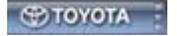


c

*A	w/ Stud Bolt	-	-
*1	EGR PIPE ASSEMBLY	*2	ENGINE COVER BRACKET
*3	ENGINE WIRE	*4	INTAKE MANIFOLD

*5	NO. 2 FUEL VAPOR FEED HOSE	*6	NO. 8 WATER BY-PASS HOSE
*7	STUD BOLT	*8	VENTILATION HOSE
*9	WATER BY-PASS HOSE	*10	INLET EGR GASKET
*11	EGR PIPE GASKET	*12	NO. 2 WATER BY-PASS HOSE
*13	NO. 1 INTAKE MANIFOLD TO HEAD GASKET	*14	E.F.I. VACUUM SENSOR ASSEMBLY (MANIFOLD ABSOLUTE PRESSURE SENSOR)
*15	VACUUM HOSE	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part



Last Modified: 01-14-2019	6.8:8.0.48	Doc ID: RM100000000THFQ
Model Year Start: 2016	Model: Prius	Prod Date Range: [11/2015 -]
Title: 2ZR-FXE (INTAKE / EXHAUST): INTAKE MANIFOLD: INSTALLATION; 2016 - 2019 MY Prius [11/2015 -]		

INSTALLATION

PROCEDURE

1. INSTALL STUD BOLT (w/ Stud Bolt)

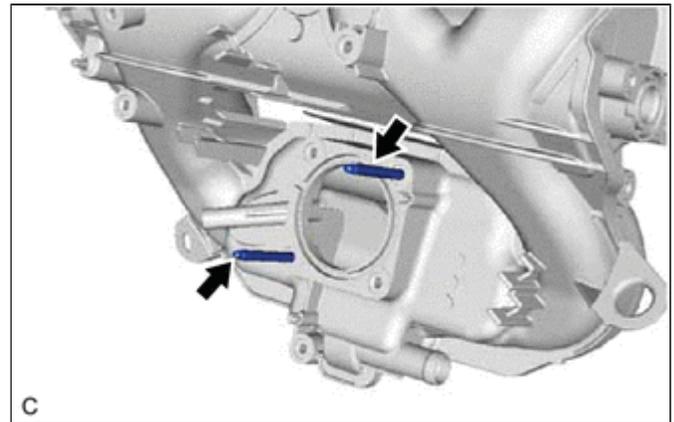
HINT:

If a stud bolt is deformed or the threads are damaged, replace it.

- (a) Using an E6 "TORX" socket wrench, install the 2 stud bolts to the intake manifold.

Torque:

5.0 N·m {51 kgf·cm, 44 in·lbf}



2. INSTALL NO. 1 INTAKE MANIFOLD TO HEAD GASKET

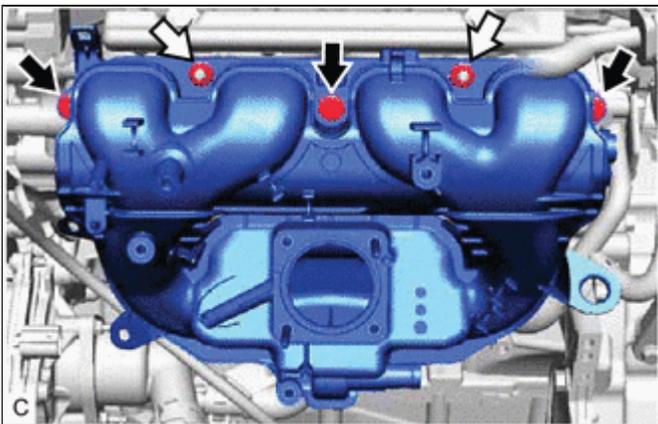
- (a) Install a new No. 1 intake manifold to head gasket to the intake manifold.

3. INSTALL INTAKE MANIFOLD

- (a) Temporarily install the intake manifold to the cylinder head sub-assembly with the 3 bolts and 2 nuts.
 (b) Tighten the 3 bolts and 2 nuts in several steps.

Torque:

28 N·m {286 kgf·cm, 21 ft·lbf}

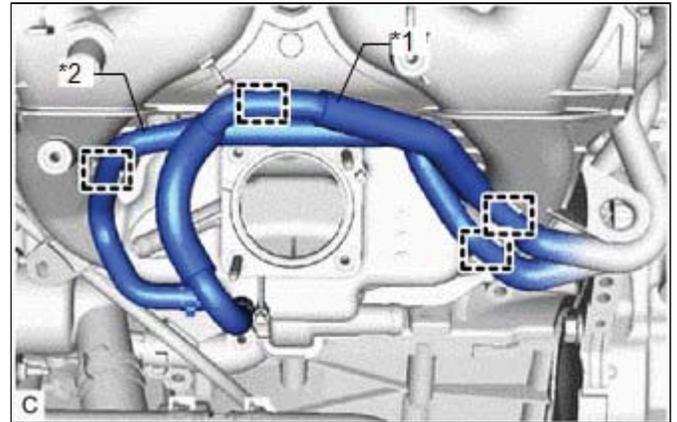


	Bolt
--	------

	
	Nut

4. CONNECT WATER BY-PASS HOSE

- (a) Engage the 2 hose clamps to connect the No. 2 water by-pass hose to the intake manifold.



