



Owners Manual

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INTRODUCTION

Fire Control Ignitions are a new analog, multi-spark, high performance capacitive discharge ignition concept designed for the real world. Advanced high silica composite encapsulation protects the circuitry from extreme-g load impacts, hard acceleration, vibration, and provides a unique thermal base that ensures reliable operation no matter how hot or cold the environment! These units can be fully submerged in water for extended periods without damage and can withstand the most severe on-road or off-road abuse.

The FC ignition is the perfect place to start a performance buildup for almost any vehicle, trucks, SUVs, import performance, to all out full competition rigs, this ignition line combines power, precision, control, and durability in one extremely versatile package. Import or domestic, forced induction, nitrous, or stock, Fire Control Ignitions deliver total performance in any application.

SPECIFICATIONS

10,000 RPM (8 cylinder, 20,000 RPM 4 cylinder) with no high-end drop-off makes this the strongest, best bang for the buck system ever offered. A full 97 mJ of spark* energy per spark (up to 6 sparks per combustion event) ensure complete and sustained ignition. With 440 volts driving the coil and using state-of-the-art HEXFET solid state firing technology and silicone controlled rectifiers, it delivers a stable multispark out-put across 22 degrees of crankshaft rotation. This technology provides us with spark interval stability better than most digital ignition systems on the market!

Easier starting, stronger pulling, lower ET's, smoother idle, reduced plug fouling, and a crisper throttle response are all benefits of the increased ignition capability. The FC will operate across a voltage range of 7.5 to 16 volts making it ideal for competition vehicles without charging systems to ensure maximum performance during long events.

*** NOTE: UNLIKE SOME MANUFACTURERS OUR SPECIFICATIONS ARE MEASURED WITH REAL WORLD INPUT VOLTAGES WITHOUT THE EXAGGERATED "THEORETICAL" OR PEAK OUT-PUT FIGURES BEING SHOWN AS THE NORM. FIRE CONTROL IGNITIONS ARE THE MOST IGNITION FOR THE MONEY, PERIOD!**

All FC ignition units can be connected to magnetic pick-up triggers (either crank sensor or distributor type) with supplied plug in connectors. For most passenger cars and trucks we also offer a complete line of optional direct plug-in harness adapters to make installation as simple as plug and play! By utilizing direct plug in connections no cutting or splicing of the stock harness is necessary and the weatherproof integrity of the harness is not compromised. Contact your dealer for availability.

The FC series is also the first full line to offer both sophisticated internal filtering circuits and a specially designed aluminum housing to eliminate RFI "line noise" that other ignitions can create. All power supply leads are soldered for maximum durability and corrosion resistance, and feature internally fused over current protection without the need for external fuses.

