4. MAINTENANCE

SERVICE INFORMATION

GENERAL

- Place the motorcycle on a level ground before starting any work.
- The exhaust contains poisonous carbon monoxide gas that may cause loss of consciousness and may lead to death. Run the engine in an open area or with an exhaust evacuation system in and enclosed area.

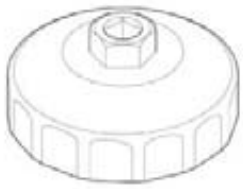
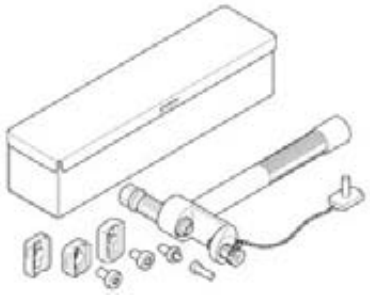
SPECIFICATIONS

ITEM			SPECIFICATIONS
Throttle grip free play			2 – 6 mm (1/12 – 1/4 in)
Spark plug	NGK		CR8EH-9
	DENSO		U24FER9
Spark plug gap			0.80 – 0.90 mm (0.031 – 0.035 in)
Valve clearance	IN		0.16 ± 0.03 mm (0.006 ± 0.001 in)
	EX		0.32 ± 0.03 mm (0.013 ± 0.001 in)
Engine oil capacity	After draining		2.7 liter (2.9 US qt, 2.4 Imp qt)
	After oil filter change		3.5 liter (3.7 US qt, 3.1 Imp qt)
Engine oil			Suggested oil: Honda "4-stroke motorcycle oil" or an equivalent Oil recommendation: API classification: SG or higher (except oils labeled as energy conserving on the circular API service label) Viscosity: SAE 10W-30 JASO T 903 standard: MA
Engine idle speed			1,200 ± 100 min^{-1} (rpm)
Drive chain slack			20 – 30 mm (4/5 – 1-1/5 in)
Recommended brake fluid			DOT 4
Recommended clutch fluid			DOT 4
Tire size		Front	120/70ZR17M/C (58W)
		Rear	160/60ZR17 M/C (69W)
Tire brand	Bridgestone	Front	BT57F RADIAL U
		Rear	BT57R RADIAL E
	Michelin	Front	Pilot ROAD B
		Rear	Pilot ROAD A
Tire air pressure	Driver only	Front	250 kPa (2.50 kgf/cm^2, 36 psi)
		Rear	290 kPa (2.90 kgf/cm^2, 42 psi)
	Driver and passenger	Front	250 kPa (2.50 kgf/cm^2, 36 psi)
		Rear	290 kPa (2.90 kgf/cm^2, 42 psi)
Minimum tire tread depth		Front	1.5 mm (0.06 in)
		Rear	2.0 mm (0.08 in)

TORQUE VALUES

Spark plug	16 N·m (1.6 kgf·m, 12 lbf·ft)	
Timing hole cap	18 N·m (1.8 kgf·m, 13 lbf·ft)	Apply grease to the threads.
Engine oil filter cartridge	26 N·m (2.7 kgf·m, 19 lbf·ft)	Apply engine oil to the threads and O-ring.
Engine oil drain bolt	30 N·m (3.1 kgf·m, 22 lbf·ft)	
Drive chain adjuster lock nut	21 N·m (2.1 kgf·m, 15 lbf·ft)	
Rear axle nut	108 N·m (11.0 kgf·m, 80 lbf·ft)	U-nut
Air cleaner duct mounting screw	1.1 N·m (0.1 kgf·m, 0.8 lbf·ft)	
Rear master cylinder push rod lock nut	17 N·m (1.7 kgf·m, 13 lbf·ft)	
Oil filter boss	See page 4-18	Apply a locking agent to the threads.

TOOLS

Oil filter wrench 07HAA-PJ70101 	Drive chain tool set 07HMH-MR10103 	Cam chain tensioner holder 07ZMG-MCAA400 

MAINTENANCE SCHEDULE

Perform the Pre-ride inspection in the Owner's Manual at each scheduled maintenance period.

I: Inspect and Clean, Adjust, Lubricate or Replace if necessary. C: Clean. R: Replace. A: Adjust. L: Lubricate.

The following items require some mechanical knowledge. Certain items (particularly those marked * and **) may require more technical information and tools. Consult an authorized Honda dealer.

	FREQUENCY / ITEMS	WHICHEVER COMES FIRST ⇩	⇨ ODOMETER READING (NOTE 1)								REFER TO PAGE
			x 1,000 km	1	6	12	18	24	30	36	
			x 1,000 mi	0.6	4	8	12	16	20	24	
			Months		6	12	18	24	30	36	
*	FUEL LINE					I		I		I	4-5
*	THROTTLE OPERATION					I		I		I	4-6
	AIR CLEANER	NOTE 2					I			I	4-7
	CRANKCASE BREATHER	NOTE 3			C	C	C	C	C	C	4-7
*	SPARK PLUG					I		R		I	4-8
*	VALVE CLEARANCE							I			4-11
	ENGINE OIL			R		R		R		R	4-16
	ENGINE OIL FILTER			R		R		R		R	4-16
	RADIATOR COOLANT	NOTE 4				I		I		R	4-19
*	COOLING SYSTEM					I		I		I	4-19
*	SECONDARY AIR SUPPLY SYSTEM					I		I		I	4-20
	DRIVE CHAIN			EVERY 1,000 km (600 mi) I, L							4-21
	DRIVE CHAIN SLIDER					I		I		I	4-25
	BRAKE FLUID	NOTE 4			I	I	R	I	I	R	4-25
	BRAKE PAD WEAR				I	I	I	I	I	I	4-26
	BRAKE SYSTEM			I		I		I		I	4-27
*	BRAKE LIGHT SWITCH					I		I		I	4-28
*	HEADLIGHT AIM					I		I		I	4-28
	CLUTCH SYSTEM			I	I	I	I	I	I	I	4-28
	CLUTCH FLUID	NOTE 4			I	I	R	I	I	R	4-29
	SIDE STAND					I		I		I	4-30
*	SUSPENSION					I		I		I	4-30
*	NUTS, BOLTS, FASTENERS			I		I		I		I	4-31
**	WHEELS/TIRES					I		I		I	4-32
**	STEERING HEAD BEARINGS			I		I		I		I	4-32

* Should be serviced by an authorized Honda dealer, unless the owner has proper tools and service data and is mechanically qualified

** In the interest of safety, we recommended these items be serviced only by an authorized Honda dealer

Honda recommends that an authorized Honda dealer should road test your motorcycle after each periodic maintenance is carried out.

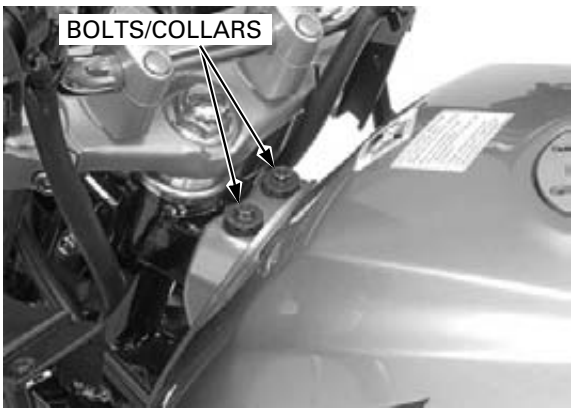
NOTES:
1. At higher odometer reading, repeat at the frequency interval established here.
2. Service more frequently when riding in unusually wet or dusty areas.
3. Service more frequently when riding in rain or at full throttle.
4. Replace every 2 years, or at indicated odometer interval, whichever comes first. Replacement requires mechanical skill.

FUEL LINE

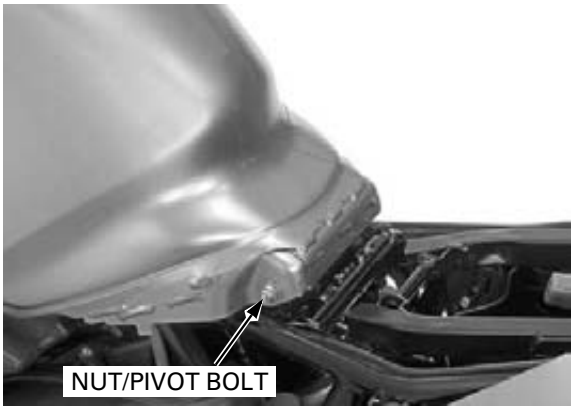
Remove the following:

– Seat (page 3-3)
– Side covers (page 3-4)
– Right and left front cowl (page 3-6)
– Inner panel (page 3-5)

Remove the fuel tank front mounting bolts and collars.



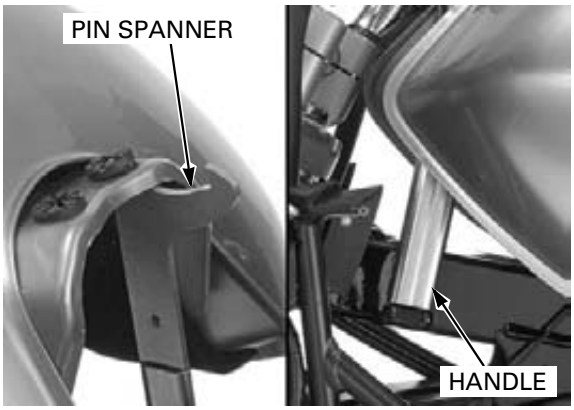
Hold the fuel tank rear pivot bolt and loosen the nut.



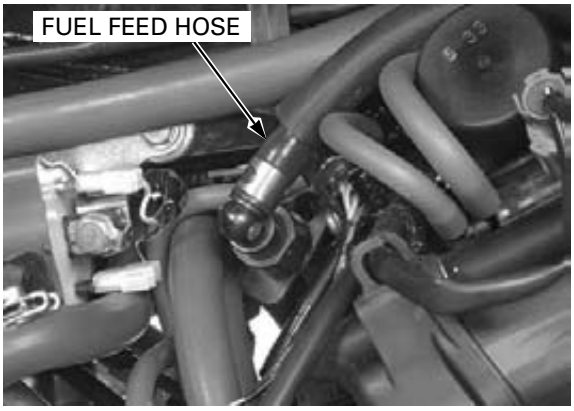
Lift the fuel tank and support it using the equipped tools (pin spanner and handle) as shown.

NOTE:

• Support the fuel tank mounting bolt hole with the pin spanner and hook the handle on the stay of the frame.



Check the fuel lines for deterioration, damage or leakage. Replace the fuel line if necessary (page 6-51).
Check the fuel rails and injectors for damage or leakage. Replace them if necessary (page 6-73).
Check the fuel pump mounting area for leakage. Replace the fuel pump packing if necessary (page 6-55).



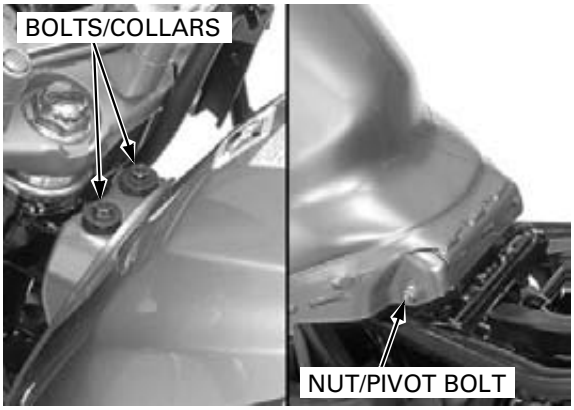
Remove a support tools, then lower the fuel tank.

NOTICE

- *Route the hoses, wires and harness properly (page 1-23).*
- *Be careful not to damage the harness and hoses.*
- *After installing the fuel tank, make sure the drain, breather and fuel hoses are not kinked or bound.*
- *Check the hose joints for loose or disconnection.*

Install the fuel tank front mounting bolts and collars. Tighten the fuel tank mounting bolts and rear pivot nut securely.

Install the removed parts in the reverse order of removal.

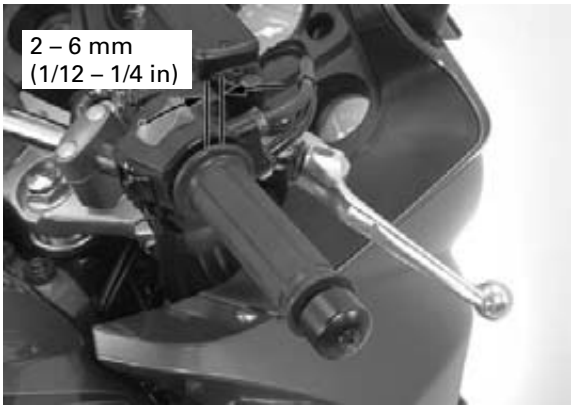


THROTTLE OPERATION

Check for smooth throttle grip full opening and automatic full closing in all steering positions.
Check the throttle cables and replace them if they are deteriorated, kinked or damaged (page 6-69).
Lubricate the throttle cables, if throttle operation is not smooth.

