Part No. 62KZV000

CONTENTS

SERVICE RULES

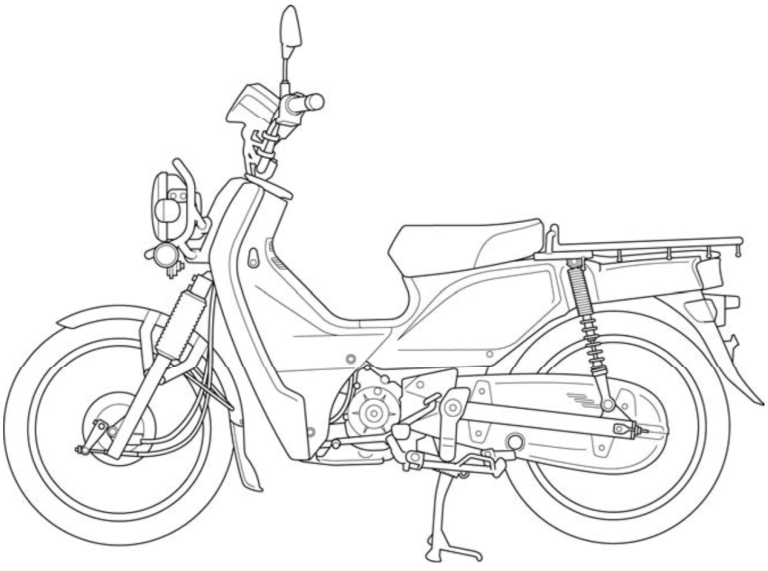
1. Use Honda genuine or Honda-recommended parts and lubricants or their equivalents. Parts that do not meet Honda's design specifications may cause damage to the motorcycle.
2. Use the special tools designed for this product to avoid damage and incorrect assembly.
3. Use only metric tools when servicing the motorcycle. Metric bolts, nuts and screws are not interchangeable with English fasteners.
4. Install new gaskets, O-rings, cotter pins, and lock plates when reassembling.
5. When tightening bolts or nuts, begin with the larger diameter or inner bolt first. Then tighten to the specified torque diagonally in incremental steps unless a particular sequence is specified.
6. Clean parts in cleaning solvent upon disassembly. Lubricate any sliding surfaces before reassembly.
7. After reassembly, check all parts for proper installation and operation.
8. Route all electrical wires as shown in the Cable and Harness Routing (page 1-14).

ABBREVIATION

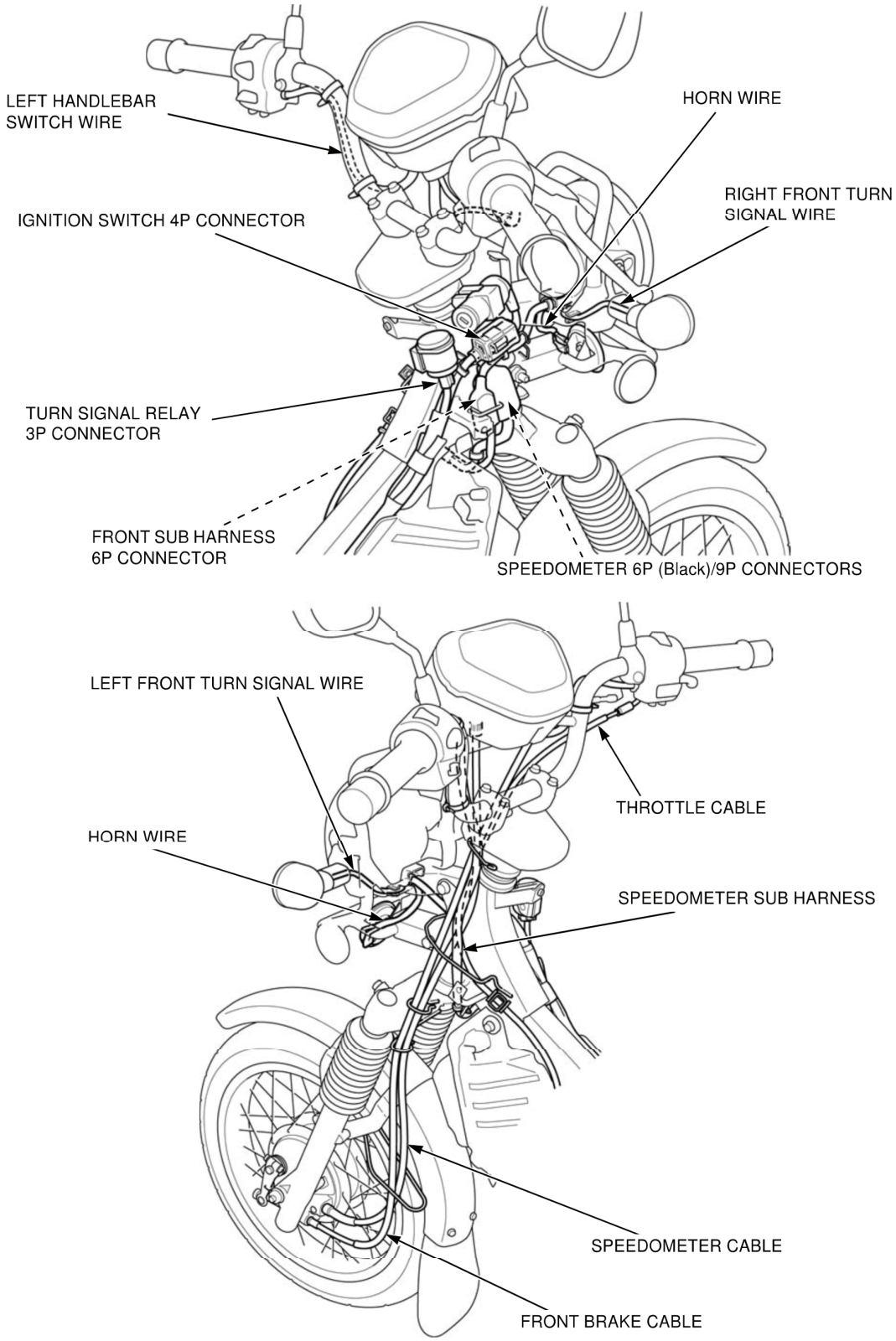
Throughout this manual, the following abbreviations are used to identify the respective parts or systems.