COIL COMPATIBILITIES

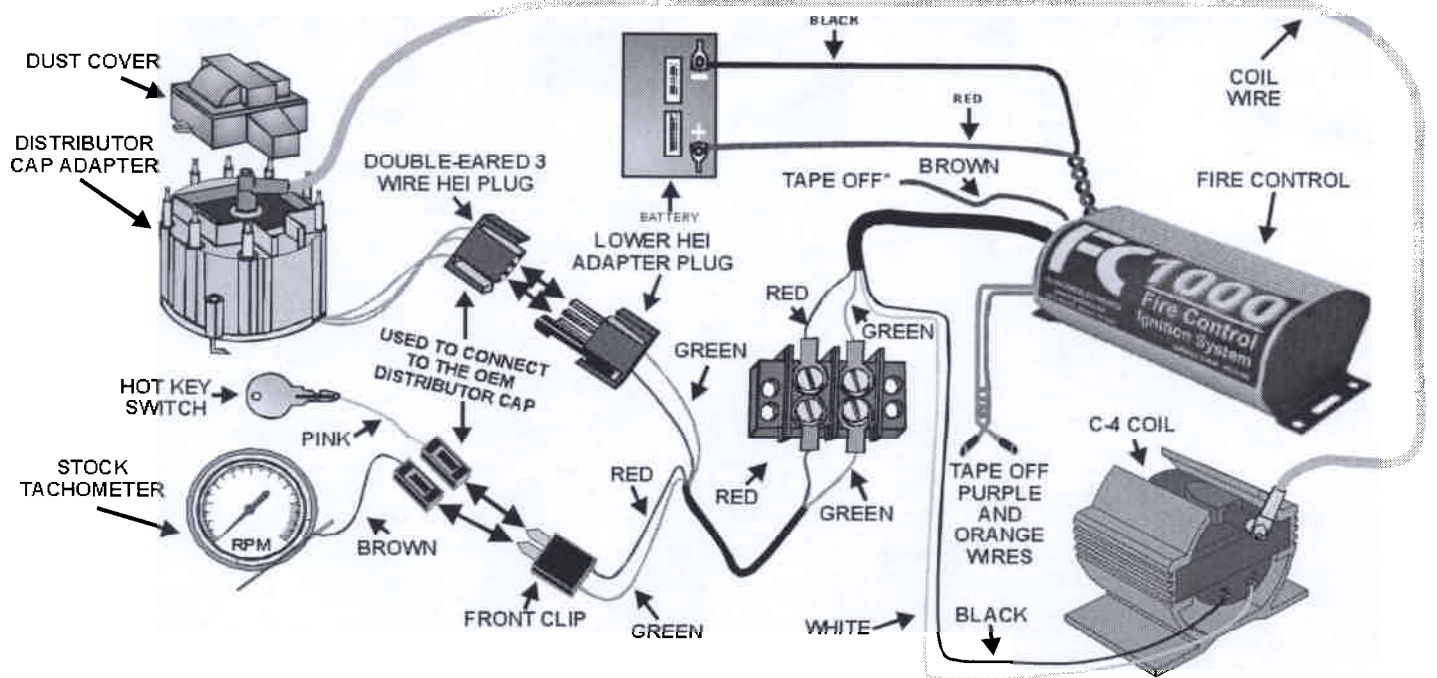
The FC series can be operated with any CD compatible coil. ***Donot use with stock OEM coils.***

WIRE FUNCTIONS

The FC 1000 can be installed by following the basic connection table below. However, optional direct plug-in harness adapters are available for most popular vehicles that make installation easier. The following diagrams illustrate the various direct plug-in harness adapters, their basic applications, and part numbers.

