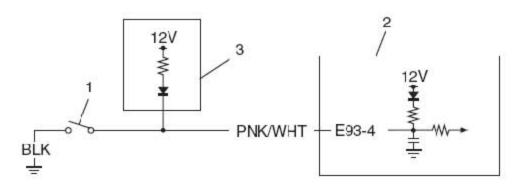
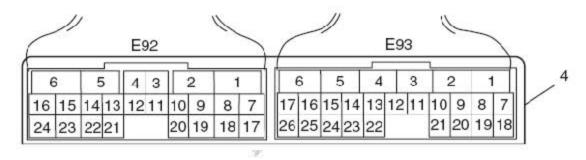
# P1874 4L Switch Circuit Malfunction (Short)

#### Wiring Diagram





1. 4L/N switch	3. 4WD control module
2. TCM	Terminal arrangement of TCM connector (viewed from harness side)

### **DTC Detecting Condition and Trouble Area**

DTC Detecting Condition	Trouble Area	
Actual transfer position is 4H although TCM detected 4L/N switch	<ul> <li>4L/N switch or its circuit.</li> </ul>	
is turned ON with vehicle speed between 29 km/h (18 mile/h) and	•TCM	
88 km/h (55 mile/h).		
(1 driving cycle detection logic)		

#### **DTC Confirmation Procedure**

- 1) Connect scan tool to DLC with ignition switch OFF.
- 2) Clear DTCs in TCM and ECM memories by using scan tool.

- 3) Start engine and transfer position switch to "4H" position.
- 4) Keep engine running at idle speed for 10 seconds or more with select lever "D" range.
- 5) Start vehicle and increase vehicle speed to about 60 km/h (37 mile/h) for 2 minutes.
- 6) Stop vehicle.

LAUNCH

7) Check DTC, pending DTC and freeze frame data.

## **DTC Troubleshooting**

Step	Action	Yes	No
1	Vehicle speed signal check  1) Check DTC in ECM and ABS hydraulic unit / control module referring to "DTC Check: in Section 1A" or "DTC Check: in Section 4E". Is there DTC P P0500: Vehicle speed sensor (VSS) malfunction in ECM and/or DTC C1021, C1022, C1025, C1026, C1031, C1032, C1035 and/or C1036 in ABS hydraulic unit / control module?	Go to applicable DTC diag. flow.	Go to Step 2.
2	Was "A/T System Check" performed?	Go to Step 2.	Go to "A/T System Check: ".
3	Do you have SUZUKI scan tool?	Go to Step 4.	Go to Step 5.
4	4L switch and its circuit check 1) Connect SUZUKI scan tool to DLC with ignition switch OFF. 2) Turn ignition switch ON. 3) Select "DATA LIST" mode on scan tool. 4) Check 4L/N switch signal (ON or OFF) on display when turning transfer position switch to each position. 4L/N switch specifications (scan tool) "4H" position: OFF "4L" position: ON Is OFF / ON displayed as described above?	Intermittent trouble or faulty TCM. Check for intermittent trouble referring to "Intermittent and Poor Connection Inspection: in Section 00". If OK, substitute a known-good TCM and recheck.	Go to Step 6.

Step	Action	Yes	No
5	4L/N switch and its circuit check 1) Turn ignition switch ON. 2) Check terminal voltage "E93-4" of TCM connector connected when turning transfer position switch to each position. 4L/N switch specifications "4H" position: 10 – 14 V "4L" position: 0 – 1 V Is voltage as specified?	Intermittent trouble or faulty TCM. Check for intermittent trouble referring to "Intermittent and Poor Connection Inspection: in Section 00". If OK, substitute a known-good TCM and recheck.	Go to Step 6.
6	4L/N switch check 1) Check 4WD low switch for operation referring to "Transfer Assembly Inspection: Motor-Shift Type (Transfer with Shift Actuator) in Section 3C".  Is check result satisfactory?	4L/N circuit is shorted to ground. If wire and connections are OK, substitute a known-good TCM and recheck.	Replace 4L/N switch.