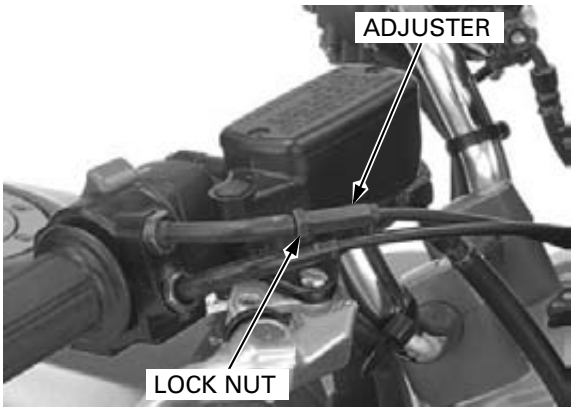
Measure the free play at the throttle grip flange.

FREE PLAY: 2 – 6 mm (1/12 – 1/4 in)



Throttle grip free play can be adjusted at either end of the throttle cable.

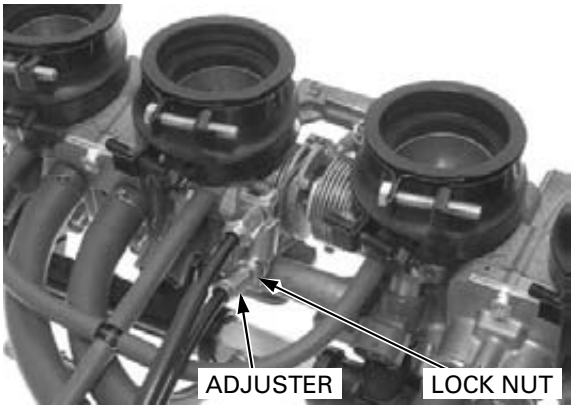
Minor adjustment is made with the throttle grip side adjuster.
Adjust the free play by loosening the lock nut and turning the adjuster.



Major adjustment is made with the throttle body side adjuster.

Remove the air cleaner housing (page 6-60).

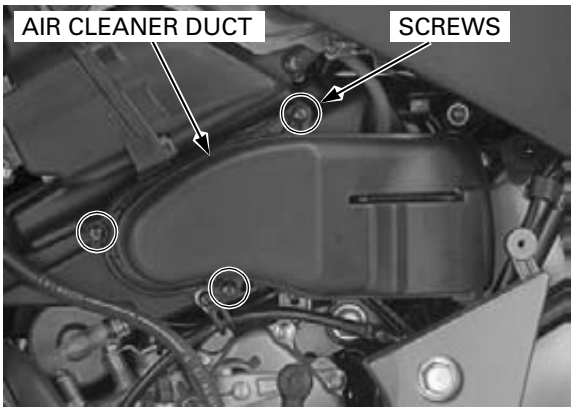
Adjust the free play by loosening the lock nut and turning the adjuster.
After adjustment, tighten the lock nut securely.
Install the air cleaner housing and recheck the throttle operation (page 6-67).
Replace any damaged parts, if necessary.



AIR CLEANER

Remove the left side cover (page 3-4).

Remove the screws and air cleaner duct.



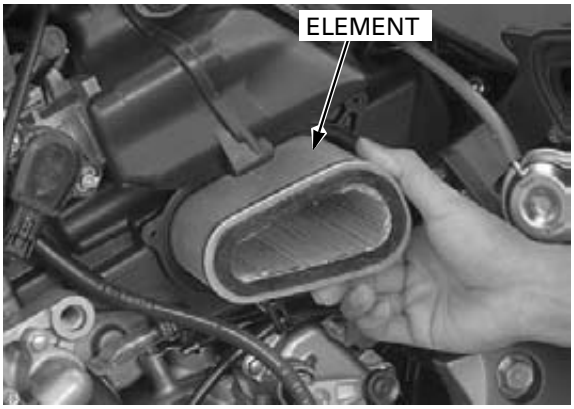
Remove and inspect the air cleaner elements in accordance with the maintenance schedule (page 4-4).

Clean the air cleaner element with the compressed air from outside of the element.

Install the air cleaner element with its opening facing out.

Install the removed parts in the reverse order of removal.

TORQUE:
Air cleaner duct mounting screw:
1.1 N·m (0.1 kgf·m, 0.8 lbf·ft)



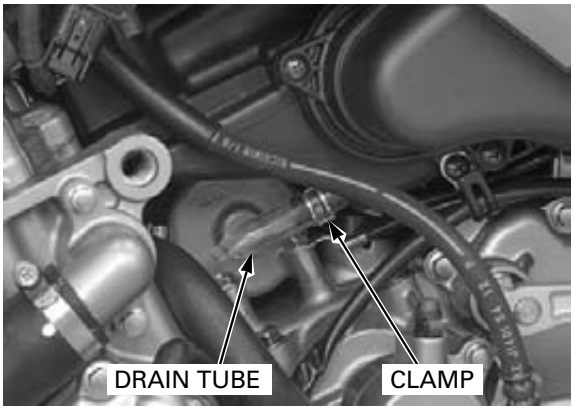
CRANKCASE BREATHER

NOTE:

- Service more frequently when ridden in rain, at full throttle, or after the motorcycle is washed or overturned. Service if the deposit level can be seen in the drain tube.

Remove the left side cover (page 3-4).

Remove the crankcase breather drain tube and drain the deposits into a suitable container, then reinstall the drain tube with the tube clamp.

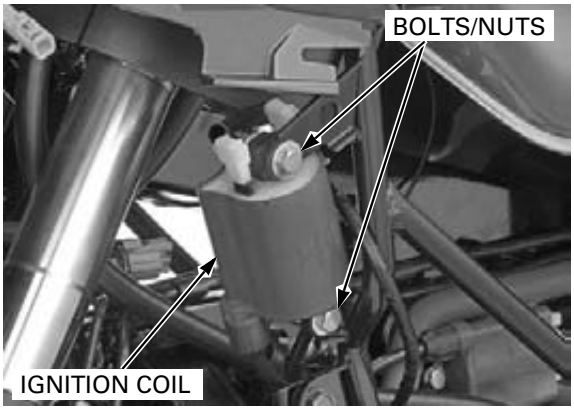


SPARK PLUG

REMOVAL

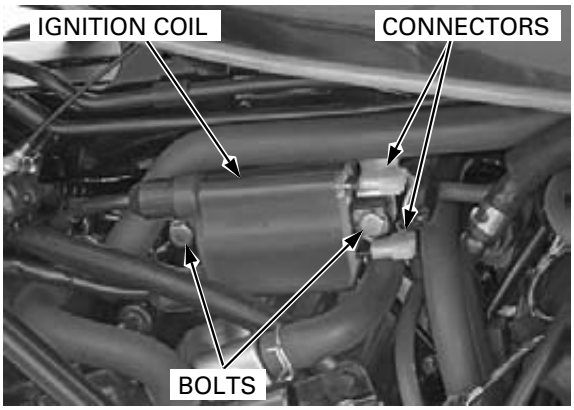
Lift and support the fuel tank (page 4-5).

Remove the ignition coil mounting bolts and nuts to disconnect the #2 and #3 spark plug caps.

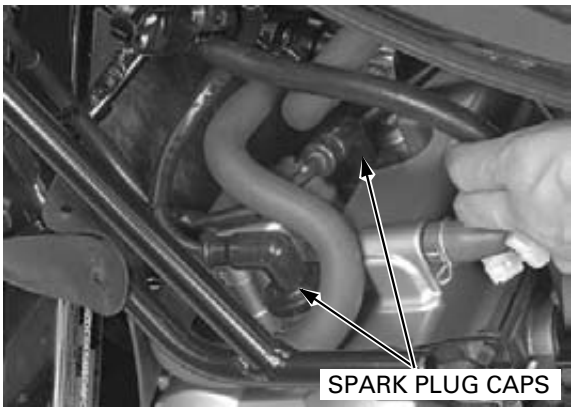


Disconnect the #1/#4 ignition coil connectors.

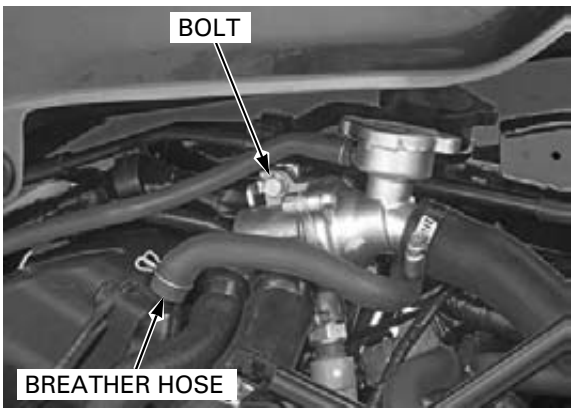
Remove the mounting bolts to disconnect the #1 and #4 spark plug caps.



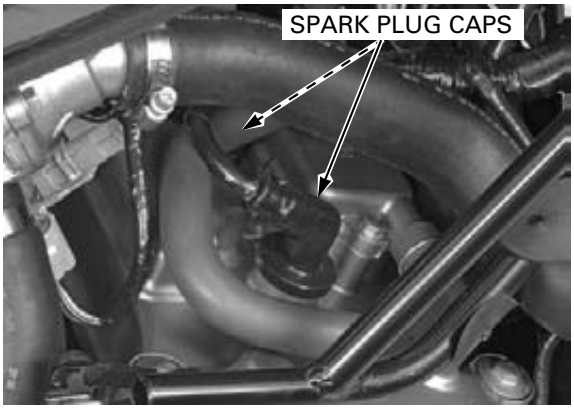
Disconnect the #1 and #2 spark plug caps.



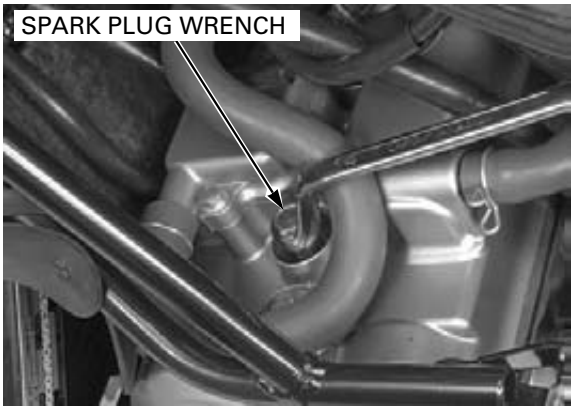
If the #3 spark plug cap is hard to be disconnected, disconnect the crankcase breather hose and remove the thermostat case mounting bolt.



Disconnect the #3 and #4 spark plug caps.



Remove the spark plugs using a equipped spark plug wrench or an equivalent tool.



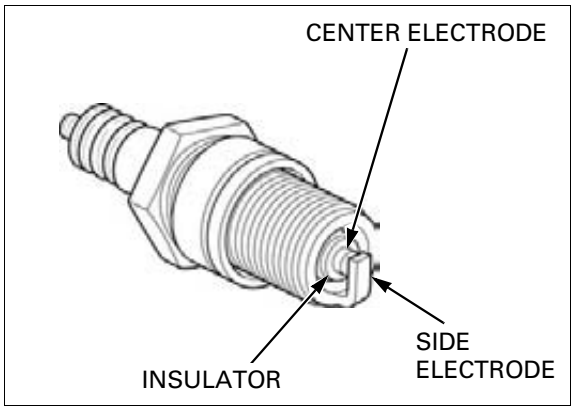
INSPECTION

Check the insulator for cracks or damage, and the electrodes for wear, fouling or discoloration.

Replace the spark plugs if necessary.

SPECIFIED SPARK PLUG:
NGK: CR8EH-9
DENSO: U24FER9

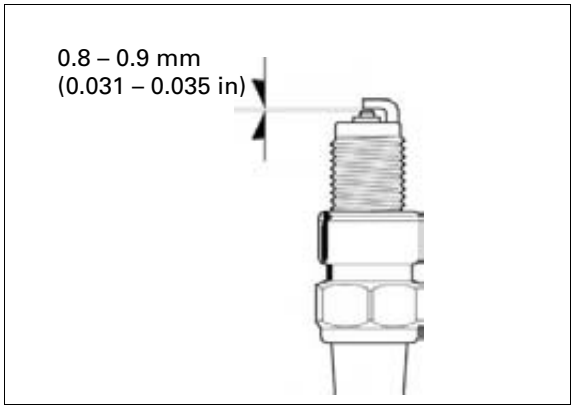
Clean the spark plug electrodes with a wire brush or special plug cleaner.



Check the gap between the center and side electrodes with a wire type feeler gauge.

SPARK PLUG GAP:
0.80 – 0.90 mm (0.031 – 0.035 in)

If necessary, adjust the gap by bending the side electrode carefully.

