



**123 Bernard Street
CHELTENHAM VIC 3192**

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www.iceignition.com

7 Amp 2 Step (7842NR) Ignition Box - Wiring Notes

Distributor to module loom:

- * Supplied finished - simply connect at both ends - no termination necessary.
- * Ensure distributor to module loom is routed separately from module to coil loom and high tension wires.

Module to coil loom (supplied semi finished). Please ensure the following:

- * Orange wire to coil positive (run direct to ignition coil - do not splice with any other wires).
- * Green wire to coil negative (run direct to ignition coil - do not splice with any other wires).
- * Black wire to earth / ground (run direct to engine block - do not splice with any other wires).
- * Be sure to keep the earth / ground wire from the ICE modules as short as possible. Always run the earth / ground wire from the ignition module (and voltage booster if fitted), to somewhere on the engine block, same as the battery earth / ground cable as per the instructions below. This is the only way to guarantee proper earth / ground.

Optional features:

- * White (single) wire : Apply 12 volts to activate low rpm limit (usually armed by trans-brake switch or similar).
- * Green (single) wire = Tach Output (12 volt square wave - normally high, then low for 1.1 m/s per spark).
- * Red wires: If connected = distributor trigger mode; If disconnected = crank trigger mode.
- * Orange, White, Yellow, Blue and Brown wires (grouped together) - refer to multiple retards page.

Power supply to coil positive - no booster or inc booster 2316 / 2216 - ideal:

- * Supply 12 volts switched (13.8 - 14.8 volts from alternator) to coil positive or booster (if fitted) via ignition switch.
- * If vehicle has ballast resistor or resistor wire, by-pass these and feed direct voltage to coil or red wire of booster.
- * Never leave original wire from the ignition switch connected to the coil positive if booster fitted (refer diagram).
- * Do not try to power anything but a single coil with the booster.
- * If wired correctly, two wires go to coil positive and one wire goes to coil negative.

Earth / Ground:

THE IMPORTANCE OF THIS STEP CANNOT BE OVER EMPHASIZED AND WILL VOID THE WARRANTY ON THE IGNITION IF IT IS NOT FOLLOWED.

* Battery negative cable **MUST** run direct to a bare metal bolt boss on the engine block (should also be attached to body) as a single cable.

* If the battery is mounted in the front of the vehicle the cable must be a minimum of 12mm - 13mm in diameter including the shielding, and must consist of a fine strand copper core.

* If the battery is mounted in the rear of the vehicle the cable must be a minimum of 14mm to 15mm in diameter including the shielding, and must consist of a fine strand copper core.

* For street cars, if you currently have the battery earth / ground cable running from the battery negative to the chassis and chassis to the engine and are relying on the body / roll cage to make the connection for earth / ground, **DO NOT** assume that because your existing ignition works like this, that the ICE Ignition will also work. You will void your warranty and quite possibly have to buy replacement parts.

* For race cars, if you currently have the battery earth / ground cable running from the battery negative to the roll cage and are relying on the roll cage and aluminum engine plates to make the connection for earth / ground, **DO NOT** assume that because your existing ignition works like this, that the ICE Ignition will also work. You will void your warranty and quite possibly have to buy replacement parts.

General:

- * Keep both looms routed away from the high tension wires.
- * These measures are to ensure no noise enters the loom and disrupts the microprocessor inside the unit.
- * Mount the unit using the vibration mounts supplied, inside the vehicle cabin, away from heat and moisture.
- * 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.



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7 Amp 2 Step (7842NR) Curve Select switch

Digit Degrees of automatic advance @ engine rpm

0 =	Locked timing
1 =	2 Degrees @ 3800 rpm
2 =	4 Degrees @ 3800 rpm
3 =	6 Degrees @ 3800 rpm
4 =	8 Degrees @ 3800 rpm
5 =	10 Degrees @ 3800 rpm
6 =	12 Degrees @ 3800 rpm
7 =	14 Degrees @ 3800 rpm
8 =	Locked timing
9 =	2 Degrees @ 3800 rpm

Expressed in crankshaft degrees @ engine rpm



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7 Amp 2 Step (7842NR) - Multiple retards

Retard wires = White & Yellow & Blue & Brown

**Wire Colour - Apply
12 volts to activate**

Degrees of automatic retard

White

2 Degrees retard when activated

Yellow

4 Degrees retard when activated

Blue

6 Degrees retard when activated

Brown

8 Degrees retard when activated

White & Yellow

6 Degrees retard when activated

White & Blue

8 Degrees retard when activated

White & Brown

10 Degrees retard when activated

Yellow & Blue

10 Degrees retard when activated

Yellow & Brown

12 Degrees retard when activated

Yellow & White & Blue

12 Degrees retard when activated

Blue & Brown

14 Degrees retard when activated

Blue & Brown & White

16 Degrees retard when activated

Blue & Brown & Yellow

18 Degrees retard when activated

Brown & Yellow & White

14 Degrees retard when activated

Brown & Blue & Yellow & White

20 Degrees retard when activated

**Note: Orange wire - has 12 volts when ignition is switched on
Expressed in crankshaft degrees @ engine rpm**