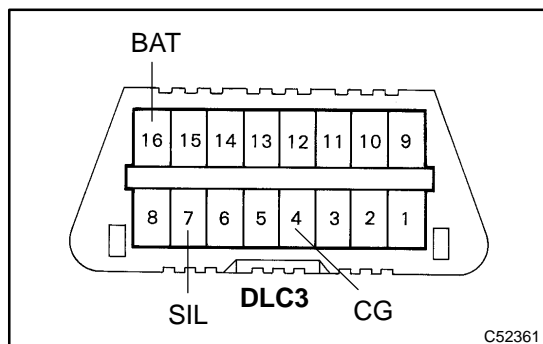


## DIAGNOSIS SYSTEM



### 1. DIAGNOSTIC SYSTEM

- (a) Inspect the battery voltage.

**Battery voltage: 11 to 14 V**

If voltage is below 11 V, recharge the battery before proceeding.

- (b) Check the DLC3.

The vehicle's skid control ECU uses ISO 9141-2 for communication. The terminal arrangement of the DLC3 complies with SAE J1962 and matches with the ISO 9141-2 format.

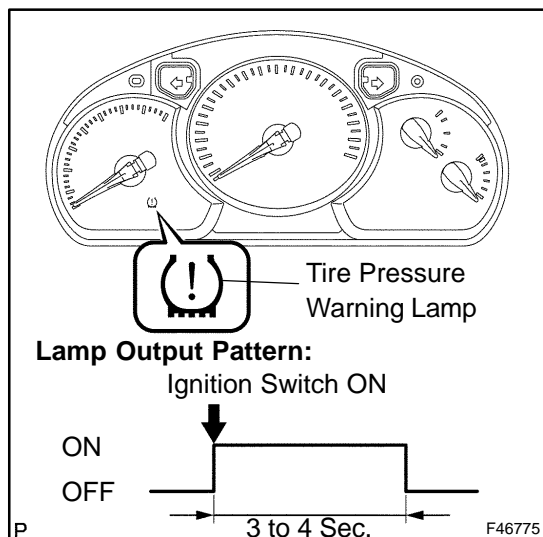
Verify conditions listed in the table below:

Terminal No.	Terminal name	Connection / Voltage or Resistance	Condition
7	SIL	Bus + Line / Pulse generation	During transmission
4	CG	Chassis Ground to Body Ground / 1 $\Omega$ or less	Always
16	BAT	Battery Positive to Body Ground / 10 to 14 V	Always

#### HINT:

If the hand-held tester displays "UNABLE TO CONNECT TO VEHICLE" when the cable of the hand-held tester is properly connected to the DLC3, the ignition switch is turned to the ON position and the tester is operated, there is either a problem on the vehicle side or tester side.

- If communication is normal when the tester is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when the tool is connected to another vehicle, the problem is probably in the tester itself. In this case, consult the Service Department listed in the tester's instruction manual.



### 2. CHECK WARNING LAMP

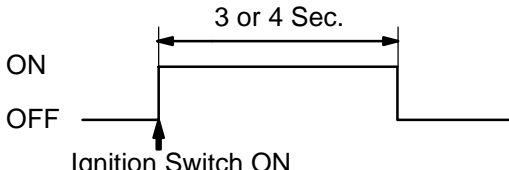
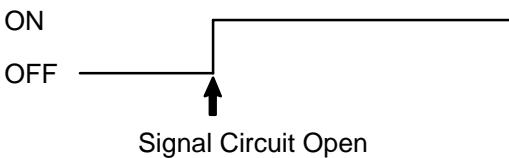
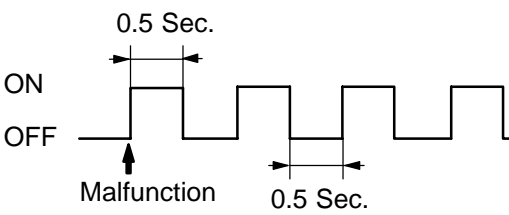
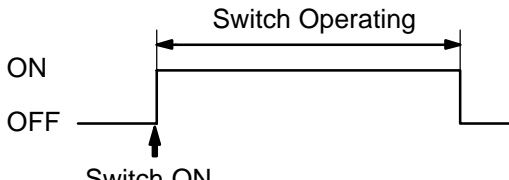
- (a) Turn the ignition switch to the LOCK position.

