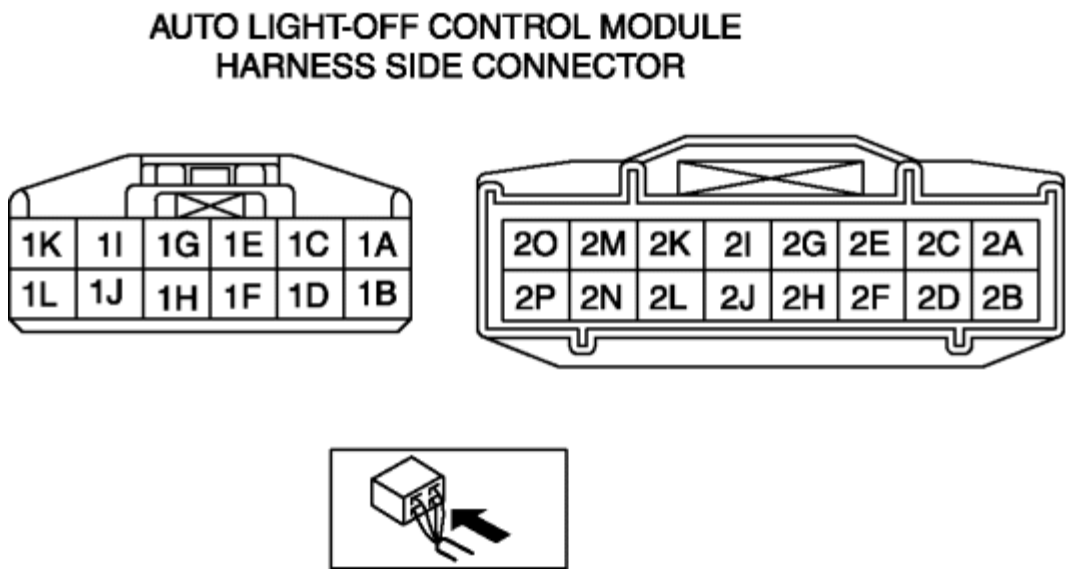


2012 - Mazda6 - Body and Accessories

AUTO LIGHT-OFF CONTROL MODULE INSPECTION

1. Measure the voltage at the auto light-off control module terminals as indicated below.

Terminal Voltage List (Reference)



Terminal	Signal	Connection	Test condition		Voltage (V)	Action
1A*1	Headlight high (RH) operation	Headlight high (RH)	Switch the ignition to ON	Light switch at HEAD position and dimmer switch at the HI position	B+	• RH headlight • Related wiring harnesses
				Light switch at HEAD position and dimmer switch at the LO position	1.0 or less	
				DRL mode	Approx 6.0	

1B*1	Headlight high (LH) operation	Headlight high (LH)	Switch the ignition to ON	Light switch at HEAD position and dimmer switch at the HI position	B+	- LH headlight - Related wiring harnesses
				Light switch at HEAD position and dimmer switch at the LO position	1.0 or less	
				DRL mode	Approx 6.0	
1C	—	—	—	—	—	—
1D	—	—	—	—	—	—
1E	—	—	—	—	—	—
1F	—	—	—	—	—	—
1G*1	GND	GND	Under any condition		1.0 or less	Related wiring harnesses
1H	—	—	—	—	—	—
1I*1	Power supply	DRL 20 A fuse	Under any condition		B+	- DRL 20 A fuse - Related wiring harnesses
1J	—	—	—	—	—	—
1K*1	Headlight high operation	Headlight high	Switch the ignition to ON	DRL mode	B+	- LH headlight - Related wiring harnesses
				Other	1.0 or less	
				Light switch at HEAD position and	1.0 or	

1L	Headlight high on/off	Light switch	Switch the ignition to ON	dimmer switch at the HI position	less	Light switch (See LIGHT SWITCH INSPECTION .) • Related wiring harnesses
				Light switch at HEAD position and dimmer switch at the LO position	B+	
2A	—	—	—	—	—	—
2B	Sensitivity adjustment volume	Windshield wiper and washer switch	Switch the ignition to ON	Sensitivity adjustment volume turned from + position to - position	0 → 0.8 → 1.4 → 1.8 → 2.2	• Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION .) • Related wiring harnesses
2C	IG1	METER IG 15 A fuse	Switch the ignition to ON		B+	• METER IG 15 A fuse • Related wiring harnesses
			Switch the ignition from off or ACC.		1.0 or less	
2D	Power supply	ROOM 15 A fuse	Under any condition		B+	• ROOM 15 A fuse • Related wiring harnesses
2E	—	—	—	—	—	—
2F	DLC-2 power supply	DLC-2	Under any condition		B+	• Related wiring harnesses
2G	TNS relay operation	TNS relay	Light switch at TNS or HEAD position		1.0 or less	• TNS relay (See RELAY INSPECTION .) • Related wiring
			Light switch at OFF		B+	

