SERVICE INFORMATION

GENERAL

- Place the motorcycle on level ground before starting any work.
- Gasoline is extremely flammable and is explosive under certain conditions.
- Work in a well ventilated area. Smoking or allowing flames or sparks in the work area or where the gasoline is stored can cause a fire or explosion.
- If the engine must be running *to* do some work, make sure the area is well ventilated. Never run the engine in an enclosed area.
- 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 an enclosed area.

Spark plug	Standard	IMR9C-9H (NGK), VUH27D (DENSO)
	Optional	IMR8C-9H (NGK), VUH24D (DENSO)
Spark plug gap		0.8 – 0.9 mm (0.03 – 0.04 in)
Valve clearance	IN	0.16 ± 0.03 mm (0.006 ± 0.001 in)
	EX	0.27 ± 0.03 mm (0.011 ± 0.001 in)
Engine oil capacity	At draining	3.5 liter (3.7 US qt, 3.1 Imp qt)
	At oil filter change	3.7 liter (3.9 US qt, 3.3 Imp qt)
Drive chain slack		40 – 50 mm (1.6 – 2.0 in)
Recommended brake fluid		Honda DOT 4 Brake Fluid
	Michelin	Rear: BT012R RADIAL G
		Rear: Pilot SPORT E
		Pilot SPORT E
	load	Rear: 290 kPa (2.90 kgf/cm², 42 psi)
	Up to maximum weight capacity	Front: 250 kPa (2.50 kgf/cm², 36 psi)
		Rear: 290 kPa (2.90 kgf/cm², 42 psi)
Minimum tire tread depth		Front: 1.5 mm (0.06 in)
		Rear: 2.0 mm (0.08 in)

TORQUE VALUES

Timing hole cap	18 N•m (1.8 kgf•m, 13 lbf•ft)	Apply grease to the threads.
Spark plug	12 N•m (1.2 kgf-m, 9 lbf•ft)	
Oil drain bolt	29 N•m (3.0 kgf•m, 22 lbf•ft)	
Oil filter cartridge	26 N•m (2.7 kgf•m, 20 lbf•ft)	Apply clean engine oil to the O-ring.
Rear axle nut	113 N•m (11.5 kgf-m, 83 lbf•ft)	U–nut
Drive sprocket special bolt	54 N•m (5.5 kgf-m, 40 lbf•ft)	
Driven sprocket nut	64 N•m (6.5 kgf•m, 47 lbf•ft)	
Rear master cylinder push rod lock nut	18 N•m (1.8 kgf-m, 13 lbf•ft)	

TOOLS

Oil filter wrench	07HAA–PJ70101 or 07HAA–PJ70100
Drive chain tool set	07HMH–MR10103 or 07HMH–MR1010C (U.S.A. only)
Cam chain tensioner holder	07ZMG–MCAA400 (U.S.A. only)

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 their authorized Honda dealer.

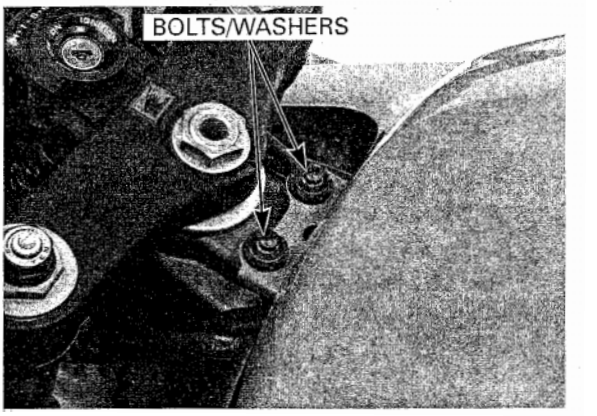
		ITEMS \ FREQUENCY	NOTE	X 1,000 mi	0.6	4	8	12	16	20	24	REFER TO PAGE
				X 100 km	10	64	128	192	256	320	384	
EMISSION RELATED ITEMS	*	FUEL LINE					I		I		I	3-4
	*	THROTTLE OPERATION					I		I		I	3-5
		AIR CLEANER	NOTE 2					I			I	3-6
		SPARK PLUGS			EVERY 16,000 mi (25,600 km): I EVERY 32,000 mi (51,200 km): R							3-6
	*	VALVECLEARANCE							I			3-10
		ENGINE OIL			R		R		R		R	3-15
		ENGINE OIL FILTER			R		R		R		R	3-15
	*	ENGINE IDLE SPEED			I	I	I	I	I	I	I	3-17
		RADIATOR COOLANT	NOTE 3				I		I		R	3-18
	*	COOLING SYSTEM					I		I		I	3-18
	*	SECONDARY AIR SUPPLY SYSTEM					I		I		I	3-19
	*	EVAPORATIVE EMISSION CONTROL SYSTEM	NOTE 4					I			I	3-19
	**	EGCV (Exhaust Gas Control Valve) CONTROL CABLE			EVERY 16,000 mi (25,600 km): I							5-93
NON-EMISSION RELATED ITEMS		DRIVE CHAIN			EVERY 500 mi (800 km): I, L							3-20
		BRAKE FLUID	NOTE 3			I	I	R	I	I	R	3-24
		BRAKE PAD WEAR				I	I	I	I	I	I	3-25
		BRAKE SYSTEM			I		I		I		I	3-25
	*	BRAKE LIGHT SWITCH					I		I		I	3-26
	*	HEADLIGHT AIM					I		I		I	3-27
		CLUTCH SYSTEM			I	I	I	I	I	I	I	3-27
		SIDE STAND					I		I		I	3-28
	*	SUSPENSION					I		I		I	3-28
	*	NUTS, BOLTS, FASTENERS			I		I		I		I	3-31
	**	WHEELS/TIRES					I		I		I	3-31
	**	STEERING HEAD BEARINGS			I		I		I		I	3-32

* 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 recommend these items be serviced only by an authorized Honda dealer.

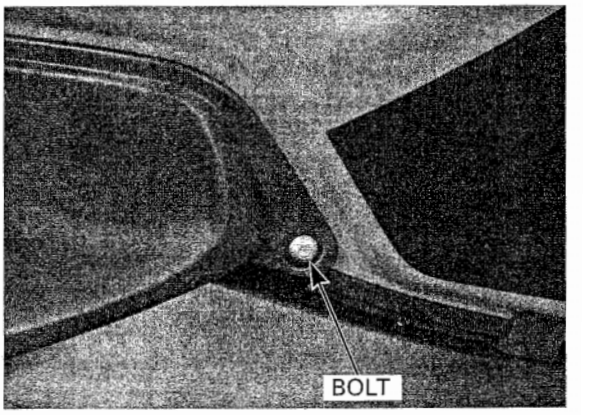
NOTES: 1. At higher odometer readings, repeat at the frequency interval established here.
2. Service more frequently if the motorcycle is ridden in unusually wet or dusty areas.
3. Replace every 2 years, or at the indicated odometer intervals, whichever comes first. Replacement requires mechanical skill.
4. California type only

FUEL LINE

Remove the front fuel tank mounting bolts and washers.

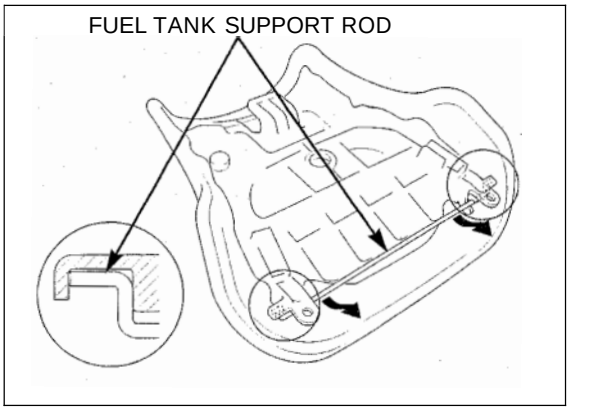


Remove the right and left duct cover mounting bolts.



After fuel line inspection, install the rod ends into the seat properly as shown

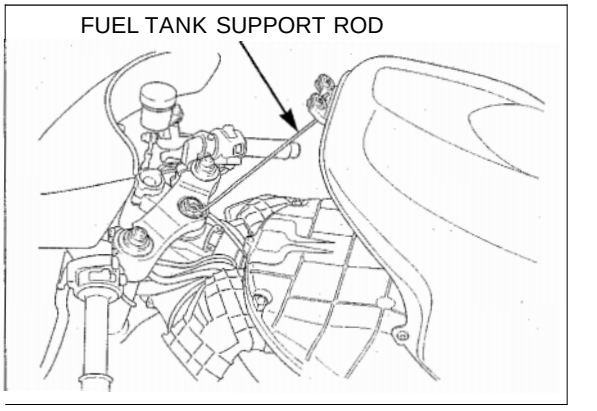
Remove the seat and then remove the fuel tank support rod from the seat.



Only use the rod to support the fuel tank

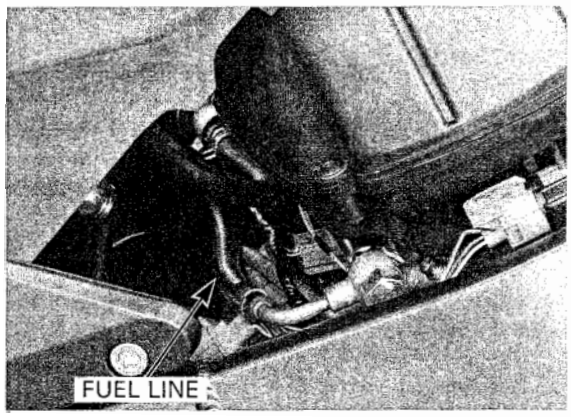
Open and support the front end of fuel tank using the support rod as shown.

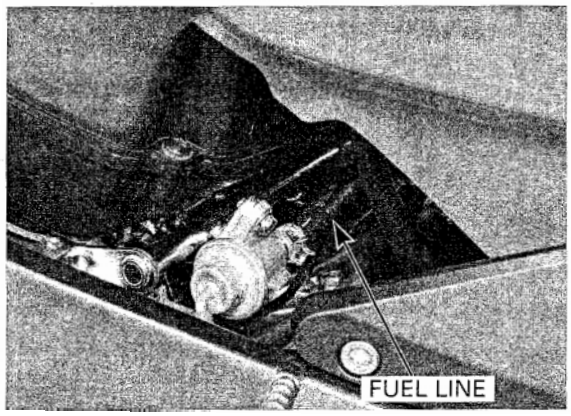
Do not lift the front end of fuel tank more than necessary to support it.



Check the fuel lines for deterioration, damage or leakage. Replace the fuel line if necessary.

Install the fuel tank in the reverse order of removal.



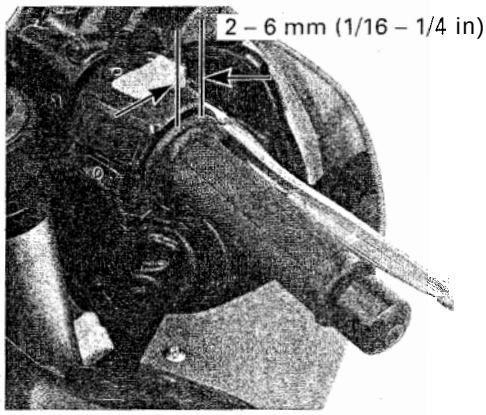


THROTTLE OPERATION

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.
Lubricate the throttle cables, if throttle operation is not smooth.

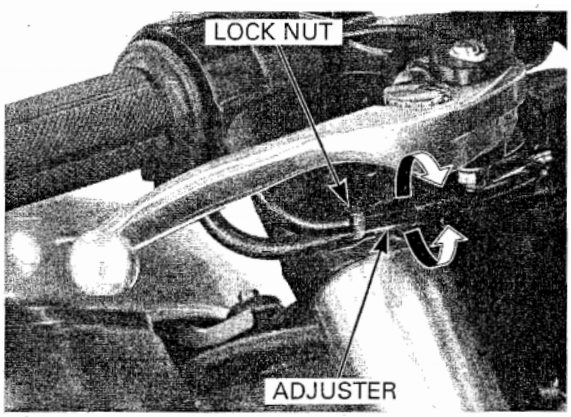
Measure the free play at the throttle grip flange.

FREE PLAY: 2 – *6* mm (1/16 – 1/4 in)



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

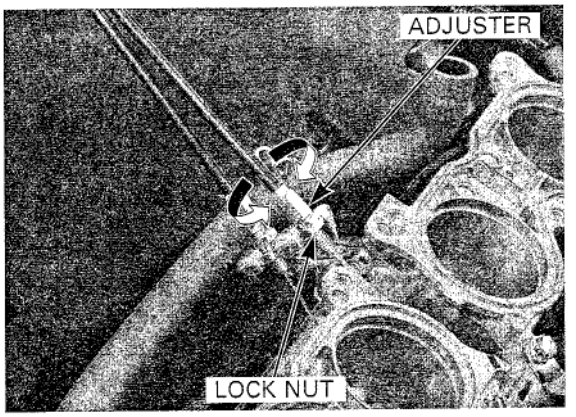
Minor adjustments are made with the upper adjuster. Adjust the free play by loosening the lock nut and turning the adjuster.



Major adjustments are made with the lower adjuster.

Remove the air cleaner housing (page 5-64).

