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CHELTENHAM VIC 3192**

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7 Amp (7016-2) Ignition Control - Wiring Instructions

Note: The 7016-2 is designed to be used either as a stand alone ignition in conjunction with an MSD Power Grid System Controller PN 7730, aftermarket EFI ECU's, OE LS ECU's or as a piggy back system on some CDI ignition controllers. Compatible CDI's are MSD 6 Series and the Digital 7 range of ignition controls. The 7016-2 must not be used with a 7AL-2, 7AL-3 or 8 Series ignition control. For compatibility with any other ignition control, please contact ICE Ignition.

Also Required: The 7016-2 must be used with 1 x ICE 4100 or 4200 Pro Series Race Coil.

Coil Loom: The coil wires are finished as a loom ready for installation. This loom is always connected in the same way, irrespective of how the 7016-2 is triggered.

Orange - Connect to the positive (+) terminal of the coil. This is the only wire that makes contact with the coil positive.

Green - Connect to the negative (-) terminal of the coil. This is the only wire that makes contact with the coil negative.

Black - Connect to true ground, ie: battery negative, battery negative junction or engine block (whichever is the shortest path for this black wire). The shorter this wire can be made, the better. Do not connect to the body, dash, etc.

Note: Junction or engine block must be connected to battery negative with battery cable of between 13mm to 15mm in diameter. The longer the distance between battery negative and the junction / block, the larger the diameter should be.

Large Red Wire - (Single wire with large terminal) Connects to a switched 12 volt source (minimum 13.8—14.8 volts when running). Eg: Dedicated ignition switch. This wire is always connected in the same way, irrespective of how the 7016-2 is triggered. **Note:** This wire carries a substantial load, so please ensure a good quality switch / relay combination supplies voltage. Relay should be a 5 pin 30A - 40A minimum with a 20A fuse on the supply wire to the relay. To determine the correct wire size / length for a 20 Amp circuit, please refer to a wire gauge versus amps chart. The three wires which make up this circuit are: 1) wire from power source to relay, 2) wire from relay to the large red wire on the 7016-2 and 3) black ground wire from the 7016-2 to true ground (refer above). The total length of these three wires will determine what gauge wire is required.

NOTE: NEVER LEAVE THIS LARGE RED WIRE POWERED UP WHEN TUNING / DOWNLOADING THE ECU OR GRID IF THE ENGINE IS NOT RUNNING.

Triggering: Only one of the three options below is ever used to effect triggering.

4-Pin Grey Deutsch Connector - Connects direct to Deutsch connector on MSD Power Grid Controller PN 7730. Connect orange and black wires as per MSD instructions. **Set Up -** For MSD Grid, in general set up, select Network Ignition from the options.

Also use this plug when triggering the 7016-2 from an aftermarket ECU. For aftermarket ECU's, the small red wire requires switched 12 volts (usually from the same 5 pin 40 Amp relay that supplies the main red wire - see above) and the white wire is the points output from the ECU. When used with an aftermarket ECU, the orange and black wires are left disconnected.

Further, whenever using the Deutsch plug, the single orange wire from the main 12 pin Delphi plug and the brown and purple wires should be left disconnected.

Brown & Purple Wires - These wires are used for triggering as a falling edge with both aftermarket and OE LS ECU's. In both cases, brown is spliced in to the main ground wire exiting from the ECU main wiring plug (as close to the ECU as possible) and purple is connected to the trigger wire in the ECU harness. Both these wires should be kept as short as possible and twisted together. Further, whenever using the brown and purple wires for triggering, the Deutsch plug and the single orange wire from the main 12 pin Delphi plug should be left disconnected.

Single Orange Wire - Connect to coil positive of MSD coil when 7016-2 is being used as a piggy back system. The Deutsch connector and purple / brown wires are left disconnected when the single orange wire is used.



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Single Green Wire - Tach output for aftermarket tachometers and other rpm activated devices. Does not provide a suitable signal for older factory tachometers.

Timing - The 7016-2 does not feature any timing functions. It is purely a spark generation module.

Mounting - Mount the unit using vibration mounts, inside the vehicle cabin, away from heat and moisture.

NOTE: If mounted in engine compartment or similar, warranty will be void.

General:

Keep all looms routed away from the high tension wires.

These measures are to ensure no noise enters the looms and disrupts the microprocessors inside the unit.

Avoid soldering wires, as they become brittle where the solder ends, flex at that point, then break.

To ensure unit functions correctly, the above steps must be adhered to.

All questions should be directed to the above contact numbers.

**Additional Notes: For Installation into VN to VT
Commodores when using OE wiring harness.
Please read and follow instructions below.**

- 1) Remove both OE wires from the coil. OE coil positive wire will be red and OE coil negative wire will be brown.
- 2) Use OE coil positive wire (red) and connect to Large Red Wire on ICE loom (Part No:3010). From the large terminal, loop a small red wire over to the small red wire on the 4 pin Deutsch connector. The OE red wire is from the OE relay, so another relay is not necessary on this circuit.
- 3) Connect OE coil negative wire (brown) to the white wire on the Deutsch connector.
- 4) The orange and black wires on the 4 pin Deutsch are not used in this application.
- 5) Connect coil loom as per instructions on other page.
- 6) If you are unsure about any of these instructions, please contact ICE Ignition on the numbers above.

Distributor Wiring for VN to VS Commodore only:

- 1) Red wire on distributor connects to white wire with black trace on vehicle harness.
- 2) Black wire on distributor connects to white wire with red trace on vehicle harness.
- 3) Green wire on distributor connects to blue wire on vehicle harness.