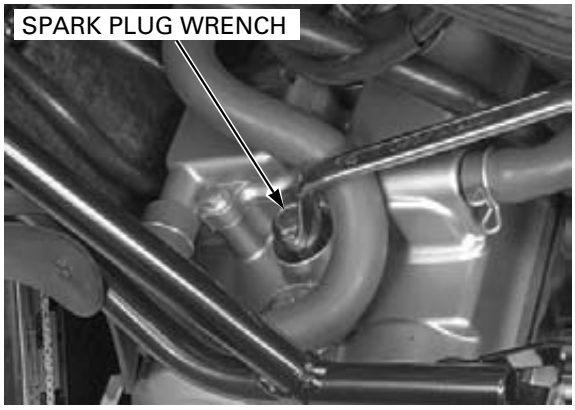


INSTALLATION

For new spark plug; install and hand-tighten the spark plug, then tighten it about 1/2 turns after the sealing washer contacts the seat of the plug hole.

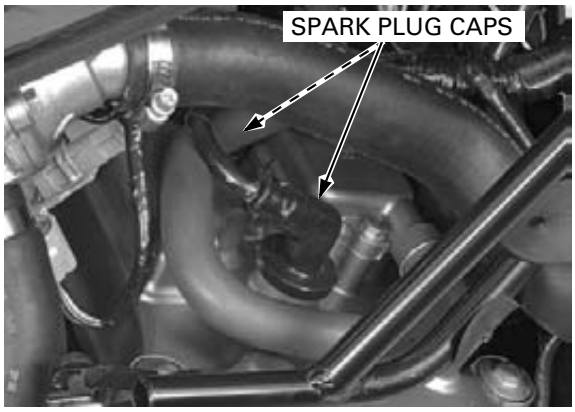
Thread each spark plug in by hand to prevent cross-threading, and tighten them using a spark plug wrench.

TORQUE: 16 N·m (1.6 kgf·m, 12 lbf·ft)



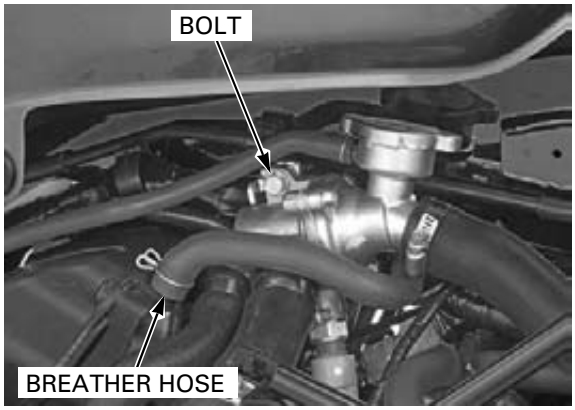
Refer to "Cable & Harness Routing" (page 1-23).

Route the spark plug wires properly and connect the #3 and #4 spark plug caps.



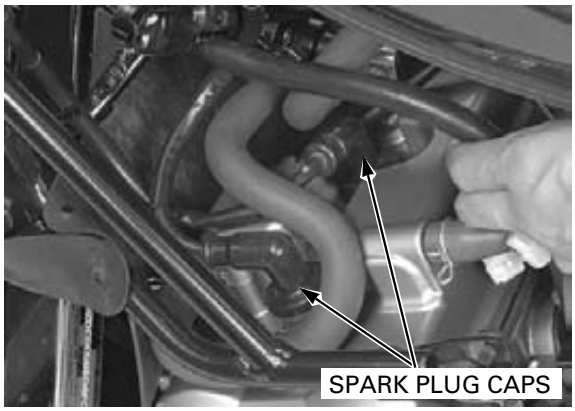
If the thermostat case is removed, install it onto the frame and tighten the mounting bolt.

Connect the crankcase breather hose.



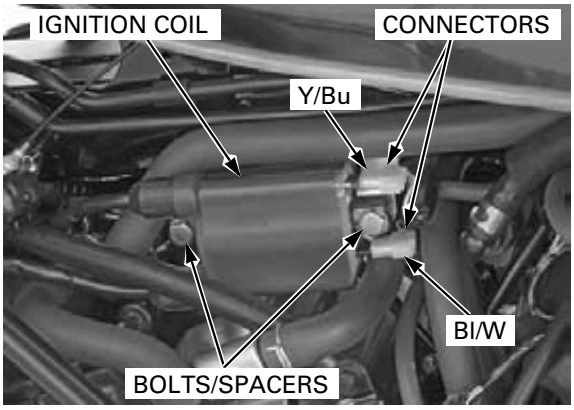
Refer to "Cable & Harness Routing" (page 1-23).

Route the spark plug wires properly and connect the #1 and #2 spark plug caps.



Install the #1/#4 ignition coil with the spacers, and tighten the mounting bolts.

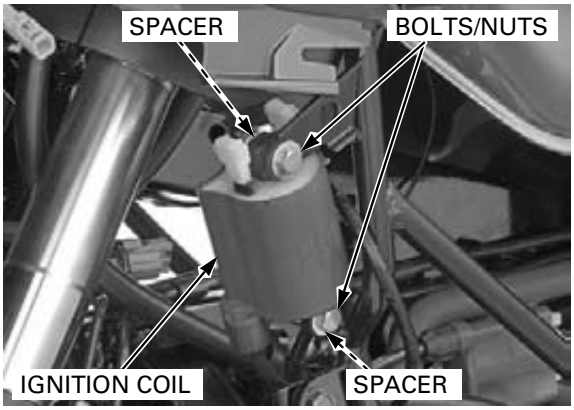
Connect the ignition coil connectors.



Install the #2/#3 ignition coil with the spacers.

Install the mounting bolts, spacers and nuts, then tighten the nuts securely.

Install the removed parts in the reverse order.



VALVE CLEARANCE

INSPECTION

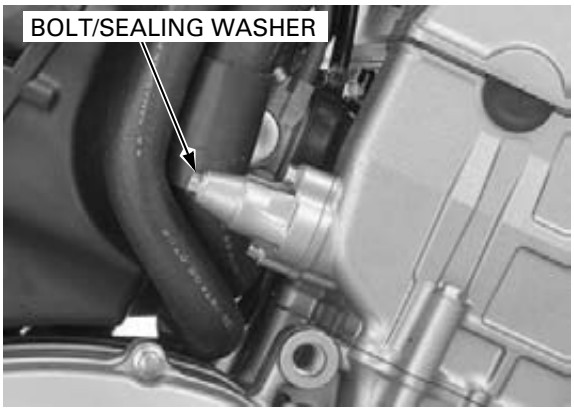
NOTE:

- Check the engine idle speed (page 6-76) after the valve clearance inspection.

Inspect and adjust the valve clearance while the engine is cold (below 35°C/95°F).

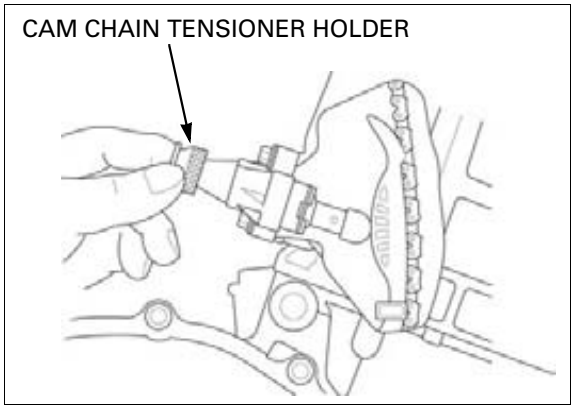
Remove the cylinder head cover (page 9-6).

Remove the cam chain tensioner lifter sealing bolt and sealing washer.

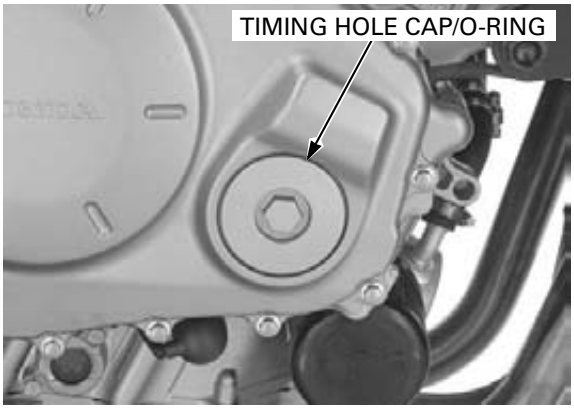


Turn the tensioner lifter shaft fully in (clockwise) and secure it using the special tool to prevent damaging the cam chain.

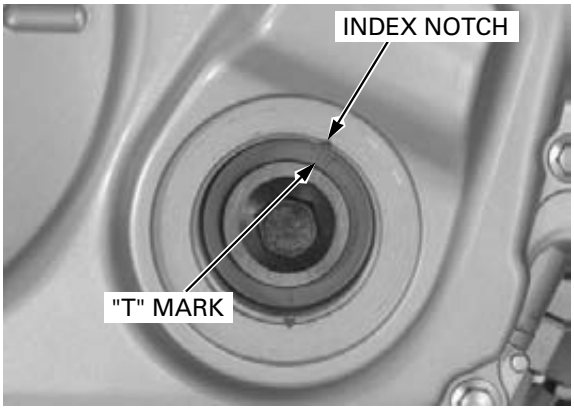
TOOL:
Cam chain tensioner holder 07ZMG-MCAA400



Remove the timing hole cap and O-ring.

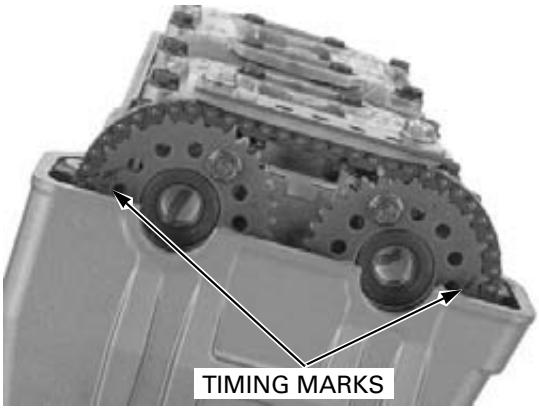


Turn the crankshaft clockwise, align the "T" mark on the starter clutch outer with the index notch on the right crankcase cover.



The timing marks ("IN" and "EX") on the cam sprockets must be flush with the cylinder head surface and facing outward as shown.

If the timing marks on the cam sprockets are facing inward, turn the crankshaft clockwise one full turn (360°) and realign the timing marks with the cylinder head surface so they are facing outward.

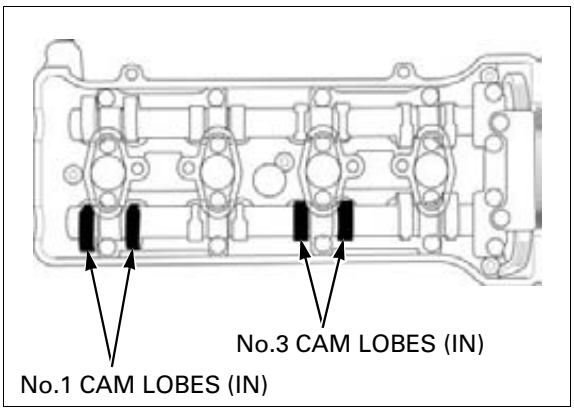


Insert the feeler gauge between the valve lifter and cam lobe.

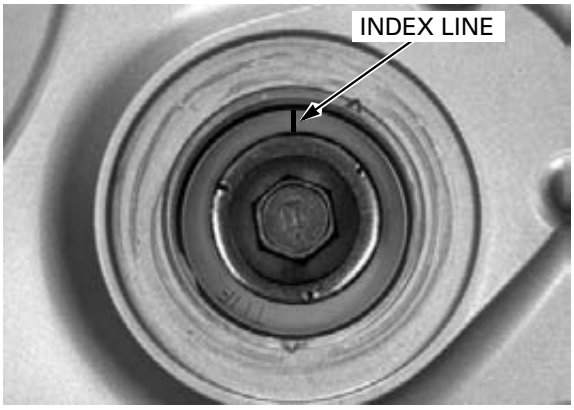
Record the clearance for each valve for reference in shim selection if adjustment is required.

Check the valve clearance for the No.1 and No.3 cylinder intake valves using a feeler gauge.

VALVE CLEARANCE:
IN: 0.16 ± 0.03 mm (0.006 ± 0.001 in)



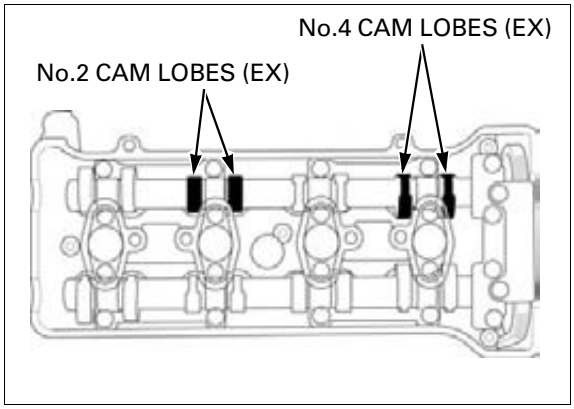
Turn the crankshaft clockwise 1/2 turn (180°), align the index line on the starter clutch outer so that it is facing up as shown.