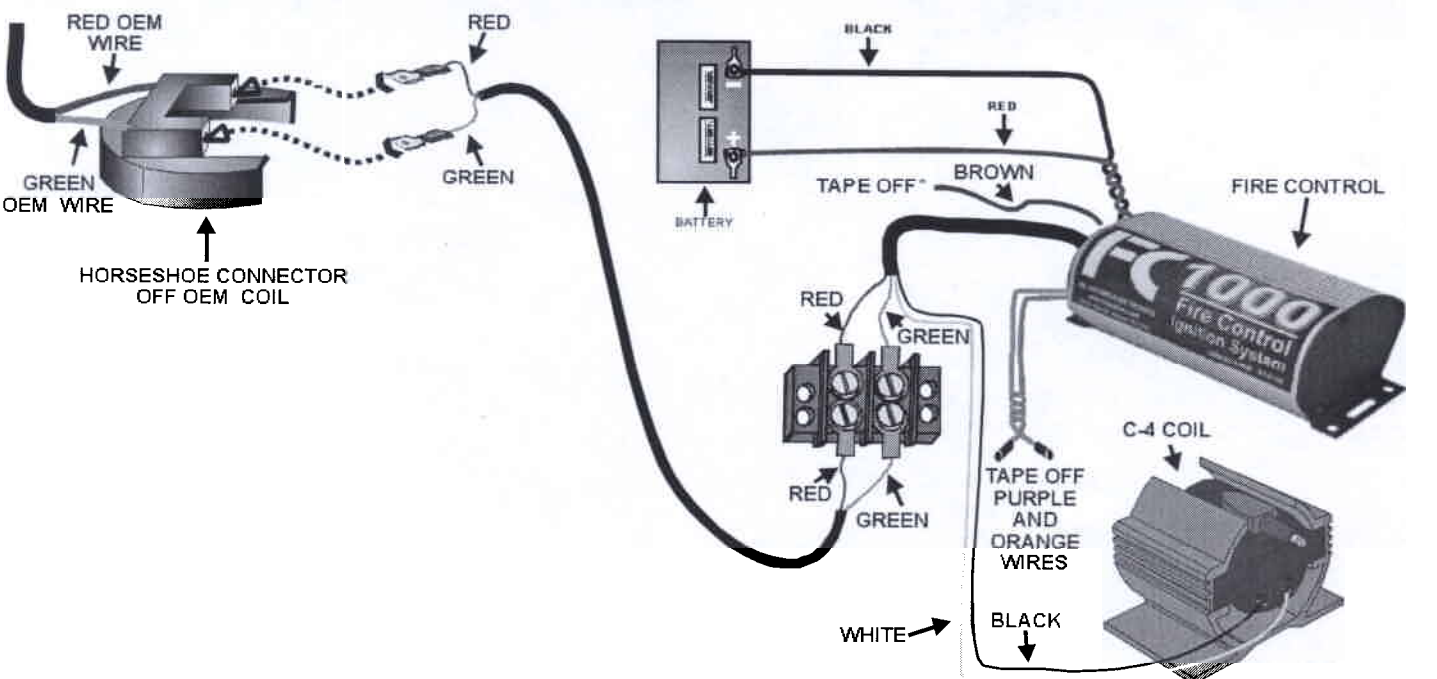
Heavy Twisted Red & Black	These are the two heavy gauge wires (12 gauge that are RED and BLACK in color) and are responsible for getting direct battery voltage to the ignition. The ignition has internal protection so no fuse is necessary. (Red to Battery +, Black to Battery -)
Red (Smaller Gauge)	Connects to a switched 12 volt source, such as the ignition key or switch.
White	Connects to the positive (+) terminal of the coil. This is the only wire that makes electrical contact with the coil positive terminal. WARNING: Do not attach to Stock OEM Coil.
Black (Smaller Gauge)	Connects to the negative (-) terminal of the coil. This is the only wire that makes electrical contact with the coil negative terminal. WARNING: Do not attach to Stock OEM Coil.
Green	This wire is used to connect to the points, electronic ignition amplifier output or to the Yellow wire of a Timing Accessory. When this wire is used, the Magnetic Pickup connector is not used.
Orange & Purple	These wires are routed together in one harness to form the Magnetic Pickup connector. It will connect to factory pickups or other aftermarket pickups. The Orange wire is positive (+) and the Purple is negative (-). When these wires are used, the Green wire is not used. NOTE: The magnetic pickup cannot be used with vehicles equipped with factory fuel injection!
Brown	This wire is used to trigger an aftermarket tachometer. This wire provides a 12 volt square wave signal. When this wire is not used, tape off Brown wire to prevent accidental grounding.

CONNECTIONS FOR GM INTERNAL HEI IGNITIONS (USING OPTIONAL 380462 HARNESS & 390804 CAP ADAPTER)



