

Classification: EC16-035b Reference:

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January 29, 2019

ITB17-042b

# INFINITI; DTC P0456 CAUSED BY EVAP LEAK AT VENT CONTROL VALVE O-RING

This bulletin has been amended. See Amendment History on the last page. Please discard previous versions of this bulletin.

 APPLIED VEHICLES:
 2011-2012 G25 Sedan (V36)
 2015 Q40

 2007-2008 G35 Sedan (V36)
 2014-2019

 2009-2013 G37 Convertible (V36)
 2014-2018

 2008-2013 G37 Coupe (V36)
 2014-2015

 2009 G37 Sedan (V36)
 2014-2019

 2006-2010 M45/M35 (Y50)
 2014-2019

 2011-2013 M37/M56 (Y51)
 2014-2018

 2004-2010 QX56 (JA60)
 2017-2019

 2011-2013 QX56 (Z62)
 2014-2019

2015 Q40 (V36) 2014-2019 Q50 (V37) 2014-2018 Q50 Hybrid (V37) 2014-2015 Q60 Convertible (V36) 2014-2019 Q60 Coupe (V36) 2014-2019 Q70 (Y51) 2014-2018 Q70 Hybrid (Y51) 2017-2019 QX30 (H15) 2014-2019 QX50 (J50) 2014-2019 QX60 (L50) 2014-2019 QX60 Hybrid (L50) 2014-2019 QX80 (Z62)

### IF YOU CONFIRM

The MIL is ON in an APPLIED VEHICLE with DTC P0456 (EVAP VERY SML LEAK)

### AND

- DTC P0456 is not caused by a loose fuel fill cap (refer to ITB13-044).
- An EVAP leak has been detected where the vent control valve mounts to the canister.
- The vent control valve O-ring seal is determined to be the cause.

### ACTION

- 1. **<u>DO NOT REPLACE</u>** the vent control valve.
- 2. Replace the vent control valve O-ring seal (O-ring).
  - Refer to SERVICE PROCEDURE on the next page.

**IMPORTANT:** The purpose of ACTION (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the <u>entire</u> SERVICE PROCEDURE as it contains information that is essential to successfully completing this repair.

Infiniti Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Infiniti retailer to determine if this applies to your vehicle.

### SERVICE PROCEDURE

- 1. Replace the O-ring.
  - To access the O-ring, refer to the appropriate section in the Electronic Service Manual (ESM) of the **APPLIED VEHICLE** for vent control valve removal and installation.
  - This O-ring is now available separately (see PARTS INFORMATION).
  - When installing, <u>do not add any lubrication</u> to the O-ring.
  - Seat the O-ring all the way down as shown on page 4, Figure 7.
    - > Having the O-ring seated all the way down will assure it is not twisted or rolled over.
  - Refer to the pictures on pages 3 and 4 for additional installation information.

#### CAUTION:

- Make sure the surfaces that the O-ring comes in contact with are clean.
- > When installed, make sure the O-ring is not twisted or rolled over.
- Verify the repair is complete by checking for leaks with a "smoke" leak detection machine or CONSULT-III plus (C-III plus).
  - > If a "smoke" leak detection machine is used, follow the manufacturer's operating instructions.
  - ➢ If C-III plus is used:
    - 1. Confirm the fuel filler cap is secure.
      - Vehicles with a service port see page 5.
      - Vehicles without a service port see page 6.
    - 2. Using Active Test, close the vent control valve.
    - 3. Apply pressure using J-42909 until the bar graph reaches about halfway.
    - 4. Monitor the bar graph for 10 minutes.



