

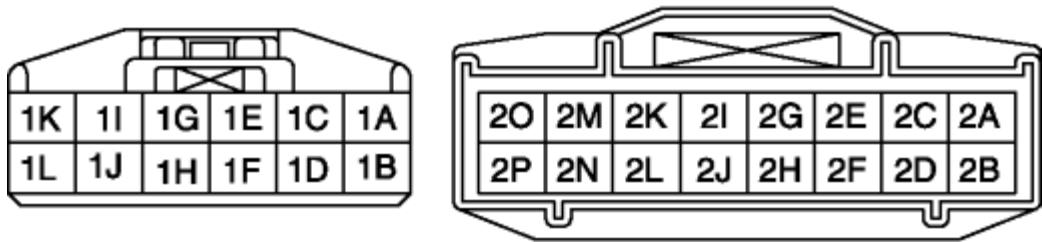
2012 - Mazda6 - Body and Accessories

AUTO LIGHT/ WIPER CONTROL MODULE INSPECTION

1. Measure the voltage at the auto light/wiper control module terminals as indicated below.

Terminal Voltage List (Reference)

AUTO LIGHT/WIPER CONTROL MODULE
HARNESS SIDE CONNECTOR



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	Autostop switch signal	Autostop switch	Switch the ignition to ON	Windshield wiper switch at LO position	Alternates between 1.0 or less and B+	- Autostop switch (Windshield wiper motor) (See WINDSHIELD WIPER MOTOR INSPECTION.) - Related wiring harnesses
				Windshield wiper switch at OFF position	1.0 or less	
1D	Windshield wiper switch signal (OFF)	Windshield wiper and washer switch	Switch the ignition to ON	Windshield wiper switch at LO position	Alternates between 1.0 or less and B+	- Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION.) - Related wiring harnesses
				Windshield wiper switch at OFF position	1.0 or less	
1E	IG2	WIPER 25 A fuse	Switch the ignition to ON		B+	- WIPER 25 A fuse - Related

			Switch the ignition from off or ACC.		1.0 or less	wiring harnesses
1F	Windshield wiper switch signal (HI)	Windshield wiper and washer switch	Switch the ignition to ON	Windshield wiper switch at HI position	B+	- Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION.) - Related wiring harnesses
				Windshield wiper switch at OFF position	1.0 or less	
1G*1	GND	GND	Under any condition		1.0 or less	Related wiring harnesses
1H	Windshield wiper switch signal (AUTO)	Windshield wiper and washer switch	Switch the ignition to ON	Windshield wiper switch at AUTO position	B+	- Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION.) - Related wiring harnesses
				Windshield wiper switch at OFF position	1.0 or less	
1I*1	Power supply	DRL 20 A fuse	Under any condition		B+	- DRL 20 A fuse - Related wiring harnesses
1J	Washer switch signal	Windshield wiper and washer switch	Switch the ignition to ON	Washer switch at ON position	B+	- Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION.) - Related wiring harnesses
				Washer switch at OFF position	1.0 or less	

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	
1L	Headlight high on/off	Light switch	Switch the ignition to ON	Light switch at HEAD position and dimmer switch at the HI position	1.0 or less	- Light switch (See LIGHT SWITCH INSPECTION.) - Related wiring harnesses
				Light switch at HEAD position and dimmer switch at the LO position	B+	
2A	Vehicle speed signal input	Instrument cluster	Because this terminal is for communication, good/no good judgment by terminal voltage is not possible.		—	- Instrument cluster (See INSTRUMENT CLUSTER INSPECTION.) - Related wiring harnesses
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	Wiper or headlight operation request	Rain sensor	Because this terminal is for communication, good/no good judgment by terminal voltage is not possible.		—	- Rain sensor - Related wiring harnesses
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 harnesses
			Light switch at OFF		B+	
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	Headlight relay	Light switch at HEAD position		1.0 or less	Headlight relay (See RELAY INSPECTION.)

	operation		Light switch at OFF or TNS position		B+	Related wiring harnesses
2L	Light switch signal	Light switch	Switch the ignition to ON	Light switch at AUTO position	1.0 or less	- Light switch (See LIGHT SWITCH INSPECTION.) - Related wiring harnesses
				Other	B+	
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 harnesses
				Light switch at OFF or TNS position	B+	
2O	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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With DRL only.

