1998 DODGE INTREPID 3.2L VIN J

DTC'S P1695 AND P1698

COMPLAINT: A 1998 Dodge Intrepid with a 3.2L engine and 42LE transmission comes into the shop with codes P1695 and P1698 stored in the computer. Code 1695 is defined as No CCD/J185O Message from the Body Control Module and P1698 means No BUS Message from the Transmission Control Module (See Figure 1).

It may also be noted that the engine starts and runs well and the transmission shifts properly yet in the Mechanical Instrument Cluster [MIC] (Figure 2), the Tachometer does not work, the speedometer does not work and the coolant temperature gauge does not work, the MIL is illuminated, while the fuel gauge is working as well as the PRNDL display other then when a Bus error message may appear.

CAUSE: The Powertrain Control Module is no longer broadcasting this information to the Mechanical Instrument Cluster.

A partial flow chart provided in figure 3 and wiring diagram in figure 4 reveals the type of information that is being broadcasted and received among the modules. It can be seen that the PCM broadcasts the RPM, VSS and ECT information and the MIC receives it. It is also noticed that the BCM broadcasts the Fuel Level information and the TCM broadcasts the PRNDL information, both of which are also received by the MIC. Since the RPM, VSS and ECT gauges are inoperable while the Fuel Level and PRNDL display are, it is sensible to conclude that the PCM is the module having problems communicating with the MIC.

Checking the Circuit
There are a total of 5 modules being used in this 1998 Dodge Intrepid (See Figure 5). The: 1. PCM 2. MIC 3. ACM (Airbag) 4. TCM 5. BCM

By adding and dividing the resistance of each module on the circuit as seen in figure 5, a quick check of the entire PCI circuit can be performed at terminal 2 in the Data Link Connector (See Figure 6). If the entire circuit measures correctly, it can be determined that the system is neither shorted or open and that the PCM itself is defective.

CORRECTION: If the entire PCI BUS measures correctly, replace the PCM.

Code Information

P1695

Code definition/description: No CCD/PCI BUS Message from Body Control Module.

When Monitored: With the ignition key on, engine running, auto trans must be in drive, and battery voltage greater than 10 volts.

Set Condition: No CCD messages from the BCM for 20 seconds.

Theory of Operation: The Chrysler Programmable Communication Interface multiplex system (PCI Bus) consists of a single wire. The Body Control Module (BCM) acts as a hub for all modules and connects the Data Link Connector (DLC). Each Module on the PCI Bus uses a local ground as a Bus reference. Continuous information is broadcast across the PCI Bus in order for Modules to share sensor information from a common sensor.

Possible Causes:
a) Open Bus wire between PCM and BCM
b) PCM Bus circuit internally open
c) BCM Bus circuit internally open
d) Bus shorted to ground
e) Bus shorted to power

P1698

Code definition/description: No CCD/PCI BUS Message from Transmission Control Module.

When Monitored: Equipped with auto trans, the ignition key on, engine running, auto trans must be in drive, and battery voltage greater than 10 volts.

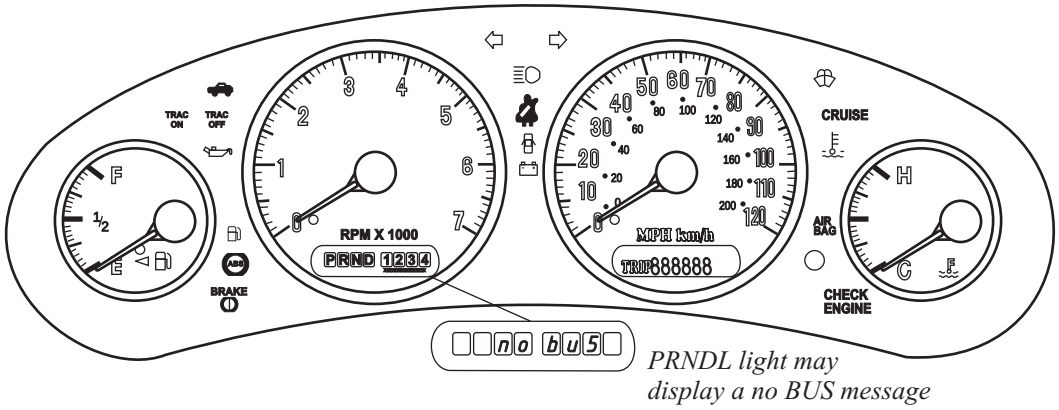
Set Condition: No CCD messages from the TCM for 10 seconds, two trips required.