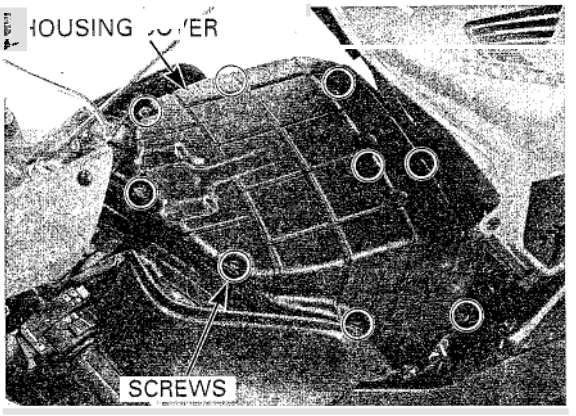
Adjust the free play by loosening the lock nut and turning the adjuster.
After adjustment, tighten the lock nut securely.
Recheck the throttle operation.
Replace any damaged parts, if necessary.



AIR CLEANER

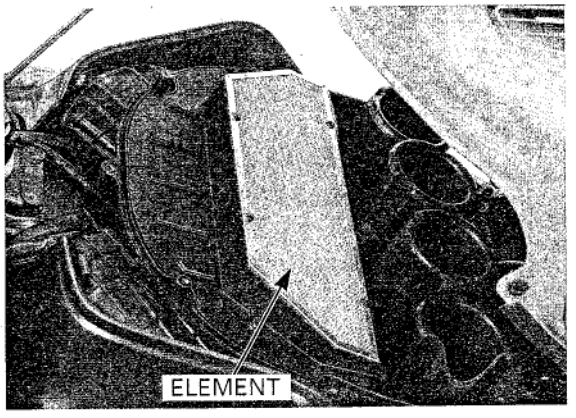
Open and support the front end of the fuel tank (page 3-4).

Remove the screws and air cleaner housing cover.



Remove and discard the air cleaner element in accordance with the maintenance schedule (page 3-3).
Also replace the air cleaner element anytime it is excessively dirty or damage.

Install the removed parts in the reverse order of removal.



SPARK PLUGS

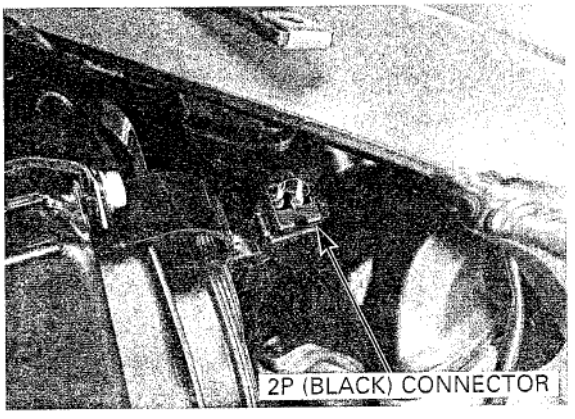
REMOVAL

NOTICE

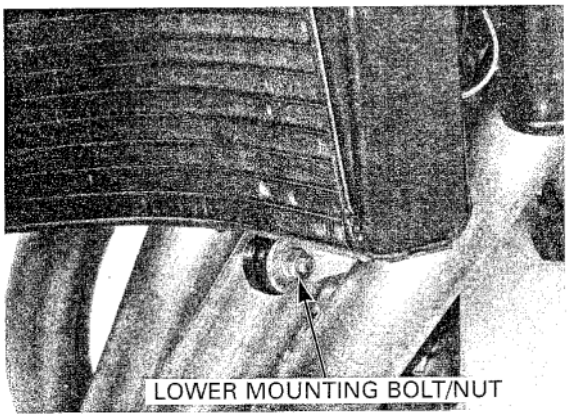
Be careful not to damage the radiator fins.

Remove the lower cowl (page 2-7).

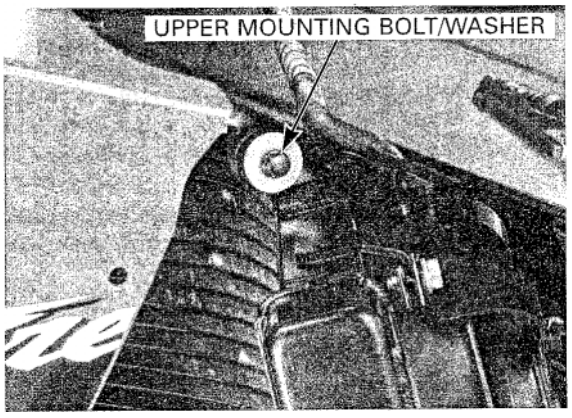
Disconnect the fan motor wire **2P** (Black) connector.



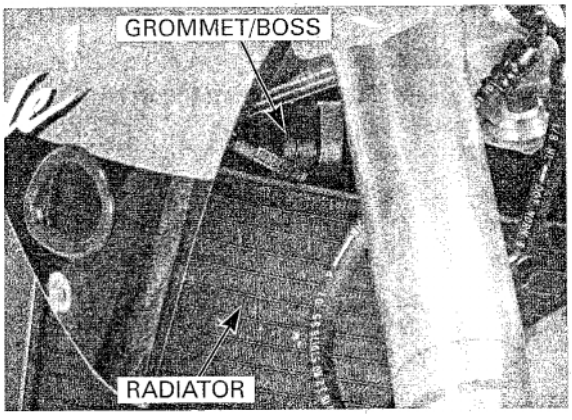
Remove the radiator lower mounting bolt/nut.



Remove the radiator upper mounting bolt and washer.

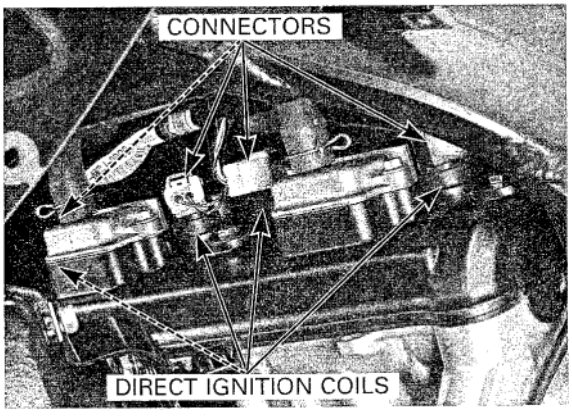


Remove the radiator grommet from the frame boss by moving it to the right, then move the radiator forward.



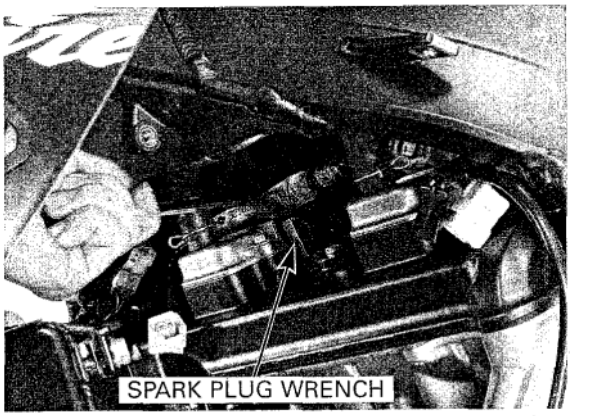
Clean around the spark plug bases with compressed air before removing, and be sure that no debris is allowed to enter the combustion chamber

Disconnect the direct ignition coil connectors.
Remove the direct ignition coils from the spark plugs.



Remove the spark plug using the equipped spark plug wrench or an equivalent.

Inspect or replace as described in the maintenance schedule.



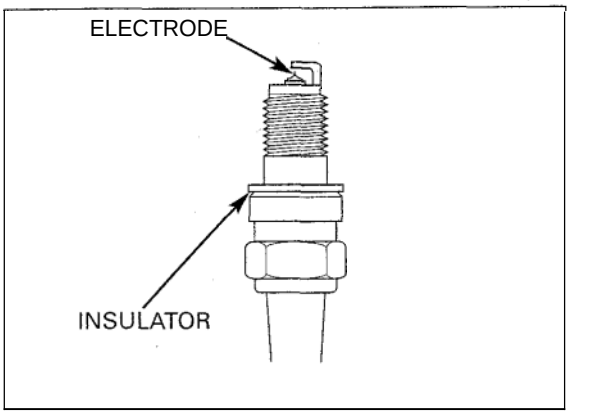
INSPECTION

Check the following and replace if necessary (recommended spark plug: page 3-2)

- Insulator for damage
- Electrodes for wear
- Burning condition, coloration

This motorcycle's spark plugs are equipped with iridium center electrodes Replace any spark plug if the electrode is contaminated

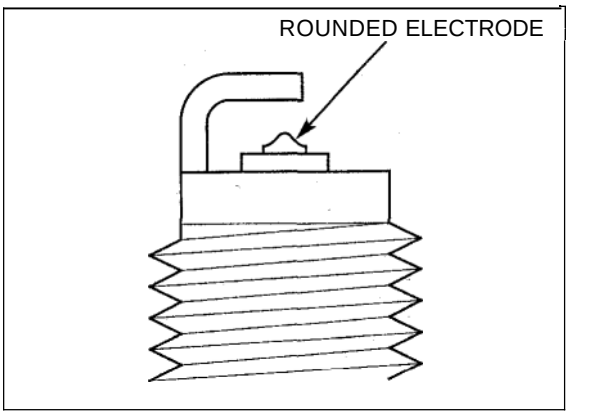
If the electrodes are contaminated with accumulated objects or dirt, replace the spark plug.



Replace the plug if the center electrode is rounded as shown in the illustration.

Always use the specified spark plugs on this motorcvcle.

SPECIFIED SPARK PLUG: IMR9C-9H (NGK)
VUH27D (DENSO)

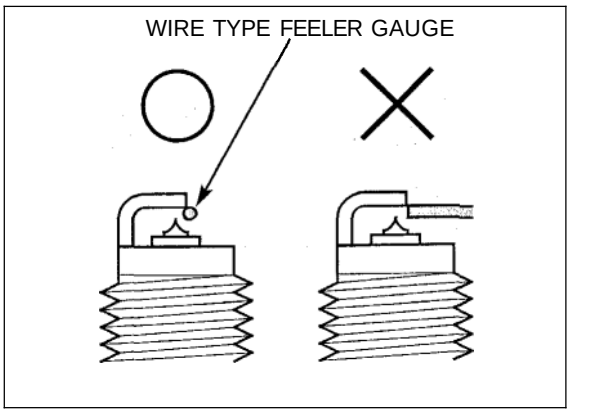


To prevent damaging the iridium center electrode, use a wire type feeler gauge to check the spark plug gap

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

Do not adjust the spark plug gap If the gap is out of specification, replace the spark plug with a new one

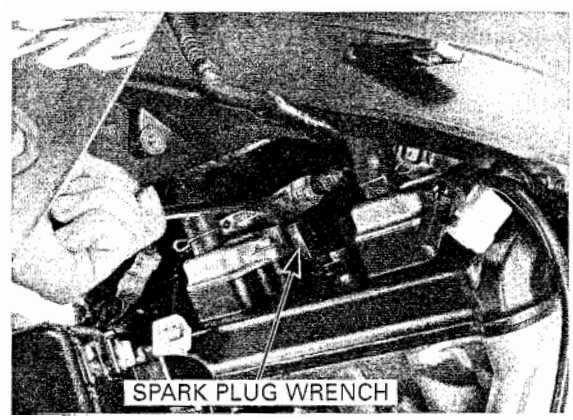
Make sure the 1.0 mm (0.04 in) diameter plug gauge does not insert between the gap.
If the gauge can be inserted into the gap, replace the plug with a new one.



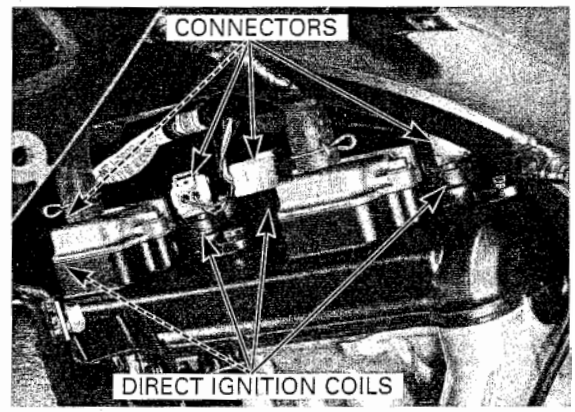
Reinstall the spark plug in the cylinder head and hand tighten, then torque to specification.

TORQUE: 12 N·m (1.2 kgf·m, 9 lbf·ft)

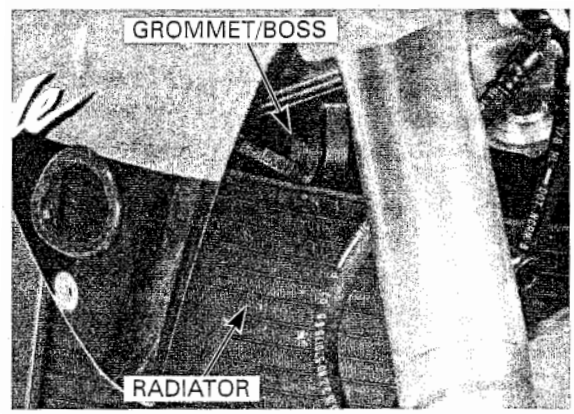
If using the new plug, install as follows:
Install and hand tighten the new spark plug, then tighten it about 1/2 turn after the sealing washer contacts the seat of the plug hole.



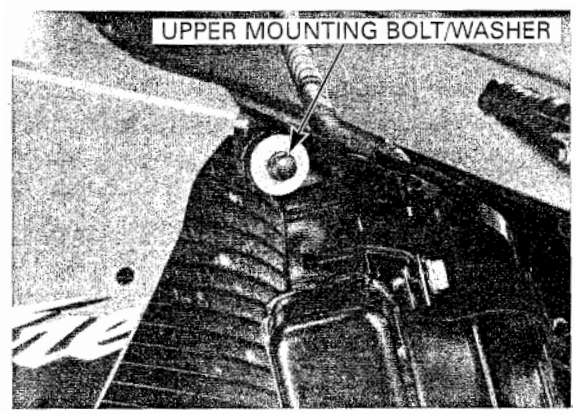
Install the direct ignition coils.
Connect the direct ignition coil connectors.



