will provide a trickle charge to the MSD NiCad battery.

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Enhancer™ for Bombardier® DS650

The MSD Enhancer™ for the Bombardier DS650 allows you to optimize the ignition timing and receive a spark with twice the energy of stock. The Enhancer replaces the stock CDI and Coil.

Once your initial timing is set up you can change the timing curve between 25° and 32° with the dip switches for ease of tuning. You can also set the rate at which you want the timing to come up to full advance!

There is an adjustable Holeshot feature that can improve your reaction time and help consistent launches. The kit comes complete with CDI, Twin tower coil, 8.5mm Super Conductor Spark plug wires and mounting hardware.

Enhancer Kit for the Bombardier® DS650 _____ PN 42050

- Replaces the stock CDI and Coil.
- Double the spark energy over stock.
- Built in Holeshot feature and adjustable overrev limiter.
- Adjustable Timing Advance with 2° high speed retard.



REPLACEMENT PARTS

CDI: PN 4205
COIL: PN 4573
WIRE SET: PN 31029

Enhancer™ Components

NiCad 7.2 Volt Battery

This battery is completely potted in Restech potting compound for a vibration and water proof seal. This construction produces a strong and durable battery pack.



NiCad Battery _____ PN 4381

Fast Charger

The Fast Charger is a 12 volt DC unit that plugs into a standard automotive cigarette lighter outlet. It will charge the MSD NiCad battery pack to full power within an hour.

MSD NiCad Fast Charger _____ PN 4385

Note: The 7.2 NiCad Battery must be fully discharged before charging.

8.5mm Spark Plug Wire

The Super Conductor® is the only wire recommended for use with MSD's Enhancer Ignition Controls. This is due to its supreme suppression capabilities coupled with low resistance for the most spark energy. This is a single, extra long wire supplied with 90° terminals and a Mini-Stripper-Crimper Tool.



PN 31019

ATV

MSD[®] POWERSPORTS

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Snowmobile Multi-Channel Racing Ignitions

The technology gained from years of performance on the top watercrafts has finally found its way to snowmobile racers! The MSD Programmable Multi-Channel Ignition system is designed for racers and engine builders that need to get every bit of performance out of their sled.

Precise ignition timing is essential to produce maximum horsepower. The Multi-Channel Ignition lets you set an incredibly accurate timing curve throughout the rpm range of the engine. There are three settings that you easily program to create a timing curve for your application. First you set the initial timing, or where the timing will be at idle or low rpm. Next you set the rpm point to begin the ignition curve followed by the amount you want it to retard (up to 30°) through the high rpm limit. All of the adjustments are made with dip switches built into the ignition. With MSD you don't have to compromise your engine's timing which means more power throughout the entire rpm range!

Another great drag racing feature is a Two Step Rev Control. This gives you the ability to program two rev limits; one to protect the engine from overrev damage and another to activate at the starting line for quick holeshots. When the Holeshoot rev limit is activated you can hold the throttle wide open and the MSD Soft Touch rev control circuitry will keep the engine at your desired launch rpm. The limit is adjustable with built-in dip switches and can be set between 3,000 to 6,750 rpm in 250 rpm increments. This way you can concentrate on the green light while the rpm stays at your ideal launch rpm. The result is consistent holeshots and great power!

- Capacitive discharge produces high voltage sparks throughout racing rpm for top end power.
- Multiple spark series improves throttle response and prevents plug fouling.
- Incredible spark energy and voltage for complete combustion.
- High output MSD Pro Coil for each cylinder.
- Individual trigger pickups can be timed for its specific cylinder.
- Lightweight billet aluminum flywheel improves throttle response.

Complete MSD Race Kits are Available for the Following:

| | |
|--|-----------------|
| Universal Kit _____ | PN 42360 |
| Arctic Cat[®] 800/900/1000 _____ | PN 41050 |
| Polaris[®] Storm _____ | PN 42060 |
| Polaris[®] Twin _____ | PN 42070 |
| Polaris[®] Triple _____ | PN 42080 |
| SKI-DOO[®] Triple _____ | PN 42090 |

The MSD Multi-Channel Snowmobile Ignition Kits are supplied with everything you need to fire up your sled's performance!



UIC
PATENT NOS.
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6196208

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SNOWMOBILE

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Trigger Plate and Triggers

Each snowmobile kit is supplied with its own trigger plate assembly. These non-magnetic pickups are extremely accurate throughout the entire rpm range of your engine. The pickups are mounted to a billet aluminum plate that is CNC machined to exact tolerances. Each plate is adjustable so you can fine tune your timing.



Trigger Plates for

- Polaris®, 800 XCR, Triple _____ PN 4520
- Polaris®, Storm, Triple _____ PN 4522
- Polaris®, All Twins _____ PN 4561
- SKI-DOO®, 809, Triple _____ PN 4530
- Artic Cat®, 800/900/1000, Triple _____ PN 4540

Pro-Billet Flywheel

MSD Powersports has designed lightweight flywheels specific for each snowmobile engine application. The flywheels are CNC machined from strong aircraft grade 7075-T6 one-piece billet aluminum. They average half the weight of a stock flywheel, which allows the engine to spin up to speed faster.

Pro-Billet Flywheels for

- Polaris®, 800 XCR, Triple _____ PN 4521
- Polaris®, All Twins _____ PN 4560
- SKI-DOO®, 809, Triple _____ PN 4531
- Artic Cat®, 800/900/1000, Triple _____ PN 4541



PN 4560



PN 4521

High Performance Coil

Depending on what model snowmobile kit you get, you'll have two, three or four of these coils. This Coil is specially designed with a higher turns ratio that is matched to the MSD's CD output. The result is a high voltage spark that is capable of full output through high racing rpm.

Performance Snowmobile Coil _____ PN 42921



COIL SPECIFICATIONS

- URNS RATIO:** 30 KV
- PRIMARY RESISTANCE:** 0.2 Ohms
- SECONDARY RESISTANCE:** 70:1
- MAX VOLTAGE:** Less than 2000 Ohms

MSD 8.5mm Super Conductor® Spark Plug Wires

All of our snowmobile kits use MSD's 8.5mm Super Conductor Spark Plug wire. These wires are the same ones used on 320+ mph top fuel dragsters! The wire features a copper alloy conductor that has less than 50 ohms per foot of resistance. More importantly, the wire retains very high Electro Magnetic Interference suppression capabilities! The wire is heavy duty from the inside-out with a very durable and heat resistant sleeve. See page 35 for more information.



SNOWMOBILE

MSD[®] POWERSPORTS

New!

G2X-m™ Data Acquisition System

MSD Ignition's economically priced GPS-based track mapping system gives factory level information on a privateer's budget. This system can help you improve your lap times by helping you learn how you and your machine react in race situations.

The technology employed in this system has been utilized for years in various forms of motorsports. We have logged thousands of on-track laps in creating an economical data logger that is both rugged and dependable in a wide variety of environments.

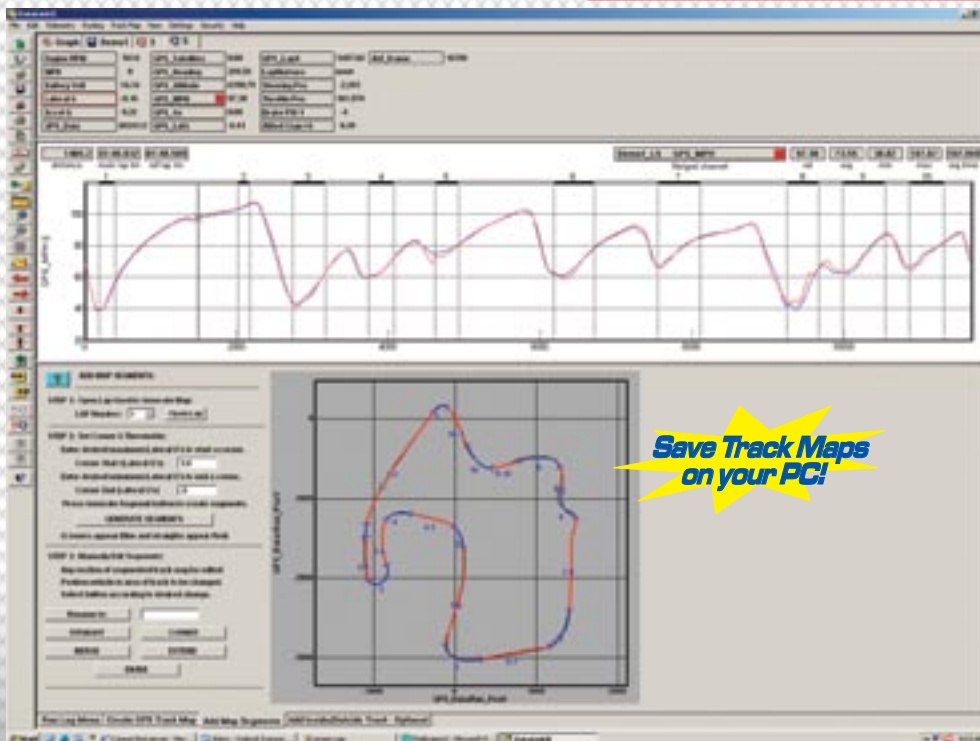
The MSD G2X-m Data Acquisition System provides accurate speed, lap and segment times through the use of Global Positioning System satellites. This means there's no need to set up track-side beacon transmitters, receivers, or their associated wiring. After running a few laps, simply remove the Compact Flash card from the system and download the information to your PC. MSD's Datalink software is easy to view and navigate. Once a track map is created, you'll always have it on file to use at other events. The new MSD Data Acquisition System will provide you with the information you need to win!