Abbrev. term	Full term
CKP sensor	Crankshaft Position sensor
DLC	Data Link Connector
ECM	Engine Control Module
EEPROM	Electrically Erasable Programmable Read Only Memory
EOT sensor	Engine Oil Temperature sensor
IACV	Intake Air Control Valve
IAT sensor	Intake Air Temperature sensor
MAP sensor	Manifold Absolute Pressure sensor
MIL	Malfunction Indicator Lamp
PGM-FI	Programmed Fuel Injection
SCS connector	Service Check Short connector
TP sensor	Throttle Position sensor

MODEL IDENTIFICATION



CABLE & HARNESS ROUTING



EXHAUST PIPE/MUFFLER

REMOVAL/INSTALLATION

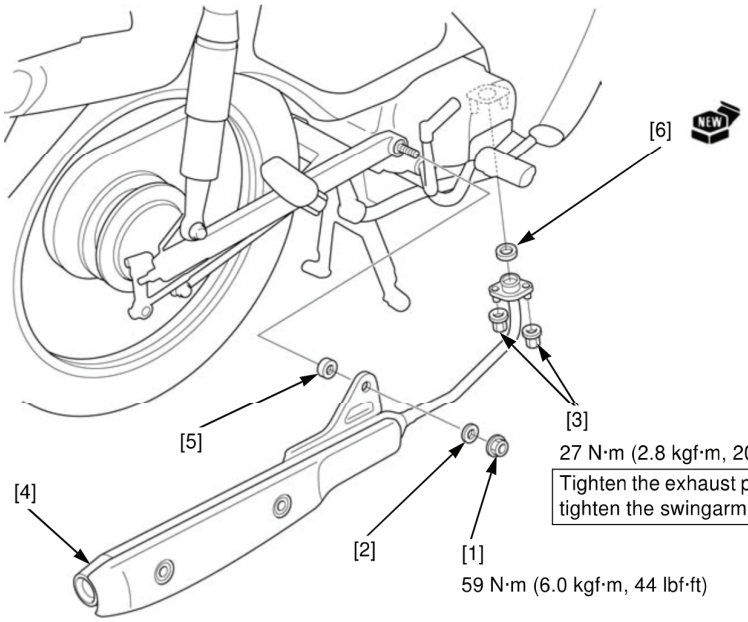
Remove the under guard (page 2-6).

Remove the following:

– Swingarm pivot nut [1]
– Washer [2]
– Exhaust pipe joint nut [3]
– Exhaust pipe/muffler [4]
– Collar [5]
– Exhaust pipe gasket [6]

Installation is in the reverse order of removal.

• Always replace the exhaust pipe gasket with a new one.



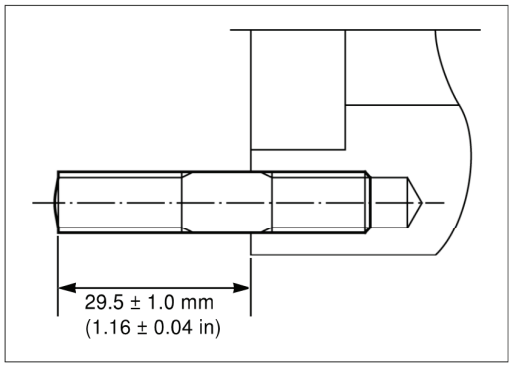
EXHAUST PIPE STUD BOLT

Thread two nuts to the stud bolt and tighten them together, then use a wrench on them to turn the stud bolt out.

Install and tighten new stud bolts into the cylinder head to the specified torque.

TORQUE: 11 N·m (1.1 kgf·m, 8 lbf·ft)

After tightening the stud bolts, check that the length from the bolt head to the cylinder head surface is within specification.

