

2012 - Mazda6 - Body and Accessories

BASIC POWER WINDOW SYSTEM INSPECTION [POWER WINDOW SYSTEMS (AUTO-OPEN/ CLOSE FUNCTION)]

Manual Mode Function Inspection

STEP	INSPECTION		ACTION
1	- Switch the ignition to ON. - Turn the power-cut switch to UNLOCK. - Does each door glass move up and down in manual mode using the power window subswitch?	Yes	Go to the next step.
		No	- Inspect the following items: - Power window main switch (power-cut switch system malfunction) - Power window subswitch power supply fuses (at BCM) - Power window subswitch ground wiring harness - Power window subswitch power supply wiring harnesses - Wiring harness between power window subswitch and power window motor - Power window subswitch - Power window motor - Repair or replace the malfunctioning part, then go to the next step.

2	Does the driver-side door glass move up and down in manual mode using the power window main switch?	Yes	Go to the next step.
		No	- Inspect the following items: - Power window main switch power supply fuses (at BCM) - Power window main switch ground wiring harness - Power window main switch power supply wiring harnesses - Wiring harness between power window main switch and power window motor - Power window main switch - Repair or replace the malfunctioning part, then go to the next step.
3	Does each other door glass other than the driver-side door glass move up and down in manual mode using the power window main switch?	Yes	Go to the next step.
		No	- Perform the power window initialization procedure for any door glass that does not move up and down, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.) - If it does not move up and down upon reinspection, inspect the following: - Wiring harness between power window main switch and subswitch - Repair or replace the malfunctioning part, then go to the next step.
4	- Turn the power-cut switch to LOCK. - Push/pull the power window main switch (switches for all windows in manual mode).	Yes	- Manual mode function is normal. - Go to the automatic mode function inspection.
		No	Replace the power window main switch, then go to the automatic mode function inspection (power-cut

	Does only driver-side front door glass move up and down?		switch system malfunction).
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Automatic Mode Function Inspection

NOTE:

- Perform the following inspection for the power window main switch and the power window subswitches for each window.

STEP	INSPECTION	ACTION	
1	- Switch the ignition to ON. - Operate the each power window switch in automatic mode. - Does the each door glass move up and down in automatic mode?	Yes	Go to the next step.
		No	- Door glass does not move up and down in automatic mode: - Go to Step 1 of NO. 1 DOOR GLASS DOES NOT MOVE UP AND DOWN IN AUTOMATIC MODE. - Door glass moves up and down in automatic mode, but door glass reverses: - Go to Step 1 of NO. 3 DOOR GLASS REVERSES EVEN THOUGH THE GLASS DOES NOT ENCOUNTER A FOREIGN OBJECT WHILE IT IS MOVING UP IN AUTOMATIC MODE.
2	- Gently pull the each power window switch while the door glass is moving down in automatic mode. - Does the glass stop?	Yes	Go to the next step.
		No	Replace the suspected power window switch, then go to the automatic door glass return function inspection.
3	Gently press the each power window switch while the door glass is moving up in automatic mode.	Yes	- Automatic mode function is normal. - Go to the automatic door glass return function inspection.

	Does the glass stop?	No	Replace the suspected power window switch, then go to the automatic door glass return function inspection.
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Automatic Door Glass Return Function Inspection

NOTE:

- Perform the following inspection for the power window main switch and the power window subswitches for each window.
- With the switch held at auto-up, the door glass does not automatically reverse even when a foreign object is encountered.

STEP	INSPECTION	ACTION	
1	- Switch the ignition to ON. - Lower the door glass completely. - Use the power window switch to close the door glass in automatic mode. - Does the door glass automatically reverse even though the glass does not encounter a foreign object while it is moving up in automatic mode?	Yes	Go to Step 1 of NO. 3 DOOR GLASS REVERSES EVEN THOUGH THE GLASS DOES NOT ENCOUNTER A FOREIGN OBJECT WHILE IT IS MOVING UP IN AUTOMATIC MODE.
		No	Go to the next step.
2	- Lower the door glass completely. - Take a hammer and hold it against the inside of the top of the window frame so that the door glass will hit its handle when it is closed. - Raise the door glass using automatic mode. - When the door glass hits the hammer handle, does it immediately reverse and move down to approx.200 mm { 7.87 in } from the completely closed position?	Yes	- Automatic door glass return function inspection is normal. - Go to the IG OFF timer function inspection.
		No	Go to Step 1 of NO. 2 DOOR GLASS DOES NOT REVERSE, EVEN WHEN ENCOUNTERING A FOREIGN OBJECT IN ITS PATH.