G2X-m™ Data Acquisition System _____ **PN 11500**



CALL TOLL FREE: 888.258.3835

- **GPS-based track mapping, segmenting and lap timing.**
- **RPM Input (used with 8918 GMR Pickup).**
- **Two separate on/off inputs to monitor when the brakes are applied through the brake switches.**
- **TPS input will assist monitor throttle position through the track position.**



DATA ACQUISITION

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MSD POWERSPORTS

New!



PATENT NOS.
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6721648

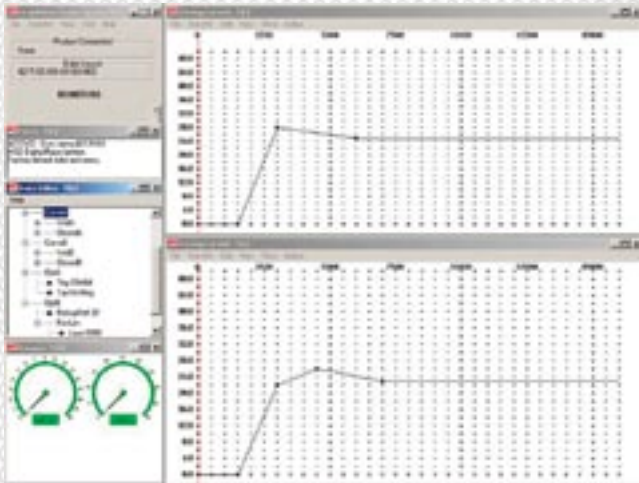
programming abilities, but the Capacitive Discharge design delivers high output sparks! The ignition accepts either a magnetic pickup or a Hall-Effect input. Also included are adjustable launch rpm and rev limiters.

Single Cylinder Programmable Battery Powered Ignition **PN 4217**

- PC Programmable, high output ignition.
- Create a timing curve with up to 20 points across the engine rpm range.
- Switch between two timing curves on the fly.
- Accepts magnet pickup or Hall-Effect trigger inputs.
- Program a rev limit for the launch and one for overrev applications.

Single Cylinder Programmable Ignition

MSD's Single Cylinder Programmable Ignition gives you flexibility you could never imagine with a single cylinder engine. It is fully laptop programmable and allows you to change timing curves on the fly. Not only do you get great



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SINGLE CYL. SPECIFICATIONS

VOLTAGE INPUT: 9.2 Volts Min., Startup 16 Volts Max.
MAXIMUM RPM: 16,000
ENERGY OUTPUT: 92 mJ/spark
CURRENT REQUIREMENTS: 2.2A maximum at 15 Volts input at 16,000 RPM
MULTI SPARK DURATION: 2 sparks to 1200 rpm / 10° duration
WEIGHT & SIZE: 10 oz., 3.4" x 1.5" x 2.1"
PRIMARY VOLTAGE: 420-435V
SECONDARY VOLTAGE: 33-36Kv with PN 8232 coil, 25-29Kv with PN 42921 MC coil

Blaster™ Single Tower Coil

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

COIL SPECIFICATIONS

TURNS RATIO: 85:1
PRIMARY RESISTANCE: .09 ohms
SECONDARY RESISTANCE: 988 ohms
INDUCTANCE: 3.7 mH
MAXIMUM VOLTAGE: 43,000 V
PEAK CURRENT: 800 mA
SPARK DURATION: 125 uS

Tested with CPC Ignition at plug gap



PN 8232*

*Note legal for use or sale on pollution controlled vehicles.

SMALL ENGINE

Small Engine Ignition Controls

Small engines are being used in a variety of performance applications ranging from dirt tracks, asphalt courses and even on the drag strip! Of course, where there is racing there are modifications and when you're making power, the stock ignition is just not going to stand up to higher compression, rpm or race fuels. Thankfully, MSD offers an Ignition Control for the popular Briggs & Stratton and Tecumseh engines!

The MSD Small Engine Controllers are more than capable of handling increased cylinder pressures, higher rpm and even exotic fuels such as alcohol. This incredible power comes from a Capacitive Discharge Ignition design that is able to deliver a spark in excess of 30,000 volts! This spark is also packed with 100 millijoules of energy and will burn across the plug gap for up to 18° of crankshaft rotation. This incredible power will produce quick starts, crisp throttle response and more power!

Besides the increased power of the MSD, the system also

lets you easily adjust the timing! Stock ignitions tend to retard the timing at higher rpm while the MSD's Hall Effect Pickup is much more accurate throughout the rpm range of your engine. Also, the trigger pickup plate is designed so you can adjust the position of the pickup. This lets you easily and safely adjust the timing. On stock engines you would have to remove the woodruff key from the crankshaft which could cause costly engine damage or even personal injury. The MSD system lets you set the timing from 14° to 38° by simply adjusting the position of the trigger pickup.

MSD offers two versions of the Small Engine Ignition System. One is for use with stock points and another with a precise Hall Effect Trigger Pickup which replaces the stock coil and points. Both versions are ready to install on all Briggs & Stratton® 5 hp, Tecumseh® 5 & 10 hp and Cushman style engines.

Both Small Engine Ignition kits can be powered by any 12 volt source or by two NiCad 7.2 volt batteries run together. Each kit is supplied with the Ignition, a battery harness, timing tape, Pro CD Coil, a cut-to-fit 8.5mm Super Conductor Spark Plug Wire and a heavy duty On/Off switch.

OPERATING SPECIFICATIONS

- OPERATING VOLTAGE:** 12 VDC
- RPM RANGE:** 14,000 (1-Cylinder)
- ENERGY OUTPUT MAX:** 100 mJ
- MULTIPLE SPARK DURATION:** 14°-18° (1-Cylinder)
- CURRENT REQUIREMENTS:** 1.5 Amps @ 10,000 RPM
- WEIGHT & SIZE:** .50 lbs., 3.5"L x 2"W x 1/5"H
- VOLTAGE OUTPUT:** Primary 450 Volts
- SECONDARY VOLTAGE:** 30,000+ Volts w/MSD Coil

Small Engine Controller Kits

Briggs & Stratton®, Points _____ PN 41500

Briggs & Stratton®, Tecumseh®
Hall-Effect _____ PN 41510

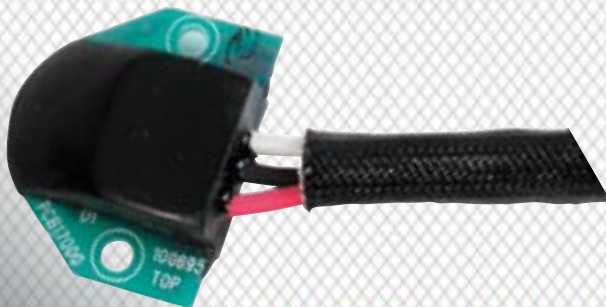
MC-3 Pro Stock Ignition _____ PN 42231

See MC-3 Pro Stock Ignition on page 6.

