

# P0713 Transmission Fluid Temperature Sensor "A" Circuit High

## Wiring Diagram

Refer to "DTC P0712 Transmission Fluid Temperature Sensor "A" Circuit Low: ".

## DTC Detecting Condition and Trouble Area

DTC Detecting Condition	Trouble Area
Transmission temperature sensor terminal voltage is less than 4.89 V under vehicle condition shown in the following. <ul style="list-style-type: none"><li>• Ignition switch is turned on for 15 minutes or more</li><li>• Engine coolant temperature is more than 50 °C (122 °F)</li></ul> (1 driving cycle detection logic)	<ul style="list-style-type: none"><li>• Transmission fluid temperature sensor or its circuit.</li><li>• TCM</li></ul>

## 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.
- 4) Start vehicle and increase vehicle speed to about 40 km/h (25 mile/h) for 20 minutes or more.
- 5) Stop vehicle.
- 6) Check DTC, pending DTC and freeze-frame data.

## DTC Troubleshooting

Step	Action	Yes	No
1	Was "A/T System Check" performed?	Go to Step 2.	Go to "A/T System Check".
2	<p><b>Check transmission fluid temperature sensor circuit for open</b></p> <p>1) Turn ignition switch OFF.</p> <p>2) Disconnect TCM connectors from TCM.</p> <p>3) Check for proper connection to transmission fluid temperature sensor at terminal "E92-11" and "E92-12".</p> <p>4) If OK, check continuity between terminal "E92-11" and "E92-12" of disconnected harness side TCM connector.</p> <p>Is continuity indicated?</p>	Go to Step 3.	Transmission fluid temperature sensor circuit is open circuit.
3	<p><b>Check transmission fluid temperature sensor circuit for power supply short</b></p> <p>1) Cool down A/T fluid temperature under ambient temperature.</p> <p>2) Connect TCM connectors to TCM with ignition switch OFF.</p> <p>3) Turn ignition switch ON.</p> <p>4) Measure voltage between terminal " E92-11" of TCM connector and ground.</p> <p>Is it 4.89 V or more?</p>	Transmission fluid temperature sensor circuit is shorted to power supply circuit. If circuit is OK, go to Step 4.	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.

Step	Action	Yes	No
4	<b>Inspection transmission fluid temperature sensor 1) Inspection transmission fluid temperature sensor referring to "Transmission Fluid Temperature Sensor Inspection: ". Is result satisfactory?</b>	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.	Replace valve body harness including transmission fluid temperature sensor referring to "Transmission Fluid Temperature Sensor Removal and Installation: ".

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