



Vehicle OBD II Connector (front view)
ISO 9141 uses pins 4, 5, 7, 15, & 16

Mastercheck Pin	Mastercheck Data Function	Mapping to OBD-II Connector Pin(s)
Mastertech Socket Pins that map directly to ISO 9141 OBD-II Port Pins		
B	+12V source (fused, 4 Amp)	16
E	Ground/Earth	4 & 5
r	Transmission/Gearbox ISO-9141 L-Line [Ctrl Line]	15
s	Transmission/Gearbox ISO-9141 K-Data [P-code]	7
v	Powertrain/Engine ISO-9141 L-Line [Ctrl Line]	15
w	Powertrain/Engine ISO-9141 K-Data [P-Code]	7
Full Mastertech Socket Pin to Function Map		
A	+12V via Ignition, Fuseboard F2, fuse A3 (20 Amp)	
B	+12V source, via several Fuseboard F1 fuses in series ALSO to 6-way diagnostic plug & socket (single pin) FROM THERE to Pin 16 on OBD-II connector for USA or Canadian Specification Cars	
C	Engine Management ECU, pin 46, via 104-way connector	
D	Unused	
E	Ground/Earth ALSO to 6-way diagnostic plug & socket (single pin) FROM THERE to Pins 4 & 5 on OBD-II connector for USA or Canadian Specification Cars	
F	Automatic Ride Control 'Power' ECU, via 24-way connector	

G	Automatic Ride Control 'Power' ECU, via 24-way connector
H	Unused
J	Centralized door locking/alarm system ECU
K	Transmission Control Module (TCM) ECU, pin 40, via 55-way connector
L	Air conditioning unit microprocessor
M	Unused
N	Centralized Door Locking (CDL)/anti-theft alarm system ECU, pin 7, via CDL 12-way socket ALSO Air Bags System ECU, pin 7 ALSO <i>via air bags/seat belt pretensioner diagnostic switch</i> to pin 7 on seat belt pretensioner ECU <i>This pin is always connected to the CDL ECU and to:</i> <i>the Air Bags System ECU ALONE</i> <u>or</u> <i>(the Air Bags System ECU</i> <u>and the seat belt pretensioner ECU)</u>
P	Centralized Door Locking (CDL)/anti-theft alarm system ECU, pin 17, via CDL 26-way socket ALSO Air Bags System ECU, pin 8 ALSO <i>via air bags/seat belt pretensioner diagnostic switch</i> to pin 8 on seat belt pretensioner ECU <i>This pin is always connected to the CDL ECU and to:</i> <i>the Air Bags System ECU ALONE</i> <u>or</u> <i>(the Air Bags System ECU</i> <u>and the seat belt pretensioner ECU)</u>
S	Turbo Air Pressure Transducer – Boost Control (in volts), Turbo cars only
T	Barometric pressure sensor
U	Unused
V	Engine Management ECU, pin 72, via 104-way connector Engine Speed Signal (Ctrl is on socket pin C?)
W	Unused
X	Anti-Lock Braking System ECU
Y	TCM Road Speed Signal, pin 34, via 55-way connector
Z	Instruments Module, through (in order): 24-way main to valence loom plug/socket [Right A-post] 24-way Automatic Ride Control connector and 26-way instruments module socket, yellow
a	?? from TCM, pin 26, via 55-way connector
b	Throttle position potentiometer - transmission
c	Engine Coolant Temperature Sensor Output
d	?? from TCM, pin 39, via 55-way connector
e	?? from TCM, pin 43, via 55-way connector
f	?? from TCM, pin 42, via 55-way connector
g	Temperature/voltage probe, pin 4, via 18-way main loom to valence plug/socket, Right A-post
h	Temperature/voltage probe, pin 3, via 18-way main loom to valence plug/socket, Right A-post

i	Temperature/voltage probe, pin 2, via 18-way main loom to valence plug/socket, Right A-post
j	Temperature/voltage probe, pin 1, via 18-way main loom to valence plug/socket, Right A-post
k	Unused
m	?? from TCM, pin 52, via 55-way connector
n	?? from TCM, pin 49, via 55-way connector
p	Throttle Position switch/potentiometer
q	Throttle Position switch/potentiometer
r	Transmission/Gearbox ISO-9141 L-Line (Ctrl line to TCM), pin 16, via 55-way connector ALSO to 6-way diagnostic plug & socket (two pins both of which carry ctrl data from r & v) FROM HERE to Pin 15 on OBD-II connector for USA or Canadian Specification Cars
s	Transmission/Gearbox ISO-9141 K-Data (P-code from TCM), pin 45, via 55-way connector ALSO to 6-way diagnostic plug & socket (two pins both of which carry ctrl data from s & w) FROM HERE to Pin 7 on OBD-II connector for USA or Canadian Specification Cars
t	NOT CONNECTED according to wiring diagram
u	NOT CONNECTED according to wiring diagram
v	Powertrain/Engine ISO-9141 L-Line (Ctrl line to Engine Management ECU), pin 92, via 104-way connector ALSO to 6-way diagnostic plug & socket (two pins both of which carry ctrl data from r & v)
w	Powertrain/Engine ISO-9141 K-Data (P-code from Engine Management ECU), pin 40, via 104-way connector ALSO to 6-way diagnostic plug & socket (two pins both of which carry ctrl data from s & w)
x	Unused
y	Unused
z	Unused
aa	Unused