Hall-Effect Trigger Pickup

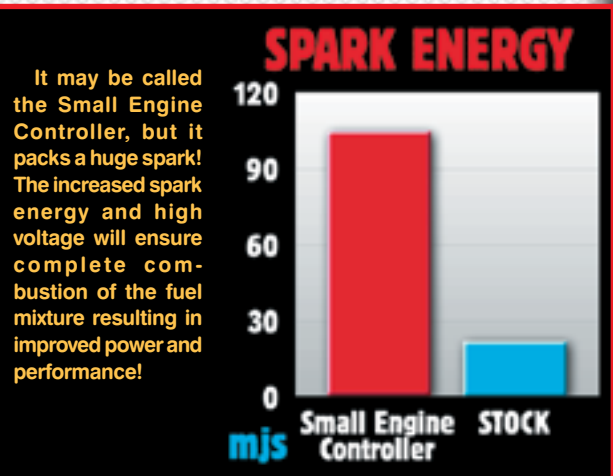
The Small Engine Controller uses a Hall-effect style pickup. These pickups are extremely accurate through the entire rpm range of your engine. This is extremely important, especially at high rpm where most pickups actually retard the timing. This compact pickup is molded-over in an epoxy compound for increased protection against vibration and racing conditions.

Small Engine Hall-Effect Trigger _____ PN 4154



PN 8232

PN 41510



MSD POWERSPORTS

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Kicker® Ignition

Put some fire under your feet with MSD's Kicker Ignition for your Go-Ped! The Kicker Ignition system easily mounts under the ride board and is slim enough so it won't scrape on corners or long jumps.

The Kicker Ignition consists of a control unit with an integral high output coil and requires a 7.2 volt NiCad battery.



Dimensions: 1.25"H x 2.25"W x 5.75"L
Weight: 15 Ounces

U.S. PATENT NO. 6058909

This system delivers a 21,000 volt spark with 26 millijoules of energy that easily burns the fuel mixture creating more power!

The Kicker will improve the performance of even stock engines, but as you install more performance parts the need for a powerful spark increases! As the engine revs higher, the stock coil can't charge fast enough to deliver a powerful spark, but the Kicker has no problem delivering its full power energy through high racing rpm. This full power spark will improve the throttle response, pulling power and prevent fuel load-up.

To improve your tuning abilities, the Kicker Ignition also features a variable retard rate. You can compensate for changes in elevation, fuel quality and control engine temperature better with an MSD Kicker Ignition. The Kicker's hot, accurate spark is the key to winning a race or just for a good-running machine!

The Ignition can be installed on old and new style engines. The kit is supplied with the Ignition, Pickup and Spark Plug Wire.

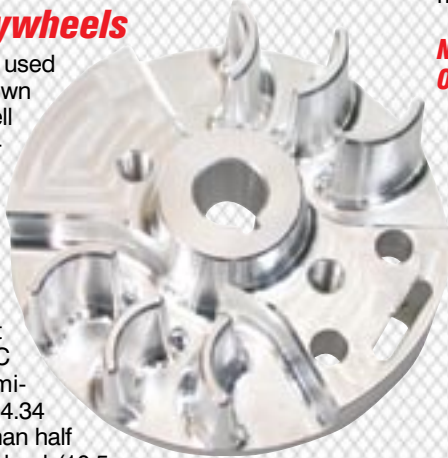
Kicker Ignition Kit _____ PN 4160

Pro-Billet™ Flywheels

The stock flywheels used on Go-Peds are known for not holding up well on higher rpm, modified engines. Not only are they not reliable but they're heavy which slows the revving ability of your engine.

These Pro-Billet Flywheels are CNC machined from aluminum and weigh only 4.34 ounces! That's less than half of the stock cast flywheel (10.5 ounces). Less rotating weight produces lightning quick throttle response plus you'll get the benefits of a stronger and better balanced wheel due to the CNC machining process.

Two Flywheels are available for the old and newer style engines. They can only be used with the MSD Kicker Ignition system.



PN 4161



PN 41611



Pull Start Hubs

These hubs make it possible to retain your pull start mechanism with one of MSD's Billet Flywheels.

New Style Engine, G23-LH, '95-On _____ PN 41611

Old Style Engines, G2D-58, Pre-'95 _____ PN 41621

GO-PEd

MSD POWERSPORTS

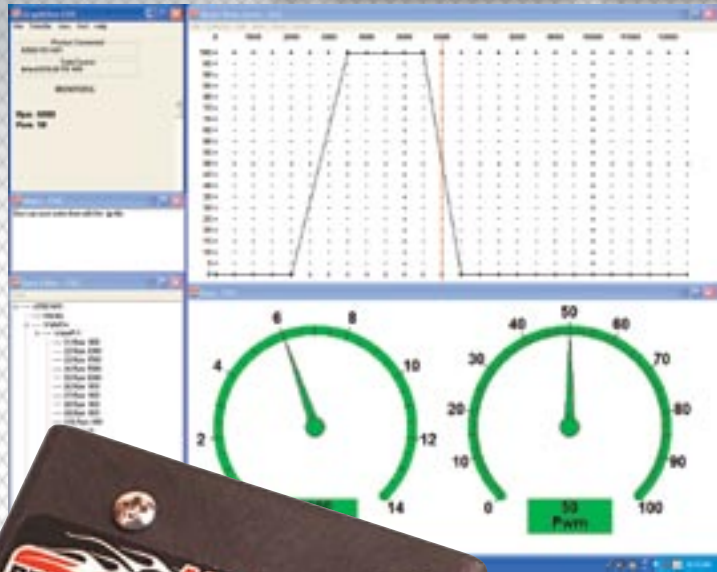
CALL TOLL FREE: 888.258.3835

Programmable Pulse Width Modulated Water Injection

Stock and performance exhaust systems are designed for maximum power at a specific rpm. It's not really something you can change during a race, and we know that compromises power at other rpm. Racers don't like to compromise, so MSD offers a new Programmable Water Injection system so you can tune your exhaust to match any rpm!

By injecting water into the exhaust chamber at lower rpm, the density of the exhaust pulse is increased which slows it down. This has the same effect as lengthening the chamber to increase low to mid range torque and power! The Programmable Water Injection system uses MSD's Pro-Data+ Windows based software so you can easily program how much water and at what rpm it gets injected into the pipe. The programming features allow you to inject water from 0 to 100 percent anywhere from 500 rpm to 12,000 rpm.

The kit comes complete with spray nozzles, solenoid, heat resistant hose, programmable controller and software.



Programmable Water Control Kit _____ PN 42590

Includes PN 42592, PN 4340 and PN 4341.

U.S. PATENT NOS.
5983633
6304814
6741925



PN 4340



PN 4341



PN 42592

MSD's Pro-Data+ software allows you to easily program the Water Injection points from your PC!

Replacement Parts

Programmable Water Controller System _____ PN 42592

Replacement Solenoid _____ PN 4340

Normally closed solenoid that pulses water to the spray nozzle.

Remote Mount Spray Nozzle _____ PN 4341

This 1/16" NPT spray nozzle attaches to an 1/8" hose from the solenoid.

Direct Mount Spray Nozzle _____ PN 43411

This 1/8" NPT spray nozzle mounts directly to the solenoid.



PN 43411

Inlet Water Filter

Keep your injection water free of debris with this effective filter. It features impact resistant nylon with a clear bowl and removable filter screen plus has barbed ends for secure connections.



PN 4336

3/8" Inlet/Outlet _____ PN 4335

1/2" Inlet/Outlet _____ PN 4336

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PWC

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Enhancer™ Ignitions

If you're looking for bolt-in performance for your watercraft, the MSD Enhancers are just the ticket! Each Enhancer is a direct plug in unit and is designed to fit in the stock location. The Enhancer ignition gives the racer an edge due to the powerful spark energy and adjustable rev-limiter.

The Enhancer Ignitions produce a much more powerful spark, as much as four times more spark energy, to ensure complete combustion of the fuel mixture. This complete combustion results in improved performance including quick



Enhancer™ for Yamaha® 650/701

If you own a Yamaha with a 650 or 701 engine, this Enhancer is a necessity! The Enhancer produces a powerful spark with increased spark duration.

Not only does the improved spark energy boost power, but this Enhancer features a more aggressive timing curve for even more

- High output sparks improve throttle response, starting and top end power.
- Factory style connectors for a direct plug-in installation.
- Bolt in place of the factory ignition.

throttle response, improved pulling power and top end, plus it will reduce spark plug fouling. Whether your watercraft is stock or if you've added other modifications such as a better flowing intake or exhaust modifications, the Enhancer Ignitions will improve the performance!

power to get you going!

At lower rpm you'll notice incredible acceleration and throttle response due to advancing the timing. Then as the rpm increases, the timing is retarded to the factory setting to prevent detonation and engine damage.

For racers, there is also a lower rpm limit that you can activate for quick and consistent holeshots. By activating a switch mounted on the handlebar the rpm will limit at approximately 3,000 rpm. The instant the button is released, the rpm revs up just as normal and you rocket off.

Everything you need to install the Yamaha Enhancer is supplied along with factory connectors for a direct plug-in installation!

