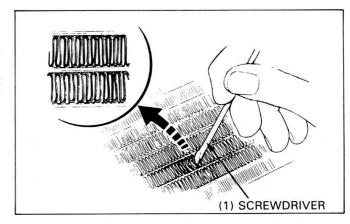
# **COOLING SYSTEM**

Remove the radiator shroud and check the radiator air passages for clogging or damage.

Straighten bent fins or collapsed core tubes with a small flat blade screwdriver as shown and remove insects, mud or any obstructions with compressed air or low pressure water.

Replace the radiator if the air flow is restricted over more than 30% of the radiator's surface.

For radiator replacement, refer to page 5-5.



Make sure the hoses are in good condition. Replace any hose that shows any sign of deterioration. Check that all hose clamps are tight.

# CYLINDER COMPRESSION

Warm up the engine to normal operating temperature.

# **A**WARNING

- 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 lead to death.

Stop the engine, disconnect both spark plug caps and remove one spark plug.

# NOTE

 To measure the cylinder compression of each individual cylinder and remove only one plug at a time.

Turn the engine stop switch OFF.

Insert the compression gauge. Open the throttle all the way and crank the engine with the starter motor. Crank the engine until the gauge reading stops rising. The maximum reading is usually reached within 4-7 seconds.

## **COMPRESSION PRESSURE:**

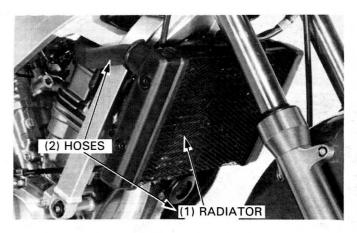
 $1,324 \pm 196 \text{ kPa} (13.5 \pm 2.0 \text{ kg/cm}^2, 192 \pm 28 \text{ psi})$ 

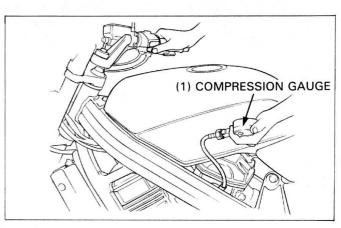
If compression is high, it indicates that carbon deposits have accumulated on the combustion chamber and/or the piston crown.

If compression is low, pour 3-5 cc (0.1-0.2 US. oz) of clean engine oil into the cylinder through the spark plug hole and recheck the compression.

If the compression increases from the previous value, check the cylinder, piston and piston rings.

If the compression is the same as the previous value, check the valves for leakage.





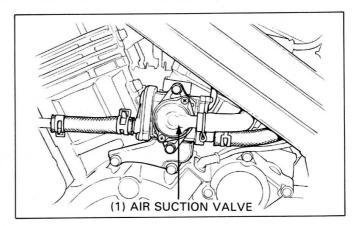
# SECONDARY AIR SUPPLY SYSTEM (California model only)

Check the air and vacuum hoses and tubes for bending or twisting and straighten if necessary.

Check the system hoses and tubes for damage, deterioration, clogging or loose connections.

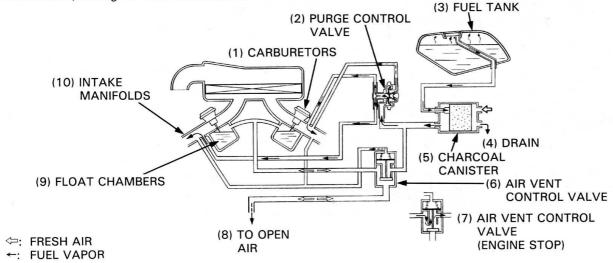
Check the air suction valve for damage (page 4-17).

Refer to the vacuum hose routing diagram label for hose connections as shown below.



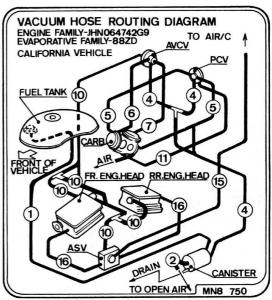
# EVAPORATIVE EMISSION CONTROL SYSTEM (California model only)

Check the hoses between the fuel tank, canister, purge control valve (PCV), air vent control valve (AVCV), and carburetor for deterioration, damage or loose connections.



Also check the tubes for bending or twisting and straighten if necessary.

Check the canister for cracks deterioration, or other damage. Refer to the vacuum hose routing diagram label for connections as shown right.



# **DRIVE CHAIN**

# CHAIN SLACK INSPECTION

# **A**WARNING

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

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

Place the chain slack gauge against the reference arrow on lower edge of the swingarm as shown.