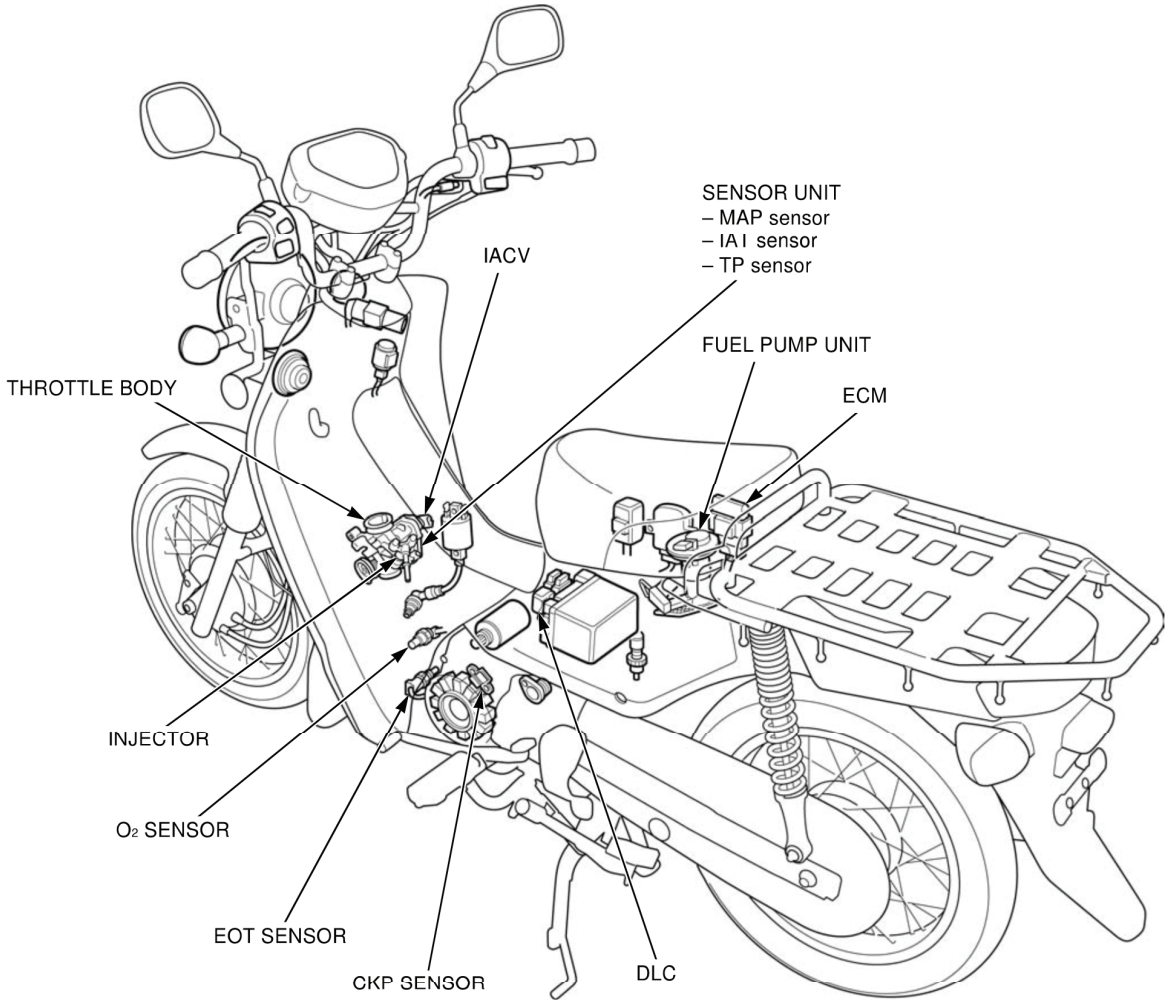


SERVICE INFORMATION

GENERAL

- Use an electric heating element to heat the water for the EOT sensor inspection, keep flammable materials away from the electric heating element. Wear protective clothing, insulated gloves and eye protection.
- A faulty PGM-FI system is often related to poorly connected or corroded connectors. Check those connections before proceeding.
- The PGM-FI system is equipped with the Self-Diagnostic System (page 4-5). If the MIL blinks, follow the Self-Diagnostic Procedures to remedy the problem.
- When checking the PGM-FI, always follow the steps in the troubleshooting flow chart.
- The PGM-FI system is provided with fail-safe function to secure a minimum running capability even when there is any trouble in the system. When any abnormality is detected by the self-diagnosis function, running capability is secured by making use of the numerical values of a situation preset in the simulated program map.
  It must be remembered, however, that when any abnormality is detected in injector, the fail-safe function stops the engine to protect it from damage.
- For PGM-FI system location (page 4-2).
- Use a digital tester for PGM-FI system inspection.

PGM-FI SYSTEM LOCATION



3. ECM Power Line Inspection 1

Turn the ignition switch "ON" and engine stop switch "".

Measure the voltage between the ECM 33P (Black) connector [1] of the wire harness side and ground.

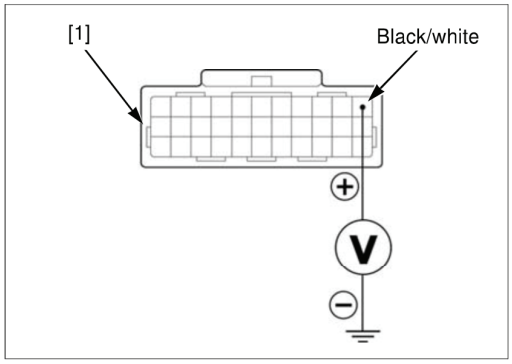
CONNECTION: Black/white (+) – Ground (–)

TOOL:
Test probe **07ZAJ-RDJA110**

Does the battery voltage exist?

YES – Replace the ECM with a new one, and recheck.

NO – GO TO STEP 4.



4. ECM Power Line Inspection 2

Turn the ignition switch "OFF".

Disconnect the regulator/rectifier 6P (Black) connector (page 17-7).

Turn the ignition switch "ON" and engine stop switch "".

Check for continuity between the ECM 33P (Black) connector [1] and regulator/rectifier 6P (Black) connector [2] of the wire harness side.

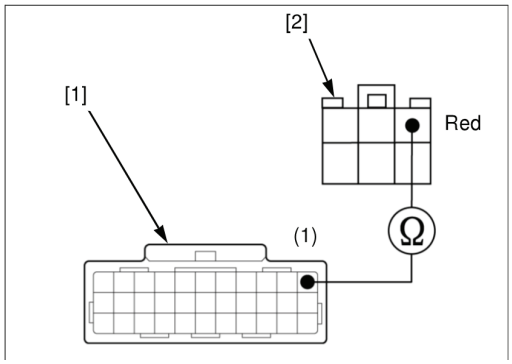
CONNECTION: 1 (Black/white) – Red

TOOL:
Test probe **07ZAJ-RDJA110**

Is there continuity?

YES – Inspect the regulator/rectifier (page 17-7).

NO –
- Open or short circuit in Black/white wire between ECM 33P connector and engine stop switch 4P (Black) connector
- Open or short circuit in Black/blue wire between engine stop switch 4P (Black) connector and ignition switch 4P connector
- Open or short circuit in Red wire between ignition switch 4P connector and regulator/rectifier 6P (Black) connector



EOT SENSOR

REMOVAL/INSTALLATION

- Replace the EOT sensor while the engine is cold.

Drain the engine oil (page 3-7).

Remove the left leg shield (page 2-3).

Disconnect the EOT sensor 2P (Black) connector [1].
Remove the EOT sensor [2] and sealing washer [3].

Always replace a sealing washer with a new one.