Vent control valve

Figure 1

Figure 2

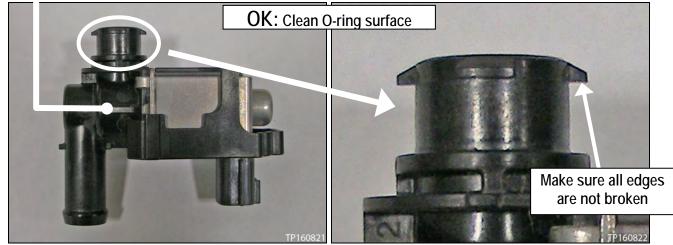


Figure 3

Figure 4

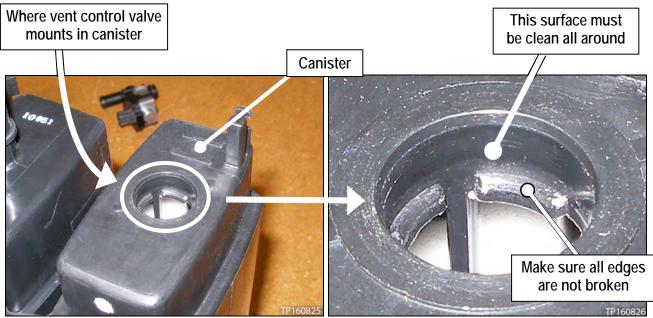


Figure 5

Figure 6

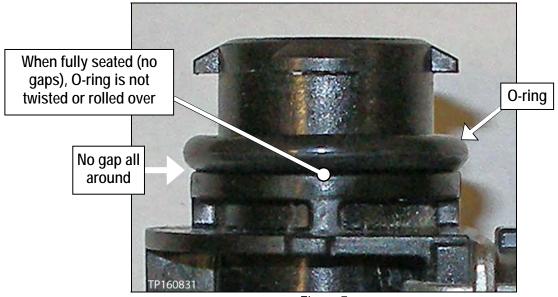
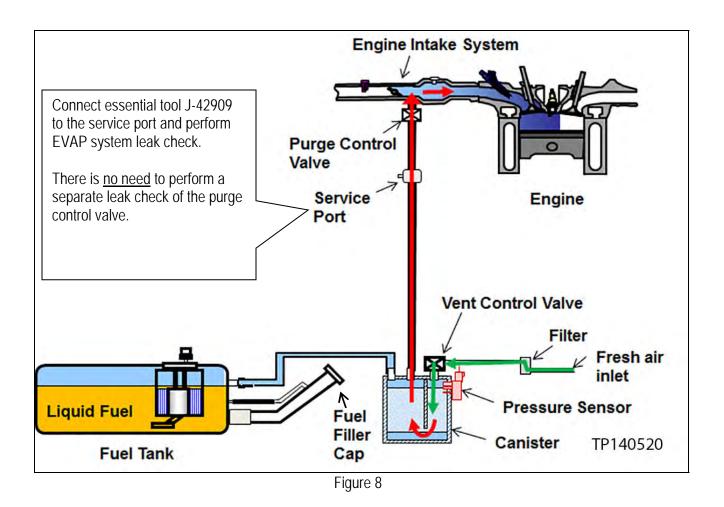


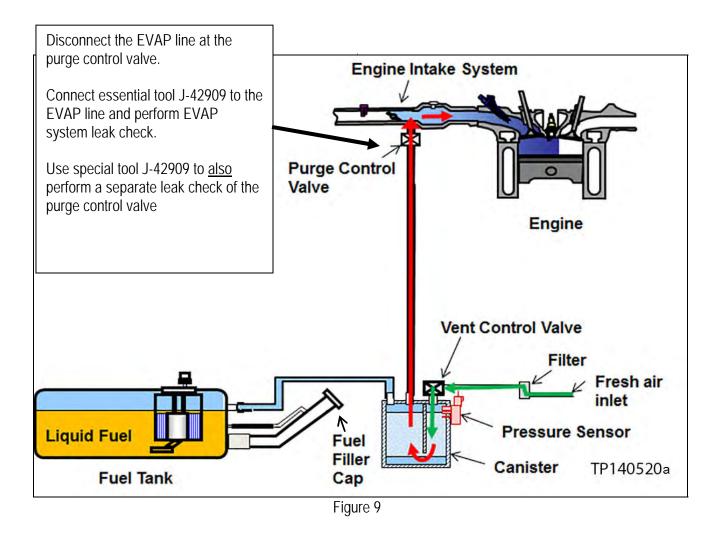
Figure 7



### **EVAP System Basic Operation**

- Fuel vapor flows from fuel tank into canister (light blue area)
- Vapor flows from canister through purge control valve (red line)
- Fresh air flows into canister (green line)

# Models Without a Service Port (QX30 and 2018 and Newer)



### **EVAP System Basic Operation**

- Fuel vapor flows from fuel tank into canister (light blue area)
- Vapor flows from canister through purge control valve (red line)
- Fresh air flows into canister (green line)

### PARTS INFORMATION

DESCRIPTION	P/N	QUANTITY	
SEAL O-RING	16618-JF00A	1	

### **CLAIMS INFORMATION**

## Submit a Primary Part (PP) line claim using the following claims coding:

DESCRIPTION	MODEL	PFP	OP CODE	SYM	DIA	FRT
Replace Vent Control Valve O-Ring	M35, M45 (Y50)	16618-JF00A	FX57AA	HD	32	
	G25, G35, G37 (V36)					0.3
	Q40, Q60 (V36)					0.5
	Q50 Hybrid (V37)					
	Q50, Q60 (V37)					
	M37, M56, M Hybrid (Y51)					
	Q70, Q70 Hybrid (Y51)					
	EX35, EX37 (J50)					0.4
	QX50 (J50)					
	FX35, FX37, FX45, FX50 (S51)					
	QX70 (S51)					
	JX35 (L50)					
	QX60 (L50), Hybrid					
	QX50 (J55)					
	QX56 (JA60)					0.5
	QX56 (Z62)					0.5
	QX80 (Z62)					

### AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
July 21, 2017	ITB17-042	Original bulletin published
November 16, 2018	ITB17-042a	The APPLIED VEHICLES and CLAIMS INFORMATION sections have been updated
January 29, 2019	ITB17-042b	The APPLIED VEHICLES section has been updated