

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

AUTO HEADLIGHT BEAM LEVELER SYSTEM (DIAGNOSTICS)

11. Diagnostic Procedure with Diagnostic Trouble Code (DTC)

A: DTC U0073 CONTROL MODULE COMMUNICATION BUS OFF

Detected when CAN line abnormality is detected.

NOTE:

Perform the diagnosis for LAN system. <Ref. to LAN(w/o HEV)(diag)-2, PROCEDURE, Basic Diagnostic Procedure.> <Ref. to LAN(HEV)(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

B: DTC U0122 LOST COMMUNICATION WITH VEHICLE DYNAMICS CONTROL MODULE

Detected when CAN data (vehicle speed signal) is not received from VDC.

NOTE:

Perform the diagnosis for LAN system. <Ref. to LAN(w/o HEV)(diag)-2, PROCEDURE, Basic Diagnostic Procedure.> <Ref. to LAN(HEV)(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

C: DTC U0140 LOST COMMUNICATION WITH BODY CONTROL MODULE

Detected when CAN data (headlights ON signal) is not received from the body integrated unit.

NOTE:

Perform the diagnosis for LAN system. <Ref. to LAN(w/o HEV)(diag)-2, PROCEDURE, Basic Diagnostic Procedure.> <Ref. to LAN(HEV)(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

D: DTC B2900 AHLCU ERROR

DTC DETECTING CONDITION:

Detected when internal malfunction occurs in the auto headlight beam leveler CM.

TROUBLE SYMPTOM:

The auto headlight beam leveler does not operate.

CAUTION:

Initialization is required after replacing the auto headlight beam leveler CM.

Step	Check	Yes	No
1 CHECK DTC. 1) Turn the ignition switch to OFF → ON. 2) Turn on the headlight low beam. 3) Using the Subaru Select Monitor, clear the auto headlight beam leveler system memory. 4) Turn the ignition switch to OFF → ON. 5) Use the Subaru Select Monitor and read DTCs.	Is DTC B2900 displayed? (current malfunction)	Replace the auto headlight beam leveler CM. <Ref. to LI-92, Auto Headlight Beam Leveler Control Module.>	System is normal. It is possible that temporary poor contact occurs.

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E: DTC B2902 REAR HEIGHT SENSOR ERROR

DTC DETECTING CONDITION:

Detected when error occurs in the rear height sensor.

TROUBLE SYMPTOM:

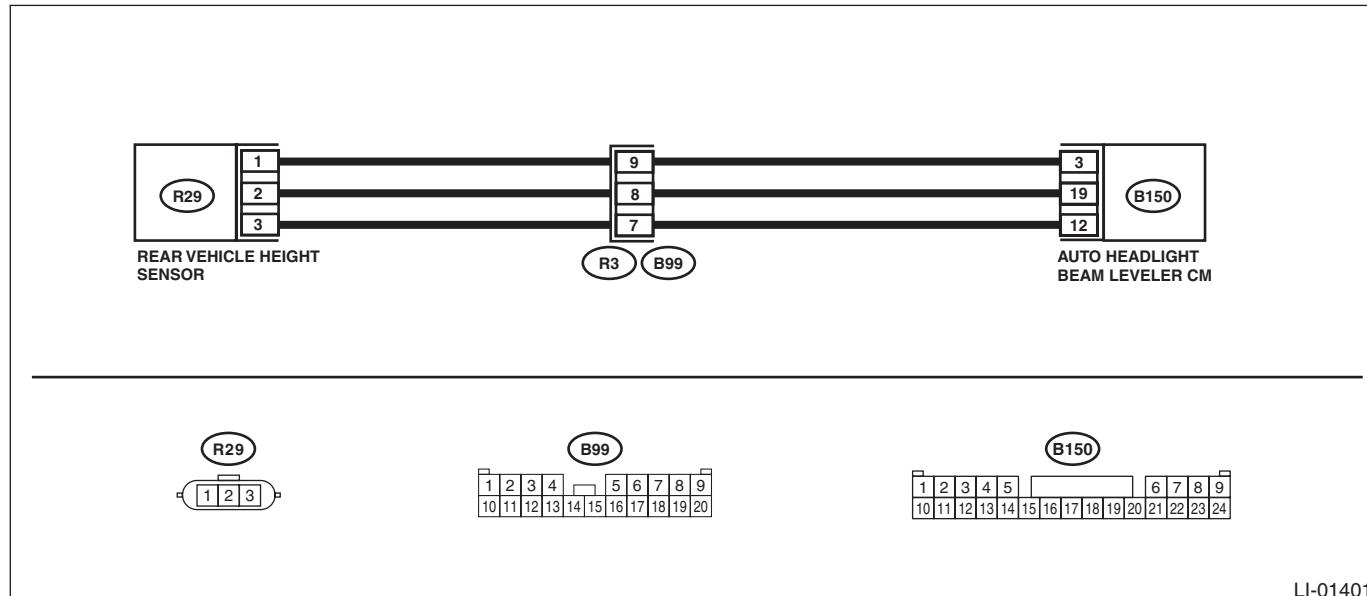
The auto headlight beam leveler does not operate.

