

Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2009 MAZDA 3 / Axela Hatchback OEM Service and Repair Workshop Manual

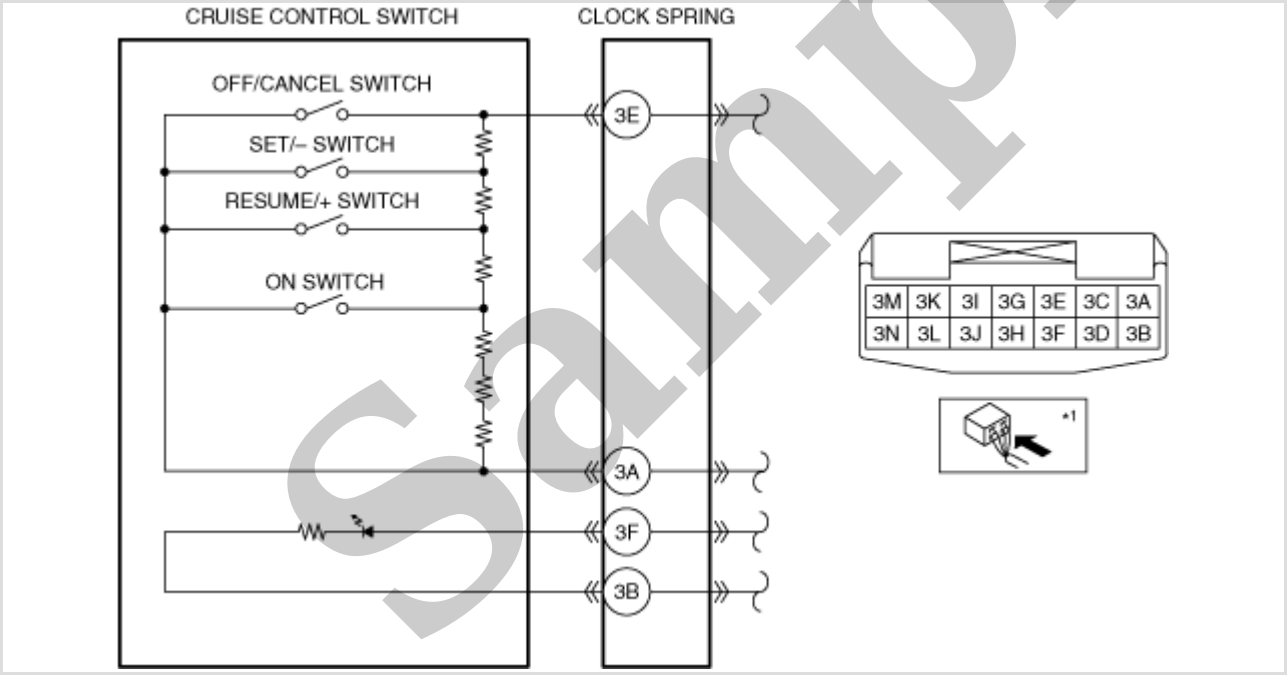
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CRUISE CONTROL SWITCH INSPECTION [SKYACTIV-D 2.2]

SM2897684

id0120e580010

- 1.Disconnect the negative battery terminal and wait for 1 min or more. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
- 2.Remove the driver-side air bag module. (See [DRIVER-SIDE AIR BAG MODULE REMOVAL \[TWO-STEP DEPLOYMENT CONTROL SYSTEM - US/CANADA/ISRAEL SPEC.\]](#).) (See [DRIVER-SIDE AIR BAG MODULE INSTALLATION \[TWO-STEP DEPLOYMENT CONTROL SYSTEM - US/CANADA/ISRAEL SPEC.\]](#).)
- 3.Disconnect the clock spring connector (part wiring harness-side).
- 4.Measure the resistance between clock spring terminals 3E and 3A (part wiring harness-side) using a tester.



am3uuw00014614

*1:Part wiring harness-side

- If as specified, go to the next step.
- If not as specified, replace the steering switch. (See [STEERING SWITCH REMOVAL/INSTALLATION.](#))

Switch condition	Resistance (ohm)
OFF/CANCEL switch held at on	Continuity
SET/- switch held at on	Approx. 84.5
RESUME/+ switch held at on	Approx. 189.5
ON switch held at on	Approx. 326.5
Neutral	Approx. 3,311.5

CRUISE CONTROL SWITCH REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)]

SM2897685

id0120q610540

Note

- The cruise control switch is a component part of the steering switch and cannot be removed as a single unit.
- If the cruise control switch requires replacement, replace the steering switch as a single unit.