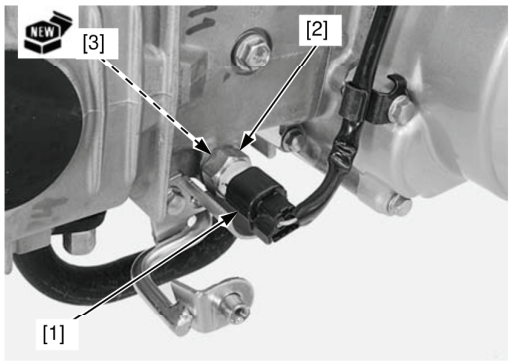
Install a new sealing washer and EOT sensor.
Tighten the EOT sensor to the specified torque.

TORQUE: 14 N·m (1.4 kgf·m, 10 lbf·ft)

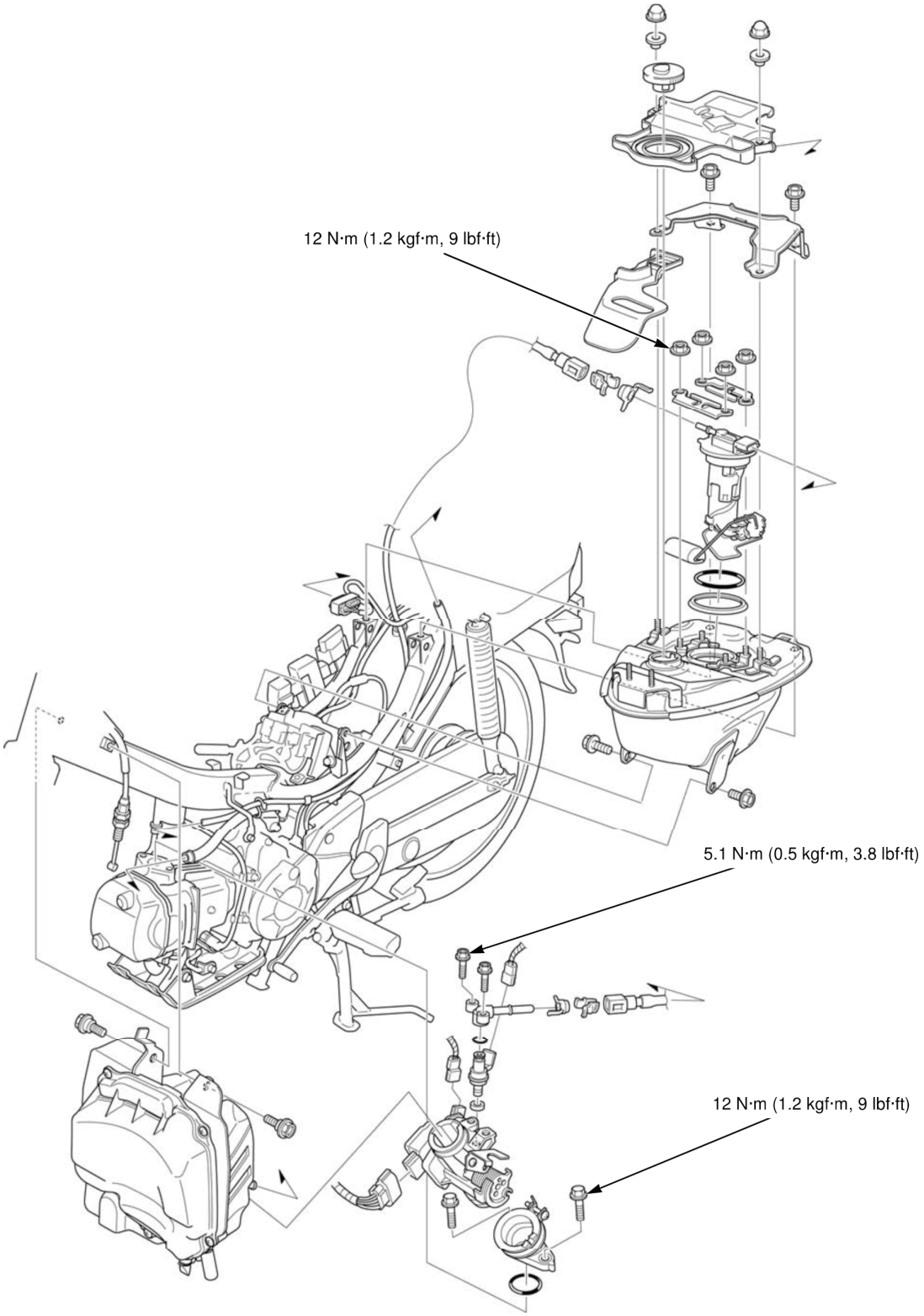
Connect the EOT sensor 2P (Black) connector.

Fill the engine with recommended engine oil (page 3-7).

