



123 Bernard Street  
CHELTENHAM VIC 3192

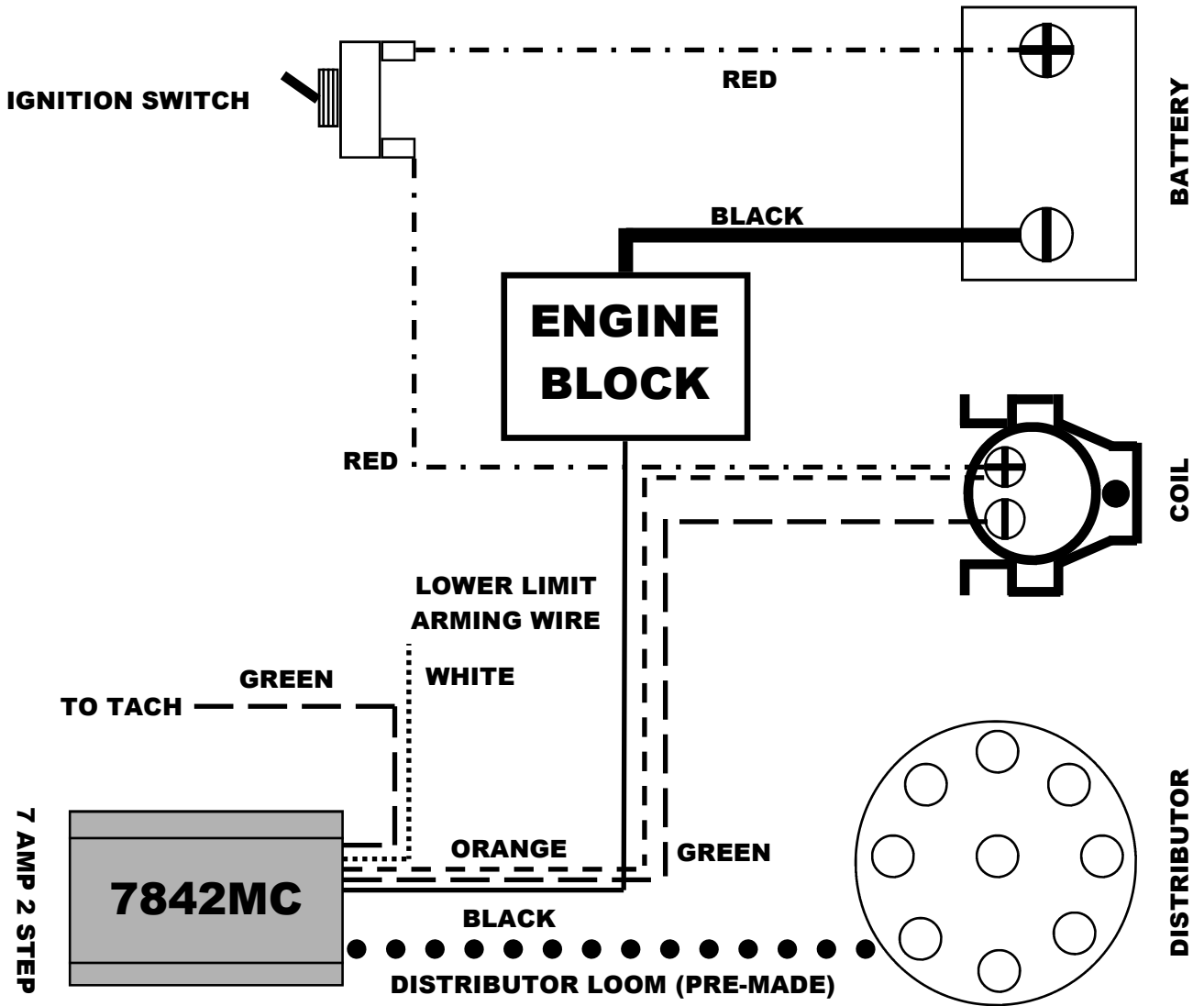
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**Wiring Diagram 7 Amp 2 Step (7842MC) Ignition Box - No Booster**



**WIRE COLOR LEGEND**

- ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● DISTRIBUTOR LOOM
- ORANGE WIRE
- GREEN WIRE
- BLACK WIRE
- ..... WHITE WIRE
- - - - - RED WIRE





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## **7 Amp 2 Step (7842MC) 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.

