

# Your Ultimate Source for OEM Repair Manuals

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## 2014 MAZDA CX-9 OEM Service and Repair Workshop Manual

[Go to manual page](#)

# EXPANSION VALVE REMOVAL/INSTALLATION

SM2898638

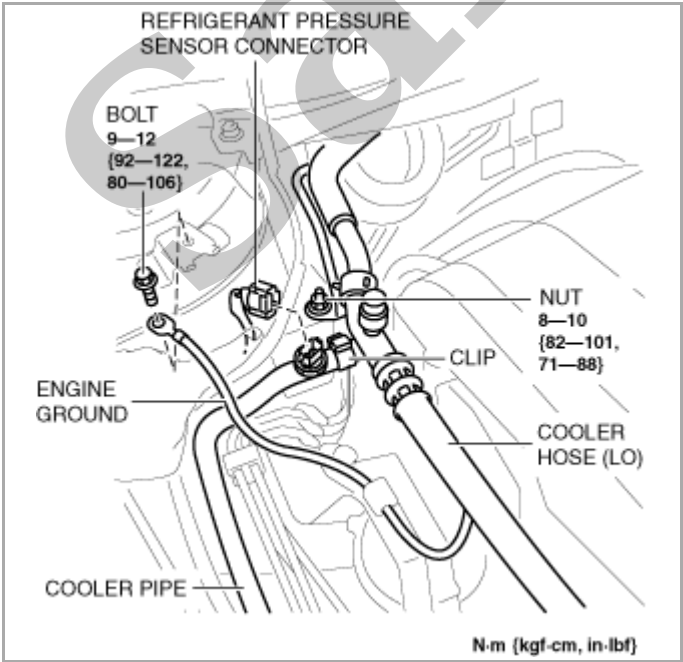
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## Replacement Part

O-ring (cooler hose (LO))	O-ring (cooler pipe)	O-ring (expansion valve)
Quantity: 1	Quantity: 1	Quantity: 2
Location of use: A/C unit	Location of use: A/C unit	Location of use: expansion valve

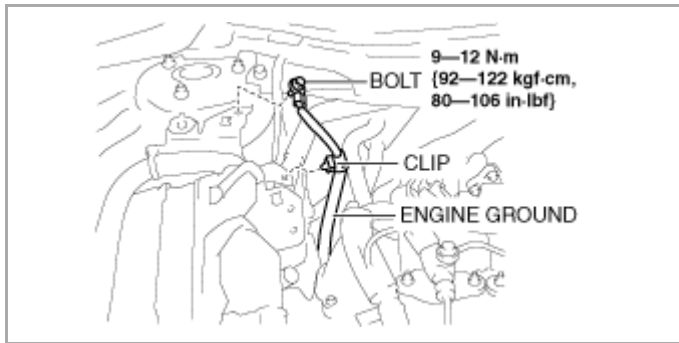
## SKYACTIV-G 2.5

- 1.Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
- 2.Discharge the refrigerant. (See [REFRIGERANT RECOVERY.](#)) (See [REFRIGERANT CHARGING.](#))
- 3.Remove the plug hole plate. (See [PLUG HOLE PLATE REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\].](#)) (See [PLUG HOLE PLATE REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITHOUT CYLINDER DEACTIVATION\)\].](#))
- 4.Disconnect the refrigerant pressure sensor connector.



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- 5.Remove the bolt.

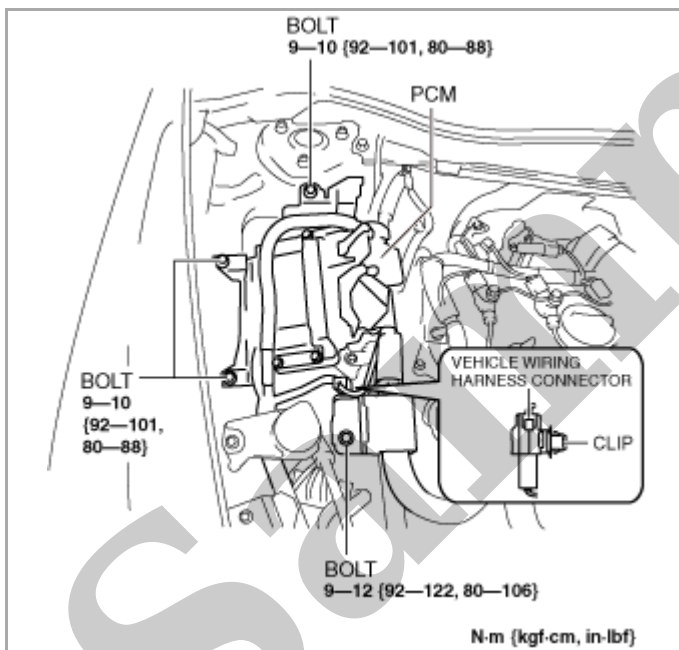


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5.Remove the bolt.

6.Disconnect the engine ground.

