

| | | | | | | | | | | | | | | | | |
|---|---|--------------------------------|-------------|---------------------|-------------------------------|-------------|---------------------|--------------------------------|-------------|---------------------|-------------------------------|-------------|---------------------|-------------------------------|-------------|---------------------|
| High impedance injectors do not need ballast resistors | | | | | | | | | | | | | | | | |
| For 1 low impedance injector using an output then 1 resistor of 4R7 per output is required | | | | | | | | | | | | | | | | |
| For 2 low impedance injectors sharing an output then 1 resistor of 3R3 per output is required | | | | | | | | | | | | | | | | |
| Note - Outputs are in FIRING ORDER, NOT CYLINDER NUMBER | | | | | | | | | | | | | | | | |
| If stepper motor idle controls are used these pinouts will change. | | | | | | | | | | | | | | | | |
| Note 1 | Can use any spare PWM output - FUEL5, 6, 7, 8, 11, 12 | | | | | | | | | | | | | | | |
| Note 2 | Can use any spare PWM output - FUEL7, 8, 11, 12 | | | | | | | | | | | | | | | |
| Note 3 | Can use any spare PWM output - FUEL5, 6, 7, 8 | | | | | | | | | | | | | | | |
| Note 4 | Can use any spare PWM output - FUEL7, 8 | | | | | | | | | | | | | | | |
| Note 5 | Can use FUEL4 and single wire idle only | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | 4 Injector | | | 4 Injector | | | 8 Injector | | | 8 Injector | | | 8 Injector | | |
| | | Inner semi sequential | | | Inner sequential | | | Inner semi sequential | | | Inner sequential | | | Inner sequential | | |
| | | No outer injectors | | | No outer injectors | | | Outer semi sequential | | | Outer semi sequential | | | Outer sequential | | |
| | | Cam sensor not required | | | Cam sensor is required | | | Cam sensor not required | | | Cam sensor is required | | | Cam sensor is required | | |
| | | | | | | | | | | | | | | | | |
| | | Distributor | DIS | Coil on plug | Distributor | DIS | Coil on plug | Distributor | DIS | Coil on plug | Distributor | DIS | Coil on plug | Distributor | DIS | Coil on plug |
| FUNCTION | NOTES | | | | | | | | | | | | | | | |
| Ignition Coil 1 | | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 |
| Ignition Coil 2 | | NA | IGN2 - A12 | IGN2 - A12 | NA | IGN2 - A12 | IGN2 - A12 | NA | IGN2 - A12 | IGN2 - A12 | NA | IGN2 - A12 | IGN2 - A12 | NA | IGN2 - A12 | IGN2 - A12 |
| Ignition Coil 3 | | NA | NA | IGN3 - B12 | NA | NA | IGN3 - B12 | NA | NA | IGN3 - B12 | NA | NA | IGN3 - B12 | NA | NA | IGN3 - B12 |
| Ignition Coil 4 | | NA | NA | IGN4 - B1 | NA | NA | IGN4 - B1 | NA | NA | IGN4 - B1 | NA | NA | IGN4 - B1 | NA | NA | IGN4 - B1 |
| Injector 1 Inner | | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 |
| Injector 2 Inner | | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 |
| Injector 3 Inner | | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL5 - B5 | FUEL5 - B5 | FUEL5 - B5 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL5 - B5 | FUEL5 - B5 | FUEL5 - B5 | FUEL5 - B5 | FUEL5 - B5 | FUEL5 - B5 |
| Injector 4 Inner | | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL6 - B3 | FUEL6 - B3 | FUEL6 - B3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL6 - B3 | FUEL6 - B3 | FUEL6 - B3 | FUEL6 - B3 | FUEL6 - B3 | FUEL6 - B3 |
| Injector 1 Outer | | NA | NA | NA | NA | NA | NA | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 |
| Injector 2 Outer | | NA | NA | NA | NA | NA | NA | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 |
| Injector 3 Outer | | NA | NA | NA | NA | NA | NA | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 | FUEL11 - B2 |
| Injector 4 Outer | | NA | NA | NA | NA | NA | NA | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 | FUEL12 - A2 |