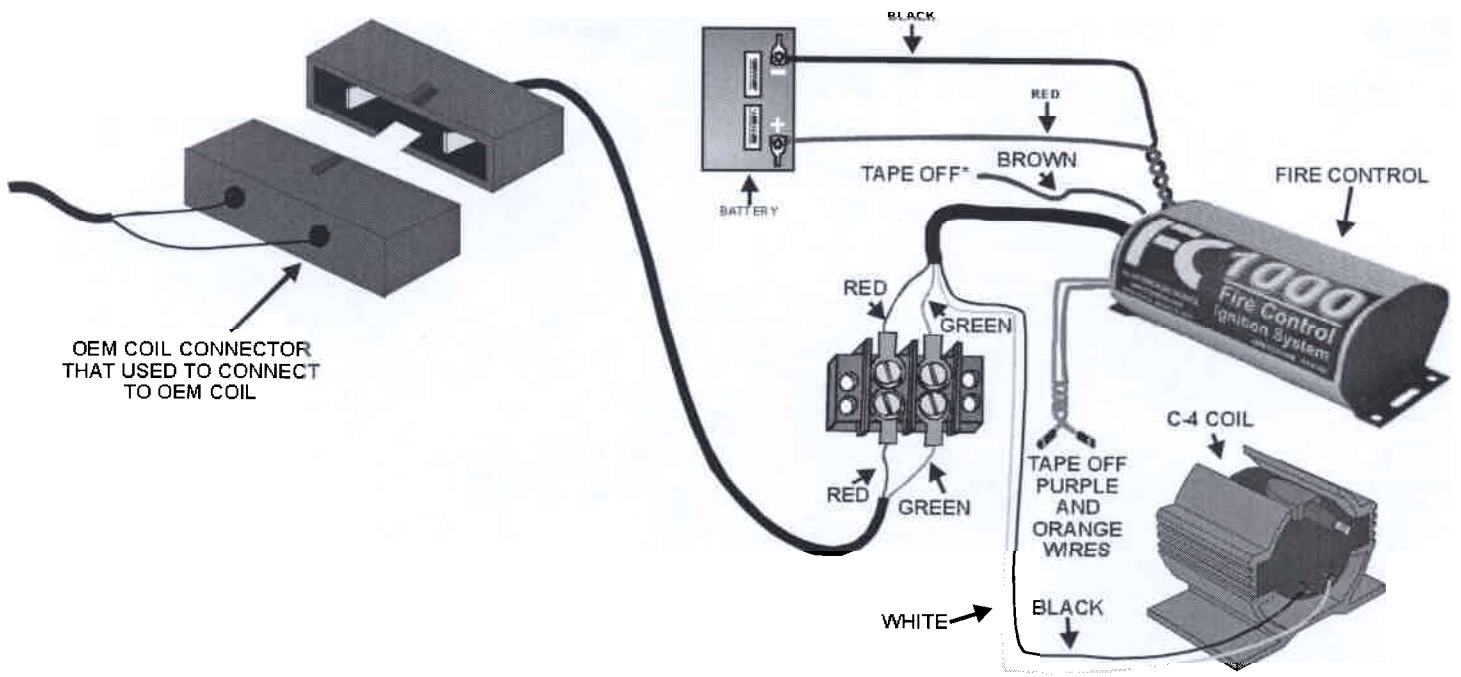
* NOTE: If using aftermarket tachometer it may trigger correctly off the Green points connection wire in the harness. If tach bounces or fails to read, connect to Brown Tach lead off unit.

CONNECTIONS FOR FORD & AMC WITH DURASPARK IGNITIONS (USING OPTIONAL 380464 ADAPTER)