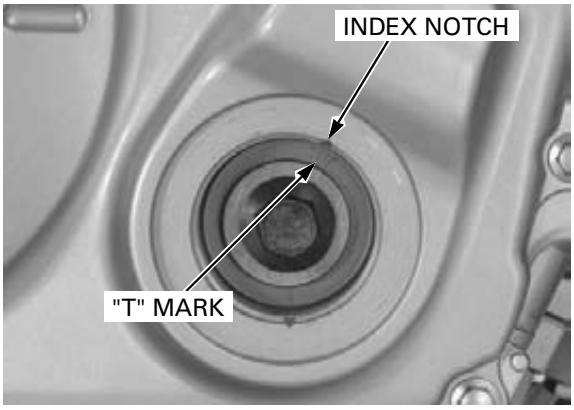
Record the clearance for each valve for reference in shim selection if adjustment is required.

Check the valve clearance for the No.2 and No.4 cylinder exhaust valves using a feeler gauge.

VALVE CLEARANCE:
EX: 0.32 ± 0.03 mm (0.013 ± 0.001 in)



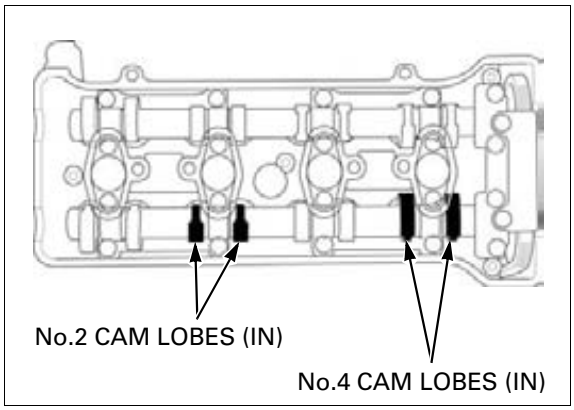
Turn the crankshaft clockwise 1/2 turn (180°), align the "T" mark on the starter clutch outer with the index notch on the right crankcase cover.



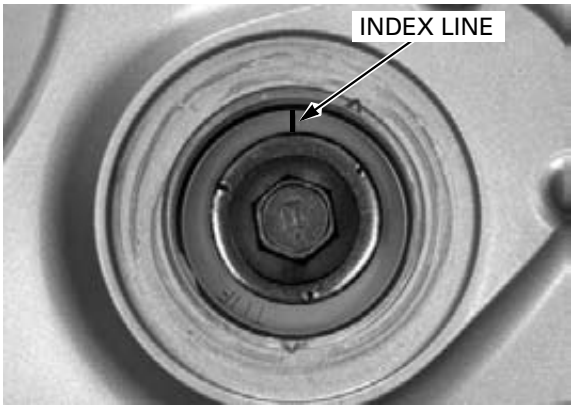
Record the clearance for each valve for reference in shim selection if adjustment is required.

Check the valve clearance for the No.2 and No.4 cylinder intake valves using feeler gauge.

VALVE CLEARANCE:
IN: 0.16 ± 0.03 mm (0.006 ± 0.001 in)



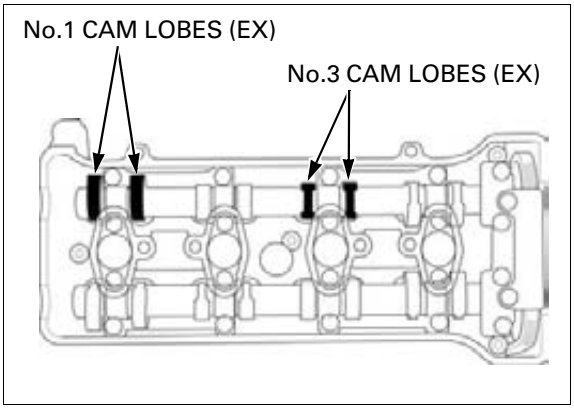
Turn the crankshaft clockwise 1/2 turn (180°), align the index line on the starter clutch outer so that it is facing up as shown.



Record the clearance for each valve for reference in shim selection if adjustment is required.

Check the valve clearance for the No.1 and No.3 cylinder exhaust valves using a feeler gauge.

VALVE CLEARANCE:
EX: 0.32 ± 0.03 mm (0.013 ± 0.001 in)



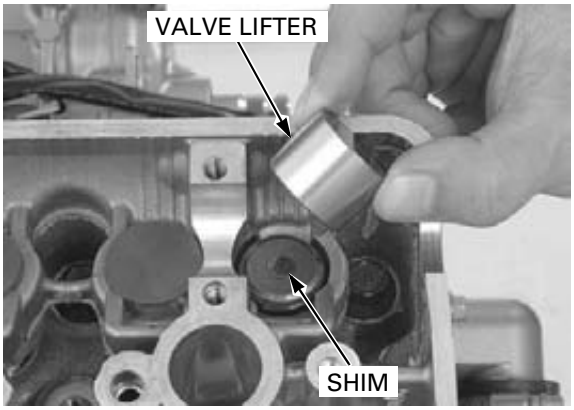
ADJUSTMENT

It is not necessary to remove the cam sprocket from the camshaft except when replacing the camshaft and/or cam sprocket.

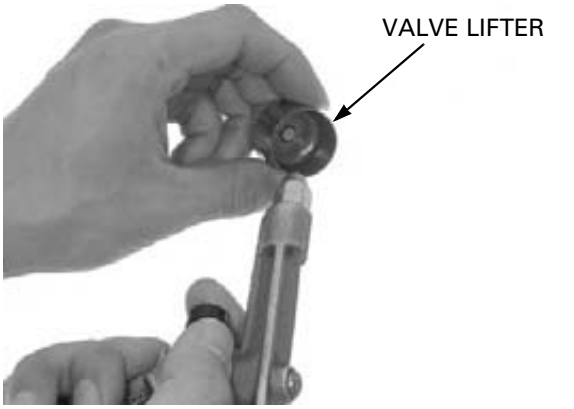
Remove the camshafts (page 9-8).

Remove the valve lifters and shims.

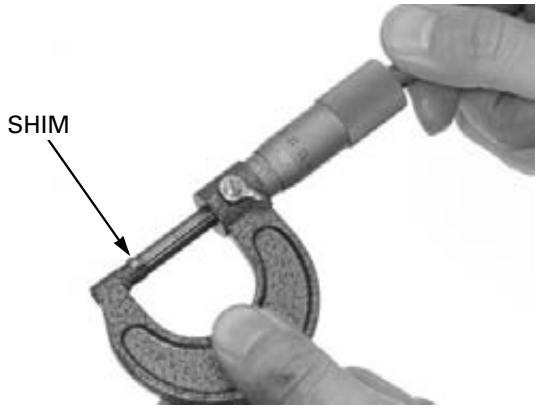
- Shim may stick to the inside of the valve lifter. Do not allow the shims to fall into the crankcase.
- Mark all valve lifters and shims to ensure correct reassembly in their original locations.
- The valve lifter can be easily removed with a valve lapping tool or magnet.
- The shims can be easily removed with a tweezers or magnet.



Clean the valve shim contact area in the valve lifter with compressed air.



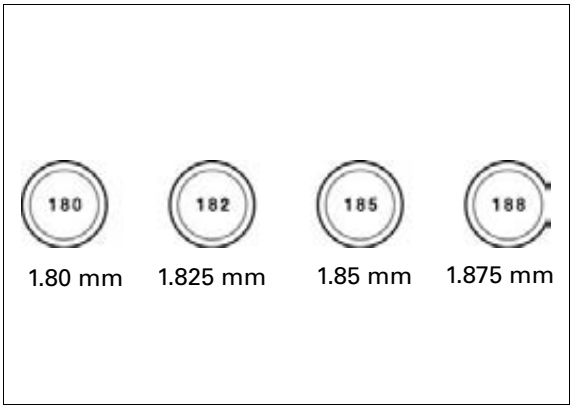
Measure the shim thickness and record it.



Sixty-nine different thickness shims are available from the thinnest 1.200 mm thickness shim to the thickest 2.900 mm thickness shim in intervals of 0.025 mm.

Calculate the new shim thickness using the equation below.
A = (B – C) + D
A: New shim thickness
B: Recorded valve clearance
C: Specified valve clearance
D: Old shim thickness

- Make sure of the correct shim thickness by measuring the shim by micrometer.
- Reface the valve seat if carbon deposit result in a calculated dimension of over 2.900 mm.

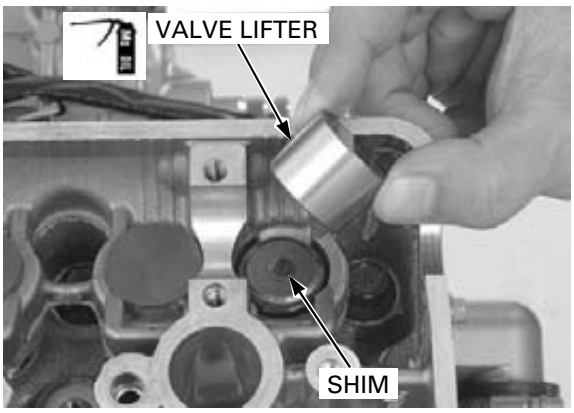


Install the shims and valve lifters in their original locations

Install the newly selected shim on the valve spring retainer.
Apply molybdenum disulfide oil to the valve lifters.
Install the valve lifters into the valve lifter holes.

Install the camshafts (page 9-25).

Rotate the camshafts by rotating the crankshaft clockwise several times.
Recheck the valve clearance.

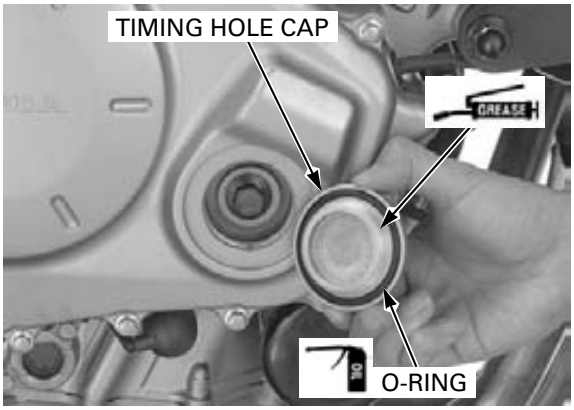


Check that the O-ring is in good condition, replace if necessary.

Apply oil to the timing hole cap O-ring.
Apply grease the timing hole cap threads.
Tighten the timing hole cap to the specified torque.

TORQUE: 18 N·m (1.8 kgf·m, 13 lbf·ft)

Install the removed parts in the reverse order of removal.



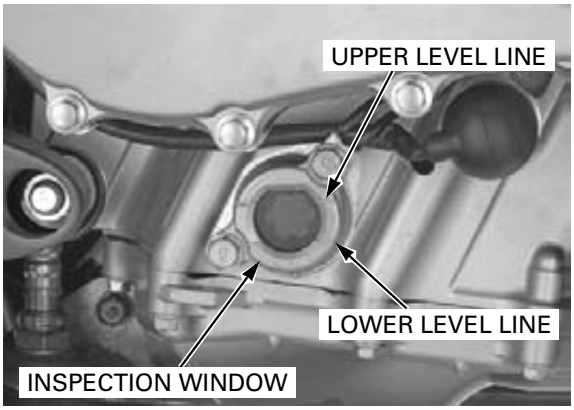
ENGINE OIL/OIL FILTER

OIL LEVEL INSPECTION

Start the engine and let it idle for 3 – 5 minutes.
Stop the engine and wait 2 – 3 minutes.
Hold the motorcycle in an upright position.

Check the oil level through the inspection window.

If the level is below the lower level line, fill the crankcase with the recommended oil up to the upper level line as following procedures.

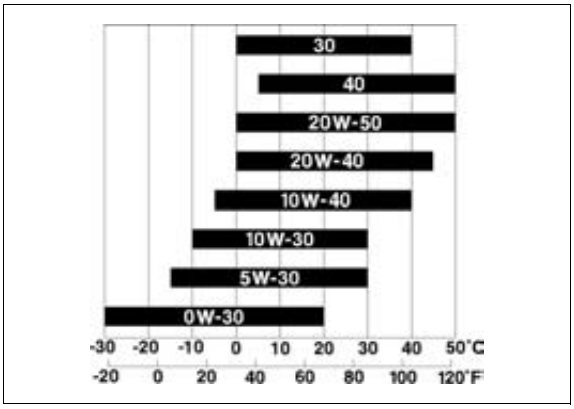


Remove the oil filler cap.

Fill the recommended engine oil up to the upper level line.

Other viscosities shown in the chart may be used when the average temperature in your riding area is within the indicated range.