						harnesses
2H	—	—	—	—	—	—
2I	Front fog light relay operation	Front fog light relay	Light switch at the headlight position and dimmer switch at LO	Front fog light switch at ON position	1.0 or less	• Front fog light relay (See RELAY INSPECTION.) • Related wiring harnesses
				Front fog light switch at OFF position	B+	
2J	Front fog switch on/off	Front fog Light switch	Light switch at the headlight position and dimmer switch at LO	Front fog light switch at ON position	1.0 or less	• Light switch (See FRONT FOG LIGHT SWITCH INSPECTION.) • Related wiring harnesses
				Front fog light switch at OFF position	B+	
2K	Headlight relay operation	Headlight relay	Light switch at HEAD position		1.0 or less	• Headlight relay (See RELAY INSPECTION.) • Related wiring harnesses
			Light switch at OFF or TNS position		B+	
2L	—	—	—	—	—	—
2M	TNS switch on/off	Light switch	Switch the ignition to ON	Light switch at TNS or HEAD position	1.0 or less	• Light switch (See LIGHT SWITCH INSPECTION.) • Related wiring harnesses
				Light switch at OFF position	B+	
2N	Light switch on/off	Light switch	Switch the ignition to ON	Light switch at HEAD position	1.0 or less	• Light switch (See LIGHT SWITCH INSPECTION.) • Related wiring
				Light switch at OFF or	B+	

				TNS position		harnesses
20	GND	GND	Under any condition		1.0 or less	Related wiring harnesses
2P*1	Parking brake switch on/off	- BCM - Parking brake switch	Switch the ignition to ON	Parking brake switch on	1.0 or less	- BCM (See BODY CONTROL MODULE (BCM) INSPECTION .) - Parking brake switch - Related wiring harnesses
				Parking brake switch OFF	B+	

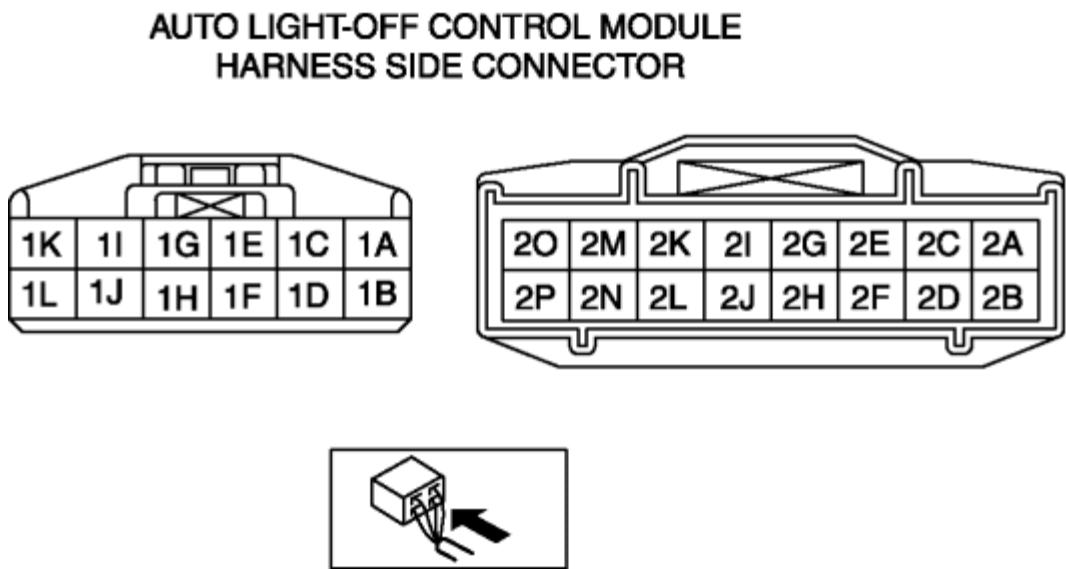
*1
With DRL only.