*1	Water By-Pass Hose
*2	No. 2 Water By-pass Hose

- (b) Engage the 2 hose clamps to connect the water by-pass hose to the intake manifold.

5. CONNECT NO. 2 FUEL VAPOR FEED HOSE

- (a) Engage the 2 hose clamps to connect the No. 2 fuel vapor feed hose to the intake manifold.
(b) Connect the No. 2 fuel vapor feed hose to the intake manifold.

6. CONNECT NO. 8 WATER BY-PASS HOSE

- (a) Connect the No. 8 water by-pass hose to the No. 3 water by-pass pipe and slide the clip to secure it.
(b) Engage the 2 hose clamps.

7. CONNECT ENGINE COVER BRACKET

- (a) Connect the engine cover bracket to the intake manifold with the bolt.

Torque:

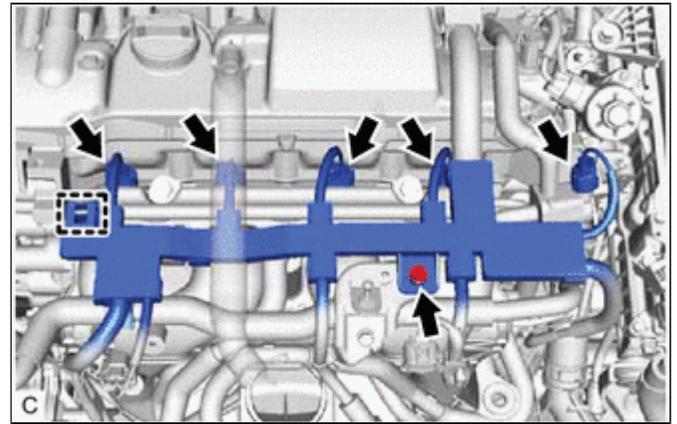
10 N·m { 102 kgf·cm, 7 ft·lbf }

8. CONNECT ENGINE WIRE

- (a) Engage the clamp and connect the engine wire with the bolt.

Torque:

8.0 N·m {82 kgf·cm, 71 in·lbf}

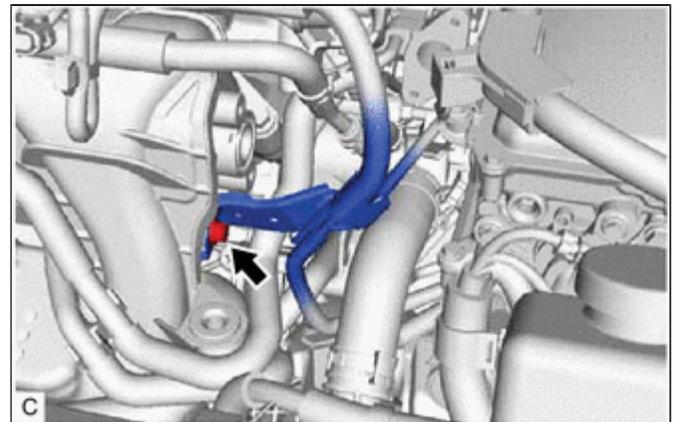


(b) Connect the 4 fuel injector assembly connectors and purge valve (purge VSV) connectors.

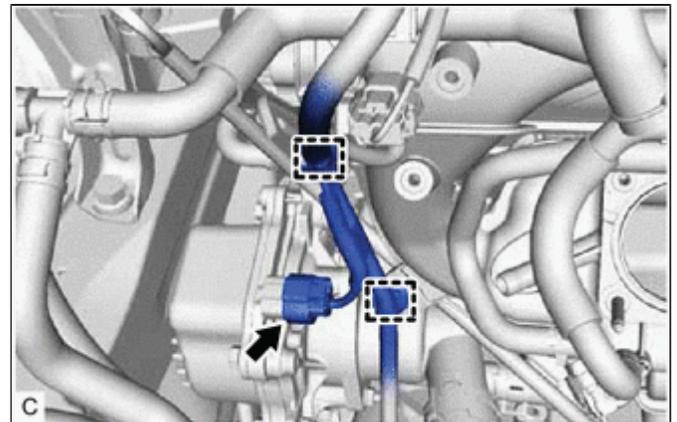
(c) Connect the wire harness bracket with the bolt.

Torque:

8.0 N·m {82 kgf·cm, 71 in·lbf}



(d) Connect the engine water pump assembly connector.



(e) Engage the 2 clamps.

9. CONNECT VENTILATION HOSE

(a) Connect the ventilation hose to the intake manifold and slide the clip to secure it.

10. INSTALL E.F.I. VACUUM SENSOR ASSEMBLY (MANIFOLD ABSOLUTE PRESSURE SENSOR)

(a) Install the E.F.I. vacuum sensor assembly (manifold absolute pressure sensor) to the intake manifold with the bolt.

Torque:

7.0 N·m { 71 kgf·cm, 62 in·lbf }

(b) Connect the vacuum hose to the intake manifold.

