

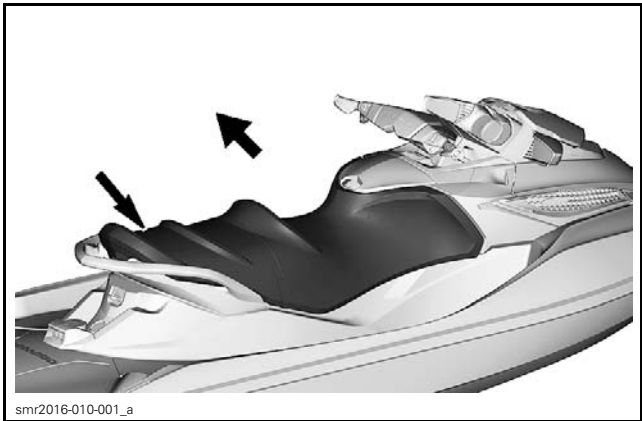
Description	Part Number	Page
LOCTITE 243 (BLUE).....	293 800 060	5



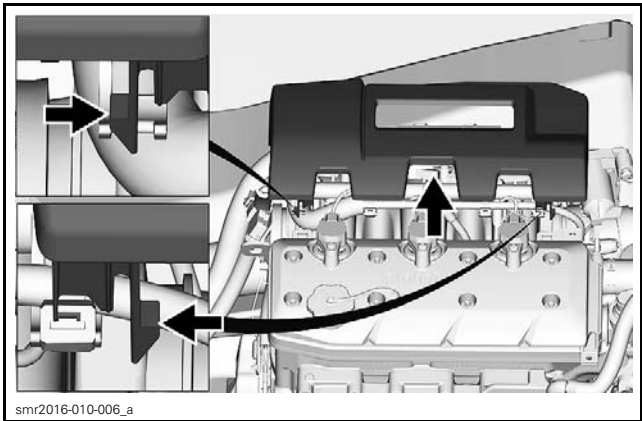
PROCEDURES

INTAKE MANIFOLD

Intake Manifold Access

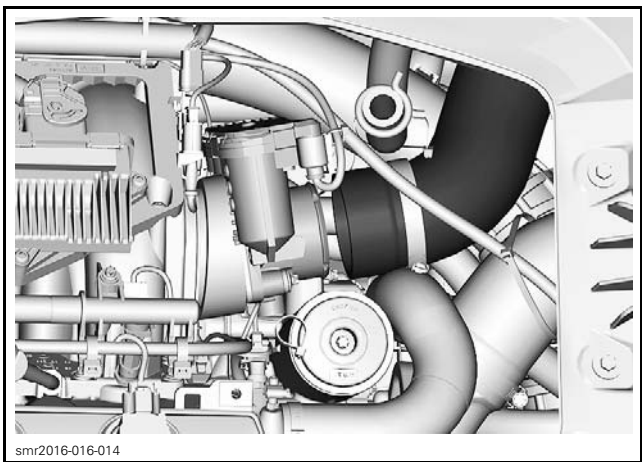


TYPICAL



Move the coolant expansion tank aside to make room.

Removing the Intake Manifold

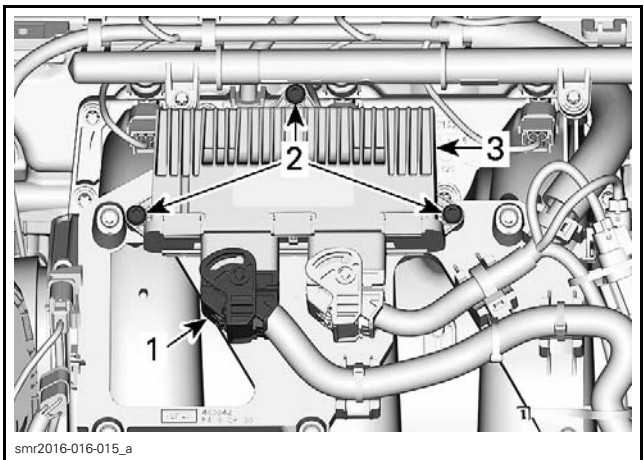


Remove the oil dipstick.