SUGGESTED OIL:
Honda "4-stroke motorcycle oil" or an equivalent
OIL RECOMMENDATION:
API classification: SG or higher (except oils labeled energy conserving on the circular API service label)
Viscosity: SAE 10W-30
JASO T 903 standard: MA



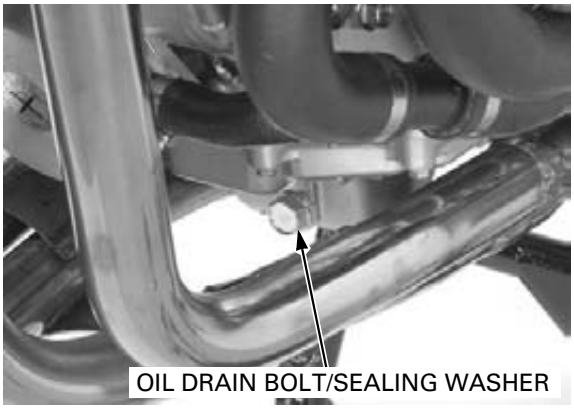
Reinstall the oil filler cap.

ENGINE OIL & FILTER CHANGE

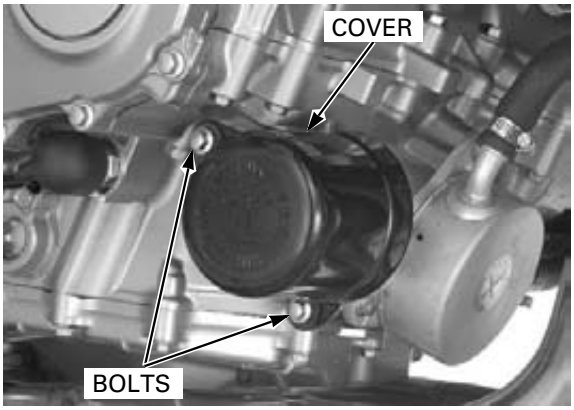
Hold the motorcycle in an upright position.

Remove the oil filler cap.

Remove the oil drain bolt and sealing washer, then drain the engine oil completely.

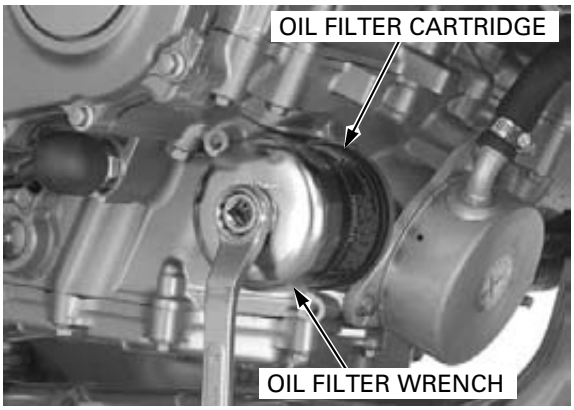


Remove the bolts and oil filter cover.



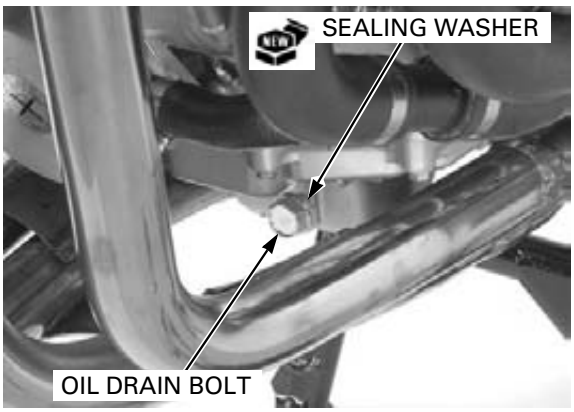
Remove and discard the oil filter cartridge using the special tool.

TOOL:
Oil filter wrench **07HAA-PJ70101**



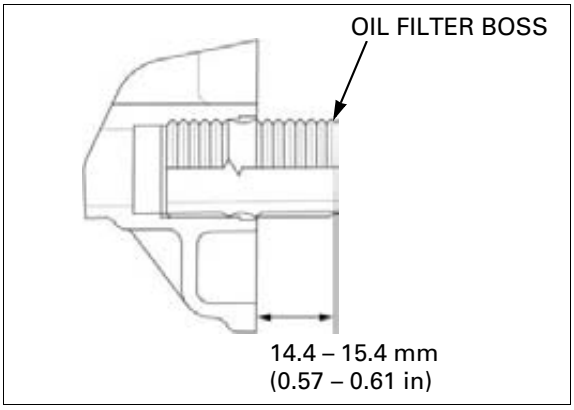
Replace the sealing washer with new one.
Install and tighten the oil drain bolt.

TORQUE: 30 N·m (3.1 kgf·m, 22 lbf·ft)

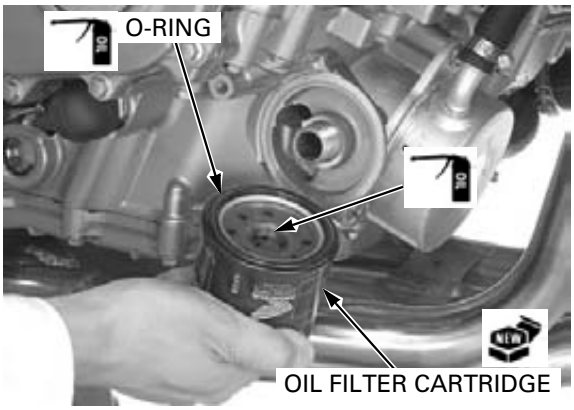


Check that the oil filter boss protrusion from the crankcase is specified length as shown.

SPECIFIED LENGTH: 14.4 – 15.4 mm (0.57 – 0.61 in)



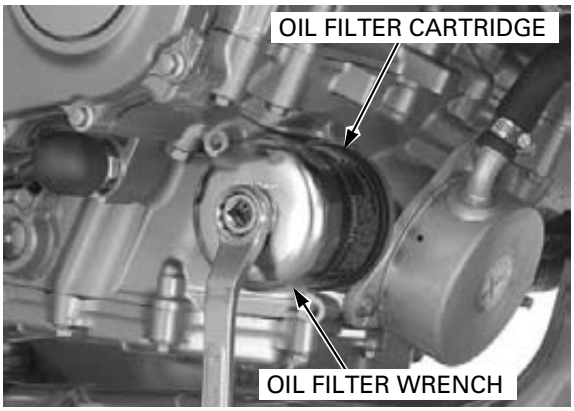
Apply clean engine oil to new oil filter cartridge threads and O-ring.



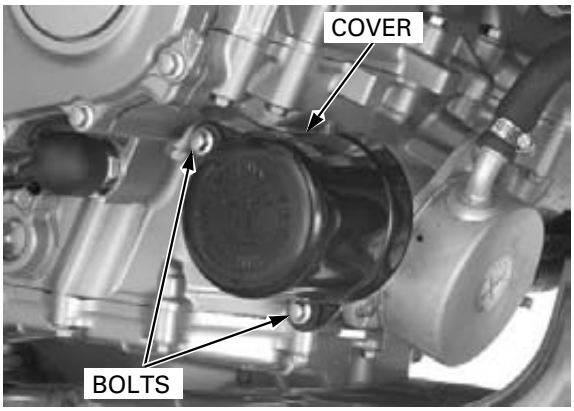
Install the oil filter and tighten it to the specified torque.

TOOL:
Oil filter wrench 07HAA-PJ70101

TORQUE: 26 N·m (2.7 kgf·m, 19 lbf·ft)



Install the oil filter cover and tighten the bolts securely.



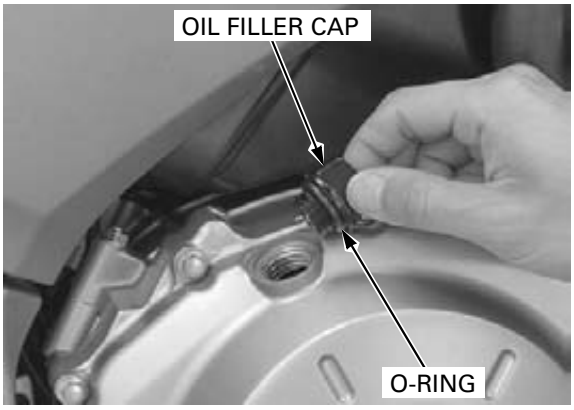
Fill the crankcase with recommended engine oil (page 4-16).

OIL CAPACITY:
2.7 liter (2.9 US qt, 2.4 Imp qt) after draining
3.5 liter (3.7 US qt, 3.1 Imp qt) after oil filter change

Check that the O-ring on the oil filler cap is in good condition, and replace it if necessary.
Install the oil filler cap.

Recheck the oil level (page 4-16).

Make sure there are no oil leaks.

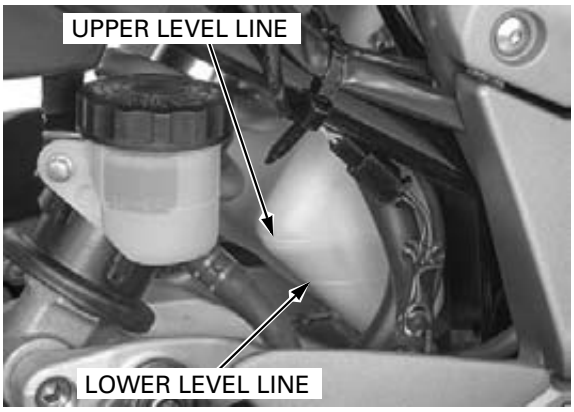


RADIATOR COOLANT

Check the coolant level of the reserve tank with the engine running at normal operating temperature.

The level should be between the "UPPER" and "LOWER" level lines.

If necessary, add recommended coolant.



Remove the following:

– Seat (page 3-3)
– Left side cover (page 3-4)

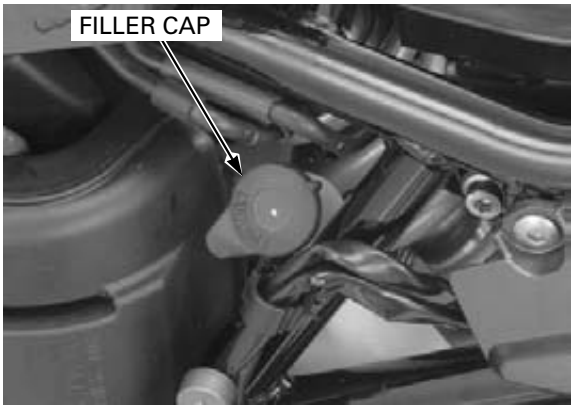
Remove the reserve tank filler cap and fill to the "UPPER" level line with 1:1 mixture of distilled water and antifreeze.

RECOMMENDED ANTIFREEZE:
High quality ethylene glycol antifreeze containing corrosion protection inhibitors.

Reinstall the filler cap.

Install the following:

– Left side cover (page 3-4)
– Seat (page 3-3)

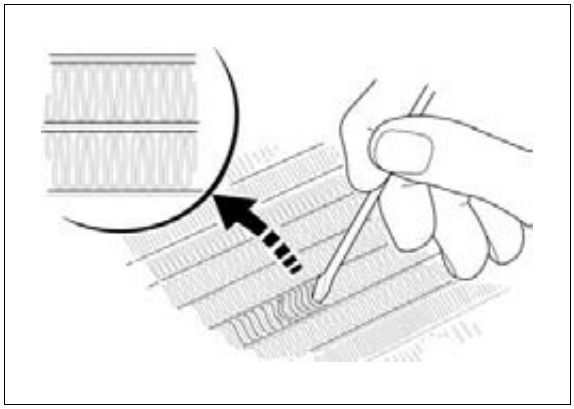


COOLING SYSTEM

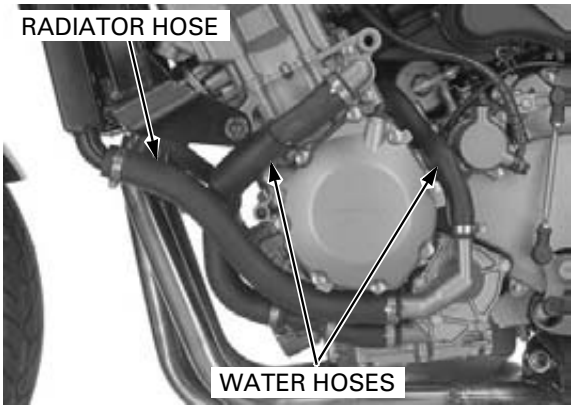
Check the radiator air passages for clogging or damage.

Straighten bent fins, and remove insects, mud or other obstructions with compressed air or low water pressure.

Replace the radiator if the air flow is restricted over more than 20% of the radiating surface.

