

SUZUKI

**OWNER'S
MAINTENANCE MANUAL**

PE175

IMPORTANT

Please read this manual and follow its instructions carefully.

To emphasize special information the words **WARNING**, **CAUTION** and **NOTE** carry special meanings and should be carefully reviewed.

WARNING:

The personal safety of the rider may be involved. Disregarding this information could result in injury to the rider.

CAUTION

These instructions point out special service procedures or precautions that must be followed to avoid damaging the machine.

NOTE

This provide special information to make maintenance easier or important instructions clearer.

FOREWORD

Welcome to the world of Suzuki motorcycles.

The confidence you have shown by the purchase of our products is very much appreciated. Each Suzuki motorcycle backs this confidence by a long record of manufacturing and engineering excellence. The same excellence that has produced a long history of world-championship racing successes in many race tracks of Europe.

Suzuki now presents the new PE175, a competition proved racing machine, capable of competing on any race course in the world.

This handbook is presented as a means whereby you can maintain your PE175 in top working condition at all times. Your riding skill and the maintenance steps outlined in this manual will assure you of top performance from your machine under any type of competition conditions.

We sincerely wish you and your Suzuki motorcycle a successful partnership for many years of happy riding.

SUZUKI MOTOR CO., LTD.

- * All information, illustrations, photographs and specifications contained in this manual are based on the latest product information available at the time of publication. The right is reserved to make changes at any time without notice.

WARNING

THIS VEHICLE IS DESIGNED AND MANUFACTURED FOR COMPETITION USE ONLY AND IS NOT SUBJECT TO FEDERAL MOTOR VEHICLE SAFETY STANDARDS AS IT IS NOT EQUIPPED OR APPROVED FOR OPERATION ON PUBLIC STREETS, ROADS, OR HIGHWAYS.

SOME STATE LAWS FURTHER PROHIBIT OPERATION OF THIS VEHICLE EXCEPT IN AN ORGANIZED COMPETITIVE EVENT UPON A CLOSED COURSE CONDUCTED UNDER THE AUSPICES OF A RECOGNIZED SANCTIONING BODY OR BY PERMIT OF THE LOCAL GOVERNMENTAL AUTHORITY HAVING JURISDICTION.

BEFORE OPERATION, FIRST DETERMINE THAT OPERATION IS LEGAL IN YOUR STATE.

CONTENTS

GENERAL

General instruction	2
Operating instruction	4
Periodic maintenance schedule	6
Inspection and maintenance	7

ENGINE

Engine removal	13
Disassembly	14
Inspection and servicing on engine components	19
Reassembly	23
Carburetor	29

ELECTRICAL

Ignition system	30
Wire routing	33

CHASSIS

Front wheel	34
Front fork	35
Steering	39
Rear wheel	43
Full-floating suspension system	45
Suspension	49
Cable routing	56

INFORMATION AND DATA

Troubleshooting	57
Tightening torque	58
Special tools	60
Materials	64
Wiring diagram	65
Specifications	66
Service data	68

GENERAL INSTRUCTION

FUEL

The PE175 is of the two-stroke design, which requires a premixture of gasoline and oil. Use a premium (high-octance) gasoline with an octance number of at least 95.

ENGINE OIL

SUZUKI strongly recommends the use of **SUZUKI CCI SUPER 2-CYCLE MOTOR LUBRICANT**.

If this oil is not available, use an equivalent high quality Two Cycle Racing Lubricant, at a 20 to one ratio only.

CAUTION:

Do not allow two different brands to get mixed in the fuel-oil mixture.

MIXING RATIO

20 parts gasoline to 1 part oil is the correct gasoline to oil mixture ratio for your engine. For proper engine performance, it is essential that the above fuel/oil mixture should be maintained.

FUEL OIL MIXTURE RATIO OF 20 : 1

GASOLINE	OIL	GASOLINE	OIL
(qt)	(oz)	(qt)	(oz)
0.5	0.8	5.5	8.8
1.0	1.6	6.0	9.6
1.5	2.4	6.5	10.4
2.0	3.2	7.0	11.2
2.5	4.0	7.5	12.0
3.0	4.8	8.0	12.8
3.5	5.6	8.5	13.6
4.0	6.4	9.0	14.4
4.5	7.2	9.5	15.2
5.0	8.0	10.0	16.0

GASOLINE	OIL	GASOLINE	OIL
(L)	(ml)	(L)	(ml)
0.5	25	5.5	275
1.0	50	6.0	300
1.5	75	6.5	325
2.0	100	7.0	350
2.5	125	7.5	375
3.0	150	8.0	400
3.5	175	8.5	425
4.0	200	9.0	450
4.5	225	9.5	475
5.0	250	10.0	500

CAUTION:

A mixture containing too little oil will cause overheating of the engine. Too much oil will cause excessive carbon formation resulting in preignition, fouled spark plug and loss of engine power.

MIXING PROCEDURE

To mix gasoline and oil, always use a separate, clean container. Pour the full amount of oil required for the total mixture into the container, add approximately half the amount of gasoline to be mixed and shake thoroughly. Add the remainder of the gasoline and again thoroughly agitate the container.

TRANSMISSION OIL

Use a good quality SAE 20W/40 multigrade motor oil.

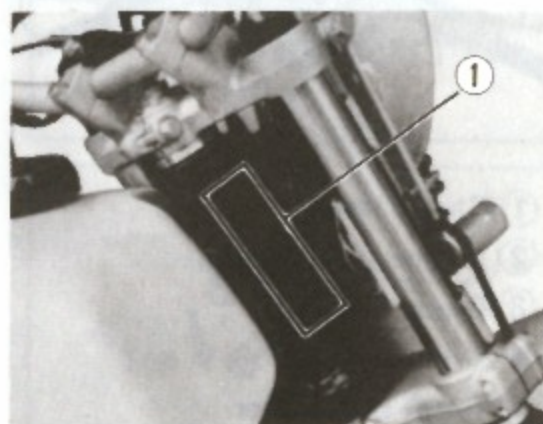
FRONT FORK OIL

For the oil in the two legs, use a fork oil of # 10.

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 parts of Suzuki origin in the machine, will lower the inherent capability of the machine and, for worse, could induce costly mechanical trouble.

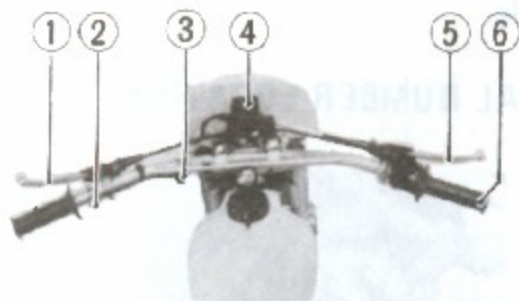
SERIAL NUMBER LOCATION



Frame serial number ① is stamped on the steering head pipe. Engine serial number ② is located on the right crankcase. When registering your machine and making orders for spare parts, cite these two numbers.

OPERATING INSTRUCTION

Take the time to familiarize yourself with the operating principles of the following motorcycle components.



- ① Clutch lever
- ② Engine stop switch
- ③ Dimmer switch
- ④ Trip meter
- ⑤ Front brake lever
- ⑥ Throttle grip



- ⑦ Fuelcock
- ⑧ Gearshift lever
- ⑨ Side stand

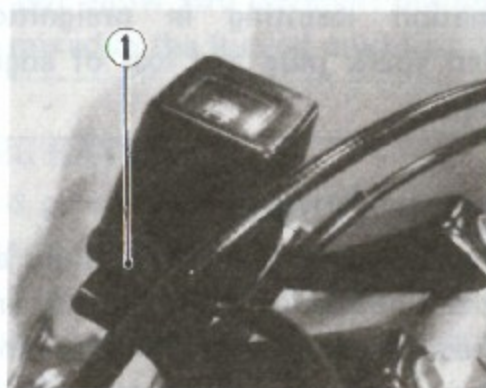


- ⑩ Kick starter lever
- ⑪ Rear brake pedal
- ⑫ Tool

BREAKING-IN

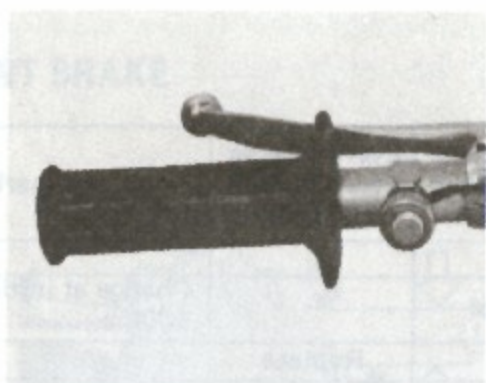
The PE175 is manufactured using the latest technology relating to the two-stroke engine and thus requires a relatively short break-in. No programmed breaking-in operation is necessary: the only thing is that machine should not be continuously operated in full-load condition for the first one hour or 30km (20 miles). This practice will help all moving parts to break in and will assist in acquainting you with machine. Once the machine is fully broken in, you can be assured of high performance in competition.

TRIP METER



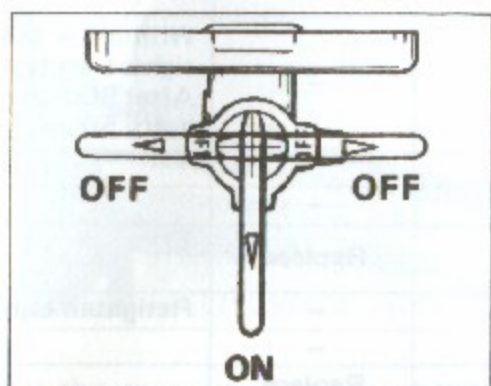
The trip meter can be used to indicate the distance traveled. Pulling and turning the knob ① clockwise or counterclockwise will return the meter to zero. After resetting the meter, push back the knob.

ENGINE STOP SWITCH



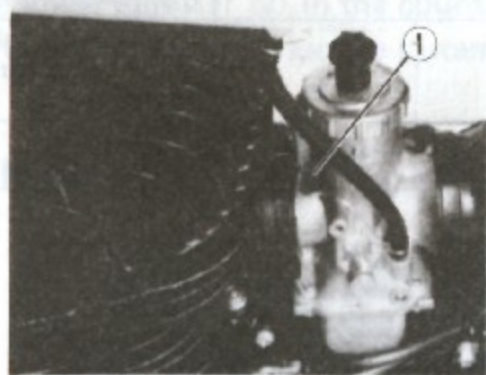
To stop the engine, push the engine stop button 1 as shown in photo.

FUELCOCK LEVER



The fuelcock lever has two position; ON and OFF.

CARBURETOR CHOKE LEVER



When the engine is cold:

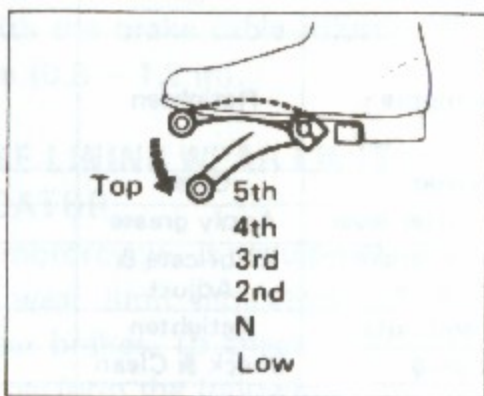
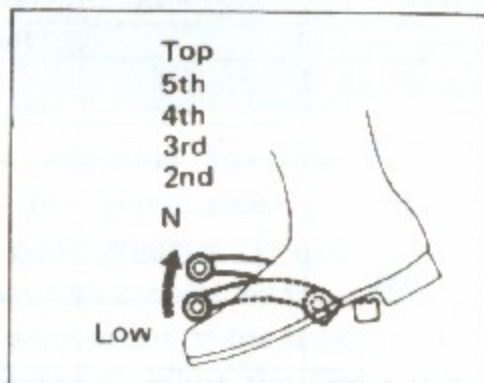
Push down the choke lever ①. Depress the kick starter lever without opening the throttle.

Opening the throttle even slightly may make the engine hard to start. Always return the choke lever to the original position when the engine warms up.

When engine is warm:

Using the choke lever is not necessary. To start a warm engine, open the throttle 1/8 to 1/4 and kick-start the engine.

GEARSHIFT LEVER



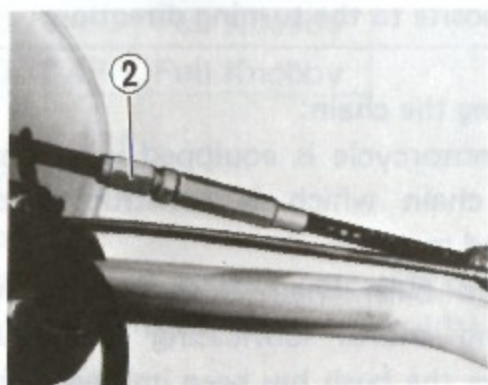
The PE175 is equipped with a 6-speed transmission which operates as shown in figure. Neutral is located between low and 2nd. Low gear is located by fully depressing the lever from the neutral position. Shifting into succeeding higher gears is accomplished by pulling up on the shift lever once for each gear. When shifting from low to 2nd, neutral is automatically skipped. When neutral is wanted for stopping, depress or raise the lever a half of a stroke between low and 2nd.

PERIODIC MAINTENANCE SCHEDULE

Interval Service Item	Each race Every 100km (60 miles)	Every 2 races Every 200km (120 miles)	Every 3 races Every 300km (180 miles)	Every 5 races Every 500km (300 miles)	Remarks
Piston ring	—	Replace	—	—	
Transmission oil	—	—	Change	—	Change at initial 100km
Engine sprocket	—	—	—	Replace	
Drive chain	—	—	Replace	—	Adjust slack every 40km Clean and/or Lubricate if necessary
Rear sprocket	—	—	Replace	—	
Drive chain buffer	—	—	—	Replace	
Drive chain guide defence	—	—	Replace	—	
Spoke nipple	Retighten	—	—	—	Within 0 — 50km re- tighten every 10km. After 500km retighten every 50km.
Air cleaner	Clean	—	—	—	
Kick starter lever	Apply grease	—	—	—	
Throttle, brake clutch cable	Lubricate & Adjust	—	—	Replace	
Bolts and nuts	Retighten	—	—	—	Retighten initial-20km
Spark plug	Check & Clean	—	—	—	
Piston	—	—	—	Replace	
Front fork oil	—	—	Change	—	Change initial 100km
Engine mounting bolt	Retighten	—	—	—	Retighten initial 5km
Front fork air pressure	Check	—	—	—	Check abnormality of front fork inner tube after removing rubber damper every race.
Full-Floating suspension system pivoting portion .	Check	—	—	—	Check and apply grease all pivoting portion frequently.
Chain control roller	Check & grease	—	—	Change	

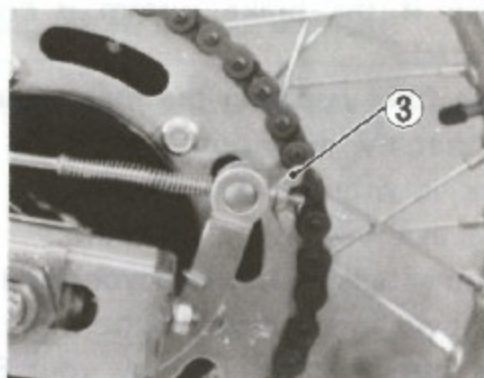
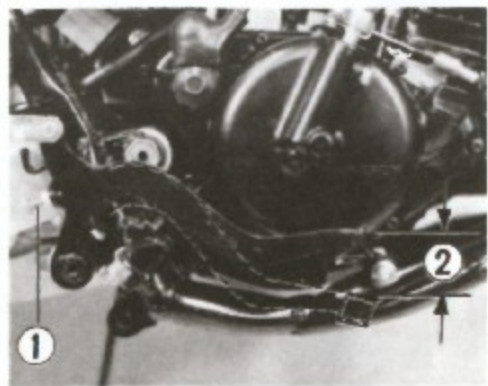
INSPECTION AND MAINTENANCE

FRONT BRAKE



Measure the amount of the front brake lever distance ① between the brake lever end and throttle grip when the brake is operated. The distance should be 20 – 30 mm (0.8 – 1.2 in). If adjustment is necessary, turning the front brake adjuster ② in the counterclockwise direction will increase the distance.

REAR BRAKE



Before adjusting the brake pedal travel, adjust the brake pedal position with the brake pedal adjuster ① until the most suitable position is obtained for quick operation. After adjustment of the brake pedal position is completed, adjust the brake pedal travel ② with the brake cable adjuster ③ to 20 – 30 mm (0.8 – 1.2 in).

BRAKE LINING WEAR LIMIT INDICATOR

This motorcycle is equipped with brake lining wear limit indicators on both front and rear brakes. To check wear of the brake lining perform the following.

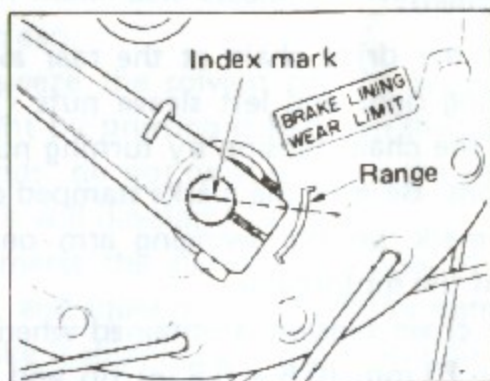


Fig. A
The extension line of the index mark is within the range.

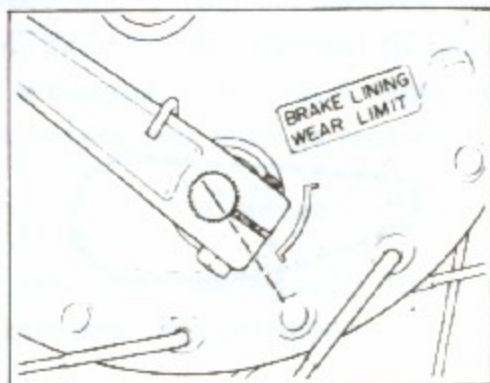
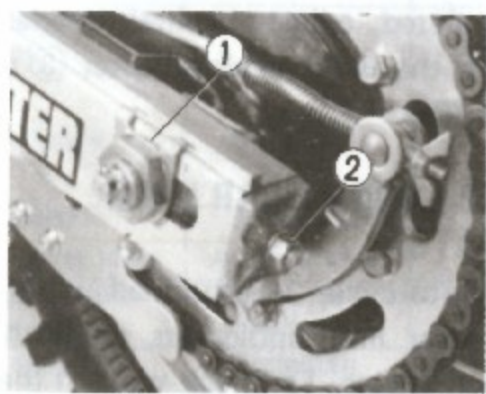


Fig. B
The extension line of the index mark is out of the range.

- 1) Check if the brake system is properly adjusted.
- 2) While fully applying the brake, check to see that the extension line of the index mark is within the range on the brake panel as shown in the figure A.
- 3) If the extension line is beyond the range as shown in the figure B, have the brake shoe assembly replaced by your Suzuki dealer to insure safe operation.