Pull the lower run of the drive chain down with your finger and check slack using the gauge.

# NOTE

- The chain slack gauge and eccentric bearing carrier wrench are supplied with this motorcycle.
- The chain slack gauge is using the "UP" mark facing the swingarm without fail.
- Make sure the upper edge of the chain is between lines A and B on the gauge.

A-B: Good.

Above A: Too tight. Below C: Too loose.

# 

(1) DRIVE CHAÎN SLACK GAUGE (EQUIPMENT TOOL)

(2) ECCENTRIC BEARING CARRIER PINCH BOLT

# CHAIN ADJUSTMENT

Loosen the eccentric bearing carrier pinch bolt.

Turn the eccentric bearing carrier clockwise or counterclockwise by the bearing carrier wrench to obtain the drive chain slack as necessary.

Tighten the eccentric bearing carrier pinch bolt.

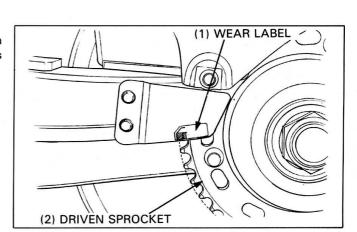
TORQUE: 75 N·m (7.5 kg-m, 54 ft-lb)

Recheck chain slack.

Lubricate the drive chain with SAE #80 or 90 gear oil.

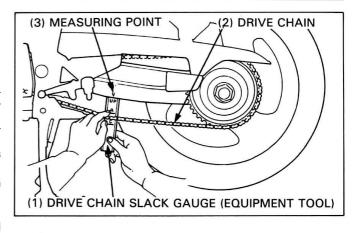
Check the chain wear label on the swingarm. If the red zone on the label aligns with the driven sprocket teeth after chain has been adjusted, the chain must be replaced.

REPLACEMENT CHAIN: RK525 SM3 or DID525 V7 (112 LE) LINK: 112 Links



(1) ECCENTRIC BEÀRING CÁRRIER WRENCH

(EQUIPMENT TOOL)



# LUBRICATION AND CLEANING

When the drive chain becomes extremely dirty, it should be cleaned prior to lubrication.

Clean the drive chain with a non-flammable or high flash point and wipe dry.

The drive chain on this motorcycle is equipped with small Orings between the link plates. The O-rings can be damaged by steam cleaners, high pressure washers and certain solvents.

Lubricate only with SAE #80 or 90 gear oil.

Commercial chain lubricants may contain solvents which could damage the rubber O-rings.

### DRIVE AND DRIVEN SPROCKET

Inspect the sprocket teeth for excessive wear or damage. Replace if necessary.

#### NOTE

 Never install a new drive chain on worn sprockets or a worn chain on new sprockets. Both chain and sprockets must be in good condition, or the new replacement chain or sprockets will wear repidly.

# **BRAKE FLUID**

# **FRONT**

Check the front brake fluid level with the handlebar turned so that the reservoir is level.

Check the front brake fluid through the sight glass. If the level is visible, check pad wear first; replace the pads if necessary. Then remove the cover, set plate and diaphragm. Fill the reservoir to the upper level with DOT 4 fluid from a sealed container. Check the system for leaks.

#### CAUTION

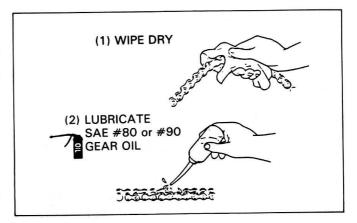
- Do not remove the reservoir cover until the handlebar has been turned so that the reservoir is level.
- Do not mix different types of fluid, as they are not compatible with each other.
- Do not allow foreign material to enter the system when filling the reservoir.
- Avoid spilling the fluid on painted, plastic or rubber parts.
   Place a rag over these parts whenever the system is serviced.

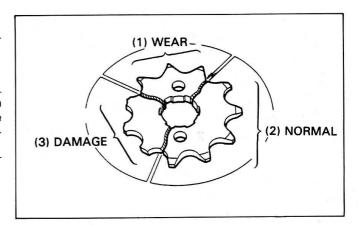
Refer to section 14 for brake bleeding procedures.

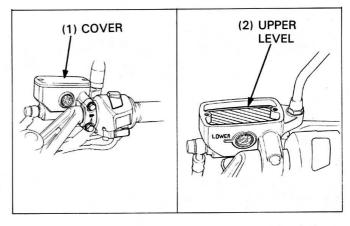
#### **REAR**

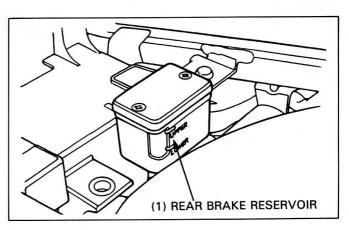
Check the rear brake fluid level after supporting the motorcycle upright on level ground.