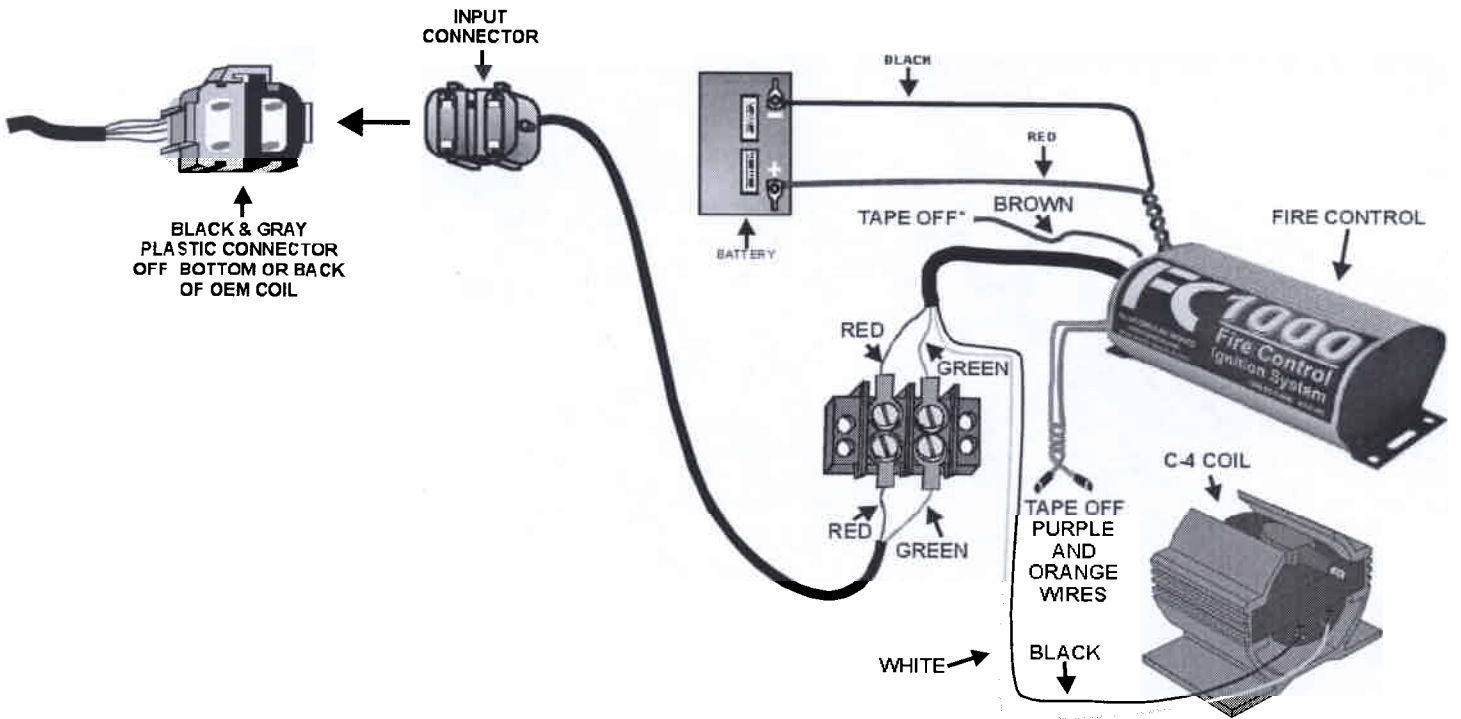
* NOTE: If using aftermarket tachometer it may trigger correctly off the Green points connection wire in the harness. If tach bounces or fails to read, connect to Brown Tach lead off unit.

CONNECTIONS FOR FORD EEC-IV IGNITION WITH FUEL INJECTION (USING OPTIONAL 380466 ADAPTER)