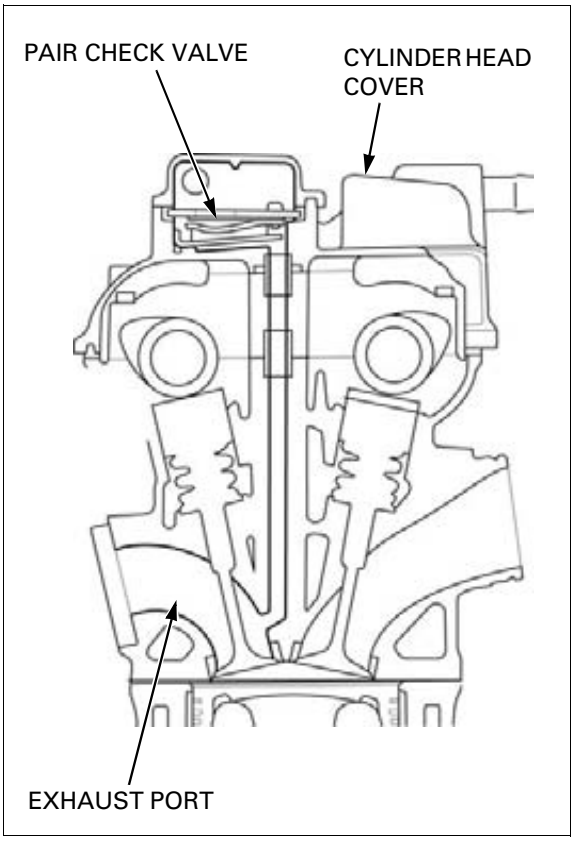


Inspect the radiator hoses for cracks or deterioration, and replace them if necessary.
Check the tightness of all hose clamps and fasteners.



SECONDARY AIR SUPPLY SYSTEM

- This model is equipped built-in secondary air supply system. The pulse secondary air supply system is located on the cylinder head cover.
- The secondary air supply system introduces filtered air into exhaust gases in the exhaust port. The secondary air is drawn into the exhaust port whenever there is negative pressure pulse in the exhaust system. This charged secondary air promotes burning of the unburned exhaust gases and changes a considerable amount of hydrocarbons and carbon monoxide into relatively harmless carbon dioxide and water.



Lift and support the fuel tank (page 4-5).

If the hoses show any signs of heat damage, inspect the reed valves in the PAIR check valves for damage.

Check the PAIR (pulse secondary air injection) hoses between the PAIR control solenoid valve and cylinder head cover for deterioration, damage or loose connections. Make sure that the hoses are not cracked.

Check the air suction hose between the air cleaner housing and PAIR control solenoid valve for deterioration, damage or loose connections.
Make sure that the hoses are not kinked, pinched or cracked.

DRIVE CHAIN

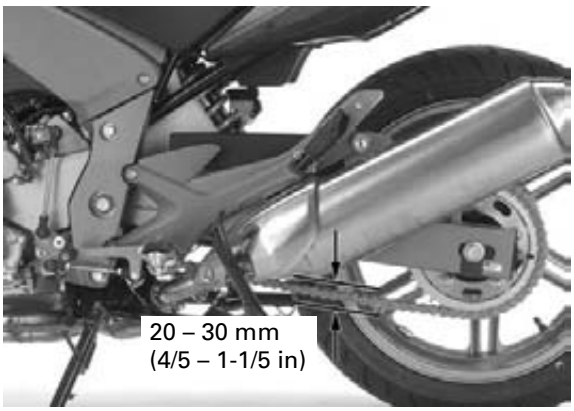
Never inspect and adjust the drive chain while the engine is running.

DRIVE CHAIN SLACK INSPECTION

Turn the ignition switch OFF, place the motorcycle on its side stand and shift the transmission into neutral.

Check the slack in the drive chain lower run midway between the sprockets.

CHAIN SLACK: 20 – 30 mm (4/5 – 1-1/5 in)



NOTICE

Excessive chain slack, 50 mm (2.0 in) or more, may damage the frame.

Lubricate the drive chain with #80 – 90 gear oil or chain lubricant designed specifically for use with O-ring chains. Wipe off the excess oil or chain lubricant.

ADJUSTMENT

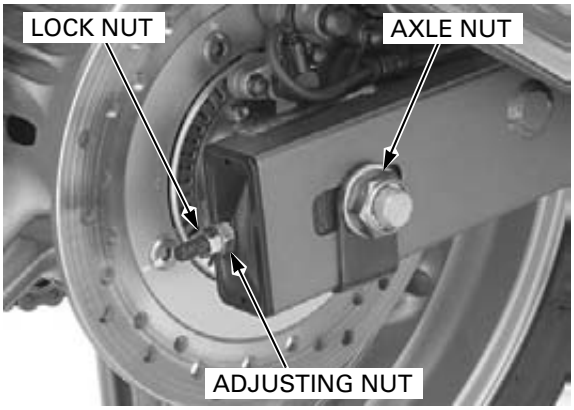
Loosen the rear axle nut and both drive chain adjuster lock nuts.
Turn both adjusting nuts an equal number of turns until the correct drive chain slack is obtained.
A scale is included on the adjusters. Be sure the reading on the scale is same for both sides.

Tighten the rear axle nut to the specified torque.

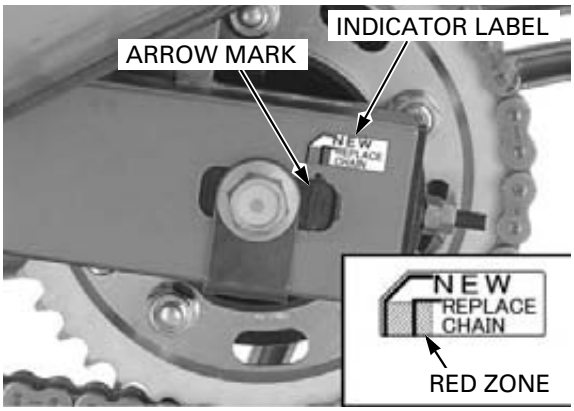
TORQUE: 108 N·m (11.0 kgf·m, 80 lbf·ft)

Tighten each adjuster lock nut while holding the adjusting nut.

TORQUE: 21 N·m (2.1 kgf·m, 15 lbf·ft)

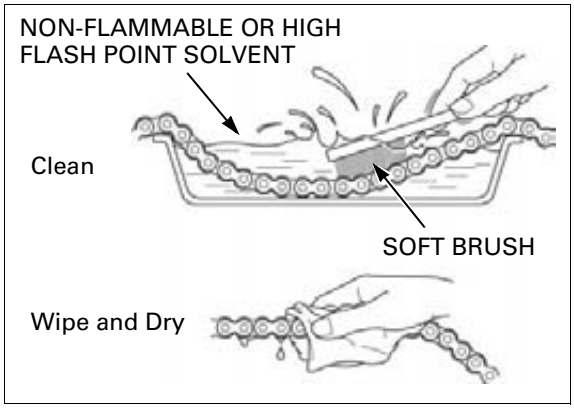


Recheck the drive chain slack and free wheel rotation.
Check the index mark (arrow) on the left chain adjuster.
If the index mark (arrow) reaches the red zone of the wear indicator label, replace the drive chain with a new one.

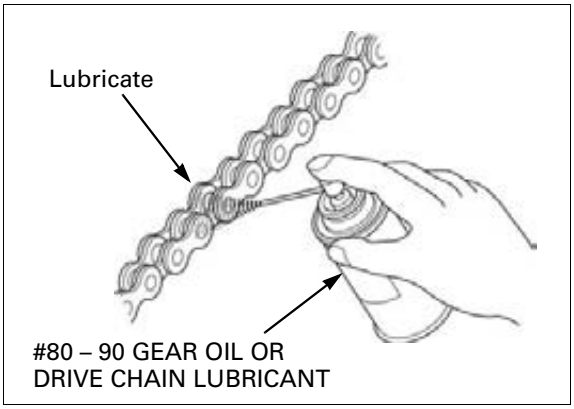


CLEANING AND LUBRICATION

Clean the chain with non-flammable or high flash point solvent and wipe it dry.
Be sure the chain has dried completely before lubricating.
Inspect the drive chain for possible damage or wear. Replace any chain that has damaged rollers, loose fitting links, or otherwise appears unserviceable.
Installing a new chain on badly worn sprockets will cause the new chain to wear quickly.
Inspect and replace sprocket as necessary.



Lubricate the drive chain with #80 – 90 gear oil or drive chain lubricant designed specifically for use with O-ring chains. Wipe off the excess oil or chain lubricant.



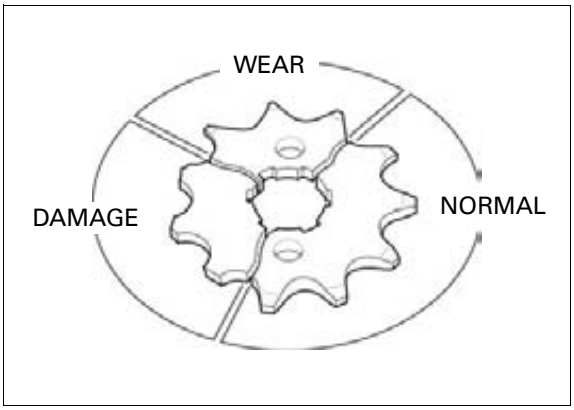
SPROCKET INSPECTION

Remove the left crankcase rear cover (page 12-7).

Inspect the drive and driven sprocket teeth for wear or damage, replace if necessary.

Never use a new drive chain on worn or damaged sprockets.

Both chain and sprockets must be in good condition, or the new replacement chain will wear rapidly.

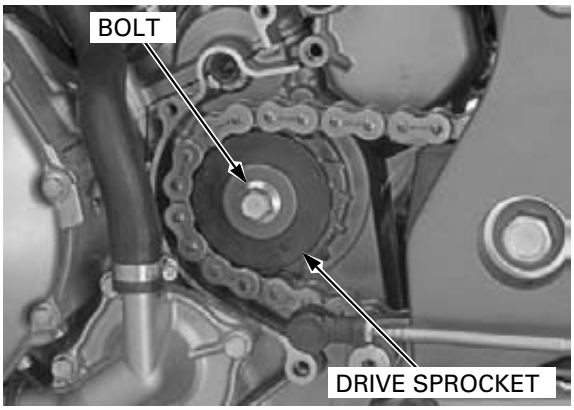


Check the attaching bolts and nuts on the drive and driven sprockets.
If any are loose, torque them.

TORQUE:

Drive sprocket bolt:
54 N·m (5.5 kgf·m, 40 lbf·ft)

Final driven sprocket nut:
108 N·m (11.0 kgf·m, 80 lbf·ft)



REPLACEMENT

This motorcycle uses a drive chain with a staked master link.

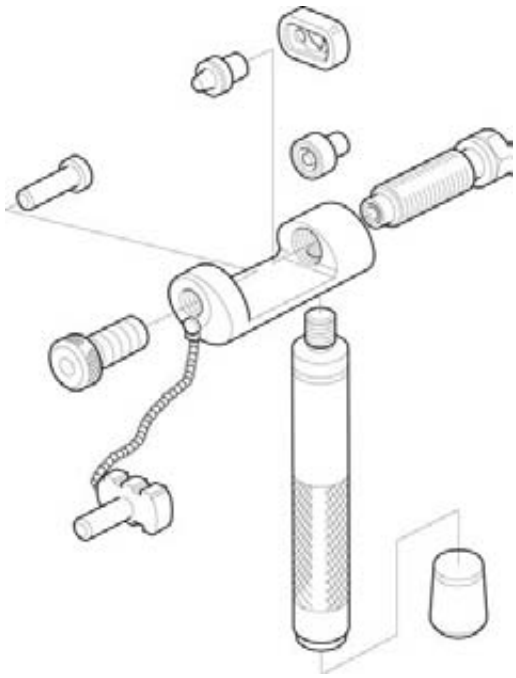
Loosen the drive chain (page 4-21).

When using the special tool, follow the manufacturer's instruction.

Assemble the special tool as shown.

TOOL:
Drive chain tool set **07HMH-MR10103**

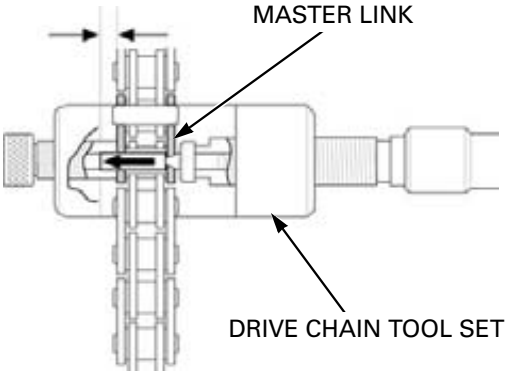
DRIVE CHAIN TOOL SET:



Locate the crimped pin ends of the master link from the outside of the chain, and remove the link with the drive chain tool set.

TOOL:
Drive chain tool set **07HMH-MR10103**

Remove the drive chain.

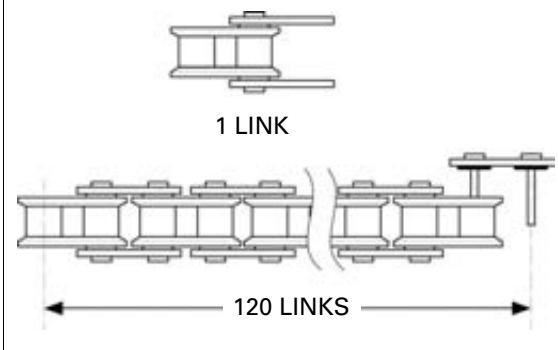


Include the master link when you count the drive chain links.

Remove the excess drive chain links from the new drive chain using the drive chain tool set.