Theory of Operation: Same as P1695 listed above.

Possible Causes:
a) Open Bus wire between PCM and BCM
b) Open Bus wire between PCM and TCM
c) BCM Bus circuit internally open
d) PCM Bus circuit internally open
e) TCM Bus circuit internally open
f) Bus circuit shorted to ground
g) Bus circuit shorted to power

Figure 1

Mechanical Instrument Cluster



1998 Dodge Intrepid 3.2L - 42LE transmission

Figure 2

1998 Dodge Intrepid 3.2L - 42LE transmission
Partial Module Communication Flow Chart

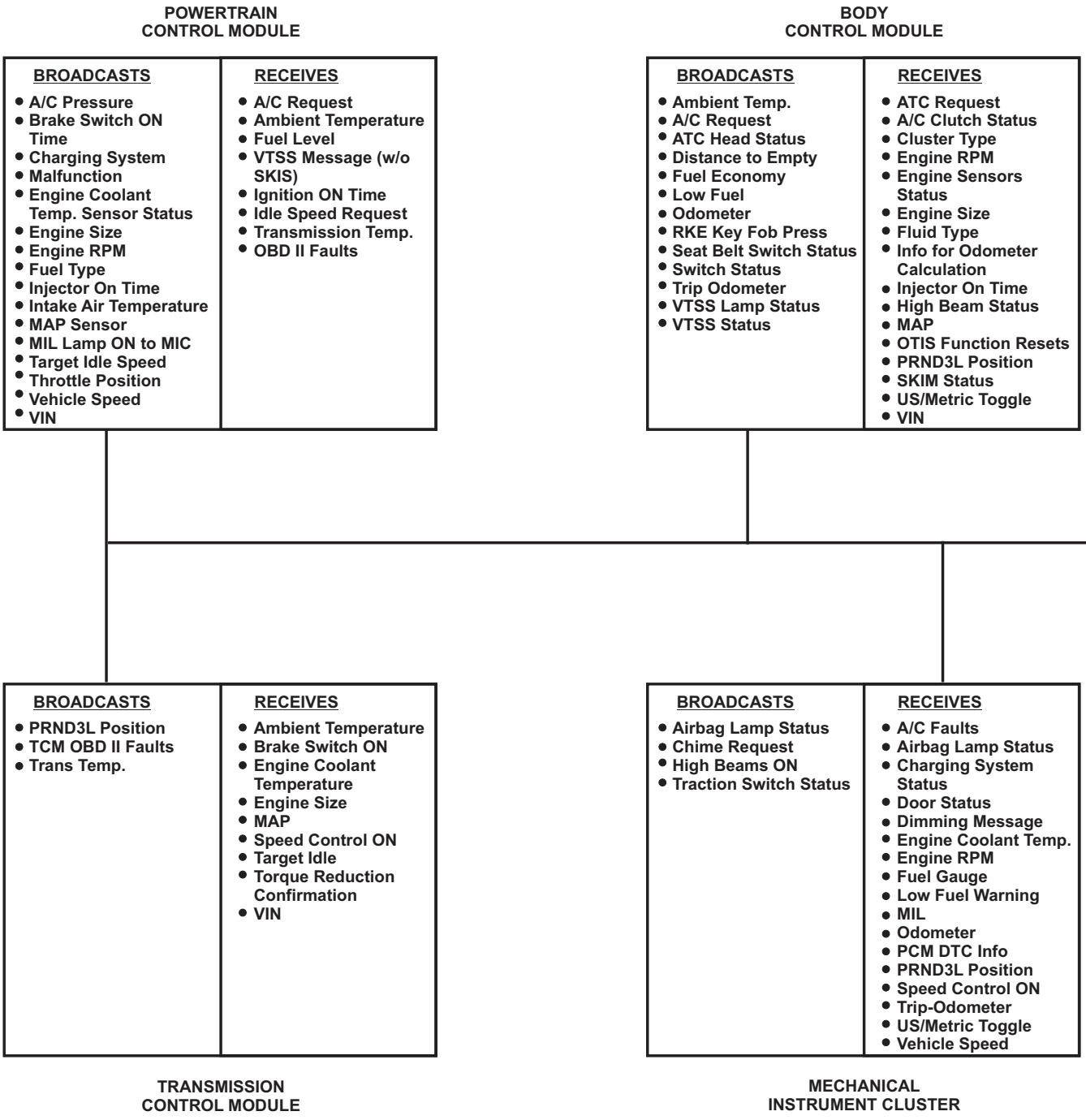
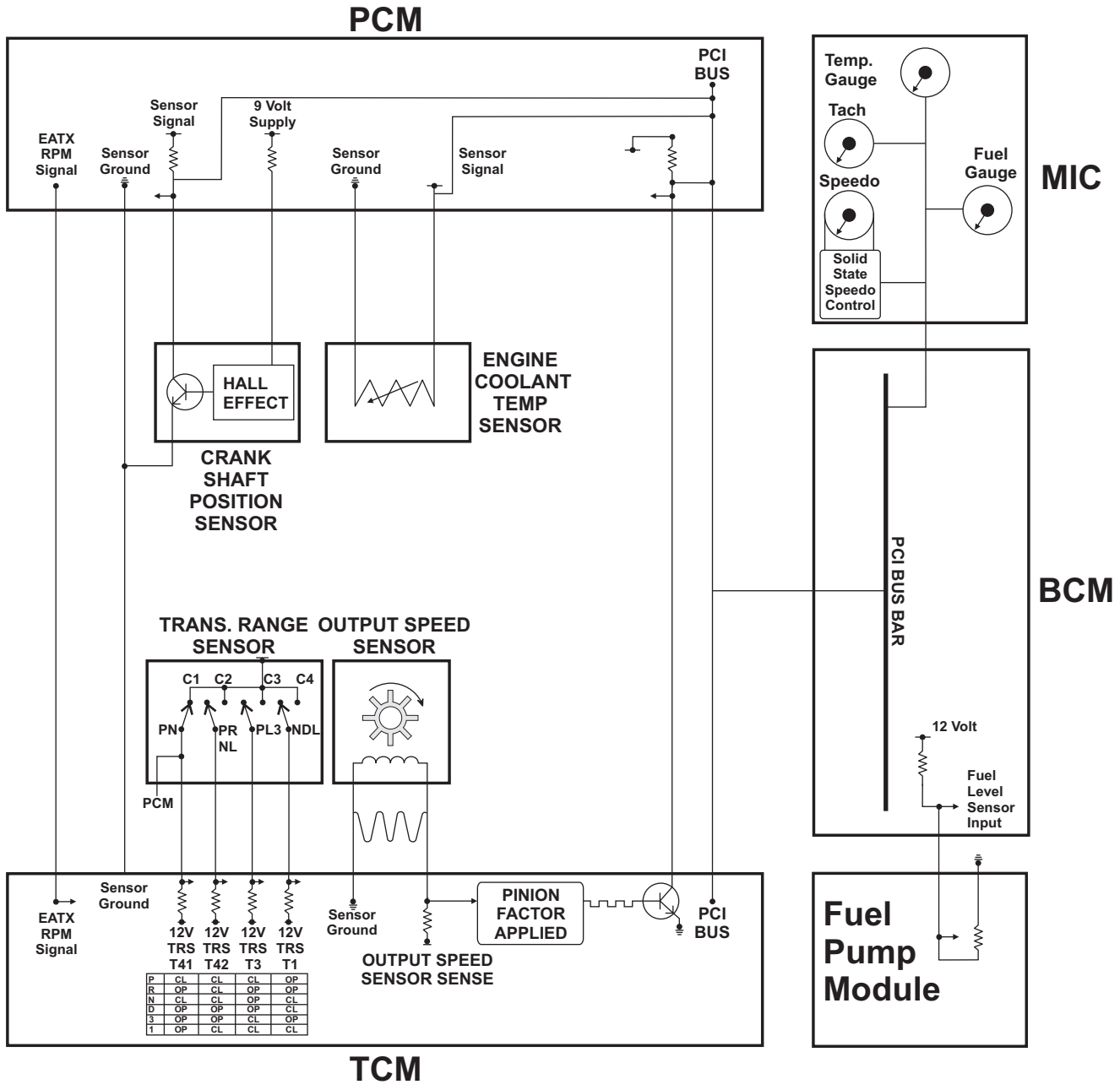