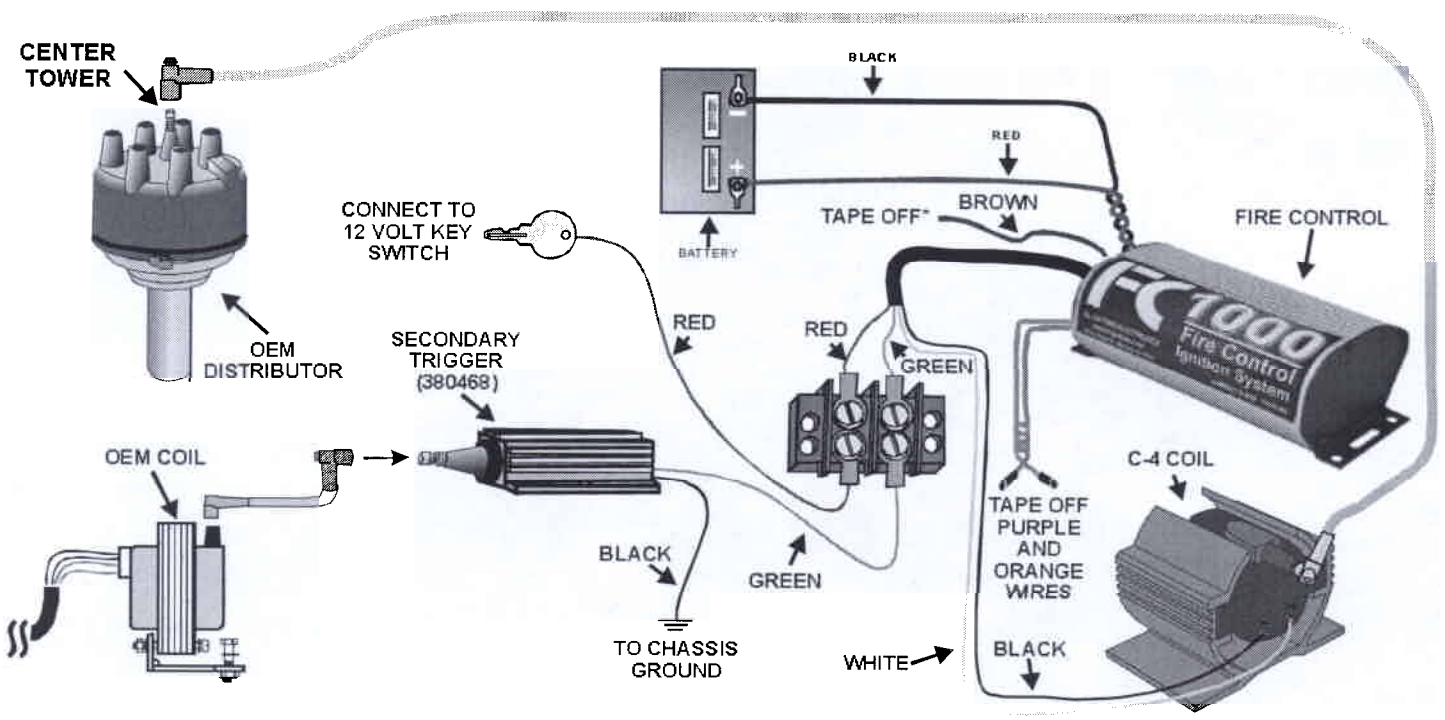
* NOTE: If using aftermarket tachometer it may trigger correctly off the Green points connection wire in the harness. If tach bounces or fails to read, connect to Brown Tach lead off unit.

CONNECTIONS FOR GM EXTERNAL COIL HEI IGNITIONS (USING OPTIONAL 380467 ADAPTER)