IG OFF Timer Function Inspection

STEP	INSPECTION		ACTION
1	• Close all doors. • Switch the ignition to ON. • In automatic mode, push down the power window main switch for the driver-side front door glass. The door glass should move down within approx. 43 s after ignition switch off. • In manual mode (finger continuously depressing the power window main switch), the door glass should move down within approx. 43 s after ignition switch off. • Does the driver-side front door glass move down?	Yes	Go to the next step.
		No	• Perform the driver-side power window initialization procedure, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.) • If it does not move up and down upon reinspection, inspect the following: ▪ Wiring harness for the door open/close signal system ▪ Latch switch • Repair or replace the malfunctioning part, and reinspect. ▪ If operation is not normal, replace the power window main switch, and then go to the next step.
2	• Switch the ignition to ON. • In automatic mode, pull up the power window main switch and subswitch for the all doors glass. The door glass does not move up within approx. 43 s after ignition switch off. • Verify that driver-side all doors glass does not operate.	Yes	• Perform the suspect power window initialization procedure, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.) ▪ If operation is not normal,

	Does the driver-side all doors glass move up?		replace the suspect power window switch, then go to the next step.
		No	Go to the next step.
3	- Switch the ignition to ON. - Perform the following for all doors. - Lower the driver-side front door glass completely. - Take a hammer and hold it against the inside of the top of the door glass frame so that the door glass will hit its handle when it is closing. - Raise the door glass using manual mode. - When the door glass hits the hammer handle, does it immediately reverse and move down to approx. 200 mm { 7.87 in } from the completely closed position?	Yes	Go to the next step.
		No	- Perform the suspect power window initialization procedure, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.) - If operation is not normal, replace the suspect power window switch, then go to the next step.
4	- Open any door. - Switch the ignition to ON. - Push/pull the power window main switch or subswitch for all door glass within approx. 43 s after ignition switch off. - Verify that the door glass does not move up or down. - Does the door glass move up or down?	Yes	- Inspect the suspect door switch and related wiring harness. - If above parts are normal, replace the suspect power window switch, then go to the next step. - If the above parts have any malfunction, repair or replace the malfunction part, then go to the next step.
		No	Go to the next step.

5	• Close all doors. • Switch the ignition to ON. • Push/pull the power window main switch or subswitch for all door glass after approx. 60 s after ignition switch off. • Verify that the door glass does not move up or down. • Does the door glass move up or down?	Yes	• Perform the suspect power window initialization procedure, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.)
		No	• The IG OFF timer function is normal.

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BASIC POWER WINDOW SYSTEM INSPECTION [POWER WINDOW SYSTEMS (AUTO-OPEN/ CLOSE FUNCTION)]

Manual Mode Function Inspection

STEP	INSPECTION		ACTION
1	- Switch the ignition to ON. - Turn the power-cut switch to UNLOCK. - Does each door glass move up and down in manual mode using the power window subswitch?	Yes	Go to the next step.
		No	- Inspect the following items: - Power window main switch (power-cut switch system malfunction) - Power window subswitch power supply fuses (at BCM) - Power window subswitch ground wiring harness - Power window subswitch power supply wiring harnesses - Wiring harness between power window subswitch and power window motor - Power window subswitch - Power window motor - Repair or replace the malfunctioning part, then go to the next step.

2	Does the driver-side door glass move up and down in manual mode using the power window main switch?	Yes	Go to the next step.
		No	- Inspect the following items: - Power window main switch power supply fuses (at BCM) - Power window main switch ground wiring harness - Power window main switch power supply wiring harnesses - Wiring harness between power window main switch and power window motor - Power window main switch - Repair or replace the malfunctioning part, then go to the next step.
3	Does each other door glass other than the driver-side door glass move up and down in manual mode using the power window main switch?	Yes	Go to the next step.
		No	- Perform the power window initialization procedure for any door glass that does not move up and down, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.) - If it does not move up and down upon reinspection, inspect the following: - Wiring harness between power window main switch and subswitch - Repair or replace the malfunctioning part, then go to the next step.
4	- Turn the power-cut switch to LOCK. - Push/pull the power window main switch (switches for all windows in manual mode).	Yes	- Manual mode function is normal. - Go to the automatic mode function inspection.
		No	Replace the power window main switch, then go to the automatic mode function inspection (power-cut

	Does only driver-side front door glass move up and down?		switch system malfunction).
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Automatic Mode Function Inspection

NOTE:

- Perform the following inspection for the power window main switch and the power window subswitches for each window.

