



PWM OR ON/OFF CONTROL OF SOLENOID VALVE 3A (MAX)

TACHO I/P OR PWM OR ON/OFF CONTROL OF SOLENOID VALVE 2A (MAX)

PWM OR ON/OFF CONTROL OF SOLENOID VALVE 3.5A (MAX)
TYP USE = BOOST CONTROL OR VARIABLE CAM CONTROL

PWM OR ON/OFF CONTROL OF SOLENOID VALVE 3.5A (MAX)

PWM OR ON/OFF CONTROL OF SOLENOID VALVE 5A (MAX)
TYP USE = IDLE OR VARIABLE CAM CONTROL

FOR HALL SENSOR/S CONNECT CORRESPONDING +ve (WHT) WIRES ONLY & CUT -ve (BLACK) WIRES BACK CLOSE TO SHIELD

IGNITION DISTRIBUTOR OR INDIVIDUAL CRANK & CAM SENSORS

!!! IMPORTANT !!! SENSOR & TRIGGER GROUNDS MUST NOT MAKE ANY CONNECTION TO GROUND AT ENGINE END

AIR INTAKE TEMP SENSOR
USE AUTRONIC OR COMPATIBLE OEM SENSOR

OPTIONAL HEATED NARROW BAND O2 SENSOR FOR $\lambda = 1$ CLOSED LOOP

!!! IMPORTANT !!! ENSURE O2 SENSOR SIGNAL GND & HEATER GND WIRES ARE NOT SWAPPED. ALSO IF SENSOR GND IS INTERNALLY CONNECTED TO SENSOR BODY (3 WIRE & SOME 4 WIRE SENSOR TYPES), DO NOT CONNECT THE ECU HARNESS O2 SENSOR SIGNAL GND (BLACK) WIRE.

COOLANT TEMP SENSOR
BOSCH 0 280 130 023 OR COMPATIBLE OEM SENSOR

THROTTLE POSITION SENSOR 2K TO 20K OHM TOTAL RESISTANCE

STEPPER MOTOR OR UP TO 4 x 1A (MAX) PUSH-PULL RELAY OR SOLENOID DRIVERS. IF SUPPLY REQD. CONNECT TO SAME AS ECU PIN 15

IGNITION SYSTEM 1 2 3 4 5
SPARE IGNITION O/Ps MAY BE USED AS 1A (MAX) PUSH-PULL RELAY OR SOLENOID DRIVERS POWERED BY SAME SUPPLY AS ECU PIN 15

SYSTEM GROUND (Keep short & Connect to chassis near ECU)

SM3 ECU (VIEW FROM WIRE SIDE)

*** DENOTES WIRE NOT FITTED IN STD LENGTH HARNESS

** MANDATORY BALLAST RESISTOR REQUIRED FOR EACH LOW IMPEDANCE INJECTOR (FIT TO MATCH PC SOFTWARE INJECTOR SELECTION)

SPARE INJ O/Ps MAY BE USED FOR RELAY OR SOLENOID DRIVING. SPARE INJ 6 MAY ALSO BE USED AS SWITCH INPUT IF NOT ASSIGNED AS AN O/P (CONNECT SWITCH BETWEEN I/P & GND)

!!!! SATURATING TYPE DRIVERS !!!! ONLY USE HIGH IMPEDANCE INJECTORS OR LOW IMPEDANCE INJECTORS CONNECTED THROUGH BALLAST RESISTORS (MINIMUM 5 OHM LOAD PER OUTPUT)

INJ 1 TO CYLINDER 1, CONNECT OTHERS IN FIRING ORDER SEQUENCE IF STANDARD INJ O/P PATTERN USED. ALTERNATLY WIRE IN CYLINDER NUMBER ORDER & SET A CUSTOM INJ FIRING PATTERN MATCHING THE FIRING ORDER

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FUEL INJECTION — ADVANCED CONTROLS

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