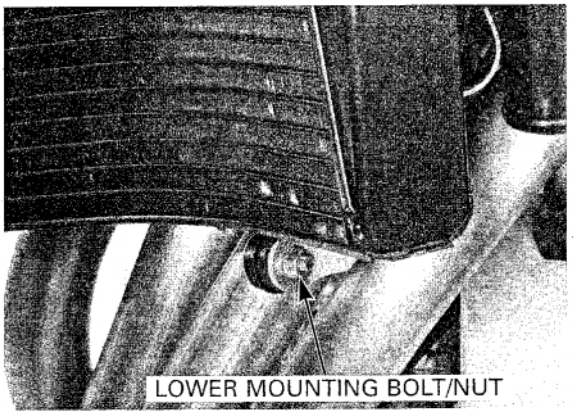
Install the radiator grommet onto the frame boss.



Install the washer and radiator upper mounting bolt, then tighten the bolt.

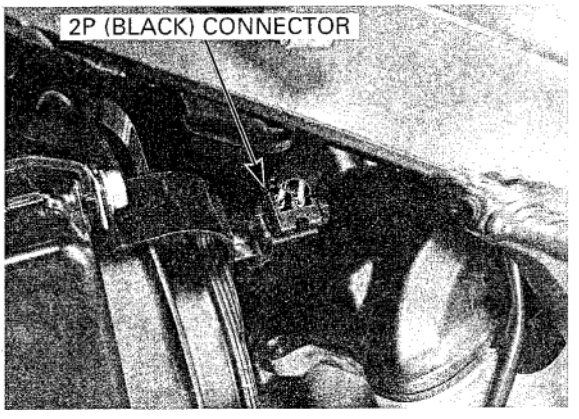


Install and tighten the radiator lower mounting bolt/nut.



Connect the fan motor wire 2P (Black) connector.

Install the lower cowl (page 2-7).



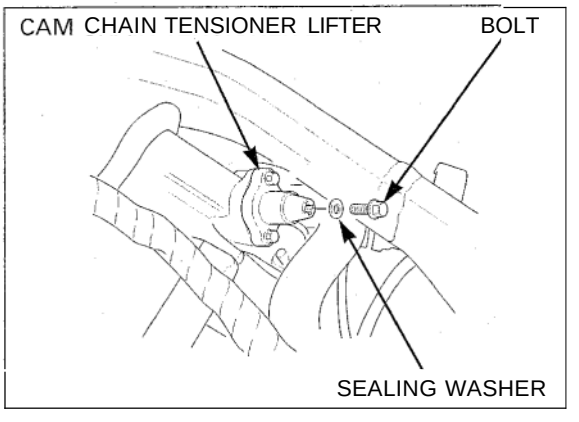
VALVE CLEARANCE

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

INSPECTION

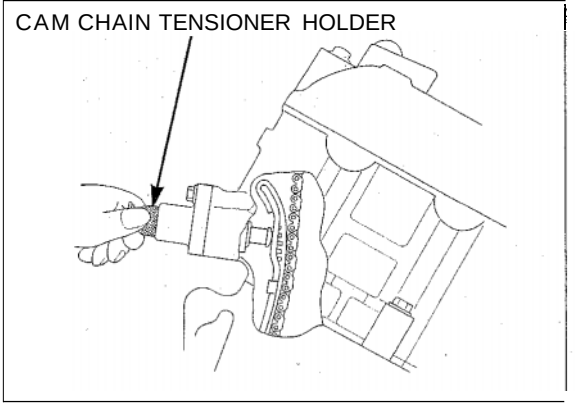
Remove the cylinder head cover (page 8-5).

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

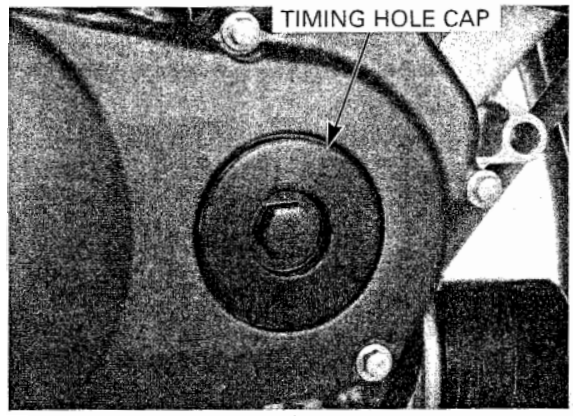


Turn the cam chain tensioner lifter shaft fully in (clockwise) and secure it using the special tool.

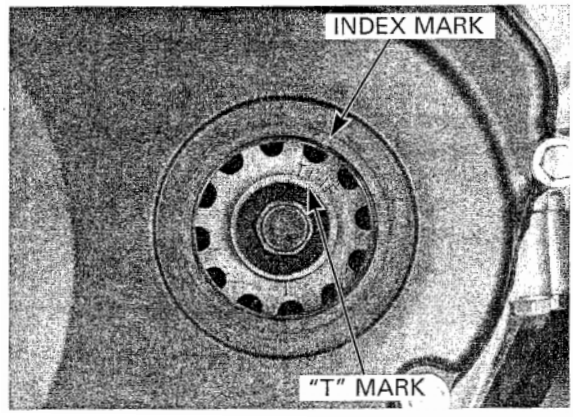
TOOL:
Cam chain tensioner holder **07ZMG–MCAA400 (U.S.A. only)**



Remove the timing hole cap and O-ring.

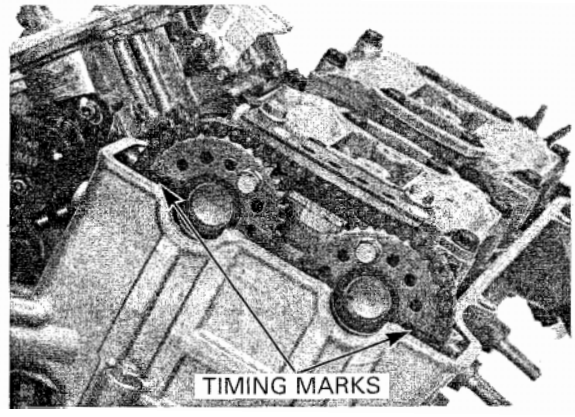


Turn the crankshaft clockwise, and align the "T" mark on the ignition pulse generator rotor with the index mark on the right crankcase cover.



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

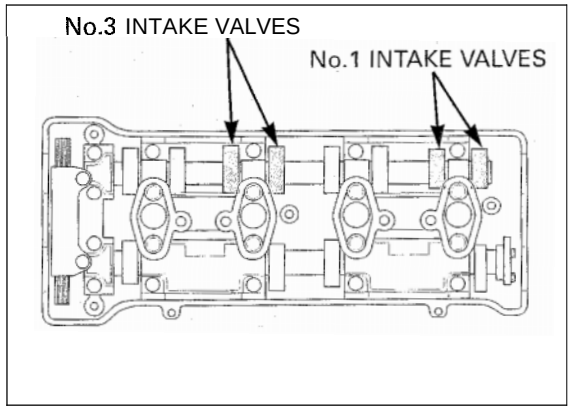
If the timing marks on the cam sprocket face inward, turn the crankshaft clockwise one full turn (360°) and realign the timing marks with the cylinder head surface so they are facing outward.



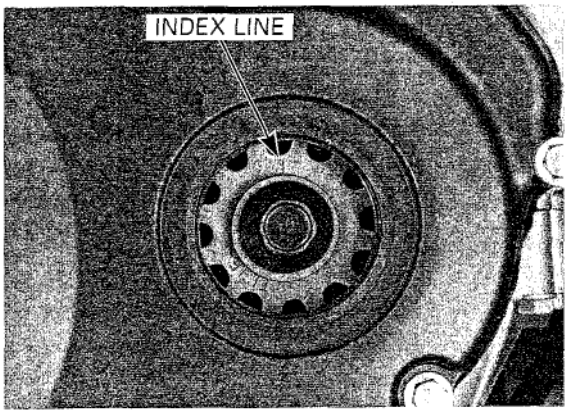
Record the clearance for each valve for reference in shim selection if adjustment is required

Insert a feeler gauge between the valve lifter and the cam lobe.
Check the valve clearance for the No.1 and No.3 cylinder intake valves using a feeler gauge.

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



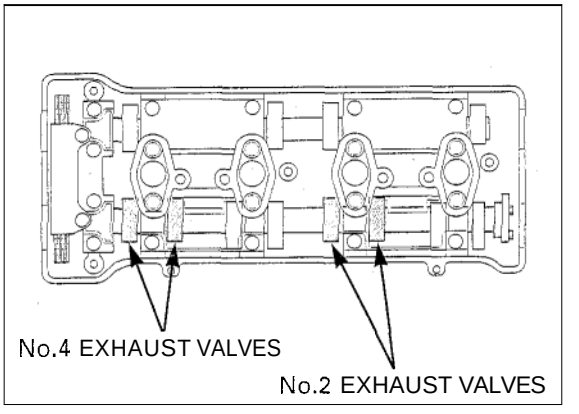
Turn the crankshaft clockwise 1/2 turn (180°), align the index line on the ignition pulse generator rotor so that it is facing up as shown.



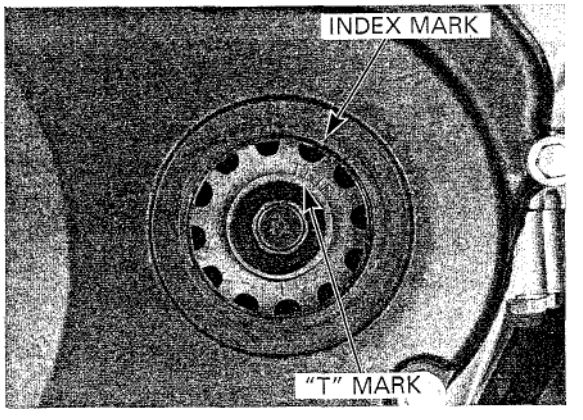
Record the clearance for each vaive for reference in shim selection if adjustment is required

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

VALVE CLEARANCE:
EX: 0.27 ±0.03 mm (0.011 ±0.001 in)



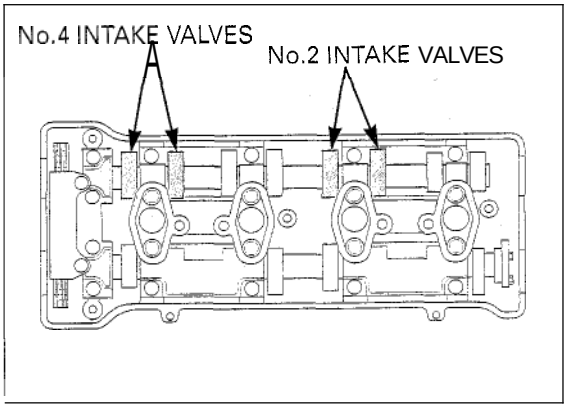
Turn the crankshaft clockwise 1/2 turn (180°), and align the "T" mark on the ignition pulse generator rotor with the index mark on the right crankcase cover.



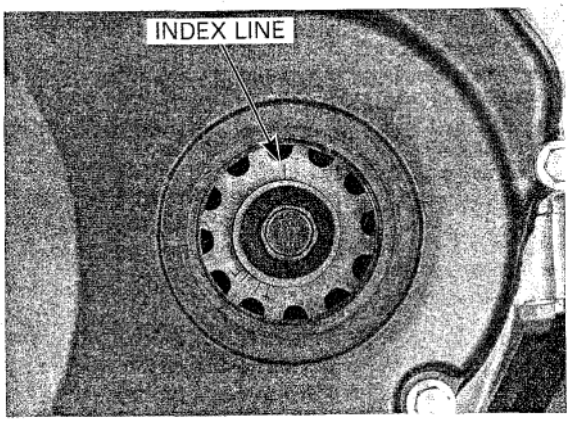
Record tne clearance for each vaive for reference in shim selection if adjustment is required

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

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



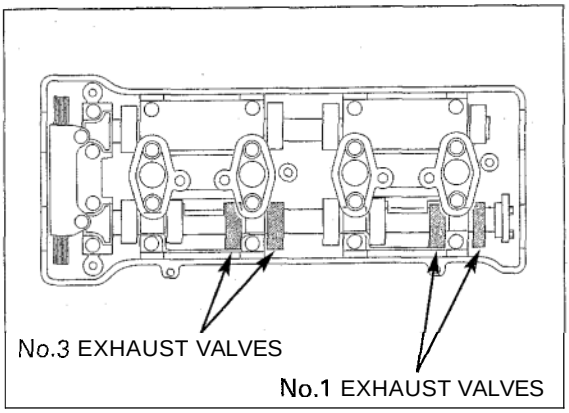
Turn the crankshaft clockwise 1/2 turn (180°), and align the index line on the ignition pulse generator rotor so it is facing up as shown.