STANDARD LINKS: 120 LINKS

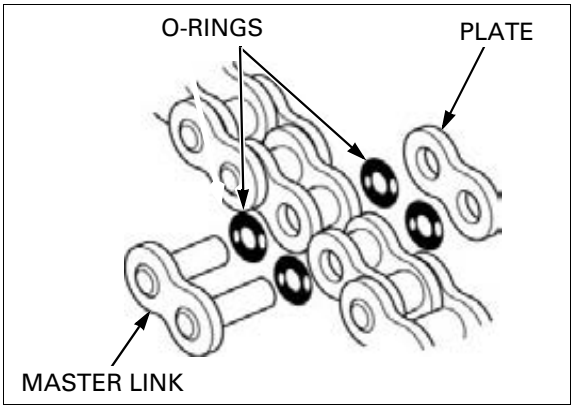
REPLACEMENT CHAIN
DID: DID50VA8-120LE
RK: RK50HFOZ5-120LE



- Never reuse the old drive chain, master link, master link plate and O-rings.

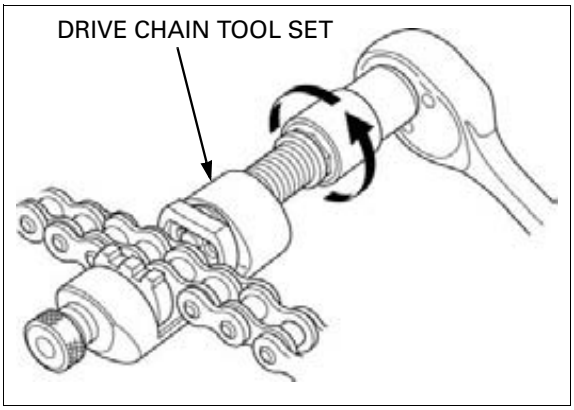
Insert the master link from the inside of the drive chain, and install the plate with the identification mark facing the outside.

Assemble the new master link, O-rings and plate.



Assemble and set the drive chain tool set.

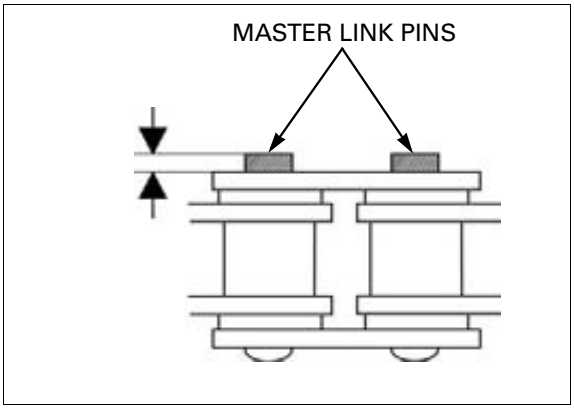
TOOL:
Drive chain tool set 07HMH-MR10103



Make sure that the master link pins are installed properly.
Measure the master link pin length projected from the plate.

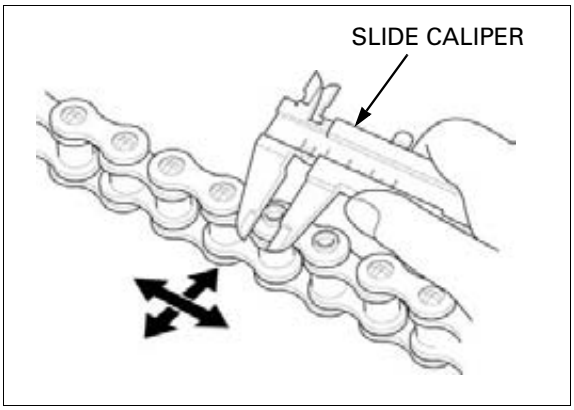
STANDARD LENGTH:
DID: 1.15 – 1.55 mm (0.045 – 0.061 in)
RK: 1.2 – 1.4 mm (0.05 – 0.06 in)

Stake the master link pins.



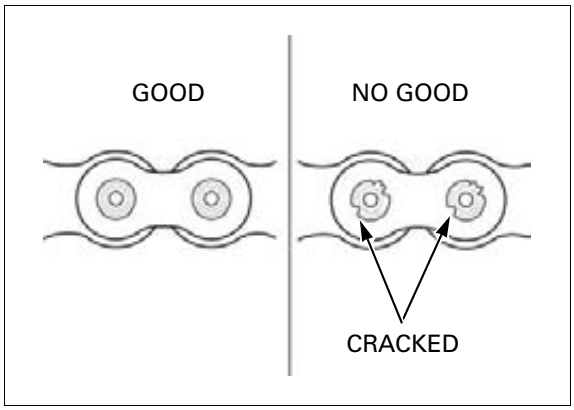
Make sure that the pins are staked properly by measuring the diameter of the staked area using a slide caliper.

DIAMETER OF THE STAKED AREA:
DID: 5.50 – 5.80 mm (0.217– 0.228 in)
RK: 5.30 – 5.70 mm (0.209 – 0.224 in)



A drive chain with a clip-type master link must not be used.

After staking, check the staked area of the master link for cracks.
If there is any cracking, replace the master link, O-rings and plate.

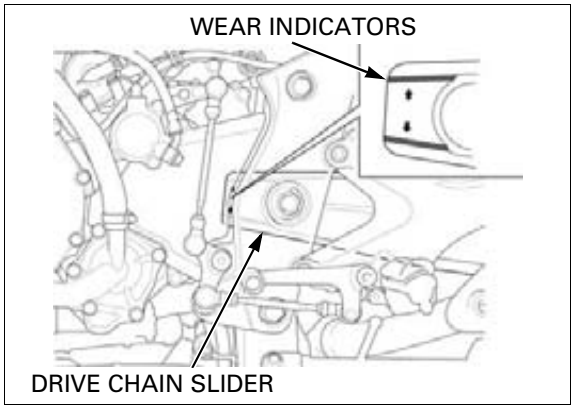


DRIVE CHAIN SLIDER

Remove the left crankcase rear cover (page 12-7).

Inspect the drive chain slider for excessive wear or damage.

If it is worn to the wear indicator, replace the drive chain slider (page 15-15).



BRAKE FLUID

NOTICE

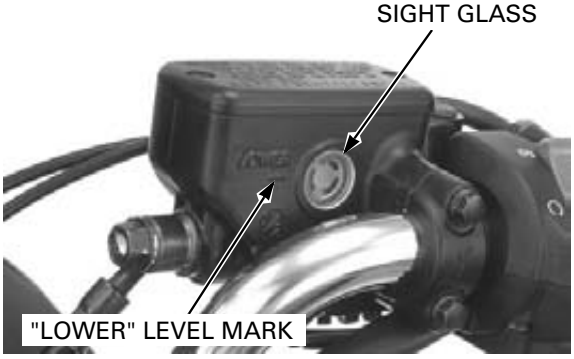
Spilled fluid can damage painted, plastic or rubber parts. Place a rag over these parts whenever the system is serviced.

- Do not mix different types of fluid, as they are not compatible with each other.
- Do not allow foreign material to enter the system when filling the reservoir.

When the fluid level is low, check the brake pads for wear (page 4-26). A low fluid level may be due to wear of the brake pads. If the brake pads are worn, the caliper piston is pushed out, and this accounts for a low reservoir level.
If the brake pads are not worn and the fluid level is low, check entire system for leaks (page 4-27).

FRONT BRAKE

Turn the handlebar to the left so the reservoir is level and check the front brake reservoir fluid level through the sight glass.



If the fluid level is near the "LOWER" level mark, remove the reservoir cap, set plate and diaphragm, and fill the reservoir with DOT 4 brake fluid from a sealed container to the casting ledge.

Install the diaphragm, set plate and reservoir cap, and tighten the cap screws.

TORQUE: 1.5 N·m (0.2 kgf·m, 1.1 lbf·ft)

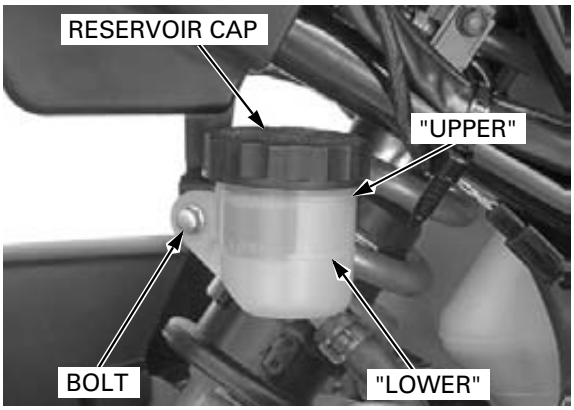
REAR BRAKE

Support the motorcycle upright on a level surface.

Check the fluid level in the rear brake reservoir.
If the level is near the "LOWER" level line, remove the mounting bolt and the reservoir cap, and fill the reservoir with DOT 4 brake fluid from a sealed container to the "UPPER" level line.
Install the reservoir cap with the diaphragm and set plate.

Install the reservoir onto the frame and tighten the mounting bolt.

TORQUE: 10 N·m (1.0 kgf·m, 7 lbf·ft)



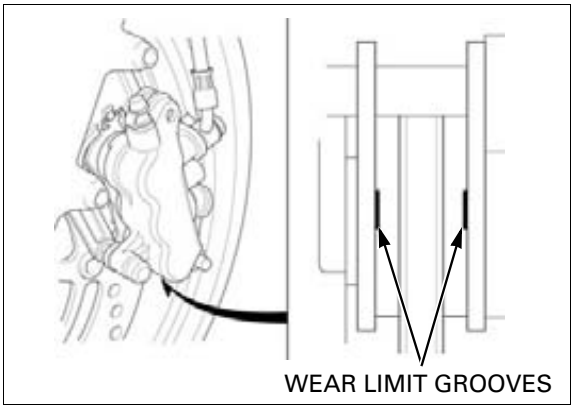
BRAKE PAD WEAR

FRONT BRAKE PADS

Check the brake pads for wear.
Replace the brake pads if either pad is worn to the wear limit groove.

For front brake pad replacement:

– CBF1000A (page 16-15)
– CBF1000 (page 16-16)

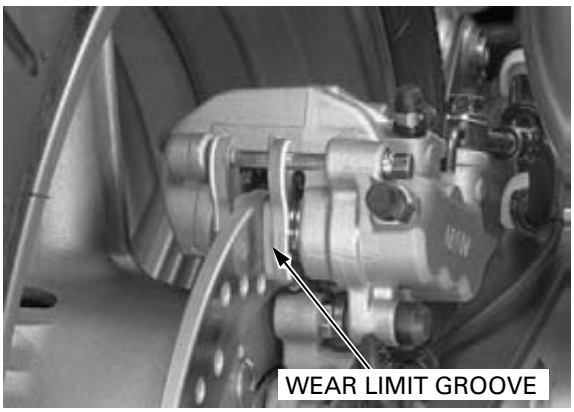


REAR BRAKE PADS

Check the brake pads for wear.
Replace the brake pads if either pad is worn to the wear limit groove.

For rear brake pad replacement:

– CBF1000A (page 16-17)
– CBF1000 (page 16-18)



BRAKE SYSTEM

INSPECTION

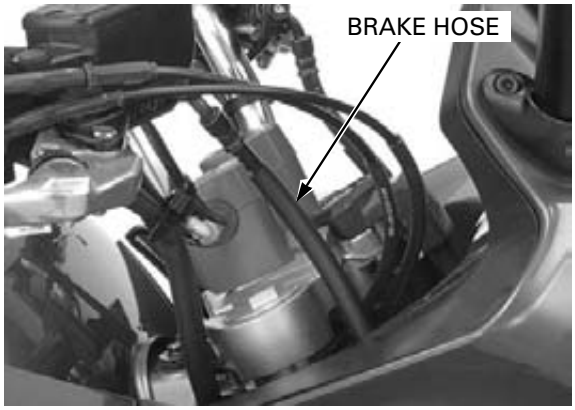
Firmly apply the brake lever or pedal, and check that no air has entered the system.

If the lever or pedal feels soft or spongy when operated, bleed the air from the system.

Inspect the brake hose and fittings for deterioration, cracks and signs of leakage.
Tighten any loose fittings.
Replace hoses and fittings as required.

Refer the procedure for brake bleeding:

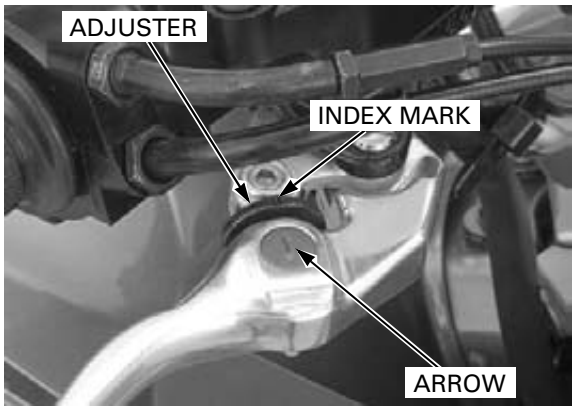
– CBF1000A (page 16-7)
– CBF1000 (page 16-13)



BRAKE LEVER ADJUSTMENT

Align the index mark on the adjuster with the arrow on the brake lever.