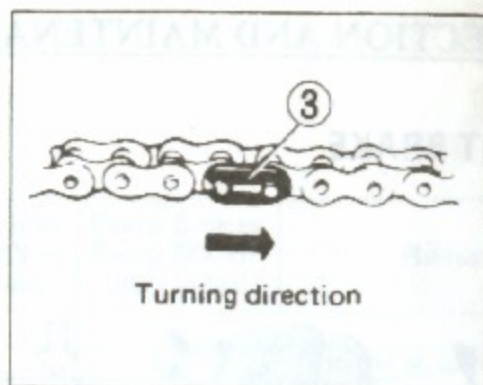
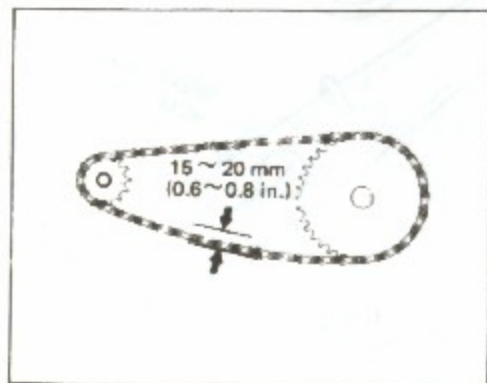
DRIVE CHAIN



Adjustment:

Adjust the drive chain at the rear axle by loosening right and left sleeve nuts ① and adjust the chain tension by turning nuts ② in or out. Be sure the marks stamped on the same mark on the swinging arm on both sides of the motorcycle.

Proper chain tension is obtained when there is 15 – 20 mm (0.6 – 0.8 in.) up and down slack in the chain with using the side stand, at a point midway between the sprockets.



CAUTION:

When refitting the drive chain, be sure the drive chain joint clip ③ is attached in the way that the slit end will face opposite to the turning direction.

Cleaning the chain:

This motorcycle is equipped with a special drive chain which is constructed of the sintered metal.

Sintered bush chain does not require the cleaning and/or lubricating so frequently, because the bush has been impregnated with special grease at the factory.

To keep the well lubrication, wipe and brush the chain if necessary. If the chain tends to rust or becomes severely dirty, clean it with kerosene. After thoroughly washing the chain and allowing it to dry, oil the links with a heavy weight gear oil SEA 90.

CAUTION:

Do not use gasoline, trichlene or other commercial sold cleaning solvents.

TIRE PRESSURE

Inflate the tires properly, depending on the weight of the rider. Too high an inflating pressure makes the machine bounce up and down; too low a pressure makes steering hard. In either case, tire life will be shortened.

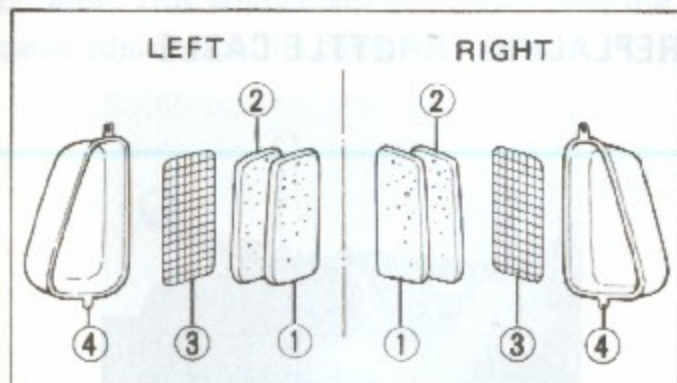
	Cold inflation tire pressure
Front	0.7–1.0 kg/cm ² (10–14 psi)
Rear	0.7–1.0 kg/cm ² (10–14 psi)

Standard tire size
3.00-21-4PR, Full Knobby
4.10-18-4PR, Full Knobby

AIR CLEANER

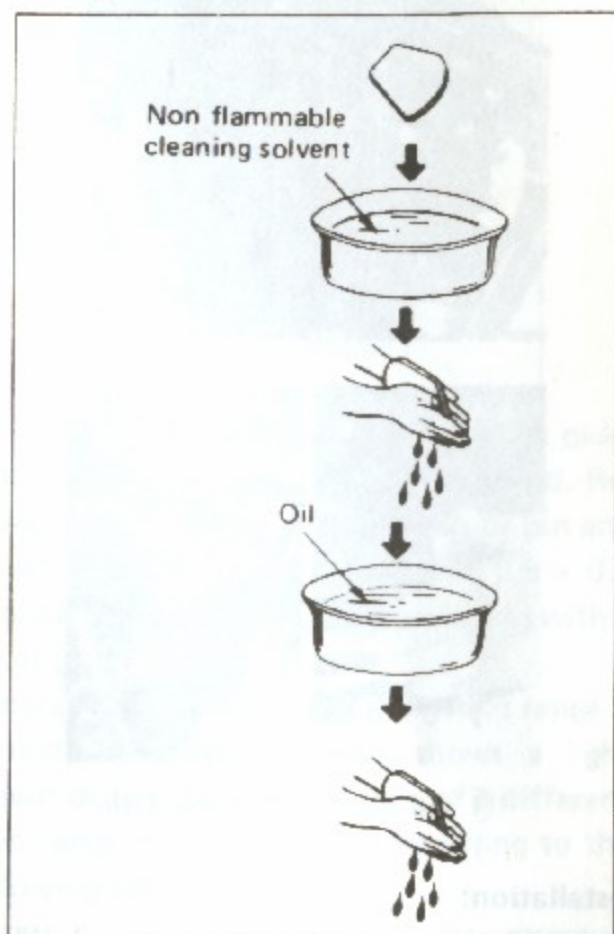
Removal:

Remove the air cleaner case side cover and the element inside, from both sides of the case, as shown.



- ① Inner element ② Outer element
③ Element frame ④ Side cover

Washing the air cleaner element:



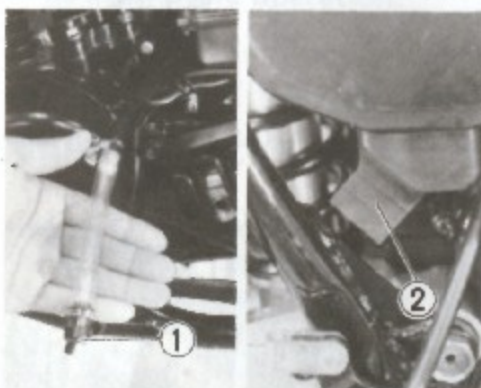
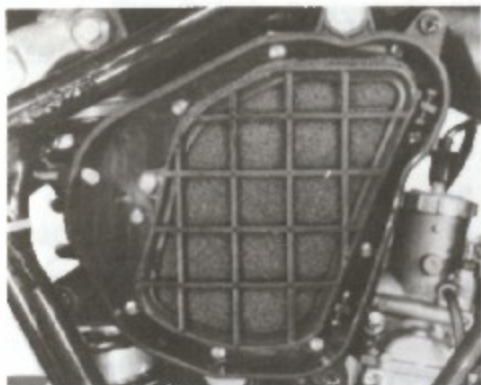
1. Fill a washing pan of a proper size with non flammable cleaning solvent and wash it clean.
2. Squeeze the solvent off the washed element by pressing it between the palms of hands: do not twist or wring the element, or it will develop fissures.
3. Immerse the element in a pool of motor oil, and squeeze the oil off the element to make it slightly wet with motor oil.

CAUTION:

Before and during the cleaning operation, examine the element to see if it has a rupture or fissure. A ruptured or fissured element must be replaced.

CAUTION:

Do not clean the element frame and cleaner case with petroleum.



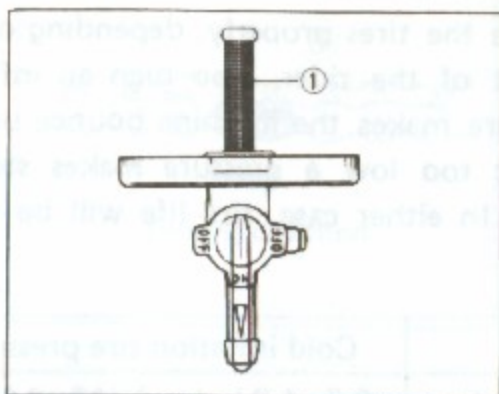
① Oil drain ② Water drain

Installation:

Shrunk element should be replaced. When installing the element, do not confuse the location of the two elements. The thicker element should come inside and the thinner (coarser) outside as installed in place. Make sure that there is no clearance all around the element.

Before each race, drain out the blownback gasoline and water, if any, by removing the oil drain ① and lightly pressing the water drain ② by finger, respectively.

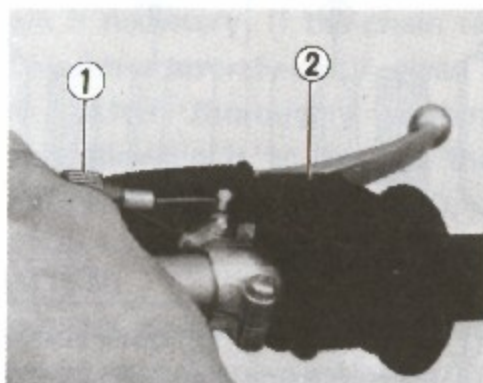
FUEL FILTER



The fuel filter is incorporated in the fuel cock which is mounted on the bottom of the fuel tank at the left side. Accumulation of dirt in the filter will restrict the flow of the fuel and cause the carburetor to malfunction, therefore, the fuel filter should be serviced periodically.

1. Drain the fuel from the fuel tank.
2. Remove the fuel cock by unscrewing the fitting screws.
3. Wash the screen filter ① in cleaning solvent.

REPLACING THROTTLE CABLE



To remove the cable, simply unscrew the cable stopper ① all the way out.

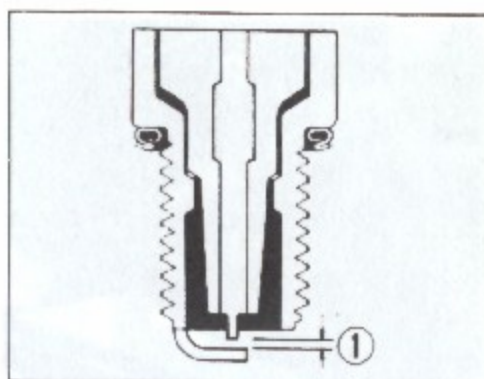
To install the cable, return the throttle grip fully, insert the cable end into the casing as far as it will go and turn the throttle grip slightly to make sure that the cable end is hitched in the mechanism and pulled in as the grip is twisted. Turn the throttle grip fully and tighten the cable stopper ① by hand. This job should be done with the cap ② installed in place.

CAUTION:

The throttle cable stopper ① should not be used for adjusting the cable play. Should the throttle be operated with the stopper ① loosened, it may interfere with the smooth movement of the throttle.

CARBURETOR

For correct, safe throttle operation the throttle cable should be adjusted to have 0.5 – 1.0 mm (0.02 – 0.04 in.) play at the carburetor. This adjustment can be made at the cable adjuster on the carburetor cap.

SPARK PLUG

When carbon accumulates on the spark plug, a hot, strong spark will not be produced. Remove carbon deposits with a wire or pin and adjust the spark plug gap ① to 0.5 – 0.6 mm (0.020 – 0.024 in.) by measuring with a feeler gauge.

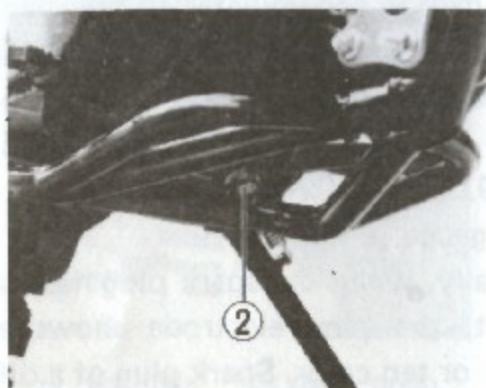
Generally, when the spark plug heat range is correct, the plug electrode shows a light brown or tan color. Spark plug of a different heat range may be chosen according to the following table.

NGK	Champion	REMARK
B 9EGV	N- 2G	HOT TYPE
B 10EGV	N-59G	STANDARD TYPE

CAUTION:

1. The heat range selection may be made only under the condition that the carburetion is set properly.
2. If another brand of spark plug is to be used other than NGK or Champion, consult your authorized SUZUKI dealer.
3. When installing the spark plug, screw in with your fingers to prevent the threads from stripping, then tighten with a torque wrench to 2.5 – 3.0 kg-m (18.0 – 22.0 lb-ft).

TRANSMISSION OIL



To change the transmission oil, remove the filler ① and drain plugs ② and drain the oil. Install the drain plug and measure 800 ml (0.85/0.72 US/Imp qt) of a good quality SAE 20W/40 multigrade motor oil, then pour it into the transmission slowly.

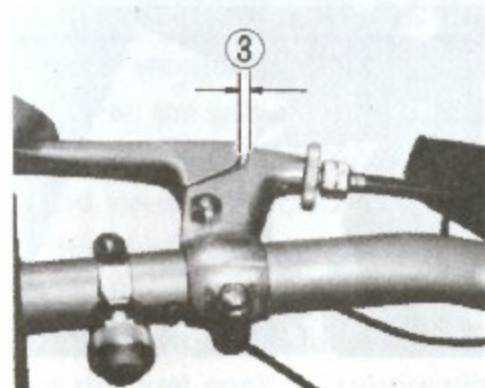
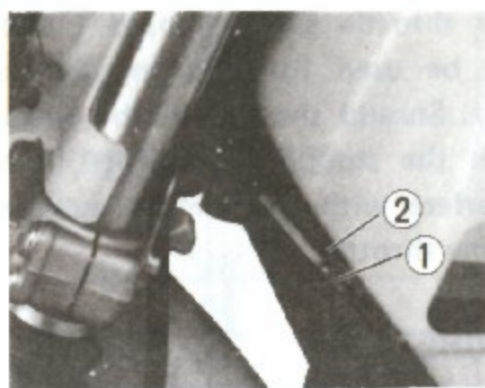
CAUTION:

Be sure to set the gearshifting cam stopper, spring and gasket, when re-installing the drain plug.

CAUTION:

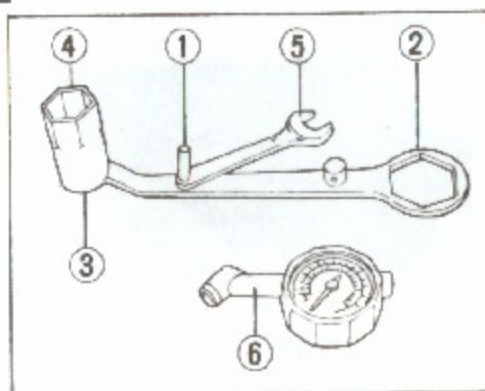
Never attempt to gearshift during removing the drain plug, because the drain plug is used for gearshifting cam stopper.

CLUTCH



Adjust the clutch with the clutch cable adjuster ① by loosening lock nut ②. The play ③ of the clutch cable should be 2 – 3 mm (0.08 – 0.12 in.) measured at the clutch lever holder before pressure can be felt indicating disengagement of the clutch.

TOOL



These tools are provided for PE175 to be able to service the following items.

1. Draw out the rear axle.
 2. Loosen and tighten rear sleeve nut.
 3. Loosen and tighten front axle nut.
 4. Loosen and tighten spark plug.
 5. Loosen and tighten 12-mm nut or bolt.
 6. Check the front fork air pressure.
- The tools ② through ⑤ are equipped on the right upper bracket and the ⑥ separately comes with the machine.

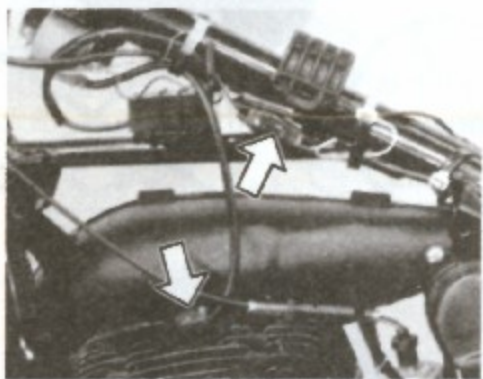
ENGINE REMOVAL



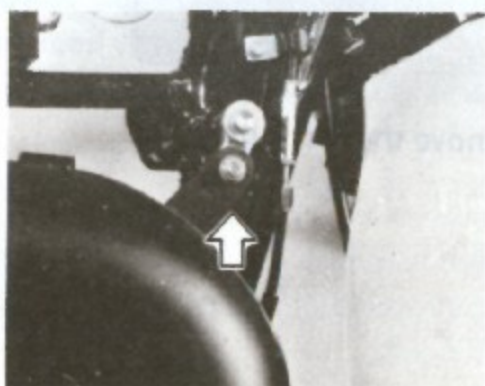
1. Remove the left frame cover and the 2nd muffler.



2. Remove the seat and the fuel tank.



3. Disconnect lead wires and spark plug cord.



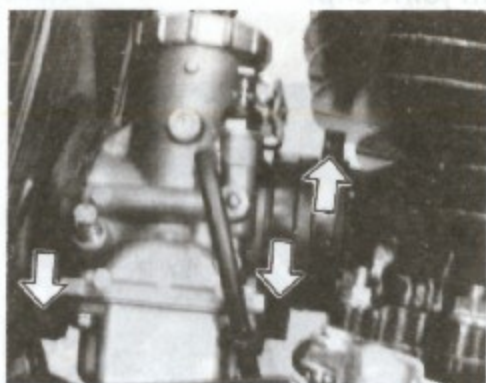
4. Remove the muffler mounting bolt.



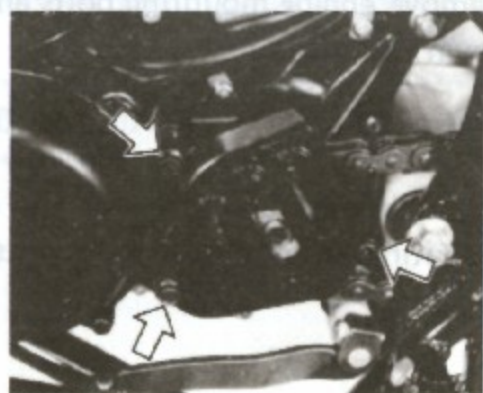
5. Unhook the springs and the muffler.



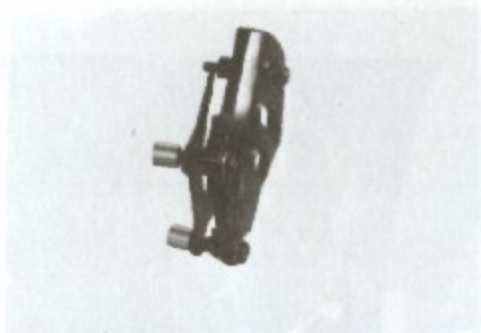
6. Disconnect the clutch cable.