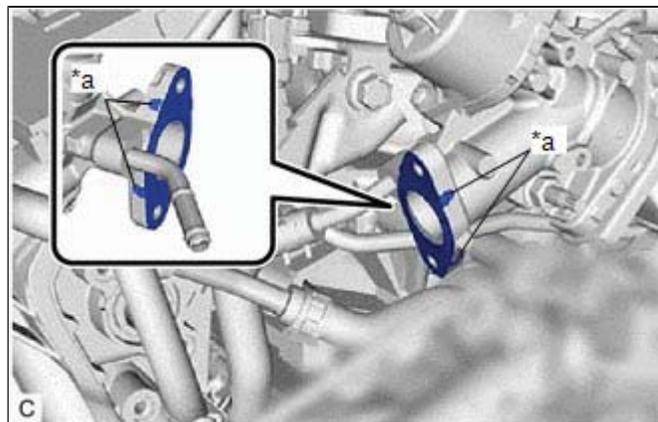
(c) Connect the E.F.I. vacuum sensor assembly (manifold absolute pressure sensor) connector.

11. INSTALL EGR PIPE ASSEMBLY

(a) Install a new EGR pipe gasket to the EGR valve assembly.

NOTICE:

Make sure that the claws of the EGR valve gasket are toward the EGR valve assembly side.

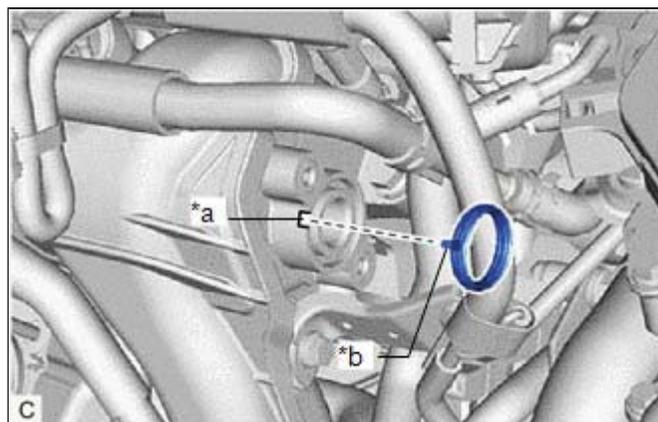


*a	Claw
----	------

(b) Install a new inlet EGR gasket to the intake manifold.

HINT:

Align the protrusion of the inlet EGR gasket with the groove of the intake manifold.



*a	Groove
*b	Protrusion

(c) Install the EGR pipe assembly to the intake manifold and EGR valve assembly with the 4 bolts.

Torque:

8.5 N·m { 87 kgf·cm, 75 in·lbf }

12. INSTALL INLET NO. 1 AIR CLEANER

(a) Install the inlet No. 1 air cleaner to the intake manifold with the 2 bolts.

Torque:

4.0 N·m { 41 kgf·cm, 35 in·lbf }

13. INSTALL AIR CLEANER BRACKET

- (a) Engage the wire harness clamp and install the air cleaner bracket to the cylinder block sub-assembly and air conditioning wire with the bolt (A) and 2 bolts (B).

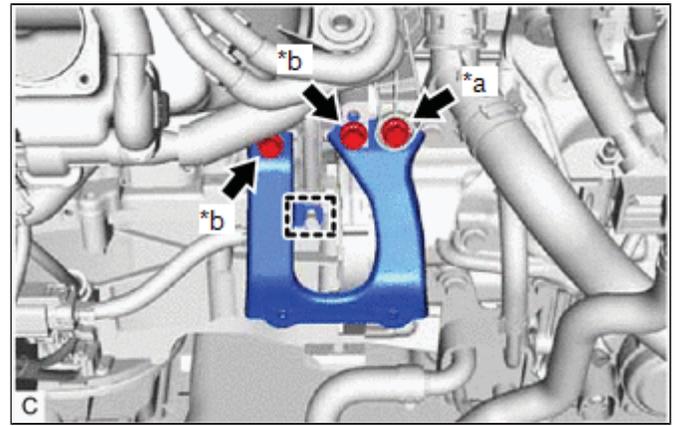
Torque:

Bolt (A) :

12.5 N·m { 127 kgf·cm, 9 ft·lbf }

Bolt (B) :

12 N·m { 122 kgf·cm, 9 ft·lbf }



*a	Bolt (A)
*b	Bolt (B)

14. INSTALL AIR CLEANER CASE SUB-ASSEMBLY

- (a) Install the air cleaner case sub-assembly to the air cleaner bracket with the 2 bolts.

Torque:

4.0 N·m { 41 kgf·cm, 35 in·lbf }

15. INSTALL AIR CLEANER FILTER ELEMENT SUB-ASSEMBLY

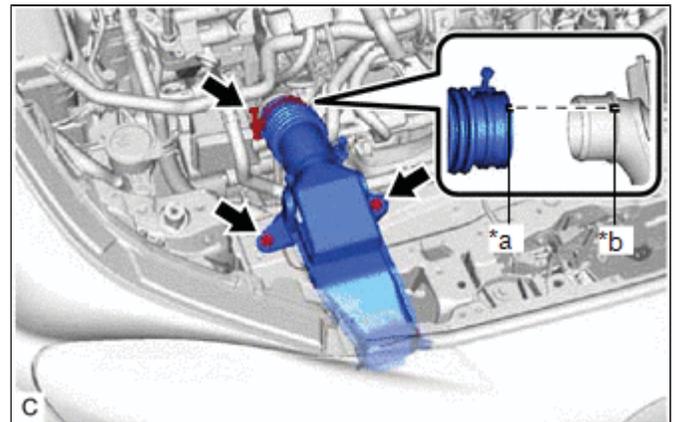
- (a) Install the air cleaner filter element sub-assembly to the air cleaner case sub-assembly.