| Crank sensor | | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 |
| Cam sensor | | NA | NA | NA | T2 - A11 | T2 - A11 | T2 - A11 | NA | NA | NA | T2 - A11 | T2 - A11 | T2 - A11 | T2 - A11 | T2 - A11 | T2 - A11 |
| Fuel pump | | B6 | B6 | B6 | B6 | B6 | B6 | B6 | B6 | B6 | B6 | B6 | B6 | B6 | B6 | B6 |
| Tacho | | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 |
| Shift Light | 12V out when active | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 |
| O2 sensor | | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 |
| Wastegate valve | | FUEL8 - A3 | FUEL8 - A3 | See note 1 | FUEL8 - A3 | FUEL8 - A3 | See note 2 | FUEL8 - A3 | FUEL8 - A3 | See note 3 | FUEL8 - A3 | FUEL8 - A3 | See note 4 | See note 5 | See note 5 | See note 5 |
| Knock input | | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 |
| MAP input | | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 |
| ALS switch input | 12V IN to arm | C11 | C11 | C11 | C11 | C11 | C11 | C11 | C11 | C11 | C11 | C11 | C11 | C11 | C11 | C11 |
| 1 wire idle | | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 |
| 2 wire idle | | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 |
| | | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 | FUEL4 - C2 |
| 12V power | Via ign switch | A4 | A4 | A4 | A4 | A4 | A4 | A4 | A4 | A4 | A4 | A4 | A4 | A4 | A4 | A4 |
| 5V sensor power | | C9 | C9 | C9 | C9 | C9 | C9 | C9 | C9 | C9 | C9 | C9 | C9 | C9 | C9 | C9 |
| Power GND | | A5 | A5 | A5 | A5 | A5 | A5 | A5 | A5 | A5 | A5 | A5 | A5 | A5 | A5 | A5 |
| Power GND | | B7 | B7 | B7 | B7 | B7 | B7 | B7 | B7 | B7 | B7 | B7 | B7 | B7 | B7 | B7 |
| Sensor GND | | A6 | A6 | A6 | A6 | A6 | A6 | A6 | A6 | A6 | A6 | A6 | A6 | A6 | A6 | A6 |
| Timing GND | | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 |
| CTS | | A9 | A9 | A9 | A9 | A9 | A9 | A9 | A9 | A9 | A9 | A9 | A9 | A9 | A9 | A9 |
| ATS | | B9 | B9 | B9 | B9 | B9 | B9 | B9 | B9 | B9 | B9 | B9 | B9 | B9 | B9 | B9 |
| TPS wiper | | C8 | C8 | C8 | C8 | C8 | C8 | C8 | C8 | C8 | C8 | C8 | C8 | C8 | C8 | C8 |
| 4 Cyl Pin Numbers | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | |
|---|---|--------------------------------|---------------------|-------------------------------|---------------------|--------------------------------|---------------------|-------------------------------|---------------------|-------------------------------|---------------------|
| High impedance injectors do not need ballast resistors | | | | | | | | | | | |
| For 1 low impedance injector using an output then 1 resistor of 4R7 per output is required | | | | | | | | | | | |
| For 2 low impedance injectors sharing an output then 1 resistor of 3R3 per output is required | | | | | | | | | | | |
| Note - Outputs are in FIRING ORDER, NOT CYLINDER NUMBER | | | | | | | | | | | |
| If stepper motor idle controls are used these pinouts will change. | | | | | | | | | | | |
| If MAP is used for load on a NA engine use internal sensor to free up MAP2 input for other uses | | | | | | | | | | | |
| Note 1 | Spare Outputs - [IGN4,5,6] [FUEL 4,5,6] [HS2] | | | | | | | | | | |
| Note 2 | Spare Outputs - [FUEL 4,5,6] [HS2] | | | | | | | | | | |
| Note 3 | Spare Outputs - [IGN4,5,6] [HS2] | | | | | | | | | | |
| Note 4 | Spare Outputs - [HS2] | | | | | | | | | | |
| | | 6 Injector | | 6 Injector | | 12 Injector | | 12 Injector | | 12 Injector | |
| | | Inner semi sequential | | Inner sequential | | Inner semi sequential | | Inner sequential | | Inner semi sequential | |
| | | No outer injectors | | No outer injectors | | Outer semi sequential | | Outer semi sequential | | Outer sequential | |