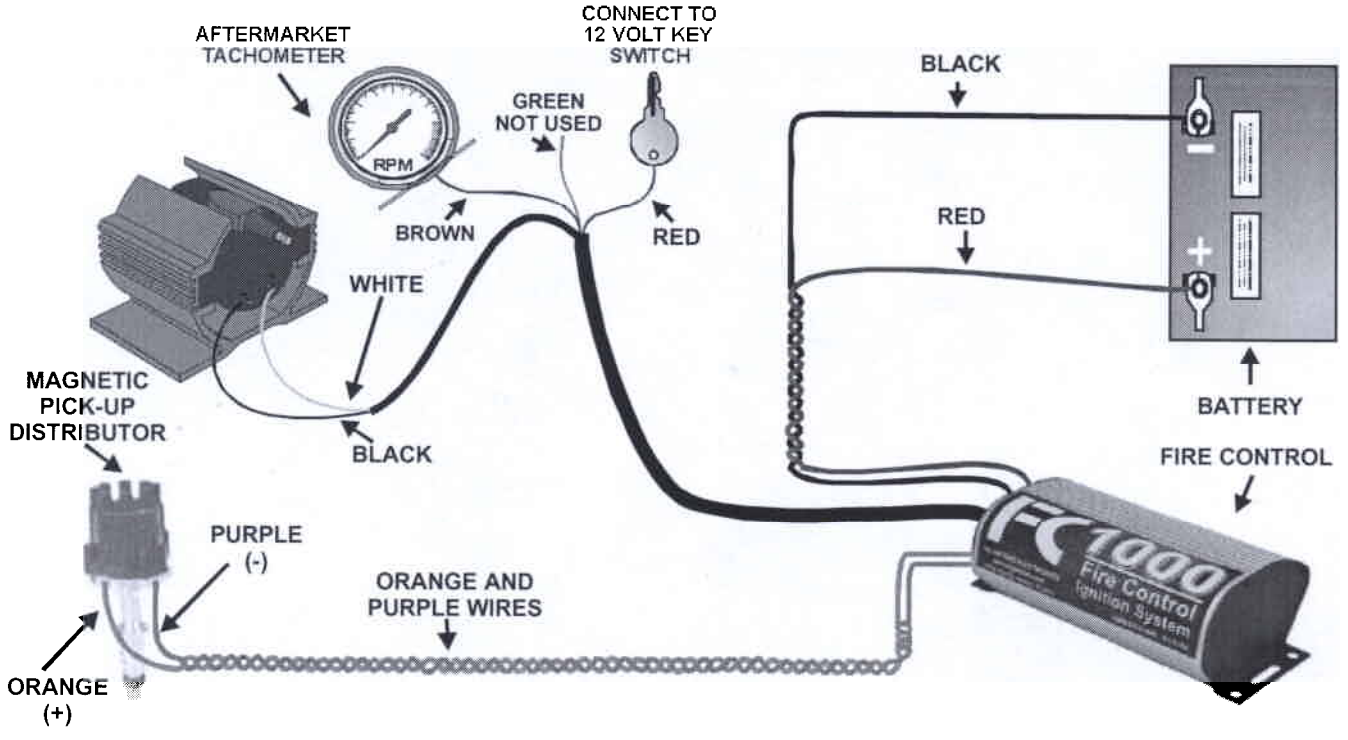
* NOTE: If using aftermarket tachometer it may trigger correctly off the Green points connection wire in the harness. If tach bounces or fails to read, connect to Brown Tach lead off unit.

CONNECTIONS FOR LATE MODEL FUEL INJECTED APPLICATIONS (USING OPTIONAL 380468 ADAPTER)