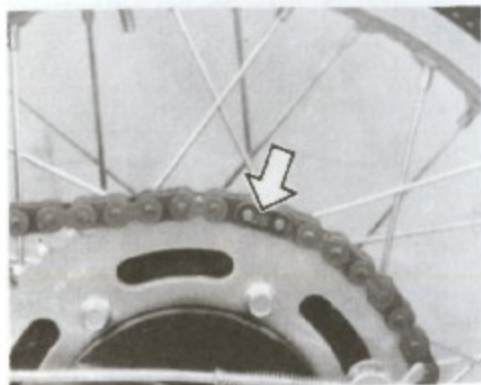
7. Remove the carburetor by loosening three clamps.



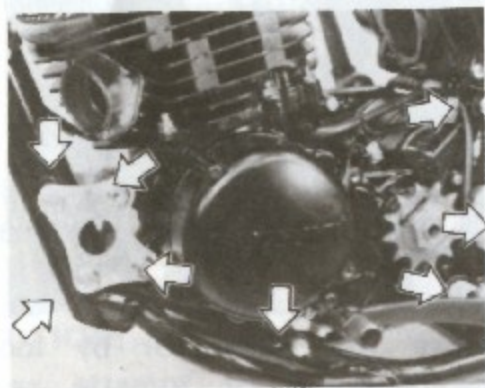
8. Remove the engine sprocket cover and the chain guide plate.



NOTE: In reassembly, locate the sprocket cover and the related parts as shown in the photo.



9. Remove the drive chain by removing the chain joint clip.

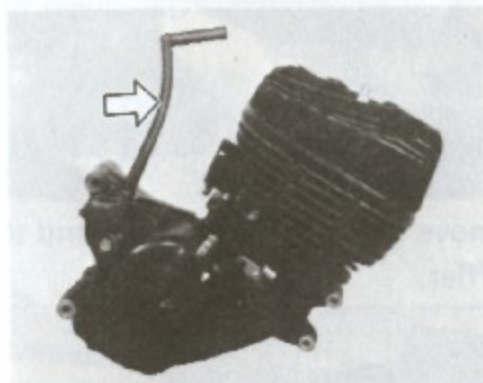


10. Remove engine mounting bolts and take down the engine.

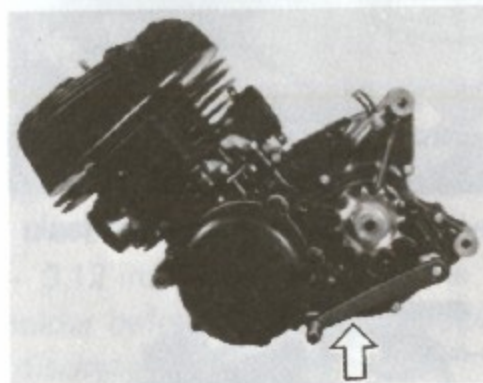
11. Self-lock nuts are used for the engine mounting. Do not reuse these nuts.

ENGINE DISASSEMBLY

Drain the oil by removing the drain plug from the bottom of the engine.



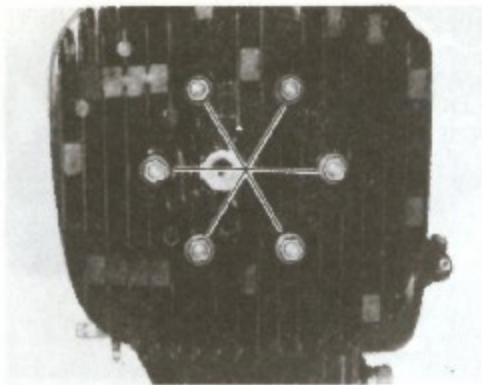
1. Remove the kick starter.



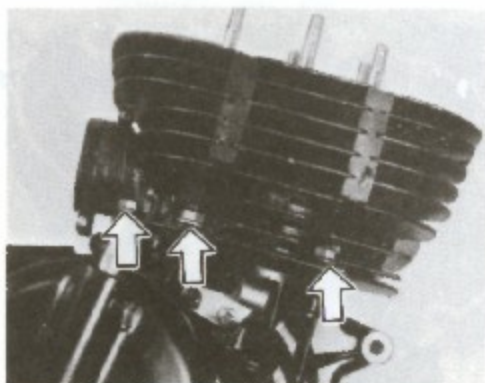
2. Remove the gear shift lever.



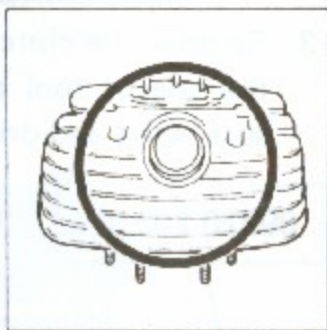
3. Remove the spark plug.



4. Remove the six nuts and cylinder head.



5. Remove the six nuts and the cylinder.

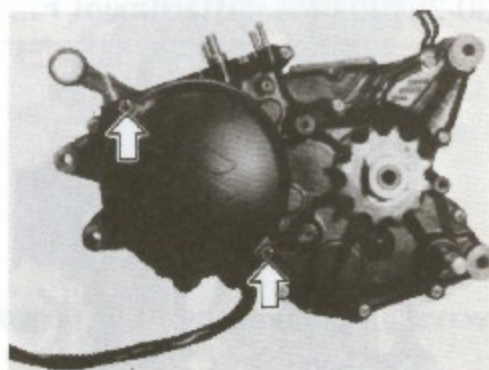


CAUTION:

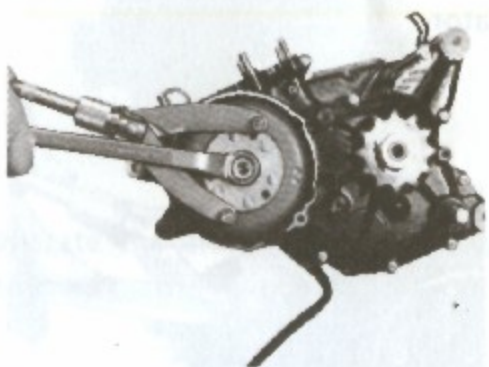
Place the removed cylinder on the table upside down, to prevent distortion of the reed valve stopper.



6. Put a clean cloth over the bore of crankcase. Then remove the piston pin circlip, piston pin, bearing and piston.

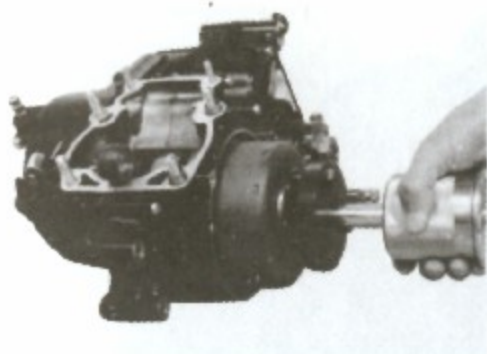


7. Remove the two screws and the magneto cover.



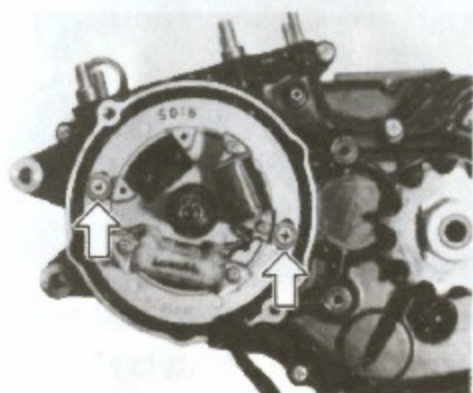
8. Remove the nut by using special tool.

09930-40113	Rotor holder
-------------	--------------

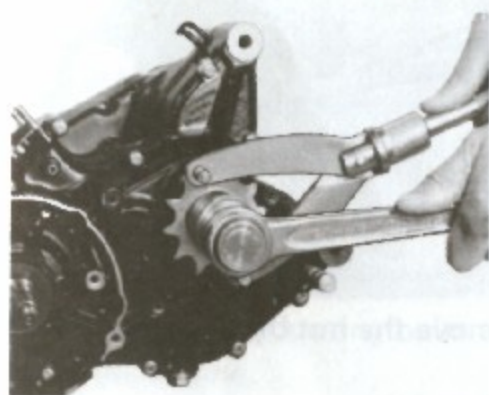


9. Draw out the rotor by using special tool.

09930-30102	Rotor remover (Slide shaft)
09930-30190	Attachment F.

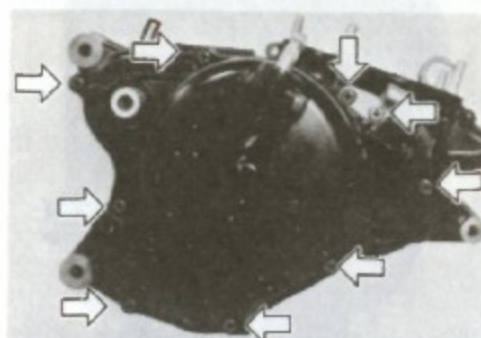


10. Loosen two screws and take off the stator.



11. Flatten the engine sprocket washer and loosen the nut by using special tool and draw out the engine sprocket.

09930-40113	Rotor holder
-------------	--------------



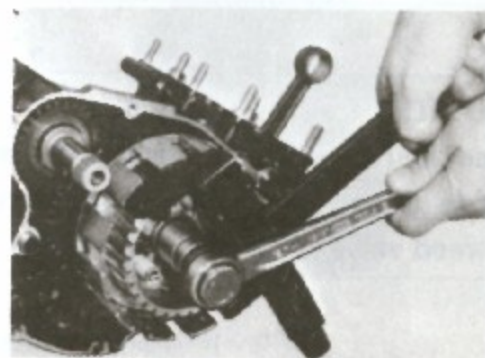
12. Loosen the screws and remove the clutch cover.

NOTE: Do not lose the two dowel pins.



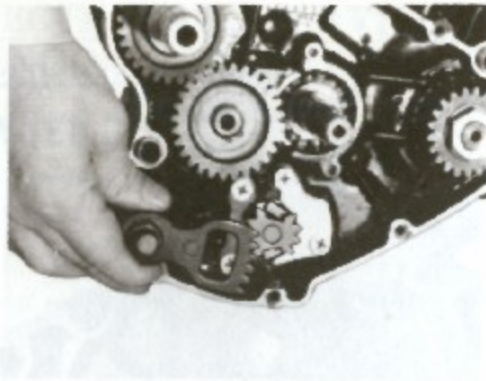
13. Remove the clutch spring pins by using the special tool and take off the pressure, drive and driven plates.

09920-20310	Clutch spring hook
-------------	--------------------

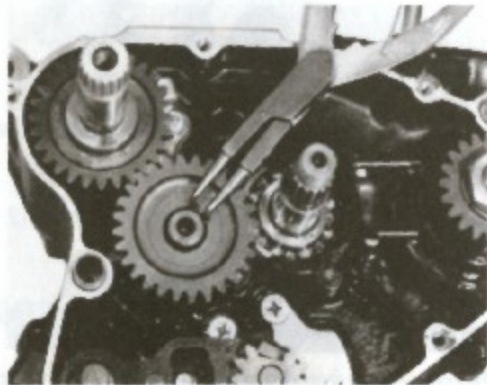


14. Flatten the clutch sleeve hub washer and loosen the hub nut by using the clutch sleeve hub holder. Then draw out the clutch hub.

09920-53710	Clutch sleeve hub holder
-------------	--------------------------



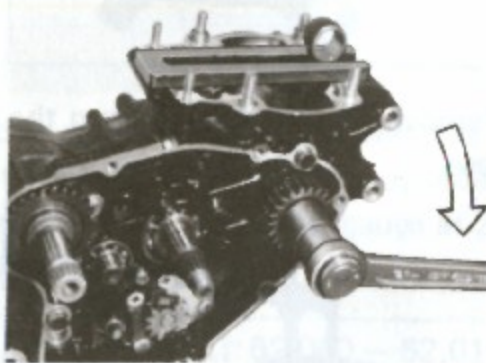
15. Draw out the gear shifting shaft.



16. Remove the circlip by using special tool and draw out the kick idle gear.

09900-06104

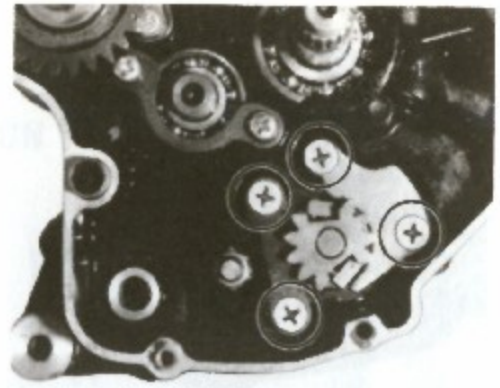
Snap ring pliers



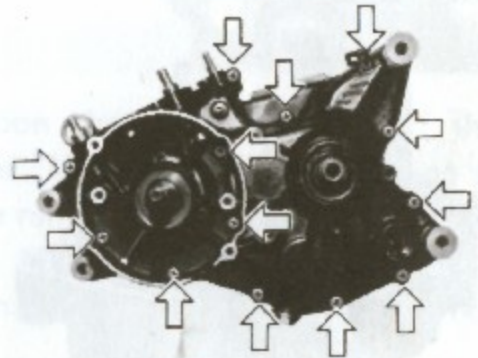
17. Flatten the primary drive gear washer and loosen the nut.

09910-20115

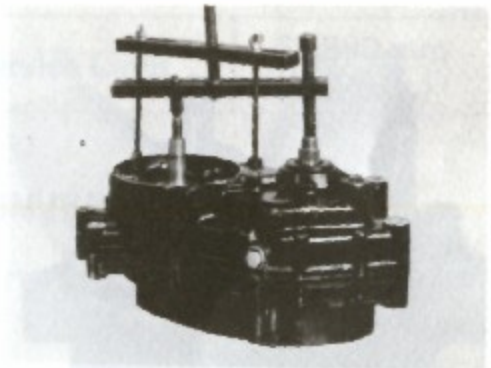
Con-rod holder



18. Remove the cam stopper.



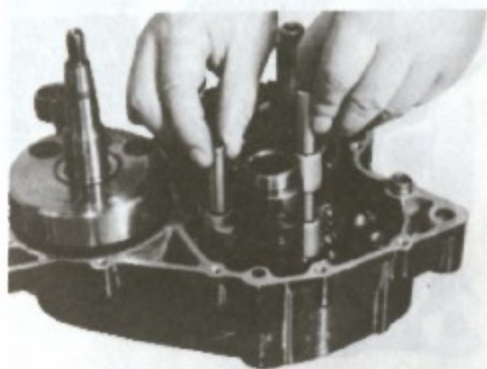
19. Loosen the crankcase fitting screws.



20. Separate the crankcase by using special tool and plastic hammer.

09910-80115

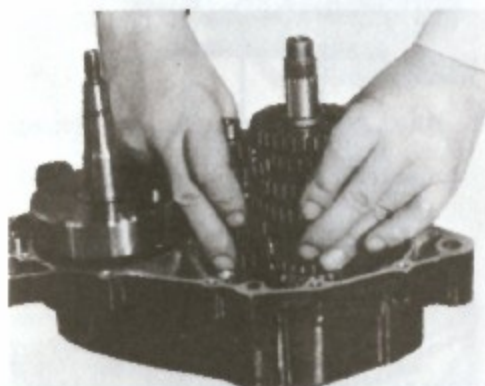
Crankcase separating tool



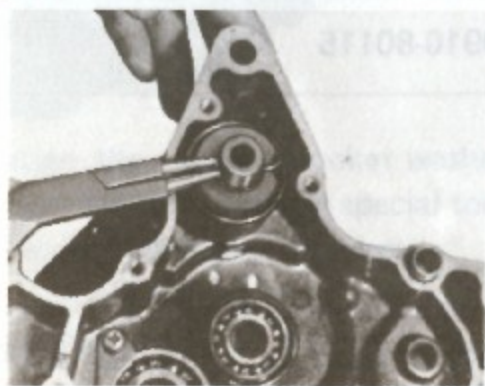
21. Draw out two gearshift fork shafts and three forks.



22. Draw out the shifting cam.



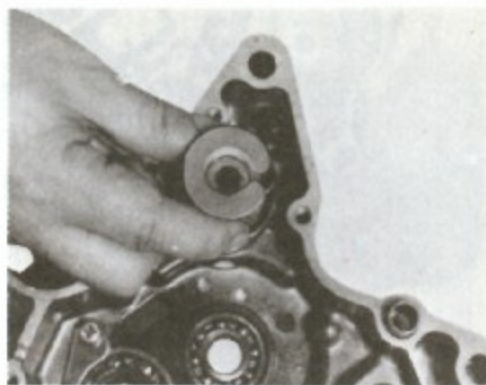
23. Draw out counter and drive shaft with gears.



24. Remove the circlip by using special tool.

09900-06104

Snap ring pliers



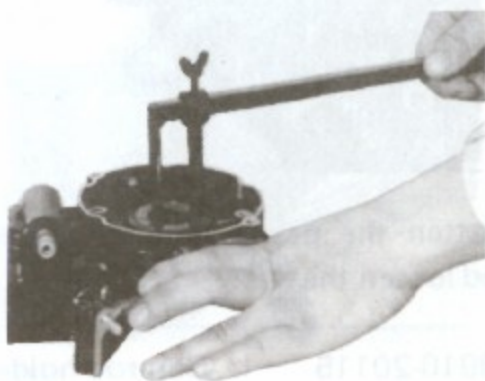
25. Take off the spring guide.



26. Remove the spring and kick starter shaft.



27. Remove the crankshaft from the crankcase.



28. Remove the oil seal by special tool.

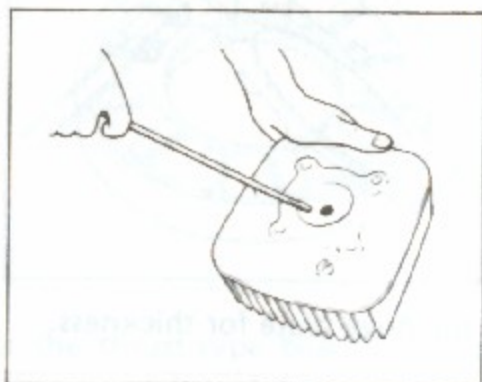
09913-50121

Oil seal remover

Do not re-use damaged oil seals. Make sure that each oil seal is in good condition, with its lip absolutely free of any damage or of evidence of distortion.

INSPECTION AND SERVICING ON ENGINE COMPONENTS

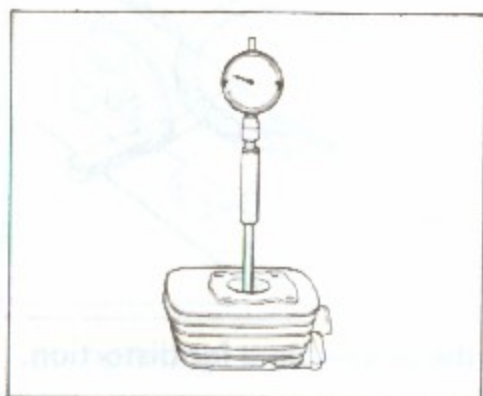
CYLINDER HEAD



Remove the carbon and clean the cylinder head.

