

DTC P1826

1. DTC Description

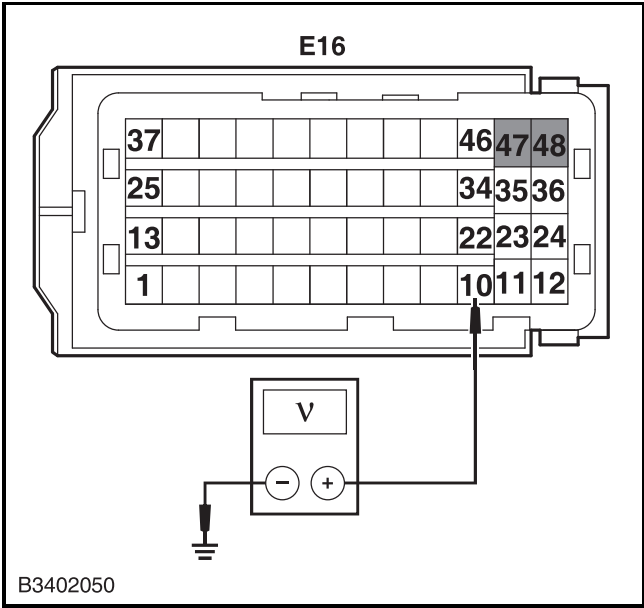
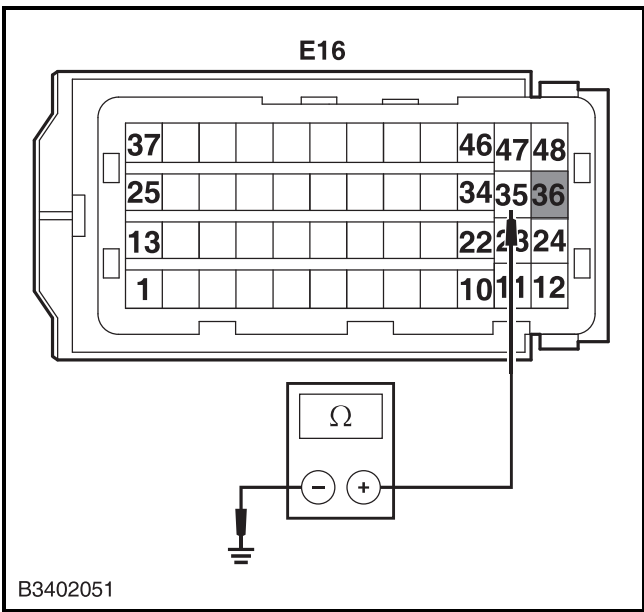
DTC	Description	Definition
P1826	General Failure	The vehicle is driving in D range and the command of shifting to 1st is sent. If the vehicle is in 3rd or 5th, it is necessary to shift to neutral from 3rd or 5th, so as to engage odd clutch and shift to 1st.

2. Possible Causes

DTC	Inspection Strategy	Setting Condition (Control Strategy)	Faulty Area
P1826	Hardware Circuit Inspection	<ul style="list-style-type: none"> The vehicle is driving in D range and the software sends the command of shifting to neutral from 3rd/5th gear after the command of shifting to 1st is sent. The software detects that shifting to neutral from 3rd or 5th gear fails for 3 times or more and judges as malfunction by DTC 	<ul style="list-style-type: none"> 3rd/5th gear synchronizer 2Nd-3rd/4th-5th switch valve TCU

3. Diagnosis Procedure

Test Conditions	Details/Results/Actions
1. Inspect DTC	<p>A. Connect the diagnostic tool.</p> <p>B. Detect automatic transmission system with diagnostic tool.</p> <p>Is there any DTC other than P1826?</p> <p>Yes</p> <p style="text-align: center;">Refer to: DTC Diagnosis Procedure Index (3.4.2 Automatic Transmission, DTC Diagnosis and Testing).</p> <p>No</p> <p>Go to step 2.</p>
2. Inspect fork 2 displacement sensor datastream	<p>A. Using diagnostic tool, read automatic transmission datastream "Fork 2 Displacement Sensor".</p> <p>Is the datastream normal?</p> <p>Yes</p> <p>Go to step 3.</p> <p>No</p> <p>Repair the faulty area.</p>

Test Conditions	Details/Results/Actions
<p>3. Inspect TCU power supply circuit</p>  <p>B3402050</p>	<p>A. Turn the ignition switch to "LOCK".</p> <p>B. Disconnect the TCU wiring harness connector E16.</p> <p>C. Turn the ignition switch to "ON".</p> <p>D. Measure voltage between terminals 47, 48, 10 of TCU wiring harness connector E16 and reliable ground point.</p> <p>Standard voltage: 11 ~ 14 V</p> <p>Is the circuit normal?</p> <p>Yes</p> <p>Go to step 4.</p> <p>No</p> <p>Inspect and repair the open circuit fault between terminals 47, 48, 10 of TCU wiring harness connect E16 and engine compartment main fuse box C13 and instrument cluster fuse box P01.</p>
<p>4. Inspect TCU ground circuit</p>  <p>B3402051</p>	<p>A. Turn ignition switch to "LOCK" and disconnect negative battery cable.</p> <p>B. Disconnect the TCU wiring harness connector E16.</p> <p>C. Measure resistance between terminals 35, 36 of TCU wiring harness connector E16 and reliable ground point.</p> <p>Standard resistance: less than 5 Ω</p> <p>Is the resistance normal?</p> <p>Yes</p> <p>Go to step 5.</p> <p>No</p> <p>Inspect and repair the open circuit fault between terminals 35, 36 of TCU wiring harness connector E16 and ground point G404.</p> <p>The system is normal.</p>

Test Conditions	Details/Results/Actions
5. Inspect TCU	<p>A. Remove the transmission control unit TCU.</p> <p>B. Install the TCU of the vehicle onto another vehicle with well condition.</p> <p>Is another vehicle normal?</p> <p>Yes</p> <p style="text-align: center;">Refer to: Intermittent Malfunction Diagnosis Procedure (3.1.13 Electronic Control System - Symptom Diagnosis and Testing).</p> <p>No</p> <p>Replace the transmission control unit TCU.</p>