



MSD STACKER IGNITION CONTROLS

The Stacker Advantage

The MSD Stacker Ignitions utilize the best characteristics of both the conventional factory inductive ignition and a multiple sparking, capacitive discharge (CD) ignition system. The inductive side of the ignition provides the engine with a long duration spark while the Stackers CD design provides a full power spark with high voltage and energy. The Patented design of the Stacker Ignitions allow the system to run parallel with the stock ignition resulting in simplified installation and compatibility with the rest of the vehicle's electronics.

Capacitive Discharge: The MSD Stacker Ignitions feature a capacitive discharge ignition design. The majority of factory ignition systems are inductive ignitions. In an inductive ignition, the coil must store and step up the voltage to maximum strength in between each firing. At higher rpm, since there is less time to charge the coil to full capacity, the voltage falls short of reaching maximum energy resulting in a loss of power or top end miss. The MSD Stacker Ignitions feature a step up transformer and capacitor which is quickly charged to full power (120 millijoules) in less than one millisecond. This produces a full power spark throughout the entire rpm range of the engine.

Multiple Sparks: Due to the quick charge time of the Stacker's CD design, they are capable of delivering a series of full power sparks to each spark plug. Under 3,000 rpm, the Stackers deliver a series of sparks that lasts for 20° of crankshaft rotation for each firing of the spark plug. The number of sparks that occur depends on rpm. Above 3,000 rpm there is simply not enough time to fire the spark plug more than once, but there is always one full power spark.

The high output and multiple sparks of the Stacker Ignitions work together with the stock inductive spark to ensure complete combustion of the fuel mixture. Improved combustion results in quick starts, smooth idle, quick throttle response and increased performance.

Specifications:

Operating Voltage: 10-18 Volts,
Current Requirements: 1 Amp per 1,000 rpm
RPM Range: 15,000 RPM with 14 Volt Input
Spark Series Duration: 20°
Primary Voltage: 250 Volts
Energy Output: 120 millijoules

Stacker Ignition, Single Channel, PN 7000
 For 4, 6 or 8-cylinder engines with a distributor, points or electronic.

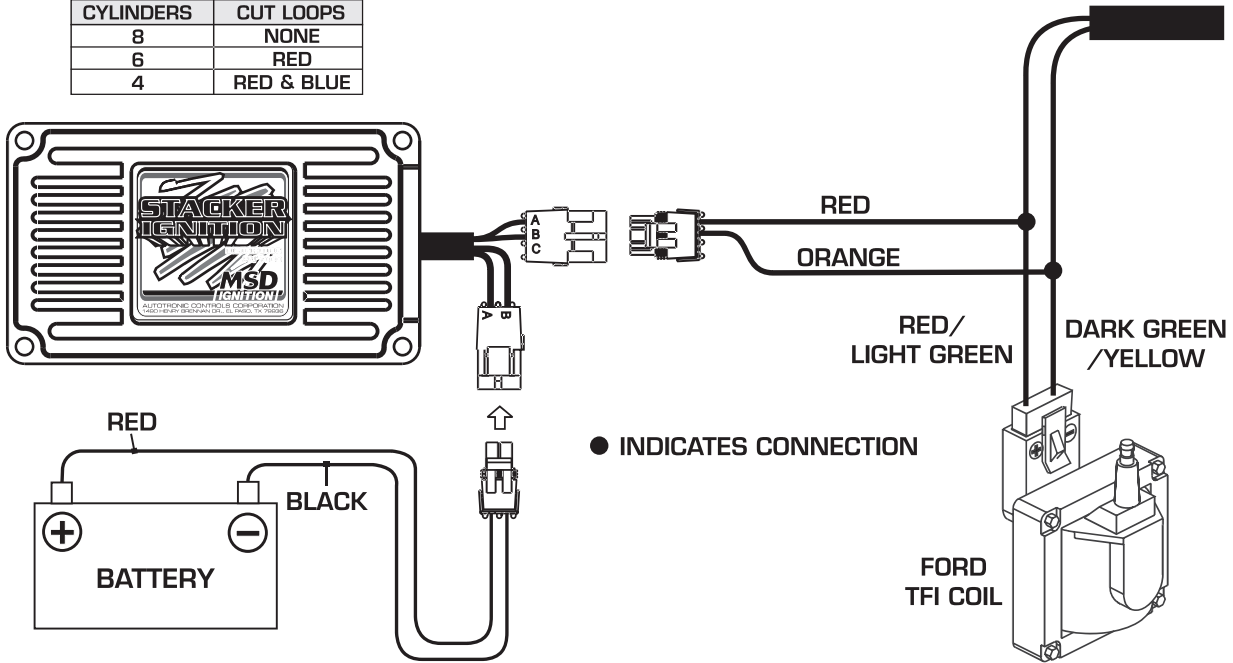
Stacker-4 Ignition, PN 7010
 Designed to work with four channel DIS vehicles.