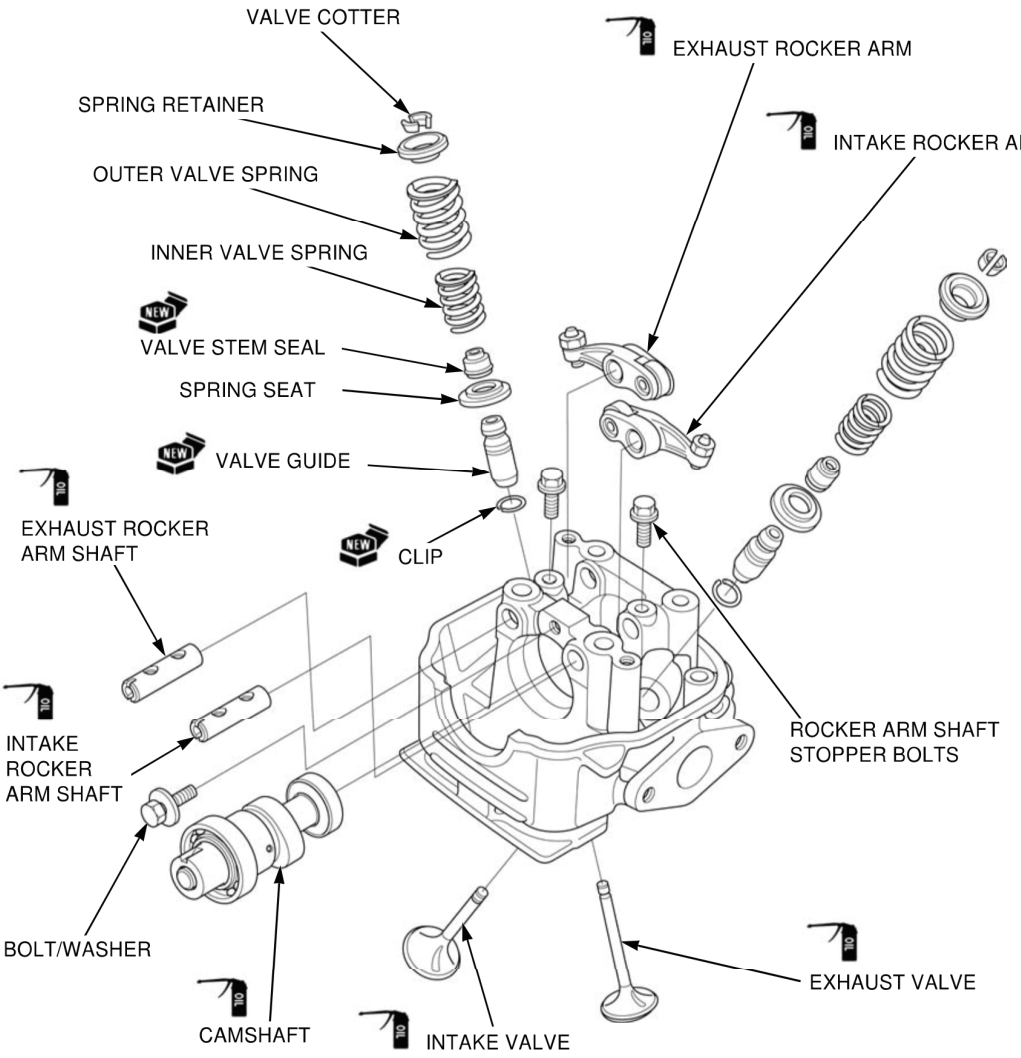
Install the left leg shield (page 2-3).



COMPONENT LOCATION



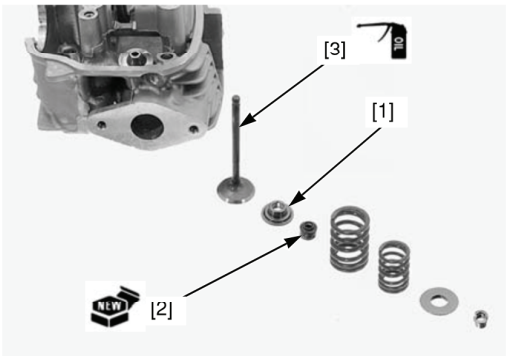
ASSEMBLY



VALVE

Blow through the oil passage in the cylinder head with compressed air.
Install the valve spring seats [1] and new valve stem seals [2].

Coat the valve stem [3] sliding surface with engine oil.
Insert the valves into the valve guides while turning them slowly to avoid damage to the valve stem seals.

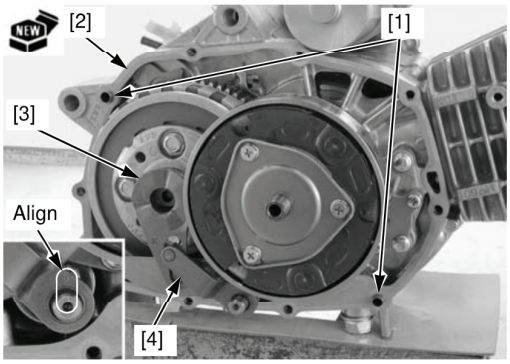


Clean the gasket mating surface of the crankcase and right crankcase cover, being careful not to damage them.

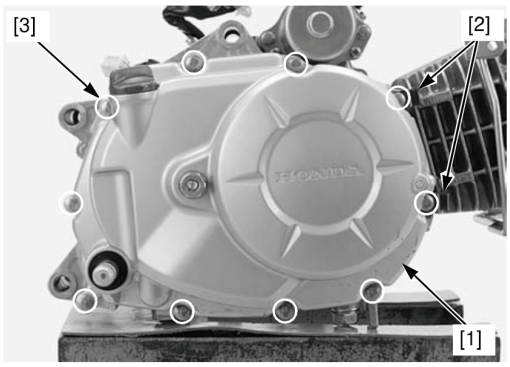
Install the dowel pins [1] and a new gasket [2] onto the crankcase.

Install the clutch lifter cam plate [3] onto the clutch lifter bearing.
Install the clutch lever [4] onto the gearshift spindle while aligning the punch mark of the lever with index line of the gearshift spindle.

Apply engine oil to the gearshift spindle journal area.



Install the right crankcase cover [1].
Install the two wire clamps [2] and tighten the right crankcase cover bolts [3] in a crisscross pattern in several steps.

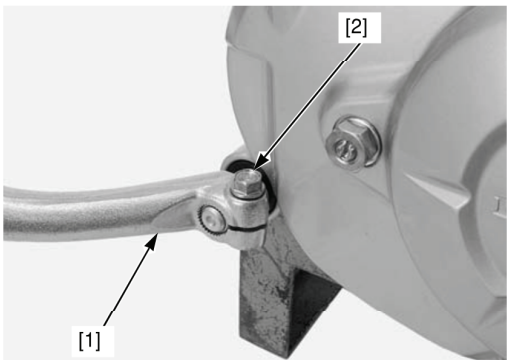


Install the kickstarter pedal [1] to its original position as marked during removal.
Install and tighten the bolt [2].

Install the footpeg bar (page 2-8).

Fill the engine with recommended engine oil (page 3-7). Make sure there are no oil leaks.

