

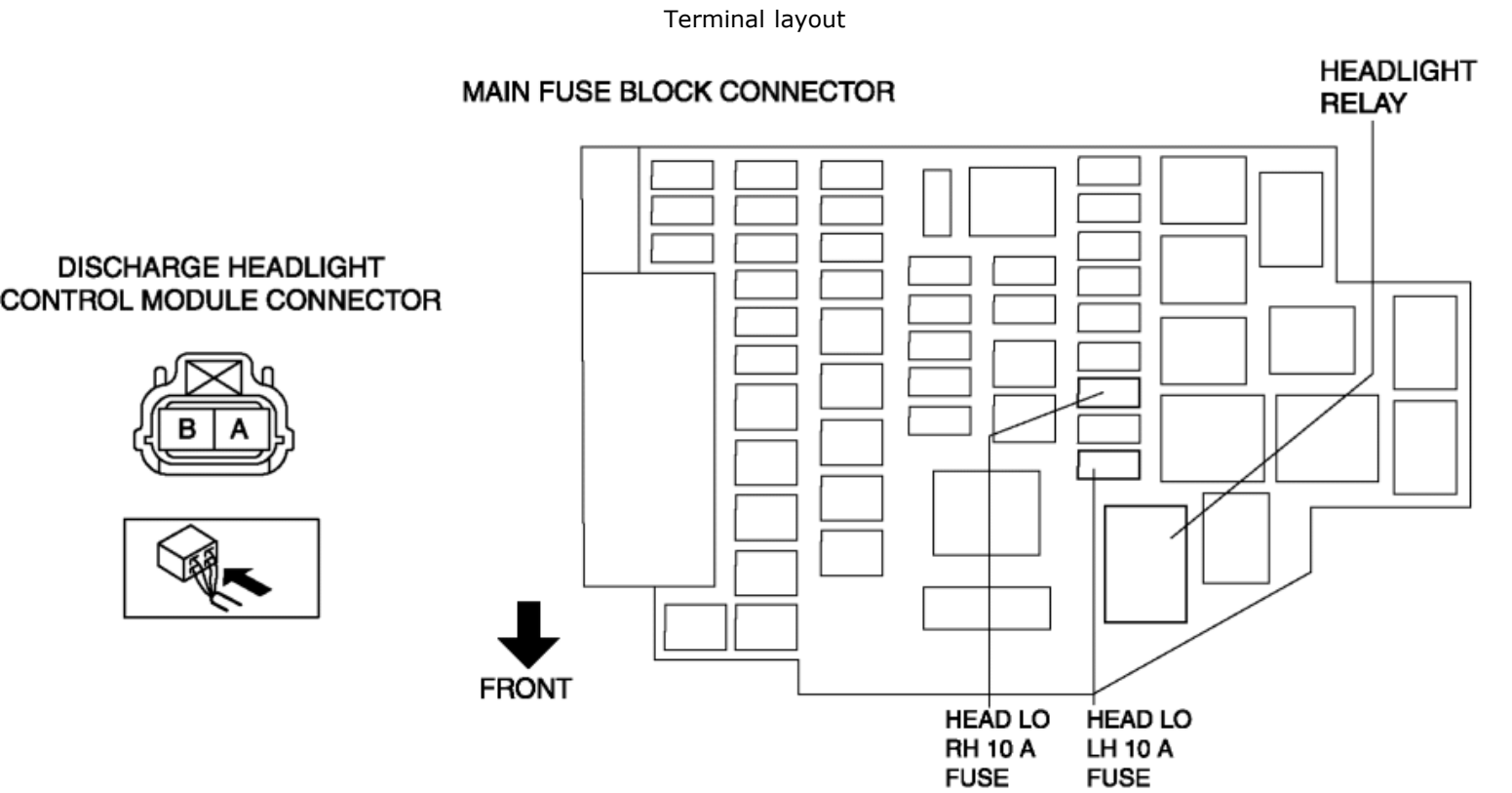
2012 - Mazda6 - Body and Accessories

DISCHARGE HEADLIGHT SYSTEM INSPECTION

Discharge headlight inoperative

WARNING:

- Incorrect servicing of the discharge headlights could result in electrical shock. Before servicing the discharge headlights, always refer to the discharge headlight service warnings. (See [DISCHARGE HEADLIGHT SERVICE WARNINGS](#).)



Inspection procedure

STEP	INSPECTION	ACTION
1	INSPECT POWER SUPPLY CIRCUIT OF DISCHARGE HEADLIGHT CONTROL MODULE • Disconnect the discharge headlight control module connector. • Turn the light switch to the HEAD (LO) position. • Measure the voltage at discharge headlight control module connector (harness-side) terminal A. • Is the voltage approx. 12 V?	YesGo to Step 6.
		NoGo to the next step.
2	INSPECT FUSE	YesGo to the next step.

	• Turn the light switch to the OFF position. • Remove the HEAD LO 10 A fuse or HEAD LO LH 10 A fuse. • Inspect the fuses. • Are the fuses normal?	No	Replace the fuse.
3	INSPECT HEADLIGHT RELAY • Remove the headlight relay. (See RELAY LOCATION.) • Inspect the headlight relay. (See RELAY INSPECTION.) • Is the headlight low relay normal?	Yes	Go to the next step.
		No	Replace the headlight relay. (See RELAY LOCATION.)
4	INSPECT LIGHT SWITCH • Inspect the light switch. (See LIGHT SWITCH INSPECTION.) • Is the light switch normal?	Yes	Go to the next step.
		No	Replace the light switch. (See LIGHT SWITCH REMOVAL/ INSTALLATION.)
5	INSPECT WIRING HARNESS BETWEEN BATTERY AND DISCHARGE HEADLIGHT CONTROL MODULE • Disconnect the negative battery cable. • Inspect for continuity between the following terminals: ▪ Positive battery—headlight relay terminal D ▪ HEAD LO RH 10 A fuse—discharge headlight control module terminal A ▪ HEAD LO LH 10 A fuse—discharge headlight control module terminal A • Are the wiring harnesses normal?	Yes	Go to the next step.
		No	Replace the related wiring harness.
6	INSPECT WIRING HARNESS BETWEEN DISCHARGE HEADLIGHT CONTROL MODULE AND GROUND • Inspect wiring harness between discharge headlight control module terminal B and ground for following: ▪ Short to power supply ▪ Open circuit • Is the wiring harness normal?	Yes	Go to the next step.
		No	Replace the related wiring harness.
7	VERIFY WHETHER MALFUNCTION IS IN DISCHARGE HEADLIGHT OR DISCHARGE HEADLIGHT CONTROL MODULE • Install any other discharge headlight. (See HEADLIGHT BULB REMOVAL/ INSTALLATION.) • Connect the discharge headlight control module connector. • Turn the light switch to the HEAD (LO) position. • Does the headlight (low-beam) illuminate?	Yes	Replace the discharge headlight. (See HEADLIGHT BULB REMOVAL/ INSTALLATION.)
		No	Replace the discharge headlight control module. (See DISCHARGE HEADLIGHT CONTROL MODULE REMOVAL/ INSTALLATION.)

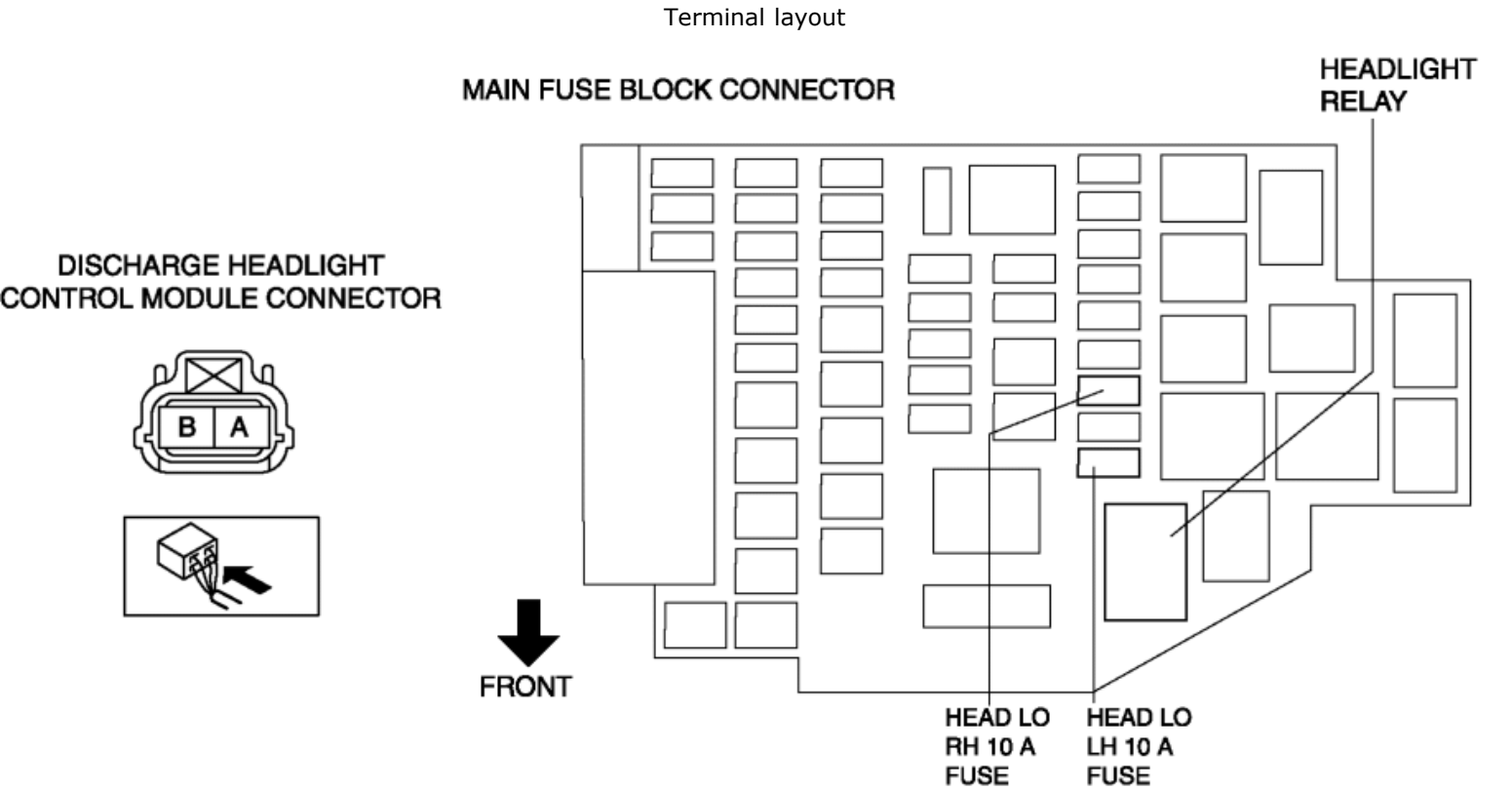
2012 - Mazda6 - Body and Accessories

DISCHARGE HEADLIGHT SYSTEM INSPECTION

Discharge headlight inoperative

WARNING:

- Incorrect servicing of the discharge headlights could result in electrical shock. Before servicing the discharge headlights, always refer to the discharge headlight service warnings. (See [DISCHARGE HEADLIGHT SERVICE WARNINGS](#).)



Inspection procedure

STEP	INSPECTION	ACTION
1	INSPECT POWER SUPPLY CIRCUIT OF DISCHARGE HEADLIGHT CONTROL MODULE • Disconnect the discharge headlight control module connector. • Turn the light switch to the HEAD (LO) position. • Measure the voltage at discharge headlight control module connector (harness-side) terminal A. • Is the voltage approx. 12 V?	YesGo to Step 6.
		NoGo to the next step.
2	INSPECT FUSE	YesGo to the next step.

	• Turn the light switch to the OFF position. • Remove the HEAD LO 10 A fuse or HEAD LO LH 10 A fuse. • Inspect the fuses. • Are the fuses normal?	No	Replace the fuse.
3	INSPECT HEADLIGHT RELAY • Remove the headlight relay. (See RELAY LOCATION.) • Inspect the headlight relay. (See RELAY INSPECTION.) • Is the headlight low relay normal?	Yes	Go to the next step.
		No	Replace the headlight relay. (See RELAY LOCATION.)
4	INSPECT LIGHT SWITCH • Inspect the light switch. (See LIGHT SWITCH INSPECTION.) • Is the light switch normal?	Yes	Go to the next step.
		No	Replace the light switch. (See LIGHT SWITCH REMOVAL/ INSTALLATION.)
5	INSPECT WIRING HARNESS BETWEEN BATTERY AND DISCHARGE HEADLIGHT CONTROL MODULE • Disconnect the negative battery cable. • Inspect for continuity between the following terminals: ▪ Positive battery—headlight relay terminal D ▪ HEAD LO RH 10 A fuse—discharge headlight control module terminal A ▪ HEAD LO LH 10 A fuse—discharge headlight control module terminal A • Are the wiring harnesses normal?	Yes	Go to the next step.
		No	Replace the related wiring harness.
6	INSPECT WIRING HARNESS BETWEEN DISCHARGE HEADLIGHT CONTROL MODULE AND GROUND • Inspect wiring harness between discharge headlight control module terminal B and ground for following: ▪ Short to power supply ▪ Open circuit • Is the wiring harness normal?	Yes	Go to the next step.
		No	Replace the related wiring harness.
7	VERIFY WHETHER MALFUNCTION IS IN DISCHARGE HEADLIGHT OR DISCHARGE HEADLIGHT CONTROL MODULE • Install any other discharge headlight. (See HEADLIGHT BULB REMOVAL/ INSTALLATION.) • Connect the discharge headlight control module connector. • Turn the light switch to the HEAD (LO) position. • Does the headlight (low-beam) illuminate?	Yes	Replace the discharge headlight. (See HEADLIGHT BULB REMOVAL/ INSTALLATION.)
		No	Replace the discharge headlight control module. (See DISCHARGE HEADLIGHT CONTROL MODULE REMOVAL/ INSTALLATION.)

