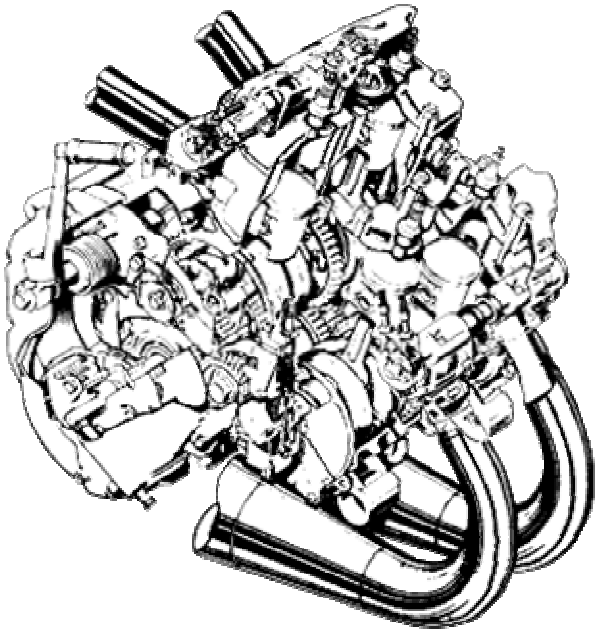
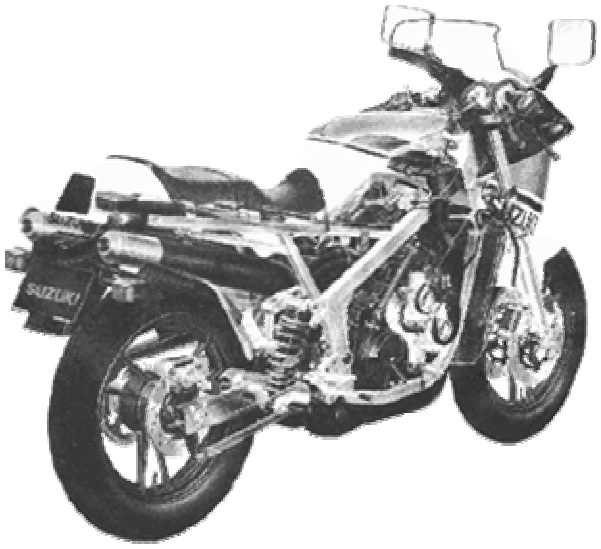
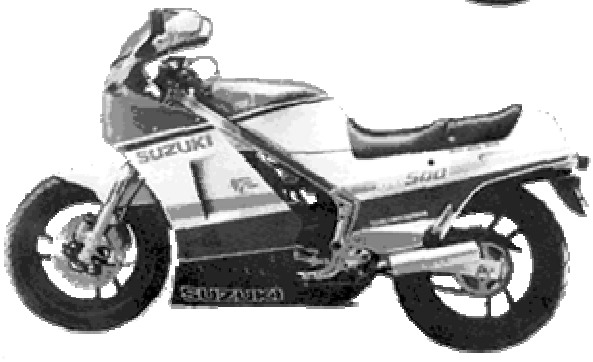
SUZUKI

RG500

SERVICE MANUAL







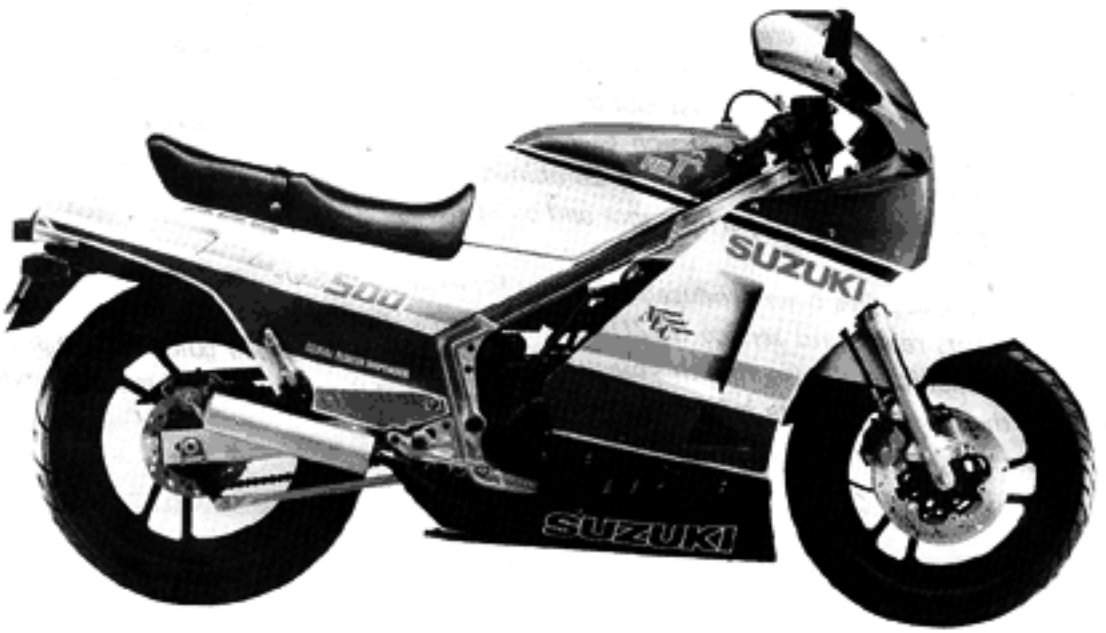
FOREWORD

The SUZUKI RG500 has been developed as a new generation motorcycle to the RG models. It is packed with highly advanced design concepts including a liquid cooled square four engine, a Suzuki Automatic Exhaust Control (S.A.E.C.), a Suzuki Intake Power Chamber (S.I.P.C.), a cartridge type transmission gear, a C.D. ignition system, a deca-piston brake system and a full-floater rear suspension. Combined with precise control and easy handling the RG500 provides excellent performance and outstanding riding comfort.

This service manual has been produced primarily for experienced mechanics whose job is to inspect, adjust, repair and service SUZUKI motorcycles. Apprentice mechanics and do-it-yourself mechanics, will also find this manual an extremely useful repair guide. This manual contains the most up-to-date information at the time of publication. The rights are reserved to update or make corrections to this manual at any time.

SUZUKI MOTOR CORPORATION
Motorcycle Technical
Service Department

VIEW OF SUZUKI RG500



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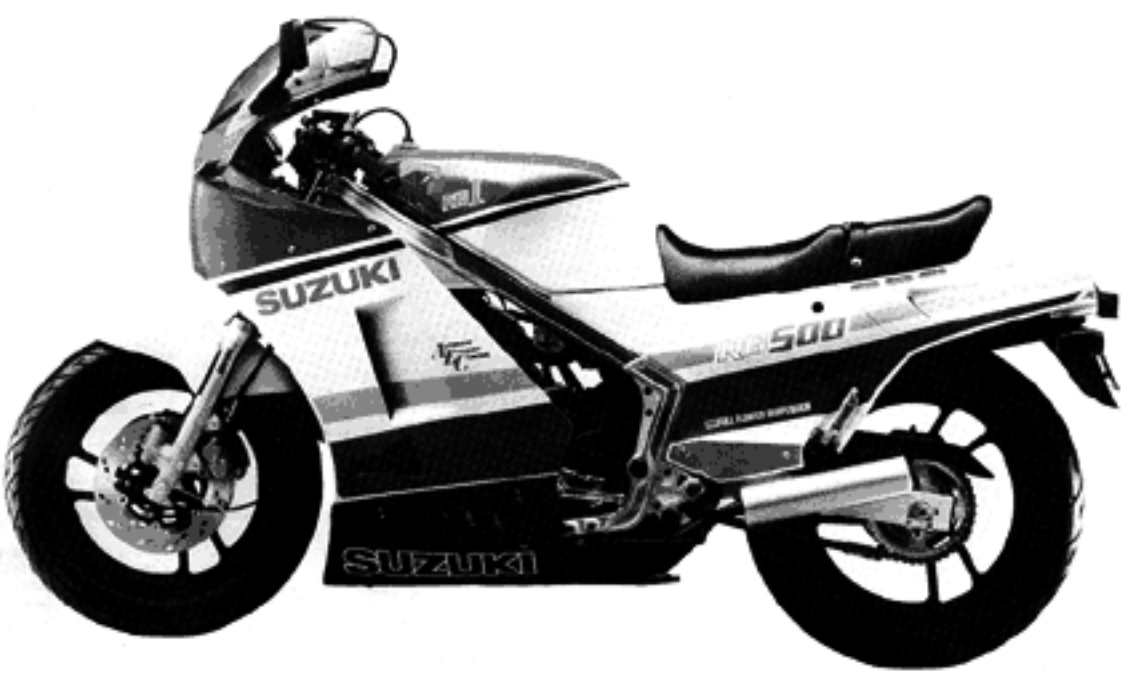

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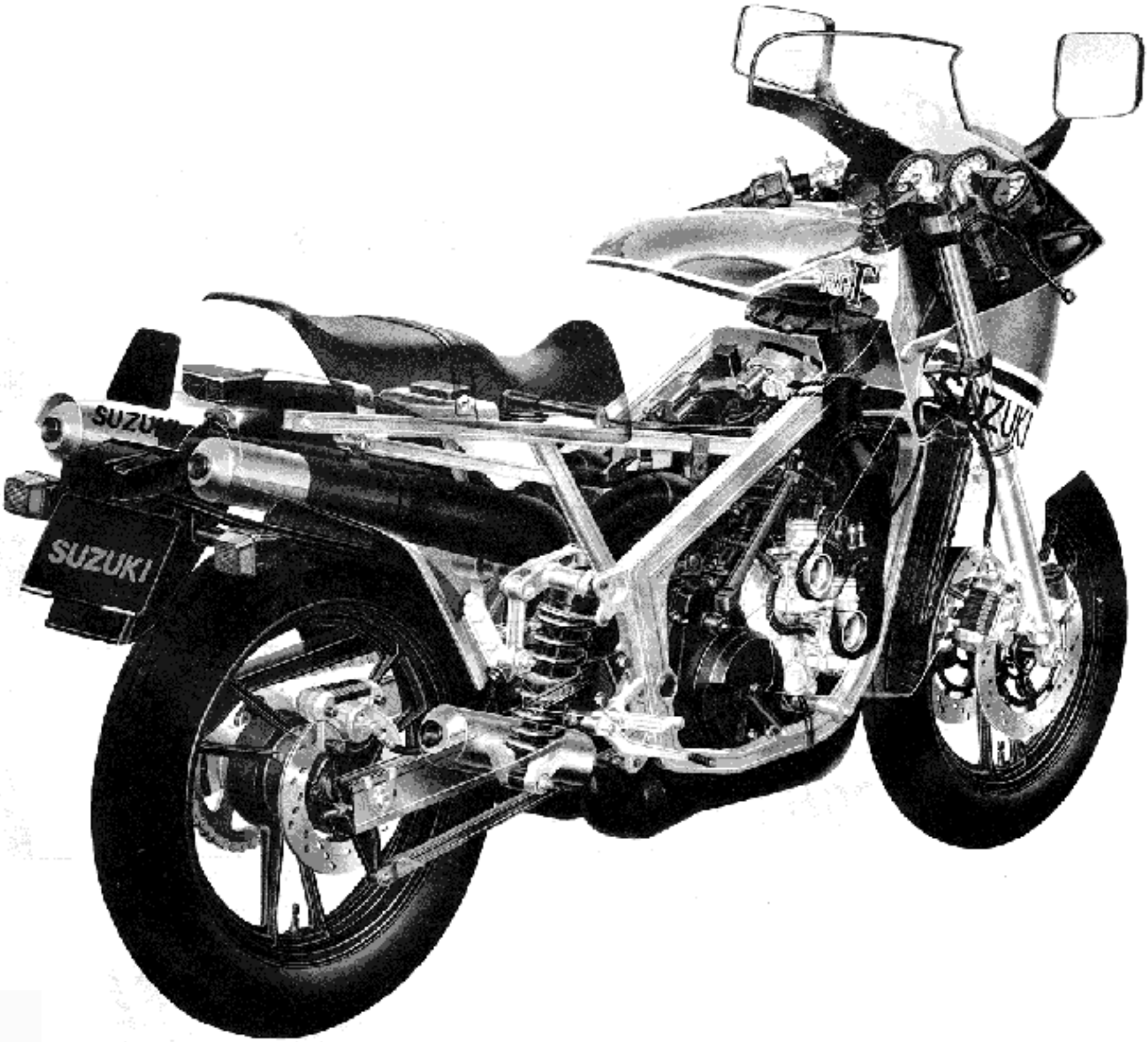
SUZUKI
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GENERAL INFORMATION