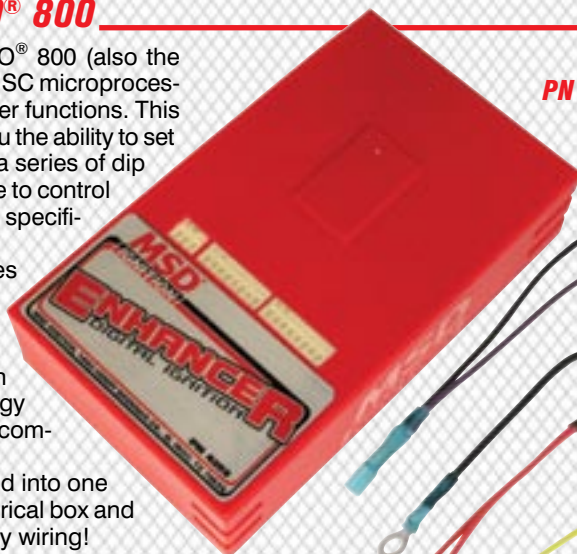
Yamaha Enhancer _____ **PN 4253**

Enhancer™ for the SEA-DOO® 800

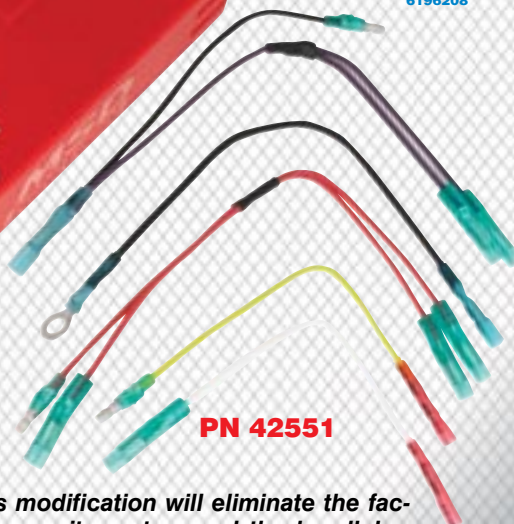
The Enhancer Ignition for the SEA-DOO® 800 (also the '95, '96, XP and GSX) uses a high speed RISC microprocessor to control all of the timing and rev limiter functions. This opens the door for programming, giving you the ability to set two rev limits and a timing curve through a series of dip switches built into the Enhancer. Being able to control the ignition curve lets you match the timing specifically to your engine and its modifications.

The Digital Enhancer produces a series of sparks through 3,000 rpm rather than just a single spark. This feature delivers incredible throttle response, acceleration and keeps the idle clean and smooth. Each spark is packed with 105 millijoules of energy and up to 36,000 volts to ensure complete combustion and great performance.

All of this power and features are packed into one compact housing that fits in the stock electrical box and plugs directly into your SEA-DOO's factory wiring!



PN 4255



PN 42551

Enhancer for the SEA-DOO® 800 XP and GSX — **PN 4255**

Enhancer Kit w/Adapter Harness for the 800

'97-'98 SPX and '97 GTX _____ **PN 42550**

Adapter Harness only _____ **PN 42551**

This Harness is required to mount the SEA-DOO® 800 Digital Enhancer Ignition in the models listed above.

Note: This modification will eliminate the factory DSS security system and the handlebar kill feature.

PWC

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PWC

Enhancer™ for the Kawasaki® 750

There are two versions of the Enhancer for the Kawasaki® 750. Both models feature the increased spark energy you expect from MSD plus they have an adjustable rev limiter and holeshoot rpm limit.

The rev limit is adjusted with a potentiometer on the back of the ignition housing. The holeshoot feature lets you activate a lower rpm limit that is best to use for quick starts at the beginning of a race. Also, these ignitions can be connected to the factory overheat sensor. With this feature, if the water temperature gets too high, the Enhancer will limit the rpm to a safe value to avoid any engine damage.

Note: Enhancer will not work on 1996 Zxi.

U.S. PATENT NO. 5526785



PN 4251

Enhancer for 750 SX, SXi and '95 Zxi models _____ PN 4251

Enhancer Kit for 750 SS, ST, Xi and Xir models _____ PN 42500

Enhancer™ Retard Module

The Enhancer Retard Module is designed to retard the timing of the Enhancer ignition by 5°. On racing and high performance engines with extremely high compression using the Enhancer and Timing Advance Plate, this module is recommended.

Enhancer Retard Module _____ PN 4331



PN 4331

Timing Advance Plate

The timing advance plate is recommended for all Kawasaki® 750 engines running the Enhancer Ignition. This plate advances the timing 7° for a boost in low to mid range performance.

Note: If you are running excessive compression or low octane fuel it is recommended that you run the retard module listed. Must be used with PN 4251 on SXi, XiR and ZXi.

Timing Advance Plate _____ PN 4332



PN 4332

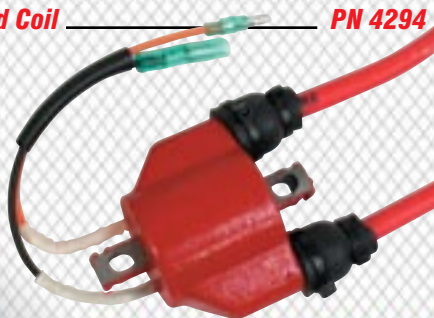
Note: Not intended for use on the '95 SXi Model.

Stock Improved Coil

Replace your old factory coil with this direct bolt-in coil.

Stock Improved Coil _____ PN 4294

PN 4294



- Replaces stock Kawasaki® and Yamaha® coils.
- Molded-in 8.5mm Super Conductor wires.
- Output voltage - 30KV.
- Primary resistance - .08 Ohm.
- Secondary resistance - 2K Ohms.
- Includes Mini-Stripper Crimper.
- Used with Enhancer Ignition for Yamaha® 650/701 and Kawasaki 750 only.
- Also applicable with the Yamaha® Banshee - (Quad).

MSD[®] POWERSPORTS

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Watercraft Multi-Channel Racing Ignition Systems

For all-out racing performance, you can't beat MSD's Multi-Channel Ignition systems. These digital ignition controls deliver incredible power and offer versatile programming features. Top racers and teams such as Sean Workman, Jordan Fielder, Eric Malone, Alessander Lenzi and many more, rely on the power and programming options of the MSD Multi-Channel system!

Precise ignition timing is essential to produce maximum horsepower. However, one timing setting is not ideal for an engine's entire rpm range. The dynamics of air and fuel flow into the engine as well as the speed that the piston travels through the combustion stroke all affect the ideal timing setting. Fortunately, the Programmable MSD Ignition lets you tune in a custom timing curve to match your engine's requirements!

There are three settings that you program to create a timing curve. First you set where you want the initial timing, or idle timing. Next you set the rpm point to begin the curve followed by the amount you want it to retard (up to 30°) through the high rpm limit. All of the adjustments are made with dip switches built into the ignition.

This Ignition delivers a powerful capacitive discharge spark from idle to top end. This improved output results in complete combustion for performance through the entire rpm range of your engine.

- High output CD sparks produce improved top end power.
- Program a timing curve, overrev limiter and holeshot rpm.
- Multiple spark series improves throttle response and idle quality.
- Incredible spark energy and voltage for complete combustion.
- Individual high output coil per cylinder.
- Separate trigger pickup for each cylinder for cylinder-to-cylinder timing.
- Can be used on two and three channel ignitions.

The Multi-Channel Racing Ignition Kits are supplied with all the parts needed for your application, CD Coils, Trigger Pickups and Spark Plug Wires.