Disconnect fuel hose connector at fuel rail. Refer to *ELECTRONIC FUEL INJECTION (EFI)* subsection.

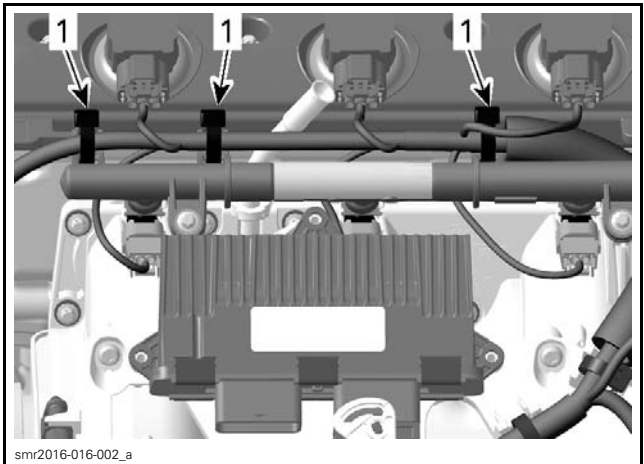
Unplug the "B" connector from the ECM. Refer to *CONNECTOR INFORMATION* subsection for procedure.

Unscrew ECM retaining screws.

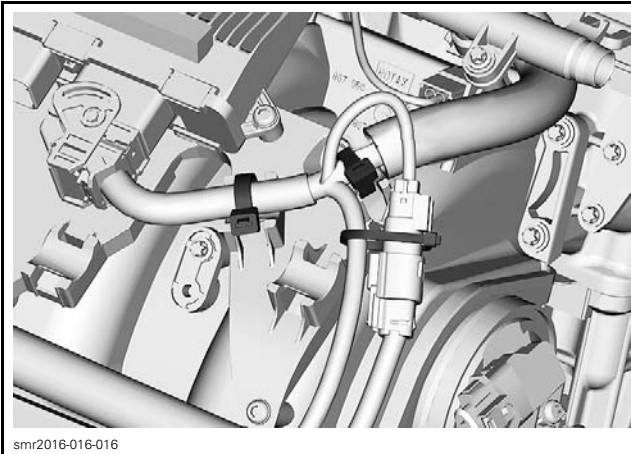


- 1. Connector "B"
- 2. Retaining screws
- 3. ECM

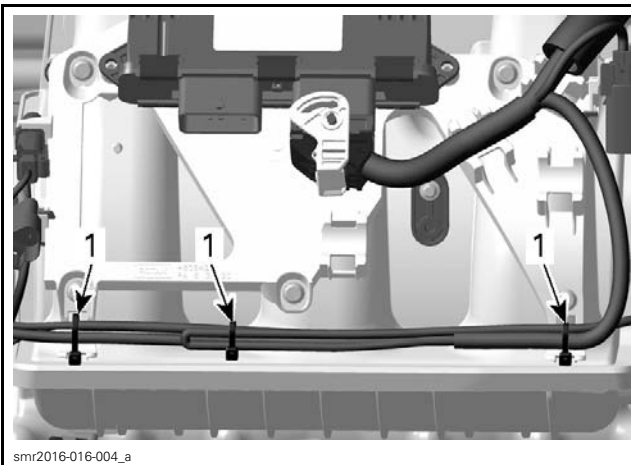
Cut locking ties securing the wiring harnesses to the intake manifold.