| | | Cam sensor not required | | Cam sensor is required | | Cam sensor not required | | Cam sensor is required | | Cam sensor is required | |
| | | DIS | Coil on plug | DIS | Coil on plug | DIS | Coil on plug | DIS | Coil on plug | DIS | Coil on plug |
| FUNCTION | NOTES | | | | | | | | | | |
| Ignition Coil 1 | | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | IGN1 - A1 | Not possible | IGN1 - A1 | Not possible |
| Ignition Coil 2 | | IGN2 - A12 | IGN2 - A12 | IGN2 - A12 | IGN2 - A12 | IGN2 - A12 | IGN2 - A12 | IGN2 - A12 | Not possible | IGN2 - A12 | Not possible |
| Ignition Coil 3 | | IGN3 - B12 | IGN3 - B12 | IGN3 - B12 | IGN3 - B12 | IGN3 - B12 | IGN3 - B12 | IGN3 - B12 | Not possible | IGN3 - B12 | Not possible |
| Ignition Coil 4 | | NA | IGN4 - B1 | NA | IGN4 - B1 | NA | IGN4 - B1 | NA | Not possible | NA | Not possible |
| Ignition Coil 5 | | NA | IGN5 - B2 | NA | IGN5 - B2 | NA | IGN5 - B2 | NA | Not possible | NA | Not possible |
| Ignition Coil 6 | | NA | IGN6 - A2 | NA | IGN6 - A2 | NA | IGN6 - A2 | NA | Not possible | NA | Not possible |
| Injector 1 Inner | | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | FUEL1 - B4 | Not possible | IGN4 - B1 | Not possible |
| Injector 2 Inner | | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | FUEL2 - C3 | Not possible | IGN5 - B2 | Not possible |
| Injector 3 Inner | | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | FUEL3 - C6 | Not possible | IGN6 - A2 | Not possible |
| Injector 4 Inner | | FUEL1 - B4 | FUEL1 - B4 | FUEL4 - C2 | FUEL4 - C2 | FUEL1 - B4 | FUEL1 - B4 | FUEL4 - C2 | Not possible | IGN4 - B1 | Not possible |
| Injector 5 Inner | | FUEL2 - C3 | FUEL2 - C3 | FUEL5 - B5 | FUEL5 - B5 | FUEL2 - C3 | FUEL2 - C3 | FUEL5 - B5 | Not possible | IGN5 - B2 | Not possible |
| Injector 6 Inner | | FUEL3 - C6 | FUEL3 - C6 | FUEL6 - B3 | FUEL6 - B3 | FUEL3 - C6 | FUEL3 - C6 | FUEL6 - B3 | Not possible | IGN6 - A2 | Not possible |
| Injector 1 Outer | | NA | NA | NA | NA | FUEL4 - C2 | FUEL4 - C2 | IGN4 - B1 | Not possible | FUEL1 - B4 | Not possible |
| Injector 2 Outer | | NA | NA | NA | NA | FUEL5 - B5 | FUEL5 - B5 | IGN5 - B2 | Not possible | FUEL2 - C3 | Not possible |
| Injector 3 Outer | | NA | NA | NA | NA | FUEL6 - B3 | FUEL6 - B3 | IGN6 - A2 | Not possible | FUEL3 - C6 | Not possible |
| Injector 4 Outer | | NA | NA | NA | NA | FUEL4 - C2 | FUEL4 - C2 | IGN4 - B1 | Not possible | FUEL4 - C2 | Not possible |
| Injector 5 Outer | | NA | NA | NA | NA | FUEL5 - B5 | FUEL5 - B5 | IGN5 - B2 | Not possible | FUEL5 - B5 | Not possible |
| Injector 6 Outer | | NA | NA | NA | NA | FUEL6 - B3 | FUEL6 - B3 | IGN6 - A2 | Not possible | FUEL6 - B3 | Not possible |
| Crank sensor | | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | T1 - A7 | Not possible | T1 - A7 | Not possible |
| Cam sensor | | NA | NA | T2 - A11 | T2 - A11 | NA | NA | T2 - A11 | Not possible | T2 - A11 | Not possible |
| Fuel pump | | B6 | B6 | B6 | B6 | B6 | B6 | B6 | Not possible | B6 | Not possible |
| Tacho | | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | TACHO - C12 | Not possible | TACHO - C12 | Not possible |
| Shift Light | 12V out when active | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | HS1 - C5 | Not possible | HS1 - C5 | Not possible |
| O2 sensor (1) | | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | OX1 - C7 | Not possible | OX1 - C7 | Not possible |
| O2 sensor (2) | For 'V' engines | OX2 - B11 | OX2 - B11 | OX2 - B11 | OX2 - B11 | OX2 - B11 | OX2 - B11 | OX2 - B11 | Not possible | OX2 - B11 | Not possible |
| SPARE OUTPUTS | | See Note 1 | See Note 2 | See Note 3 | See Note 4 | See Note 3 | See Note 4 | See Note 4 | | See Note 4 | |
| Knock input | | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | KNOCK - B10 | Not possible | KNOCK - B10 | Not possible |