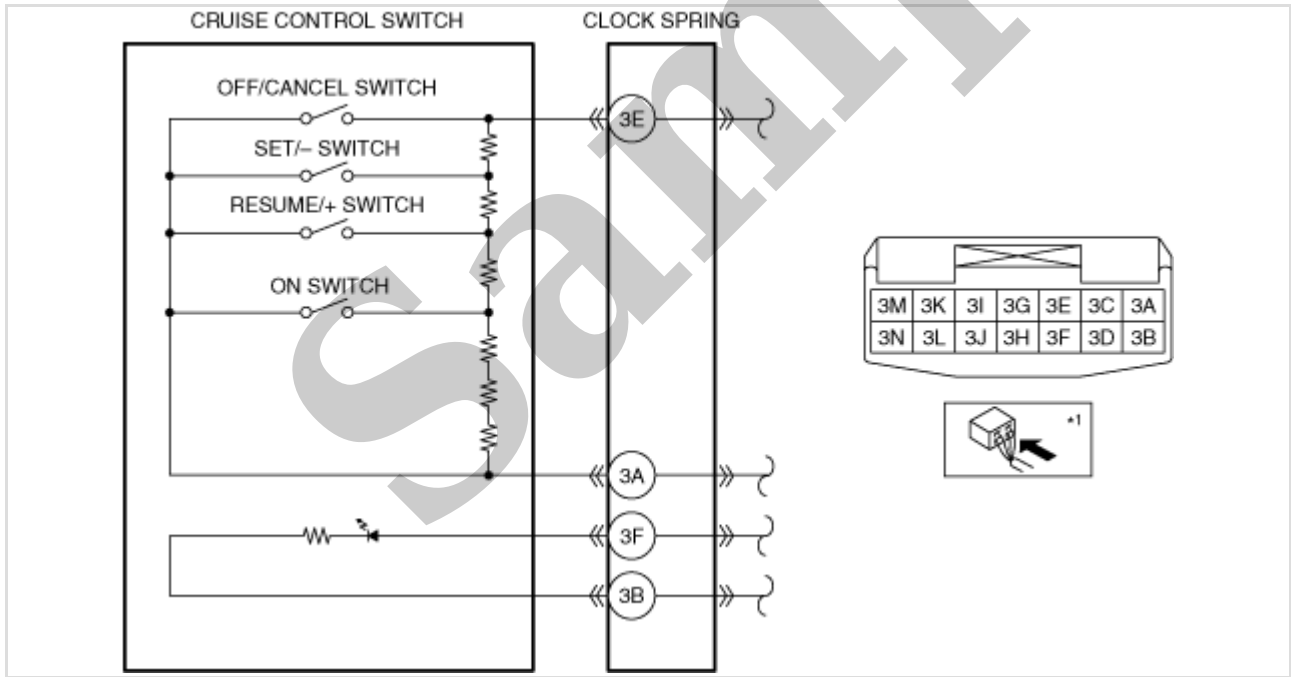
1.Remove the steering switch. (See [STEERING SWITCH REMOVAL/INSTALLATION](#).)

CRUISE CONTROL SWITCH INSPECTION [SKYACTIV-G 2.5 (WITHOUT CYLINDER DEACTIVATION)]

SM2897688

id0120q980010

- 1.Disconnect the negative battery terminal and wait for 1 min or more. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
- 2.Remove the driver-side air bag module. (See [DRIVER-SIDE AIR BAG MODULE REMOVAL \[STANDARD DEPLOYMENT CONTROL SYSTEM - MEXICO SPEC.\]](#).) (See [DRIVER-SIDE AIR BAG MODULE INSTALLATION \[STANDARD DEPLOYMENT CONTROL SYSTEM - MEXICO SPEC.\]](#).) (See [DRIVER-SIDE AIR BAG MODULE REMOVAL \[TWO-STEP DEPLOYMENT CONTROL SYSTEM - US/CANADA/ISRAEL SPEC.\]](#).) (See [DRIVER-SIDE AIR BAG MODULE INSTALLATION \[TWO-STEP DEPLOYMENT CONTROL SYSTEM - US/CANADA/ISRAEL SPEC.\]](#).)
- 3.Disconnect the clock spring connector (part wiring harness-side).
- 4.Measure the resistance between clock spring terminals 3E and 3A (part wiring harness-side) using a tester.