Stacker-8 Ignition, PN 7020
 Designed for engines with individual coils per cylinder. Up to eight cylinders.

Power Leads	These are the Red and Black wires (14 gauge) and are responsible for getting direct battery voltage to the ignition. The ignition has an internal fuse so no fuse is necessary.
Red(14 Gauge)	This wire connects to the battery positive (+) terminal.
Black(14 Gauge)	This wire connects to ground, either at the battery negative (-) terminal or to the engine.
Red(18 Gauge)	This wire turns the Stacker On and needs to be connected to a switched 12 volt source. A coil positive (+) wire is a wire that can be spliced into.
Trigger/Output	
Orange Wires (18 Gauge)	The Orange wire(s) on the MSD Stackers, one on the Stacker, four on the Stacker-4, eight on the Stacker-8, are the trigger wires and need to be connected to each coil's negative wire. Use the supplied ring lug or Blue tab splice connectors to connect the Orange wires to their connection (Figure 1). Note: If your application does not use all of the Orange wires (the channels), the remaining Orange wires should be connected to an active channel.

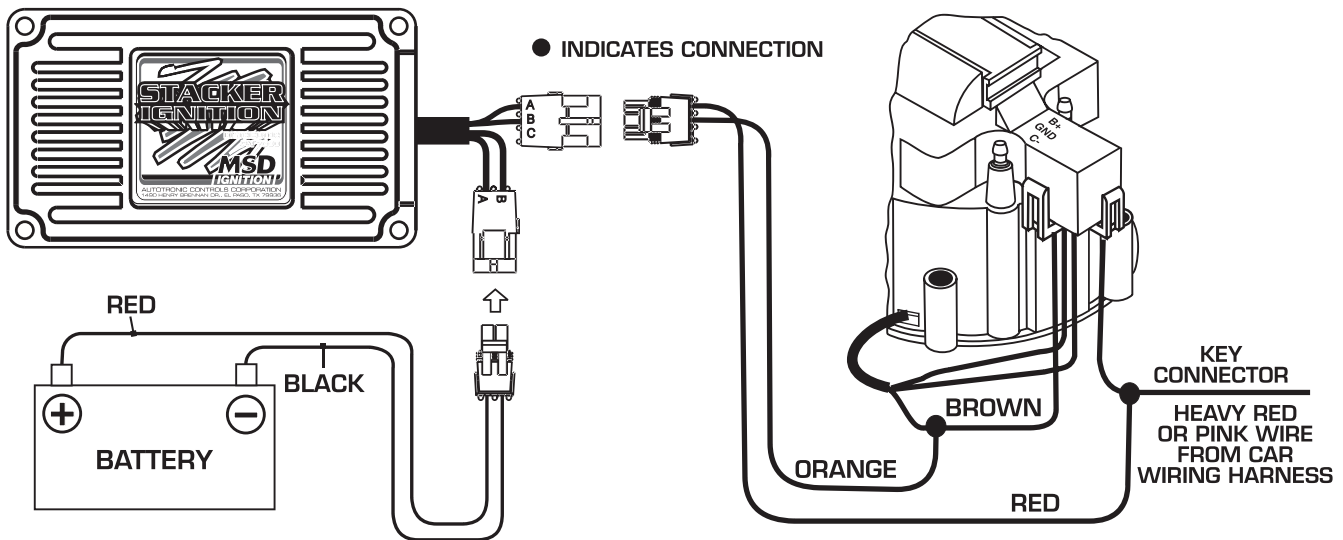
MSD STACKER, PN 7000, TO FORD TFI

CYLINDERS	CUT LOOPS
8	NONE
6	RED
4	RED & BLUE



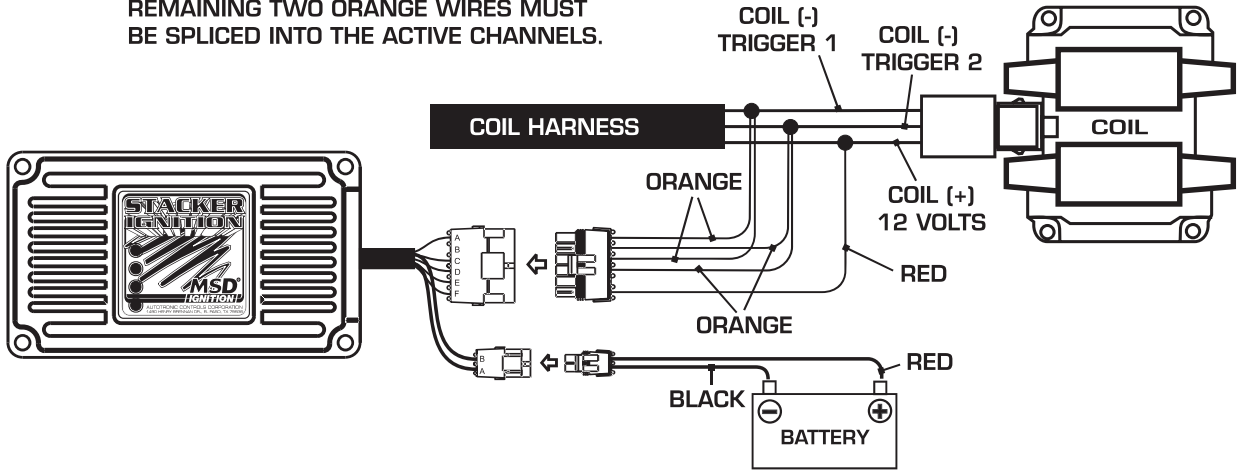
MSD STACKER, PN 7000, TO GM HEI

CYLINDERS	CUT LOOPS
8	NONE
6	RED
4	RED & BLUE

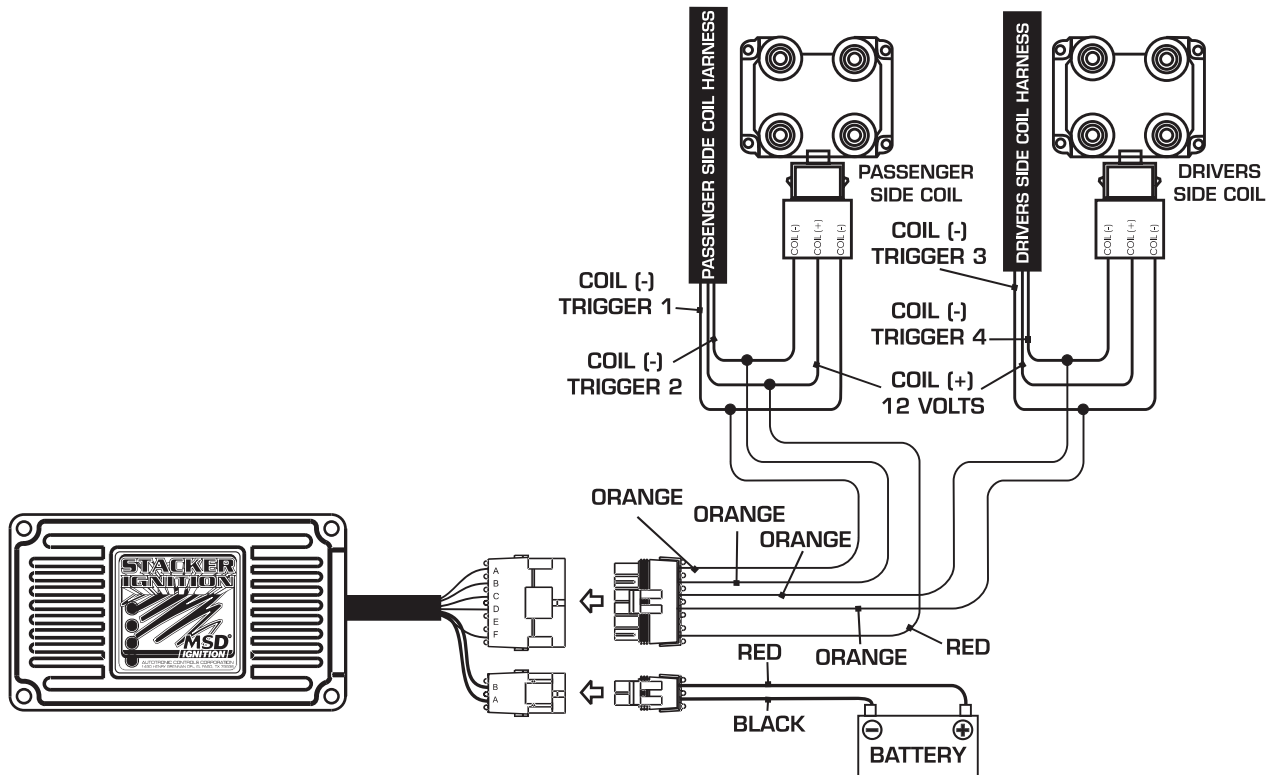


MSD STACKER-4 TO 4-CYLINDER COIL PACK IGNITION

NOTE: ONLY TWO CHANNELS ARE USED SO THE REMAINING TWO ORANGE WIRES MUST BE SPLICED INTO THE ACTIVE CHANNELS.



MSD STACKER-4 TO 8-CYLINDER COIL PACK IGNITION



MSD STACKER-8 TO 8-CYLINDER COIL PER CYLINDER IGNITION