Check the rear brake fluid level; if it is near the lower line, check pad wear first; replace the pads if necessary. Then remove the cover, set plate and diaphragm. Fill the reservoir to the upper level with DOT 4 fluid from a sealed container. Check the system for leaks.









# **BRAKE PAD WEAR**

# **FRONT**

Check the front brake pads for wear, through from the lower end of the caliper.

#### **REAR**

Check the rear brake pads for wear, through from the rear of the caliper.

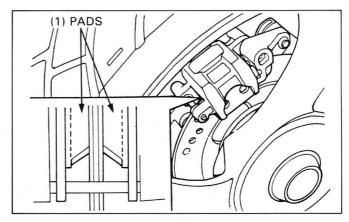
#### **CAUTION**

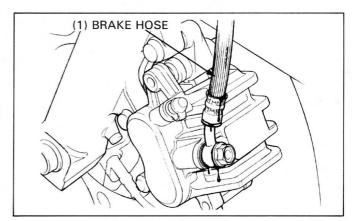
Always replace the brake pads as a set to assure even disc pressure.

See section 14 for brake pad replacement.

# **BRAKE SYSTEM**

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





# REAR BRAKE PEDAL

Check the rear brake pedal height.

To adjust the brake pedal height, loosen the lock nut and turn the master cylinder push rod. Tighten the lock nut.

#### NOTE

 Adjust the brake light switch after adjusting the brake pedal height.

# **BRAKE LIGHT SWITCH**

#### NOTE

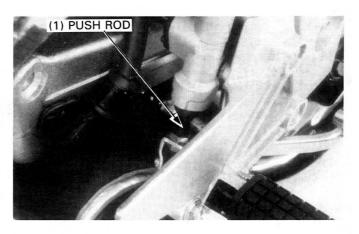
- Perform the rear brake light switch adjustment after adjusting the brake height.
- · The front brake light switch does not require adjustment.

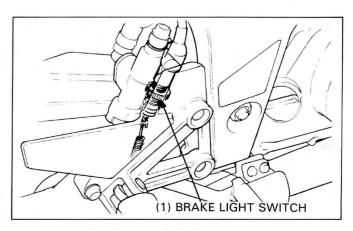
Adjust the brake light switch so that the brake light will come on when brake engagement begins.

Adjust by turning the adjuster while holding the switch body. Tighten the adjuster lock nut and recheck the brake light switch operation.

# NOTE

· Do not turn the switch body.





# **HEADLIGHT AIM**

Adjust vertically by loosing the headlight mounting bolts. Adjust horizontally by turning the horizontal adjusting screw.

#### NOTE

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

## AWARNING

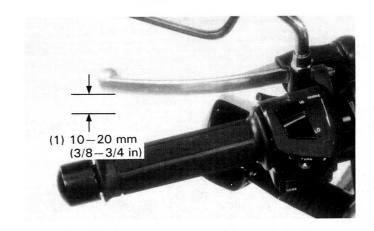
 An improperly adjusted headlight may blind oncoming drivers, or it may fail to light the road for a safe distance.

# (2) VERTICAL ADJUSTING BOLTS (1) HORIZONTAL ADJUSTING SCREW

# **CLUTCH SYSTEM**

Measure the clutch lever free play at the lever end.

FREE PLAY: 10-20 mm (3/8-3/4 in)

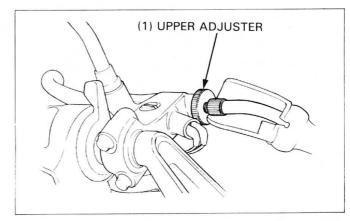


Minor adjustments are made with the upper adjuster.

Pull the lever cover back, loosen the lock nut and turn the adjuster to obtain the specified free play.

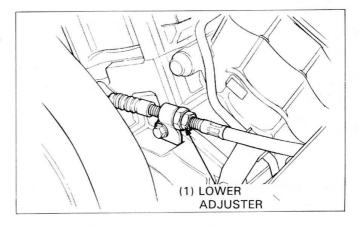
Tighten the lock nut and install the cover.

Check clutch operation.



Major adjustments are made with the lower adjuster. Loosen the lock nut and turn the adjusting nut to obtain the specified free play.

Tighten the lock nut and check the clutch operation.