16. INSTALL INLET NO. 2 AIR CLEANER

- (a) Temporarily install the inlet No. 2 air cleaner to the inlet No. 1 air cleaner and upper radiator support sub-assembly with the 2 bolts.

HINT:

Align the protrusion of the inlet No. 1 air cleaner with the groove of the inlet No. 2 air cleaner.



*a	Groove
*b	Protrusion

- (b) Tighten the 2 bolts.

Torque:

4.0 N·m { 41 kgf·cm, 35 in·lbf }

- (c) Tighten the hose clamp.

Torque:

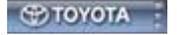
2.0 N·m {20 kgf·cm, 18 in·lbf}

17. INSTALL RADIATOR SUPPORT OPENING COVER

Click here [INFO](#) [INFO](#)

18. INSTALL THROTTLE BODY ASSEMBLY

Click here [INFO](#)



Last Modified: 01-14-2019	6.8:8.0.48	Doc ID: RM100000000THFP
Model Year Start: 2016	Model: Prius	Prod Date Range: [11/2015 -]
Title: 2ZR-FXE (INTAKE / EXHAUST): INTAKE MANIFOLD: REMOVAL; 2016 - 2019 MY Prius [11/2015 -]		

REMOVAL

CAUTION / NOTICE / HINT

The necessary procedures (adjustment, calibration, initialization or registration) that must be performed after parts are removed and installed, or replaced during intake manifold removal/installation are shown below.

Necessary Procedures After Parts Removed/Installed/Replaced

REPLACED PART OR PERFORMED PROCEDURE	NECESSARY PROCEDURE	EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURE NOT PERFORMED	LINK
<ul style="list-style-type: none"> Replacement of throttle body assembly Cleaning the deposits from the throttle body assembly 	Inspection After Repair	<ul style="list-style-type: none"> Poor idle, etc. Engine start function, etc. 	INFO

PROCEDURE

1. REMOVE THROTTLE BODY ASSEMBLY

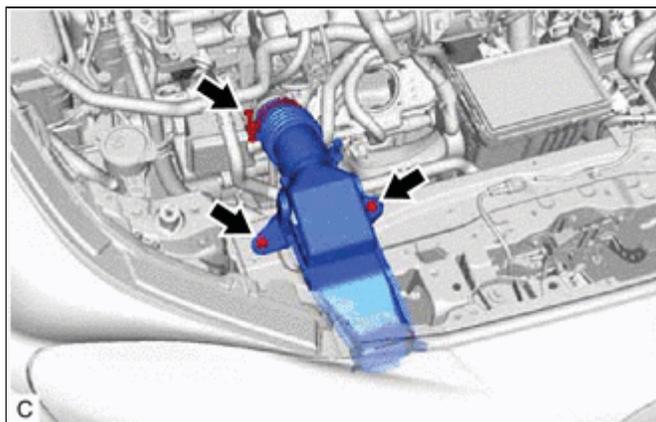
Click here [INFO](#)

2. REMOVE RADIATOR SUPPORT OPENING COVER

Click here [INFO](#) [INFO](#)

3. REMOVE INLET NO. 2 AIR CLEANER

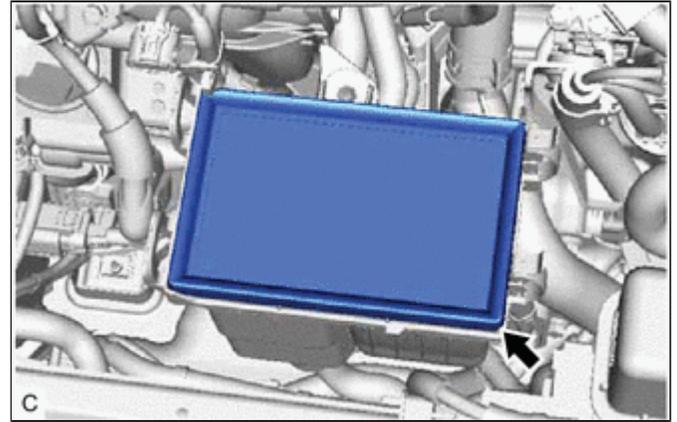
(a) Loosen the hose clamp.



(b) Remove the 2 bolts and inlet No. 2 air cleaner from the inlet No. 1 air cleaner and upper radiator support sub-assembly.

