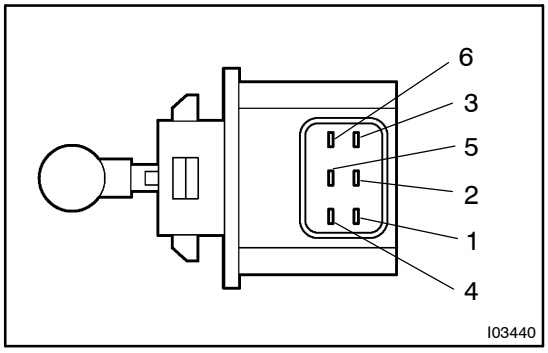


BE21K–01

INSPECTION

1. INSPECT HEADLIGHT BEAM LEVEL CONTROL ACTUATOR RESISTANCE

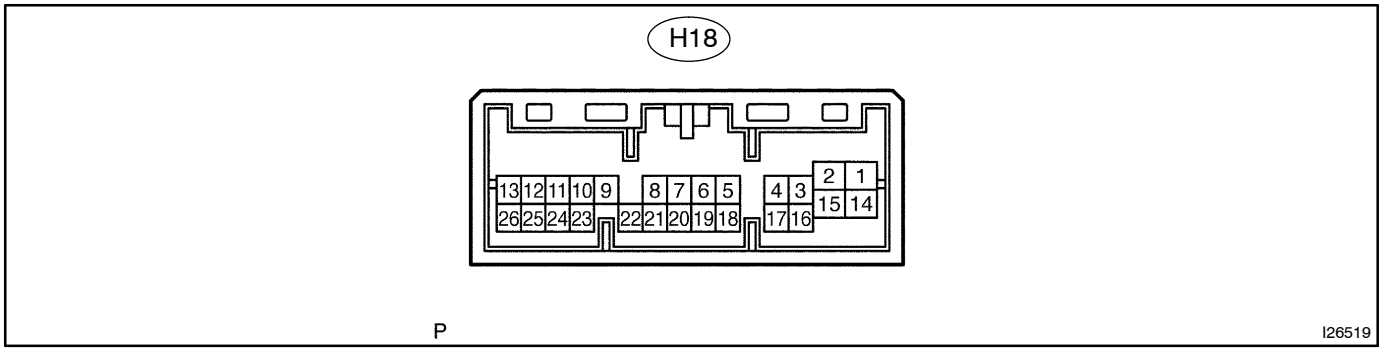
(a) Check that continuity exists between terminal 2 and 5.

(b) Check that resistance exists between terminal, as shown in the chart.

Terminal	Resistance (Ω)
2 – 1	26 – 30
2 – 3	26 – 30
2 – 4	26 – 30
2 – 6	26 – 30
5 – 1	26 – 30
5 – 3	26 – 30
5 – 4	26 – 30
5 – 6	26 – 30

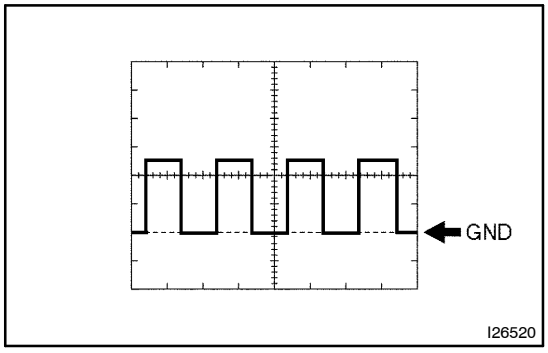
If resistance value is not as specified, replace the actuator.