| MAP input | | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | MAP2 - A10 | Not possible | MAP2 - A10 | Not possible |
| ALS switch input | 12V IN to arm | C11 | C11 | C11 | C11 | C11 | C11 | C11 | Not possible | C11 | Not possible |
| 1 wire idle | | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | Not possible | FUEL7 - B8 | Not possible |
| 2 wire idle | | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | FUEL7 - B8 | Not possible | FUEL7 - B8 | Not possible |
| | | FUEL8 - A3 | FUEL8 - A3 | FUEL8 - A3 | FUEL8 - A3 | FUEL8 - A3 | FUEL8 - A3 | FUEL8 - A3 | Not possible | FUEL8 - A3 | Not possible |
| 12V power | Via ign switch | A4 | A4 | A4 | A4 | A4 | A4 | A4 | Not possible | A4 | Not possible |
| 5V sensor power | | C9 | C9 | C9 | C9 | C9 | C9 | C9 | Not possible | C9 | Not possible |
| Power GND | | A5 | A5 | A5 | A5 | A5 | A5 | A5 | Not possible | A5 | Not possible |
| Power GND | | B7 | B7 | B7 | B7 | B7 | B7 | B7 | Not possible | B7 | Not possible |
| Sensor GND | | A6 | A6 | A6 | A6 | A6 | A6 | A6 | Not possible | A6 | Not possible |
| Timing GND | | A8 | A8 | A8 | A8 | A8 | A8 | A8 | Not possible | A8 | Not possible |
| CTS | | A9 | A9 | A9 | A9 | A9 | A9 | A9 | Not possible | A9 | Not possible |
| ATS | | B9 | B9 | B9 | B9 | B9 | B9 | B9 | Not possible | B9 | Not possible |
| TPS wiper | | C8 | C8 | C8 | C8 | C8 | C8 | C8 | Not possible | C8 | Not possible |
| 6 Cyl Pin Numbers | | | | | | | | | | | |

| High impedance injectors do not need ballast resistors | | | | | | | | | | | | | | | | | |
|---|--|--------------------------------|--------------|---------------------|-------------------------------|--------------|---------------------|--------------------------------|---------------|---------------------|-------------------------------|---------------|---------------------|-------------------------------|---------------|---------------------|--|
| For 1 low impedance injector using an output then 1 resistor of 4R7 per output is required | | | | | | | | | | | | | | | | | |
| For 2 low impedance injectors sharing an output then 1 resistor of 3R3 per output is required | | | | | | | | | | | | | | | | | |
| Note - Outputs are in FIRING ORDER, NOT CYLINDER NUMBER | | | | | | | | | | | | | | | | | |
| If stepper motor idle controls are used these pinouts will change. | | | | | | | | | | | | | | | | | |
| Note 1 | Can use any spare PWM output - FUELS 6, 7, 8, 11, 12 | | | | | | | | | | | | | | | | |
| Note 2 | Can use any spare PWM output - FUEL7, 8, 11, 12 | | | | | | | | | | | | | | | | |
| Note 3 | Can use any spare PWM output - FUELS 6, 7, 8 | | | | | | | | | | | | | | | | |
| Note 4 | Can use any spare PWM output - FUEL7, 8 | | | | | | | | | | | | | | | | |
| Note 5 | Can use FUEL4 and single wire idle only | | | | | | | | | | | | | | | | |
| | | 4 Injector | | | 4 Injector | | | 8 Injector | | | 8 Injector | | | 8 Injector | | | |
| | | Inner semi sequential | | | Inner sequential | | | Inner semi sequential | | | Inner sequential | | | Inner sequential | | | |
| | | No outer injectors | | | No outer injectors | | | Outer semi sequential | | | Outer semi sequential | | | Outer sequential | | | |
| | | Cam sensor not required | | | Cam sensor is required | | | Cam sensor not required | | | Cam sensor is required | | | Cam sensor is required | | | |
| | | Distributor | DIS | Coil on plug | Distributor | DIS | Coil on plug | Distributor | DIS | Coil on plug | Distributor | DIS | Coil on plug | Distributor | DIS | Coil on plug | |
| FUNCTION | NOTES | | | | | | | | | | | | | | | | |
| Ignition Coil 1 | | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | |
| Ignition Coil 2 | | NA | Yellow grey | Yellow grey | NA | Yellow grey | Yellow grey | NA | Yellow grey | Yellow grey | NA | Yellow grey | Yellow grey | NA | Yellow grey | Yellow grey | |
| Ignition Coil 3 | | NA | NA | Yellow red | NA | NA | Yellow red | NA | NA | Yellow red | NA | NA | Yellow red | NA | NA | Yellow red | |
| Ignition Coil 4 | | NA | NA | Yellow orange | NA | NA | Yellow orange | NA | NA | Yellow orange | NA | NA | Yellow orange | NA | NA | Yellow orange | |
| Injector 1 Inner | | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | |
| Injector 2 Inner | | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | |
| Injector 3 Inner | | Brown black | Brown black | Brown black | Brown green | Brown green | Brown green | Brown black | Brown black | Brown black | Brown green | Brown green | Brown green | Brown green | Brown green | Brown green | |
| Injector 4 Inner | | Brown yellow | Brown yellow | Brown yellow | Brown violet | Brown violet | Brown violet | Brown yellow | Brown yellow | Brown yellow | Brown violet | Brown violet | Brown violet | Brown violet | Brown violet | Brown violet | |
| Injector 1 Outer | | NA | NA | NA | NA | NA | NA | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | |
| Injector 2 Outer | | NA | NA | NA | NA | NA | NA | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | |
| Injector 3 Outer | | NA | NA | NA | NA | NA | NA | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | Yellow green | |
| Injector 4 Outer | | NA | NA | NA | NA | NA | NA | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | Yellow violet | |
| Crank sensor | | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | |
| Cam sensor | | NA | NA | NA | Red screen | Red screen | Red screen | NA | NA | NA | Red screen | Red screen | Red screen | Red screen | Red screen | Red screen | |
| Fuel pump | | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | |
| Tacho | | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | |
| Shift Light | 12V out when active | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | |
| O2 sensor | | White red | White red | White red | White red | White red | White red | White red | White red | White red | White red | White red | White red | White red | White red | White red | |
| Wastegate valve | | Brown pink | Brown pink | See note 1 | Brown pink | Brown pink | See note 2 | Brown pink | Brown pink | See note 3 | Brown pink | Brown pink | See note 4 | See note 5 | See note 5 | See note 5 | |
| Knock input | | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | |
| MAP input | | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | |
| ALS switch input | 12V IN to arm | White pink | White pink | White pink | White pink | White pink | White pink | White pink | White pink | White pink | White pink | White pink | White pink | White pink | White pink | White pink | |
| 1 wire idle | | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | |
| 2 wire idle | | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | |
| | | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | Brown orange | |
| 12V power | Via ign switch | Red | Red | Red | Red | Red | Red | Red | Red | Red | Red | Red | Red | Red | Red | Red | |
| 5V sensor power | | Pink | Pink | Pink | Pink | Pink | Pink | Pink | Pink | Pink | Pink | Pink | Pink | Pink | Pink | Pink | |
| Power GND | | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | |
| Power GND | | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | |
| Sensor GND | | Grey | Grey | Grey | Grey | Grey | Grey | Grey | Grey | Grey | Grey | Grey | Grey | Grey | Grey | Grey | |
| Timing GND | | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | A8 | |