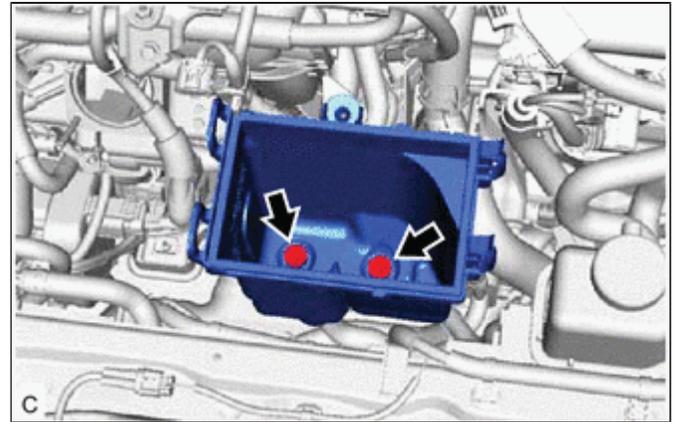
4. REMOVE AIR CLEANER FILTER ELEMENT SUB-ASSEMBLY

- (a) Remove the air cleaner filter element sub-assembly from the air cleaner case sub-assembly.



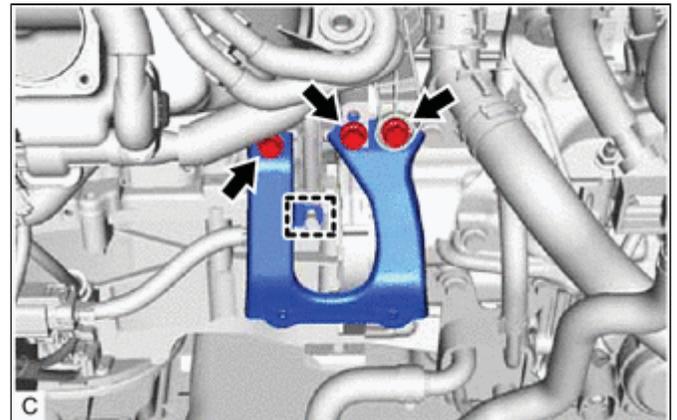
5. REMOVE AIR CLEANER CASE SUB-ASSEMBLY

- (a) Remove the 2 bolts and air cleaner case sub-assembly from the air cleaner bracket.



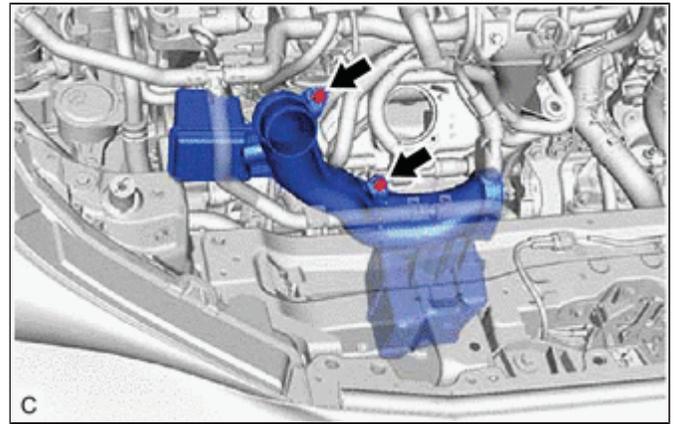
6. REMOVE AIR CLEANER BRACKET

- (a) Remove the 3 bolts and disengage the wire harness clamp to remove the air cleaner bracket from the cylinder block sub-assembly and air conditioning wire.



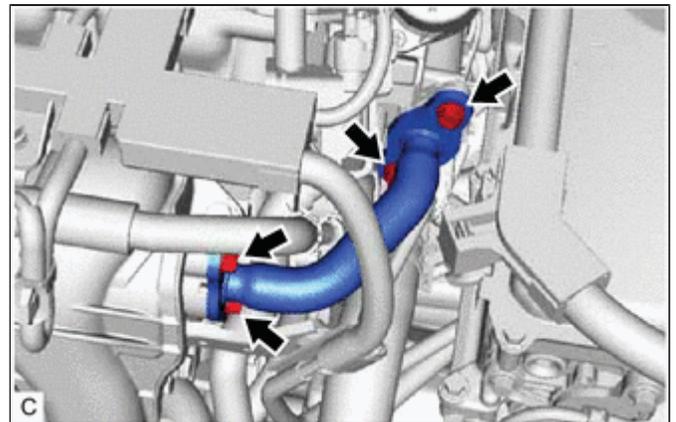
7. REMOVE INLET NO. 1 AIR CLEANER

(a) Remove the 2 bolts and inlet No. 1 air cleaner from the intake manifold.