2. INSPECT HEADLIGHT BEAM LEVEL CONTROL ECU CIRCUIT



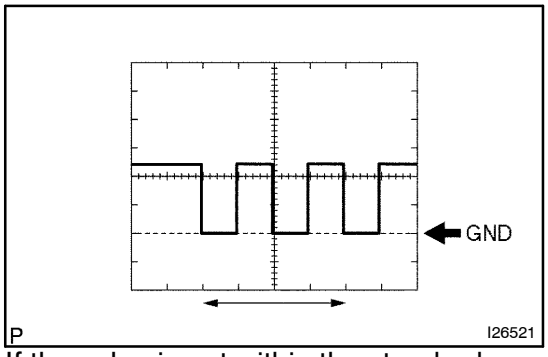
Terminal No. (Symbols)	Wiring Color	Condition	Specified condition
1 ⇔ Body ground (E1 ⇔ Body ground)	W–B ↔ Body ground	Always	Below 1 V
5 ⇔ 1 (SPDL ⇔ E1)	Y–B ↔ W–B	Drive at about 30 km/h	Pulse generation (*1)
6 ⇔ 1 (SPDR ⇔ E1)	Y–R ↔ W–B	Drive at about 30 km/h	Pulse generation (*1)
7 ⇔ 1 (B2 ⇔ E1)	R–B ↔ W–B	Ignition switch ON, Light control switch is ON (HEAD)	Below 1.5 V
8 ⇔ Body ground (CHG ⇔ Body ground)	P–G ↔ Body ground	Engine is running	10 – 14 V
9 ⇔ Body ground (RHG ⇔ Body ground)	R ↔ Body ground)	Always	Below 1 V
10 ⇔ 9 (RH+ ⇔ RHG)	G ↔ R	Light control switch is ON (HEAD) and engine running, when keep and bounce the vehicle	Pulse generation (*2)
11 ⇔ 9 (RHT ⇔ RHG)	O ↔ R	Light control switch is ON (HEAD) and engine running, when keep and bounce the vehicle	Pulse generation (*2)
12 ⇔ 9 (RH– ⇔ RHG)	R–G ↔ R	Light control switch is ON (HEAD) and engine running, when keep and bounce the vehicle	Pulse generation (*2)

13 ⇔ 9 (RHE ⇔ RHG)	P ↔ R	Light control switch is ON (HEAD) and engine running, when keep and bounce the vehicle	Pulse generation (*2)
14 ⇔ 9 (IG ⇔ RHG)	R–L ↔ R	Ignition switch ON	Battery positive voltage
16 ⇔ Body ground (SGF ⇔ Body ground)	V–Y ↔ Body ground	Ignition switch OFF	Below 1 V
17 ⇔ 16 (SHFL ⇔ SGF)	V–G ↔ V–Y	Ignition switch ON, when keep and bounce the vehicle	0.5 – 4.5 V
18 ⇔ 16 (SHRL ⇔ SGF)	B–R ↔ V–Y	Ignition switch ON, when keep and bounce the vehicle	0.5 – 4.5 V
20 ⇔ 16 (SBF ⇔ SGF)	B ↔ V–Y	Ignition switch ON	5 V
21 ⇔ 1 (WNG ⇔ E1)	L ↔ W–B	Ignition switch ON	No continuity
22 ⇔ Body ground (LHG ⇔ Body ground)	R–Y ↔ Body ground	Ignition switch ON	Below 1 V
23 ⇔ 22 (LH+ ⇔ LHG)	V–R ↔ R–Y	Light control switch is ON (HEAD) and engine running, when keep and bounce the vehicle	Pulse generation (*2)
24 ⇔ 22 (LHT ⇔ LHG)	LG ↔ R–Y	Light control switch is ON (HEAD) and engine running, when keep and bounce the vehicle	Pulse generation (*2)
25 ⇔ 22 (LH– ⇔ LHG)	R–W ↔ R–Y	Light control switch is ON (HEAD) and engine running, when keep and bounce the vehicle	Pulse generation (*2)
26 ⇔ 22 (LHE ⇔ LHG)	P–B ↔ R–Y	Light control switch is ON (HEAD) and engine running, when keep and bounce the vehicle	Pulse generation (*2)



Oscilloscope wave (*1)
HINT:

- Terminal: SPDL, SPDR – E1
- Gauge set: 5V / DIV. 2ms / DIV
- Condition: Drive at about 30 km/h



Oscilloscope wave (*2)
HINT:

- Terminal: RH+, RHT, RH–, RHE ↔ RHG
  LH+, LHT, LH–, LHE ↔ LHG
- Gauge set: 5V / DIV. 10ms / DIV
- Condition: Light control switch is ON (HEAD) and engine running, when keep and bounce the vehicle

If the value is not within the standard range, some defect on the vehicle side is plausible. Inspect the fuse, wire harness and connector.