- 1. Locking ties (3x)

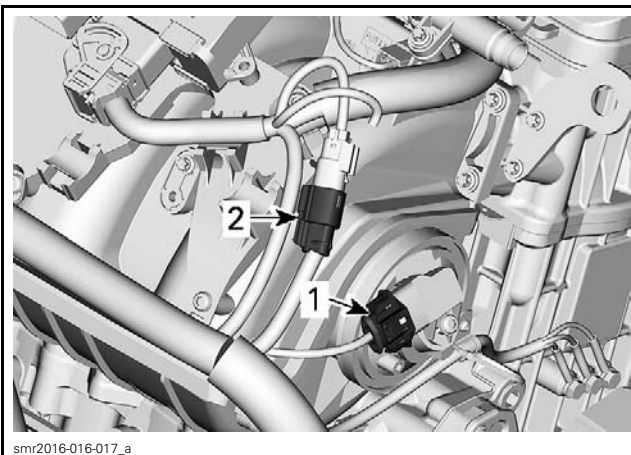


smr2016-016-016
LOCKING TIES (3X)



smr2016-016-004_a
1. Locking ties (3x)

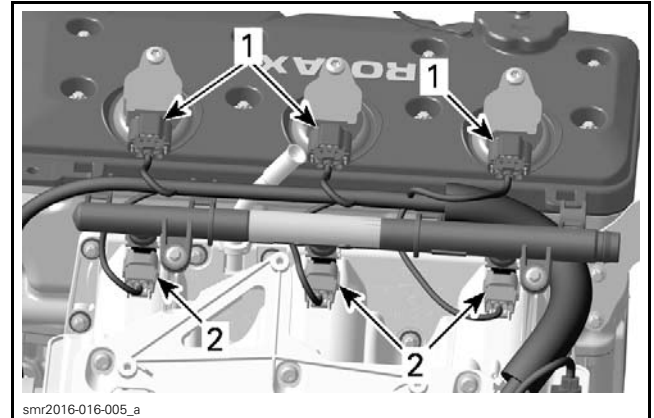
Unplug the manifold absolute pressure and temperature sensor (MAPTS) and the engine connector.



smr2016-016-017_a
1. MAPTS connector
2. Engine connector location

Remove ECM from its support.

Unplug the ignition coil and fuel injector connectors.

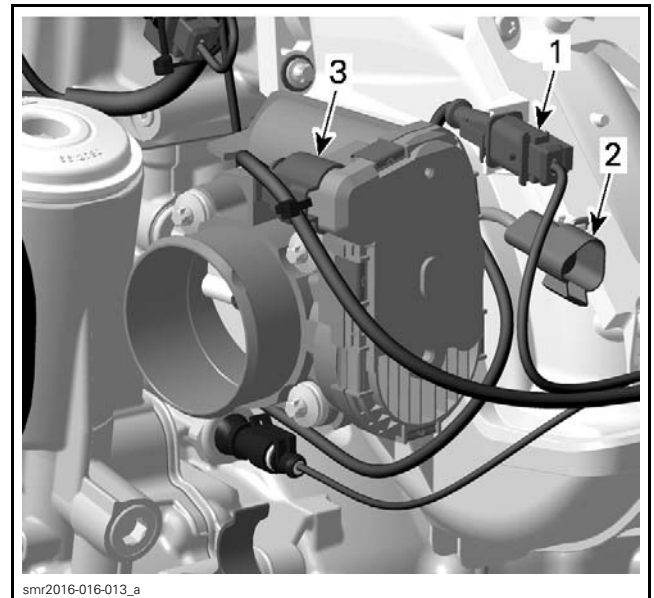


smr2016-016-005_a
1. Ignition coil connectors
2. Fuel injector connectors

Cut locking tie from throttle body connector.

Unplug:

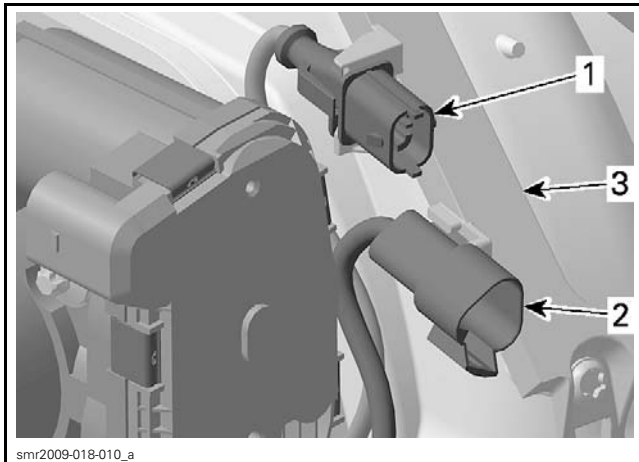
- Knock sensor (KS)
- Stator connector
- Throttle body connector.