| CTS | | White violet | White violet | White violet | White violet | White violet | White violet | White violet | White violet | White violet | White violet | White violet | White violet | White violet | White violet | White violet | |
| ATS | | White green | White green | White green | White green | White green | White green | White green | White green | White green | White green | White green | White green | White green | White green | White green | |
| TPS wiper | | Orange | Orange | Orange | Orange | Orange | Orange | Orange | Orange | Orange | Orange | Orange | Orange | Orange | Orange | Orange | |

4 Cyl Colour Codes

| High impedance injectors do not need ballast resistors | | | | | | | | | | | |
|--|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------------|--------------------------|------------------------------|
| For 1 low impedance injector using an output then 1 resistor of 4R7 per output is required | | | | | | | | | | | |
| For 2 low impedance injectors sharing an output then 1 resistor of 3R3 per output is required | | | | | | | | | | | |
| Note - Outputs are in FIRING ORDER, NOT CYLINDER NUMBER | | | | | | | | | | | |
| If stepper motor idle controls are used these pinouts will change. | | | | | | | | | | | |
| If MAP is used for load on a NA engine use internal sensor to free up MAP2 input for other uses: | | | | | | | | | | | |
| Note 1 | Spare Outputs - [IGN4,5,6] [FUEL 4,5,6] [HS2] | | | | | | | | | | |
| Note 2 | Spare Outputs - [FUEL 4,5,6] [HS2] | | | | | | | | | | |
| Note 3 | Spare Outputs - [IGN4,5,6] [HS2] | | | | | | | | | | |
| Note 4 | Spare Outputs - [HS2] | | | | | | | | | | |
| | | 6 Injector | | 6 Injector | | 12 Injector | | 12 Injector | | 12 Injector | |
| | | Inner semi sequential | | Inner sequential | | Inner semi sequential | | Inner sequential | | Inner semi sequential | |
| | | No outer injectors | | No outer injectors | | Outer semi sequential | | Outer semi sequential | | Outer sequential | |
| | | Cam sensor not required | | Cam sensor is required | | Cam sensor not required | | Cam sensor is required | | Cam sensor is required | |
| | | DIS | Coil on plug | DIS | Coil on plug | DIS | Coil on plug | DIS | Coil on plug | DIS | Coil on plug |
| FUNCTION | NOTES | | | | | | | | | | |
| Ignition Coil 1 | | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Yellow black | Not possible | Yellow black | Not possible |
| Ignition Coil 2 | | Yellow grey | Yellow grey | Yellow grey | Yellow grey | Yellow grey | Yellow grey | Yellow grey | Not possible | Yellow grey | Not possible |
| Ignition Coil 3 | | Yellow red | Yellow red | Yellow red | Yellow red | Yellow red | Yellow red | Yellow red | Not possible | Yellow red | Not possible |
| Ignition Coil 4 | | NA | Yellow orange | NA | Yellow orange | NA | Yellow orange | NA | Not possible | NA | Not possible |
| Ignition Coil 5 | | NA | Yellow green | NA | Yellow green | NA | Yellow green | NA | Not possible | NA | Not possible |
| Ignition Coil 6 | | NA | Yellow violet | NA | Yellow violet | NA | Yellow violet | NA | Not possible | NA | Not possible |
| Injector 1 Inner | | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Brown black | Not possible | Yellow orange | Not possible |
| Injector 2 Inner | | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Brown yellow | Not possible | Yellow green | Not possible |
| Injector 3 Inner | | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Brown red | Not possible | Yellow violet | Not possible |
| Injector 4 Inner | | Brown black | Brown black | Brown orange | Brown orange | Brown black | Brown black | Brown orange | Not possible | Yellow orange | Not possible |
| Injector 5 Inner | | Brown yellow | Brown yellow | Brown green | Brown green | Brown yellow | Brown yellow | Brown green | Not possible | Yellow green | Not possible |