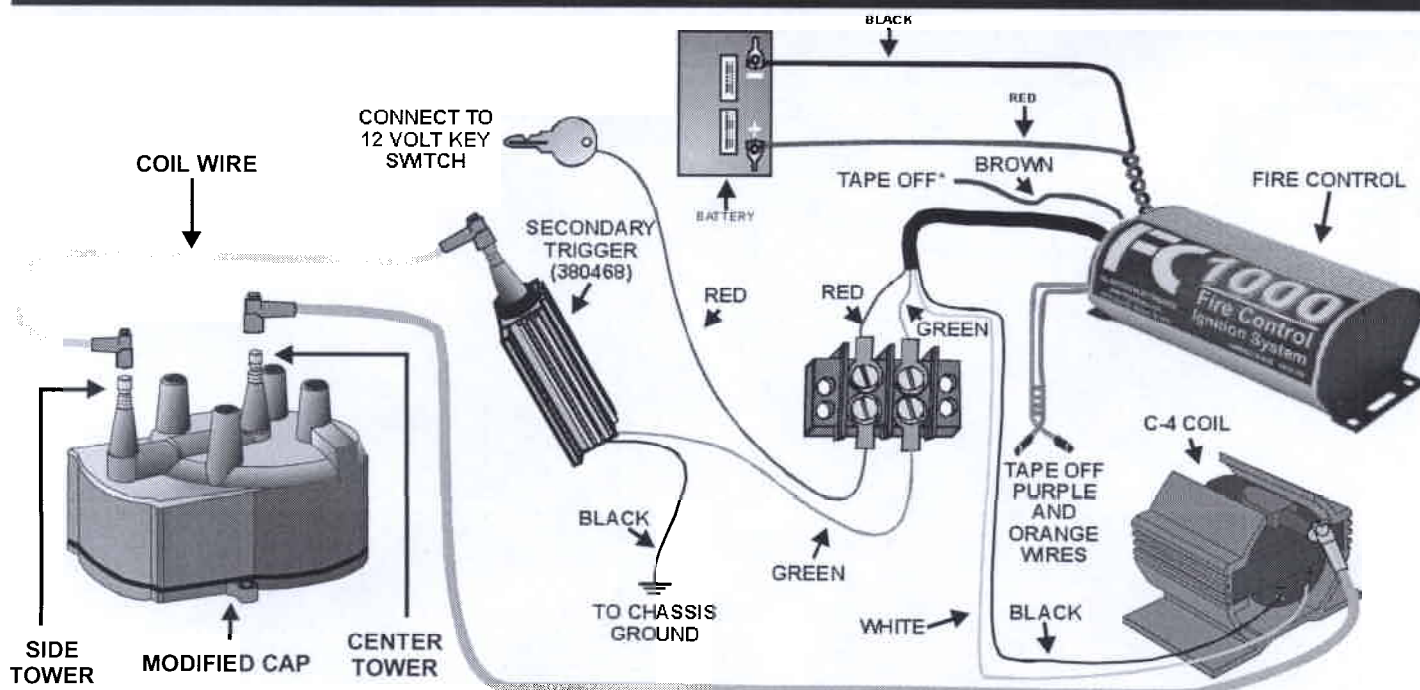


* NOTE: When using Secondary Trigger any pre-existing stock or aftermarket tachometer should trigger off the OEM coil negative or can be hooked to the Brown wire off the unit.

CONNECTIONS FOR MAGNETIC PICKUP DISTRIBUTORS OR CRANK TRIGGERS



CONNECTIONS FOR IMPORTS WITH INTERNAL COIL (USING OPTIONAL 380468 ADAPTER & MODIFIED DIST. CAP)



*** NOTE: When using Secondary Trigger any pre-existing stock or aftermarket tachometer should trigger off the OEM coil negative.**

CONNECTIONS USING A SECONDARY TRIGGER AND MODIFIED CAP (NON GM HEI)

This adapter harness for the FC1000 is designed for use on import vehicles originally equipped with an internal coil type distributor. On these vehicles you normally cannot get to the OEM COIL primary terminals (+ and -).

The manufacturer usually places the coil inside the distributor cap in such a way that makes it extremely difficult to install an ignition system by conventional methods. Also, retaining the OEM COIL is generally required by the vehicles on-board computer for correct operation.

The addition of an aftermarket ignition system would cause performance and/or driveability problems. These situations are corrected by using a SECONDARY TRIGGER and a MODIFIED CAP. The OEM COIL and wiring are left intact and used to trigger the FC1000. This allows the OEM system to operate properly while the FC1000 and C-4 Coil are actually driving the spark plugs with an improved spark.

NOTE: YOU WERE EITHER SOLD A MODIFIED CAP WITH YOUR KIT, OR YOU MUST CALL JACOBELECTRONICS FOR A CAP MODIFICATION #.

IF YOU NEED HELP
 WITH WARRANTY INFORMATION, TECHNICAL INFORMATION OR INSTALLATION ASSISTANCE:
 CALL 216.688.8300 x 5 M-F 8:00 AM - 5:00 PM EST



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