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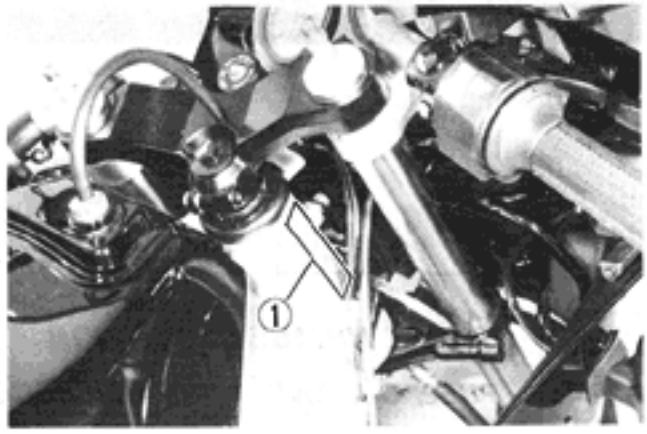
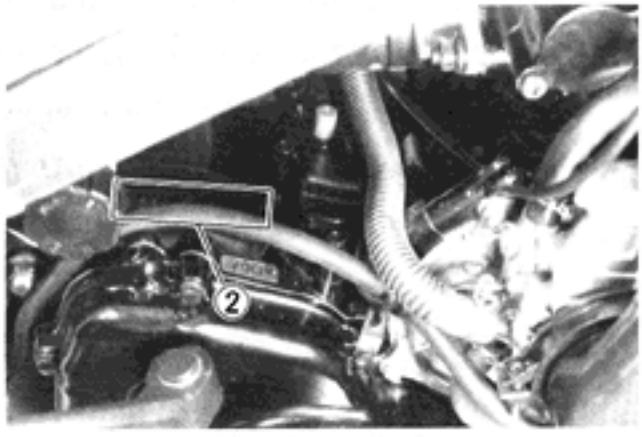
SERIAL NUMBER LOCATION

The frame serial number or V.I.N. (Vehicle Identification Number) ① is stamped on the steering head pipe. The engine serial number ② is located on the right side of the crankcase. These numbers are required especially for registering the machine and ordering spare parts.





FUEL, OIL AND COOLANT RECOMMENDATION

FUEL

Gasoline used should be graded 85 – 95 octane or higher. An unleaded or low-lead gasoline type is recommended.

ENGINE OIL

Use SUZUKI "CCI" oil or SUZUKI CCI Super oil. They are formulated to give best engine performance with least combustion chamber deposits, least preignition, maximum spark plug life and best lubrication. If they are not available, a good quality TWO-STROKE OIL (non-diluent type) should be used.

TRANSMISSION OIL

Use a good quality SAE 20W/40 multi-grade motor oil.

FRONT FORK OIL

Use fork oil # 15.

99000-99044-15G	SUZUKI Fork oil # 15

BRAKE FLUID

Specification and classification:	SAE J1703, DOT3 or DOT4

WARNING:

- **Since the brake system of this motorcycle is filled with a glycol-based brake fluid by the manufacturer, do not use or mix different types of fluid such as silicone-based and petroleum-based fluid for refilling the system, otherwise serious damage will result.**
- **Do not use any brake fluid taken from old or used or unsealed containers.**
- **Never re-use brake fluid left over from the previous servicing and stored for a long period.**

COOLANT

Use an anti-freeze/coolant compatible with an aluminum radiator, mixed with distilled water only, at the ratio of 50 : 50.

WATER FOR MIXING

Use distilled water only. Water other than distilled water can corrode and clog the aluminum radiator.

ANTI-FREEZE/COOLANT

The coolant performs as corrosion and rust inhibitor as well as anti-freeze. Therefore, the coolant should be used at all times even through the atmospheric temperature in your area does not go down to freezing point.

SUZUKI recommends the use of SUZUKI GOLDEN CRUISER 1 200 anti-freeze/coolant. If this is not available, use an equivalent which is compatible with an aluminum radiator.

REQUIRED AMOUNT OF WATER/COOLANT

Solution capacity (total): 2 250 ml

CAUTION:
Mixing of anti-freeze/coolant should not exceed 60%. Mixing beyond it would reduce its efficiency. If the anti-freeze/coolant mixing ratio is below 50%, the rust inhibiting performance is greatly reduced. Be sure to mix the solution at 50%, even though the atmospheric temperature does not go down to freezing point.
Every new unit contains Bar's leak material.

BREAKING-IN PROCEDURES

During manufacture only the best possible materials are used and all machined parts are finished to a very high standard, but it is still necessary to allow the moving parts to "BREAK-IN" before subjecting the engine to maximum stresses. The future performance and reliability of the engine depends on the care and restraint exercised during its early life. The general rules are as follows:

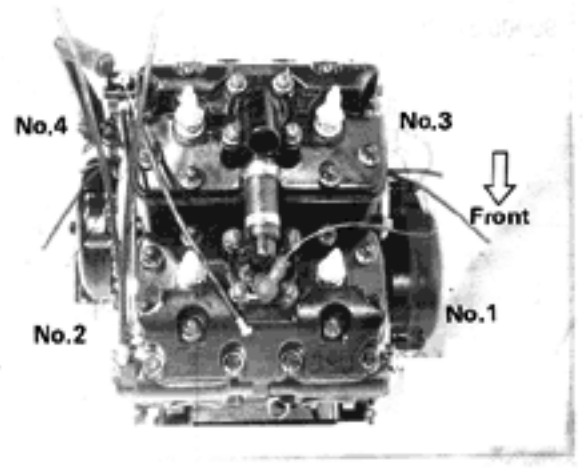
- Keep to these breaking-in engine speed limits:

Initial 800 km	Below 6 000 r/min
Up to 1 600 km	Below 8 000 r/min
Over 1 600 km	Below 10 000 r/min

- Upon reaching an odometer reading of 1 600 km you can subject the motorcycle to full throttle operation.
  However, do not exceed 10 000 r/min at any time.

CYLINDER IDENTIFICATION

The four cylinders of this engine are identified as No. 1, No. 2, No. 3 and No. 4 cylinder, as shown in the photograph.



SPECIAL MATERIALS

The materials listed below are needed for maintenance work on the RG500, and should be kept on hand for ready use. They supplement such standard materials as cleaning fluids, lubricants, emery cloth and the like. How to use them and where to use them are described in the text of this manual.

MATERIAL	PART	PAGE	PART	PAGE
 SUZUKI SUPER GREASE "A" 99000-25010	• Side stand pivot • Brake pedal pivot and brake rod link • Gearshift lever mounting boss • Oil seals • Kick starter gear • Kick starter shaft oil seal • Rotary disc valve O-ring • Kick starter lever steel balls • Water pump shaft oil seal	2- 2 3- 8 3-35 3-41 3-37 3-42 3-45 3-50 4- 9	• Wheel bearing • Steering stem bearing • Rear sprocket mounting drum bearing • Swingarm, cushion lever bearing	7- 7 7-27 7-40 7-57
 SUZUKI BOND No. 1207B 99000-31140	• Crankcase mating surface • Water pump mechanical seal • Water temp. gauge	3-44 4- 9 4-12		
 THREAD LOCK SUPER "1333" 99000-32020	• Gearshift cam pin retainer plate screw • Gearshift cam stopper bolt • Water pump shaft housing screw	3-36 3-36 4-10		
 THREAD LOCK SUPER "1324" 99000-32120	• Magneto rotor nut	3-46		

MATERIAL	PART	PAGE	PART	PAGE
 THREAD LOCK "1360" 99000-32130	• Disc plate bolt	7- 8 7-41		
 THREAD LOCK "1342" 99000-32050	• Bearing stopper screw • Inner valve seat screw • Magneto stator screw • Damper rod bolt • Posi-damp unit bolt	3-36 3-45 3-46 7-21 7-21		
 SUZUKI BRAKE FLUID 99000-23021				
 SUZUKI FORK OIL #15 99000-99044-15G				
 SUZUKI GOLDEN CRUISER 1200 (2L) 99000-24120	• Coolant			
SUZUKI BAR's LEAK 99000-24240	• Coolant	4- 2		

PRECAUTION AND GENERAL INSTRUCTION

Observe the following items without fail when servicing, disassembling and reassembling motorcycles.

- Do not run engine indoors with little or no ventilation.
- Be sure to replace packings, gaskets, circlips, O-rings and cotter pins with new ones.

CAUTION:
Never reuse a circlip. After a circlip has been removed from a shaft, it should be discarded and a new circlip must be installed.
When installing a new circlip, care must be taken not to expand the end gap larger than required to slip the circlip over the shaft.
After installing a circlip, always insure that it is completely seated in its groove and securely fitted.

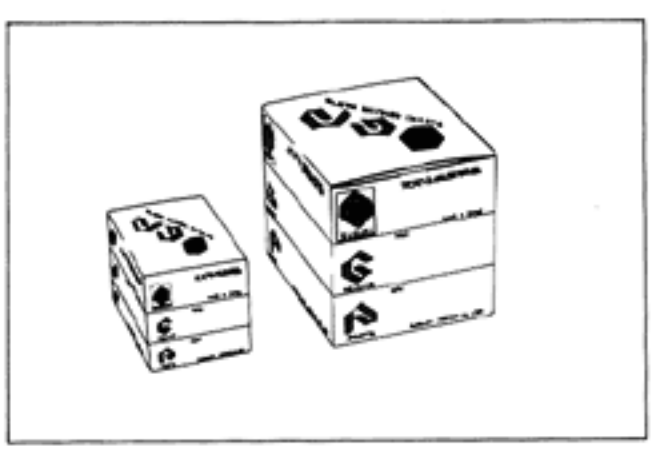
- Tighten cylinder head and case bolts and nuts beginning with larger diameter and ending with smaller diameter, and from inside to outside diagonally, to the specified tightening torque.
- Use special tools where specified.
- Use genuine parts and recommended oils.
- When 2 or more persons work together, pay attention to the safety of each other.
- After the reassembly, check parts for tightness and operation.
- Treat gasoline, which is extremely flammable and highly explosive, with greatest care. Never use gasoline as cleaning solvent.