Check the clutch system adjustment (page 3-14).



CLUTCH

REMOVAL

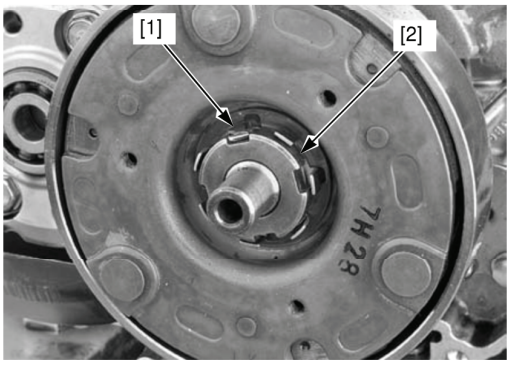
NOTE:

- Clutch system can be serviced with the engine installed on the frame.

Remove the following:

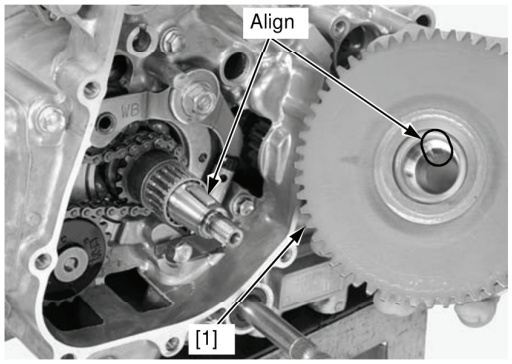
– Right crankcase cover (page 11-4)
– Engine oil centrifugal filter cover (page 3-7)

Bend up the tab [1] of the lock washer to clear the lock nut [2] groove.



Wipe any oil off the mating surface of the crankshaft and flywheel/starter clutch [1].

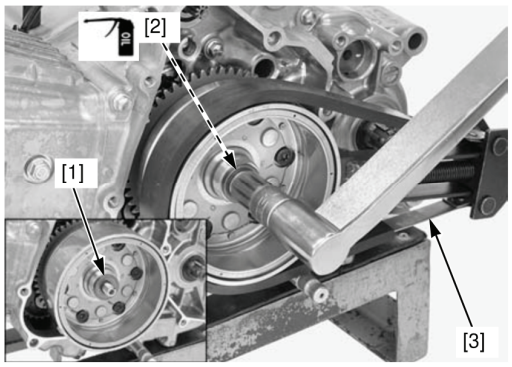
Install the flywheel/starter clutch to the crankshaft, aligning the key way with the woodruff key.



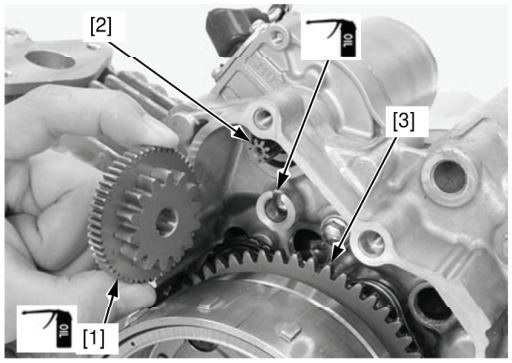
Install the washer [1].
Apply engine oil to the flywheel nut [2] threads and seating surface, then install it.
Hold the flywheel using the special tool and tighten the flywheel nut to the specified torque.

TOOL:
[3] Flywheel holder 07725-0040001

TORQUE: 40 N·m (4.1 kgf·m, 30 lbf·ft)

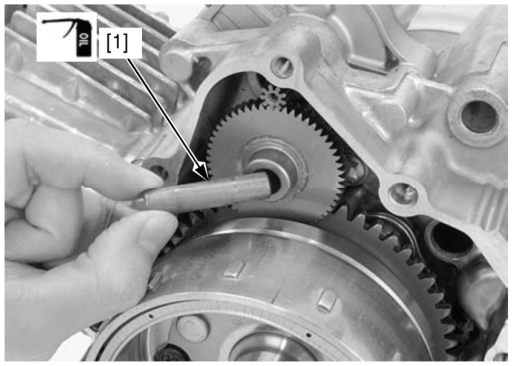


Apply engine oil to the starter reduction gear [1] journal and gear teeth.
Install the starter reduction gear with aligning the starter drive gear [2] and starter driven gear [3].

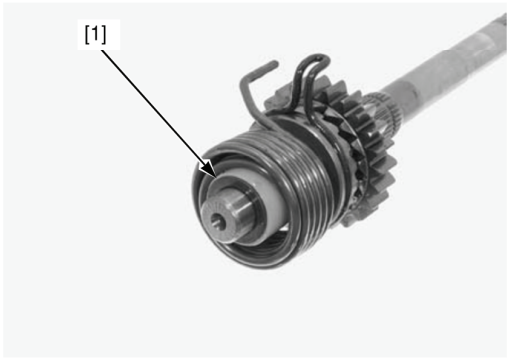


Apply engine oil to the starter reduction gear shaft [1].
Install the shaft into the reduction gear.

Install the left crankcase cover (page 12-3).



Install the special washer [1] to the kickstarter spindle.



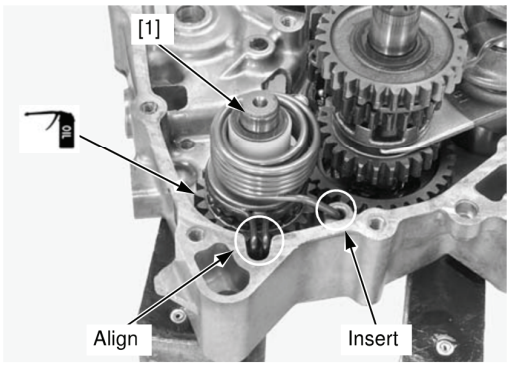
INSTALLATION

Apply engine oil to the kickstarter gear teeth.

Install the kickstarter spindle [1] while aligning its ratchet spring with the groove of the right crankcase as shown.