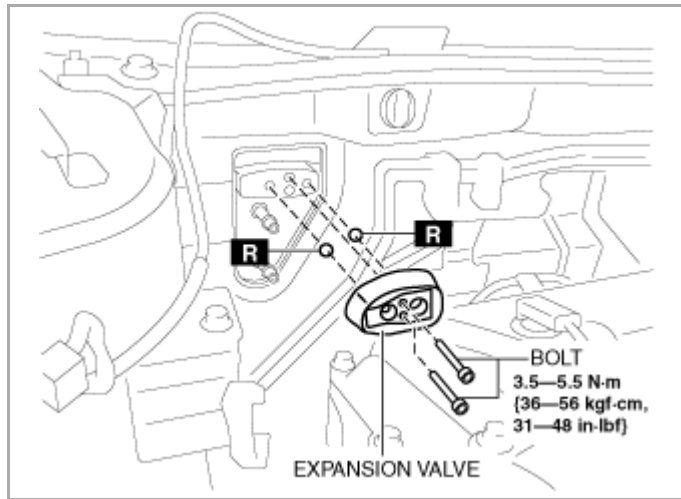
7.Remove the clip for the vehicle wiring harness connector.



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8.Remove the bolts.

9.Set the PCM out of the way.



17. Remove the expansion valve. Do not allow compressor oil to spill.

#### Caution

- If moisture or foreign material enters the refrigeration cycle, cooling ability will be lowered and abnormal noise will occur. Always immediately plug all open fittings after removing any refrigeration cycle parts to keep moisture or foreign material out of the cycle.

18. Install in the reverse order of removal.

19. Perform the refrigerant system performance test. (See [REFRIGERANT SYSTEM PERFORMANCE TEST](#).)

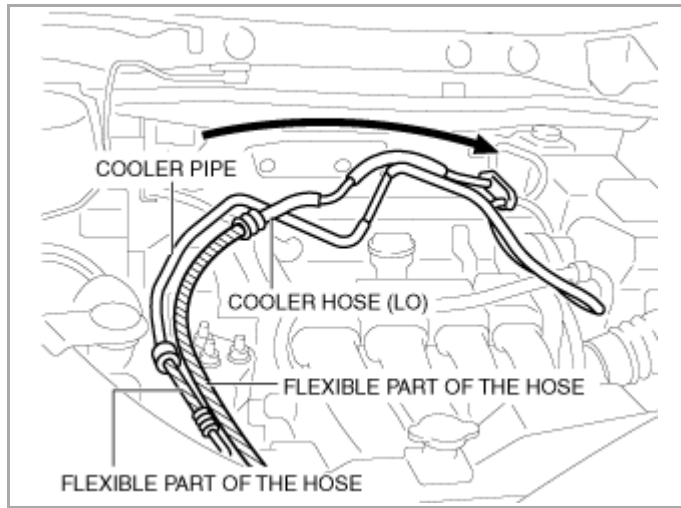
## SKYACTIV-G 2.5T

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

2. Discharge the refrigerant. (See [REFRIGERANT RECOVERY](#).) (See [REFRIGERANT CHARGING](#).)

3. Remove the plug hole plate. (See [PLUG HOLE PLATE REMOVAL/INSTALLATION \[SKYACTIV-G 2.5T\]](#).)

4. Detach the clips.

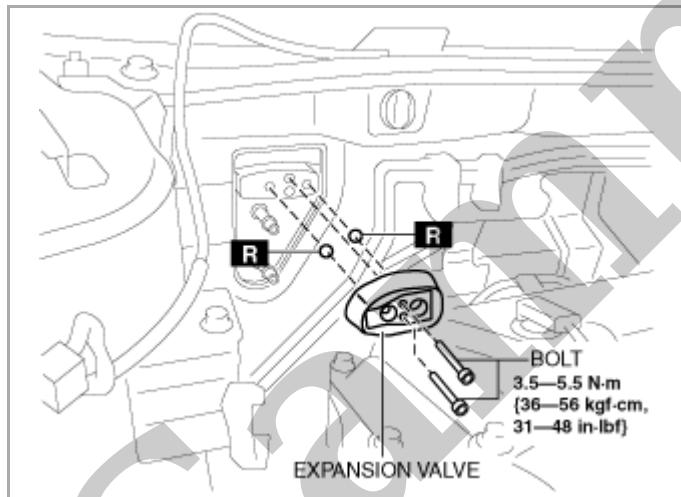


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#### Caution

- When setting the cooler hose (LO) and cooler pipe aside, only bend the flexible part of the hose. If force is applied to areas other than the flexible hose, the pipe will bend and could be damaged.

16.Remove the bolts.



