

## Antilock Brake System (ABS)

### Diagnostic Trouble Codes (DTC)

When the ABS warning light in the Instrument Panel remains ON, the EHCU (Electronic Hydraulic Control Unit) stores the DTC and disables the ABS.

#### DTC display:

When the DTC display activated the ABS warning light will blink. The code is a Double-digit display. By counting the number of times the ABS warning light flashes, the DTC code can be determine. See the table below for the DTC descriptions.

The first code displayed is the normal DTC 12 and signifies the start and stop of a DTC flash sequence. It is displayed three times. If any other DTCs are stored in the EHCU they will be displayed three times. If no other DTCs have been stored then the display of DTC 12 will be repeated 3 times. The sequence repeats for 5 minutes or until the ignition switch is switch OFF or the jumper is removed.

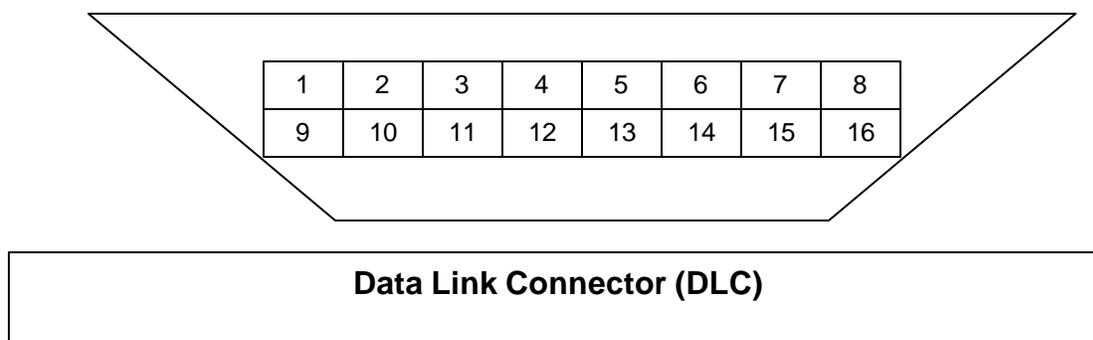
#### Starting the DTC Display

1. The vehicle must be stopped and the brake pedal is not pressed in.
2. The ignition switch must be in the off position.
3. Install a jumper from the DLC terminal 12 to terminal 4 (see the diagram below).
4. Turn on the Ignition Switch.

#### Erasing the Codes

During the first 3 seconds after the ignition switch is switched to the ON position, press the brake pedal 6 times. Actuation of the brake pedal switch during the EHCU self-diagnosis startup period clears the memory of the EHCU.

Additionally, the EHCU memory will be cleared upon driving the vehicle above 8 mph and no faults detected by the EHCU.



## Diagnostic Trouble Codes (DTC)

Code Flash out	Diagnosis	Description
12	-	-
13	C0285	2 WD Controller in 4WD Vehicle Controller
14	C0271	RAM read/write error
14	C0272	ROM checksum error
14	C0270	ALU function error
14	C0273	Inoperative isolation item
14	C0284	Loop time overrun
15	C0277	Low ignition voltage
15	C0278	High ignition voltage
17	C0269	Excessive dump time
18	C0274	Excessive isolation time
21	C0276	G-Sensor Failure
22	C0281	Brake switch Failure
24	C0282	Open or shorted 4x4 input signal (4WD only)
32	C0267	Open motor circuit or shorted ECU output
32	C0268	Stalled motor or open ECU output
35	C0265	Open relay circuit
35	C0266	Shorted relay circuit
41	C0245	FL Open isolation solenoid or shorted ECU output
41	C0247	FL Shorted isolation solenoid or open ECU output

42	C0246	FL Open dump solenoid or shorted ECU output
42	C0248	FL Shorted dump solenoid or open ECU output
43	C0241	FR Open isolation solenoid or shorted ECU output
43	C0243	FR Shorted isolation solenoid or open ECU output
44	C0242	FR Open dump solenoid or shorted ECU output
44	C0244	FR Shorted dump solenoid or open ECU output
45	C0251 f^ •	Rear Open isolation solenoid or shorted ECU output
45	C0253	Rear Shorted isolation solenoid or open ECU output
46	C0252	Rear Open dump solenoid or shorted ECU output
46	C0254	Rear Shorted dump solenoid or open ECU output
51	C0225	FL Open or shorted sensor
52	C0221	FR Open or shorted sensor
53	C0235	Rear Open or shorted sensor
61	C0226	FL Missing sensor signal
61	C0227	FL Sensor signal dropout
62	C0222	FR Missing sensor signal
62	C0223	FR Sensor signal dropout
63	C0236	Rear Missing sensor signal
63	C0237	Rear Sensor signal dropout
64	C0229	Simultaneous dropout of front sensor signal
65	C0238	Wheel speed error