Check the scratch on the mating surface.

CYLINDER



Decarbon the exhaust ports and the upper part of the cylinder. Check the cylinder bore for wear by using a cylinder gauge at 20 mm (0.79 in.) from the top surface.

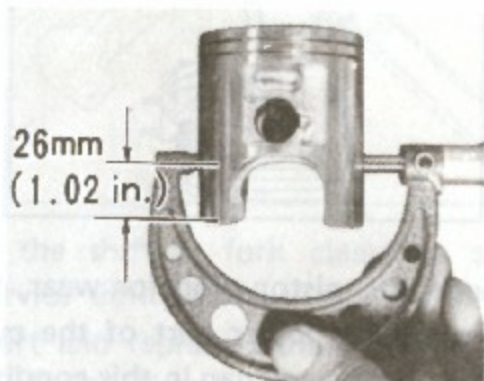
Standard	62.000 – 62.015 mm (2.441 – 2.442 in.)
----------	---

Service Limit	62.070 mm (2.444 in.)
---------------	--------------------------

CAUTION:

After reboring, be sure to lightly chamfer the ports edges with a scraper and smoothen the chamfers with sand paper.

PISTON

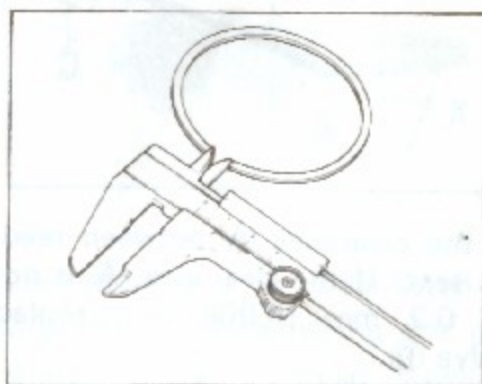


Decarbon the piston crown and the ring grooves. Minor scuff on the sliding surface can be removed by grinding with sand paper #400. Measure the piston diameter at the 26 mm (1.02 in.) from piston skirt end.

Standard	61.935 – 61.950 mm (2.438 – 2.439 in.)
----------	---

Service Limit	61.880 mm (2.436 in.)
---------------	--------------------------

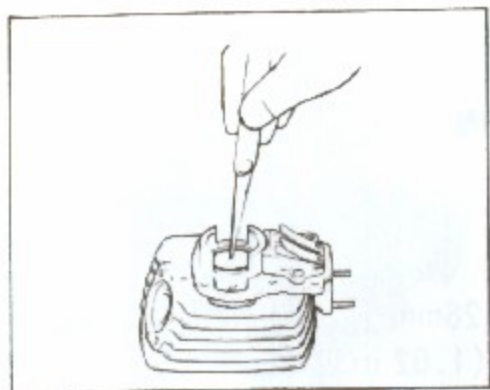
PISTON RING



Check each ring for free end gap.

Standard	4.5 mm (0.18 in.)
----------	-------------------

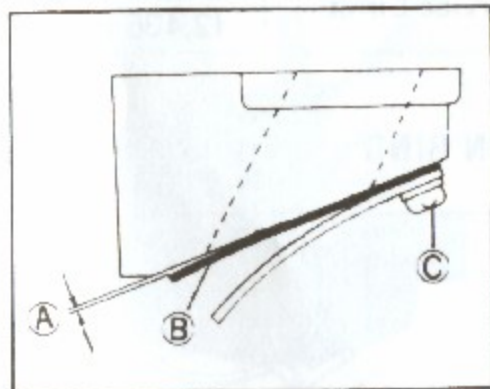
Service Limit	3.6 mm (0.14 in.)
---------------	-------------------



To check the piston ring for wear, fit the ring around the lower part of the cylinder and measure the end gap in this condition of the ring, as shown. If the reading taken exceeds the limit, replace it by a new one.

Standard	0.20 – 0.40 mm (0.008 – 0.016 in.)
Service Limit	0.85 mm (0.033 in.)

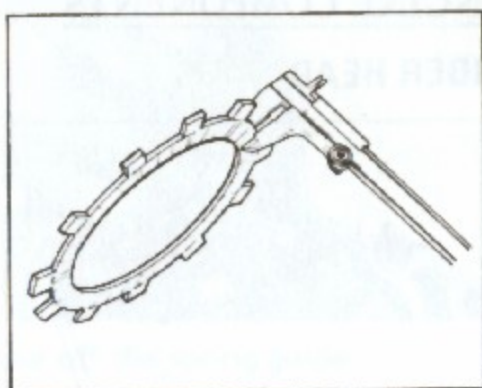
REED VALVE



Check the clearance (A) between reed valve and its seat. If the clearance (A) is noted to exceed 0.2 mm (0.008 in.), replace the reed valve (B).

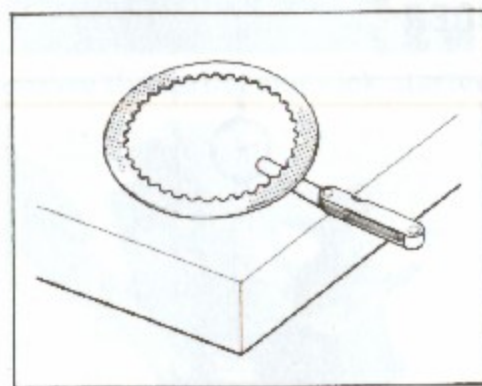
Reed valve fitting screw tightening torque (C)	0.8 – 1.2 N·m 0.08 – 0.12 kg·m 0.5 – 1.0 lb·ft
--	--

CLUTCH PLATE



Check the drive plate for thickness.

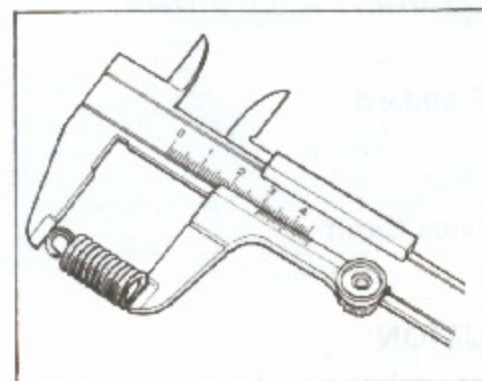
Standard	2.9 – 3.1 mm (0.11 – 0.12 in.)
Service Limit	2.6 mm (0.10 in.)



Check the driven plate for distortion.

Driven plate Service Limit	0.1 mm (0.004 in.)
----------------------------	-----------------------

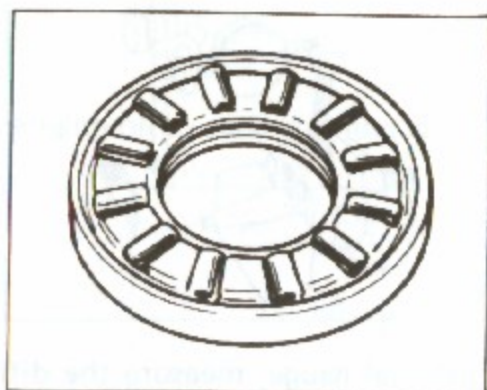
CLUTCH SPRING



Measure the clutch spring free length. If any one of them is longer than service limit, replace all the springs at a time.

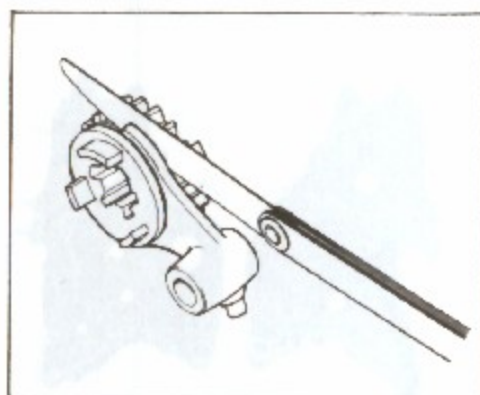
Service Limit	32.0 mm (1.26 in.)
---------------	--------------------

CLUTCH RELEASE BEARING



Inspect the thrust-type bearing for any abnormality especially cracks.

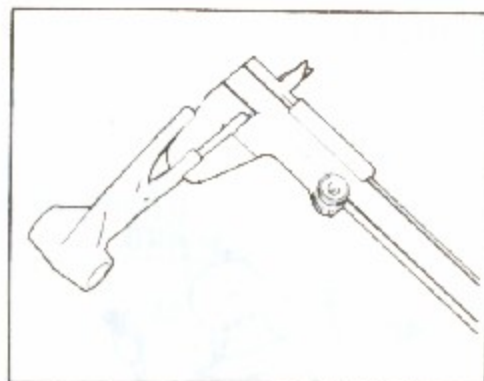
SHIFTING FORK-GROOVE CLEARANCE



Check the shifting fork clearance in the groove of its gear.

Standard	0.05 – 0.25 mm (0.002 – 0.010 in.)
----------	---------------------------------------

Service Limit	0.45 mm (0.018 in.)
---------------	------------------------



When the shifting fork clearance exceeds the service limit, measure the width of the tips part and replace either or both of the shifting fork and gear.

Shift fork groove width	No. 1	4.45 - 4.55 mm (0.175 - 0.179 in.)
	No. 2	5.45 - 5.55 mm (0.215 - 0.219 in.)
Shift fork thickness	No. 1	4.3 - 4.4 mm (0.169 - 0.173 in.)
	No. 2	5.3 - 5.4 mm (0.209 - 0.212 in.)

COUNTER SHAFT

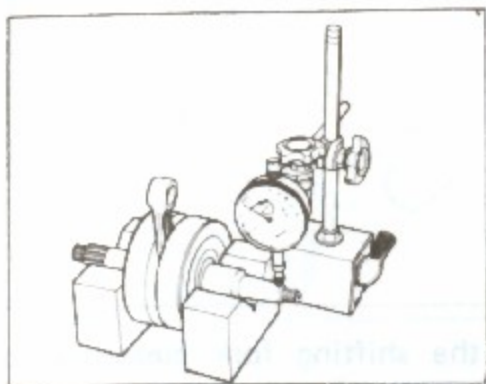
91.85 ± 0.05mm
(3.616 ± 0.002in.)



The 2nd drive gear is press-fitted on the countershaft. In reassembling the gears on the shaft, apply "Thread Lock Super 1303B" to the 2nd drive gear bore and press-fit it over the end of the countershaft so that the distance between the 1st and 2nd drive gears agrees with the specification as shown.

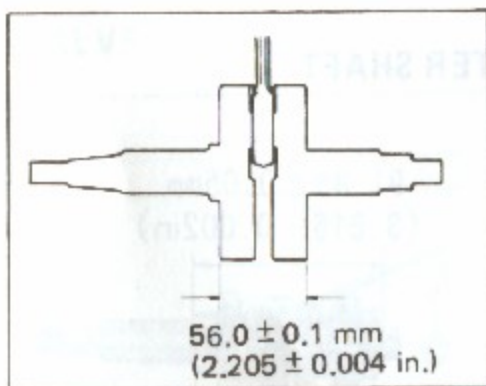
Standard distance	91.85 ± 0.05 mm (3.616 ± 0.002 in.)
99104-32030	Thread Lock Super "1363A"

CRANK SHAFT



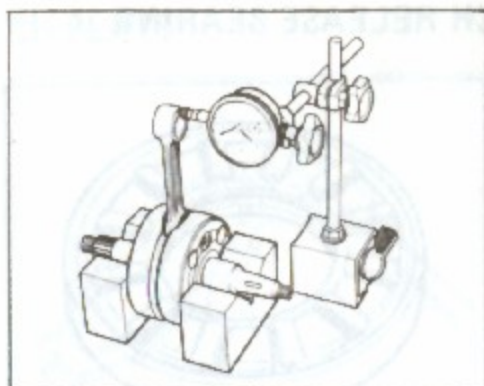
Check the crankshaft for deflection with dial gauge. Deflection is total dial reading, and is specified to be within the following limit.

Service Limit	0.05 mm (0.002 in.)
---------------	------------------------



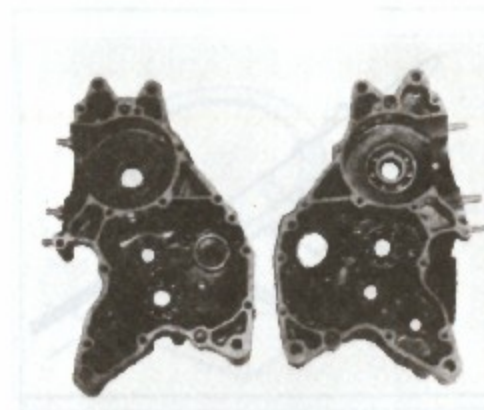
When rebuilding the crankshaft, measure the flywheel width with caliper.

Standard	56.0 ± 0.1 mm (2.205 ± 0.004 in.)
----------	--------------------------------------



Using the dial gauge, measure the deflection of the connecting rod small end.

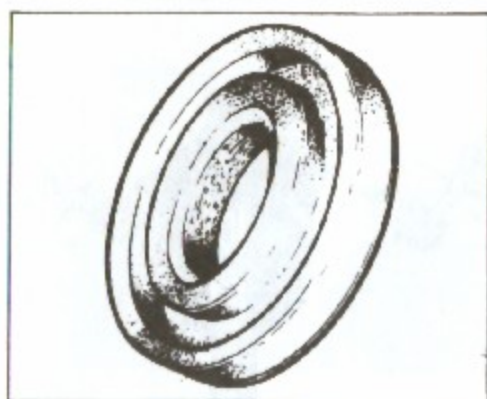
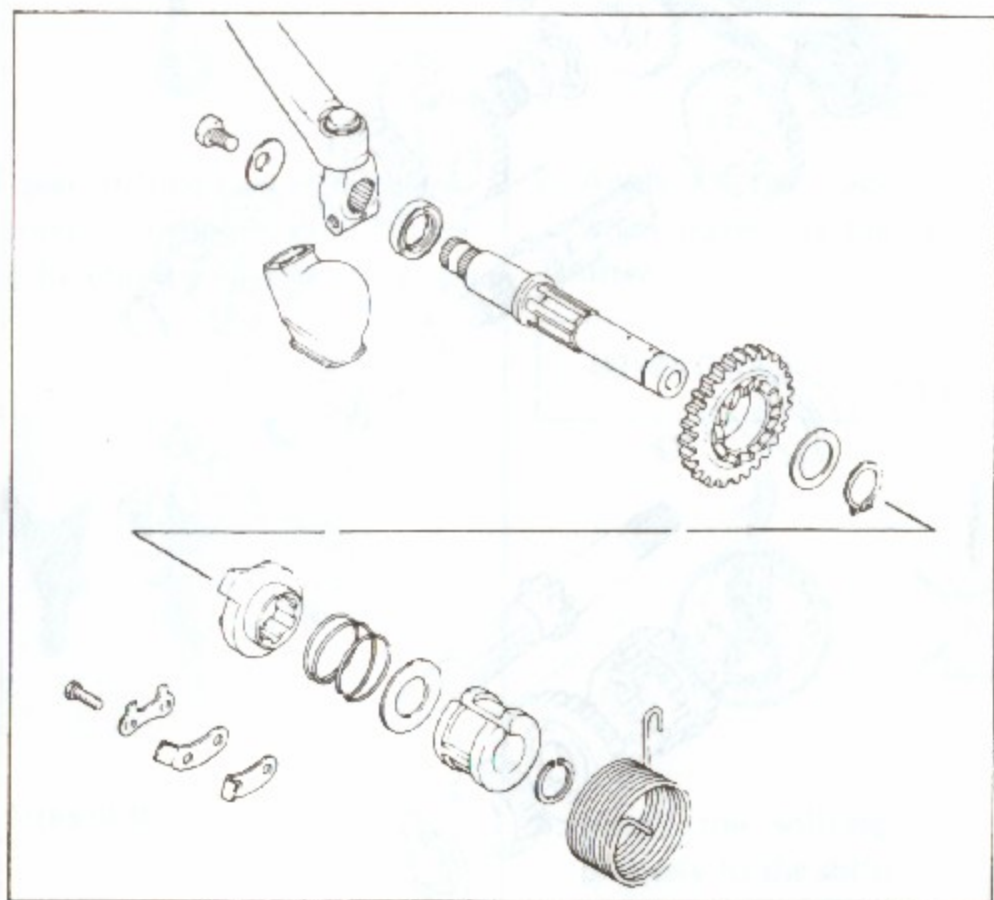
Service Limit	3.0 mm (0.12 in.)
---------------	-------------------



Wash the bearing with cleaning solvent and lubricate with motor oil before inspecting. Turn the inner race and check to see that it turns smoothly. If noise is heard, replace it.

REASSEMBLY

Apply engine oil to each running and sliding part before installing it in reassembling.