STEP	INSPECTION	ACTION	
1	- Switch the ignition to ON. - Operate the each power window switch in automatic mode. - Does the each door glass move up and down in automatic mode?	Yes	Go to the next step.
		No	- Door glass does not move up and down in automatic mode: - Go to Step 1 of NO. 1 DOOR GLASS DOES NOT MOVE UP AND DOWN IN AUTOMATIC MODE. - Door glass moves up and down in automatic mode, but door glass reverses: - Go to Step 1 of NO. 3 DOOR GLASS REVERSES EVEN THOUGH THE GLASS DOES NOT ENCOUNTER A FOREIGN OBJECT WHILE IT IS MOVING UP IN AUTOMATIC MODE.
2	- Gently pull the each power window switch while the door glass is moving down in automatic mode. - Does the glass stop?	Yes	Go to the next step.
		No	Replace the suspected power window switch, then go to the automatic door glass return function inspection.
3	Gently press the each power window switch while the door glass is moving up in automatic mode.	Yes	- Automatic mode function is normal. - Go to the automatic door glass return function inspection.

	Does the glass stop?	No	Replace the suspected power window switch, then go to the automatic door glass return function inspection.
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Automatic Door Glass Return Function Inspection

NOTE:

- Perform the following inspection for the power window main switch and the power window subswitches for each window.
- With the switch held at auto-up, the door glass does not automatically reverse even when a foreign object is encountered.

STEP	INSPECTION	ACTION	
1	- Switch the ignition to ON. - Lower the door glass completely. - Use the power window switch to close the door glass in automatic mode. - Does the door glass automatically reverse even though the glass does not encounter a foreign object while it is moving up in automatic mode?	Yes	Go to Step 1 of NO. 3 DOOR GLASS REVERSES EVEN THOUGH THE GLASS DOES NOT ENCOUNTER A FOREIGN OBJECT WHILE IT IS MOVING UP IN AUTOMATIC MODE.
		No	Go to the next step.
2	- Lower the door glass completely. - Take a hammer and hold it against the inside of the top of the window frame so that the door glass will hit its handle when it is closed. - Raise the door glass using automatic mode. - When the door glass hits the hammer handle, does it immediately reverse and move down to approx.200 mm { 7.87 in } from the completely closed position?	Yes	- Automatic door glass return function inspection is normal. - Go to the IG OFF timer function inspection.
		No	Go to Step 1 of NO. 2 DOOR GLASS DOES NOT REVERSE, EVEN WHEN ENCOUNTERING A FOREIGN OBJECT IN ITS PATH.

IG OFF Timer Function Inspection

STEP	INSPECTION	ACTION
1	• Close all doors. • Switch the ignition to ON. • In automatic mode, push down the power window main switch for the driver-side front door glass. The door glass should move down within approx. 43 s after ignition switch off. • In manual mode (finger continuously depressing the power window main switch), the door glass should move down within approx. 43 s after ignition switch off. • Does the driver-side front door glass move down?	YesGo to the next step.
		No • Perform the driver-side power window initialization procedure, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.) • If it does not move up and down upon reinspection, inspect the following: ▪ Wiring harness for the door open/close signal system ▪ Latch switch • Repair or replace the malfunctioning part, and reinspect. ▪ If operation is not normal, replace the power window main switch, and then go to the next step.
2	• Switch the ignition to ON. • In automatic mode, pull up the power window main switch and subswitch for the all doors glass. The door glass does not move up within approx. 43 s after ignition switch off. • Verify that driver-side all doors glass does not operate.	Yes • Perform the suspect power window initialization procedure, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.) ▪ If operation is not normal,

	Does the driver-side all doors glass move up?		replace the suspect power window switch, then go to the next step.
		No	Go to the next step.
3	- Switch the ignition to ON. - Perform the following for all doors. - Lower the driver-side front door glass completely. - Take a hammer and hold it against the inside of the top of the door glass frame so that the door glass will hit its handle when it is closing. - Raise the door glass using manual mode. - When the door glass hits the hammer handle, does it immediately reverse and move down to approx. 200 mm { 7.87 in } from the completely closed position?	Yes	Go to the next step.
		No	- Perform the suspect power window initialization procedure, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.) - If operation is not normal, replace the suspect power window switch, then go to the next step.
4	- Open any door. - Switch the ignition to ON. - Push/pull the power window main switch or subswitch for all door glass within approx. 43 s after ignition switch off. - Verify that the door glass does not move up or down. - Does the door glass move up or down?	Yes	- Inspect the suspect door switch and related wiring harness. - If above parts are normal, replace the suspect power window switch, then go to the next step. - If the above parts have any malfunction, repair or replace the malfunction part, then go to the next step.
		No	Go to the next step.

5	• Close all doors. • Switch the ignition to ON. • Push/pull the power window main switch or subswitch for all door glass after approx. 60 s after ignition switch off. • Verify that the door glass does not move up or down. • Does the door glass move up or down?	Yes	• Perform the suspect power window initialization procedure, and reinspect. (See POWER WINDOW SYSTEM INITIALIZATION PROCEDURE.)
		No	• The IG OFF timer function is normal.