Insert the return spring end into the hole on the right crankcase as shown.

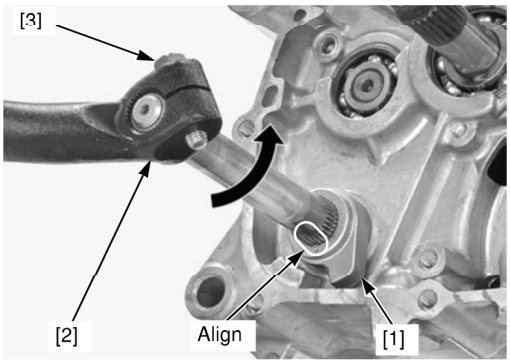
Assemble the crankcase (page 13-15).



Set the retainer [1] to the kickstarter spindle.

Temporarily install the kickstarter pedal [2] and bolt [3]. Turn the kickstarter pedal and completely install the retainer while aligning its wide tooth with the wide spline on the spindle.

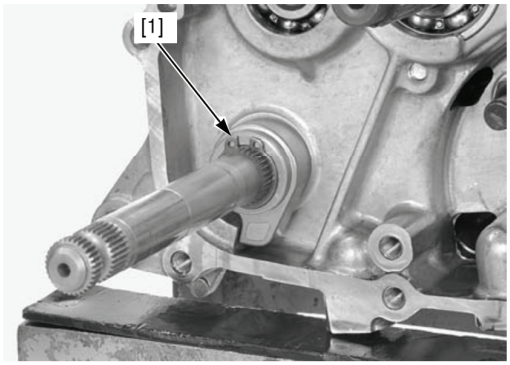
Release the kickstarter pedal.
Remove the bolt and kickstarter pedal.



Make sure that the snap ring is firmly seated in the groove.

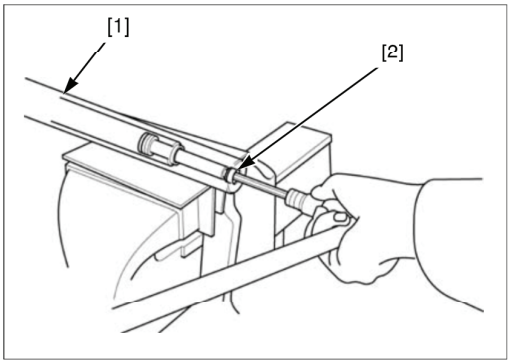
Install the snap ring [1] to the kickstarter spindle groove.

Install the gearshift linkage (page 11-26).

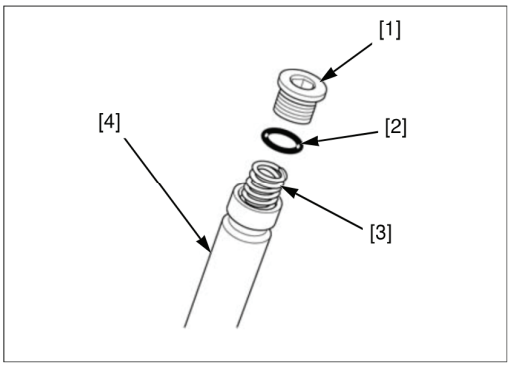


Hold the fork slider [1] in a vice with soft jaws or a shop towel.

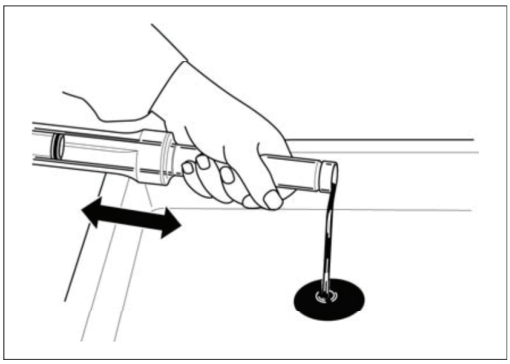
Loosen the fork socket bolt [2] but do not remove yet.



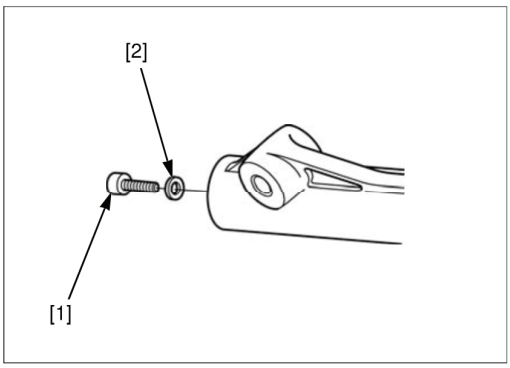
Remove the fork cap bolt [1], O-ring [2] and fork spring [3] from the fork pipe [4].



Pour out the fork fluid by pumping the fork pipe several times.



Remove the socket bolt [1] and sealing washer [2].



SWINGARM

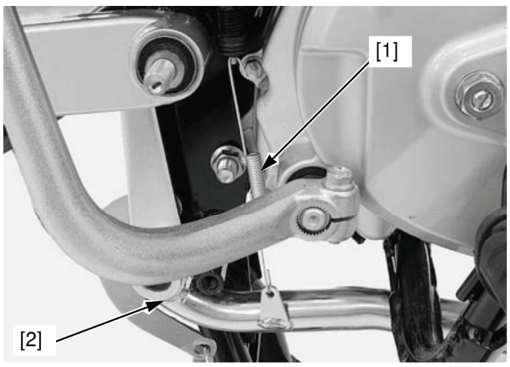
REMOVAL

Support the motorcycle with its centerstand.