am3uuw00014614

*1:Part wiring harness-side

- If as specified, go to the next step.
- If not as specified, replace the steering switch. (See [STEERING SWITCH REMOVAL/INSTALLATION.](#))

Switch condition	Resistance (ohm)
OFF/CANCEL switch held at on	Continuity
SET/- switch held at on	Approx. 84.5
RESUME/+ switch held at on	Approx. 189.5

CRUISE CONTROL SWITCH REMOVAL/INSTALLATION [SKYACTIV-G 2.5T]

SM2897689

id0120r310540

Note

- The cruise control switch is a component part of the steering switch and cannot be removed as a single unit.
- If the cruise control switch requires replacement, replace the steering switch as a single unit.

1.Remove the steering switch. (See [STEERING SWITCH REMOVAL/INSTALLATION](#).)

DRIVE SELECTION SWITCH INSPECTION [SKYACTIV-G 2.5T]

SM2897691

id0121a510010

1. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
2. Remove the drive selection switch. (See [DRIVE SELECTION SWITCH REMOVAL/INSTALLATION \[SKYACTIV-G 2.5T\]](#))
3. Measure the resistance between drive selection switch terminals B and C under the following conditions.

Resistance when drive selection switch pressed to – side (backward) and held

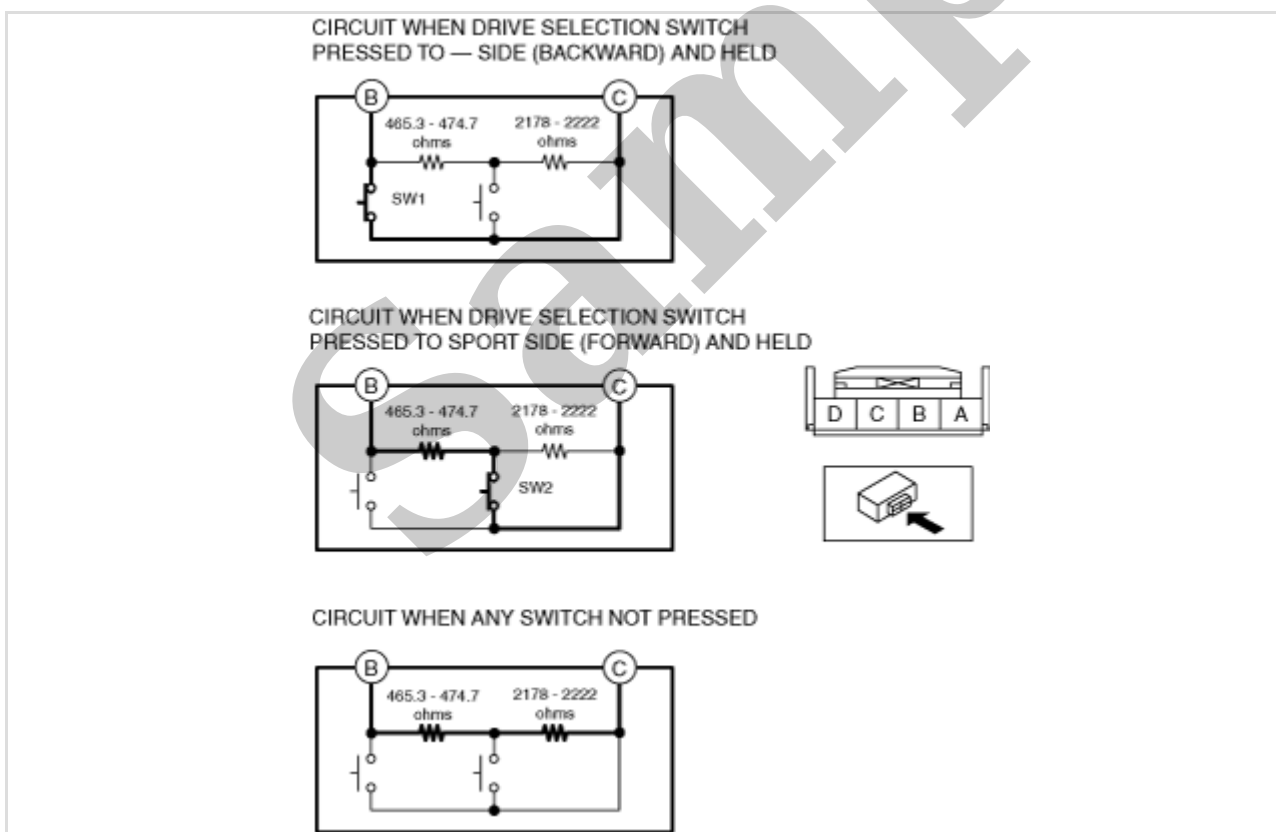
- 0 ohms

Resistance when drive selection switch pressed to SPORT side (forward) and held

- 465.3–474.7 ohms

Resistance when any switch not pressed

- 2643.3–2696.7 ohms



ac5uuw00005729

- If not within the specification, replace the drive selection switch. (See [DRIVE SELECTION SWITCH REMOVAL/INSTALLATION \[SKYACTIV-G 2.5T\]](#).)

DRIVE SELECTION SWITCH INSPECTION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)]

SM2897693

id0121a610010

1. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))

2. Remove the drive selection switch. (See [DRIVE SELECTION SWITCH REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#))

3. Measure the resistance between drive selection switch terminals B and C under the following conditions.

Resistance when drive selection switch pressed to – side (backward) and held