Warning, Caution and Note are included in this manual occasionally, describing the following contents.

WARNING ..... When personal safety of the rider is involved, disregard of the information could result in injury.
CAUTION ..... For the protection of the motorcycle, the instruction or rule must be strictly adhered to.
NOTE ..... Advice calculated to facilitate the use of the motorcycle is given under this heading.

USE OF GENUINE SUZUKI PARTS

To replace any part of the machine, use a genuine SUZUKI replacement part. Imitation parts or parts supplied from any other source than SUZUKI, if used to replace SUZUKI parts can reduce the machine's performance and, even worse, could induce costly mechanical troubles.



SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2100 mm
Overall width	695 mm
Overall height	1185 mm
Wheelbase	1425 mm
Ground clearance	120 mm
Dry mass	154 kg

ENGINE

Type	Two-stroke, water-cooled
Number of cylinders	4
Bore	56.0 mm
Stroke	50.6 mm
Piston displacement	498 cm^3
Compression ratio	7.0 : 1
Carburetor	MIKUNI VM28SH
Air cleaner	Polyurethane foam element
Starter system	Kick
Lubrication system	SUZUKI "CCI"

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	6-speed constant mesh
Gearshift pattern	1-down, 5-up
Pilot drive and driven gear ratio	1.000 (54/54)
Primary reduction	2.230 (58/26)
Final reduction	2.500 (40/16)
Gear ratios, Low 2nd 3rd 4th 5th Top	2.636 (29/11) 1.750 (28/16) 1.380 (29/21) 1.173 (27/23) 1.045 (23/22) 0.956 (22/23)
Drive chain	DAIDO : DID 50VA TAKASAGO: RK50 HFO 106 links

CHASSIS

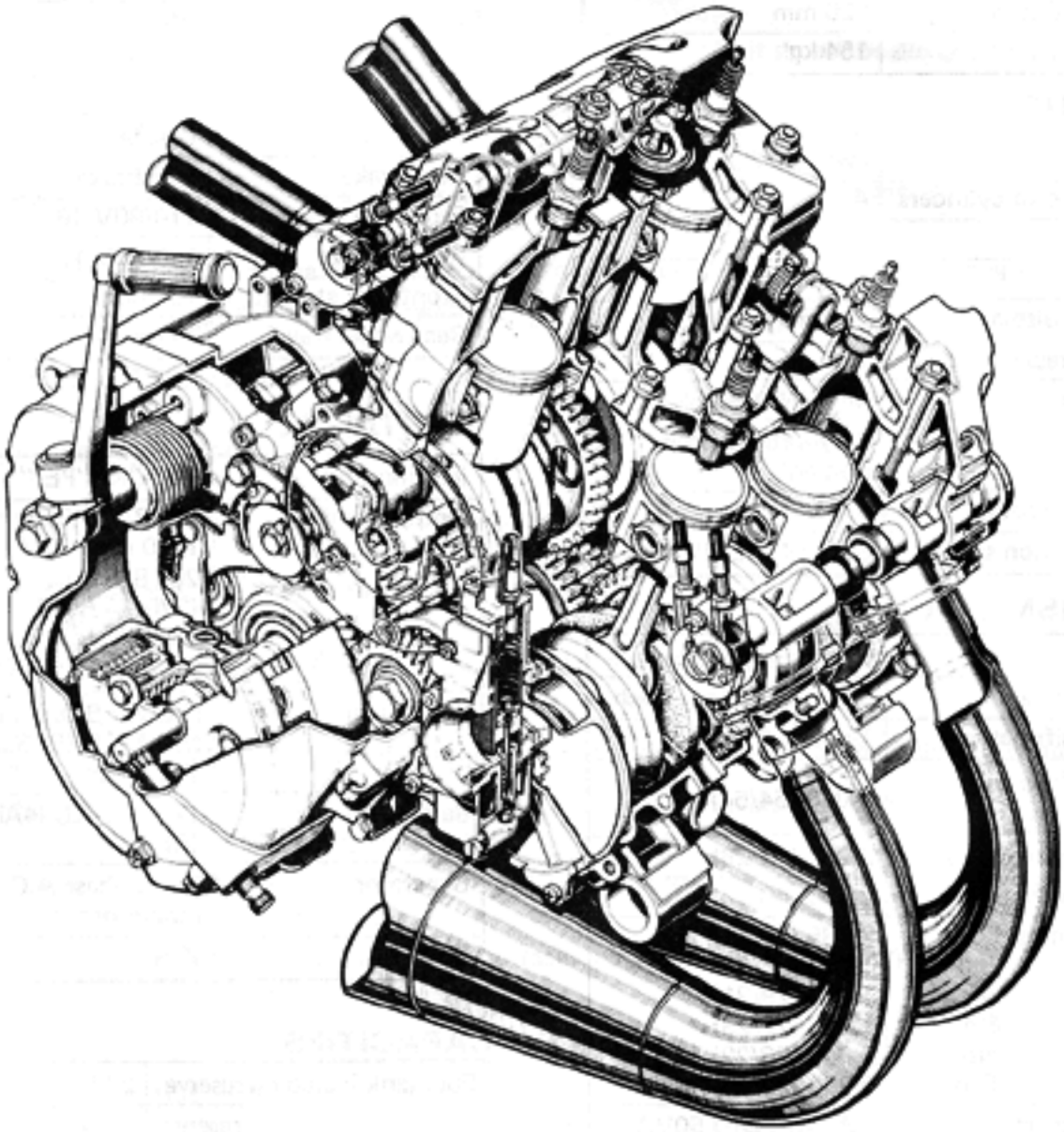
Front suspension	Telescopic pneumatic/coil spring oil damped with posi-damp unit. Spring pre-load adjustable.
Rear suspension	Full-floating suspension system, oil damped, spring pre-load fully adjustable
Steering angle	30° (right & left)
Caster	64°50'
Trail	110 mm
Turning radius	3.2 m
Front brake	Disc brake, twin
Rear brake	Disc brake
Front tire size	110/90V 16
Rear tire size	120/90V 17
Front fork stroke	130 mm
Rear wheel travel	127 mm

ELECTRICAL

Ignition type	SUZUKI "PEI"
Ignition timing	14° B.T.D.C. below 1700 r/min, 26° B.T.D.C. (2700 – 6000 r/min.) and 11° B.T.D.C. above 9500 r/min.
Spark plug	N.G.K.: B9ES... E01 N.G.K.: BR9ES... The others
Battery	12V 14.4KC (4Ah)/10HR
Generator	Three-phase A.C. generator
Fuse	20A

CAPACITIES

Fuel tank including	reserve	22 L
	reserve	5.0 L
Engine oil		1.5 L
Transmission oil		800 ml
Coolant		2250 ml
Front fork oil		441 ml



PERIODIC MAINTENANCE AND TUNE-UP PROCEDURES

CONTENTS

PERIODIC MAINTENANCE SCHEDULE

The chart below lists the recommended intervals for all the required periodic service work necessary to keep the motorcycle operating at peak performance and economy. Mileages are expressed in terms of kilometers.

NOTE:
Vehicles operated under severe conditions may require more frequent servicing.

PERIODIC MAINTENANCE CHART

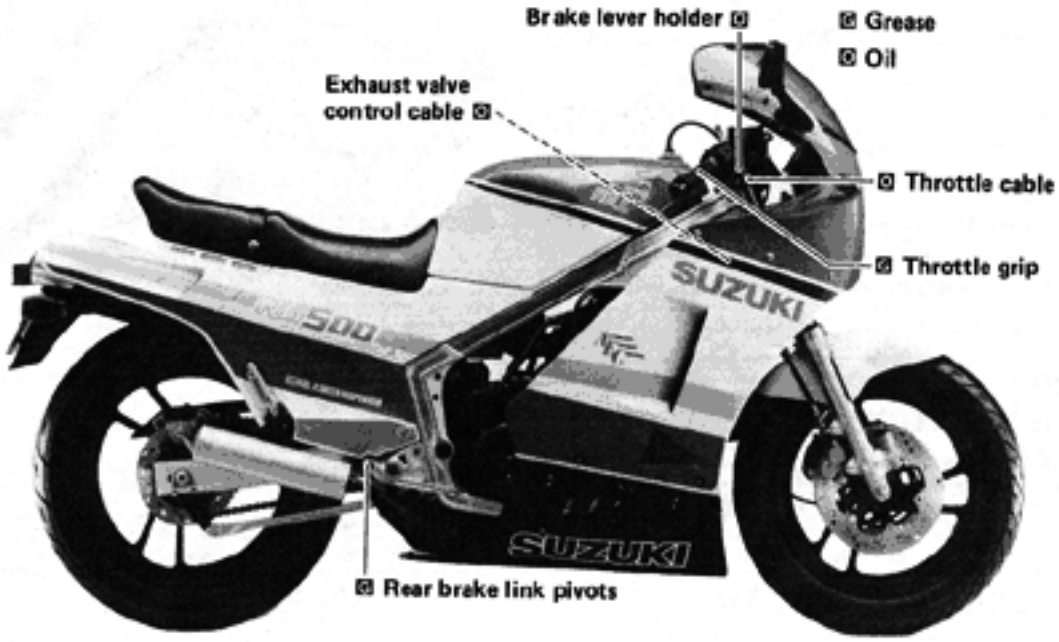
This interval should be judged by odometer reading or months, whichever comes first.	km	1 000	6 000	12 000	18 000	24 000
	months	2	12	24	36	48
Battery		–	I	I	I	I
Engine bolts and nuts		T	T	T	T	T
Cylinder head, cylinder and muffler		–	C	C	C	C
Air cleaner		Clean every 3 000 km				
Spark plugs		I	R	R	R	R
Carburetors		I	I	I	I	I
Fuel lines		I	I	I	I	I
		Replace every 4 years				
Oil pump		I	I	I	I	I
Clutch		I	I	I	I	I
Transmission oil		R	–	R	–	R
Radiator hoses		I	–	I	–	I
		Replace every 4 years				
Coolant		Replace every 2 years				
Drive chain		I	I	I	I	I
		Clean and lubricate every 1 000 km				
Brakes		I	I	I	I	I
Brake hoses		I	I	I	I	I
		Replace every 4 years				
Brake fluid		Replace every 2 years				
Tires		I	I	I	I	I
Steering		I	I	I	I	I
Front fork		–	–	I	–	I
		Inspect air pressure every 6 months				
Rear suspension		–	–	I	–	I
Chassis bolts and nuts		T	T	T	T	T