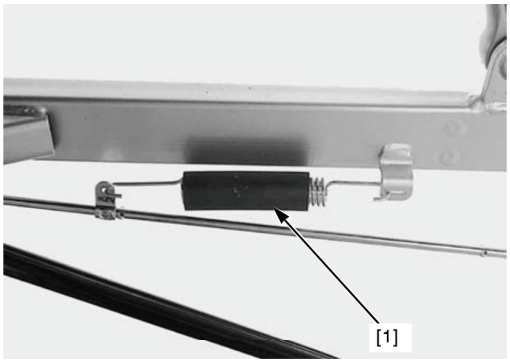
Remove the following:

– Exhaust pipe/muffler (page 2-10)
– Rear wheel (page 16-4)

Unhook the brake light switch spring [1] from the brake pedal [2].

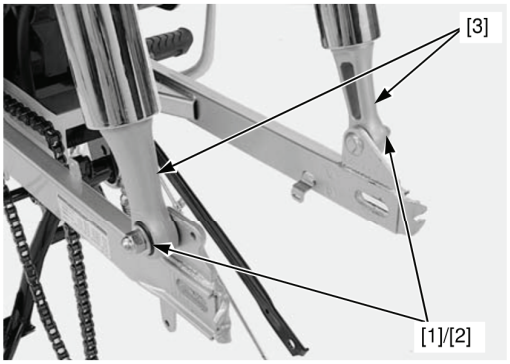


Remove the brake pedal return spring [1] from the brake rod and swingarm.

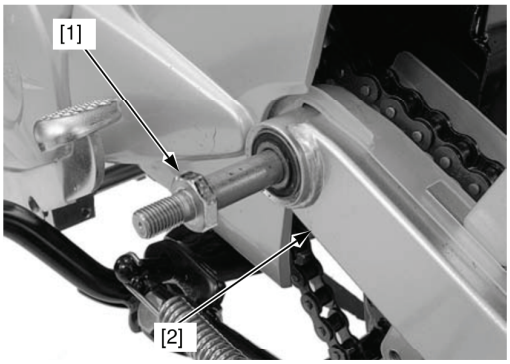


Remove the rear shock absorber lower mounting cap nuts [1] and washers [2].

Release both shock absorber lower mounts [3] from the swingarm studs.

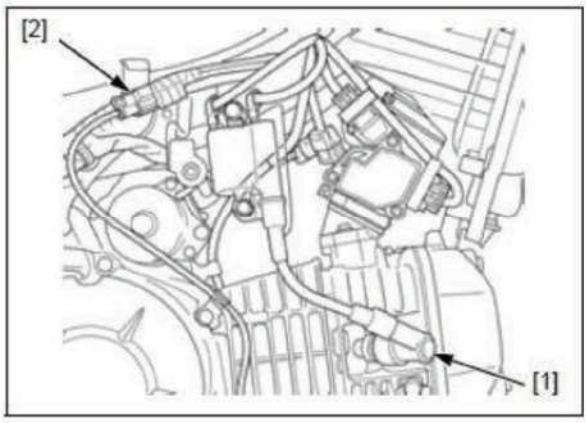


Remove the swingarm pivot bolt [1] and swingarm [2].



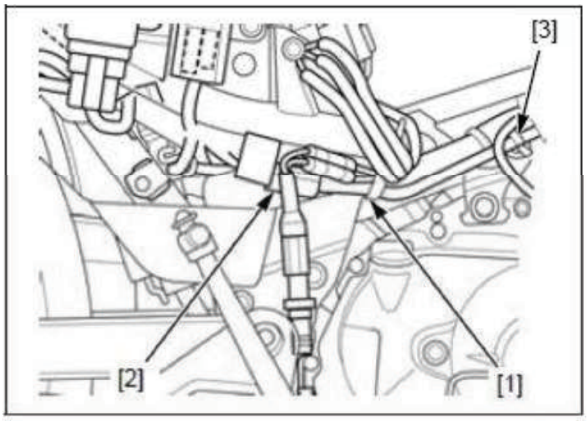
ENGINE REMOVAL

Disconnect the spark plug cap [1] and O2 sensor 1P(Black) connector [2].

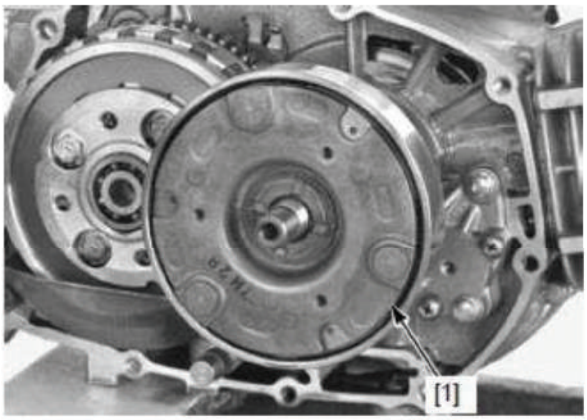


Remove the wire band [1] and disconnect the starter motor 2P connector [2].

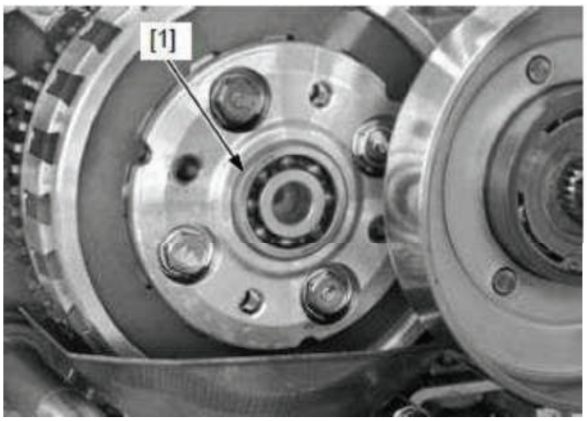
Release the wire band boss [3]



Disconnect the EOT sensor 2P (Black) connector [1] and release the EOT sensor wire [2] from the clamps [3].



Remove the clutch lifter bearing [1].



Hold the clutch lifter plate and remove the clutch center lock nut [1] using the special tools.

TOOLS: [2] Universal holder 07725-0030000
[3] Lock nut wrench, 20 x 24 mm 07716-0020100
[4] Extension bar 07716-0020500