- 0 ohms

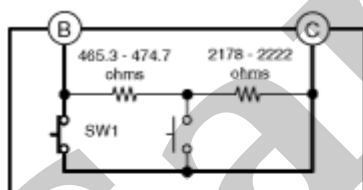
Resistance when drive selection switch pressed to SPORT side (forward) and held

- 465.3–474.7 ohms

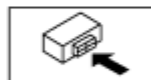
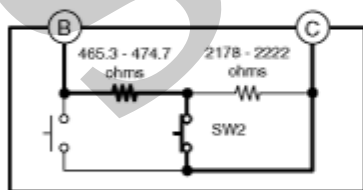
Resistance when any switch not pressed

- 2643.3–2696.7 ohms

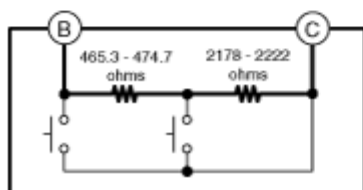
CIRCUIT WHEN DRIVE SELECTION SWITCH
PRESSED TO – SIDE (BACKWARD) AND HELD



CIRCUIT WHEN DRIVE SELECTION SWITCH
PRESSED TO SPORT SIDE (FORWARD) AND HELD



CIRCUIT WHEN ANY SWITCH NOT PRESSED



ac5uuw00005729

- If not within the specification, replace the drive selection switch. (See [DRIVE SELECTION SWITCH REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)

DRIVE SELECTION SWITCH INSPECTION [SKYACTIV-G 2.5 (WITHOUT CYLINDER DEACTIVATION)]

SM2897695

id0121q710010

- 1.Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
- 2.Remove the drive selection switch. (See [DRIVE SELECTION SWITCH REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITHOUT CYLINDER DEACTIVATION\)\]](#))
- 3.Measure the resistance between drive selection switch terminals B and C under the following conditions.

Resistance when drive selection switch pressed to – side (backward) and held

- 0 ohms

Resistance when drive selection switch pressed to SPORT side (forward) and held

- 465.3–474.7 ohms

Resistance when any switch not pressed

- 2643.3–2696.7 ohms



ac5uuw00005729

- If not within the specification, replace the drive selection switch. (See [DRIVE SELECTION SWITCH REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITHOUT CYLINDER DEACTIVATION\)\]](#).)

Mazda intelligent Drive Select (Mi-Drive) SWITCH INSPECTION

SM3066007

id01220000010

1. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION](#))
2. Remove the Mi-Drive switch. (See [Mazda intelligent Drive Select \(Mi-Drive\) SWITCH REMOVAL/INSTALLATION](#))
3. Measure the resistance between Mi-Drive switch terminals B and C under the following conditions.