1. Apply grease to lip of oil seals, and fit the crankshaft on the crankcase.

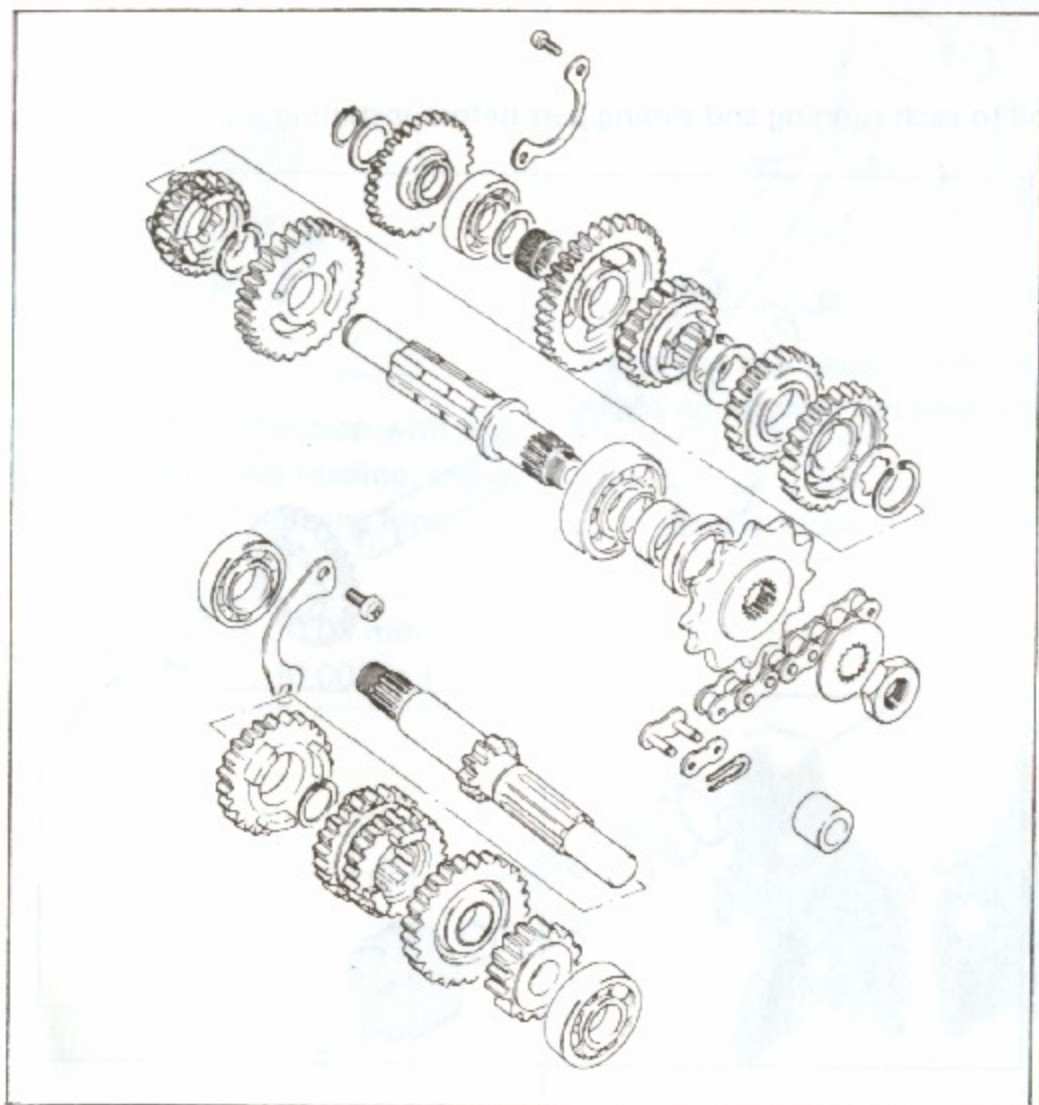
99000-25030

SUZUKI SUPER
GREASE "A"



2. Fix the kick starter so that the marking on the kick starter matches the marking on the kick starter shaft.

GEAR LOCATION

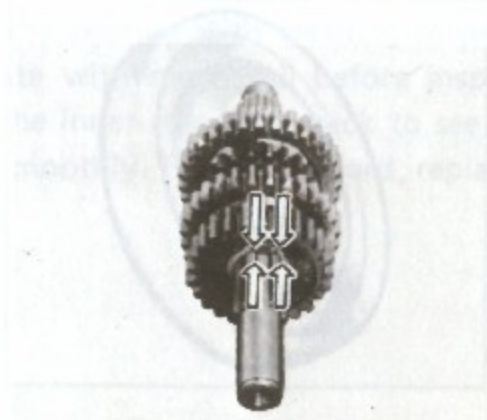


CAUTION:

Never reuse a circlip after a circlip has been removed from a shaft, it should be discarded and new circlip must be installed.

When installing a new circlip, care must be taken not to expand the end gap and larger than required to slip the circlip over the shaft.

After installing a circlip, always insure that it is completely seated in its grooved and securely fitted.



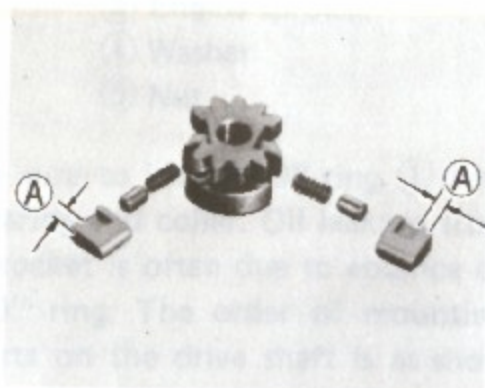
3. Fix both countershaft and drive shaft to the crankcase.



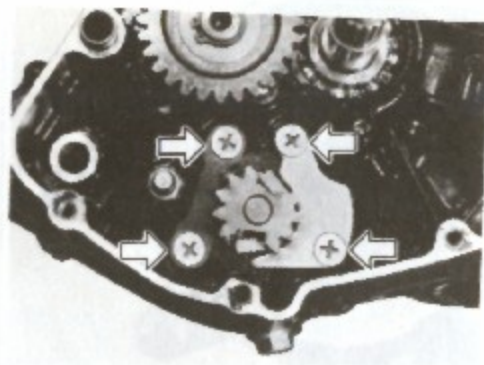
4. Install the gear shifting cam to the crankcase and bring it to the neutral position. (Drain plug functions as gearshifting cam stopper.)



5. Install the forks in the gear groove.

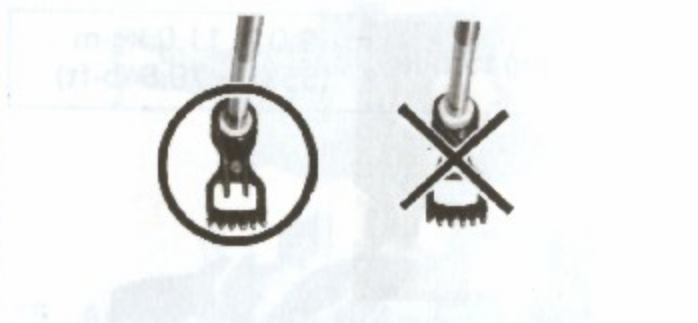


6. Install the two cam drive gear pawls properly. (A) should face outside.

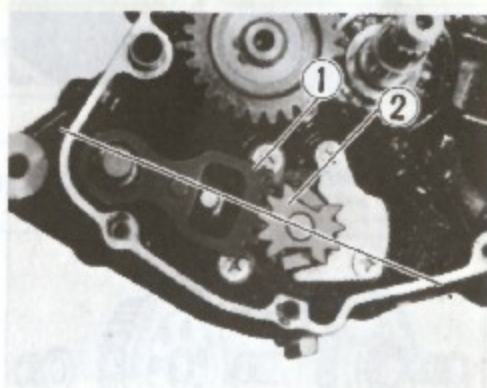


7. Apply Thread Lock "1363C" to screws when tightening the cam guide and pawl lifter.

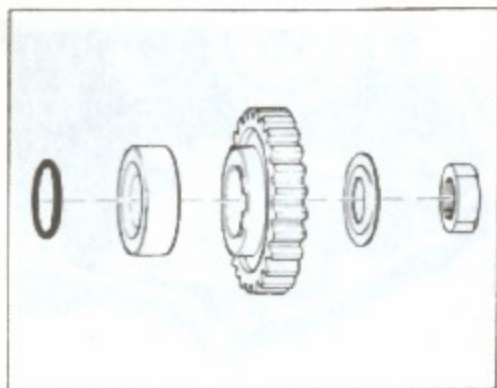
99104-32050	Thread Lock "1363C"
-------------	---------------------



8. Install the shifting shaft return spring properly to the shifting shaft.



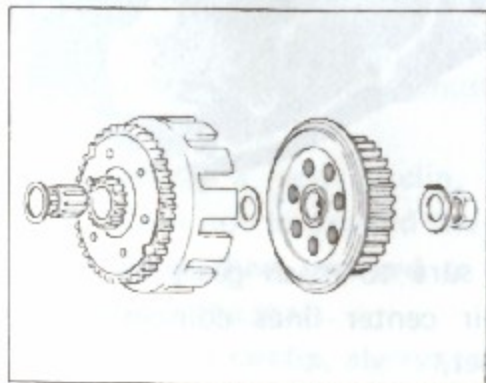
9. Be sure to mesh gears ① and ② with their center lines coinciding with each other.



10. The relative position of parts associated with the primary drive gear is as shown in this illustration. Be sure to install the "O" ring.

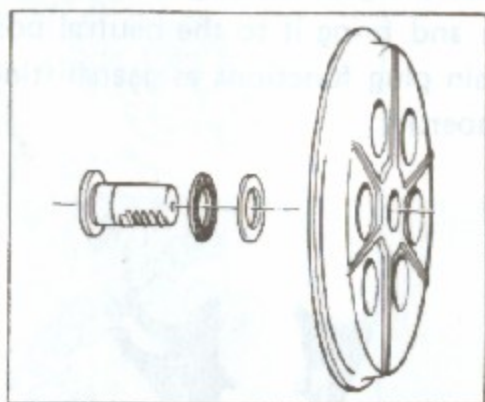
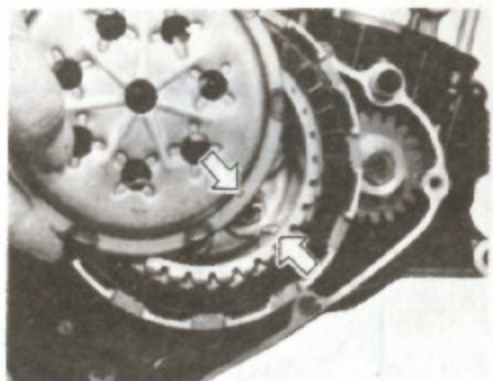
Tighten the primary drive gear and bend the washer at two places.

Tightening torque	9.0 – 11.0 kg-m (65.0 – 79.5 lb-ft)
-------------------	--



11. Attach the washer as shown in the photo, tighten the clutch sleeve hub nut and bend the washer.

Tightening torque	4.0 – 6.0 kg-m (29.0 – 43.0 lb-ft)
-------------------	---------------------------------------



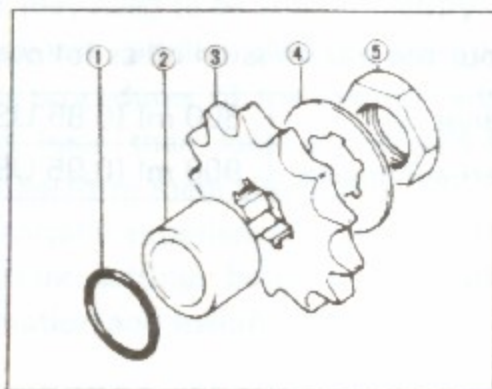
12. Install the clutch pressure plate so that mark on the plate is aligned with boss in the clutch sleeve hub.



13. Using the spring hook, install clutch spring pin in the indicated manner.

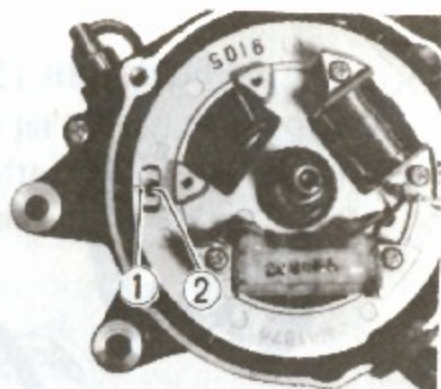
09920-20310

Clutch spring hook



- ① "O" ring
- ② Collar
- ③ Engine sprocket
- ④ Washer
- ⑤ Nut

14. Be sure to install "O" ring ① between bearing and collar. Oil leakage from the sprocket is often due to absence of this "O" ring. The order of mounting the parts on the drive shaft is as shown in this illustration:



15. The engraved line ① (on stator) is aligned to the center of screw ② and the stator is secured in that position.



16. Apply Thread Lock Super "1332B" to the flywheel rotor nut and tighten the nut.

Tightening torque

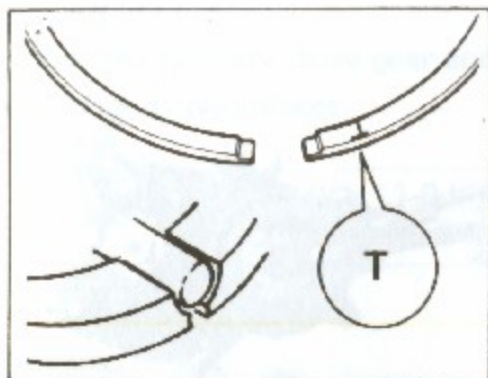
3.0 – 4.0 kg-m
(21.5 – 29.0 lb-ft)

99104-32090

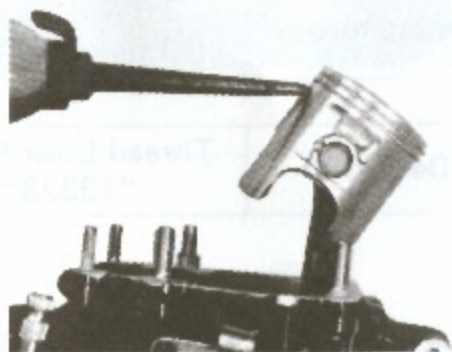
Thread Lock Super
"1332B"



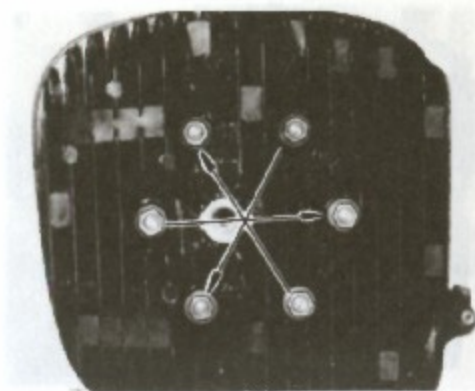
17. The arrow mark on the piston crown points to exhaust port side.



18. Each piston ring must be so positioned in the groove as to bring its marked side (near joint) to top side and to locate the joint at the locating pin.



19. Apply engine oil to the piston surface and insert the piston in the cylinder.



20. After installing the cylinder head, gradually tighten the nuts as shown in the photo.

Tightening torque	2.0 – 2.5 kg-m (14.5 – 18.0 lb-ft)
-------------------	---------------------------------------

21. Pour the transmission oil as follows.

Change oil	800 ml (0.85 US qt)
Overhaul engine	900 ml (0.95 US qt)

CARBURETOR

The carburetion of your motorcycle was carefully selected after extensive testing. You will find that the carburetion will function smoothly under many varied operating conditions. For best results we recommend that the adjustments and carburetion jetting be left "as is" from the factory. Some riders may operate their motorcycle under extreme operating conditions such as; very high altitudes or extremely cold and hot temperatures. In these circumstances the jetting of the carburetor or other adjustments may need to be altered slightly. Riders who are not familiar with the operation and jetting procedures of the Mikuni carburetor should have their local authorized Suzuki dealer perform these alterations.

Mechanically experienced riders can alter the carburetor settings based on the following information and specifications.

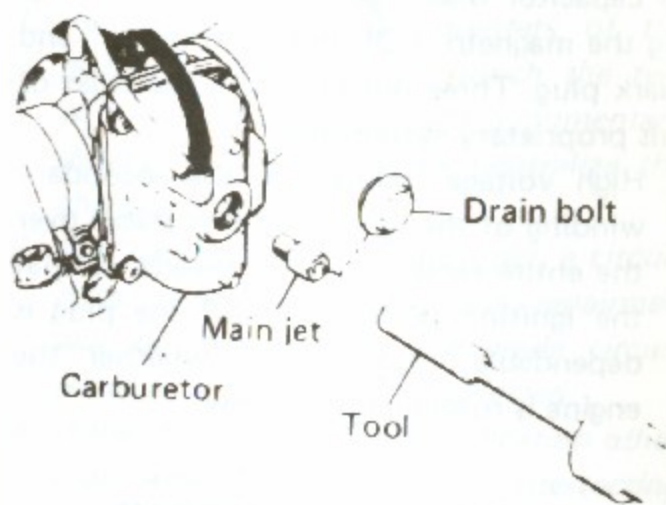
CARBURETOR SPECIFICATIONS

Bore	34 mm
Main jet	#250
Jet needle	6DP17-4
Needle jet	R-3
Cut-away	2.0
Pilot jet	#25
Pilot air adjusting screw	1-1/2 29.2 ± 1.0 mm
Float height	(1.15 ± 0.04 in)

Optional main jets
#220, #230, #240, #260 and #270

MAIN JET REPLACING

The main jet is usually the component which is most often changed. A convenient method of replacement is provided.



1. Move fuelcock lever to OFF position.
2. Remove the drain bolt on float chamber to empty the chamber of fuel.
3. Loosen clamp screws on both sides of carburetor and turn the carburetor around to bring its float chamber toward you.
4. Insert the main jet replacing tool into the drain bolt hole and, with this tool, remove the main jet.
5. Install the main jet of another number in the carburetor. Plug up the float chamber by refitting the drain bolt.
6. Restore the carburetor (which is now tilted condition) to the original position by turning it around, and tighten the clamp screws on both sides to secure the carburetors in place.

IGNITION SYSTEM

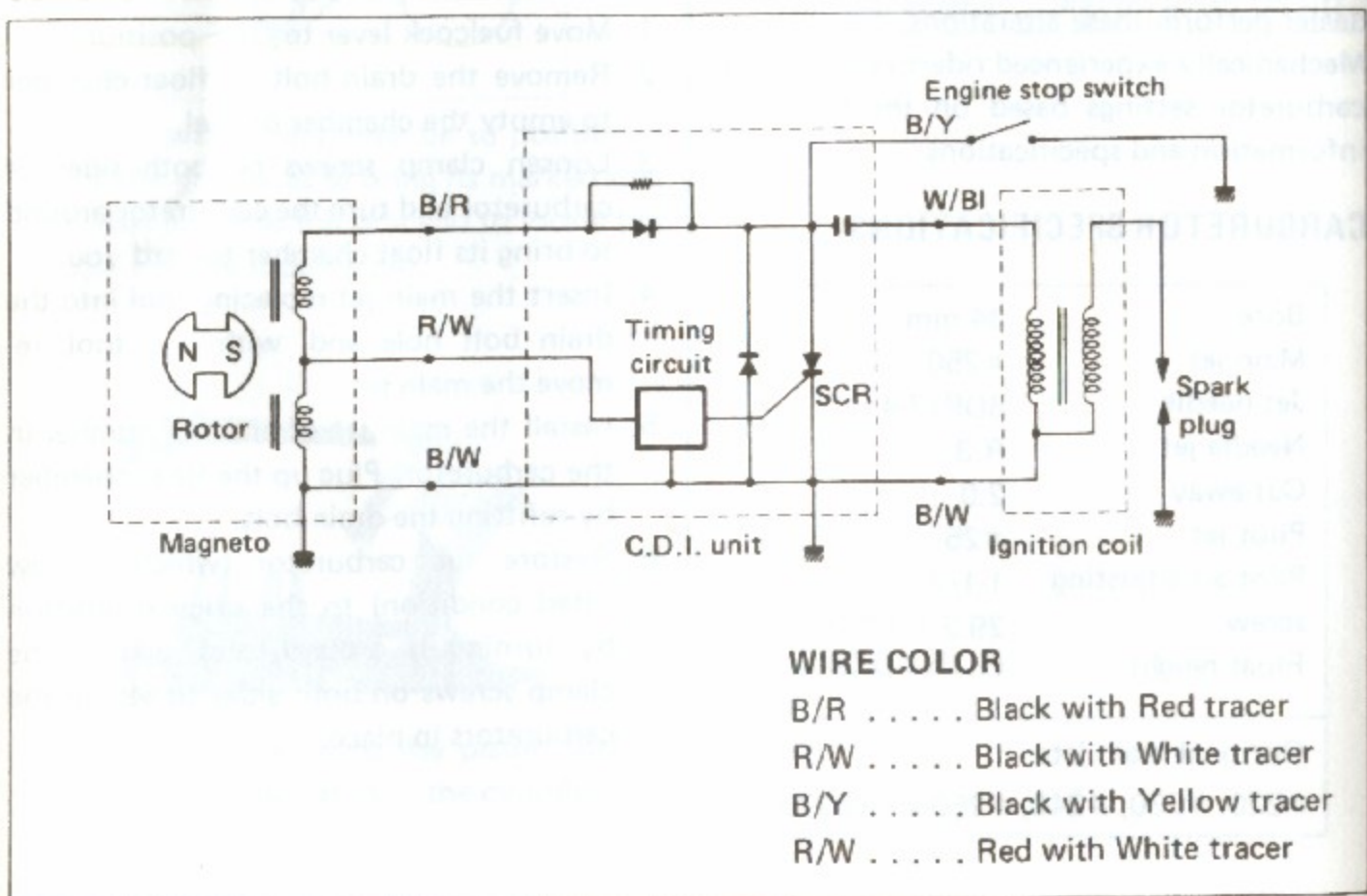
SUZUKI "PEI" SYSTEM

In the PE175, ignition energy is supplied to the spark plug through electronically triggered capacitor discharge in a system comprising the magneto, CDI unit, ignition coil and spark plug. Three outstanding advantages of this proprietary system are:

1. High voltage induced in the secondary winding of the ignition coil is stable over the entire range of engine speeds, so that the ignition performance of the plug is dependable, regardless of whether the engine is running fast or slow.