CAUTION:

Initialization is required after replacing the auto headlight beam leveler CM.

WIRING DIAGRAM:

Headlight beam leveler system <Ref. to WI(w/o HEV)-136, WIRING DIAGRAM, Headlight Beam Leveler System.> <Ref. to WI(HEV)-134, WIRING DIAGRAM, Headlight Beam Leveler System.>



Step	Check	Yes	No
1 CHECK DTC. 1) Turn the ignition switch to OFF → ON. 2) Turn on the headlight low beam. 3) Using the Subaru Select Monitor, clear the auto headlight beam leveler system memory. 4) Turn the ignition switch to OFF → ON. 5) Use the Subaru Select Monitor and read DTCs.	Is DTC B2902 displayed? (current malfunction)	Go to step 2.	System is normal. It is possible that temporary poor contact occurs.
2 CHECK CURRENT DATA. Display {R Sensor Signal} using Subaru Select Monitor.	Does the data indicate the standard value?	Replace the auto headlight beam leveler CM. <Ref. to LI-92, Auto Headlight Beam Leveler Control Module.>	Go to step 3.
3 CHECK CURRENT DATA. 1) Display {R Sensor Signal} using Subaru Select Monitor. 2) Change the vehicle posture.	Does the data change?	Go to step 6.	Go to step 4.

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Step	Check	Yes	No
4 CHECK OUTPUT VOLTAGE BETWEEN AUTO HEADLIGHT BEAM LEVELER CM AND VEHICLE HEIGHT SENSOR. 1) Disconnect the vehicle height sensor connector. 2) Turn the ignition switch to ON. 3) Measure the voltage between the vehicle height sensor connector and chassis ground. <i>Connector & terminal (R29) No. 3 (+) — Chassis ground (-):</i>	Is the voltage 5 ± 0.25 V?	Go to step 5.	Replace the auto headlight beam leveler CM. <Ref. to LI-92, Auto Headlight Beam Leveler Control Module.>
5 CHECK REAR HEIGHT SENSOR. 1) Remove the rear vehicle height sensor. 2) Perform the inspection of rear height sensor unit. <Ref. to LI-95, INSPECTION, Rear Height Sensor.>	Is the rear height sensor normal?	Go to step 6.	Replace the rear height sensor. <Ref. to LI-94, Rear Height Sensor.>
6 CHECK HARNESS. 1) Disconnect the auto headlight beam leveler CM connector. 2) Using a tester, measure the resistance between the auto headlight beam leveler CM connector and rear height sensor connector. <i>Connector & terminal (B150) No. 3 — (R29) No. 1: (B150) No. 19 — (R29) No. 2: (B150) No. 12 — (R29) No. 3:</i>	Is there continuity?	Go to step 7.	Repair or replace the open circuit of harness.
7 CHECK HARNESS. Using a tester, measure the resistance between the auto headlight beam leveler CM connector and chassis ground. <i>Connector & terminal (B150) No. 3 — Chassis ground: (B150) No. 19 — Chassis ground: (B150) No. 12 — Chassis ground:</i>	Is the resistance $10\text{ k}\Omega$ or more?	Replace the auto headlight beam leveler CM. <Ref. to LI-92, Auto Headlight Beam Leveler Control Module.>	Repair or replace the short circuit of the harness.

F: DTC B2903 VDC DATA ERROR

DTC DETECTING CONDITION:

Detected when data (vehicle speed signal) from VDC CM is abnormal.

TROUBLE SYMPTOM:

The auto headlight beam leveler does not operate.

NOTE:

Perform the diagnosis for VDC. <Ref. to VDC(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>