smr2016-016-013_a
1. KS connector
2. Stator connector location
3. Throttle body connector

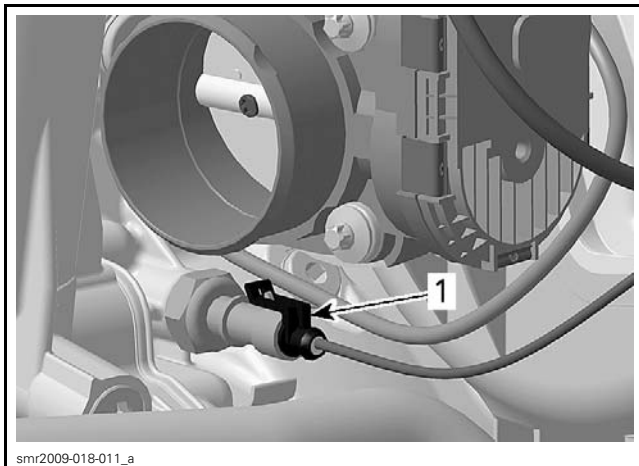
Detach the knock sensor (KS) and stator connector housings from the ECM support. For more details, refer to *CONNECTOR INFORMATION* subsection.

Subsection XX (INTAKE MANIFOLD)



1. KS connector
2. Stator connector
3. ECM support

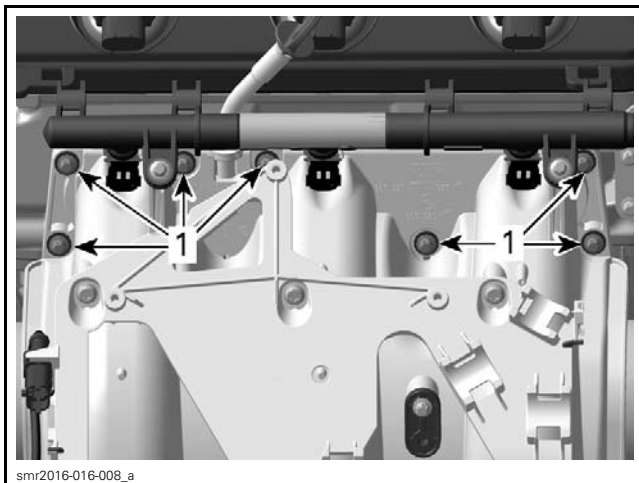
Unplug the oil pressure switch (OPS).



1. Oil pressure switch (OPS)

Pull the engine wiring harness with the ECM plugged away from intake manifold.

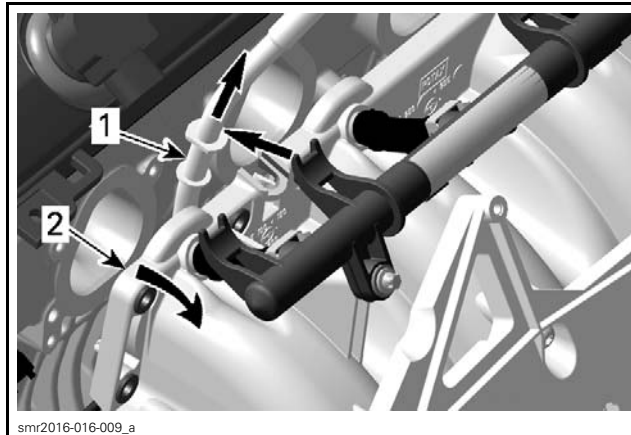
Remove manifold retaining screws.