# SIDE STAND

Place the motorcycle on its center stand.

Check the rubber pad on the side stand for deterioration and wear.

Replace the rubber pad if wear extends to the wear line.

Check the side stand operation:

When lowerd, the stand should move easily to the first stop, then lock forward to support the motorcycle when the pad touches the ground and the weight of the motorcycle is supported.

When the motorcycle is raised, the stand should automatically move to the first stop, then retract easily when kicked.

(1) WEAR MARK

(4) RETRUCTED

(2) SIDE STAND RUBBER

(3) FIRST CLICK

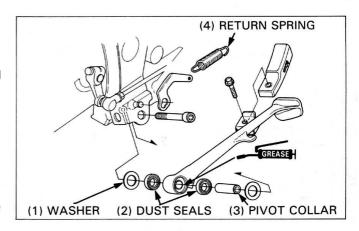
If the side stand does not operate smoothly, disassemble and check the side stand assembly as following procedure:

Remove the return spring at the retracted position. Remove the pivot bolt and side stand.

Check the following parts:

- inside of the pivot and pivot collar for wear or damage.
- pivot dust seal for damage.

Lubricate the pivot area with clean grease and reassemble the side stand.



#### TORQUE:

Side stand pivot bolt: 38 N·m (3.8 kg-m, 27 ft-lb)

#### CAUTION

- · Install the dust seal lip spring is facing out.
- · Make sure that the dust seal lip spring is seated securely.

Check the side stand operation as indicated above.

# **SUSPENSION**

## **FRONT**

Check the suspension action by compressing it several times.

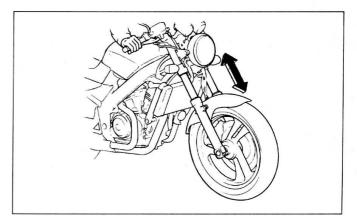
Check the entire fork leg assembly for signs of leaks or damage.

Replace any components which are unrepairable.

Tighten all nuts and bolts to the specified torque value.

# **A**WARNING

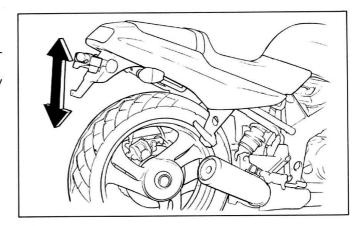
 Do not ride a vehicle with faulty suspension. Loose, worn, or damaged suspension parts may affect stability and rider control.



# **REAR**

Check the action of the rear suspension components by compressing the suspension several times.

Check the entire suspension assembly, being sure it is securely mounted and not damaged or distored.



Place the motorcycle on its center stand.

Check for worn swingarm bearings by grabbing the swingarm, and attempting to move the swingarm side to side. Replace the bearings if any looseness is noted (page 13-19).

Tighten all nuts and bolts.

# **NUTS, BOLTS, FASTENERS**

Tighten the bolts, nuts and fasteners at the intervals shown in the Maintenance Schedule (page 3-3).

Check that all chassis nuts and bolts are tightened to their correct torque values (page 1-5 and 6).

Check all cotter pins and safety clips.

# WHEELS/TIRES

# TIRE PRESSURE

# NOTE

· Tire pressure should be checked when the tires are COLD.

		Front	Rear
Tire size (Tubeless)		110/80-17 57H	150/70-17 69H
Cold tire pressures kPa (kg/cm², psi)	Up to maximum weight capacity	225 (2.25, 33)	250 (2.50, 36)
	Up to 90 kg (200 lbs) load	225 (2.25, 33)	225 (2.25, 33)
Tire brand	Bridgestone Dunlop	G547G K505G	G548 K505

# **MAINTENANCE**

Check the tires for cuts, imbedded nails, or other sharp objects.

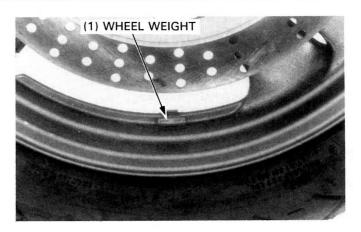
Check the front and rear wheels for trueness (Section 12 and 13).

Measure the tread depth at the center of the tires.

Replace the tires if the tread depth reaches the following limit:

#### **MINIMUM TREAD DEPTH:**

Front: 1.5 mm (0.06 in) Rear: 2.0 mm (0.08 in)



# STEERING HEAD BEARINGS

#### NOTE

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

Raise the front wheel off the ground.

Check that the fork pivots freely from side to side. If the fork pivots unevenly, binds, or has vertical movement, inspect the steering head bearings (Section 12).