Multi-Channel Racing Ignition Kits for:

| | |
|---|-----------------|
| Universal 2 and 3-Cylinder _____ | PN 42360 |
| Yamaha® 650/701/760 _____ | PN 42380 |
| Yamaha® 800 _____ | PN 42410 |
| Kawasaki® 650/750 _____ | PN 42370 |
| SEA-DOO® 800 _____ | PN 42450 |
| SEA-DOO® 951 _____ | PN 42460 |
| Yamaha® XXL/GPR 1200 _____ | PN 42350 |

U.S.
PATENT NO.
6196208



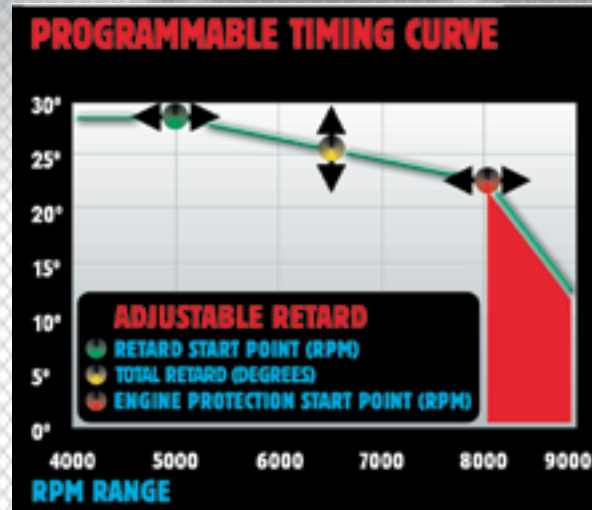
PWC

Watercraft Racing Ignitions Rev Control

The MSD's adjustable rev limiter will save your engine from overrev damage caused by parts failure or if the craft's drive mechanism comes out of the water. When your limit is reached, the ignition adjusts the spark output quickly to stay below that rpm. This produces a smooth rev limiting action.

Holeshot

Thanks to the rev limiting circuit of the Ignition, MSD engineers developed a feature that will give you great holeshots. By installing a handlebar operated switch, you can activate a lower rpm limit that will hold the engine under 3,000 rpm. This way you can hold the throttle wide open and concentrate on the rubberband snapping. When it does, you release the button, the engine revs to full power and you launch out in front!



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Easy Starts

When you increase the compression ratio of your engine, it also puts more pressure on the starter to crank the engine over. The MSD Programmable Ignition has two features that can help ease cranking pressure and improve the start up of your watercraft.

Retard: When activated, this feature retards the timing 20° to ease cranking. When the engine starts, the timing returns to the initial setting.

Delay for Electric Starters: When activated, this mode will not produce a spark for the first several rotations of the engine. This helps build momentum in the engine resulting in easier starting.

Mounting Bracket

A sturdy aluminum bracket with mounting holes for an MSD Ignition!

Bracket for Yamaha® 650/701 _____ PN 4396

| SW3 | | | | | | | | SW2 | | | | | | | | SW1 | | | | | | | | |
|--------------|-------------|-----------|-----|-------|-----------|-----|-----|--------------------|------|------|----------|-----------|-----|---------|-------|--------|----------|-------------|---------------|----------------|-----------|--------|----|----|
| RETARD | BEGIN SPEED | MAX SPEED | | | REV LIMIT | | | HOLESHOT REV LIMIT | | | | MAX SPEED | | | | RETARD | | | | MAX TIMING | | | | |
| RPM | S1 | S2 | S3 | RPM | S5 | S6 | S7 | S8 | RPM | S1 | S2 | S3 | S4 | DEG/+15 | S5 | S6 | S7 | S8 | DEG | S6 | S7 | S8 | | |
| 4000 | OFF | OFF | OFF | 6250 | OFF | OFF | OFF | OFF | 3000 | OFF | OFF | OFF | OFF | 0/15 | OFF | OFF | OFF | OFF | -7 | OFF | OFF | OFF | | |
| 4500 | ON | OFF | OFF | 6500 | ON | OFF | OFF | OFF | 3250 | ON | OFF | OFF | OFF | 1/16 | ON | OFF | OFF | OFF | -6 | ON | OFF | OFF | | |
| 5000 | OFF | ON | OFF | 6750 | OFF | ON | OFF | OFF | 3500 | OFF | ON | OFF | OFF | 2/17 | OFF | ON | OFF | OFF | -5 | OFF | ON | OFF | | |
| 5500 | ON | ON | OFF | 7000 | ON | ON | OFF | OFF | 3750 | ON | ON | OFF | OFF | 3/18 | ON | ON | OFF | OFF | -4 | ON | ON | OFF | | |
| 6000 | OFF | OFF | ON | 7250 | OFF | OFF | ON | OFF | 4000 | OFF | OFF | ON | OFF | 4/19 | OFF | OFF | ON | OFF | -3 | OFF | OFF | ON | | |
| 6500 | ON | OFF | ON | 7500 | ON | OFF | ON | OFF | 4250 | ON | OFF | ON | OFF | 5/20 | ON | OFF | ON | OFF | -2 | ON | OFF | ON | | |
| 7000 | OFF | ON | ON | 7750 | OFF | ON | ON | OFF | 4500 | OFF | ON | ON | OFF | 6/21 | OFF | ON | ON | OFF | -1 | OFF | ON | ON | | |
| 7500 | ON | ON | ON | 8000 | ON | ON | ON | OFF | 4750 | ON | ON | ON | OFF | 7/22 | ON | ON | ON | OFF | MAX | ON | ON | ON | | |
| TIMING SETUP | | | | S4 | 8250 | OFF | OFF | OFF | ON | 5250 | ON | OFF | OFF | ON | 9/24 | ON | OFF | OFF | ON | MAX/MIN REVLIM | | | | S1 |
| LED OPERATE | | | | ON | 8750 | OFF | ON | OFF | ON | 5500 | OFF | ON | OFF | ON | 10/25 | OFF | ON | OFF | ON | MAX RETARD | | | | S2 |
| IGN. OPERATE | | | | OFF | 9250 | OFF | ON | OFF | ON | 5750 | ON | ON | OFF | ON | 11/26 | ON | ON | OFF | ON | RETARD +15° | | | | ON |
| | | | | 9500 | ON | OFF | ON | ON | 6000 | OFF | OFF | ON | ON | 12/27 | OFF | OFF | ON | ON | ELEC START-ON | | | | S3 | |
| | | | | 9750 | ON | OFF | ON | ON | 6250 | ON | OFF | ON | ON | ON | 13/28 | ON | OFF | ON | ON | START RET-ON | | | | S4 |
| | | | | 10000 | ON | ON | ON | ON | 6500 | OFF | ON | ON | ON | ON | 14/29 | OFF | ON | ON | ON | RET BEGIN RPM | | | | S5 |
| | | | | | | | | | 6750 | ON | ON | ON | ON | ON | ON | 15/30 | ON | ON | ON | ON | +4000 RPM | | | |
| ON | | | | | RBS=5000 | ON | | | | | HRL=3000 | ON | | | | | MMPL OFF | MR +15° OFF | ES ON | SR ON | RBR OFF | MT -6° | | |
| OFF | | | | | MSRL=7750 | OFF | | | | | MSR=6° | OFF | | | | | | | | | | | | |

The back of the Multi-Channel Ignition has three sets of dip switches. These allow you to program the features of the ignition to meet your engine's needs!



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Pro-Billet™ Flywheels

MSD's Pro-Billet Flywheels are CNC machined from 7075-T6 aluminum for absolute accuracy and great strength. Also, most of these flywheels are half the weight of the stock units! This light weight assembly produces quick throttle response with less stress on other mechanical engine components. The starter gear that is supplied features a hardened ring with chamfered teeth for smooth starter engagement.

- Light weight for improved acceleration.
- Ring gear is hardened to Rockwell 60 for great strength.
- Spin balanced for less strain on rotating components.



| Pro-Billet Flywheels for | Weight | Part Number |
|-----------------------------------|---------------------|-------------|
| Yamaha® 650/701/760 _____ | 1 lb. 11.8 oz _____ | PN 43032 |
| Yamaha® 800/1200 Powervalve _____ | | PN 43035 |
| Kawasaki® 650/750 _____ | 1 lb. 12.5 oz _____ | PN 43022 |

Magnets Only

If you're building a custom flywheel or trigger device, you'll need a set of magnets. These are the same magnets used in the MSD Pro-Billet Flywheels. They're made from samarium cobalt rare earth material and should be epoxied to the flywheel.



Two Magnets, 0.375" diameter, 0.125" thick — PN 4309

Wand Trigger Pickups

Our watercraft/snowmobile trigger pickups are exceptionally handy when it comes to replacing that factory trigger mechanism. Our pickups are hand assembled at MSD and can only be triggered by the magnet in the flywheel. This results in the most accurate trigger possible. The windings of the pickups are held secure in an epoxy compound adding vibration protection as well. Includes shim kit.



Wand Trigger Pickups for:

| | |
|------------------------------|----------|
| Kawasaki® _____ | PN 4316 |
| SEA-D00® _____ | PN 4316 |
| Yamaha®, 650/701/760 _____ | PN 4316 |
| Yamaha®, 800/1100/1200 _____ | PN 43161 |

Note: PN 4316 and PN 43161 Trigger Pickup are only applicable with the Multi-Channel Ignition, PN 42351.

Trigger Pickup Shim Kit _____ PN 4318

Ideal for ensuring correct clearance between the pickup and the flywheel.