Record the clearance for each vaive 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: 0.27 ± 0.03 mm (0.011 ± 0.001 in)

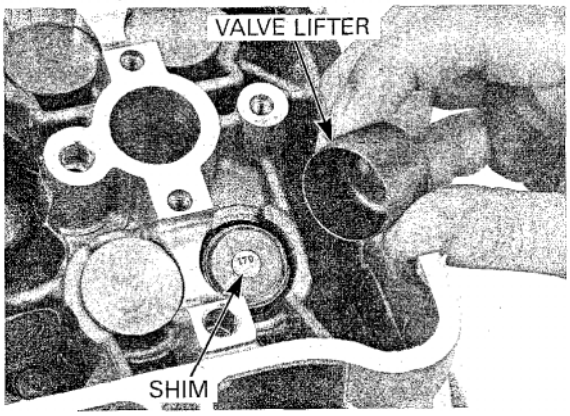


ADJUSTMENT

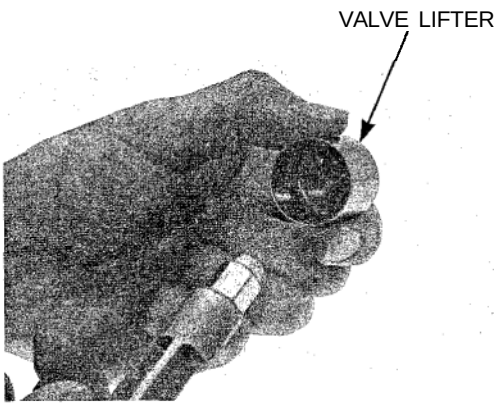
Remove the camshaft (page 8-7).

Remove the valve lifters and shims.

- Shims 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 tweezers or a magnet.



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



Sixty-five different shim thicknesses are available from 1200 rnm to 2 800 mm in intervals of 0 025 mm

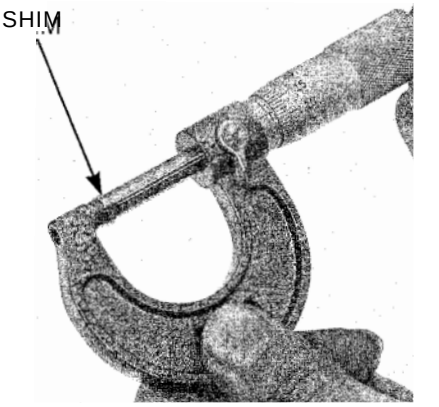
Measure the shim thickness and record it.

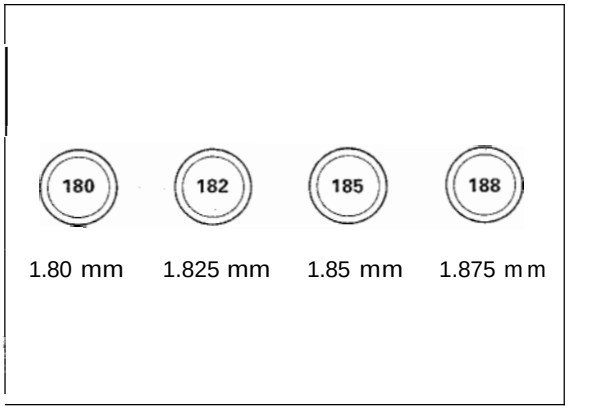
Calculate the new shim thickness using the equation below.

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 with a micrometer.
- Reface the valve seat if carbon deposits result in a calculated dimension of over 2.800 mm.





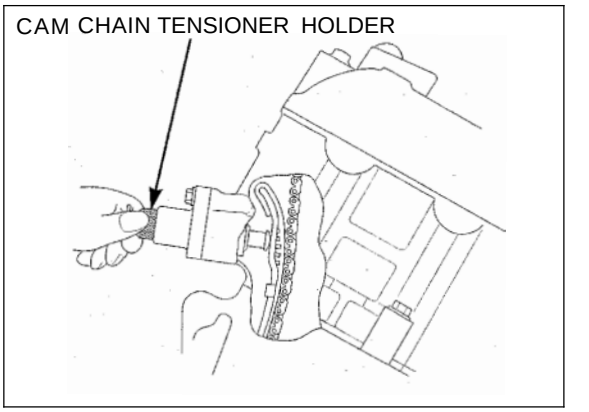
Install the shims and valve lifters in their original locations

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

Install the camshafts (page 8-24).

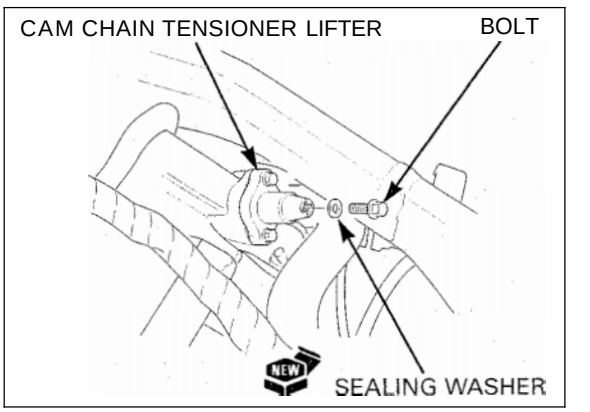
Rotate the camshafts by rotating the crankshaft clockwise several times.
Recheck the valve clearance.

Remove the cam chain tensioner holder.



Install the new sealing washer and cam chain tensioner lifter sealing bolt.
Tighten the bolt securely.

Install the removed parts in the reverse order of removal.



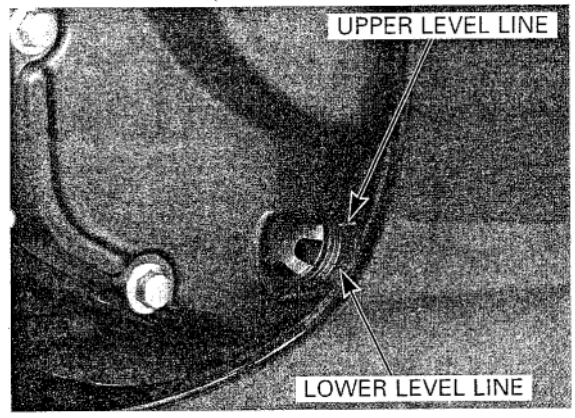
ENGINE OIL/OIL FILTER

OIL LEVEL INSPECTION

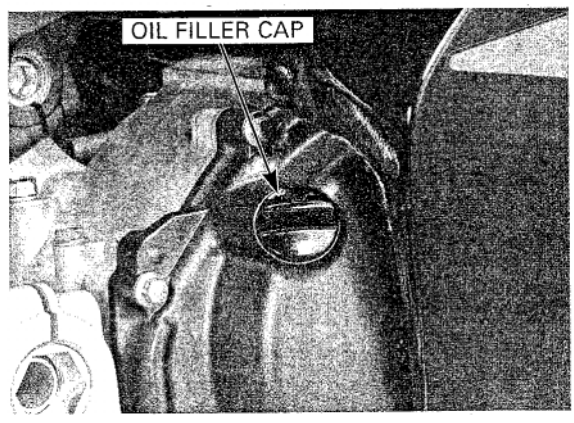
Start the engine and let it idle for 2 – 3 minutes.
Turn off the engine and support the motorcycle on a level surface.

Check the oil level through the inspection window.

If the level is below the lower line, remove the oil filler cap and fill the crankcase with the recommended oil to the upper level line.



Remove the oil filler cap.

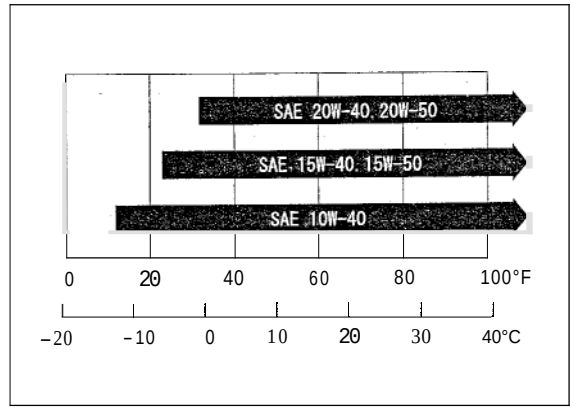


Fill the recommended engine oil up to the upper level line.

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

RECOMMENDED ENGINE OIL:
Pro Honda GN4 or HP4 (without molybdenum additives) 4-stroke oil or equivalent motor oil
API service classification: SG or higher
JASO T 903 standard: MA
Viscosity: SAE 10W–40

Reinstall the filler cap and dipstick.

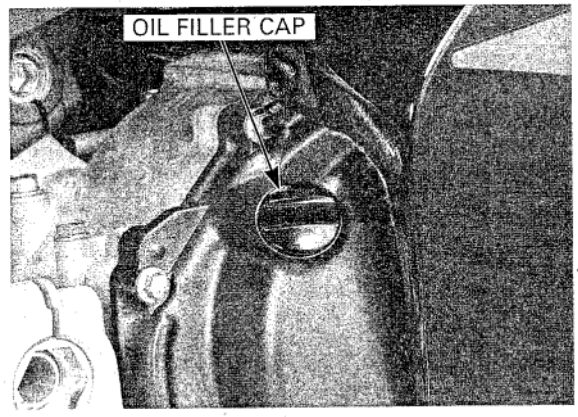


ENGINE OIL & FILTER CHANGE

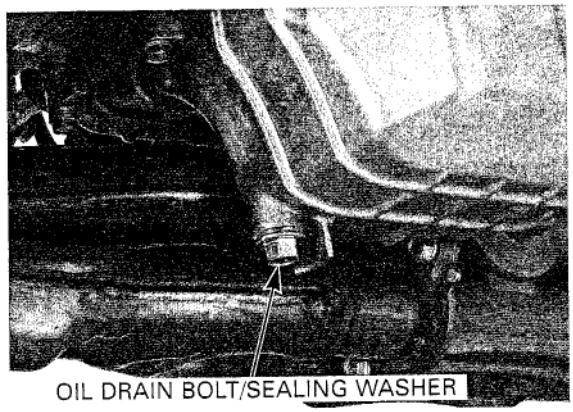
Change the engine oil with the engine warm and the motorcycle on level ground to assure complete draining

Warm up the engine.
Remove the lower cowl (page 2-7).

Stop the engine and remove the oil filler cap.

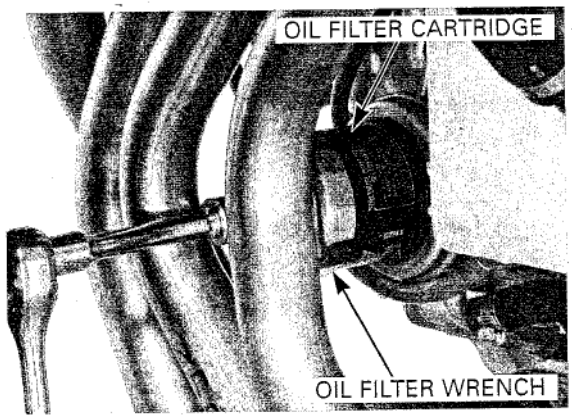


Remove the drain bolt and drain the oil completely



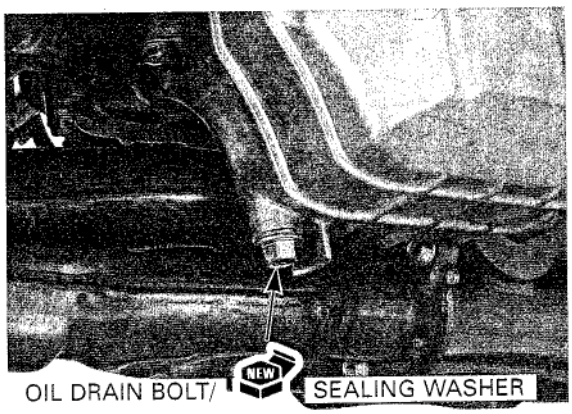
Remove and discard the oil filter cartridge using the special tool.

TOOL:
Oil filter wrench **07HAA–PJ70101 or 07HAA–PJ70100**

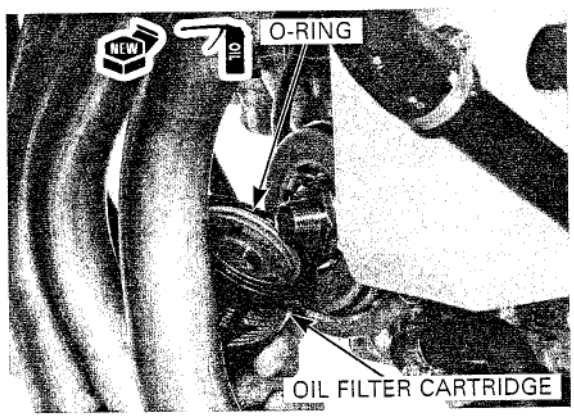


Check that the sealing washer on the drain bolt is in good condition, and replace if necessary.
Install and tighten the drain bolt.

TORQUE: 29 N·m (3.0 kgf·m, 22 lbf·ft)



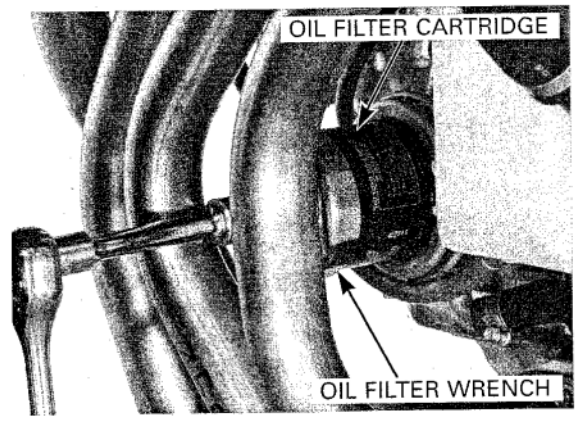
Apply oil to the new oil filter O-ring.



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

TOOL:
Oil filter wrench 07HAA-PJ70101 or 07HAA-PJ70100

TORQUE: 26 N·m (2.7 kgf·m, 20 lbf·ft)



Fill the crankcase with the recommended engine oil.

OIL CAPACITY:
3.5 liter (3.7 US qt, 3.1 Imp qt) at draining
3.7 liter (3.9 US qt, 3.3 Imp qt) at oil filter change

Install the oil filler cap.

Start the engine and let it idle for 2 to 3 minutes.
Stop the engine and recheck the oil level.
Make sure there are no oil leaks.