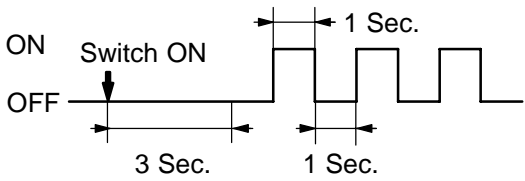

- (b) When the ignition switch is turned to the ON position, the lamp should come on for 3 to 4 seconds and then go off.

#### HINT:

If the tire pressure warning lamp has a defect, check the tire pressure warning lamp output patterns and the problem symptoms table (see page 05-740 ).

## 3. TIRE PRESSURE WARNING LAMP CHART:

Priority	Condition	Tire Pressure Warning Lamp Output Pattern
1	Ignition switch is in the ON position.	<p>Tire pressure warning lamp comes on for 3 seconds when the ignition switch is turned to the ON position. (However, during initialization, the lamp comes on for 4 seconds.)</p>  <p>ON OFF Ignition Switch ON 3 or 4 Sec.</p>
2	<p><b>System abnormal 1</b> Tire pressure warning lamp signal is open.</p> <p>HINT: When the tire pressure warning lamp drive signal circuit opens due to a skid control ECU malfunction, communication error, open circuit in the wire harness, etc., the tire pressure warning lamp comes on. (Active Lamp Circuit)</p>	<p>Tire pressure warning lamp comes on</p>  <p>ON OFF Signal Circuit Open</p>
3	<p><b>System abnormal 2</b> ABS system malfunction Speed sensor malfunction Stop lamp switch assy malfunction</p> <p>HINT: The skid control ECU monitors the speed sensor signal and the stop lamp switch signal, and the tire pressure warning lamp blinks.</p>	<p>Tire pressure warning lamp blinks (Comes on and goes off repeatedly at 0.5 second intervals.)</p>  <p>ON OFF Malfunction 0.5 Sec. 0.5 Sec.</p> <p>HINT: Occurs (When the skid control ECU detects a system abnormal 2 malfunction, check the ABS DTCs and proceed to the pages on which the ABS DTCs are described.)</p>
4 (When in test mode)	<p>Tire pressure warning reset switch is turned on during test mode. (Press and hold the tire pressure warning reset switch.)</p>	<p>Tire pressure warning lamp comes on when the tire pressure warning reset switch is turned on.</p>  <p>ON OFF Switch ON Switch Operating</p>

Priority	Condition	Tire Pressure Warning Lamp Output Pattern
5	Initialization mode is received. HINT: See step 3 for initialization procedure.	Tire pressure warning lamp blinks 3 times (Comes on and goes off repeatedly at 1 second intervals.) 
6	Failure to initialize when driving the vehicle. HINT: 3 conditions will indicate this pattern: 1. New vehicle from factory 2. ECM replacement 3. Failure to initialize	Tire pressure warning lamp blinks (Comes on and goes off repeatedly at 0.25 second intervals.) 
7	Outputs tire air pressure check result.  HINT: The result is output only when driving at 19 mph (35 km/h) or more.	Tire pressure is judged to be normal: Warning light is OFF: ON OFF _____ Tire pressure is judged to be low: Warning light comes on: ON _____ OFF _____ Judging Low Tire Pressure

**HINT:**

When the skid control ECU does not operate properly, the ABS warning lamp comes on as an ABS system malfunction.