

2012 - Mazda6 - Transmission/ Transaxle

TCM INSPECTION [AY6A-EL]

CAUTION:

- Water or foreign objects entering the connector can cause a poor connection or corrosion. Be sure not to drop water or foreign objects on the connector when disconnecting it.
- Do not damage the terminals.

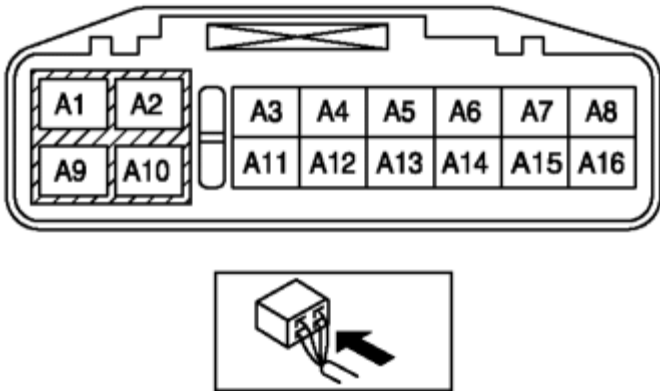
NOTE:

- Use the ground of terminal A9 of the TCM connector (wiring harness-side) when measuring terminal voltage, as an error may occur when connecting the negative circuit tester to ground.
- For the inspection on the coupler component side of the TCM, refer to the coupler component inspection. (See [COUPLER COMPONENT INSPECTION \[AY6A-EL\]](#) .)

1. Remove the fresh-air duct and air cleaner component as a single unit. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#) .)
2. Connect the voltmeter (-) lead to body GND.
3. Measure the voltage at each terminal.
 - If any incorrect voltage is detected, inspect the related system(s), wiring harnesses and connector(s) referring to the "Inspection Item" column in the "TCM Terminal Voltage".

Terminal Voltage Table (Reference)

TCM HARNESS SIDE CONNECTOR



Terminal	Connected to	Test condition	Voltage (V)	Inspection item (s)
A1	Battery	Under any condition	B+	- Battery (See BATTERY INSPECTION [MZI 3.7 V6] .) - Related harness
A2	—	—	—	—
A3	Up switch	Selector lever up-shift position	Below 1.0	- Up switch (See UP SWITCH INSPECTION [AY6A-EL] .) - Related harness
		Except selector lever up-shift position	B+	
A4	Down switch	Selector lever down-shift position	Below 1.0	- Down switch (See DOWN SWITCH INSPECTION [AY6A-EL] .) - Related harness
		Except selector lever down-shift position	B+	
A5	Starter relay No.2	Ignition switch ON	B+	- Starter relay No.2 - Related harness
		Ignition switch off	Below 1.0	
A6	CAN_L	Because this terminal is for CAN, no valid determination of terminal voltage is possible.		
A7	M position switch	M position	Below 1.0	- M position switch (See M POSITION SWITCH INSPECTION [AY6A-EL] .) - Related harness
		Except M position	B+	
A8	—	—	—	—
A9	GND	Under any condition	Continuity	Related harness
A10	—	—	—	—
A11	Ignition switch	Ignition switch ON	B+	Related harness
		Ignition switch off	Below 1.0	

A12	—	—	—	—
A13	Back-up light relay	Selector lever R position	B+	• Back-up light relay (See RELAY INSPECTION .) • Related harness
		Except selector lever R position	Below 1.0	
A14	CAN_H	Because this terminal is for CAN, no valid determination of terminal voltage is possible.		
A15	—	—	—	—
A16	—	—	—	—

[< Previous](#) [Next >](#)

[Back to Top](#)

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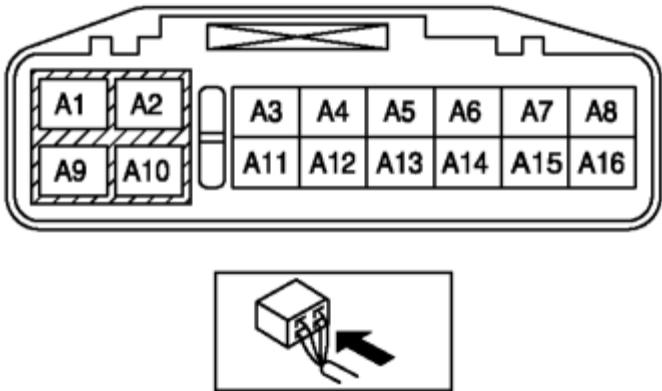
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[< Previous](#) [Next >](#)

[Back to Top](#)

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