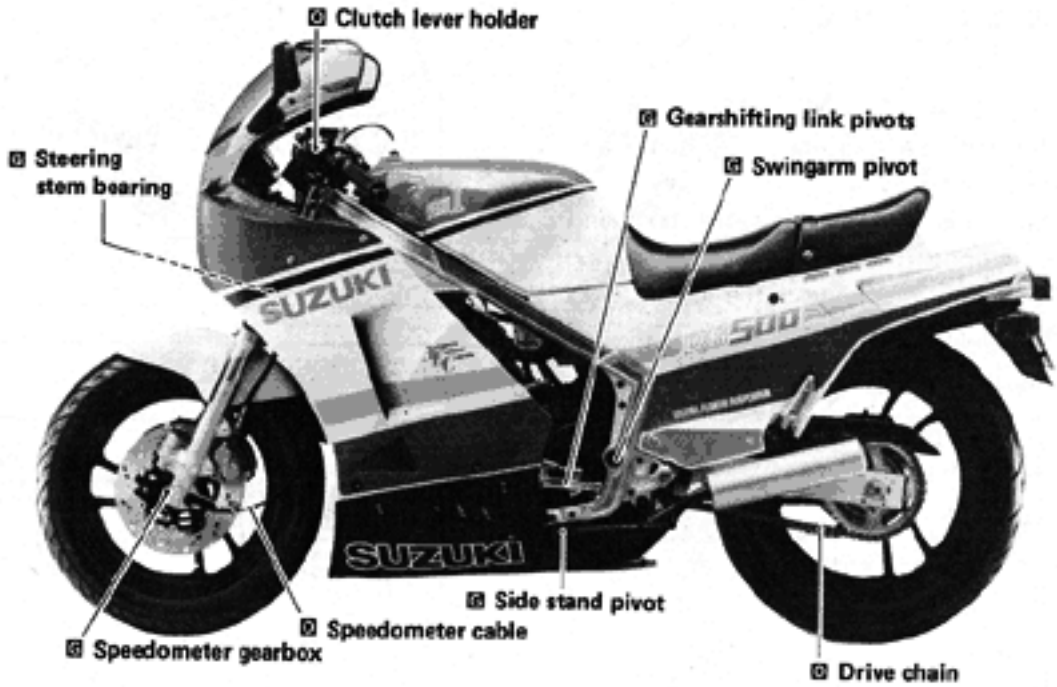
T: Tighten, I : Inspect, R : Replace, C : Clean

LUBRICATION POINTS

Proper lubrication is important for smooth operation and long life of each working part of the motorcycle. Major lubrication points are indicated below.

NOTE:
* **Before lubricating each part, clean off any rusty spots and wipe off any grease, oil, dirt or grime.**
* **Lubricate exposed parts which are subject to rust, with motor oil or grease.**





MAINTENANCE AND TUNE-UP PROCEDURES

This section describes the service procedures for each section of Periodic Maintenance.

BATTERY

Inspect Every 6000 km (12 months)

- Remove the fuel tank. (Refer to page 3-2)
- Check the battery voltage with the SUZUKI pocket tester.
  If the voltage reading is below 12.0V, this battery needs recharging.

Battery voltage	Above 12.0V

- Remove the battery ⊖ and ⊕ lead wires and remove the battery from the frame.

CAUTION:
Read the "ELECTRICAL SECTION", for the servicing battery.

ENGINE BOLTS AND NUTS

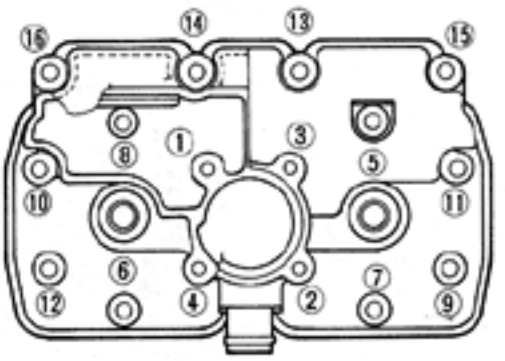
Tighten at Initially 1 000 km (2 months) and Every 6 000 km (12 months)

CYLINDER HEAD BOLTS AND NUTS

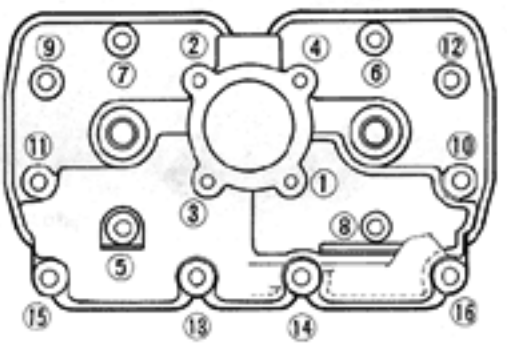
- Remove the middle fairings, fuel tank and air cleaner outlet pipes.
- First loosen bolts and nuts by 1/4 turn and tighten the cylinder head bolts and nuts to the specified torque in ascending numerical order as shown in the illustration.

Tightening torque	Bolt	10 – 12 N·m (1.0 – 1.2 kg-m)
	Nut	20 – 24 N·m (2.0 – 2.4 kg-m)

REAR CYLINDER HEAD



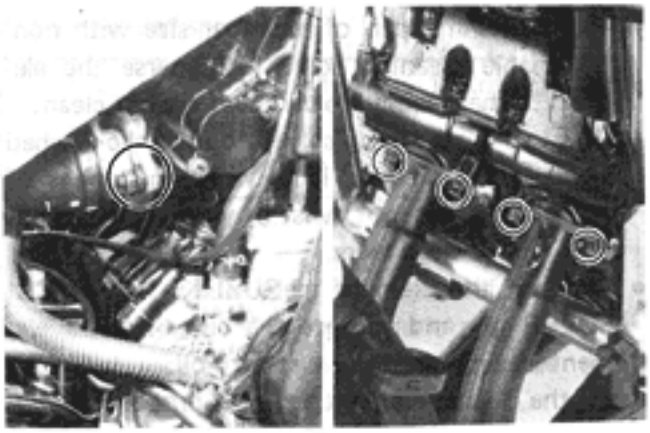
FRONT CYLINDER HEAD



EXHAUST PIPE BOLTS AND NUTS

- Remove the radiator. (See page 3-3)
- Tighten the exhaust pipe bolts and nuts to the specified torque.

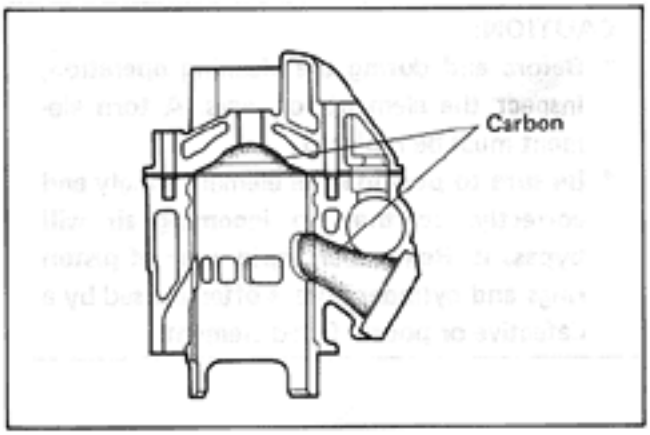
Tightening torque	24 – 28 N·m (2.4 – 2.8 kg-m)



CYLINDER HEAD, CYLINDER AND MUFFLER

Clean Every 6 000 km (12 months)

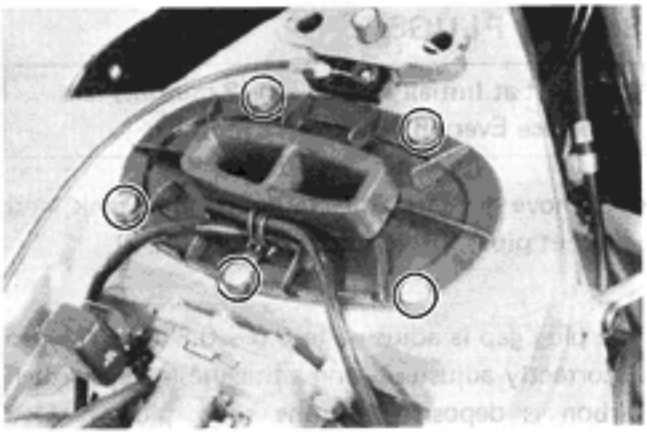
- Carbon deposits in the combustion chamber of the cylinder head and at the piston crown will raise the compression ratio and may cause pre-ignition or overheating.
- Carbon deposited at the exhaust port of the cylinder will prevent the flow of exhaust gas, reducing the output. Remove carbon deposits periodically.

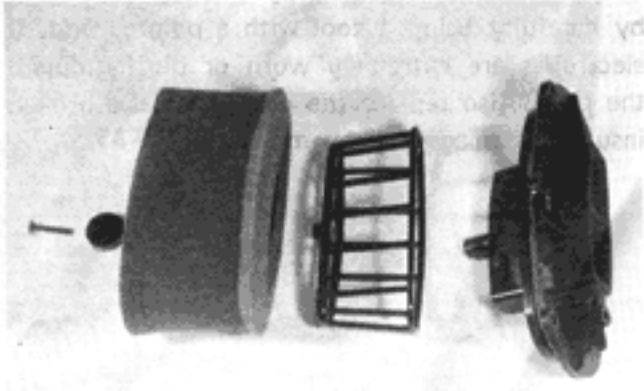


AIR CLEANER

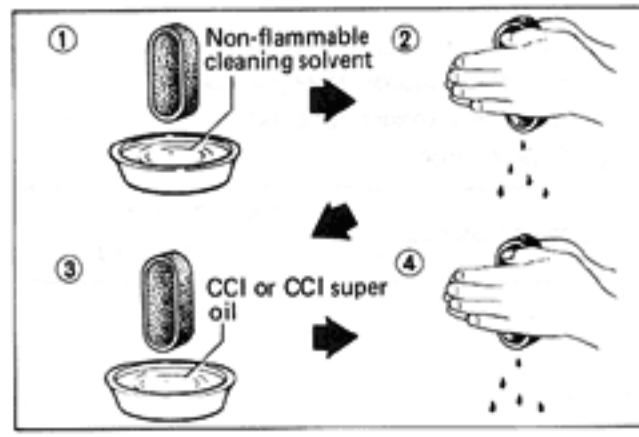
Clean Every 3 000 km

- Remove the fuel tank. (Refer to page 3-2)
- Remove the air cleaner then separate the poly-urethan foam element from the element frame.





- Fill a washing pan of a proper size with non-flammable cleaning solvent. Immerse the element in the cleaning solvent and wash it clean.
- Squeeze the cleaning solvent out of the washed element by pressing it between the palms of both hands: do not twist or wring the element or it will develop tears.
- Immerse the element in SUZUKI CCI or CCI SUPER oil, and squeeze the oil out of the element leaving it slightly wet with oil.
- Fit the cleaner element to frame properly.