2. There is no need of so frequently checking and adjusting the ignition system components as in the conventional system based on a breaker mechanism for make-break contacting action. Make-break action is electronic in the SUZUKI "PEI" system.
3. Ignition timing is automatically advanced in a manner best suited to the operating characteristic of the engine.

SUZUKI "PEI" CIRCUIT DIAGRAM



CHECKING CDI UNIT

Use a circuit tester as an ohmmeter. The two testing prods, (+) and (-), are to be put to terminals of the CDI unit in reference to the chart shown.

09900-25002	Pocket tester
09900-28106	Electro tester

The CDI unit has five terminals. The (+) prod or pointer is to be put to one of the terminals listed in the top horizontal row, and the (-) prod or pointer to the corresponding terminals listed in the vertical column. What the circuit tester or ohmmeter should indicate for the two terminals is given in the intersecting box, (ON or Approx. $3\text{ k}\Omega$, CON, OFF or $\infty\ \Omega$).

The meanings of these terms are as follows:

Term	Significance
ON	The tester shows circuit continuity.
OFF	The tester shows infinitely large resistance or, for short, infinity
CON	The indicating hand deflects a little but promptly returns to the infinity end of the scale.

CAUTION:

Never use an insulation-resistance meter (so-called megger) for this purpose or circuit elements inside the CDI unit will suffer rupture.

NOTE:

1. Before putting probe pointers of the tester to two terminals, touch the two with a jumper lead to form a momentary short-circuit in order to neutralize the charges, if any.
2. For the instrument to be used, a circuit tester of the type used by radio repairmen will do. However, a high-grade circuit tester or an ohmmeter is preferred.
3. If the instrument gives an indication other than what is shown in the intersecting box in the chart for any pair of terminals, it means that the CDI unit is defective and needs replacement.

(X k Ω range)

		Positive (+) prod				
		Black/White	Black/Yellow	Black/Red	Red/White	White/Blue
Negative (-) prod	Black/White		3 k Ω	$\infty\Omega$	3 k Ω	CON
	Black/Yellow	OFF		$\infty\Omega$	OFF	CON
	Black/Red	OFF	3 k Ω		OFF	CON
	Red/White	OFF	OFF	OFF		OFF
	White/Blue	OFF	CON	$\infty\Omega$	OFF	

CHECKING IGNITION COIL

The ignition coil is to be checked for continuity in both primary and secondary windings. Exact ohmic readings are not necessary, but, if the windings are in sound condition, their continuity will be noted with these approximate ohmic values:

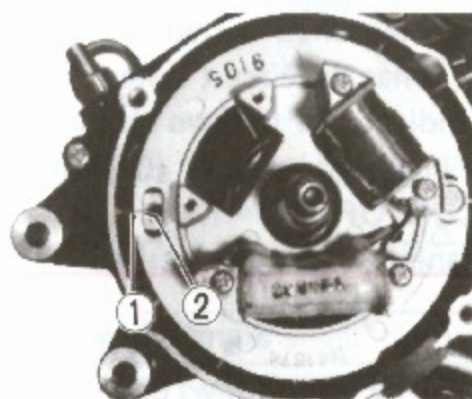
BLACK/WHITE –	
WHITE/BLUE	0 – 1 Ω
Plug cap – BLACK/WHITE or	
WHITE/BLUE	10 – 11k Ω

MAGNETO

Using the circuit tester, check the high-speed and low-speed coils for ohmic resistance. Coils in good condition will exhibit these values:

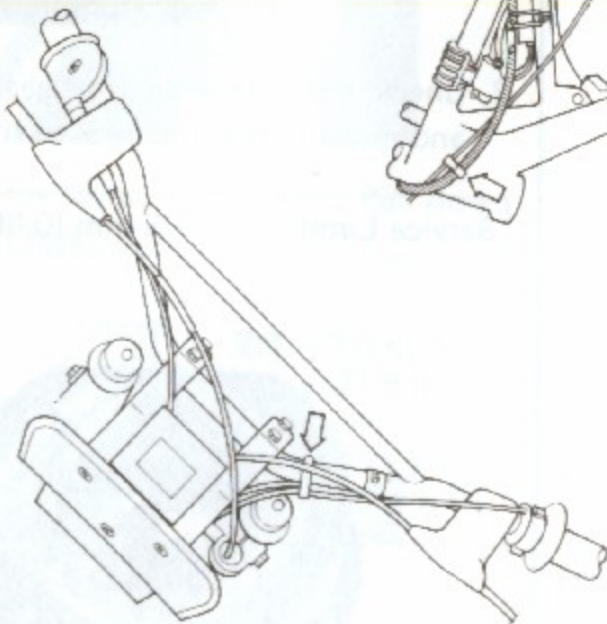
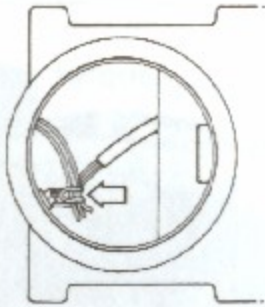
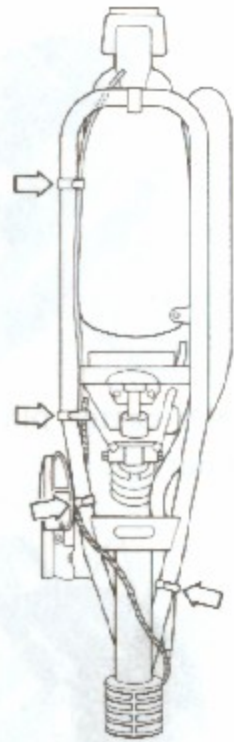
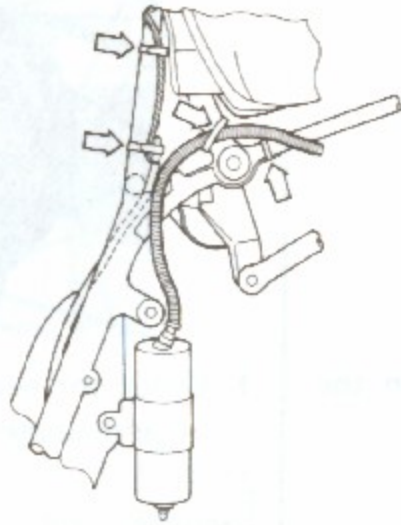
BLACK/WHITE –	
RED/WHITE	200 – 260 Ω
RED/WHITE –	
BLACK/RED	20 – 30 Ω
YELLOW/RED –	
BLACK/WHITE	0.5 – 1.5 Ω

IGNITION TIMING ADJUSTMENT



The engraved line ① (on stator) is aligned to the center of screw ② and the stator is secured in that position.

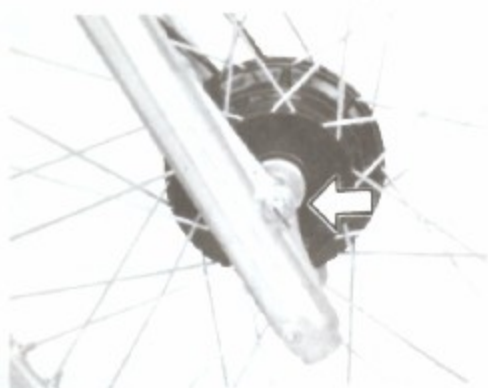
WIRE ROUTING



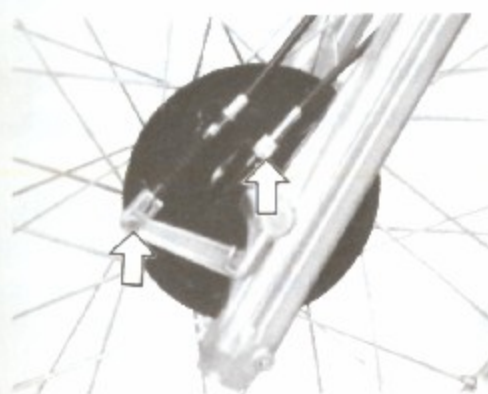
↑ Clamp position

FRONT WHEEL

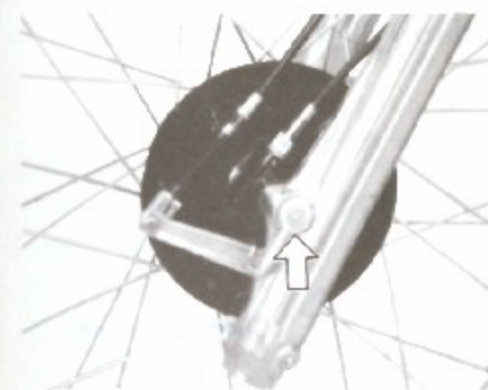
REMOVAL



1. Pull out the cotter pin and loosen the front axle nut.



2. Disconnect the front brake and the trip-meter cables.



3. Pull out the front axle.

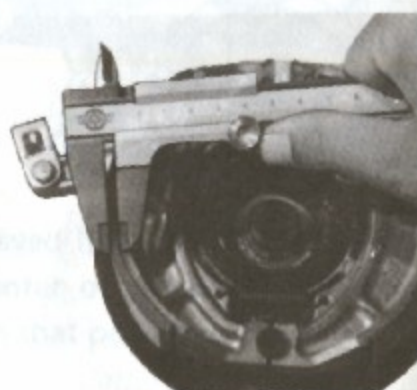
Tightening torque	3.60 – 5.20 kg-m (26.0 – 37.5 lb-ft)
-------------------	---

INSPECTION AND SERVICING



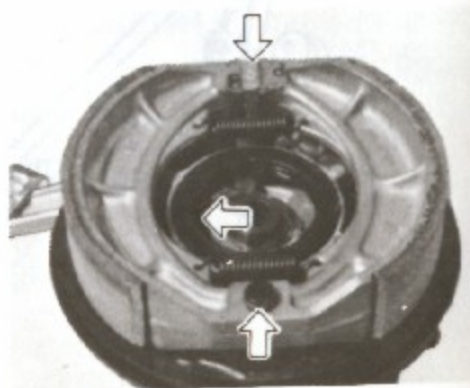
1. Check the bearing noise and measure the inner diameter of brake drum.

Service Limit	130.7 mm (5.15 in.)
---------------	---------------------



2. Check the tripmeter drive gears for wear and measure the thickness of brake shoe.

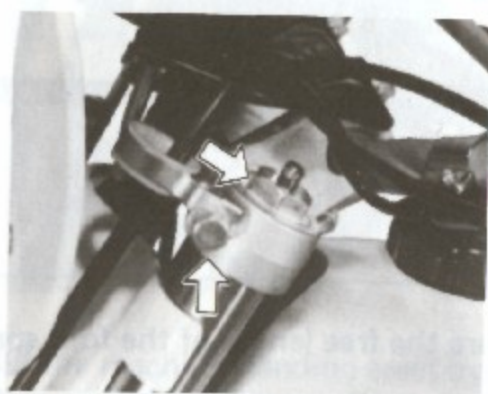
Service Limit	1.5 mm (0.06 in.)
---------------	-------------------



3. Apply grease on the gears and cam.

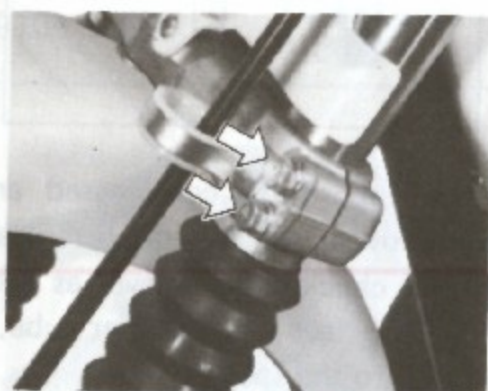
FRONT FORK

DISASSEMBLY



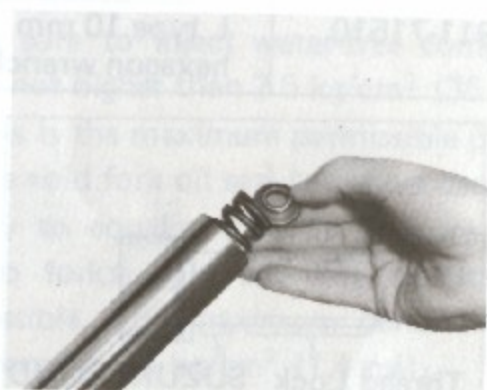
1. Remove the front wheel.
2. Loosen the front fork cap bolt after loosening the upper clamp bolt.

Tightening torque	1.5 – 3.0 kg-m (11.0 – 21.5 lb-ft)
-------------------	---------------------------------------



3. Loosen the lower clamp bolts. Pull down the front fork.

Tightening torque	Upper clamp bolt	2.0 – 3.0 kg-m (14.5 – 21.5 lb-ft)
	Lower clamp bolt	1.5 – 2.5 kg-m (11.0 – 18.0 lb-ft)



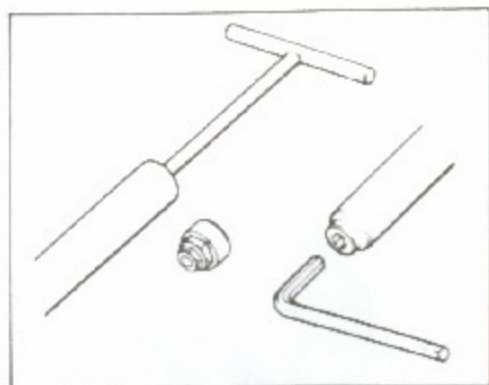
4. Remove the front fork cap bolt.
5. Draw out spacer, spring set and fork spring.



6. Invert the fork, and stroke it several times to let out the oil inside. Under the condition (inverted condition), hold the fork for a few minutes.

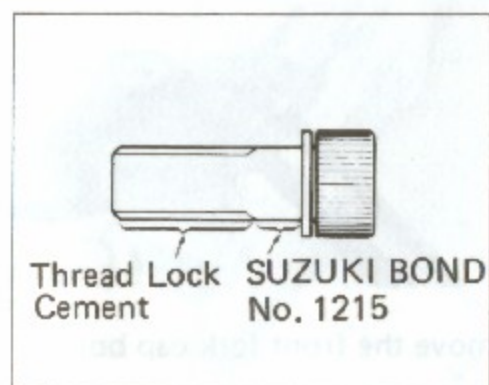
NOTE:

In installing the fork on the chassis pour in the fork oil and gently stroke the fork several times. As to quantity of oil, consult "Inspection & adjustment".



7. Remove the bolt securing the cylinder to the outer tube by using special tools.

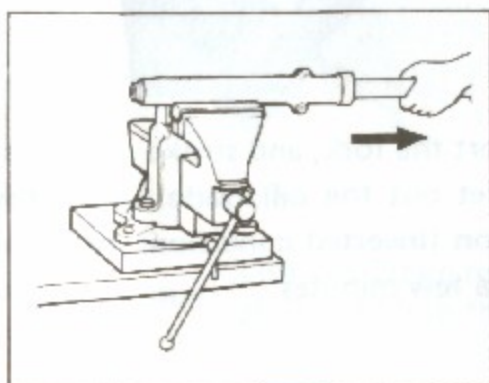
09940-34520	T handle
09940-34580	Attachment F
09911-71510	L type 10 mm hexagon wrench



When reassembling, apply both the Thread Lock "1363C" and SUZUKI BOND "1215" to the damper rod bolt as shown.

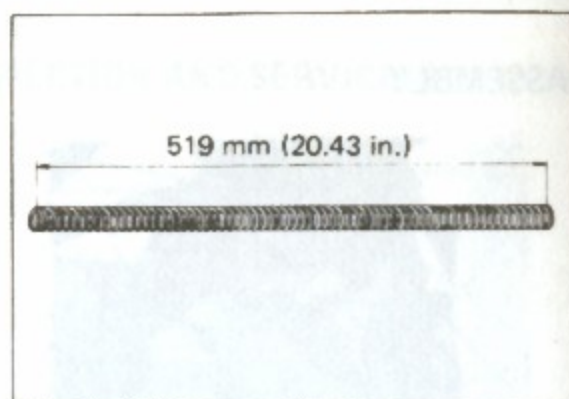
99104-32050	Thread Lock "1363C"
99104-31110	SUZUKI BOND "1215"

8. Remove the snap ring.



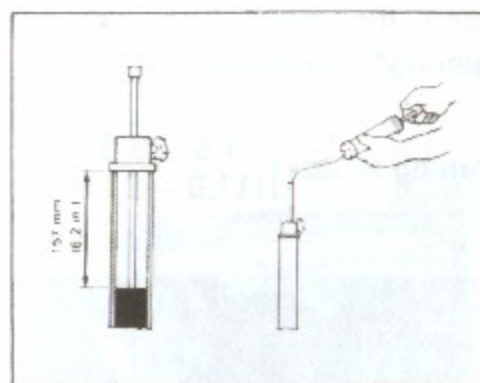
9. Remove the oil seal holder and oil seal by slowly pulling out the inner tube. Be careful not to damage the inside of the tube.

INSPECTION & ADJUSTMENT



Measure the free length of the fork spring.

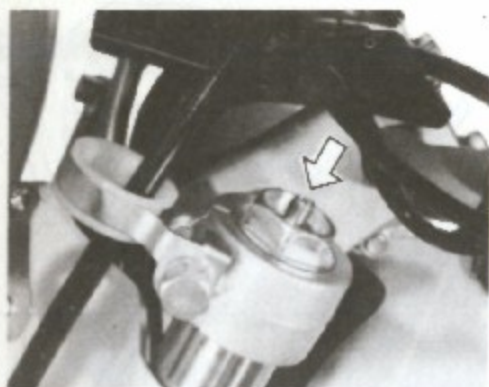
Service Limit	509 mm (20.0 in.)
---------------	-------------------



With the fork fully compressed and the spring removed, set the oil level gauge as shown and check the oil level as measured from the top face of the inner tube. adjust the oil level to the specification.