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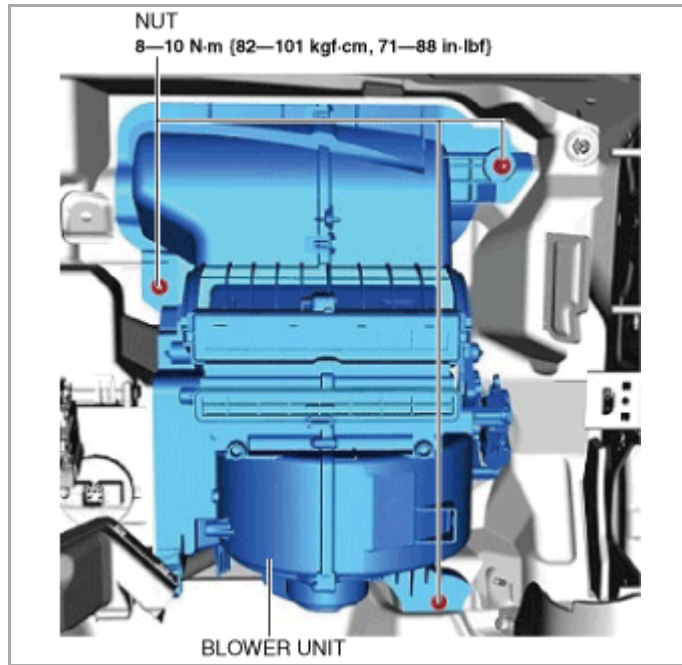
17.Remove the expansion valve. Do not allow compressor oil to spill.

#### Caution

- If moisture or foreign material enters the refrigeration cycle, cooling ability will be lowered and abnormal noise will occur. Always immediately plug all open fittings after removing any refrigeration cycle parts to keep moisture or foreign material out of the cycle.

18.Install in the reverse order of removal.

19.Perform the refrigerant system performance test. (See [REFRIGERANT SYSTEM PERFORMANCE TEST.](#))



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4.Remove the blower unit.

5.Install in the reverse order of removal.

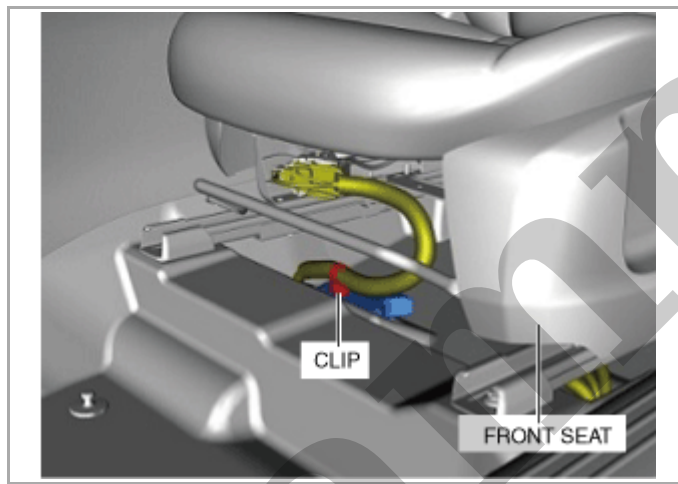
# REAR HEAT DUCT REMOVAL/INSTALLATION

SM2898641

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## Driver's side

1. Slide the front seat rearward.
2. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
3. Remove the clip.



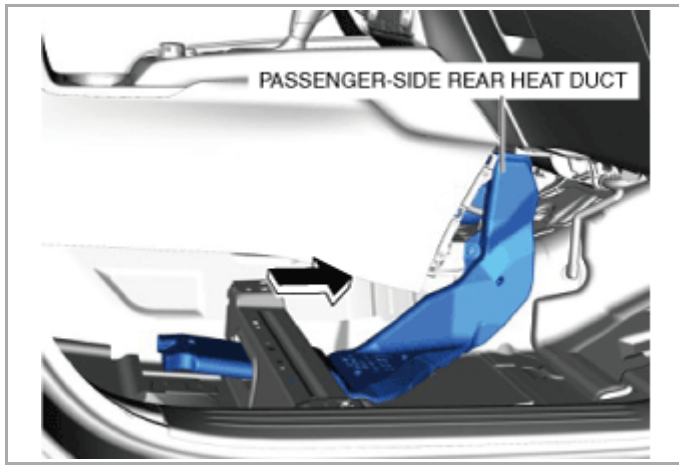
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4. Remove the following parts:

- (1) Driver-side front scuff plate (See [FRONT SCUFF PLATE REMOVAL/INSTALLATION.](#))
- (2) Driver-side front side trim (See [FRONT SIDE TRIM REMOVAL/INSTALLATION.](#))
- (3) Driver-side side wall (See [SIDE WALL REMOVAL/INSTALLATION.](#))
- (4) Joint cover (See [STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION.](#))
- (5) Accelerator pedal (See [ACCELERATOR PEDAL REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\].](#)) (See [ACCELERATOR PEDAL REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITHOUT CYLINDER DEACTIVATION\)\].](#)) (See [ACCELERATOR PEDAL REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#)) (See [ACCELERATOR PEDAL REMOVAL/INSTALLATION \[SKYACTIV-G 2.5T\].](#))

5. Turn the floor covering over.

6. Remove the fastener.



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8.Install in the reverse order of removal.



**A/C compressor oil type**

FD46XG

**A/C compressor oil sealed volume (approx. quantity)**

100 ml {100 cc, 3.38 US fl oz}

Sample

FD46XG

A/C compressor oil sealed volume (approx. quantity)

100 ml {100 cc, 3.38 US fl oz}

Sample