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Terminal Voltage List (Reference)



Terminal	Signal	Connection	Test condition		Voltage (V)	Action
1A*1	Headlight high (RH) operation	Headlight high (RH)	Switch the ignition to ON	Light switch at HEAD position and dimmer switch at the HI position	B+	• RH headlight • Related wiring harnesses
				Light switch at HEAD position and dimmer switch at the LO position	1.0 or less	
				DRL mode	Approx 6.0	

1B*1	Headlight high (LH) operation	Headlight high (LH)	Switch the ignition to ON	Light switch at HEAD position and dimmer switch at the HI position	B+	- LH headlight - Related wiring harnesses
				Light switch at HEAD position and dimmer switch at the LO position	1.0 or less	
				DRL mode	Approx 6.0	
1C	—	—	—	—	—	—
1D	—	—	—	—	—	—
1E	—	—	—	—	—	—
1F	—	—	—	—	—	—
1G*1	GND	GND	Under any condition		1.0 or less	Related wiring harnesses
1H	—	—	—	—	—	—
1I*1	Power supply	DRL 20 A fuse	Under any condition		B+	- DRL 20 A fuse - Related wiring harnesses
1J	—	—	—	—	—	—
1K*1	Headlight high operation	Headlight high	Switch the ignition to ON	DRL mode	B+	- LH headlight - Related wiring harnesses
				Other	1.0 or less	
				Light switch at HEAD position and	1.0 or	

1L	Headlight high on/off	Light switch	Switch the ignition to ON	dimmer switch at the HI position	less	Light switch (See LIGHT SWITCH INSPECTION .) • Related wiring harnesses
				Light switch at HEAD position and dimmer switch at the LO position	B+	
2A	—	—	—	—	—	—
2B	Sensitivity adjustment volume	Windshield wiper and washer switch	Switch the ignition to ON	Sensitivity adjustment volume turned from + position to - position	0 → 0.8 → 1.4 → 1.8 → 2.2	• Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION .) • Related wiring harnesses
2C	IG1	METER IG 15 A fuse	Switch the ignition to ON		B+	• METER IG 15 A fuse • Related wiring harnesses
			Switch the ignition from off or ACC.		1.0 or less	
2D	Power supply	ROOM 15 A fuse	Under any condition		B+	• ROOM 15 A fuse • Related wiring harnesses
2E	—	—	—	—	—	—
2F	DLC-2 power supply	DLC-2	Under any condition		B+	• Related wiring harnesses
2G	TNS relay operation	TNS relay	Light switch at TNS or HEAD position		1.0 or less	• TNS relay (See RELAY INSPECTION .) • Related wiring
			Light switch at OFF		B+	

						harnesses
2H	—	—	—	—	—	—
2I	Front fog light relay operation	Front fog light relay	Light switch at the headlight position and dimmer switch at LO	Front fog light switch at ON position	1.0 or less	• Front fog light relay (See RELAY INSPECTION.) • Related wiring harnesses
				Front fog light switch at OFF position	B+	
2J	Front fog switch on/off	Front fog Light switch	Light switch at the headlight position and dimmer switch at LO	Front fog light switch at ON position	1.0 or less	• Light switch (See FRONT FOG LIGHT SWITCH INSPECTION.) • Related wiring harnesses
				Front fog light switch at OFF position	B+	
2K	Headlight relay operation	Headlight relay	Light switch at HEAD position		1.0 or less	• Headlight relay (See RELAY INSPECTION.) • Related wiring harnesses
			Light switch at OFF or TNS position		B+	
2L	—	—	—	—	—	—
2M	TNS switch on/off	Light switch	Switch the ignition to ON	Light switch at TNS or HEAD position	1.0 or less	• Light switch (See LIGHT SWITCH INSPECTION.) • Related wiring harnesses
				Light switch at OFF position	B+	
2N	Light switch on/off	Light switch	Switch the ignition to ON	Light switch at HEAD position	1.0 or less	• Light switch (See LIGHT SWITCH INSPECTION.) • Related wiring
				Light switch at OFF or	B+	

				TNS position		harnesses
20	GND	GND	Under any condition		1.0 or less	Related wiring harnesses
2P*1	Parking brake switch on/off	- BCM - Parking brake switch	Switch the ignition to ON	Parking brake switch on	1.0 or less	- BCM (See BODY CONTROL MODULE (BCM) INSPECTION .) - Parking brake switch - Related wiring harnesses
				Parking brake switch OFF	B+	

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