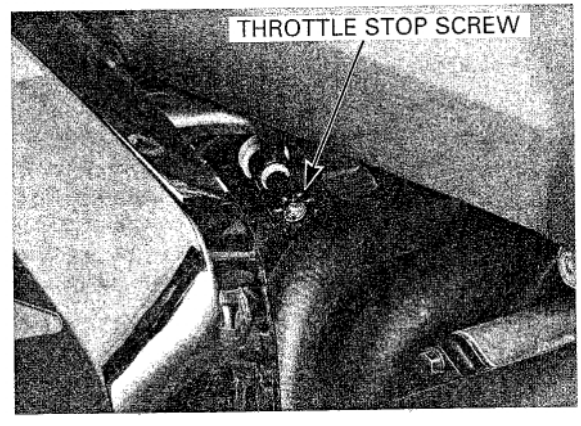
Install the lower cowl (page 2-7).

ENGINE IDLE SPEED

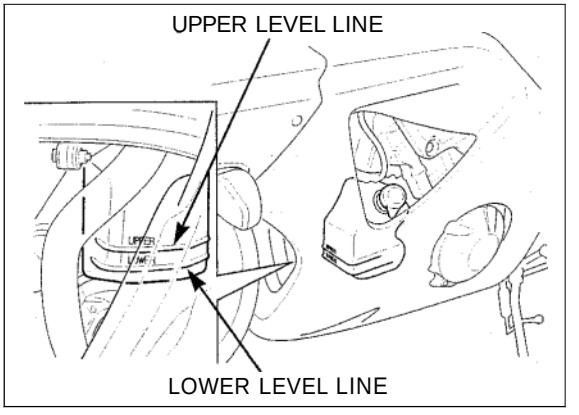
- Inspect and adjust the idle speed after all other engine maintenance items have been performed and are within specifications.
- The engine must be warm for accurate idle speed inspection and adjustment.

Warm up the engine for about 10 minutes.
Turn the throttle stop screw as required to obtain the specified idle speed.

IDLE SPEED: 1,200 ± 100 rpm



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.

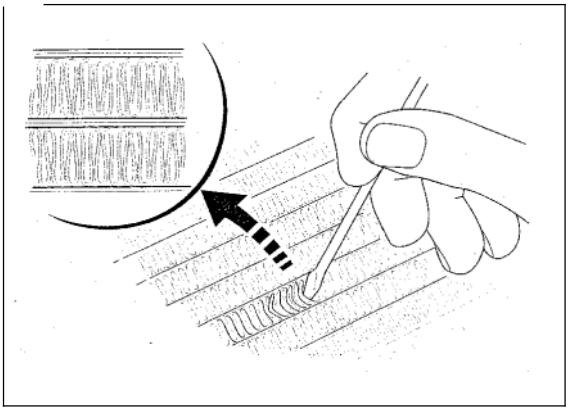
If necessary, add the recommended coolant.

RECOMMENDED ANTIFREEZE:
Pro Honda HP Coolant or an equivalent high quality ethylene glycol antifreeze containing corrosion protection inhibitors.

Remove the lower cowl (page 2-7).

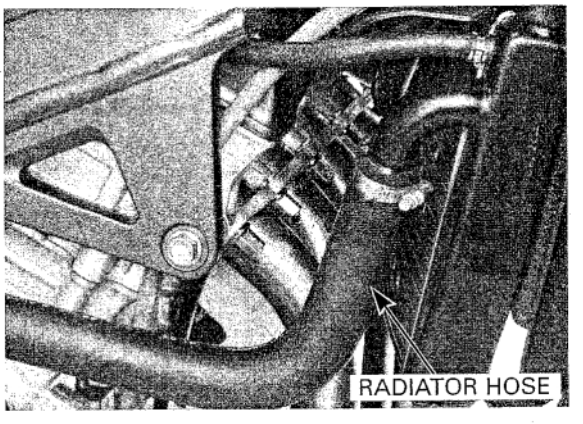
Remove the reserve tank filler cap and fill to the "UPPER" level line with a 1:1 mixture of distilled water and antifreeze.
Reinstall the filler cap.

COOLING SYSTEM



Remove the lower cowl (page 2-7).

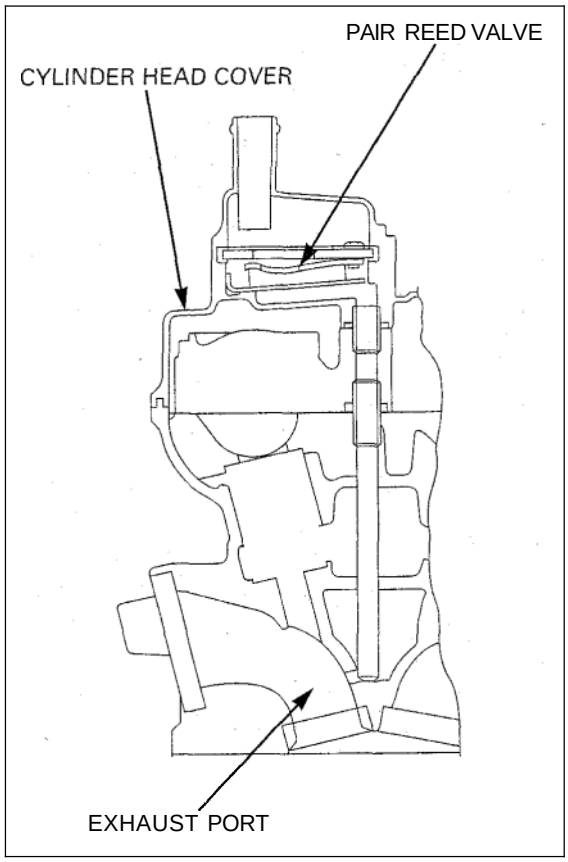
Check the radiator air passages for clogs or damage.
Straighten bent fins, and remove insects, mud or other obstructions with compressed air or low water pressure.
Replace the radiator if the air flow is restricted over more than 20% of the radiating surface.



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

SECONDARY AIR SUPPLY SYSTEM

- This model is equipped with a 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 are negative pressure pulses 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.

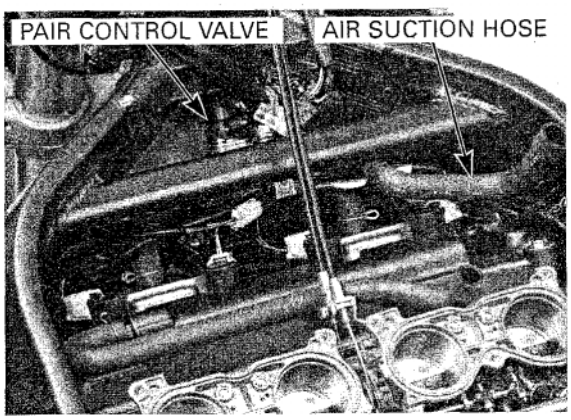


Remove the air cleaner housing (page 5-64).

if the hoses show any signs of heat damage, inspect the PAIR check valve in the PAIR reed vaive cover 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 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 the hoses are not kinked, pinched or cracked.

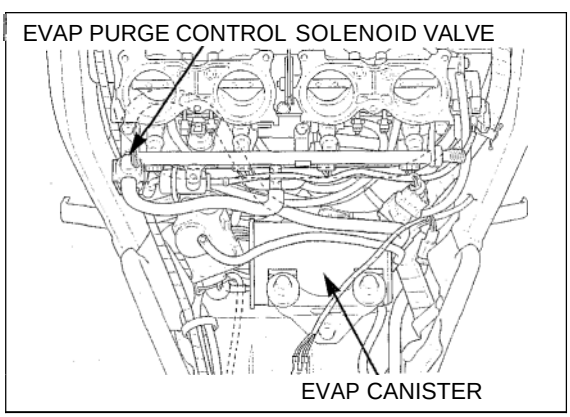


EVAPORATIVE EMISSION CONTROL SYSTEM (California type only)

Check the hoses between the fuel tank, EVAP canister, EVAP purge control solenoid valve for deterioration, damage or loose connections.

Check the EVAP canister for cracks or other damage.

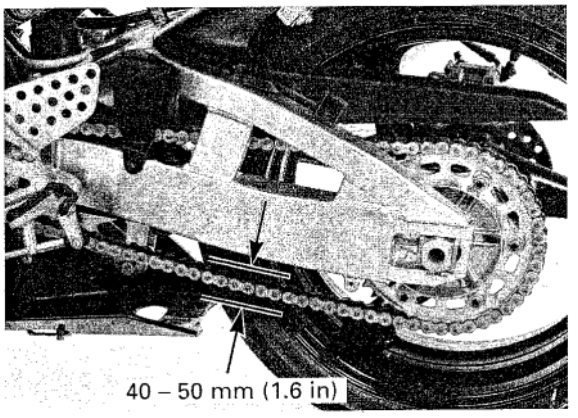
Refer to the Vacuum Hose Routing Diagram label (page 1-40) and Cable & Harness Routing (page 1-28) for hose connections.



DRIVE CHAIN

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

DRIVE CHAIN SLACK INSPECTION



Turn the ignition switch to "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.

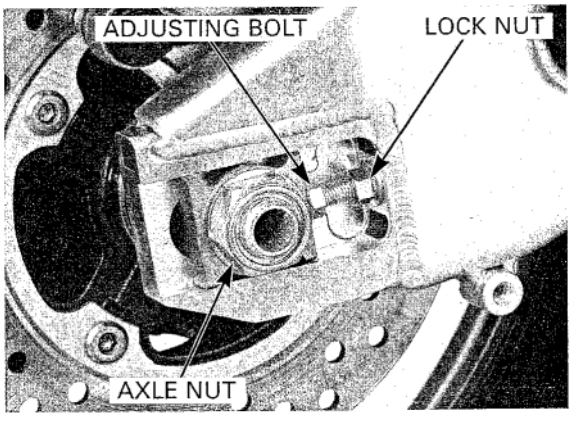
CHAIN SLACK: 40 – 50 mm (1.6 – 2.0 in)

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 drive chain lubricant designed specifically for use with O-ring chains. Wipe off the excess oil or chain lubricant.

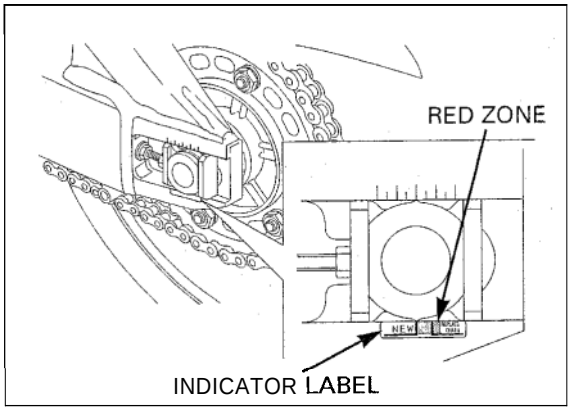
ADJUSTMENT



Loosen the rear axle nut.
Loosen the drive chain adjust bolt lock nuts and turn both adjusting bolts until the correct drive chain slack is obtained.
Make sure the index marks on both adjusting plates are aligned with the swingarm index mark.
Tighten the rear axle nut to the specified torque.

TORQUE: 113 N•m (11.5 kgf•m, 83 lbf•ft)

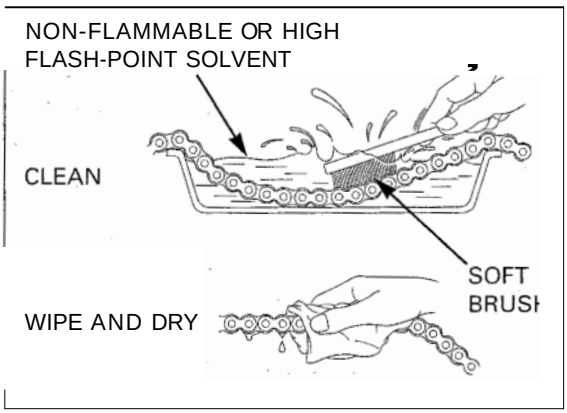
Tighten both drive chain adjusting bolt lack nuts.



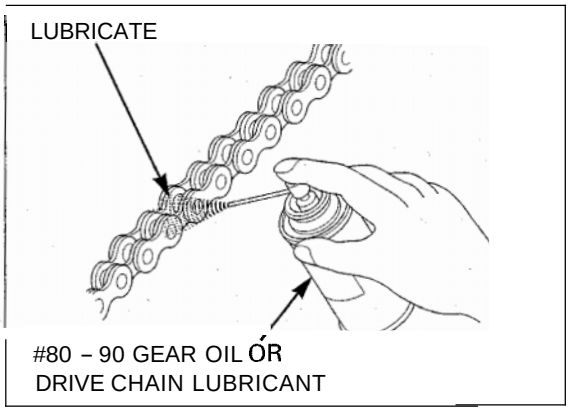
Recheck the drive chain slack and free wheel rotation.
Lubricate the drive chain with #80 – 90 gear oil or drive chain lubricant designed specifically for use with O-ring chains. Wipe *off* the excess oil or chain lubricant.
Check the drive chain wear indicator label attached on the left swingarm.
If the drive chain adjusting plate index mark reaches the red zone of the indicator label, replace the drive chain with a new one (page 3-22).

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 the sprocket as necessary.

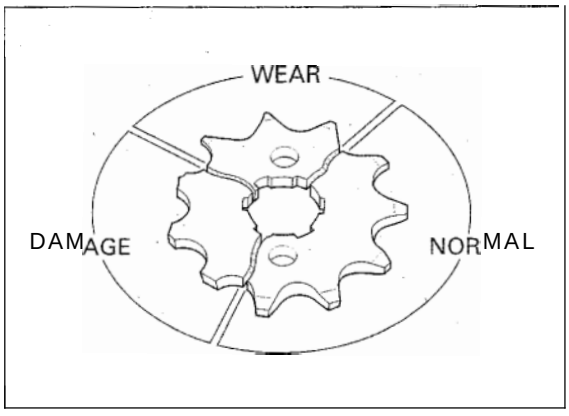


Lubricate the drive chain with #80 – 90 gear oil or drive chain lubricant designed specifically for use with O-ring chains. Wipe off the excess oil or chain lubricant.