1. Manifold retaining screws

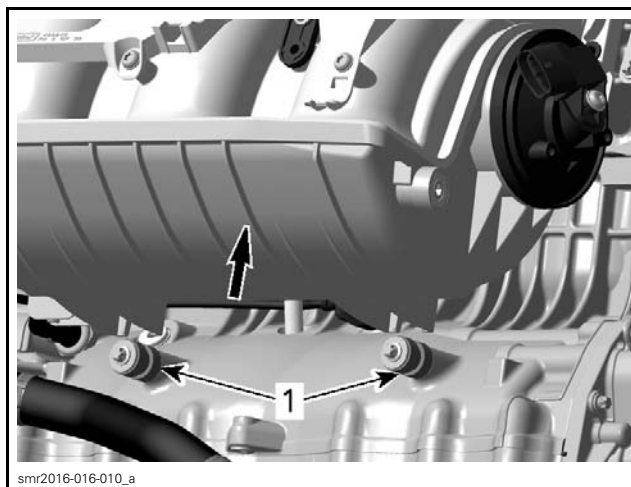
Carefully tilt intake manifold.

Then push the oil dipstick tube out of the manifold slot and pull it out of its bore in the cylinder block.



1. Oil dipstick tube
2. Intake manifold

Lift intake manifold up to pull it out of the mounting brackets.



1. Mounting brackets

Pull intake manifold out.

Remove and discard intake manifold gaskets.

Inspecting the Intake Manifold

Check intake manifold for cracks, warping at flanges or any other visible damage.

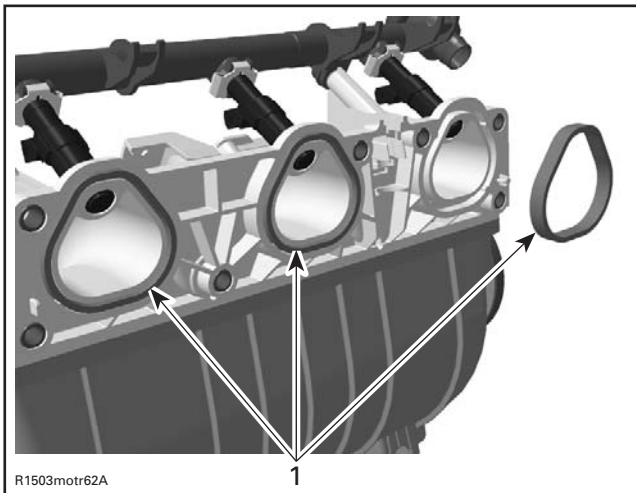
Check if intake manifold gaskets are cracked, brittle or otherwise damaged.

Replace damaged parts as necessary.

Installing the Intake Manifold

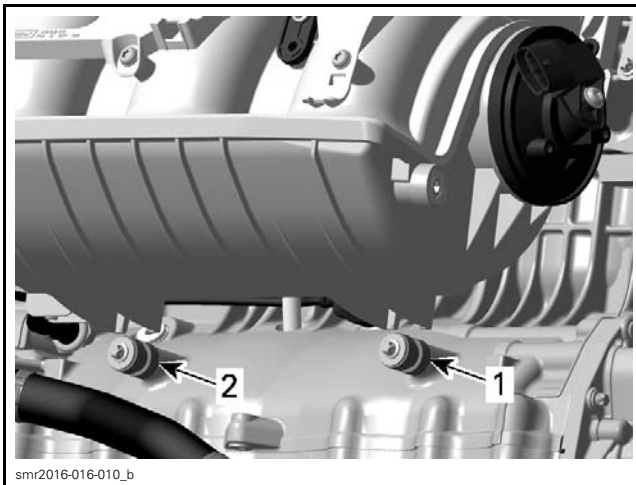
The installation is the reverse of the removal procedure. However, pay attention to following details.

Properly install **NEW** gaskets.