CAUTION:
* **Before and during the cleaning operation, inspect the element for tears. A torn element must be replaced.**
* **Be sure to position the element snugly and correctly, so that no incoming air will bypass it. Remember, rapid wear of piston rings and cylinder bore is often caused by a defective or poorly fitted element.**

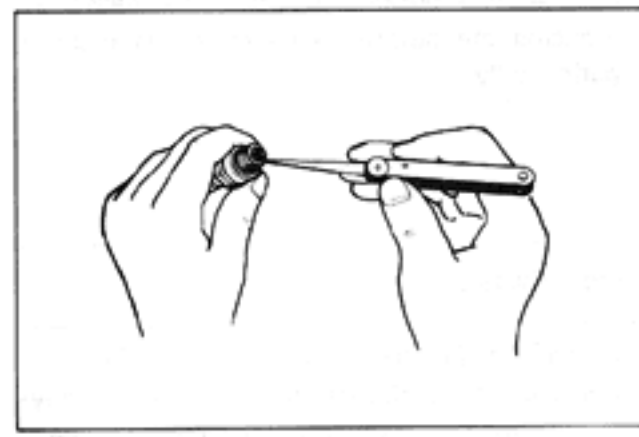
CAUTION:
If driving under dusty conditions, clean the air cleaner element more frequently. The surest way to accelerate engine wear is to use the engine without the element or to use a ruptured element. Make sure that the air cleaner is in good condition at all times. Life of the engine depends largely on this component!

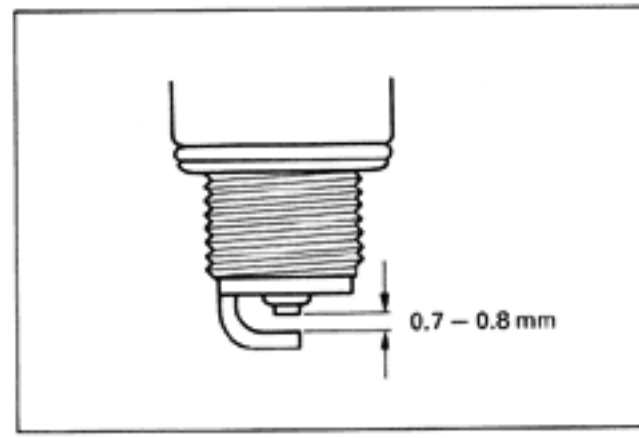
SPARK PLUGS

Inspect at Initially 1 000 km (2 months) and Replace Every 6 000 km (12 months)

- Remove the middle fairings, fuel tank and outlet pipes. (Refer to page 3-2 and 7-2)

The plug gap is adjusted to 0.6 — 0.8 mm. The gap is correctly adjusted using a thickness gauge. When carbon is deposited on the spark plug, remove the carbon with a spark plug cleaning machine or by carefully using a tool with a pointed end. If electrodes are extremely worn or burnt, replace the plug. Also replace the plug if it has a broken insulator, damaged thread, etc.





NGK B9ES listed in the table should be used as the standard plug. However, the heat range of the plug should be selected to meet the requirements of speed, actual load, fuel, etc. If the plugs need to be replaced, it is recommended that ones having a heat range closest to the standard plug in the table be selected. Remove the plugs and inspect the insulators. Proper heat range would be indicated if all insulators were light brown in color. If they are blackened by carbon, they should be replaced by a hot type NGK B8ES.

CAUTION:
Confirm the thread size and reach when replacing the plug. If the reach is too short, carbon will be deposited on the screw portion of the plug hole and engine damage may result.

Recommended spark plug

	Standard	Hot type
NGK	B9ES (BR9ES)	B8ES (BR8ES)

NOTE:
"R" type spark plug is installed for some specifications. "R" type spark plug has a resistor located at the center electrode to prevent radio noise.

CARBURETORS

Inspect at Initially 1 000 km (2 months) and Every 6 000 km (12 months)

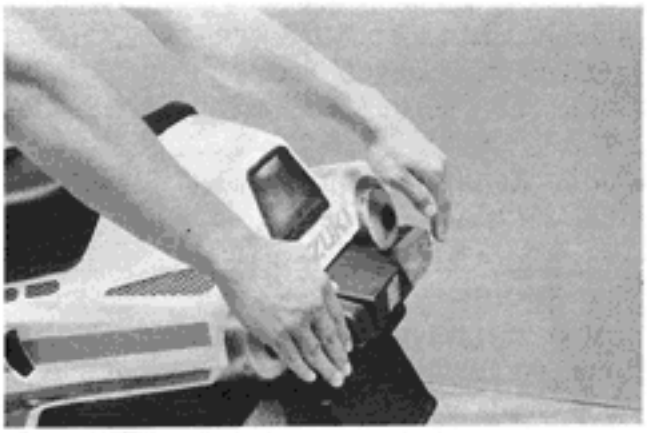
IDLE RPM ADJUSTMENT

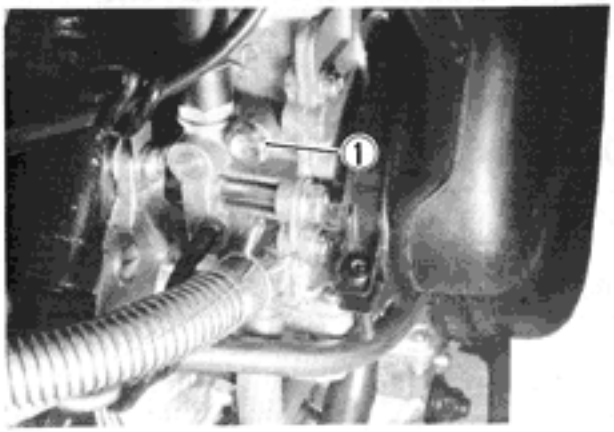
NOTE:
Make this adjustment when the engine is hot.

- Connect a tachometer.
- Start up the engine and set its speed at anywhere between 1 350 and 1 650 r/min by turning the right and left throttle stop screws ① (On Nos. 3 and 4 carburetors)

Engine idle speed	1 500 ± 150 r/min

CAUTION:
- **When setting the idle rpm, always turn the Nos. 3 and 4 carburetor throttle stop screws in the same amount.**
- **Do not touch the Nos. 1 and 2 carburetor throttle stop screws. If you turn the these screws, you have to check the balancing carburetors. (Refer to page 5-9)**



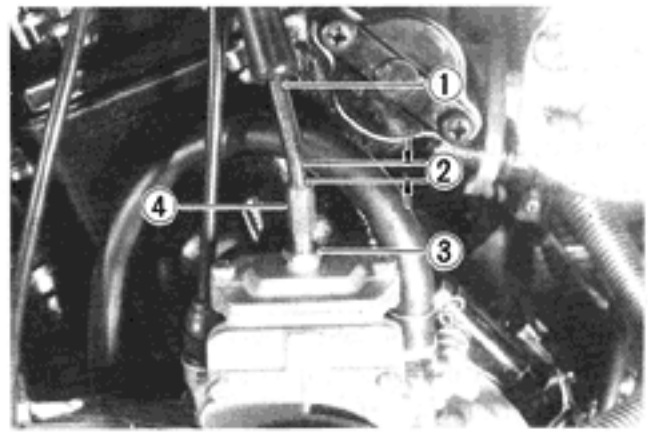


THROTTLE CABLE

The throttle cable ① should be adjusted to have a play ② of 0.5 – 1.0 mm.

If the adjustment is necessary, adjust the play in the following way.

- Remove the middle fairings. (Refer to page 7-1)
- Remove the air cleaner outlet pipes. (Refer to page 3-3)
- Loosen the lock nut ③ and turn the adjuster ④ in or out to obtain the correct play ② 0.5 – 1.0 mm.
- After adjusting the cable play, tighten the lock nut ③ and re-check cable play.
- Adjust the other carburetors in the same manner as above.

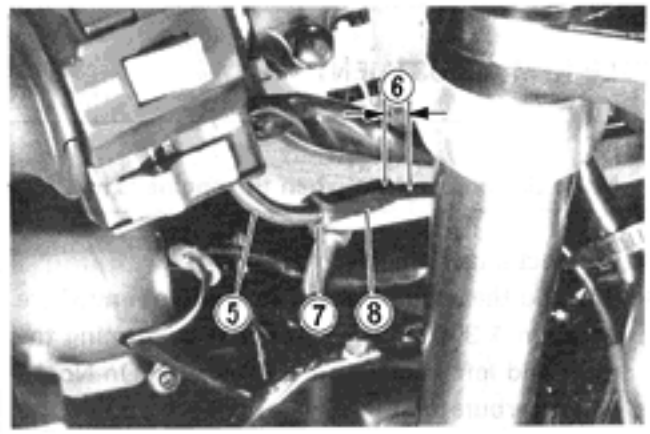


CAUTION:
This adjustment could affect the oil pump control cable play, so readjust the oil pump control cable play if necessary.

CHOKE CABLE

The choke cable ⑤ should be adjusted to have a play ⑥ of 0.5 – 1.0 mm. If the adjustment is necessary, adjust the play in the following way.

- Loosen the lock nut ⑦ and turn the adjuster ⑧ in or out to obtain the correct play ⑥ 0.5 – 1.0 mm.
- After adjusting the play, tighten the lock nut ⑦ and re-check cable play.



WARNING:
After the adjustment is completed, check that the handlebar movement does not raise the engine idle speed and that the throttle grip returns smoothly and automatically.

FUEL LINES

Inspect at Initially 1 000 km (2 months) and Every 6 000 km (12 months)
Replace Every 4 years

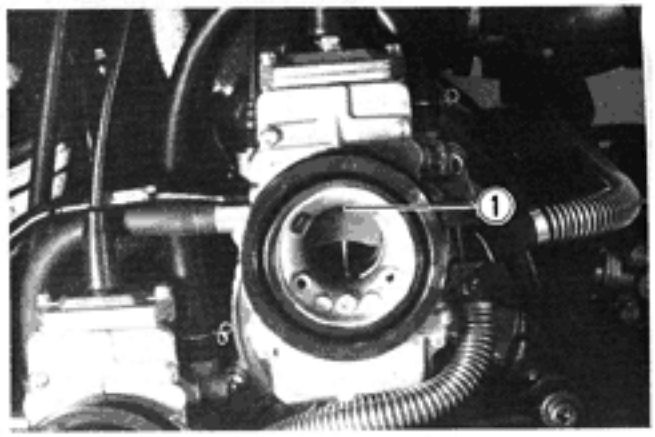
OIL PUMP

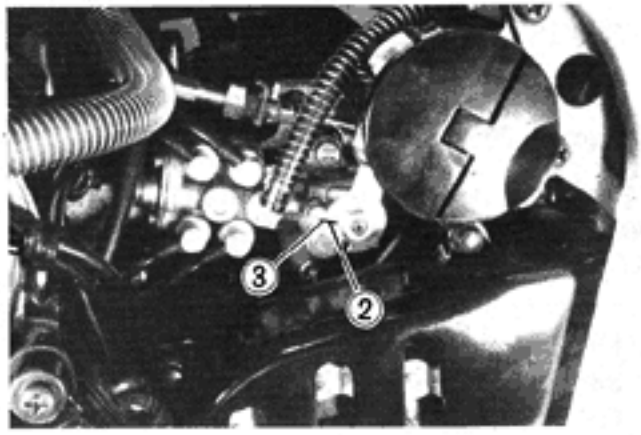
Inspect at Initially 1 000 km (2 months) and Every 6 000 km (12 months)

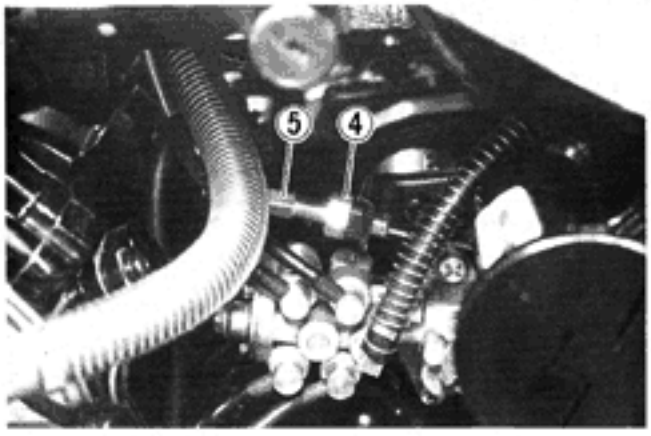
The engine oil is fed by the oil pump to the engine. The amount of oil fed to it is regulated by engine speed and the oil pump control lever which is controlled by the amount of throttle opening.
Check the oil pump in the following manner to confirm correct operation for all throttle valve opening positions.