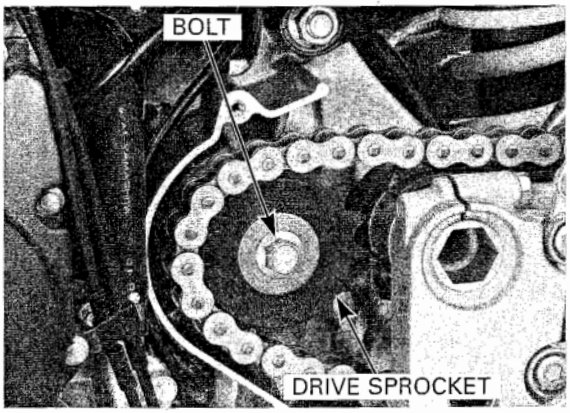
SPROCKETS INSPECTION

Inspect the drive and driven sprocket teeth for wear or damage, replace if necessary.
Never use a new drive chain on worn 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)
Driven sprocket nut: 64 N·m (6.5 kgf·m, 47 lbf·ft)

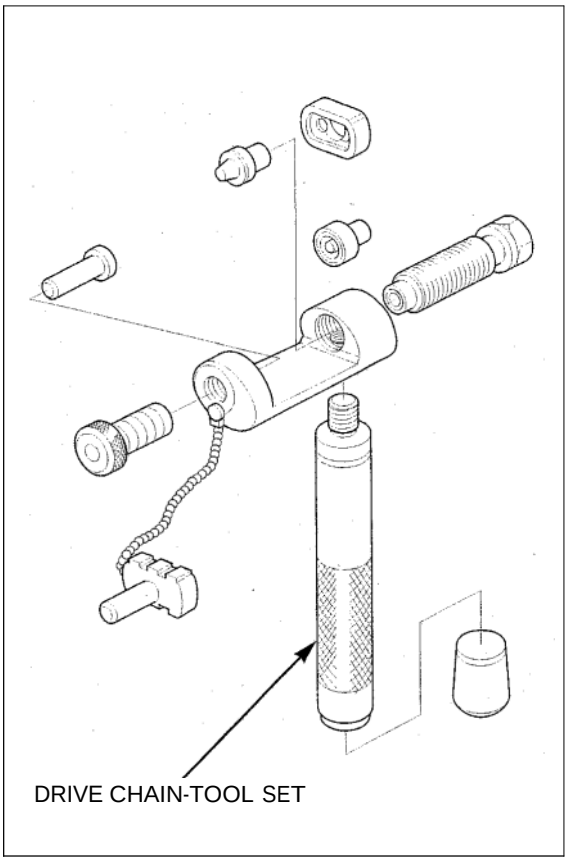


REPLACEMENT

This motorcycle uses a drive chain with a staked master link.
Loosen the drive chain (page 3-20).
Assemble the special tool as shown.

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

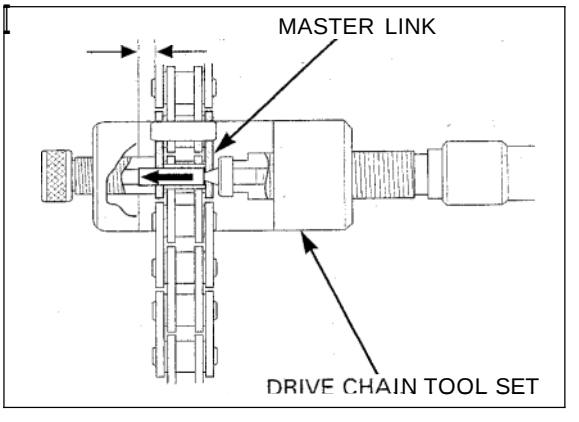
TOOL:
Drive chain tool set — **07HMH-MR10103 or 07HMH–MR1010C (U.S.A. only)**



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 or 07HMH–MR101OC (U.S.A. only)**

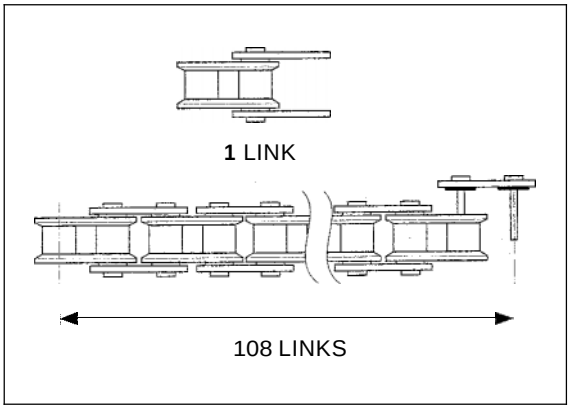
Remove the drive chain.



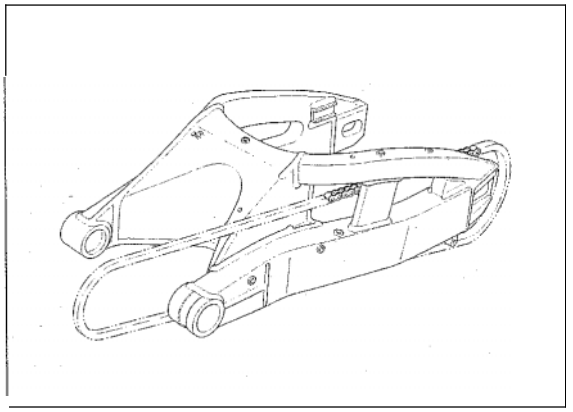
Include the master link when you count the drive chain links

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

STANDARD LINKS: 108 links
REPLACEMENT CHAIN:
DID: DID 50VA8 C1
RK: RK GB50HFOZ5



Route the drive chain through the swingarm as shown.

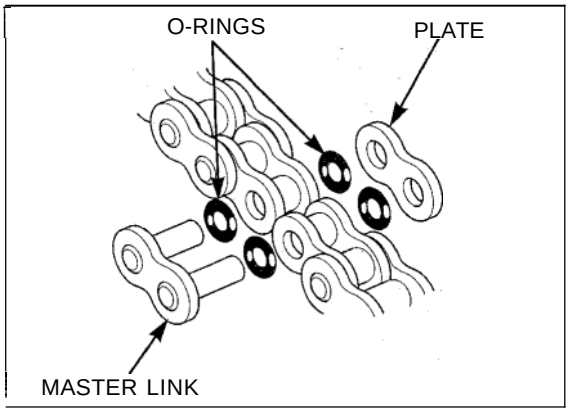


NOTICE

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 out

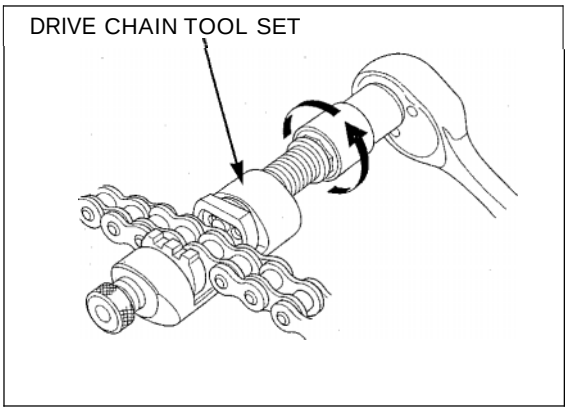
Assemble the new master link, O-rings and plate.



Assemble and set the drive chain tool set.

TOOL:

Drive chain tool set	**07HMH-MR10103 or 07HMH–MR101OC (U.S.A. only)**



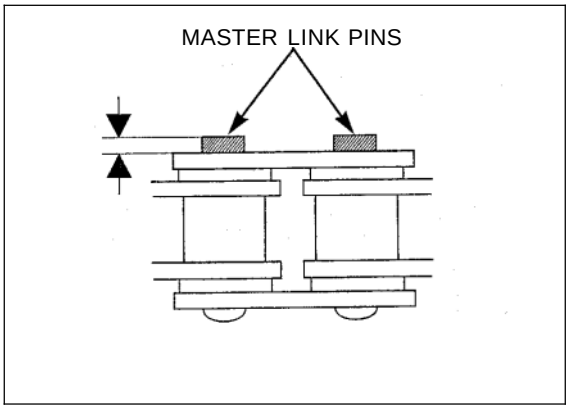
Make sure the master link pins are installed properly. Measure the master link pin length projected from the plate.

STANDARD LENGTH:

DID: 1.15 – 1.55 mm (0.045 – 0.061 in)

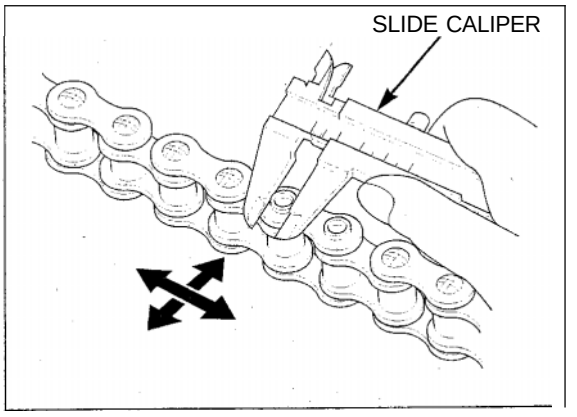
RK: 1.2 – 1.4 mm (0.05 – 0.06 in)

Stake the master link pins.



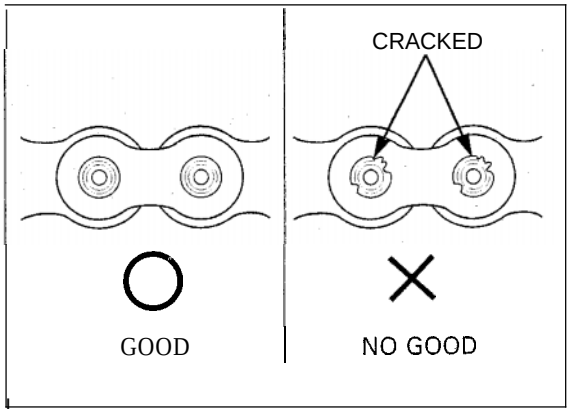
Make sure the pins are staked properly by measuring the diameter of the staked area using a slide caliper.

DIAMETER OF THE STAKED AREA:
DID: 5.50 – 5.80 mm (0.217– 0.228 in)
RK: 5.45– 5.85 mm (0.215– 0.230 in)



A drive chain with a dip-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.

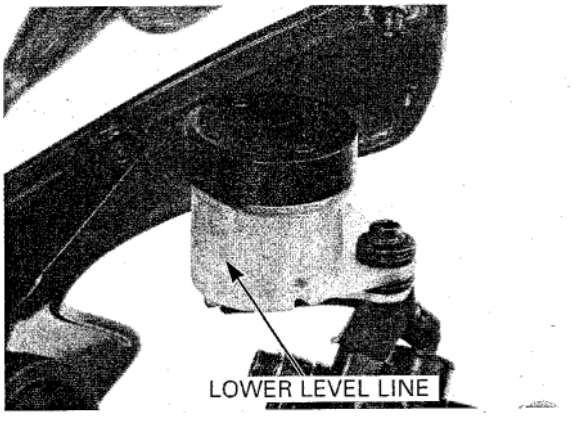


BRAKE FLUID

NOTICE

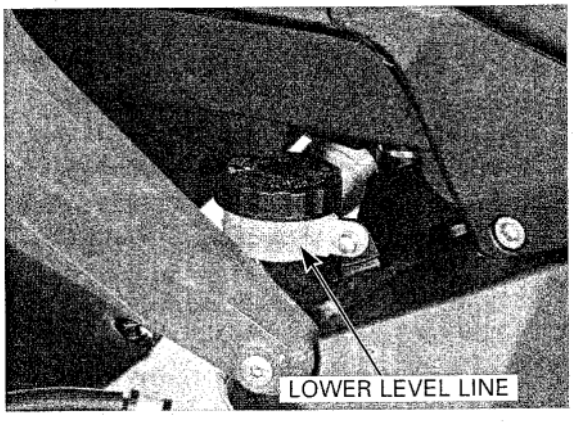
- *Do not mix different types of fluid, as they are not compatible with each other.*
- *Do not allow foreign material to enter the system when filling the reservoir.*
- *Avoid spilling fluid on painted, plastic or rubber parts. Place a rag over these parts whenever the system is serviced.*

When the fluid level is low, check the brake pads for wear (page 3-25). 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 3-25).



FRONT BRAKE

Turn the handlebar so the reservoir is level and check the front brake fluid reservoir level.
If the level is near the lower level line, check the brake pad wear (page 3-25).



REAR BRAKE

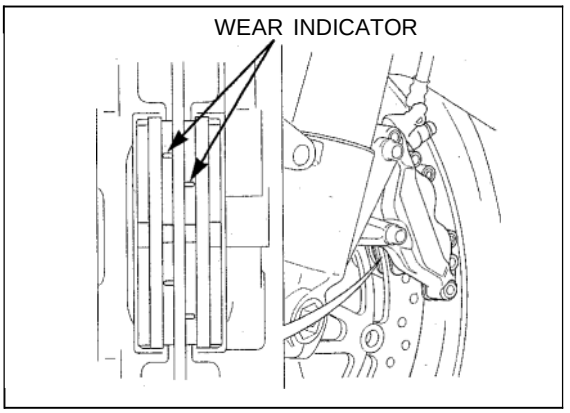
Place the motorcycle on a level surface, and support it in an upright position.
Check the rear brake fluid reservoir level.
If the level is near the lower level line, check the brake pad wear (page 3-25).