09943-74111	Front fork oil level gauge
Oil level	157 mm (6.2 in.)
Oil capacity	451 ml each leg (15.24/15.88 US/Imp oz)

AIR PRESSURE ADJUSTMENT

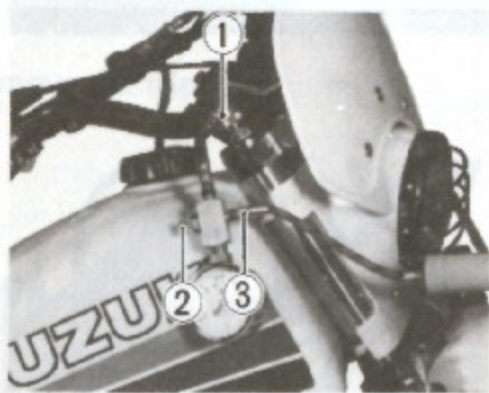


1. Hold the machine standing erect by blocking up, keeping the front wheel off the floor.
2. Push in the valve to let out the pressure. Be sure to bleed the pressure out completely.

When replacing the air valve, apply Thread Lock "1363C" to the air valve screw.

99104-32050

Thread Lock
"1363C"



3. Set up the pressure gauge as shown. Tighten up knob ① and knob ②.

09940-44120

Front fork pressure
regulating gauge

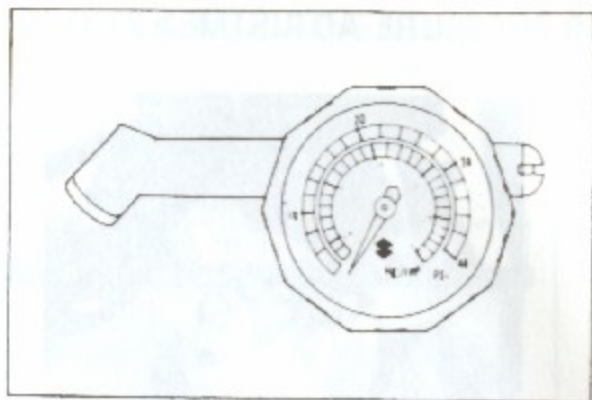
4. Inject water-free compressed air through valve ③ until the pressure gauge reads the desired level not higher than 2.5 kg/cm² (35 psi).
5. Back away (loosen) knob ② to bleed out the excess pressure, if any, to secure the desired air pressure inside the fork.

REQUIREMENTS ON AIR

- * Be sure that the compressed air supply comes through a de-watering filter. Instead of air, nitrogen gas may be used.
- * Just before charging air in, see that the valve is not loose by using the valve tightener.
- * Be sure to inject water-free compressed air not higher than 2.5 kg/cm² (35 psi). This is the maximum permissible pressure to a void fork oil seal and valve damage.
- * Try to equalize the air pressure of the two forks, right and left, as closely as possible. The maximum permissible difference is 0.1 kg/cm² (1.4 psi).
- * Before riding out, be sure to check that the air pressure is at the prescribed level.

NOTE:

The above method is based on the use of the special-tool pressure gauge available from SUZUKI but, instead of this gauge, the one furnished with each this gauge, the one furnished with each PE175 machine may be used. The furnished gauge (included in the kit) must be used in this manner: 1) fit it to the valve squarely, and 2) upon reading the pressure, let it off the valve snappily.



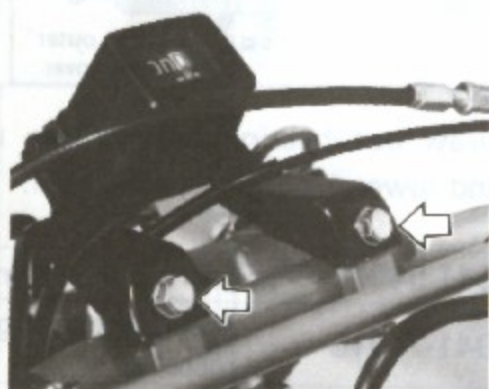
- * (A) **Standard setting Pressure:** 0 kg/cm² (0 psi)
- Oil level:** 157 mm (6.2 in.)
- 451 ml (18.24 US oz)

STEERING

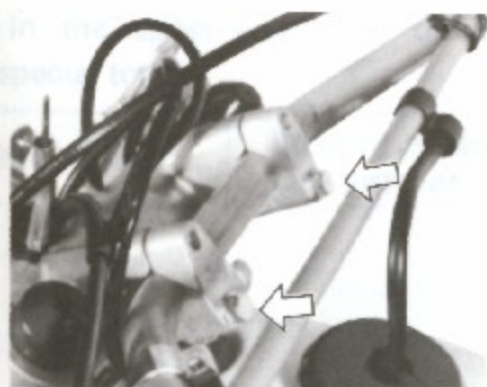
DISASSEMBLY



1. Remove the front wheel.
2. Remove the headlight.



3. Remove the tripmeter.



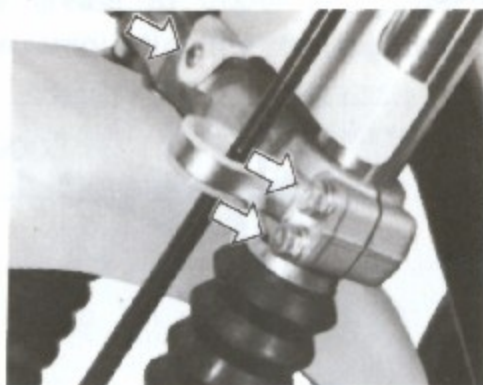
4. Remove the handlebar clamp bolts and take off the handlebar.



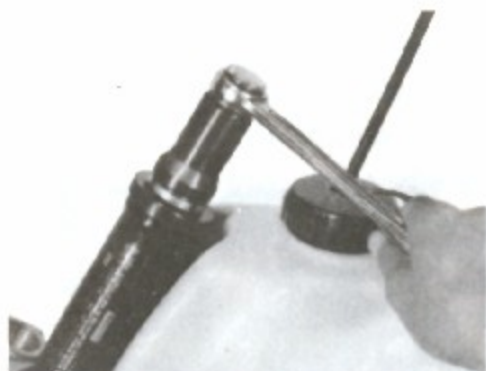
5. Remove the steering stem head bolt and loosen the front fork upper clamp bolts.



6. Remove the upper bracket.



7. Loosen the front fork lower clamp bolts and remove the front forks.
Remove the headlight housing.



8. Remove the steering stem nut with the special tool.

09940-14910

Steering nut socket wrench



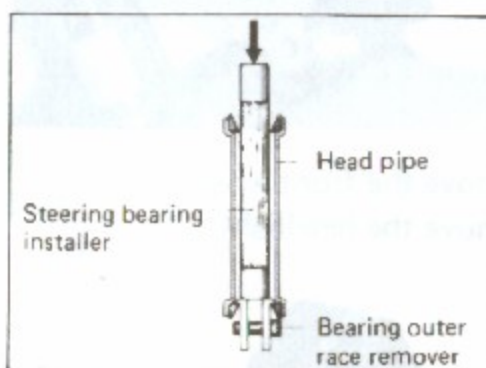
9. Draw out bearing and steering stem lower bracket.



10. Draw out bearing by using special tool.

09941-84510

Bearing inner race remover



11. Draw out bearing outer races, upper and lower, by using special tool.

09941-54910

Steering race remover

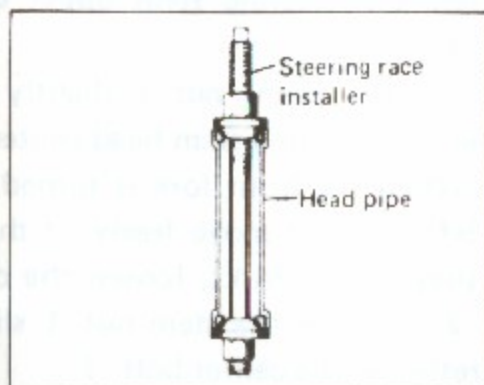
09941-74910

Steering bearing installer

REASSEMBLY

Reassemble and remount the steering stem in the reverse order of disassembly and removal and also carry out the following steps:

Outer races



Press in the upper and lower outer races using special tool.

09941-34511

Steering outer
race installer

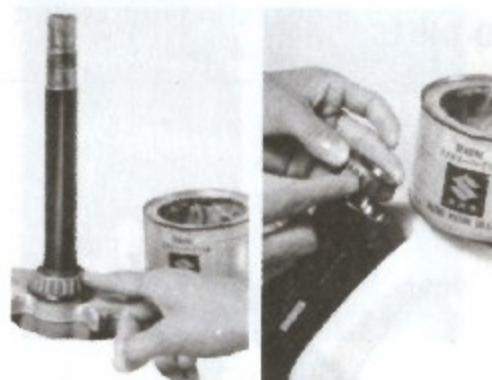
Bearings



Press in the lower bearing by using special tool.

09941-74910

Steering bearing
installer



Apply grease to upper and lower bearing before remounting the steering stem.

99000-25010

Suzuki super
grease "A"

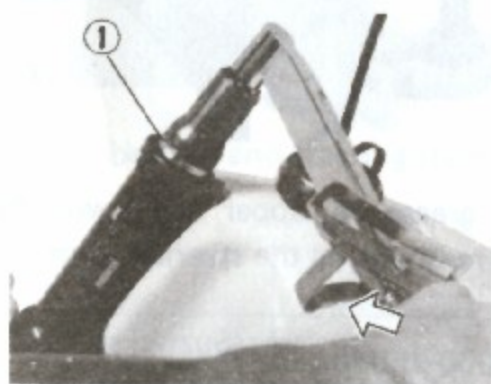


Taper roller type bearings are used on the steering system for better handling. Steering should be adjusted properly for smooth manipulation of handlebars and safe running. Too stiff steering prevents smooth manipulation of handlebars and too loose steering will cause poor stability.

09940-14910

Steering nut socket wrench

Stem nut



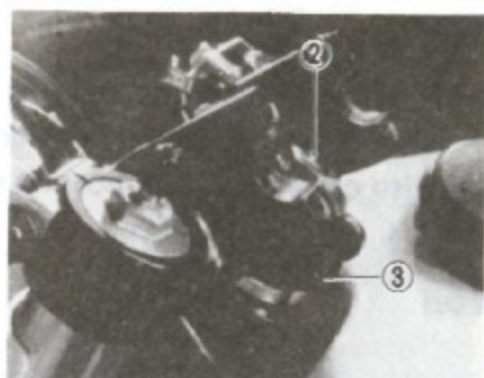
Temporarily tighten the steering stem nut ① by using special tool with specified torque.

09940-14910

Steering nut socket wrench

Tightening torque

4.0 – 5.0 kg-m
40.0 – 50.0 N·m
29.0 – 36.0 lb-ft



- Move the steering stem right and left five or six times to seat the bearings.
- Loosen the steering stem nut ① to 0 kg-m. Then retighten very lightly so that no play can be detected in the stem.
- Install the steering stem upper bracket. Temporarily tighten the steering stem head center bolt ②.
- Tighten the steering stem upper clamp bolt ③.
- Loosen the stem nut ① slightly and tighten the steering stem head center bolt ②. When the front fork is turned right and left, it must move freely. If there is any play in the forks, loosen the center bolt ②, tighten the stem nut ① slightly and retorque the center bolt ②.
- Install the handlebars.

Tightening torque

	N·m	kg-m	lb-ft
Steering stem head center bolt	35.0–50.0	3.5–5.0	25.5–36.0
Steering stem upper clamp bolt	15.0–25.0	1.5–2.5	11.0–18.0
Handlebar clamp bolt	12.0–20.0	1.2–2.0	8.5–14.5

Inspect and check the removed parts for the following abnormalities.

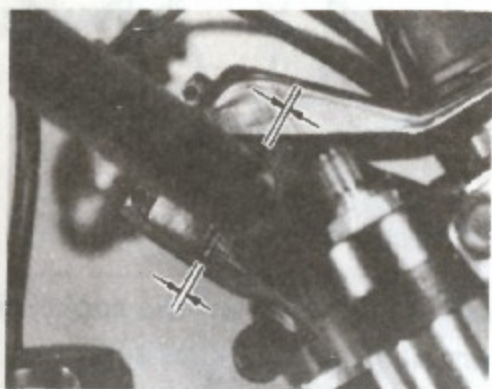
Handlebar distortion

Handlebar clamp wear

Race wear and brinelling

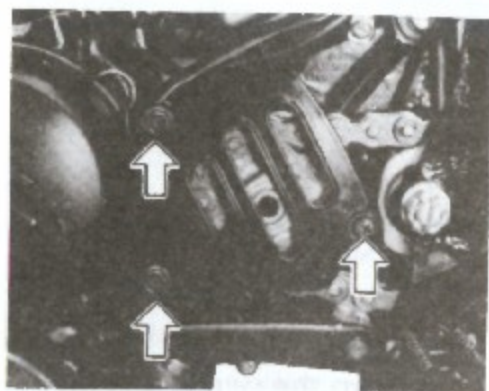
Worn or damaged steel rollers

Distortion of steering stem

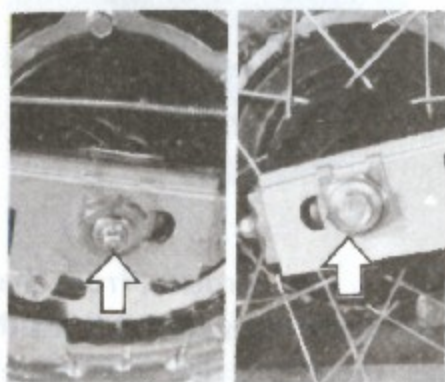


Set the handlebar so that the clearance ahead of and behind the handlebars are equalized.

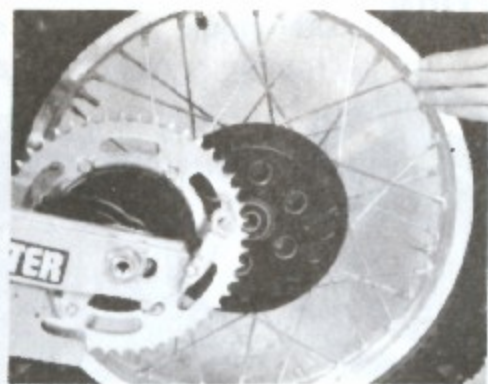
REAR WHEEL



1. Remove the engine sprocket cover and the chain guide plate. Remove the drive chain by removing the chain joint clip.



2. Remove the rear brake cable. Loosen the sleeve nuts after removing the cotter pin and remove the axle shaft.



3. Separate the rear wheel assembly from the rear brake hub panel.



4. Remove the rear brake drum and sprocket from the swinging arm.



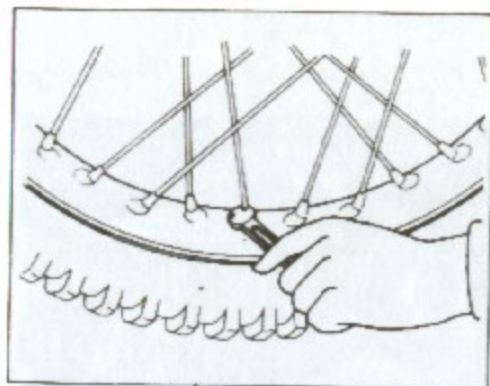
5. Remove the rear sprocket from the brake drum. Self-lock nuts are used for the rear sprocket mounting. Do not reuse these nuts.

INSPECTION



Measure the inner diameter of the brake drum and thickness of the brake shoe.

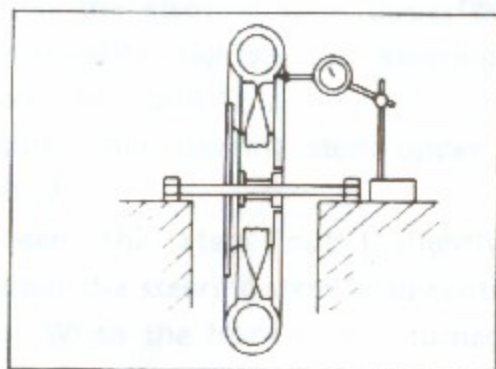
	Service Limit
Drum I.D.	130.7mm (5.15 in.)
Brake shoe	1.5mm (0.06 in.)



After each race, retighten the spoke nipples to prevent damage of nipples and rim.

09940-60113

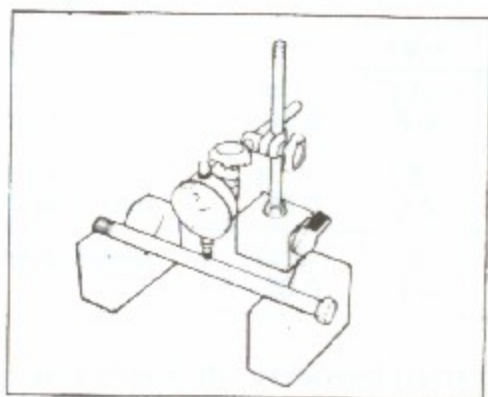
Spoke nipple wrench



Adjust the rim runout by tightening or loosening the spoke nipples.

Service Limit
Axial and Radial

2.0 mm (0.08 in.)



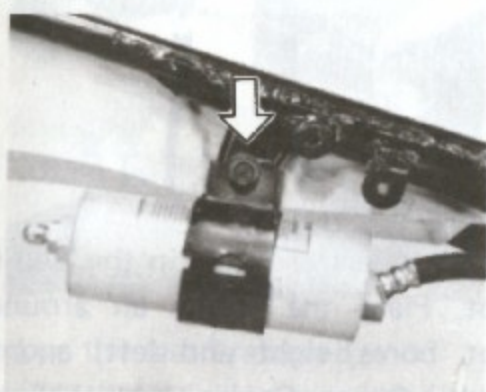
Check the axle shaft for deflection by using a dial gauge.

Service Limit

0.25 mm (0.010 in.)