- Remove the left side middle fairing. (Refer to page 7-2)
- Remove the air cleaner outlet pipe. (Refer to page 3-2)
- Turn the throttle grip until the dent mark ① on the No. 3 carburetor throttle valve comes to the upper part on the carburetor main bore.
- Check whether the mark ② on the oil pump control lever is aligned with the index mark ③ when the throttle valve is positioned as above.
- If the marks are not aligned, loosen the lock nut ④ and turn the adjuster ⑤ in or out to align the marks.
- After aligning the marks, tighten the lock nut ④.

CAUTION:
Oil pump cable adjustment must be done after throttle cable adjustment.



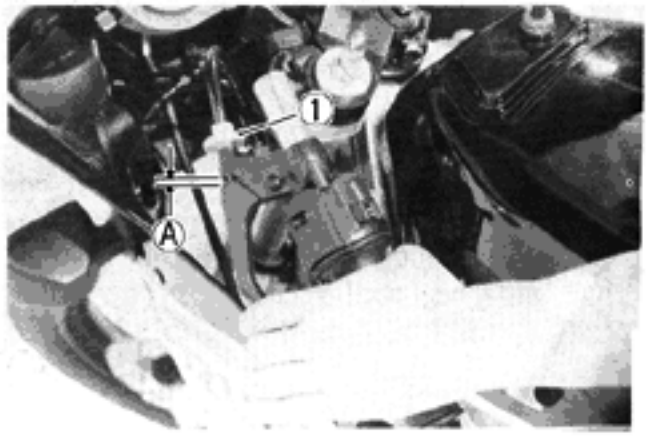




CLUTCH

Inspect at Initially 1 000 km (2 months) and Every 6 000 km (12 months)

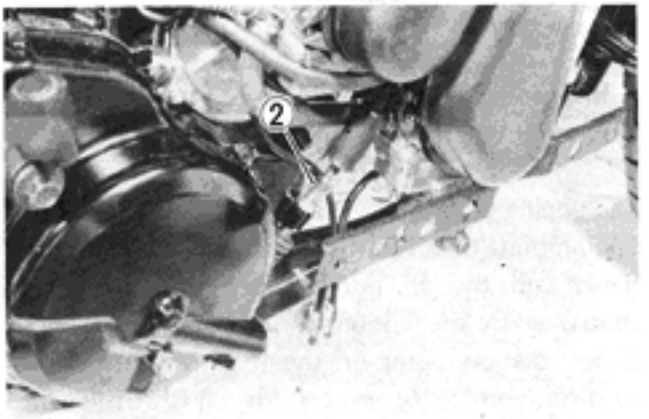
- Remove the right middle fairing. (Refer to page 7-2)
- Turn the adjust nut ① fully in on the clutch lever side.
- Loosen the cable lock nut, tighten the adjusting nut to provide play in the outer cable. Adjust



the play of the cable with adjusting nut ② until play Ⓐ of the clutch lever is 2 – 3 mm. Next, firmly secure lock nut.

Cable play Ⓐ	2 – 3 mm

- If the specified play can not be obtained with adjusting nut ②, carry out the adjustment using the adjusting nut ① on the clutch lever side.

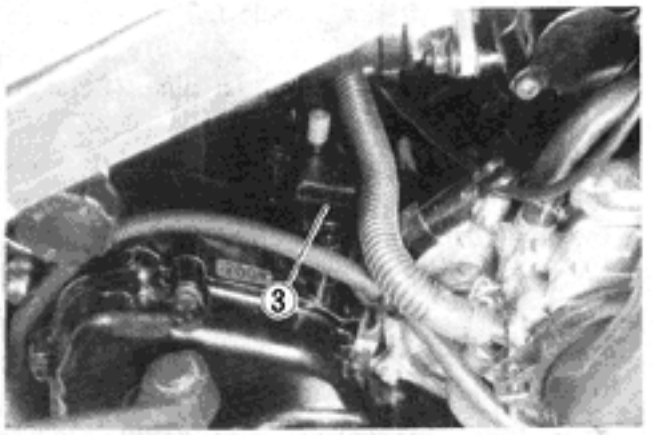


TRANSMISSION OIL

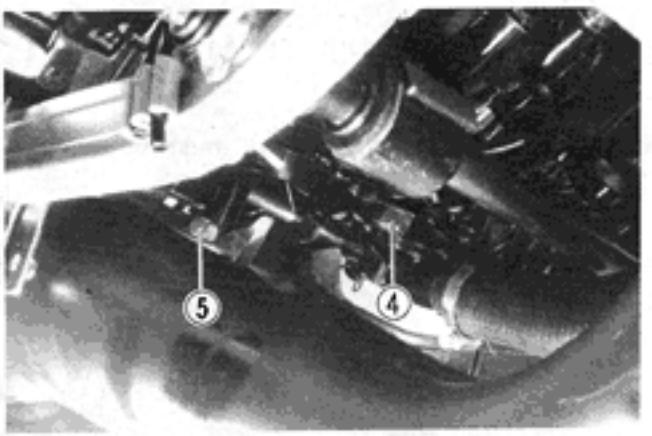
Change at Initially 1 000 km (2 months) and Every 6 000 km (12 months)

After a long period of use, the transmission oil will deteriorate and quicken the wear of sliding and interlocking surfaces. Replace the transmission oil periodically following the procedure below.

- Keep the motorcycle upright.
- Start the engine to warm up the oil, this will facilitate draining of oil. Shut off the engine.
- Place the oil pan below the engine and drain the oil by removing the filler cap ③ and two drain plugs ④ and ⑤.
- After draining the oil completely, fit the two drain plugs ④ and ⑤ securely.

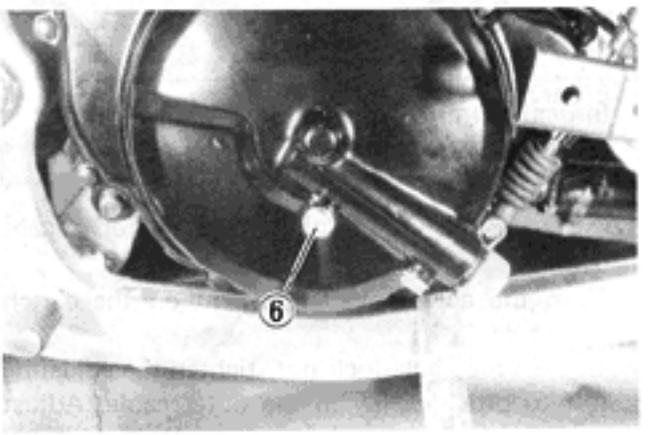


Drain plug tightening torque	10 mm	15 – 20 N·m (1.5 – 2.0 kg-m)
	12 mm	18 – 23 N·m (1.8 – 2.3 kg-m)



Golden Spectra 20W Motorcycle Gear Oil

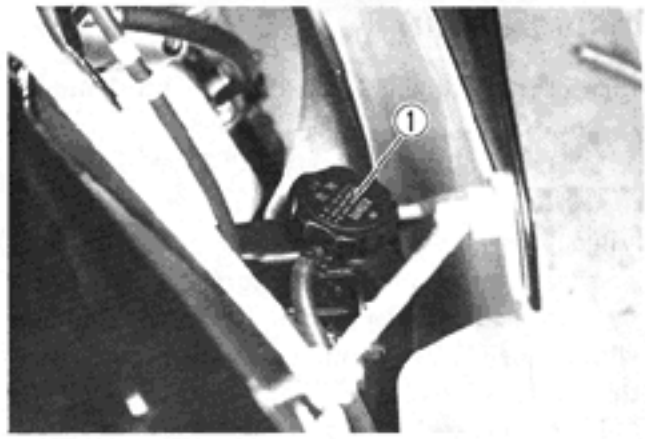
- Add the good quality SAE 20W/40 multi-grade motor oil. The transmission will hold about 800 ml of oil.
- Install the filler cap correctly.
- Start up the engine and allow it to run for several seconds at idling speed.
- Turn off the engine and wait for about one minute, and check the oil level with the oil level screw ⑥ . If the oil does not run out from the hole, add the oil until it runs out.



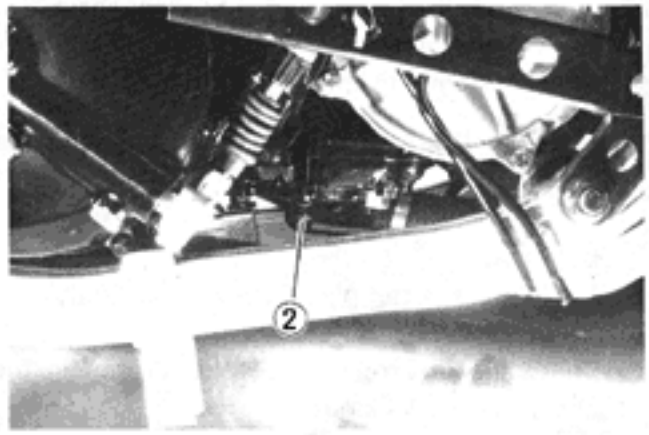
COOLING SYSTEM

Inspect at Initially 1 000 km (2 months) and Every 12 000 km (24 months)
Change coolant Every 2 years
Replace hoses Every 4 years

- Remove the middle and bottom fairings. (Refer to page 7-2)
- Remove the radiator cap ① and drain plug ②.

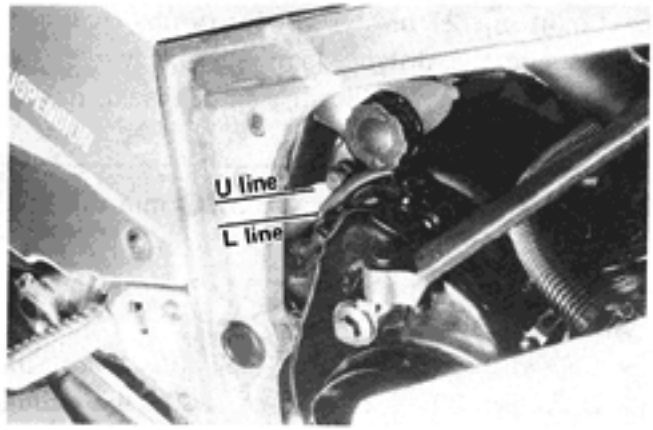


WARNING:
Do not open the radiator cap when the engine is hot, as you may be injured by escaping hot liquid or vapor.