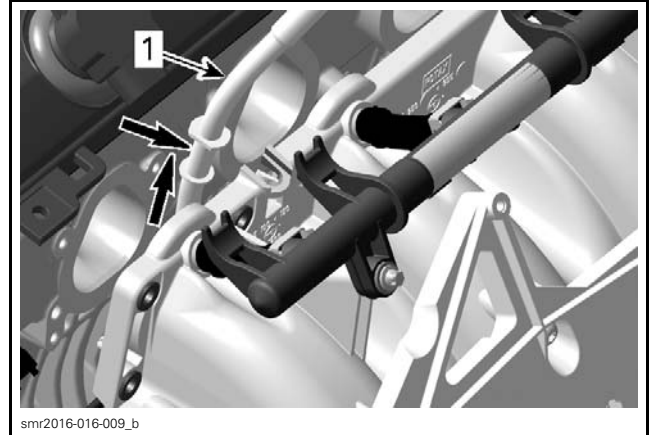
INTAKE MANIFOLD
1. Gaskets

First, position intake manifold on front mounting bracket then push manifold toward engine, then proceed with rear mounting bracket.



1. Front mounting bracket
2. Rear mounting bracket

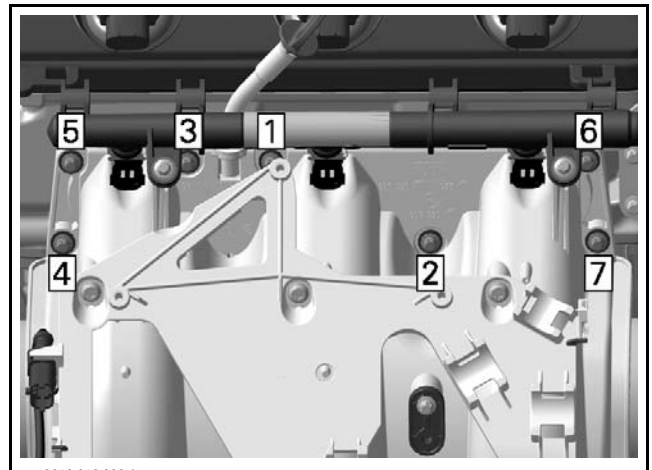
When installing the intake manifold, lift up the oil dipstick tube a little bit to fit in the slot of the manifold.



1. Oil dipstick tube

Tighten intake manifold to specification using the following sequence.

TIGHTENING TORQUE	
Service product	LOCTITE 243 (BLUE) (P/N 293 800 060)
Intake manifold screws	11 N•m ± 1 N•m (97 lbf•in ± 9 lbf•in)



TIGHTENING SEQUENCE

Ensure to properly route and secure wiring harness with locking ties.

Install the ECM on its support.

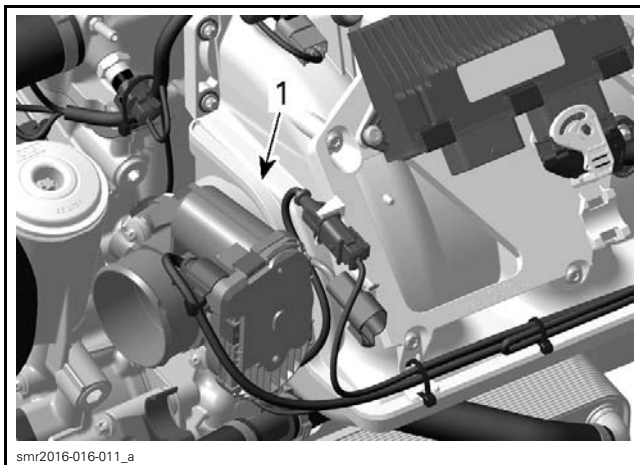
TIGHTENING TORQUE	
Service product	LOCTITE 243 (BLUE) (P/N 293 800 060)
ECM retaining screws	5.5 N•m ± 0.6 N•m (49 lbf•in ± 5 lbf•in)

Install all other removed parts.

FLAME ARRESTER

Flame Arrester Location

The flame arrester is integrated in the intake manifold.



1. Flame arrester inside intake manifold

Inspecting the Flame Arrester

The flame arrester in the intake manifold is maintenance free.

Replacing the Flame Arrester

NOTE: The flame arrester can not be removed from the intake manifold.

Replace intake manifold if necessary. Refer to *INTAKE MANIFOLD* in this subsection.