Trigger Pickup Plates

One of the advantages of the MSD Multi-Channel Ignition system is the individual trigger pickups for each cylinder. This way you can make up for variations in fuel flow dynamics to each cylinder, exhaust characteristics or carb synchronization by altering the timing of each cylinder.

Trigger Pickup Plates available for:

| | |
|-----------------------------|----------|
| Yamaha® 650/701/760 _____ | PN 4311 |
| Yamaha® 800 _____ | PN 43114 |
| Yamaha® 1200 _____ | |
| Powervalve _____ | PN 43115 |
| Kawasaki® 650/750 _____ | PN 43122 |
| SEA-D00® 951 _____ | PN 43283 |
| SEA-D00® 800 _____ | PN 43281 |
| Magnet Ring, SEA-D00® _____ | |
| 800/951 _____ | PN 43232 |

Note: Trigger Pickup Plates are only applicable with the Multi-Channel Ignition, PN 42351.

PN 43283 PN 43232



Trigger Wire Grommet

Make sure your pickup wires exit the case in a protected grommet.

| | |
|-------------------------|---------|
| Yamaha® 650/701 _____ | PN 4322 |
| Kawasaki® 650/750 _____ | PN 4321 |

PWC

Lanyard Kill Switch

This Lanyard is the answer to intermittent connections or failures common with mechanical lanyard switches. With no moving parts, this design prevents any chance of vibration or debris induced power interruption which can easily occur with conventional switches.

The Lanyard uses solid state circuitry and ensures contact even in the harshest racing conditions. All of MSD's Powersports Ignition systems will work with this reliable switch.



Lanyard Kill Switch _____ **PN 4379**

Waterproof On/Off Switch

This sealed single-pole single-throw switch is ideal as an On/Off switch for your ignition. All of the contacts are molded in rubber to make it 100% waterproof and the housing is constructed of stainless steel to prevent corrosion. A positive snap-locking rocker mechanism informs you when the switch position has been changed. Rated for up to a 10 amp draw at 28VDC.

Waterproof On/Off Switch _____ **PN 4370**



Locking Waterproof On/Off Switch

A waterproof single-pole, single-throw switch with a locking handle. To release the toggle, lift the handle to move it to the other position. It's a great switch for racing - it prevents accidental switching. Rated at 10-amps at 28 vdc.

Locking Waterproof On/Off Switch _____ **PN 4371**



Holeshot Control Switch

This is a momentary push-button switch encased in a CNC machined aluminum housing that clamps around the handle bar. It comes with a 6-foot wire harness that should reach almost anywhere on your watercraft. Use this switch to activate any MSD Holeshot feature.

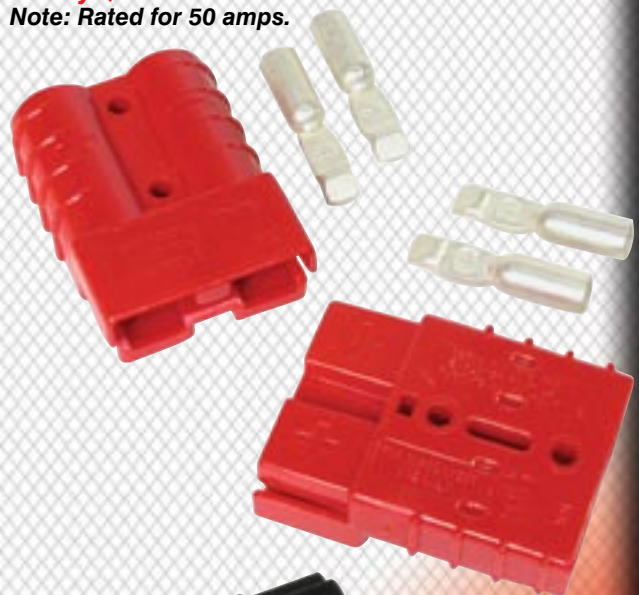
Holeshot Switch _____ **PN 4372**



Battery Quick Disconnect

Racers will appreciate this Quick Disconnect Battery Connector because it allows for easy removal of the battery. The connectors grip together to form a vibration proof connection but can be easily disconnected for quick removal for charging of the battery.

Battery Quick Disconnect _____ **PN 4376**
Note: Rated for 50 amps.



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Universal DIS Cam Sync Sensor

The Universal DIS Cam Sync Generator will produce a sync signal for the Nitro Ignition and the MC-4 Ignition Control. This allows you to take advantage of our individual cylinder timing feature on these controls.



The Cam Sync Generator will produce a cam sync signal by detecting when the number one cylinder is under compression. This is done through its signal wire which is wrapped around the designated spark plug wire.

Universal DIS Cam Sync _____ **PN 8916**

Starter Relay

This 12-volt relay is a heavy-duty unit designed to mount outside the electrical box. It's made with materials that locks out moisture and chemicals. The large copper terminals assure good solid contact with your wiring. The stainless steel base plate allows the relay to be mounted in any position. Rated for 65 amps.



Starter Relay - **PN 4390**

Tach/Fuel Injection Adapter

If you are connecting a tachometer to an MSD Ignition, or your application is equipped with electronic fuel injection then you may need to use this Tach/Fuel Injection Adapter to ensure correct operation. This Adapter will correct the operation of most tachometers and fuel injection pump relays that do not work directly off of the MSD Ignition's 12 volt square wave tach output terminal.



Tach/Fuel Injection Adapter _____ **PN 8920**

Vibration Mounts

Vibration is hard on components and in racing applications, there's a lot of vibration. To protect your MSD or many other components, we recommend the use of these vibration mounts. Three sizes are offered.

1" x .75", 4/Card _____ **PN 8800**
.75" x .63", 4/Card _____ **PN 8823**
.44" x .50", 3/Card _____ **PN 8825**



PN 8825

Timing Lights

MSD offers two heavy duty Timing Lights. The standard version is supplied in a heavy duty, metal housing and features a high output Linear Xenon strobe and a focused fresnel lens that produces a light that's bright enough to use outdoors. It is supplied with a 6-foot lead with a metal inductive pickup that clamps to the spark plug wire.



PN 8990

The second timing light is a special, self-powered model. This is handy in applications where the battery is hard to get to. It uses six AAA batteries and produces an extremely bright strobe with great accuracy. The assembly is housed in a lightweight injection molded housing and features a removable inductive lead.



PN 8991

Timing Lights
Standard _____ **PN 8990**
Self-Powered _____ **PN 8991**

ACCESSORIES

Weathertight Connectors

MSD's Weathertight Connectors seal the elements out to produce trouble-free electrical connections that are locked together. The special nylon housings withstand a variety of temperatures from -40°- 257°F and are not affected by water, chemicals or harsh vibrations. Each terminal is sealed and insulated in its own tower to prevent shorting and is held securely in place by a hinged back. A variety of connector sizes are available.



PN 8170



PN 8171



PN 8172



PN 8173



PN 8174

CALL TOLL FREE: 888.258.3835

CONNECTORS

| | Individual | Bag of 10 |
|-------------------------------|------------|-----------|
| 6-Pin w/Pins & Seals 1/Card . | PN 8170 | PN 81705 |
| 4-Pin w/Pins & Seals 1/Card . | PN 8171 | PN 81715 |
| 3-Pin w/Pins & Seals 1/Card . | PN 8172 | PN 81725 |
| 2-Pin w/Pins & Seals 1/Card . | PN 8173 | PN 81735 |
| 1-Pin w/Pins & Seals 1/Card . | PN 8174 | PN 81745 |
| Male Pins & Seals | | PN 8190 |
| Female Pins & Seals | | PN 8191 |



Weathertight Crimping Tool

The MSD Weathertight Crimping Tool is constructed of strong steel to ensure good, long lasting terminal crimps and to eliminate handle flex that is common on cheaper tools.



Standard Weathertight Crimping Tool _____ **PN 8175**

Weathertight Pin Extracting Tool

Removal of Weathertight Connectors is a breeze with this Tool. The precise diameter shaft easily slides over the Weathertight terminal pins so they can be removed from the connector housing without damage.



Weathertight Pin Extracting Tool _____ **PN 8193**

ACCESSORIES

MSD POWERSPORTS

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ACCESSORIES

Deutsch Connectors

These new connectors are sealed and lock together making them perfect for harsh racing applications.

The compact housing connectors are molded from a durable plastic material that will not harden or crack. Each housing is indexed to prevent any chance of mismatching the ends plus they have a molded channel to secure another connector to tidy up and organize your wiring.

The terminals grip to the wire with strong crimp tabs then lock into position inside the housing. The connections are protected with thick seals that will keep water, mud and debris away from the contacts. These terminals can handle more current than conventional connectors and do not require special tools to disassemble. Supplied with terminals, seals and housings.

- 2-Pin Connector, 16 gauge _____ PN 8183
- 4-Pin Connector, 16 gauge _____ PN 8181
- 6-Pin Connector, 16 gauge _____ PN 8180

Perma-Seal Connector Kit

Maximum ignition reliability can only be obtained by using high quality connectors and the Perma-Seal Connector Kit fits the bill! The tin coated copper terminals prevent corrosion and increase the connector's strength. To seal the connection, each connector has a special heat shrinkable outer sleeve that bonds and seals to the wire when heat is applied to it.

- Perma-Seal Connector Kit _____ PN 4377



- 8-Pin Connector, 16 gauge _____ PN 8185
- 12-Pin Connector, 16 gauge _____ PN 8186
- 2-Pin Connector, 12-14 gauge _____ PN 8184
- 4-Pin Connector, 12-14 gauge _____ PN 8187

Pro-Crimp Tool

If you do a lot of wiring, from plug wires to weathertight terminals, the Pro-Crimp Tool is your best bet! The tool is supplied with spark plug wire jaws, but you can crimp Deutsch, weathertight and amp terminals with optional dies.

- Pro-Crimp Tool _____ PN 35051



- Replacement Dies for the Pro-Crimp Tool
- Spark Plug Dies _____ PN 3508
- Amp Pins _____ PN 3506
- Amp Lug Dies _____ PN 3507
- Weathertight Dies _____ PN 3509
- Deutsch Terminal Dies _____ PN 3510

MSD POWERSPORTS

8.5mm Super Conductor[®] Spark Plug Wire

Spark plug wires have two main objectives; transfer the spark energy and suppress the Electro Magnetic Interference (EMI) that the spark voltage creates. The MSD 8.5mm Super Conductor delivers the best of both worlds!

MSD uses a special copper conductor keeping resistance under 50 ohms per foot! Even with this low resistance, the wire retains high EMI suppression capabilities. By wrapping the conductor tightly around a ferro-magnetic impregnated center core an EMI choke is created keeping any interference inside the wire.

The Super Conductor wire is a high performance wire from the inside out. The outer sleeve is a combination of silicone and synthetic materials for supreme resistance against heat, chemicals and abrasion. Thick boots with more material also help guard against spark arcing to ground and special dual crimp terminals grip the conductor and the sleeve of

■ Copper alloy conductor with less than 50 ohms per foot.

■ High suppression characteristics.

■ Durable outer sleeve and special Dual Crimp terminals.

the wire so there is no chance of the terminal pulling off the wire.

The 8.5mm Wire is available in bulk and universal sets. Universal kits are supplied with the spark plug terminal and boot installed, then you cut the wire to length and crimp the coil side on. MSD even supplies a Mini-Stripper-Crimper tool to produce a firm crimp.

CALL TOLL FREE: 888.258.3835

SPARK PLUG WIRES

Custom Wire Kits for Harley-Davidson[®]

PN 30933

FL: '75, '76, '77, '78, '79
 FLH: '75, '76, '77, '78, '79, '80, '81, '82, '83, '84
 FLHS: '75, '76, '77, '78, '79, '80, '81, '82, '83, '84
 FX: '75, '76, '77, '78, '79, '80, '81, '82, '83, '84
 FXB: '75, '76, '77, '78, '79, '80, '81, '82, '83, '84
 FXDG: '81, '82, '83, '84
 FXE: '75, '76, '77, '78, '79, '80, '81, '82, '83, '84
 FXEF: '75, '76, '77, '78, '79, '80, '81, '82, '83, '84
 FXS: '75, '76, '77, '78, '79, '80, '81, '82, '83, '84
 FXSB: '81, '82, '83, '84
 FXWG: '75, '76, '77, '78, '79, '80, '81, '82, '83, '84
 FXDL: '93, '94
 FXDS: '93, '94
 FXDWG: '93, '94
 FXDB: '91, '92
 FXDC: '91, '92
 FLSTC: '87, '88, '89, '90
 FLSTF: '87, '88, '89, '90
 FXST: '85, '86, '87, '88, '89, '90
 FXSTC: '85, '86, '87, '88, '89, '90
 FXSTS: '87, '88, '89, '90
 FXEF: '85, '86
 FXSB: '85, '86
 FXWG: '85, '86

PN 30943

FLSTC: '91, '92, '93, '94, '98, '99
 FLSTF: '91, '92, '93, '94, '98, '99
 FLSTS: '98, '99
 FLSTN: '93, '94
 FXSTC: '91, '92, '93, '94, '98
 FXSTS: '91, '92, '93, '94, '98
 FXST: '84
 FXSTC: '84
 XL: '79, '80, '81, '82, '83, '84
 XLH: '78, '79, '80, '81, '82, '83, '84
 XLX: '79, '80, '81, '82, '83, '84
 XLS: '79, '80, '81, '82
 XLCR: '77, '78, '80
 FLHT: '82, '83
 FLHTC: '82, '83
 FLHTP: '82, '83
 FLT: '80, '81, '82, '83
 FLTC: '82, '83

PN 30953

FXR4: '00
 FXR2: '99
 FXR3: '99
 FXLR: '87, '88, '89, '90, '91, '92, '93, '94
 FXR: '82, '83, '84, '85, '86, '87, '88, '89, '90, '91, '92, '93, '94
 FXRS, CON: '91, '92, '93, '94
 FXRS, SP: '87, '88, '89, '90, '91, '92, '93, '94
 FXRT: '82, '83, '84, '85, '86, '87, '88, '89, '90, '91, '92
 FXRS: '82, '83, '84, '85, '86, '87, '88, '89, '90, '91, '92
 FXRC: '84, '85, '86
 FXRD: '84, '85, '86
 FXRDG: '84, '85, '86
 FXRP: '84, '85, '86, '87, '88, '89, '90

PN 30963

FLHR: '98
 FLHS: '87, '88, '89, '90
 FLHT: '86, '87, '88, '89, '90, '98
 FLHTC: '86, '87, '88, '89, '90, '98
 FLHTCI: '98
 FLHTC, U: '87, '88, '89, '90
 FLHTCUI: '98
 FLHTP: '86, '87, '88, '89, '90
 FLTC: '86, '87, '88, '89, '90
 FLTC, U: '87, '88, '89, '90
 FLTR: '98
 FLTRI: '98
 FLHR: '93, '94
 FLHS: '91, '92, '93, '94
 FLHTC: '91, '92, '93, '94
 FLHTC, U: '91, '92, '93, '94
 FLTC, U: '92, '93
 FLTC: '91

PN 30973

FLHRSEI: '02
 FLTRSEI2: '01
 FLHR: '99
 FLHRC, I: '99
 FLHT: '99
 FLHTC: '99
 FLTR: '99
 FLTR, I: '99
 FLHTC, I: '99
 FLHTCU, I: '99

PN 30983

XLH: '86, '87, '88, '89, '90, '95

PN 30993

FLSTC: '00
 FLSTD: '00
 FLSTF: '00
 FLSTS: '00
 FXST: '00
 FXSTB: '00
 FXSTD: '00
 FXSTS: '00

Universal Wire Kits

1-Cylinder Universal Kit _____ PN 31019

2-Cylinder Universal Kit _____ PN 31009

3-Cylinder Universal Kit _____ PN 31039

4-Cylinder Universal Kit _____ PN 31449

V-Twin Harley-Davidson[®], Red Wire _____ PN 31059

V-Twin Harley-Davidson[®], Black Wire _____ PN 31053

Bulk Wire

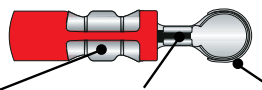
Having extra wire is always handy. No terminals or boots are supplied.

| | Red | Black |
|----------|----------|----------|
| Six Feet | PN 34039 | PN 34033 |
| 25 Feet | PN 34019 | PN 34013 |
| 100 Feet | PN 34049 | PN 34043 |
| 300 Feet | PN 34059 | PN 34053 |

DUAL CRIMP TERMINALS

The MSD spark plug terminals now feature "Dual Crimp" terminals. As the name implies, the terminals feature two crimps; one for the sleeve of the wire and another separate crimp to grasp the conductor.

By having separate crimps, the conductor doesn't need to be bent 180° and get squeezed between the terminal and sleeve. This individual conductor crimp produces a more secure crimp and there is less chance of spark arcing to the engine block or exhaust manifold through the boot!



Large crimp tabs grasp the Super Conductor sleeve.

Separate crimp tabs firmly grip the conductor.

Stainless steel "Click-Lock" tab will not vibrate off.

Note: MSD Spark Plug Wires for Harley-Davidson[®] are made in black to keep the OEM look.

MSD POWERSPORTS

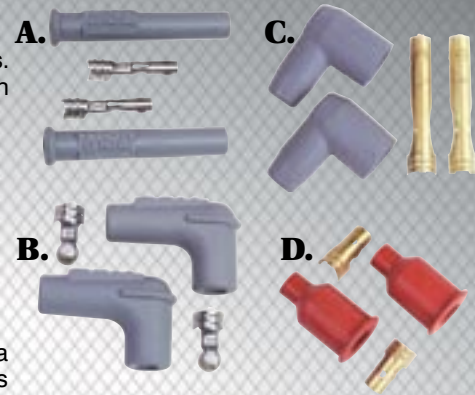
CALL TOLL FREE: 888.258.3835

SPARK PLUG WIRES

Replacement Boots and Terminals

MSD Powersports offers an assortment of spark plug wire boots and terminals. If you build a lot of wires, or like to be prepared for anything at the races or on the beach, these are great to have available.

- A. Two Multi-Angle Boots and Terminals _____ PN 3301
- B. Two 90° Spark Plug Boots and Terminals _____ PN 3311
- C. Two 90° Socket Style Boots and Terminals _____ PN 3321
- D. Two Straight Socket Boots and Terminals _____ PN 3322



Professional Racing Boots

These spark plug boots are designed for extreme racing applications. Using a proprietary blend of materials, the boots can handle much higher temperatures over an increased amount of time. Three designs are available; straight, 115° and a 90° boot are supplied with MSD durable Dual Crimp Terminals.



- 90° Pro-Temp Boots
- 2 per Card _____ PN 3325
- Pack of 8 _____ PN 8852



- Straight Pro-Temp Boots
- 2 per Card _____ PN 3327
- Pack of 8 _____ PN 8854



- 115° Pro-Temp Boots
- 2 per Card _____ PN 3326
- Pack of 8 _____ PN 8853

- Designed exclusively for extreme duty racing conditions.
- Proprietary rubber compound has a higher devulcanizing rating.
- Composition absorbs less infrared radiation.

Dual Wire Separators

These handy separators will secure two wires and keep them away from the exhaust or moving parts. Each wire can be removed easily and clipped right back in! Sold in a pack of 16.

- 8mm _____ PN 8841
- Wires with Sleeve _____ PN 8842



Pro-Heat Guard

This tough sleeving is made up of a thick glass woven core that resists temperatures up to 1,000°F. A silicone rubber coating surrounds the core adding protection against abrasion and heat. The sleeving has a 3/8" inner diameter so it easily slides over most spark plug wires.

- Pro-Heat Guard, 25-feet _____ PN 3411



Spark Plug Boot Retainer

There's no excuse for losing a race due to a plug wire popping off when you run MSD's Boot Retainers. These handy clamps are molded from heat resistant nylon material and will lock the boot to the spark plug.

- Spark Plug Retainer, 2-Cylinder _____ PN 3340
- Spark Plug Wire Retainer, 3-Cylinder _____ PN 3341



PN 3340



PN 3341

Pro-Boot Guard

MSD's Pro-Boot Guard is designed to protect spark plug boots from excessive heat. The slide-on sleeve features a fiberglass woven inner sleeve which is then coated with a specially compounded silicone rubber. This combination produces a thick sleeve that can withstand extreme temperatures. Slides over most plug boots.

- Pro-Boot Guard, 6-feet _____ PN 3412



MSD POWERSPORTS

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Self Vulcanizing Tape

Made of silicone rubber with high red oxide content, this tape will protect electrical connections, hoses, spark plug boots and more from extremely high temperatures. The self vulcanizing process automatically begins when the two sides of the tape are put into contact. A catalyst on one side of the tape begins the bonding process as soon as wrapping takes place.

Self Vulcanizing Tape, 12-feet _____ PN 3410



Shrink Sleeving

MSD Shrink Sleeving can be used to protect connections throughout the vehicle as well as spark plug wires. Simply install the Shrink Sleeving over the connection and apply heat. The sleeving will shrink tightly around the wire and protect it.

No-Split Shrink Sleeving, Set of 10 _____ PN 3409



Spark Guard

MSD's Spark Guard is a dielectric grease that solves many common ignition troubles. It stops voltage leaks, eases boot removal, prevents moisture buildup inside the spark plug wire boots, and even helps protect against radio noise (EMI). It also simplifies the installation of MSD Universal Spark Plug Wire Sets. Spark Guard will not dry up or harden so it will retain its spark isolating capabilities indefinitely.

Spark Guard, 0.5 oz. _____ PN 8804



Mini Stripper-Crimper

Designed to be used in a vise and with a single-edge razor blade to strip spark plug wires without damaging the core and to crimp a terminal. Inexpensive too!

Mini-Stripper-Crimper _____ PN 3503



Pro-Crimp Tool

To do a job right, it is important to have the right tools. If you custom build a lot of plug wires or other wiring, the Pro-Crimp is the right tool for you!

The Pro-Crimp features a hardened steel frame, molded hand grips and built-in ratchet action that is also adjustable. The tool is supplied with jaws to fit MSD's Super Conductor Spark Plug wires and can be removed to use additional jaws (not supplied) for crimping common wiring terminals.

Pro Crimp Tool _____ PN 35051



Replacement Dies for the Pro-Crimp Tool

Spark Plug Dies _____ PN 3508

Amp Pins _____ PN 3506

Amp Lug Dies _____ PN 3507

Weathertight Dies _____ PN 3509

Deutsch Terminal Dies _____ PN 3510



SPARK PLUG WIRES

MSD[®] POWERSPORTS

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MSD Powersports Logo T-Shirts

- White T-Shirt, Medium _____ PN 9450
- White T-Shirt, Large _____ PN 9451
- White T-Shirt, X-Large _____ PN 9452
- Gray T-Shirt, Medium _____ PN 9453
- Gray T-Shirt, Large _____ PN 9454
- Gray T-Shirt, X-Large _____ PN 9455
- Ladies Strap Shirt, Small _____ PN 9456
- Ladies Strap Shirt, Medium _____ PN 9457
- Ladies Strap Shirt, Large _____ PN 9458



MSD Apron

Ideal for working on your engine or to protect your clothes while barbecuing after a successful day at the races. A special blend of cotton/polyester with duracote finish makes this apron super durable. MSD logo displayed proudly on the front. One size fits all.

MSD Apron Red _____ PN 9328



MSD Caps and Beanies

A cap with the MSD logo displayed prominently on the front is just what you need to stay cool and look sharp at those hot races. Comes with a sewn-in adjustable strap so that one size fits all. Our beanies will keep your noggin warm on those cool nights at the races with an MSD Beanie!

MSD Baseball Caps:

- Black Twill _____ PN 9342
- Two Tone (Natural and Black) _____ PN 9344
- Khaki with buckle closure _____ PN 9351
- Black with Patriotic Flames _____ PN 9352
- Black with Red Flames _____ PN 9353



MSD BEANIES:

- Red _____ PN 9354
- Black _____ PN 93541

APPAREL

MSD[®] POWERSPORTS

MSD POWERSPORT TECH SUPPORT

Our Customer Support Techs are not only experts in the Powersports industry - they're enthusiasts! When they're not at MSD, they're wrenching in their garage, kicking up some dust off-road or playing on the water. They know first hand the amount of work and time you invest in your Powersports passion.

MSD Powersports Technicians attend every AMA/PRO-STAR and select AHDRA national events along with other shows across the country every year. At the races, the MSD Techs are on hand at the PR Factory race trailer to handle

all technical and installation questions. The race trailer is equipped with a test fixture for testing and troubleshooting your ignition systems.

Being at the races gives us a chance to talk with our customers one on one and answer any product questions about your application. We are interested in your opinions and ideas and value information on how you use our products or what you would like to see from us in future products. Your input is important to us and we use it to continue developing the best performance products available.

CALL TOLL FREE: 888.258.3835



Service Help

When you buy MSD, you're buying performance and support! MSD Powersports techs are available from 8-5(MST) at 1-888-258-3835 or 1-915-858-3365, you can also email

your questions to: info@msdpowersports.com

MSD Powersports is proud to be a contingency sponsor for the AMA/PROSTAR, AHDRA and NHRA events.



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For more information go to
www.MSDPOWERSPORTS.COM

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