WARNING:
Coolant may be harmful if swallowed or if it comes in contact with skin or eyes. If coolant gets into the eyes or in contact with the skin, it should be flushed thoroughly with plenty of water. If swallowed, induce vomitting and call physician immediately!

- Flush the radiator with fresh water.
- Tighten the drain plug ② securely.
- Install the specified coolant upto the radiator inlet hole.



NOTE:
For coolant information, refer to "COOLING SYSTEM" section page 4-2.

- Fill the reservoir tank to the "U" level with coolant.
- Close the radiator cap securely.
- After warming up and cooling down the engine, check the coolant level of the reservoir tank and install the coolant to the "U" level if the level is below "L".

2250 ml including reservoir tank
250 ml reservoir tank

- Add 2 packs of anti-leakage material (Bar's leaks) in the coolant.

99000-24240	Bar's leak

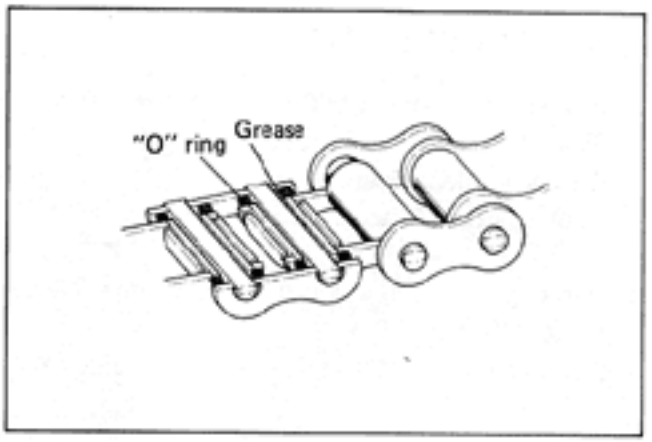
DRIVE CHAIN

Inspect at Initially 1 000 km (2 months) and Every 6 000 km (12 months)
Clean and Lubricate Every 1 000 km

Visually check the drive chain for the below-listed possible malconditions. (Support the motorcycle by jack and wooden block, and turn the rear wheel slowly by hand with the transmission shifted to Neutral.)

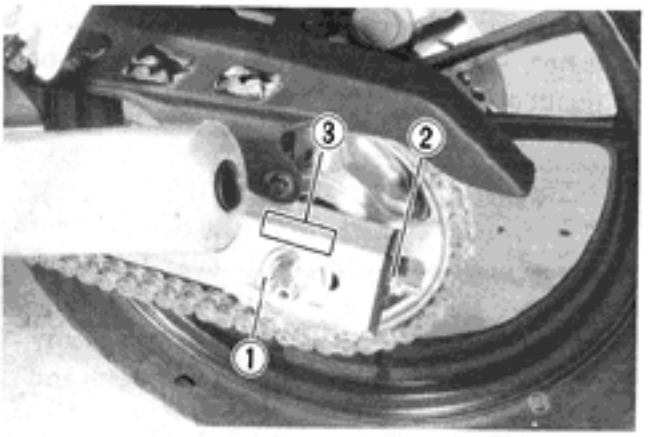
* Loose pins
* Damaged rollers
* Dry or rusted links
* Kinked or binding links
* Excessive wear
* Improper chain adjustment
* Missing O-ring seals

If any defects are found, the drive chain must be replaced.



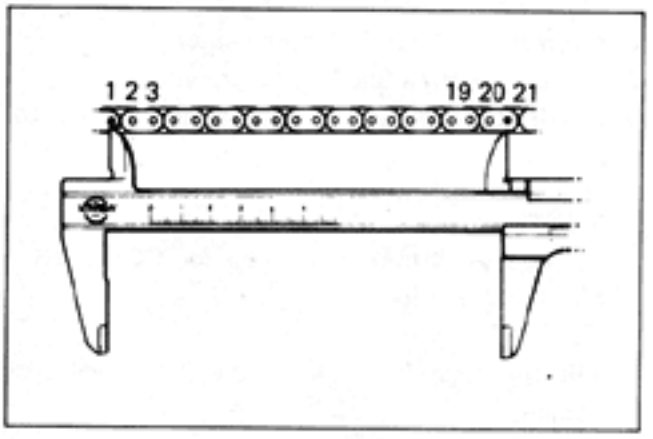
CHECKING

- Remove the cotter pin. (Canada model only)
- Loosen axle nut ①.
- Tense the drive chain fully by tightening the chain adjuster lock nuts ②.



- Count out 21 pins (20-pitch) on the chain and measure the distance between the two. If the distance exceeds following limit, the chain must be replaced.

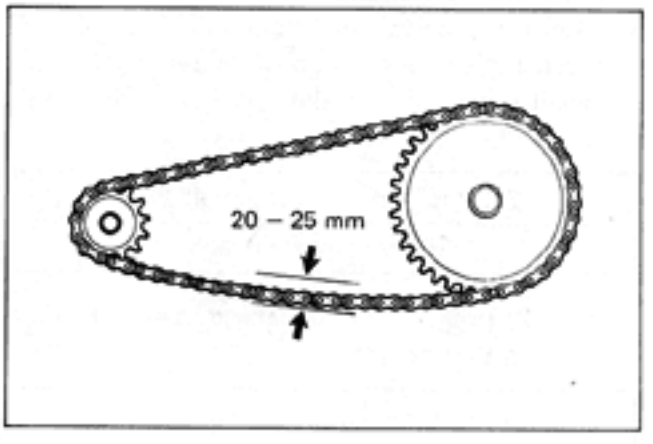
Service Limit	319.4 mm



ADJUSTING

- Loosen the chain adjuster lock nuts ② until the chain has 20 – 25 mm of sag at the middle between engine and rear sprockets. The mark ③ on both chain adjusters must be at the same position on the scale to ensure that the front and rear wheels are correctly aligned. Place the motorcycle on the side stand for accurate adjustment.
- After adjusting the drive chain, tighten the axle nut ① securely.
- Tighten the chain adjuster lock nuts securely.

Rear axle nut tightening torque	50 – 80 N·m (5.0 – 8.0 kg-m)



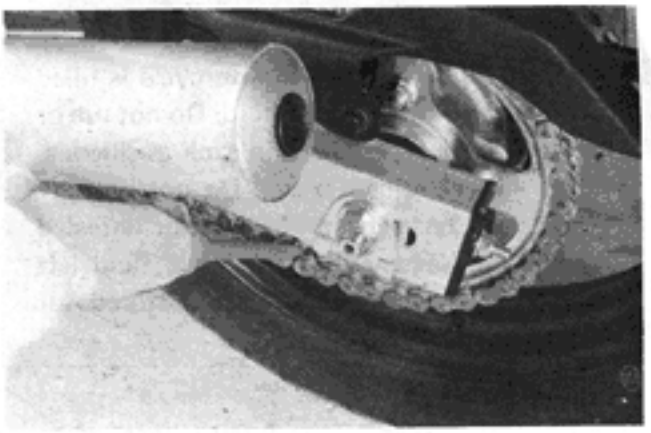
CLEANING AND LUBRICATING

- Wash the chain with kerosene. If the chain tends to rust faster, the intervals must be shortened.

CAUTION:
Do not use trichlene, gasoline or any similar fluids: These fluids have too great a dissolving power for this chain and, what is more important, can spoil the "O" rings (or seals) confining the grease in the bush to pin clearance. Remember, high durability comes from the presence of grease in that clearance.

- After washing and drying the chain, oil it with a heavy-weight motor oil.

CAUTION:
Do not use any oil sold commercially as "drive chain oil". Such oil too can spoil the "O" rings (or seals).



CAUTION:
The standard drive chain is DAIDO DID 50VA or TAKASAGO RK50HFO. SUZUKI recommends that the above-mentioned standard drive chain be used for the replacement.

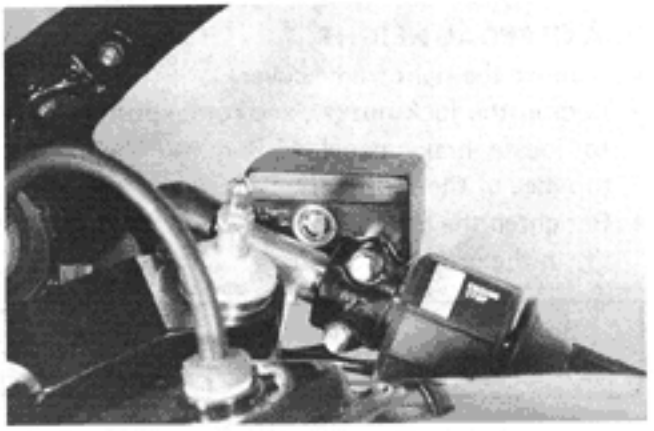
BRAKES

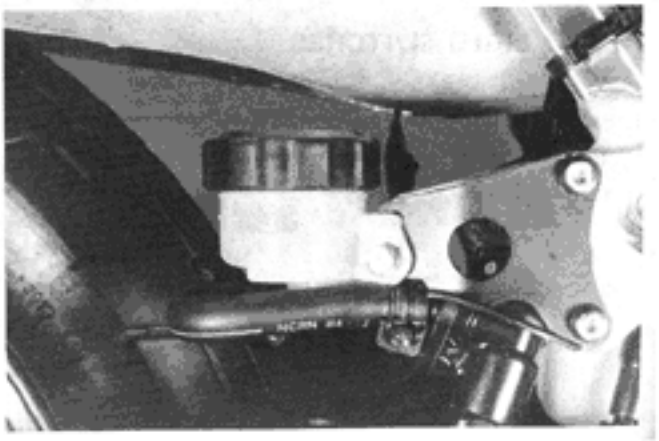
Inspect at Initially 1 000 km (2 months) and Every 6 000 km (12 months)
Replace hoses Every 4 years
Replace fluid Every 2 years

BRAKE FLUID LEVEL

- Keep the motorcycle upright and place the handlebars straight.
- Remove the right frame cover.
- Check the brake fluid level by observing the upper (only for rear brake) and lower (both front and rear brake) limit lines on the brake fluid reservoirs.
- When the level is below the lower limit line, replenish with brake fluid that meets the following specification.