| Injector 6 Inner | | Brown red | Brown red | Brown violet | Brown violet | Brown red | Brown red | Brown violet | Not possible | Yellow violet | Not possible |
| Injector 1 Outer | | NA | NA | NA | NA | Brown orange | Brown orange | Yellow orange | Not possible | Brown black | Not possible |
| Injector 2 Outer | | NA | NA | NA | NA | Brown green | Brown green | Yellow green | Not possible | Brown yellow | Not possible |
| Injector 3 Outer | | NA | NA | NA | NA | Brown violet | Brown violet | Yellow violet | Not possible | Brown red | Not possible |
| Injector 4 Outer | | NA | NA | NA | NA | Brown orange | Brown orange | Yellow orange | Not possible | Brown orange | Not possible |
| Injector 5 Outer | | NA | NA | NA | NA | Brown green | Brown green | Yellow green | Not possible | Brown green | Not possible |
| Injector 6 Outer | | NA | NA | NA | NA | Brown violet | Brown violet | Yellow violet | Not possible | Brown violet | Not possible |
| Crank sensor | | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Black screen | Not possible | Black screen | Not possible |
| Cam sensor | | NA | NA | Red screen | Red screen | NA | NA | Red screen | Not possible | Red screen | Not possible |
| Fuel pump | | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Blue white | Not possible | Blue white | Not possible |
| Tacho | | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Blue yellow | Not possible | Blue yellow | Not possible |
| Shift Light | 12V out when active | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Blue black | Not possible | Blue black | Not possible |
| O2 sensor (1) | | White red | White red | White red | White red | White red | White red | White red | Not possible | White red | Not possible |
| O2 sensor (2) | For 'V' engines | White orange | White orange | White orange | White orange | White orange | White orange | White orange | Not possible | White orange | Not possible |
| SPARE OUTPUTS | | See Note 1 | See Note 2 | See Note 3 | See Note 4 | See Note 3 | See Note 4 | See Note 4 | | See Note 4 | |
| Knock input | | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Grey screen | Not possible | Grey screen | Not possible |
| MAP input | | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | White yellow | Not possible | White yellow | Not possible |
| ALS switch input | 12V IN to arm | White pink | White pink | White pink | White pink | White pink | White pink | White pink | Not possible | White pink | Not possible |
| 1 wire idle | | Brown grey | Brown grey | Brown grey | Brown grey | Brown grey | Brown grey | Brown grey | Not possible | Brown grey | Not possible |
| 2 wire idle | | Brown grey Brown pink | Brown grey Brown pink | Brown grey Brown pink | Brown grey Brown pink | Brown grey Brown pink | Brown grey Brown pink | Brown grey Brown pink | Not possible Not possible | Brown grey Brown pink | Not possible Not possible |
| 12V power | Via ign switch | Red | Red | Red | Red | Red | Red | Red | Not possible | Red | Not possible |
| 5V sensor power | | Pink | Pink | Pink | Pink | Pink | Pink | Pink | Not possible | Pink | Not possible |
| Power GND | | Black | Black | Black | Black | Black | Black | Black | Not possible | Black | Not possible |
| Power GND | | Black | Black | Black | Black | Black | Black | Black | Not possible | Black | Not possible |
| Sensor GND | | Grey | Grey | Grey | Grey | Grey | Grey | Grey | Not possible | Grey | Not possible |
| Timing GND | | A8 | A8 | A8 | A8 | A8 | A8 | A8 | Not possible | A8 | Not possible |
| CTS | | White violet | White violet | White violet | White violet | White violet | White violet | White violet | Not possible | White violet | Not possible |