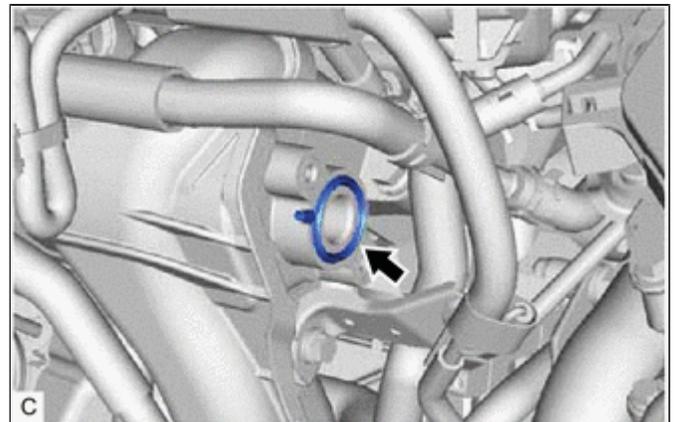


8. REMOVE EGR PIPE ASSEMBLY

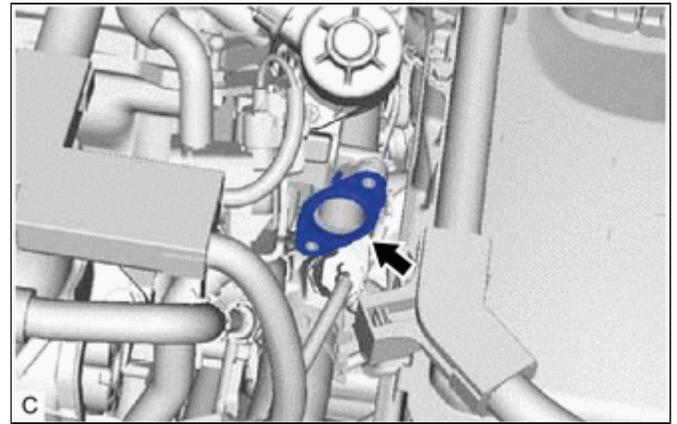
(a) Remove the 4 bolts and EGR pipe assembly from the intake manifold and EGR valve assembly.



(b) Remove the inlet EGR gasket from the intake manifold.

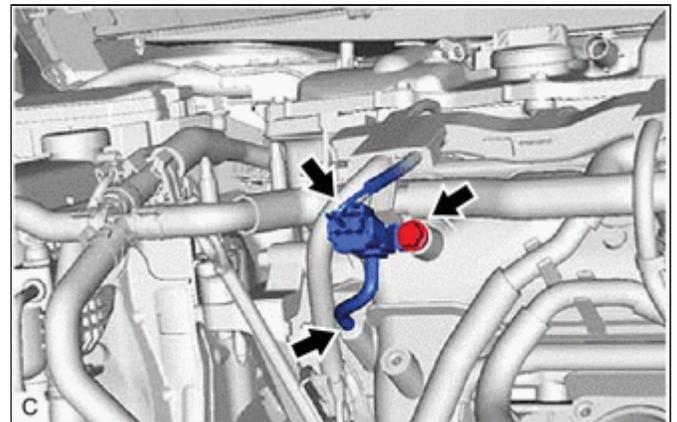


(c) Remove the EGR pipe gasket from the EGR valve assembly.



9. REMOVE E.F.I. VACUUM SENSOR ASSEMBLY (MANIFOLD ABSOLUTE PRESSURE SENSOR)

(a) Disconnect the E.F.I. vacuum sensor assembly (manifold absolute pressure sensor) connector.

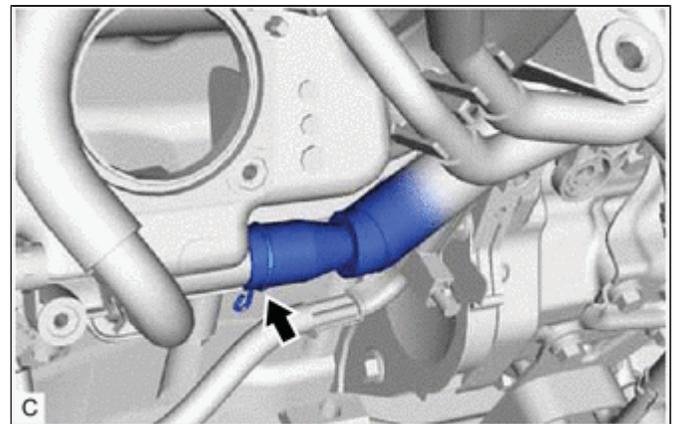


(b) Disconnect the vacuum hose from the intake manifold.

(c) Remove the bolt and E.F.I. vacuum sensor assembly (manifold absolute pressure sensor) from the intake manifold.

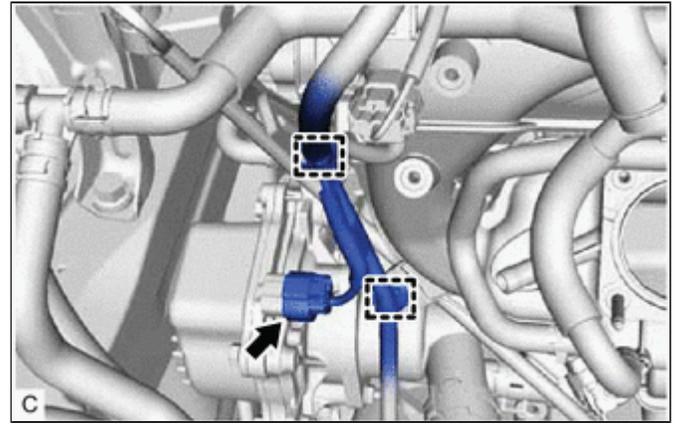
10. DISCONNECT VENTILATION HOSE

(a) Slide the clip and disconnect the ventilation hose from the intake manifold.