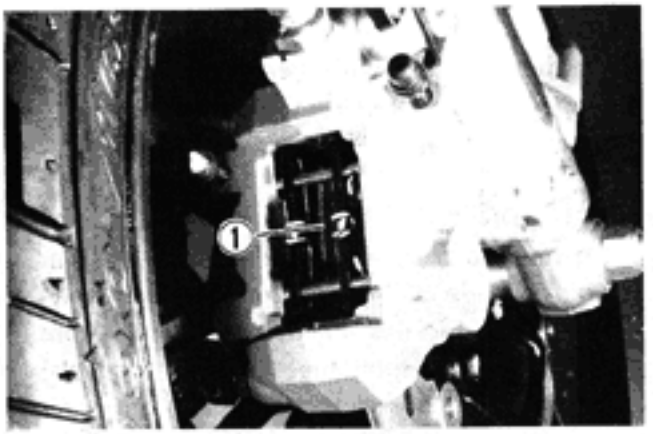
Specification and Classification	SAE J1703, DOT3 or DOT4

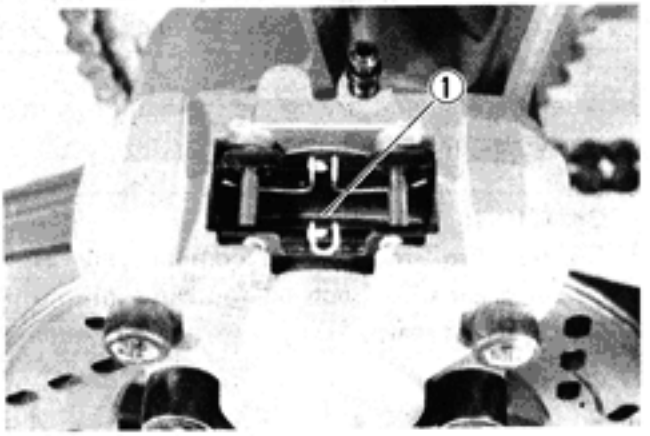




WARNING:
The brake system of this motorcycle is filled with a glycol-based brake fluid. Do not use or mix different types of fluid such as silicone-based and petroleum-based. Do not use any brake fluid taken from old, used or unsealed containers. Never re-use the brake fluid left over from the last servicing and stored for long periods.

WARNING:
Brake fluid, if it leaks, will interfere with safe running and immediately discolor painted surfaces.
Check the brake hoses for cracks and hose joints for leakage before riding.





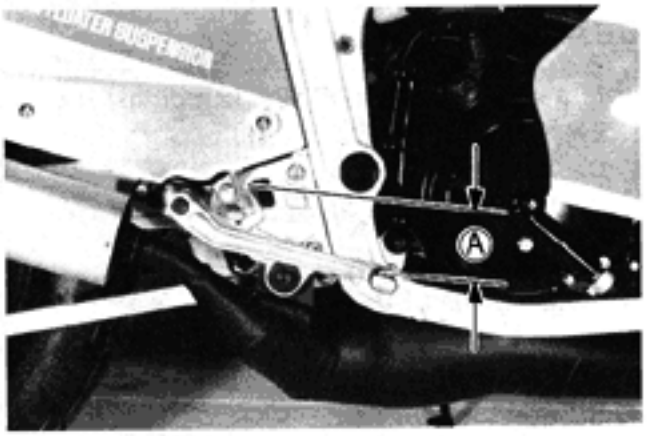
BRAKE PADS

Wearing condition of brake pads can be checked by observing the limit line ① marked on the pad. When the wear exceeds the limit line, replace the pads with new ones. (Refer to page 7-9 and 7-29)

BRAKE PEDAL HEIGHT

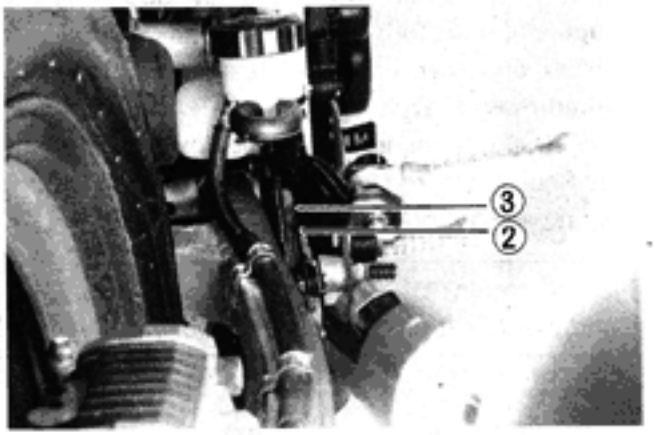
- Remove the right frame cover.
- Loosen the lock nut ②, and rotate push rod ③ to locate brake pedal 47.5 mm Ⓐ below the top face of the footrest.
- Retighten the lock nut ② to secure the push rod ③ in the proper position.

Brake pedal height Ⓐ	47.5 mm



BRAKE LIGHT SWITCHES

Adjust both brake light switches, front and rear, so that brake light will come on just before a pressure is felt when the brake lever is squeezed, or the brake pedal is depressed.



BLEEDING AIR FROM THE BRAKE FLUID CIRCUIT

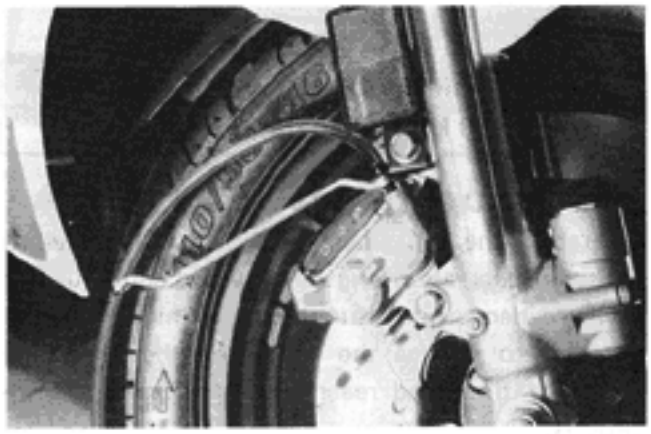
Air trapped in the fluid circuit acts like a cushion to absorb a large proportion of the pressure developed by the master cylinder and thus interferes with the full braking performance of the brake caliper. The presence of air is indicated by "sponginess" of the brake lever and also by lack of braking force. Considering the danger to which such trapped air exposes the machine and rider, it is essential that, after remounting the brake and restoring the brake system to the normal condition, the brake fluid circuit be purged of air in the following manner:

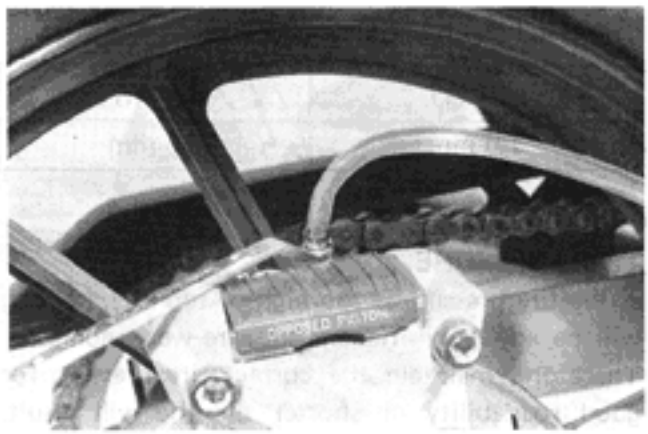
- Fill up the master cylinder reservoir to the upper end of the inspection window (for front brake) and upper line (for rear brake). Replace the reservoir cap to prevent entry of dirt.
- Attach a pipe to the caliper bleeder valve, and insert the free end of the pipe into a receptacle.
- Front brake: Bleed the air from the inboard valve first, and then outboard valve.

NOTE:
When bleeding the air, always start with the left side.

- Squeeze and release the brake lever several times in rapid succession, and squeeze the lever fully without releasing it. Loosen the bleeder valve by turning it a quarter of a turn so that the brake fluid runs into the receptacle; this will remove the tension of the brake lever causing it to touch the handlebar grip. Then, close the valve, pump and squeeze the lever, and open the valve. Repeat this process until the fluid flowing into the receptacle no longer contains air bubbles.

NOTE:
Replenish the brake fluid reservoir as necessary while bleeding the brake system.
Make sure that there is always some fluid visible in the reservoir.





- Close the bleeder valve, and disconnect the pipe. Fill the reservoir to the upper end of the inspection window (for front brake) and upper line (for rear brake).
- Rear brake: Differences between front and rear are that the master cylinder is actuated by a pedal.

Bleeder valve tightening torque	6 – 9 N·m (0.6 – 0.9 kg·m)

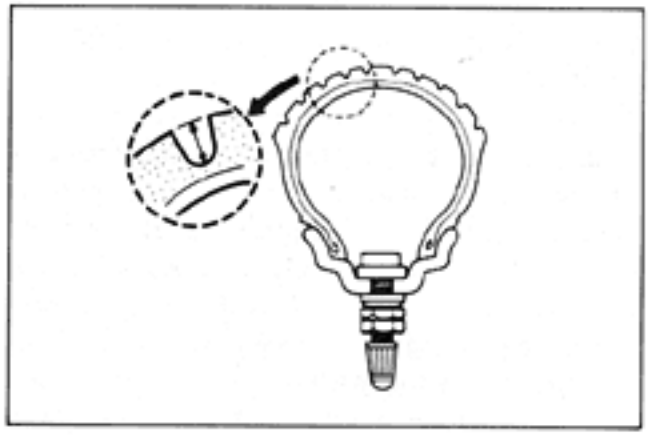
CAUTION:
Handle the brake fluid with care: the fluid reacts chemically with paint, plastics, rubber materials, etc.

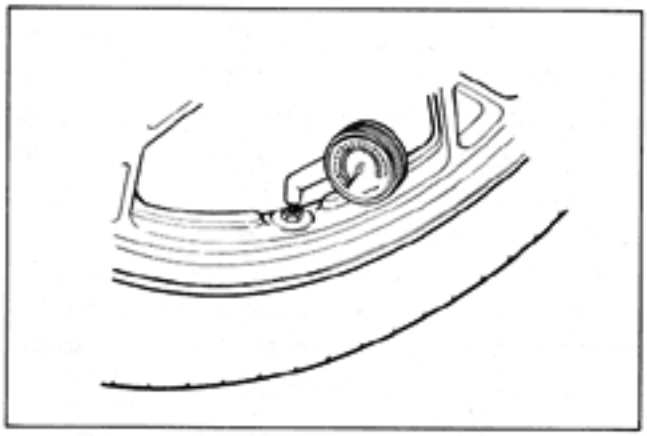
TIRES

Inspect at Initially 1 000 km (2 months) and Every 6 000 km (12 months)

TIRE TREAD CONDITION

Operating the motorcycle with excessively worn tires will decrease riding stability and consequently invite a dangerous situation. It is highly recommended to replace the tire when the remaining depth of tire tread reaches the following specifications.





Tire tread depth limit

FRONT	REAR
1.6 mm	2.0 mm

TIRE PRESSURE

If the tire pressure is too high or too low, steering will be adversely affected and tire wear increased. Therefore, maintain the correct tire pressure for good roadability or shorter tire life will result. Cold inflation tire pressure is as follows.

	Solo riding		Dual riding	
	kg/cm²	kPa	kg/cm²	kPa
FRONT	2.25	225	2.25	225
REAR	2.50	250	2.90	290

CAUTION:
The standard tire fitted on this motorcycle is 110/90V16 for front and 120/90V17 for rear. The use of a tire other than the standard may cause instability. It is highly recommended to use a SUZUKI Genuine Tire.