Figure 3



P	CL	CL	CL	OP
R	OP	CL	OP	OP
N	CL	CL	OP	CL
D	OP	OP	OP	CL
3	OP	OP	CL	OP
1	OP	CL	CL	CL

The PCM broadcasts RPM and ECT information to the MIC over the PCI Bus wire. The TCM sends a buffered VSS signal to the PCM via a hard wire. The PCM then broadcasts this information to the MIC over the PCI Bus wire.
The TCM broadcasts PRNDL information to the MIC over the PCI Bus wire.
The BCM broadcasts Fuel Level information to the MIC over the PCI Bus wire.

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Figure 4

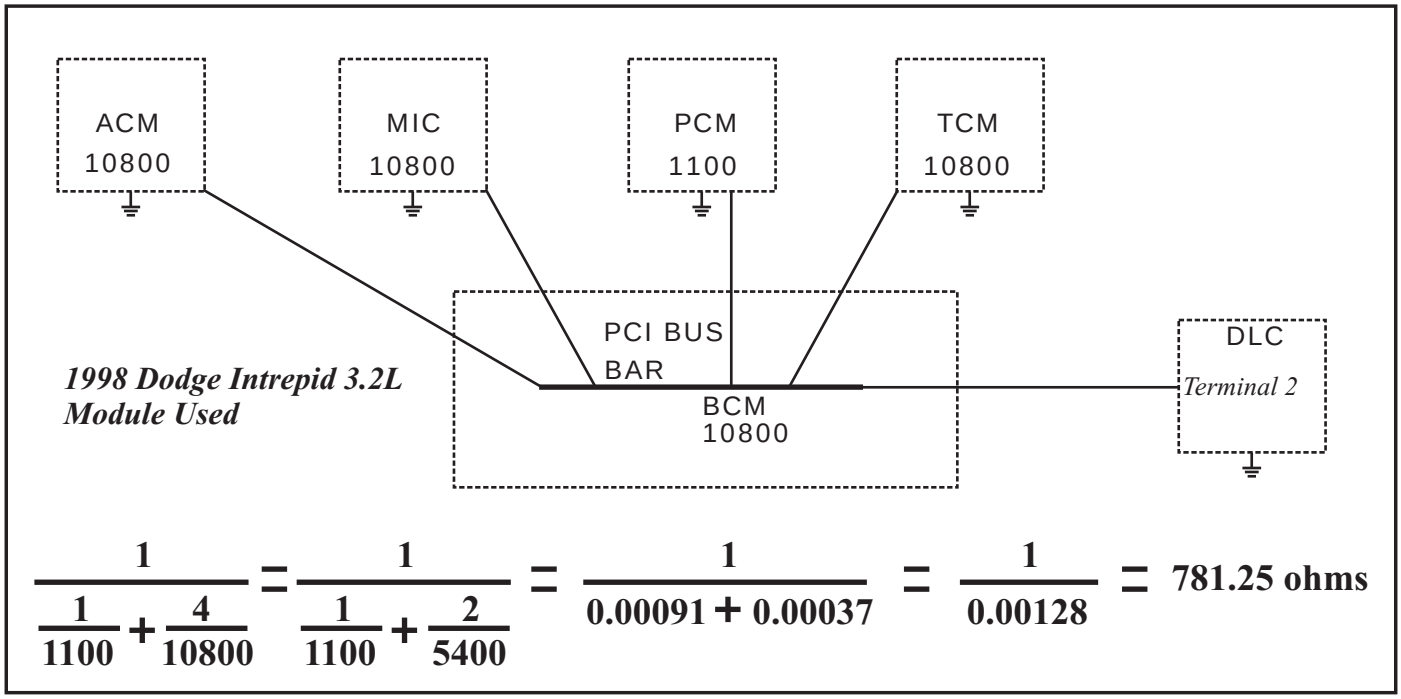

Figure 5

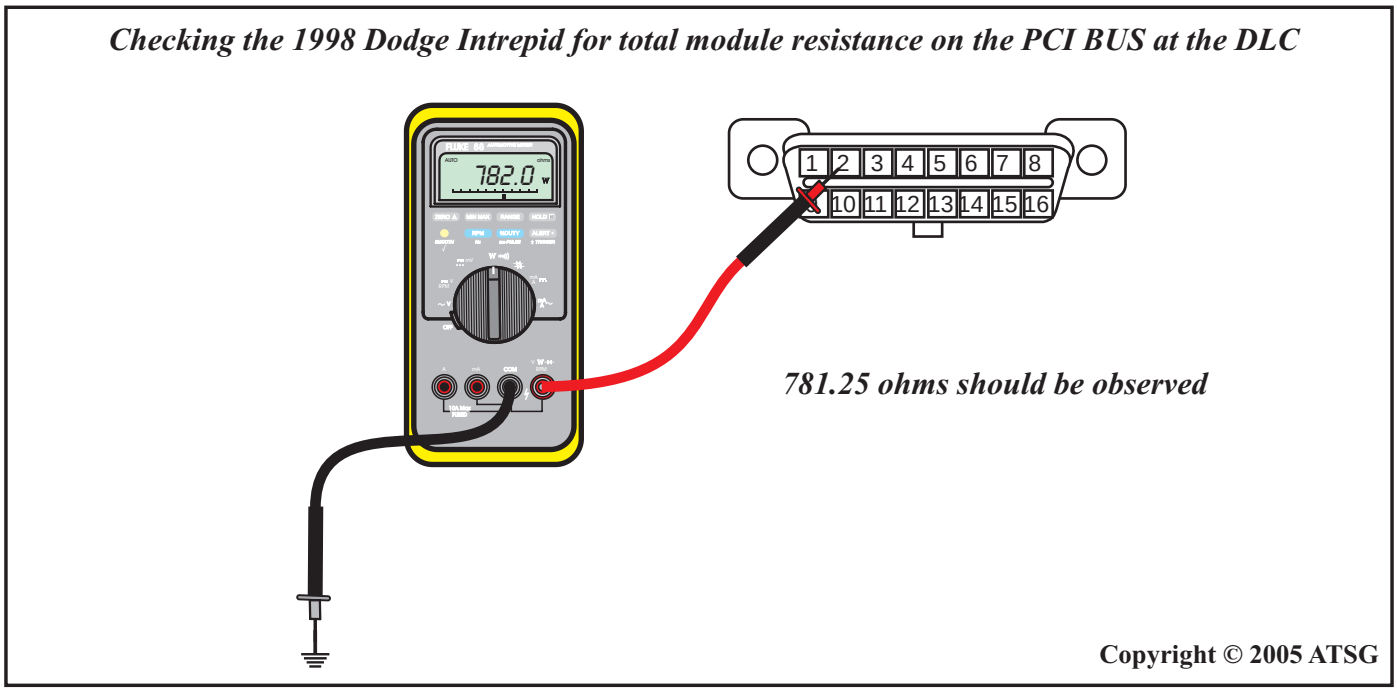

Figure 6