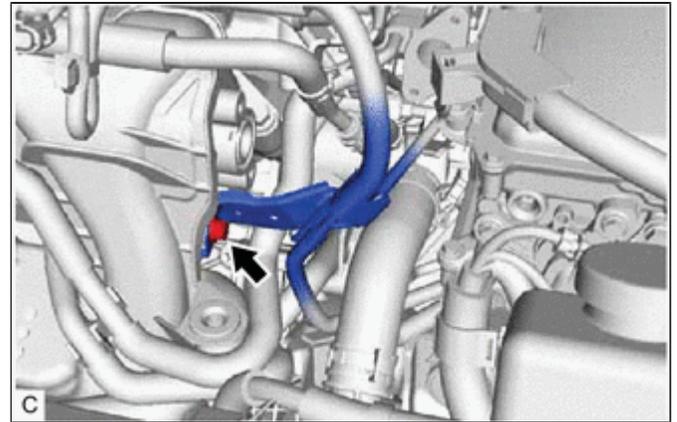


11. DISCONNECT ENGINE WIRE

(a) Disengage the 2 clamps.

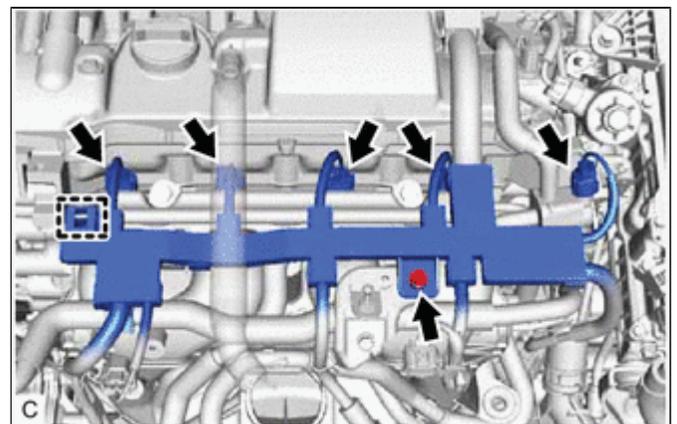


(b) Disconnect the engine water pump assembly connector.



(c) Remove the bolt and disconnect the wire harness bracket.

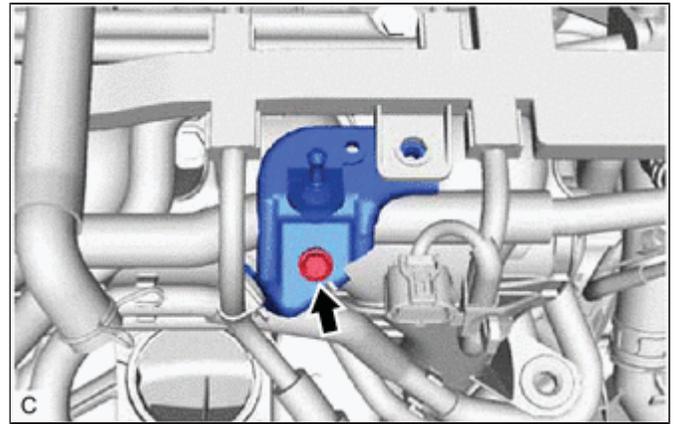
(d) Disconnect the 4 fuel injector assembly connectors and purge valve (purge VSV) connectors.



(e) Remove the bolt and disengage the clamp to disconnect the engine wire.

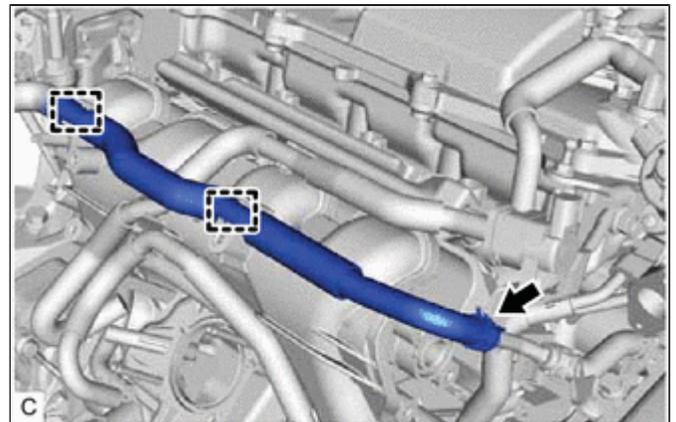
12. DISCONNECT ENGINE COVER BRACKET

- (a) Remove the bolt and disconnect the engine cover bracket from the intake manifold.



13. DISCONNECT NO. 8 WATER BY-PASS HOSE

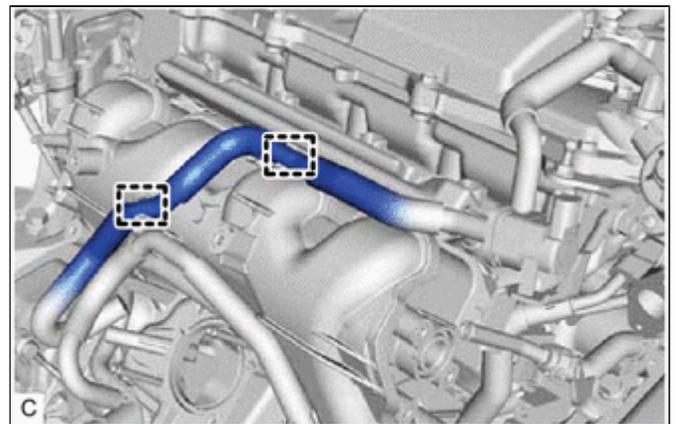
- (a) Disengage the 2 hose clamps.