BRAKE PAD WEAR

FRONT BRAKE PADS

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

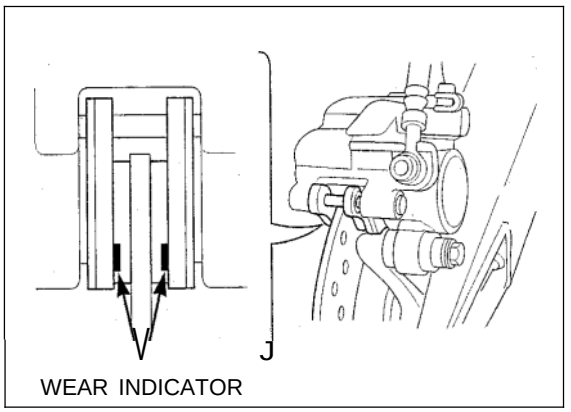
Refer to page 15-8 for brake pad replacement.



REAR BRAKE PADS

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

Refer to page 15-10 for brake pad replacement.



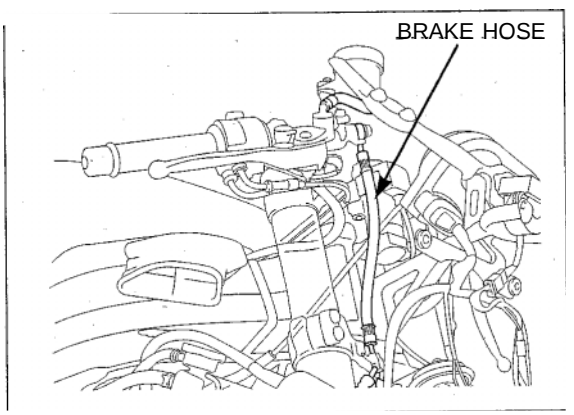
BRAKE SYSTEM

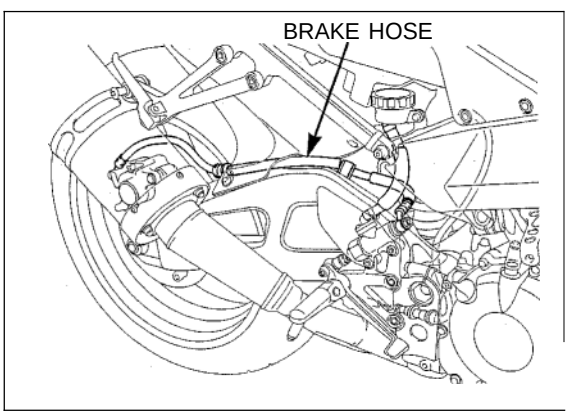
INSPECTION

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 to page 15-5 for brake bleeding procedures.

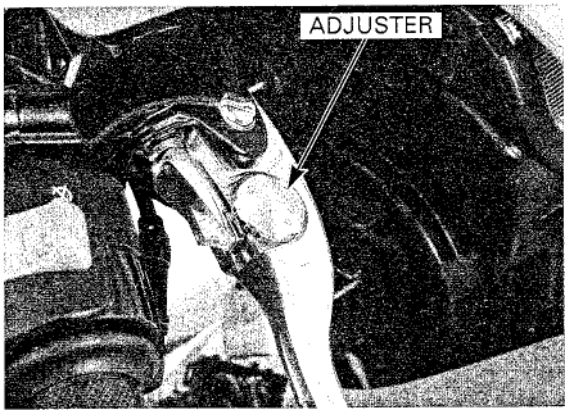




BRAKE LEVER ADJUSTMENT

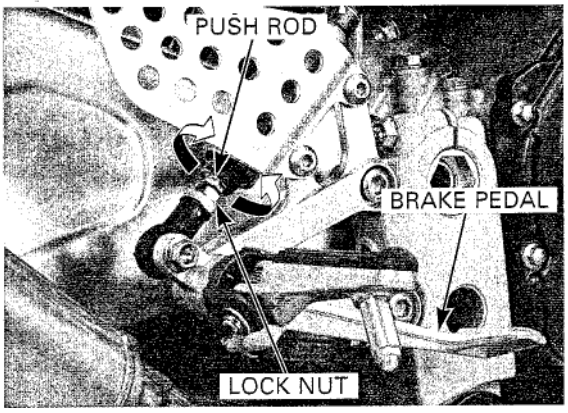
Align the allowance on the brake lever with the index number on the adjuster.

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



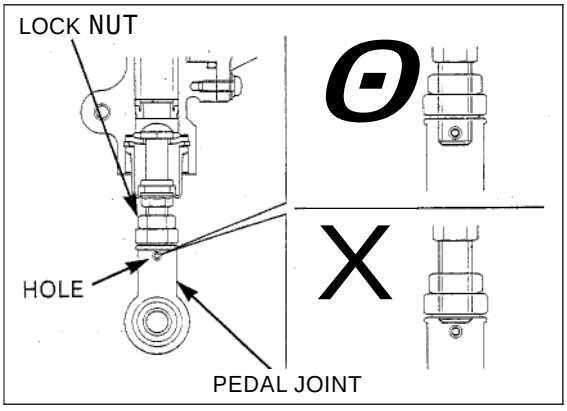
BRAKE PEDAL HEIGHT ADJUSTMENT

Loosen the lock nut and turn the push rod until the correct pedal height is obtained.



Make sure the push rod threads cannot be seen through the pedal joint hole.
After adjustment, tighten the lock nut to the specified torque.

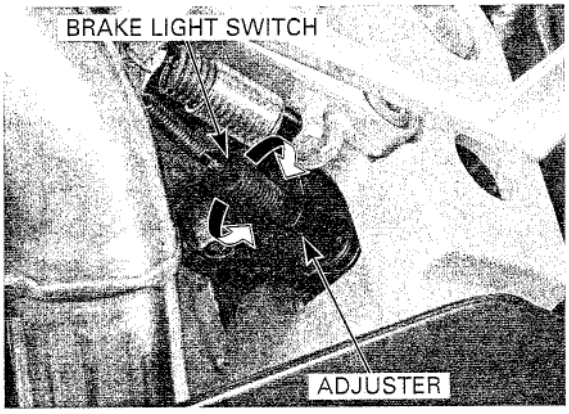
TORQUE: 18 N•m (1.8kgf•m, 13 lbf•ft)



BRAKE LIGHT SWITCH

The front brake light switch does not require adjustment.

Adjust the brake light switch so the brake light comes on just prior to the brake actually being engaged.
If the light fails to come on, adjust the switch so the light comes on at the proper time.
Hold the switch body and turn the adjuster. Do not turn the switch body.



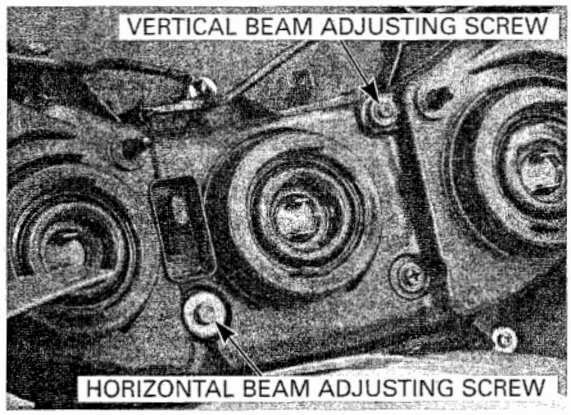
HEADLIGHT AIM

Adjust the headlight beam as specified by local laws and regulations

Place the motorcycle on a level surface.

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

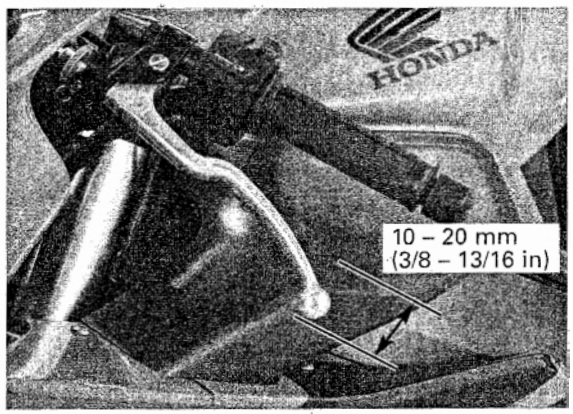
Adjust the headlight beam horizontally by turning the horizontal beam adjuster
A clockwise rotation moves the beam toward the right side of the rider.



CLUTCH SYSTEM

Measure the clutch lever free play at the end of the clutch lever.

FREE PLAY: 10 – 20 mm (3/8 – 13/16 in)

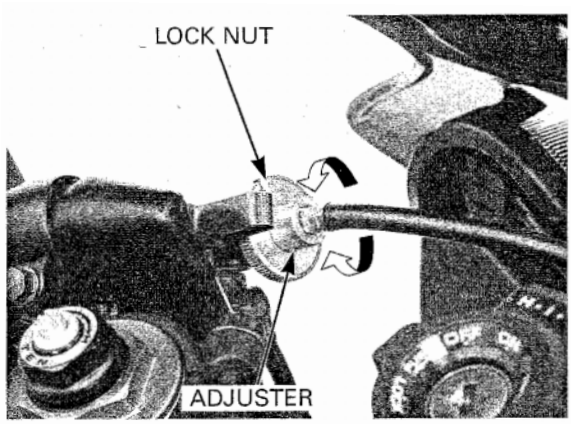


Minor adjustments are made using the upper adjuster at the clutch lever.
Loosen the lock nut and turn the adjuster.

NOTICE

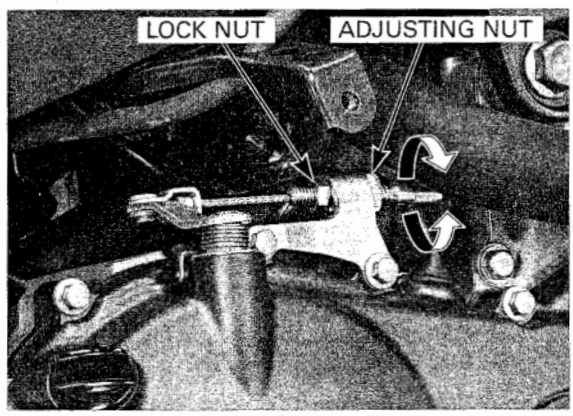
The adjuster may be damaged if it is positioned too far out, leaving minimal thread engagement.

If the adjuster is threaded out near its limit and the correct free play cannot be obtained, turn the adjuster all the way in and back out one turn.
Tighten the lock nut and make a major adjustment as described below.

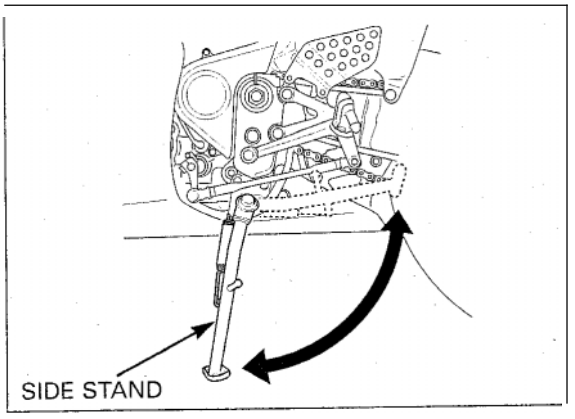


Major adjustments are performed at the clutch arm.
Loosen the lock nut and turn the adjusting nut to adjust free play.
Hold the adjusting nut securely while tightening the lock nut.

If proper free play cannot be obtained, or the clutch slips during test ride, disassemble and inspect the clutch (see section 9).



SIDE STAND

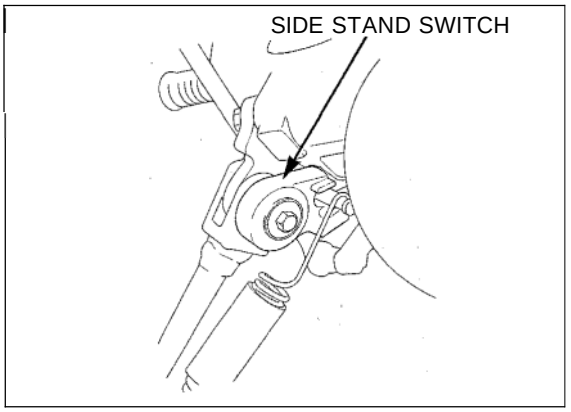


Support the motorcycle on a level surface.

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

Check the side stand ignition cut-off system:
- Sit astride the motorcycle and raise the side stand.
- Start the engine with the transmission in neutral, then shift the transmission into gear, with the clutch lever squeezed.
- Move the side stand completely down.
- The engine should stop as the side stand is lowered.

If there is a problem with the system, check the side stand switch (section 19).



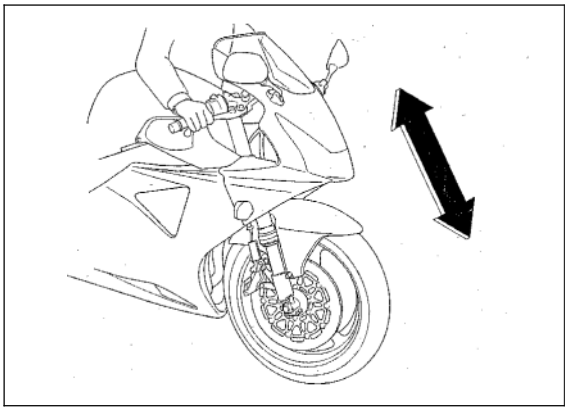
SUSPENSION

FRONT SUSPENSION INSPECTION

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

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.
Replace damaged components which cannot be repaired.
Tighten all nuts and bolts.