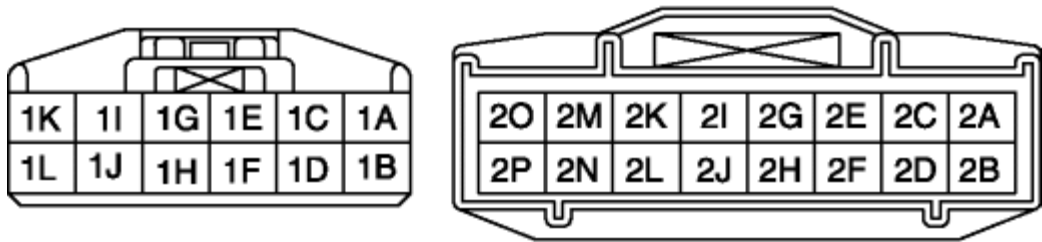
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HARNESS SIDE CONNECTOR



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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	Autostop switch signal	Autostop switch	Switch the ignition to ON	Windshield wiper switch at LO position	Alternates between 1.0 or less and B+	- Autostop switch (Windshield wiper motor) (See WINDSHIELD WIPER MOTOR INSPECTION.) - Related wiring harnesses
				Windshield wiper switch at OFF position	1.0 or less	
1D	Windshield wiper switch signal (OFF)	Windshield wiper and washer switch	Switch the ignition to ON	Windshield wiper switch at LO position	Alternates between 1.0 or less and B+	- Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION.) - Related wiring harnesses
				Windshield wiper switch at OFF position	1.0 or less	
1E	IG2	WIPER 25 A fuse	Switch the ignition to ON		B+	- WIPER 25 A fuse - Related

			Switch the ignition from off or ACC.		1.0 or less	wiring harnesses
1F	Windshield wiper switch signal (HI)	Windshield wiper and washer switch	Switch the ignition to ON	Windshield wiper switch at HI position	B+	- Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION.) - Related wiring harnesses
				Windshield wiper switch at OFF position	1.0 or less	
1G*1	GND	GND	Under any condition		1.0 or less	Related wiring harnesses
1H	Windshield wiper switch signal (AUTO)	Windshield wiper and washer switch	Switch the ignition to ON	Windshield wiper switch at AUTO position	B+	- Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION.) - Related wiring harnesses
				Windshield wiper switch at OFF position	1.0 or less	
1I*1	Power supply	DRL 20 A fuse	Under any condition		B+	- DRL 20 A fuse - Related wiring harnesses
1J	Washer switch signal	Windshield wiper and washer switch	Switch the ignition to ON	Washer switch at ON position	B+	- Windshield wiper and washer switch (See WINDSHIELD WIPER AND WASHER SWITCH INSPECTION.) - Related wiring harnesses
				Washer switch at OFF position	1.0 or less	

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	
1L	Headlight high on/off	Light switch	Switch the ignition to ON	Light switch at HEAD position and dimmer switch at the HI position	1.0 or less	- Light switch (See LIGHT SWITCH INSPECTION.) - Related wiring harnesses
				Light switch at HEAD position and dimmer switch at the LO position	B+	
2A	Vehicle speed signal input	Instrument cluster	Because this terminal is for communication, good/no good judgment by terminal voltage is not possible.		—	- Instrument cluster (See INSTRUMENT CLUSTER INSPECTION.) - Related wiring harnesses
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	Wiper or headlight operation request	Rain sensor	Because this terminal is for communication, good/no good judgment by terminal voltage is not possible.		—	- Rain sensor - Related wiring harnesses
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 harnesses
			Light switch at OFF		B+	
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	Headlight relay	Light switch at HEAD position		1.0 or less	Headlight relay (See RELAY INSPECTION.)

	operation		Light switch at OFF or TNS position		B+	Related wiring harnesses
2L	Light switch signal	Light switch	Switch the ignition to ON	Light switch at AUTO position	1.0 or less	- Light switch (See LIGHT SWITCH INSPECTION.) - Related wiring harnesses
				Other	B+	
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 harnesses
				Light switch at OFF or TNS position	B+	
2O	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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