The distance between the top of the brake lever and the grip can be adjusted by turning the adjuster.

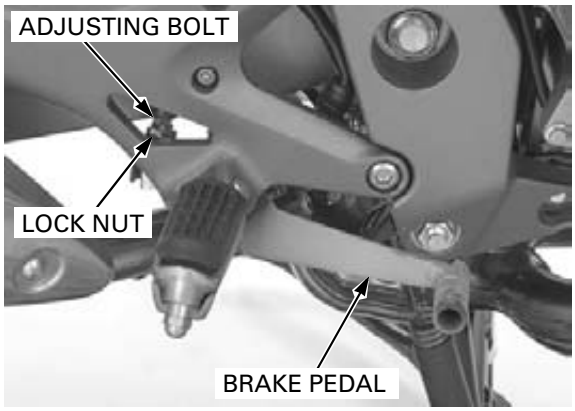


BRAKE PEDAL HEIGHT ADJUSTMENT

Loosen the lock nut and turn the master cylinder push rod to obtain the desired pedal height.

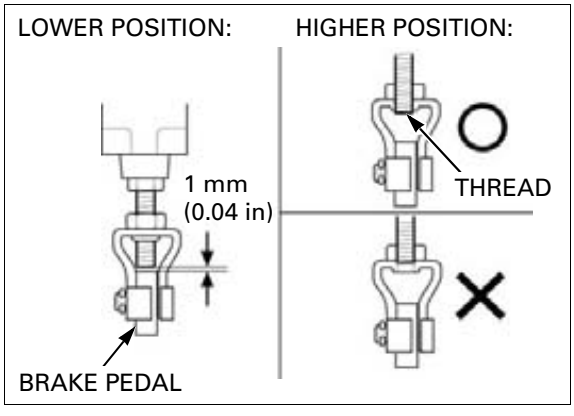
After adjustment, hold the adjusting bolt and tighten the lock nut.

TORQUE: 17 N·m (1.7 kgf·m, 13 lbf·ft)



If the brake pedal is adjusted to the lower position, make sure that the clearance between the lower end of the push rod and the brake pedal does not fall below 1 mm (0.04 in).

If the brake pedal is adjusted to the higher position, make sure that the lower end of the push rod thread is visible inside the joint.



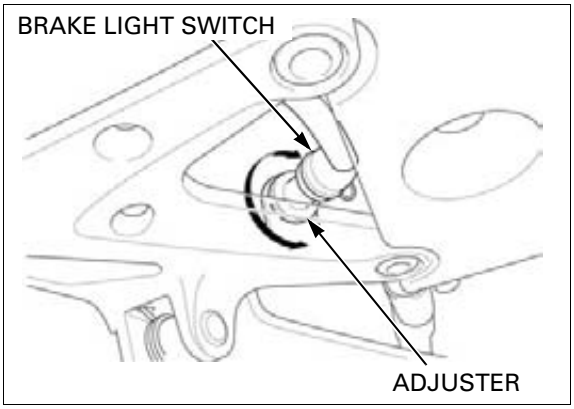
BRAKE LIGHT SWITCH

- The front brake light switch can not be adjusted.

Adjust the brake light switch so that the brake light comes on just prior to the brake actually being engaged.

If the light fails to come on, adjust the switch so that the light comes on at the proper time.

Hold the switch body and turn the adjuster. Do not turn the switch body.



HEADLIGHT AIM

Place the motorcycle on a level surface.
Remove the front right/left side cowls (page 3-6).

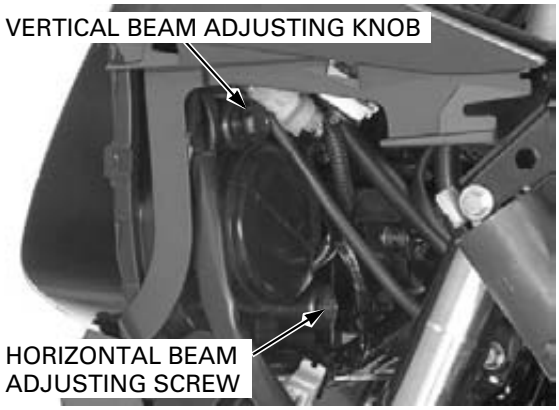
Adjust the headlight aim as specified by local laws and regulations.

Adjust the headlight aim vertically by turning the vertical beam adjusting knob.
A clockwise rotation moves the beam up and counterclockwise rotation moves the beam down.

Adjust the headlight aim horizontally by turning the horizontal beam adjusting screw.

Left Headlight: A clockwise rotation moves the beam toward the right and counterclockwise rotation moves the beam toward the left side of the rider.

Right Headlight: A clockwise rotation moves the beam toward the left and counterclockwise rotation moves the beam toward the right side of the rider.

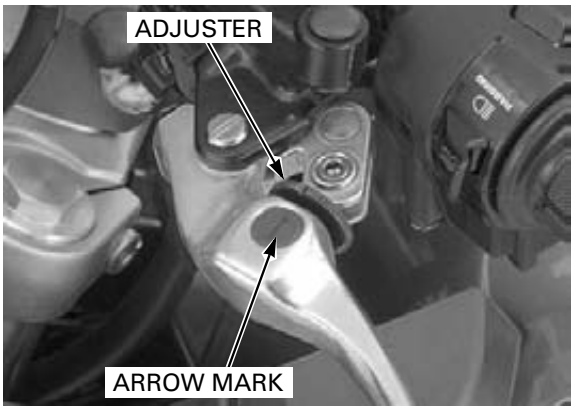


CLUTCH SYSTEM

CLUTCH LEVER ADJUSTMENT

Align the index mark on the adjuster with the arrow on the brake lever.

The distance between the tip of the clutch lever and the grip can be adjusted by turning the adjuster.



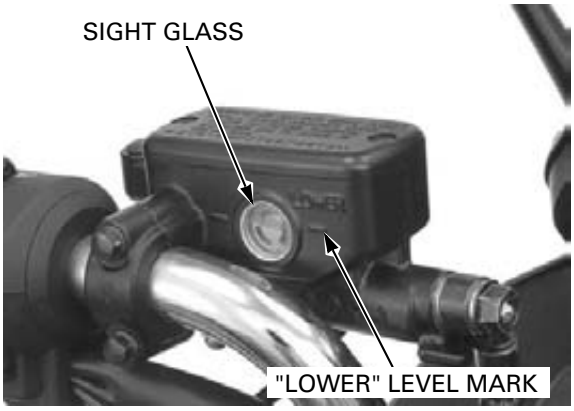
CLUTCH FLUID

NOTICE

Spilled fluid can damage painted, plastic or rubber parts. Place a rag over these parts whenever the system is serviced.

- Do not mix different types of fluid, as they are not compatible with each other.
- Do not allow foreign material to enter the system when filling the reservoir.
- When the fluid level is low, check entire system for leaks.

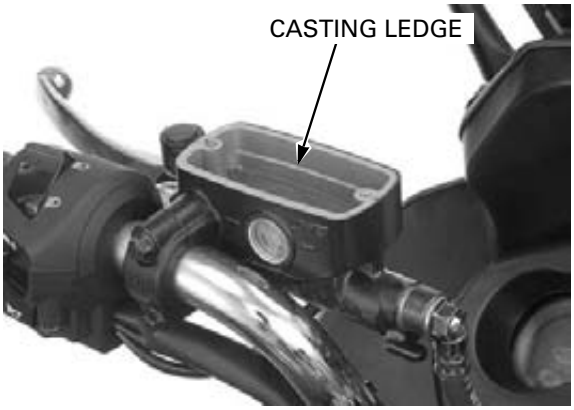
Turn the handlebar to the right so that the reservoir is level and check the clutch fluid level.



If the fluid level is near the "LOWER" level mark, remove the reservoir cap, set plate and diaphragm, and fill the reservoir with DOT 4 brake fluid from a sealed container to the casting ledge.

Install the diaphragm, set plate and reservoir cap, and tighten the cap screws.

TORQUE: 1.5 N·m (0.2 kgf·m, 1.1 lbf·ft)



Firmly apply the clutch lever, and check that no air has entered the system.
If the lever feels soft or spongy when operated, bleed the air from the system.

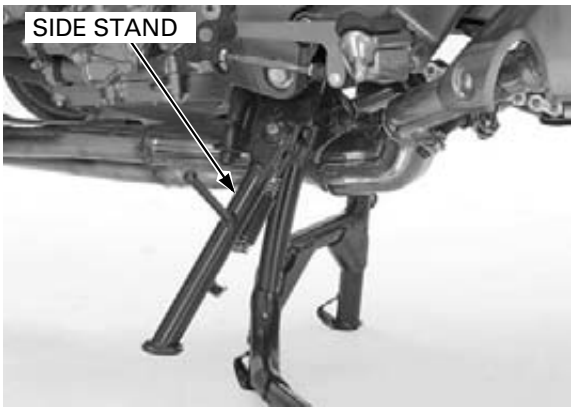
Inspect the clutch hose and fittings for deterioration, cracks and signs of leakage.
Tighten any loose fittings.
Replace hoses and fittings as required.

Refer the procedure for clutch fluid bleeding (page 10-6).

SIDE STAND

Support the motorcycle on a level surface using the center stand (CBF1000A) or maintenance stand.

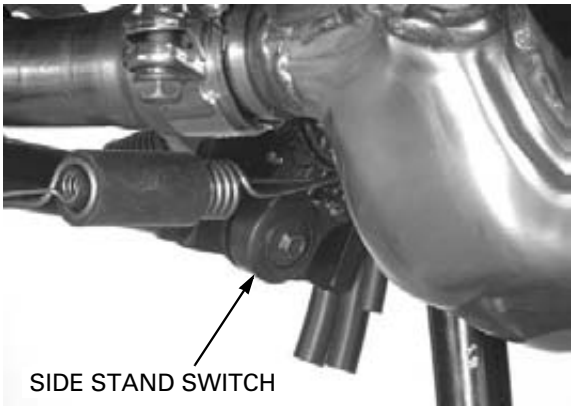
Check the side stand spring for damage or loss of tension.
Check the side stand assembly for freedom of movement and lubricate the side stand pivot if necessary.



Check the side stand ignition cut-off system:

1. Sit astride the motorcycle and raise the side stand.
2. Start the engine with the transmission in neutral, then shift the transmission into gear, with the clutch lever squeezed.
3. Move the side stand full down.
4. The engine should stop as the side stand is lowered.

If there is a problem with the system, check the side stand switch (page 21-24).



SUSPENSION

FRONT SUSPENSION INSPECTION

Check the action of the forks by operating the front brakes and compressing the front suspension several times.
Check the entire assembly for signs of leaks, damage or loose fasteners.

Loose, worn or damaged suspension parts impair motorcycles stability and control.

Replace damaged components which cannot be repaired.
Tighten all nuts and bolts.
Refer to the fork service (page 14-19).

Check for worn steering stem bearings by grabbing the front fork leg and attempting to move the front fork side to side.

Replace the steering head bearings if any looseness is noted.

REAR SUSPENSION INSPECTION

Support the motorcycle securely and raise the rear wheel off the ground.

Hold the swingarm and move the rear wheel side ways with force to see if the axle bearings are worn.

Check for worn swingarm bearings by grabbing the rear ends of the swingarm and attempting to move the swingarm side to side.

Replace the bearings if any are looseness is noted.

Check the action of the shock absorber by compressing it several times.
Check the entire shock absorber assembly for signs of leaks, damage or loose fasteners.
Replace damaged components which cannot be repaired.
Tighten all nuts and bolts.

Refer to the shock absorber service (page 15-13).

NUTS, BOLTS, FASTENERS

Check that all chassis nuts and bolts are tightened to their correct torque values (page 1-13).
Check that all safety clips, hose clamps and cable stays are in place and properly secured.

WHEELS/TIRES

Check the tires for cuts, embedded nails, or other damage.

Check the wheel for trueness:

– Front wheel (page 14-13)
– Rear wheel (page 15-6)

Tire pressure should be checked when the tires are COLD.

RECOMMENDED TIRE PRESSURE AND TIRE SIZE:

		FRONT	REAR
Tire pressure kPa (kgf/cm^2, psi)		250 (2.50, 36)	290 (2.90, 42)
Tire size		120/70ZR17 M/C (58W)	160/60ZR17 M/C (73W)
Tire bland	Bridgestone	BT57F RADIAL U	BT57R RADIAL E
	Michelin	Pilot ROAD B	Pilot ROAD A

Measure the tread depth at the center of the tires. Replace the tires when the tread depth reaches the following limits.

MINIMUM TREAD DEPTH:
FRONT: 1.5 mm (0.06 in)
REAR: 2.0 mm (0.08 in)

STEERING HEAD BEARINGS

Check that the control cables do not interfere with handlebar rotation.

Support the motorcycle securely and raise the front wheel off the ground.
Check that the handlebar moves freely from side to side.
If the handlebar moves unevenly, binds, or has vertical movement, inspect the steering head bearings (page 14-30).