

2012 - Mazda6 - Body and Accessories

No.2 THE DRIVER'S SIDE POWER WINDOW IS INOPERATIVE [POWER WINDOW SYSTEMS (WITHOUT EXTERIOR OPEN FUNCTION)]

2	The driver's side power window is inoperative.
POSSIBLE CAUSE	- Power supply circuit or ground circuit malfunction - Burnt fuse (B+) - Open or short circuit in wiring harness between fuse (B+) and power window main switch - Open or short circuit in wiring harness between power window main switch and power window motor - Open or short circuit in wiring harness between power window main switch and ground - Power window main switch malfunction - Power window motor malfunction - Power window regulator malfunction

Diagnostic procedure

STEP	INSPECTION	ACTION
1	• Turn the ignition switch to the ON position.	Yes Go to Step 6.
	• Does the LED on the power window main switch illuminate?	No Go to the next step.
2	• Operate all power windows other than the driver's side window using the power window main switch.	Yes Go to the next step.
	• Does the power window operate properly?	No Inspect for an open or short circuit in the following wiring harnesses. Inspect the connector connections (damage/pulled-out pins, corrosion): P.WIND 15 A fuse—Power window main switch terminal 1A(14-pin)

			Power window main switch terminal 1N(14-pin)—ground. Repair or replace if necessary.
3	Is the P.WIND 40 A fuse normal?	Yes	Go to Step 5.
		No	Inspect the following: - Short circuit in B+ power supply wiring harness - Short circuit in power window motor Repair or replace if necessary. Replace with the appropriate standard fuse. Then, go to the next step.
4	- Initialize the power window system. - Operate the power window system. - Do the power windows operate properly?	Yes	Troubleshooting is completed.
		No	Re-confirm the symptom and go to Step 1.
5	- Measure the voltage at the power window main switch terminal 1M(14-pin). - Is the voltage B+?	Yes	Replace the power window main switch. (See POWER WINDOW MAIN SWITCH REMOVAL/ INSTALLATION.)
		No	Inspect for an open or short circuit in the power window main switch wiring harness (battery power supply). Inspect the power window main switch connector connection. (damage/pulled-out pins, corrosion) Repair or replace if necessary.
6	- Measure the voltage at the power window main switch. (power window motor output terminal) while operating the power window using the power window main switch. - Is the voltage B+? (Open: terminal 1C (14-pin)/ close: terminal 1E (14-pin))	Yes	Go to the next step.
		No	Replace the power window main switch. (See POWER WINDOW MAIN SWITCH REMOVAL/ INSTALLATION.)
7	Measure the voltage at the power	Yes	Go to the next step.

	window motor. (battery power supply terminal) while operating the power window using the power window motor. Is the voltage B+? (Open: terminal F(6-pin)/ close: terminal E(6-pin))		No Inspect for an open or short circuit in the wiring harness between the power window main switch and the power window motor. Inspect the power window main switch and power window motor connector connections. (damage/pulled-out pins, corrosion) Repair or replace if necessary.
8	- Operate the driver's side power window using the power window main switch. - Does the power window motor operate (rotate)? CAUTION: - If the power window motor temperature is high, the motor may not rotate due to the motor internal bimetal function. Leave it untouched for about 3 min to cool it down, then reinspect.	Yes	Go to the next step.
		No	Replace the power window motor. (See POWER WINDOW MOTOR REMOVAL/ INSTALLATION.)
9	- Remove the door glass from the carrier plate. - Make sure that the door glass moves smoothly using your hand. - Does the door glass move smoothly?	Yes	Replace the power window regulator. (See FRONT POWER WINDOW REGULATOR REMOVAL/ INSTALLATION.)(See REAR POWER WINDOW REGULATOR REMOVAL/ INSTALLATION.)
		No	Inspect for a bent regulator guide or other possible malfunction. If normal, replace the door glass run-channel.

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POSSIBLE CAUSE	- Power supply circuit or ground circuit malfunction - Burnt fuse (B+) - Open or short circuit in wiring harness between fuse (B+) and power window main switch - Open or short circuit in wiring harness between power window main switch and power window motor - Open or short circuit in wiring harness between power window main switch and ground - Power window main switch malfunction - Power window motor malfunction - Power window regulator malfunction

Diagnostic procedure

STEP	INSPECTION	ACTION
1	• Turn the ignition switch to the ON position.	Yes Go to Step 6.
	• Does the LED on the power window main switch illuminate?	No Go to the next step.
2	• Operate all power windows other than the driver's side window using the power window main switch.	Yes Go to the next step.
	• Does the power window operate properly?	No Inspect for an open or short circuit in the following wiring harnesses. Inspect the connector connections (damage/pulled-out pins, corrosion): P.WIND 15 A fuse—Power window main switch terminal 1A(14-pin)

			Power window main switch terminal 1N(14-pin)—ground. Repair or replace if necessary.
3	Is the P.WIND 40 A fuse normal?	Yes	Go to Step 5.
		No	Inspect the following: - Short circuit in B+ power supply wiring harness - Short circuit in power window motor Repair or replace if necessary. Replace with the appropriate standard fuse. Then, go to the next step.
4	- Initialize the power window system. - Operate the power window system. - Do the power windows operate properly?	Yes	Troubleshooting is completed.
		No	Re-confirm the symptom and go to Step 1.
5	- Measure the voltage at the power window main switch terminal 1M(14-pin). - Is the voltage B+?	Yes	Replace the power window main switch. (See POWER WINDOW MAIN SWITCH REMOVAL/ INSTALLATION.)
		No	Inspect for an open or short circuit in the power window main switch wiring harness (battery power supply). Inspect the power window main switch connector connection. (damage/pulled-out pins, corrosion) Repair or replace if necessary.
6	- Measure the voltage at the power window main switch. (power window motor output terminal) while operating the power window using the power window main switch. - Is the voltage B+? (Open: terminal 1C (14-pin)/ close: terminal 1E (14-pin))	Yes	Go to the next step.
		No	Replace the power window main switch. (See POWER WINDOW MAIN SWITCH REMOVAL/ INSTALLATION.)
7	Measure the voltage at the power	Yes	Go to the next step.

	window motor. (battery power supply terminal) while operating the power window using the power window motor. Is the voltage B+? (Open: terminal F(6-pin)/ close: terminal E(6-pin))	No	Inspect for an open or short circuit in the wiring harness between the power window main switch and the power window motor. Inspect the power window main switch and power window motor connector connections. (damage/pulled-out pins, corrosion) Repair or replace if necessary.
8	- Operate the driver's side power window using the power window main switch. - Does the power window motor operate (rotate)? CAUTION: - If the power window motor temperature is high, the motor may not rotate due to the motor internal bimetal function. Leave it untouched for about 3 min to cool it down, then reinspect.	Yes	Go to the next step.
		No	Replace the power window motor. (See POWER WINDOW MOTOR REMOVAL/ INSTALLATION.)
9	- Remove the door glass from the carrier plate. - Make sure that the door glass moves smoothly using your hand. - Does the door glass move smoothly?	Yes	Replace the power window regulator. (See FRONT POWER WINDOW REGULATOR REMOVAL/ INSTALLATION.)(See REAR POWER WINDOW REGULATOR REMOVAL/ INSTALLATION.)
		No	Inspect for a bent regulator guide or other possible malfunction. If normal, replace the door glass run-channel.