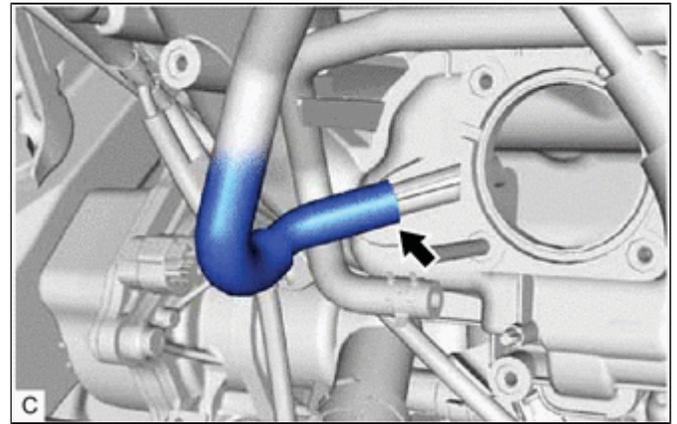
- (b) Slide the clip and disconnect the No. 8 water by-pass hose from the No. 3 water by-pass pipe.

14. DISCONNECT NO. 2 FUEL VAPOR FEED HOSE

- (a) Disengage the 2 hose clamps and disconnect the No. 2 fuel vapor feed hose from the intake manifold.

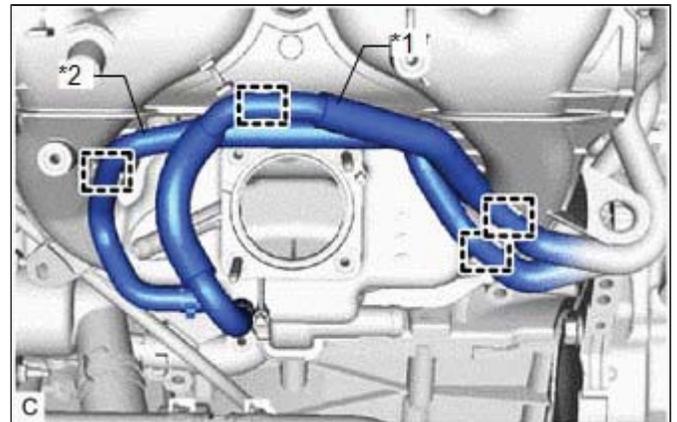


(b) Disconnect the No. 2 fuel vapor feed hose from the intake manifold.



15. DISCONNECT WATER BY-PASS HOSE

(a) Disengage the 2 hose clamps and disconnect the water by-pass hose from the intake manifold.

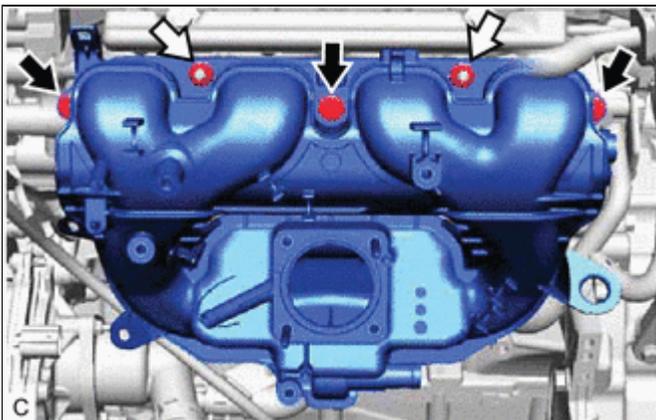


*1	Water By-Pass Hose
*2	No. 2 Water By-pass Hose

(b) Disengage the 2 hose clamps and disconnect the No. 2 water by-pass hose from the intake manifold.

16. REMOVE INTAKE MANIFOLD

(a) Remove the 3 bolts and 2 nuts and intake manifold from the cylinder head sub-assembly.

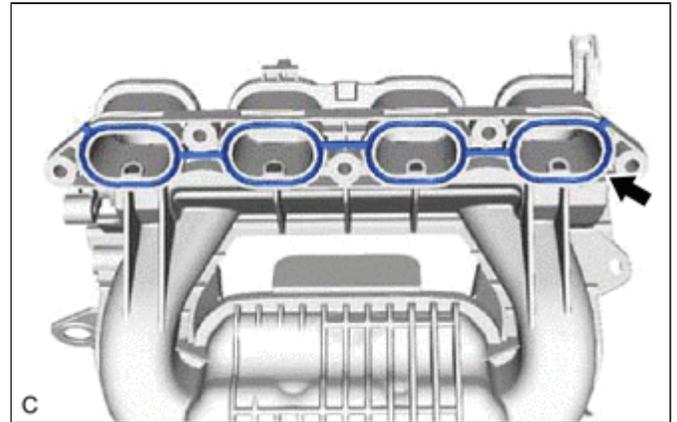


	Bolt
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	Nut

17. REMOVE NO. 1 INTAKE MANIFOLD TO HEAD GASKET

(a) Remove the No. 1 intake manifold to head gasket from the intake manifold.



18. REMOVE STUD BOLT (w/ Stud Bolt)

HINT:

If a stud bolt is deformed or the threads are damaged, replace it.

(a) Using an E6 "TORX" socket wrench, remove the 2 stud bolts from the intake manifold.