Resistance (standard) with Mi-Drive switch pressed upward and held

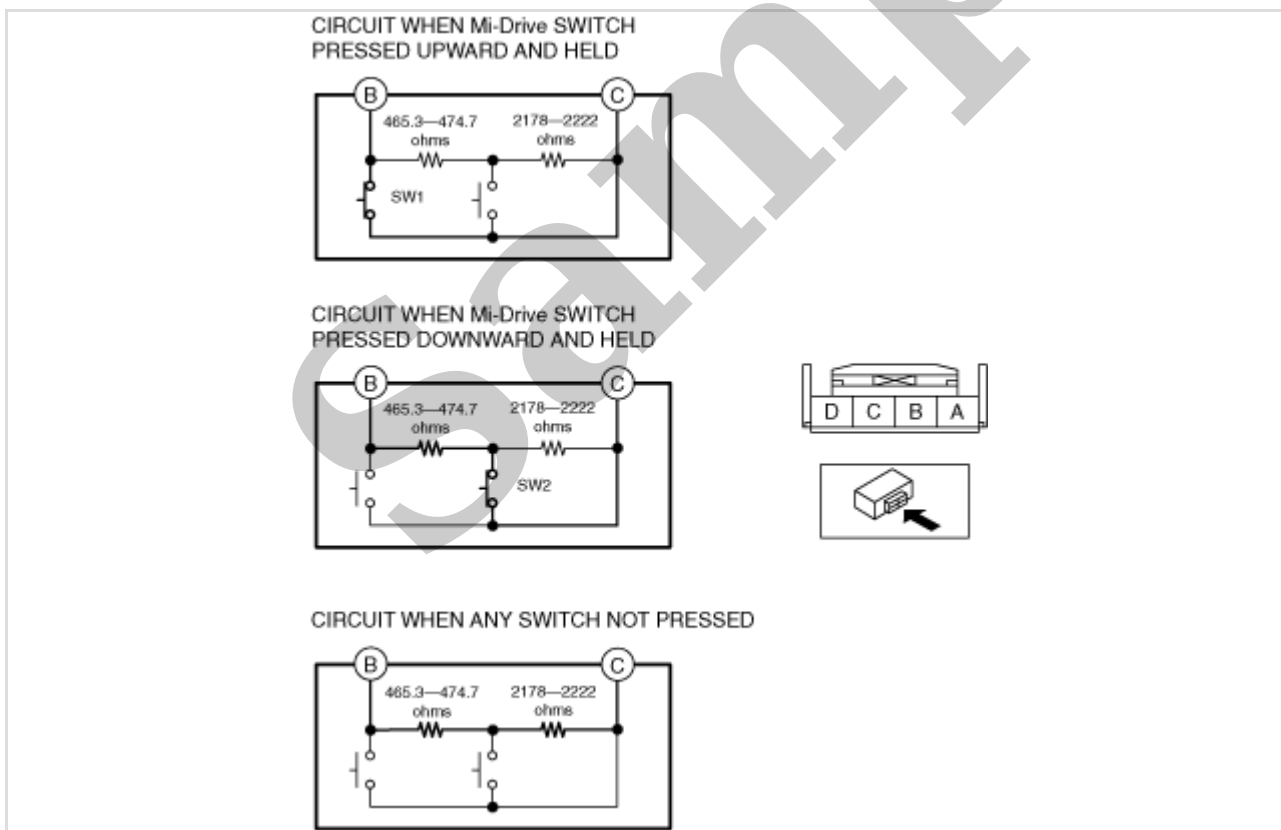
- 0 ohms

Resistance (standard) with Mi-Drive switch pressed downward and held

- 465.3–474.7 ohms

Resistance (standard) with any switch not pressed

- 2643.3–2696.7 ohms



ac5wzw00015320

- If not within the standard, replace the Mi-Drive switch. (See [Mazda intelligent Drive Select \(Mi-Drive\) SWITCH REMOVAL/INSTALLATION](#))

ENGINE OIL TEMPERATURE SENSOR/ENGINE OIL PRESSURE SENSOR REMOVAL/INSTALLATION [SKYACTIV-G 2.5T]

SM2897697

id0140h021670

Replacement Part

O-ring

Quantity: 1

Location of use: Engine oil temperature sensor/engine oil pressure sensor

Note

- The engine oil pressure sensor and engine oil temperature sensor cannot be removed as a single unit. When replacing the engine oil temperature sensor or engine oil pressure sensor, replace the engine oil pressure sensor/engine oil temperature sensor.

1. Turn the steering wheel to full right lock.
2. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
3. Lift up the vehicle.
4. Remove the front splash shield (RH). (See [SPLASH SHIELD REMOVAL/INSTALLATION.](#))
5. Disconnect the connector for the engine oil temperature sensor/engine oil pressure sensor using the following procedure: