

US
PATENT NO.
6196208



OPERATING SPECIFICATIONS

SPARK ENERGY: 190 MILLIJOULES/SPARK
PRIMARY VOLTAGE: 535 VOLTS
SECONDARY VOLTAGE: 40,000 VOLTS
SPARK SERIES DURATION: 20° CRANKSHAFT ROTATION
RPM RANGE: 12,500 RPM WITH 14.4 VOLTS
VOLTAGE REQUIRED: 12-18 VOLTS, NEGATIVE GROUND
CURRENT DRAW: 1.1 AMP PER 1,000 RPM
WEIGHT AND SIZE: 3.7 LBS., 8.5"L x 4.5"W x 2.2"H

TESTED WITH PRO POWER COIL, PN 8251

MSD Digital-7 Plus™ Ignition Control

For racers that don't need a lot of programming options, the Digital-7 Plus Ignition is a great choice. State-of-the-art technology allows the 7 Plus to produce more power while using less current. The CD circuits combined with an IGBT Coil driver deliver 520-535 volts to the primary side of the coil with up to 190 millijoules of energy at any rpm. Below 3,300 there is of course MSD's powerful series of multiple sparks, rather than a single spark. This spark series burns in the cylinder for over 20° of crankshaft rotation resulting in improved combustion and increased power.

The Digital-7 Plus provides racers with two smooth rev limits, one for top end over-rev protection and another to activate with a clutch or transbrake switch for use on the starting line. Both are adjustable with rotary dials in 100 rpm increments from 2,000-9,900 rpm with a maximum of 12,500 rpm. For nitrous applications or for racers looking for a little more mph, there is a single stage retard circuit that is adjustable up to 9.9°. Next to the rotary dials there is an LED that will verify that the ignition is receiving a trigger signal and will also warn you if there is problem with the supply voltage.

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

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

MSD Digital-7 Plus Ignition Control - PN 7520*

FOR MORE INFORMATION ON:

Recommended Coils, see page 48
 Flying Magnet Crank Trigger Kits, see page 108



ADJUSTABLE FEATURES

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

MAG PICKUP COMPENSATION CIRCUIT

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

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