### *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, or warranty will be void.



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## **7 Amp 2 Step (7842MC) Curve Select switches**

| <b>Digit</b> | <b>Advance starts @ rpm</b> | <b>Advance finishes @ rpm</b> | <b>Degrees of advance</b> |
|--------------|-----------------------------|-------------------------------|---------------------------|
| 00 =         | n/a                         | n/a                           | Locked                    |
| 01 =         | 1450                        | 3800                          | 1 deg                     |
| 02 =         | 1450                        | 3800                          | 2 deg                     |
| 03 =         | 1450                        | 3800                          | 3 deg                     |
| 04 =         | 1450                        | 3800                          | 4 deg                     |
| 05 =         | 1450                        | 3800                          | 5 deg                     |
| 06 =         | 1450                        | 3800                          | 6 deg                     |
| 07 =         | 1450                        | 3800                          | 7 deg                     |
| 08 =         | 1450                        | 3800                          | 8 deg                     |
| 09 =         | 1450                        | 3800                          | 9 deg                     |
| 10 =         | 1450                        | 3800                          | 10 deg                    |
| 11 =         | 1450                        | 3800                          | 11 deg                    |
| 12 =         | 1450                        | 3800                          | 12 deg                    |
| 13 =         | 1450                        | 3800                          | 13 deg                    |
| 14 =         | 1450                        | 3800                          | 14 deg                    |
| 15 =         | 1450                        | 3800                          | 15 deg                    |
| 16 =         | 1450                        | 3800                          | 16 deg                    |
| 17 =         | 1450                        | 3800                          | 17 deg                    |
| 18 =         | 1450                        | 3800                          | 18 deg                    |
| 19 =         | 1450                        | 3800                          | 19 deg                    |
| 20 =         | 1450                        | 3800                          | 20 deg                    |
| 21 =         | 1300                        | 3500                          | 1 deg                     |
| 22 =         | 1300                        | 3500                          | 2 deg                     |
| 23 =         | 1300                        | 3500                          | 3 deg                     |
| 24 =         | 1300                        | 3500                          | 4 deg                     |
| 25 =         | 1300                        | 3500                          | 5 deg                     |
| 26 =         | 1300                        | 3500                          | 6 deg                     |
| 27 =         | 1300                        | 3500                          | 7 deg                     |
| 28 =         | 1300                        | 3500                          | 8 deg                     |
| 29 =         | 1300                        | 3500                          | 9 deg                     |
| 30 =         | 1300                        | 3500                          | 10 deg                    |
| 31 =         | 1300                        | 3500                          | 11 deg                    |
| 32 =         | 1300                        | 3500                          | 12 deg                    |
| 33 =         | 1300                        | 3500                          | 13 deg                    |
| 34 =         | 1300                        | 3500                          | 14 deg                    |
| 35 =         | 1300                        | 3500                          | 15 deg                    |
| 36 =         | 1300                        | 3500                          | 16 deg                    |
| 37 =         | 1300                        | 3500                          | 17 deg                    |
| 38 =         | 1300                        | 3500                          | 18 deg                    |
| 39 =         | 1300                        | 3500                          | 19 deg                    |
| 40 =         | 1300                        | 3500                          | 20 deg                    |
| 41 =         | 1150                        | 3200                          | 1 deg                     |
| 42 =         | 1150                        | 3200                          | 2 deg                     |
| 43 =         | 1150                        | 3200                          | 3 deg                     |
| 44 =         | 1150                        | 3200                          | 4 deg                     |
| 45 =         | 1150                        | 3200                          | 5 deg                     |
| 46 =         | 1150                        | 3200                          | 6 deg                     |
| 47 =         | 1150                        | 3200                          | 7 deg                     |
| 48 =         | 1150                        | 3200                          | 8 deg                     |
| 49 =         | 1150                        | 3200                          | 9 deg                     |

**Note: expressed in crankshaft degrees and engine rpm.**



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| <b>Digit</b> | <b>Advance starts @ rpm</b> | <b>Advance finishes @ rpm</b> | <b>Degrees of advance</b> |
|--------------|-----------------------------|-------------------------------|---------------------------|
| 50 =         | 1150                        | 3200                          | 10 deg                    |
| 51 =         | 1150                        | 3200                          | 11 deg                    |
| 52 =         | 1150                        | 3200                          | 12 deg                    |
| 53 =         | 1150                        | 3200                          | 13 deg                    |
| 54 =         | 1150                        | 3200                          | 14 deg                    |
| 55 =         | 1150                        | 3200                          | 15 deg                    |
| 56 =         | 1150                        | 3200                          | 16 deg                    |
| 57 =         | 1150                        | 3200                          | 17 deg                    |
| 58 =         | 1150                        | 3200                          | 18 deg                    |
| 59 =         | 1150                        | 3200                          | 19 deg                    |
| 60 =         | 1150                        | 3200                          | 20 deg                    |
| 61 =         | 1000                        | 2900                          | 1 deg                     |
| 62 =         | 1000                        | 2900                          | 2 deg                     |
| 63 =         | 1000                        | 2900                          | 3 deg                     |
| 64 =         | 1000                        | 2900                          | 4 deg                     |
| 65 =         | 1000                        | 2900                          | 5 deg                     |
| 66 =         | 1000                        | 2900                          | 6 deg                     |
| 67 =         | 1000                        | 2900                          | 7 deg                     |
| 68 =         | 1000                        | 2900                          | 8 deg                     |
| 69 =         | 1000                        | 2900                          | 9 deg                     |
| 70 =         | 1000                        | 2900                          | 10 deg                    |
| 71 =         | 1000                        | 2900                          | 11 deg                    |
| 72 =         | 1000                        | 2900                          | 12 deg                    |
| 73 =         | 1000                        | 2900                          | 13 deg                    |
| 74 =         | 1000                        | 2900                          | 14 deg                    |
| 75 =         | 1000                        | 2900                          | 15 deg                    |
| 76 =         | 1000                        | 2900                          | 16 deg                    |
| 77 =         | 1000                        | 2900                          | 17 deg                    |
| 78 =         | 1000                        | 2900                          | 18 deg                    |
| 79 =         | 1000                        | 2900                          | 19 deg                    |
| 80 =         | n/a                         | n/a                           | Locked                    |
| 81 =         | 1450                        | 3800                          | 1 deg                     |
| 82 =         | 1450                        | 3800                          | 2 deg                     |
| 83 =         | 1450                        | 3800                          | 3 deg                     |
| 84 =         | 1450                        | 3800                          | 4 deg                     |
| 85 =         | 1450                        | 3800                          | 5 deg                     |
| 86 =         | 1450                        | 3800                          | 6 deg                     |
| 87 =         | 1450                        | 3800                          | 7 deg                     |
| 88 =         | 1450                        | 3800                          | 8 deg                     |
| 89 =         | 1450                        | 3800                          | 9 deg                     |
| 90 =         | 1450                        | 3800                          | 10 deg                    |
| 91 =         | 1450                        | 3800                          | 11 deg                    |
| 92 =         | 1450                        | 3800                          | 12 deg                    |
| 93 =         | 1450                        | 3800                          | 13 deg                    |
| 94 =         | 1450                        | 3800                          | 14 deg                    |
| 95 =         | 1450                        | 3800                          | 15 deg                    |
| 96 =         | 1450                        | 3800                          | 16 deg                    |
| 97 =         | 1450                        | 3800                          | 17 deg                    |
| 98 =         | 1450                        | 3800                          | 18 deg                    |
| 99 =         | 1450                        | 3800                          | 19 deg                    |

**Note: expressed in crankshaft degrees and engine rpm.**