







**123 Bernard Street  
CHELTENHAM VIC 3192**

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**www.iceignition.com**

## **7 Amp 2 Step (7642NR) 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 (7642NR) Curve Select switch**

**Digit                      Degrees of automatic advance @ engine rpm**

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

**Expressed in crankshaft degrees @ engine rpm**



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## **7 Amp 2 Step (7642NR) - 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**