| ATS | | White green | White green | White green | White green | White green | White green | White green | Not possible | White green | Not possible |
| TPS wiper | | Orange | Orange | Orange | Orange | Orange | Orange | Orange | Not possible | Orange | Not possible |

6 Cyl Colour Codes

| High impedance injectors do not need ballast resistors | | | |
|---|---|-------------------------------|--------------------------------|
| For 1 low impedance injector using an output then 1 resistor of 4R7 per output is required | | | |
| For 2 low impedance injectors sharing an output then 1 resistor of 3R3 per output is required | | | |
| Note - Outputs are in FIRING ORDER, NOT CYLINDER NUMBER | | | |
| If stepper motor idle controls are used these pinouts will change. | | | |
| If MAP is used for load on a NA engine use internal sensor to free up MAP2 input for other uses | | | |
| Note 1 | Spare Outputs - [IGN5,6] [FUEL 5,6] [HS2] | | |
| Note 2 | Spare Outputs - [HS2] | | |
| | | | |
| | 8 Injector | 8 Injector | 16 Injector |
| | Inner semi sequential | Inner sequential | Inner semi sequential |
| | No outer injectors | No outer injectors | Outer semi sequential |
| | Cam sensor not required | Cam sensor is required | Cam sensor not required |
| | | | |
| | DIS | DIS | DIS |
| FUNCTION | NOTES | | |
| Ignition Coil 1 | Yellow black | Yellow black | Yellow black |
| Ignition Coil 2 | Yellow grey | Yellow grey | Yellow grey |
| Ignition Coil 3 | Yellow red | Yellow red | Yellow red |
| Ignition Coil 4 | Yellow orange | Yellow orange | Yellow orange |
| Ignition Coil 5 | NA | NA | NA |
| Ignition Coil 6 | NA | NA | NA |
| Injector 1 Inner | Brown black | Brown black | Brown black |
| Injector 2 Inner | Brown yellow | Brown yellow | Brown yellow |
| Injector 3 Inner | Brown red | Brown red | Brown red |
| Injector 4 Inner | Brown orange | Brown orange | Brown orange |
| Injector 5 Inner | Brown black | Brown green | Brown black |
| Injector 6 Inner | Brown yellow | Brown violet | Brown yellow |
| Injector 7 Inner | Brown red | Yellow green | Brown red |
| Injector 8 Inner | Brown orange | Yellow violet | Brown orange |
| Injector 1 Outer | NA | NA | Brown green |
| Injector 2 Outer | NA | NA | Brown violet |
| Injector 3 Outer | NA | NA | Yellow green |
| Injector 4 Outer | NA | NA | Yellow violet |
| Injector 5 Outer | NA | NA | Brown green |
| Injector 6 Outer | NA | NA | Brown violet |
| Injector 7 Outer | NA | NA | Yellow green |
| Injector 8 Outer | NA | NA | Yellow violet |
| Crank sensor | Black screen | Black screen | Black screen |
| Cam sensor | NA | Red screen | NA |
| Fuel pump | Blue white | Blue white | Blue white |
| Tacho | Blue yellow | Blue yellow | Blue yellow |
| Shift Light | 12V out when active Blue black | Blue black | Blue black |
| O2 sensor (1) | White red | White red | White red |
| O2 sensor (2) | For V engines White orange | White orange | White orange |
| SPARE OUTPUTS | See Note 1 | See Note 2 | See Note 2 |
| Knock input | Grey screen | Grey screen | Grey screen |
| MAP input | White yellow | White yellow | White yellow |
| ALS switch input | 12V IN to arm White pink | White pink | White pink |
| 1 wire idle | Brown grey | Brown grey | Brown grey |
| 2 wire idle | Brown grey Brown pink | Brown grey Brown pink | Brown grey Brown pink |
| 12V power | Via ign switch Red | Red | Red |
| 5V sensor power | Pink | Pink | Pink |
| Power GND | Black | Black | Black |
| Power GND | Black | Black | Black |
| Sensor GND | Grey | Grey | Grey |
| Timing GND | A8 | A8 | A8 |
| CTS | White violet | White violet | White violet |
| ATS | White green | White green | White green |
| TPS wiper | Orange | Orange | Orange |

8 Cyl Colour Codes