Refer to section 13 for fork service.



FRONT SUSPENSION ADJUSTMENT

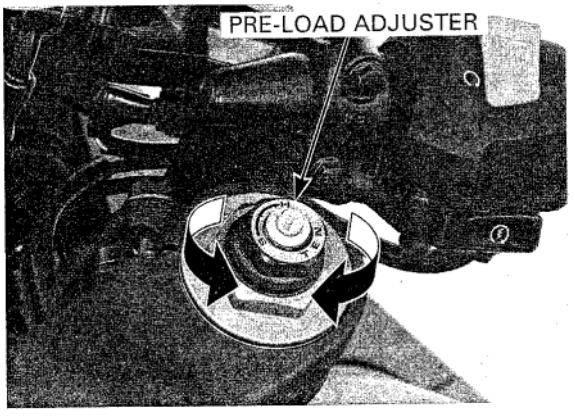
To adjust both *sides equally, set* the *right and left damping adjusters to* the *same position*

SPRING PRE-LOAD ADJUSTER

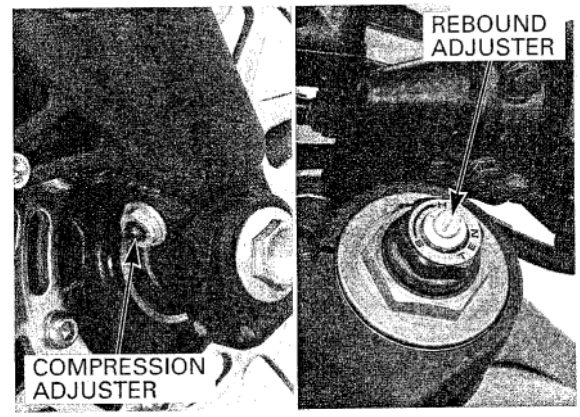
Spring pre-load can be adjusted by turning the adjuster.

TURN CLOCKWISE:
Increase the spring pre-load
TURN COUNTERCLOCKWISE:
Decrease the spring pre-load

PRE-LOAD ADJUSTER STANDARD POSITION:
7 turns from full soft



COMPRESSION AND REBOUND DAMPING ADJUSTERS



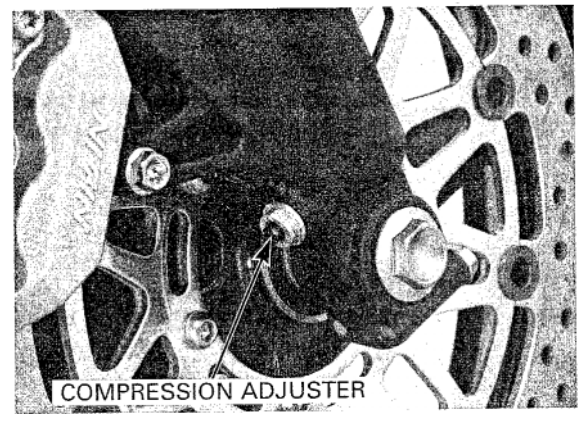
NOTICE

Do not turn the adjuster screws more than the given positions or the adjusters may be damaged.

Always start on full hard when adjusting the damping. Be sure that the rebound and compression adjusters are firmly located in a detent, and not between positions.

The compression and rebound damping can be adjusted by turning the adjusters.

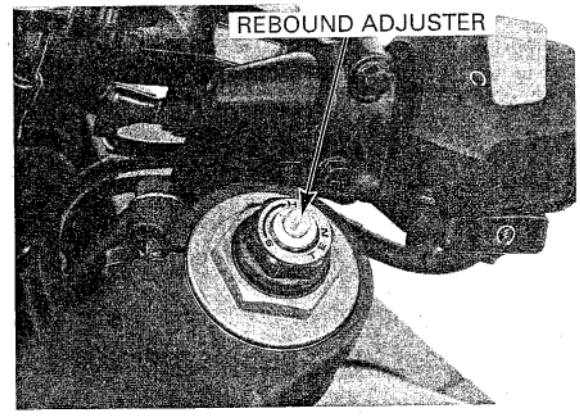
DIRECTION H: Increase the damping force
DIRECTION S: Decrease the damping force



Turn the compression adjuster clockwise until it stops, then turn the adjuster counterclockwise.

COMPRESSION ADJUSTER STANDARD POSITION:
2 turns from full hard

Turn the rebound adjuster clockwise until it stops, then turn the adjuster counterclockwise.

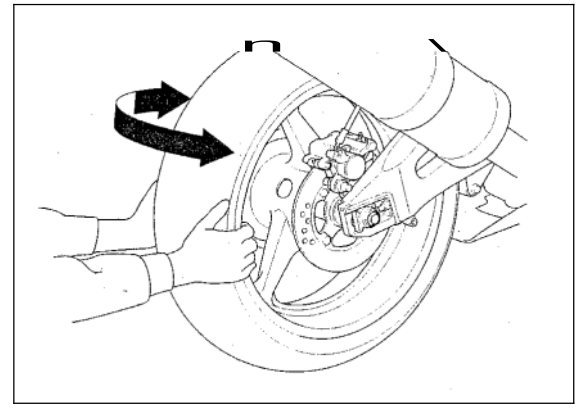


REBOUND ADJUSTER STANDARD POSITION:
2 turns from full hard

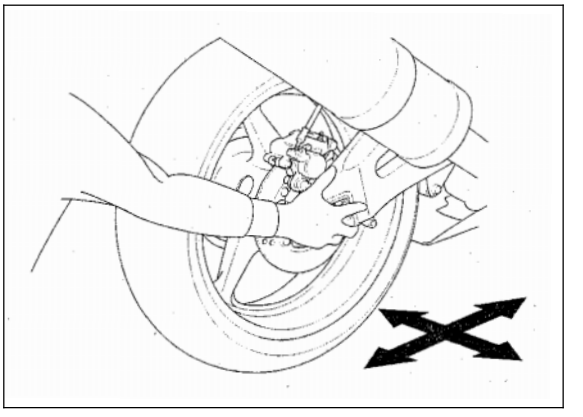
REAR SUSPENSION INSPECTION

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

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

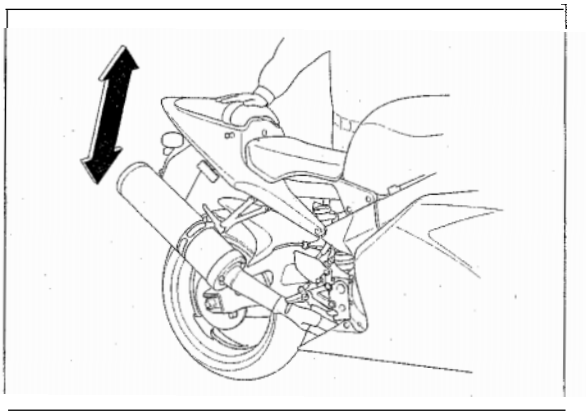


Check for worn swingarm bearings by grabbing the rear swingarm and attempting to move the swingarm side to side.
Replace the bearings if any looseness is noted.



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 section 14 for shock absorber service.



REAR SUSPENSION ADJUSTMENT

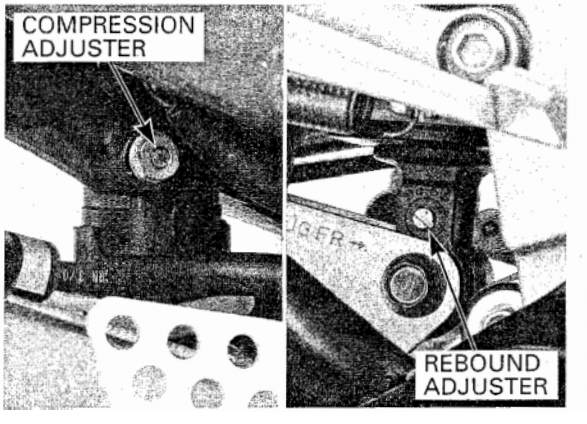
COMPRESSION AND REBOUND DAMPING ADJUSTERS

NOTICE

Do not turn the adjuster screws more than the given positions or the adjusters may be damaged.

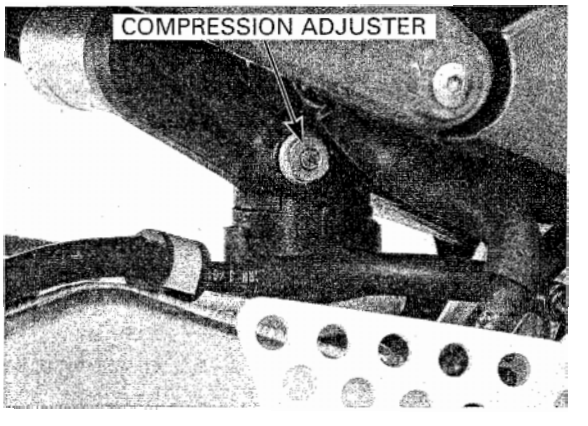
Always start on full hard when adjusting the damping.

The compression and rebound damping can be adjusted by turning the adjusters.



DIRECTION H: Increase the damping force
DIRECTION S: Decrease the damping force

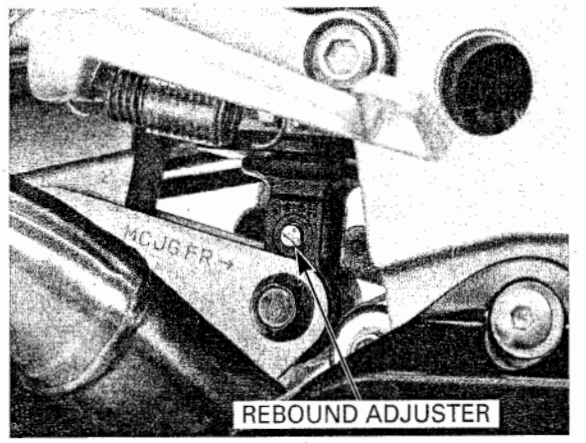
Turn the compression adjuster clockwise until it stops, then turn the adjuster counterclockwise.



COMPRESSION ADJUSTER STANDARD POSITION:
2 turns from full hard

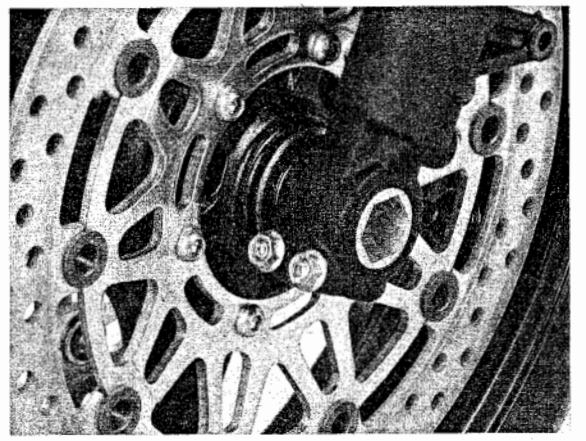
Turn the rebound adjuster clockwise until it stops, then turn the adjuster counterclockwise.

REBOUND ADJUSTER STANDARD POSITION:
2 **turns from full hard**



NUTS, BOLTS, FASTENERS

Check that all chassis nuts and bolts are tightened to their correct torque values (page 1-12).
Check that all safety clips, hose clamps and cable stays are in place and properly secured.

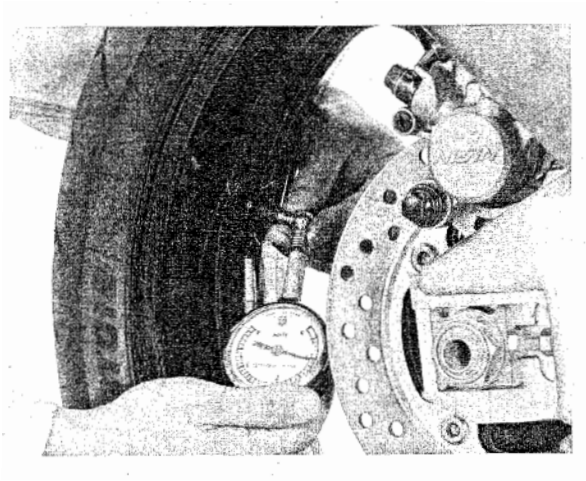


WHEELS/TIRES

The pressure should be checked when the tires are cold.

RECOMMENDED TIRE PRESSURE AND TIRE SIZE:

		FRONT	REAR
Tire pressure kPa (kgf/cm², psi)		250 (2.50, 36)	290 (2.90, 42)
Tire size		120/70 ZR17 M/C (58W)	190/50 ZR17 M/C (73W)
Tire bland	Bridgestone	BT012F RADIAL G	BT012R RADIAL G
	Michelin	Pilot SPORT E	Pilot SPORT E

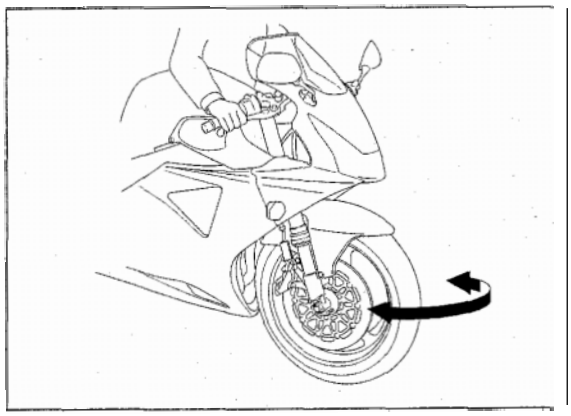


Check the tires for cuts, embedded nails, or other damage.
Check the front and rear wheels for trueness (refer to section 13 and 14).

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 (Section 13).