

Headlight System

LIGHTING SYSTEM

3. Headlight System

A: WIRING DIAGRAM

Refer to “Headlight System” in the wiring diagram. <Ref. to WI-196, WIRING DIAGRAM, Headlight System.>

B: INSPECTION

1. AUTO HEADLIGHT SYSTEM CHECK

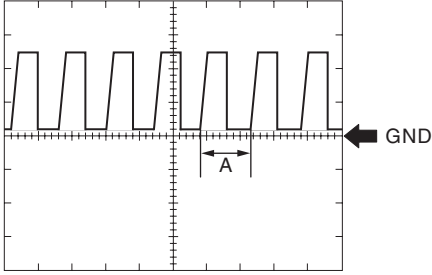
Preparation tool:

**Subaru Select Monitor III kit
Circuit tester**

	Step	Check	Yes	No
1	CHECK HEADLIGHT ILLUMINATION. Set the lighting switch to the switch 1 (TAIL) and switch 2 (HEAD).	Do the tail and headlight illuminate?	Go to step 2.	Check the combination switch (light) and headlight bulb.
2	CHECK INPUT SIGNAL. 1) Prepare the Subaru Select Monitor kit. 2) Turn the ignition switch to ON (engine OFF) and run the “PC application for Subaru Select Monitor”. 3) On «System Selection Menu» display, select {Integ. unit mode}. 4) Select the {Lighting AUTO input} from {Current Data Display & Save}.	Does the display switch between OFF ↔ ON when the lighting switch is moved to AUTO position?	Go to step 3.	Go to step 8.
3	CHECK INPUT SIGNAL. 1) From {Current Data Display & Save}, select {Illumination Sensor Output}. 2) Light up the darkness around light control sensor.	Is the value depending on the brightness output? (darkness: 47 — 53 Hz)	Check and replace the body integrated unit. • Inspection: <Ref. to BC(diag)-2, Basic Diagnostic Procedure.> • Replacement: <Ref. to SL-80, Body Integrated Unit.>	Go to step 4.
4	CHECK HARNESS. 1) Disconnect the body integrated unit connector and light control sensor connector. 2) Check the harness between body integrated unit connector and light control sensor connector. Connector & terminal (B280) No. 19 — (i194) No. 4: (B280) No. 29 — (i194) No. 6:	Is harness normal?	Go to step 5.	Repair or replace the harness.
5	CHECK HARNESS. 1) Turn the ignition switch to ON. 2) Measure the voltage between light control sensor connector and chassis ground. Connector & terminal (i194) No. 3 (+) — Chassis ground (-):	Is the voltage 10 V or more?	Go to step 6.	Repair or replace the harness.
6	CHECK BODY INTEGRATED UNIT. 1) Connect the body integrated unit connector. 2) Measure the resistance between body integrated unit connector and chassis ground. Connector & terminal (B280) No. 29 — Chassis ground:	Is the resistance less than 10 Ω?	Go to step 7.	Replace the body integrated unit. <Ref. to SL-80, Body Integrated Unit.>

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Step	Check	Yes	No
<p>7</p> <p>CHECK LIGHT CONTROL SENSOR.</p> <p>1) Connect the light control sensor connector. 2) Turn the ignition switch to ON. 3) Set the lighting switch to AUTO position. 4) Connect the Subaru Select Monitor, and read the waveform data between light control sensor connector.</p> <p>Connector & terminal (i194) No. 4 — No. 6:</p> 	<p>Is waveform normal? (Interval of A becomes shorter as the surrounding becomes brighter.)</p>	<p>Go to step 8.</p>	<p>Replace the light control sensor.</p>
<p>8</p> <p>CHECK COMBINATION SWITCH (LIGHT). Check the combination switch (light). <Ref. to LI-23, INSPECTION, Combination Switch (Light).></p>	<p>Is the combination switch (light) normal?</p>	<p>Go to step 9.</p>	<p>Replace the combination switch (light).</p>
<p>9</p> <p>CHECK HARNESS.</p> <p>1) Disconnect the body integrated unit connector. 2) Check the harness between body integrated unit connector and combination switch (light) connector.</p> <p>Connector & terminal (B71) No. 19 — (B281) No. 16:</p>	<p>Is harness normal?</p>	<p>Check and replace the body integrated unit.</p> <ul style="list-style-type: none"> • Inspection: <Ref. to BC(diag)-2, Basic Diagnostic Procedure.> • Replacement: <Ref. to SL-80, Body Integrated Unit.> 	<p>Repair or replace the harness.</p>

2. CHECK LIGHTING SWITCH

Measure the resistance between lighting switch terminals. <Ref. to LI-23, INSPECTION, Combination Switch (Light).>

3. CHECK DIMMER & PASSING SWITCH

Measure the resistance between dimmer & passing switch terminals. <Ref. to LI-23, INSPECTION, Combination Switch (Light).>

C: NOTE

For operation procedures of each component of the headlight system, refer to the respective section.

- Headlight Assembly: <Ref. to LI-27, Headlight Assembly.>
- Headlight bulb: <Ref. to LI-32, Headlight Bulb.>
- Combination switch (light): <Ref. to LI-19, Combination Switch (Light).>
- Light control sensor: <Ref. to LI-25, Light Control Sensor.>