FULL-FLOATING SUSPENSION SYSTEM

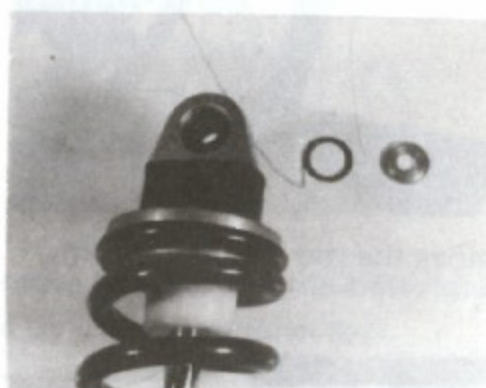
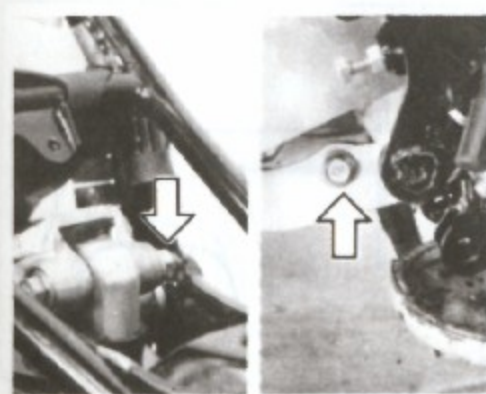
DISASSEMBLY



1. Remove the rear wheel, the frame cover and the seat.
2. Remove the reservoir.



3. Remove the rubber damper while compressing the rear shock absorber. Apply thread lock on the rubber damper screw when installing.



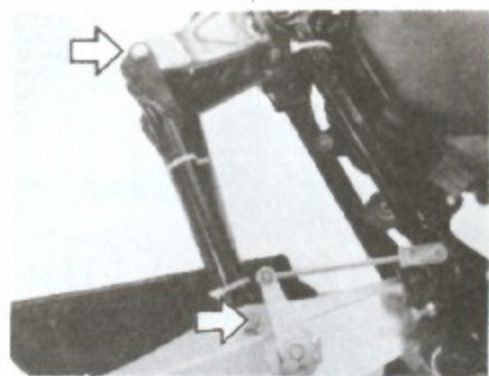
4. Remove the upper and lower shock absorber mounting bolts. Spherical ball bearing is used for upper and lower shock absorber pivoting portion.

CAUTION:

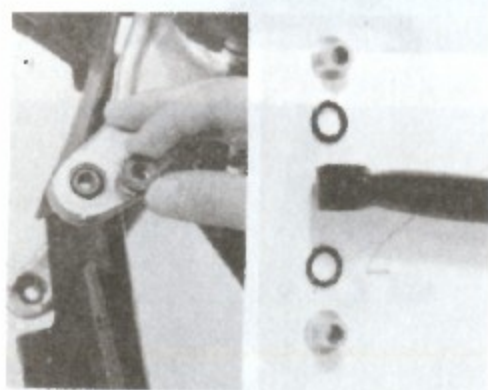
Be sure to apply SUZUKI MOLY PASTE (99000-25140) to the upper and lower side of the rear shock absorber mounting portion.



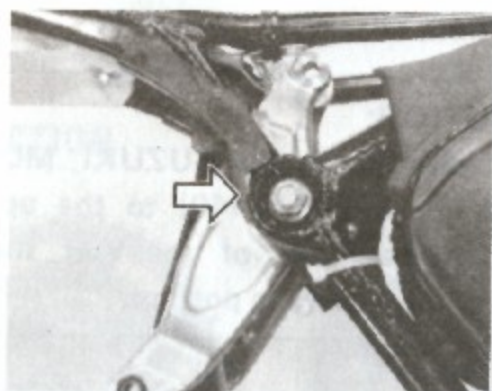
5. Pull out the shock absorber unit upward.



6. Remove the rod and mud guards.



7. Spherical ball bearing and oil seal are used on upper side, and bushing and "O" ring are used on lower side. When reinstalling, apply SUZUKI MOLY PASTE (99000-25140).

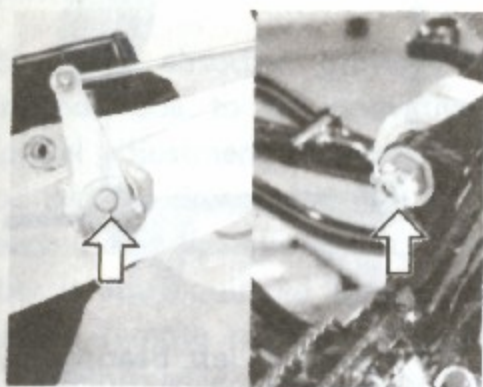


8. Draw out the Bell Crank shaft after loosening the nut and remove the Bell Crank.

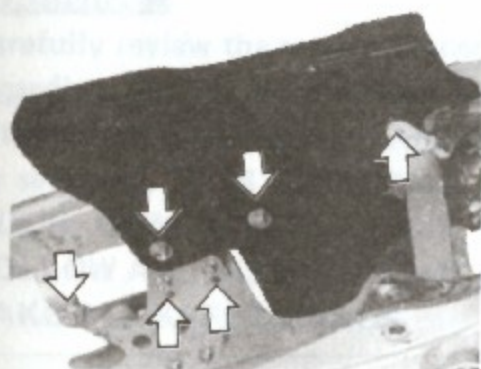


9. Needle rollers are used in the Bell Crank pivot. Place the rollers all around the pivot bores, right and left, and apply Suzuki Super Grease "A" before the assembly.

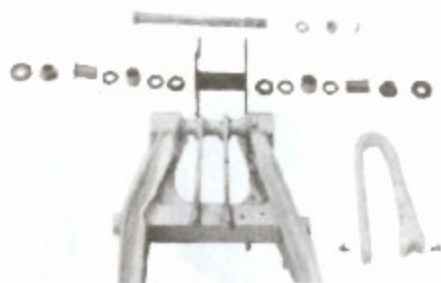
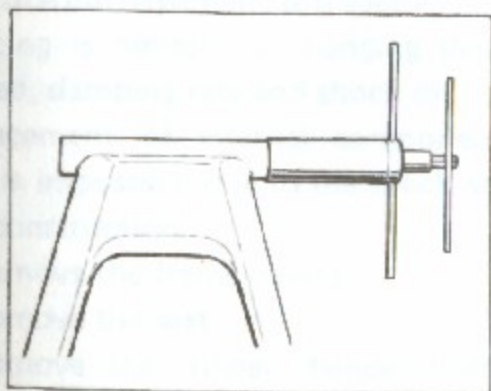
DISASSEMBLING SWING ARM



1. Remove the rear brake rod.
2. Remove the swinging arm pivot nut after pulling off the cotter pin and draw out the swinging arm pivot shaft.



3. Remove the dust seal and pull out the side spacer.
4. Remove the chain guide rollers and the chain guard.



5. Remove the bushing and bearings at both side by using the special tool.

09941-44510

Swinging arm
bearing remover

INSPECTING SWING ARM PARTS



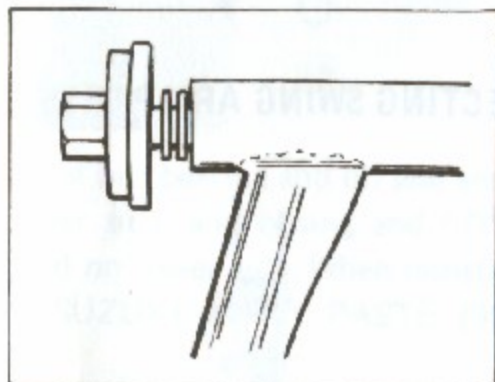
- Swinging arm for distortion and damage.
- Bearings for rattle.
- Pivot shaft distortion
- Chain guide for damage.
- Chain guide roller for wear.

INSPECTING SWING ARM PARTS



Be sure to have the bore cleaned and apply oil to the periphery of each bearing before installing.

Stamp-marked side of bearing comes on outer side when the bearing is in place.



Make sure to install the bearing at 7.0 mm (0.28 in) depth from the swinging arm pivot shaft hole surface.

Tighten the swinging arm pivot shaft.

Tighten torque	50 – 80 N·m
	5.0 – 8.0 kg·m
	36.0 · 58.0 lb·ft

Apply grease to lubricate the bearings.



Install the right and left bearings by using special tool.

09941-34511
09941-34521

Swinging arm bearing installer

SUSPENSION

PE175 shock absorber provides superior performance due to its innovative design and special adjustment features. The spring preload and the damping can be adjusted to suit each rider's specific needs. The shock absorber is also equipped with nitrogen gas pressurized remote reservoir to further aid shock performance and consistency of damping. The remote reservoir special design enables both oil replacement and nitrogen gas recharging significantly extending the service life of the shock absorber.

WARNING:

Carefully review the service procedures regarding the shock absorber before attempting to perform any adjustment or servicing. IT IS ESSENTIAL FOR YOUR OWN SAFETY THAT YOU FOLLOW ALL INSTRUCTIONS AND TAKE ALL SAFE-GUARDS.

Suzuki recommends that your local authorized Suzuki dealer perform the servicing and adjusting of your PE shock absorber unless you have all of the proper tools, special equipment, and mechanical experience.

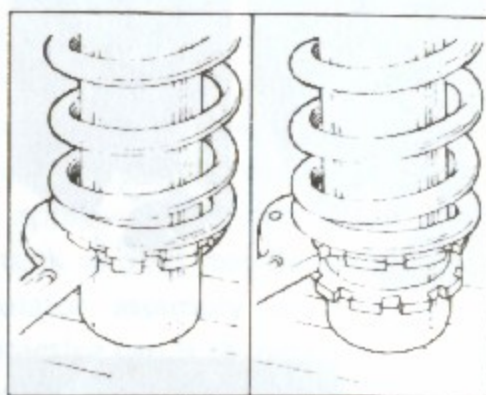
SHOCKABSORBER REMOVAL

Servicing is limited to changing the spring preload, damping rate and shock oil.

Replacement of internal components and seals is impossible due to the shock absorber unit construction.

1. Remove the frame covers.
2. Remove the seat.
3. Remove the rubber damper with compressing the shock absorber.
4. Place the motorcycle on a work stand or support the rear of the motorcycle so the rear wheel is off the ground.

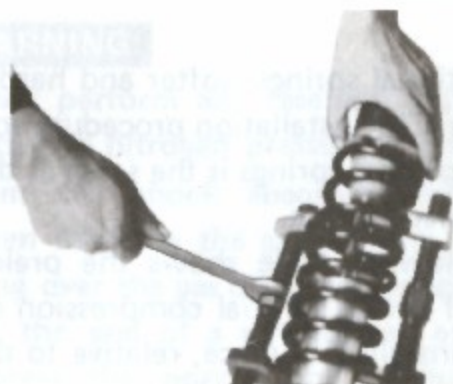
5. Remove the lower and upper shock absorber bolts.
6. Pull out the shock absorber unit upward.



7. Loosen spring set adjuster lock ring and adjuster ring, and then remove the upper spring seat.

09910-60611

Universal clamp
wrench

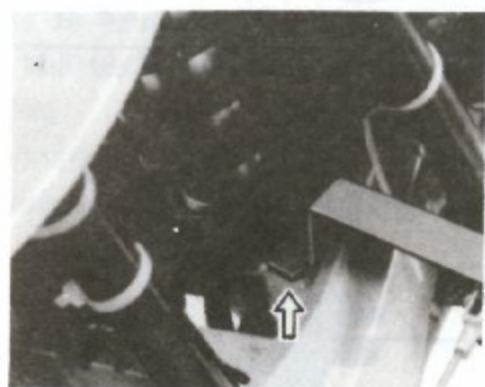
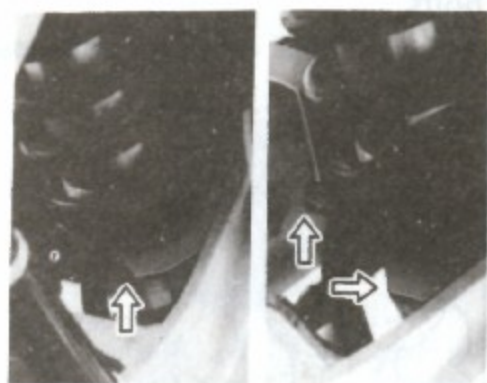


8. Special tool is available for removing and/or installing the optional springs.

09940-71430

Rear Suspension
spring compressor

SPRING ADJUSTMENT



Spring preset position is adjustable by changing the spring adjuster ring position. Turning the spring adjuster ring counterclockwise increases the spring preload (stiffness). Do not set the spring to the length less than 258 mm (10.2 in.). The standard spring set length is 268 mm (10.6 in.). After adjusting the preload, tighten the spring adjuster lock ring securely.

Two optional springs, softer and harder, are available. The installation procedure for each of the optional springs is the same as that for the standard spring.

The following table shows the preload in terms of spring's initial compression dimension as installed in place, relative to the free length.

	SOFTER SPRING	HARDER SPRING
STANDARD PRELOAD	10 mm (0.39 in)	10 mm (0.39 in)
MAXIMUM ALLOWABLE PRELOAD	26 mm (1.02 in)	25 mm (0.98 in)

NOTE:

For installation of the optional spring, a special tool is available as explained in the previous page.

DAMPING FORCE ADJUSTMENT

The damping force on the tension side can be adjusted by setting the position of the damping adjuster ring as given below. The standard setting is the "II" position.

Roll the rubber dust cap up and away from the adjusting ring. To increase or decrease the damping force, turn this adjusting ring. Damping adjustments, are indicated by the numbers I thru IIII engraved on the adjusting ring. As you turn the adjusting ring, you will notice a click as you reach each number position. When changing the damping, always be sure that the adjusting ring stops with the number visible, that a click is noticed and the ring feels as if it were sitting in a detent or a notch.

Position I (softest) provides for the smallest amount of damping force, and position IIII (stiffest) for the largest amount.

Tension side

Adjusting ring position	I	II	III	IIII
Damping force (kg/0.3 m/sec)	185	200	225	250

The damping force on compression side is fixed at 40 km/0.3 m/sec.



CAUTION:

Do not operate rear damper units in any positions other than the click or detented positions. If position II½, III½ etc. is used, the damping force will automatically have the same damping force as number III (stiffest) position.

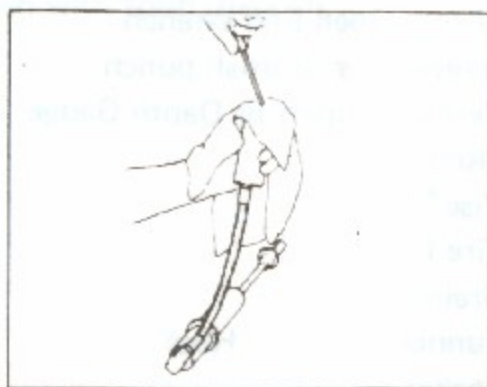
OIL AND NITROGEN GAS REPLACEMENT PROCEDURE

After extended usage the shock absorber oil will begin to deteriorate and affect the shock damping performance. The corrective service procedure requires proper tools, special equipment and mechanical experience for proper safe operation. Your local Suzuki dealer has the necessary equipment and training to perform this special servicing:

WARNING:

If you elect to perform the servicing yourself, several important precautions must be adhered to. These precautions primarily concern the use, handling, and transportation of a high pressure nitrogen gas.

1. The nitrogen tank must be tagged with a green tag indicating it holds a non-flammable gas.
2. Always use either a single stage or two stage pressure-regulator for proper pressure reduction and regulation.
3. Whenever transporting such a tank the regulator assembly should be removed and the approved tank safety cap re-installed. A tank should not be stored unless the regulator assembly is removed and the protective cap is re-installed.
4. During transportation, the tank should be securely fastened at all times so as to prevent damage to the tank in the event of an accident, etc.
5. Certain cities and states prohibit the transportation of high pressure tanks over specific marked roadways, bridges, tunnels, etc.

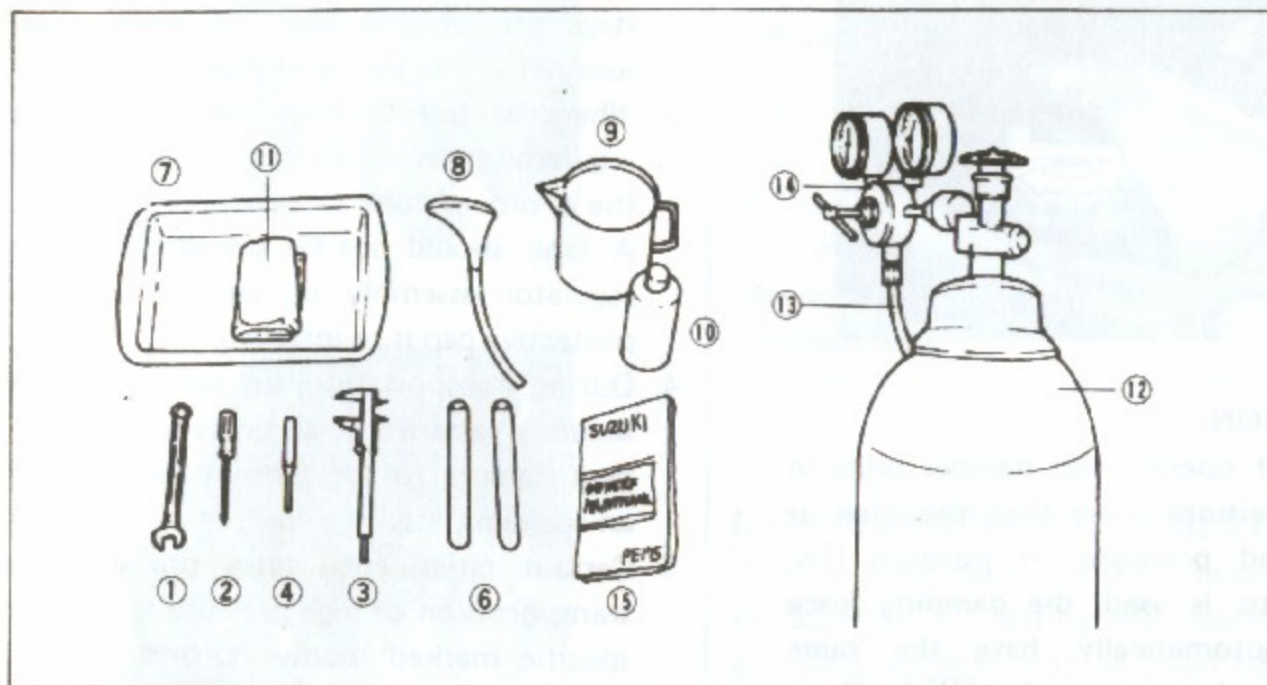


WARNING:

Never perform any reservoir servicing until the nitrogen pressure is released from the shock absorber reservoir. When releasing the gas pressure, place a rag over the gas discharge nozzle and use the end of a screwdriver, etc. to depress the nozzle, and release the nitrogen gas. Do not use your finger to depress the gas nozzle. Direct the nozzle away from your face and body.

Required tools and special equipment

Shown below are the necessary tools and special equipment that are required to perform adjustments and servicing both correctly and safely.



- (1) 17 mm Open End Wrench
- (2) Screwdriver or small punch
- (3) Vernier calipers or Depth Gauge
- (4) Blunt rod
- (5) Vise*
- (6) Tire Irons
- (7) Drain Pan
- (8) Funnel and Filler Hose
- (9) Beaker
- (10) Specified Shock Oil
- (11) Rags
- (12) Nitrogen tank
- (13) Filler Hose and Nozzle
- (14) Regulator Assembly
- (15) Owner's Maintenance Manual

*Not Shown in the illustration

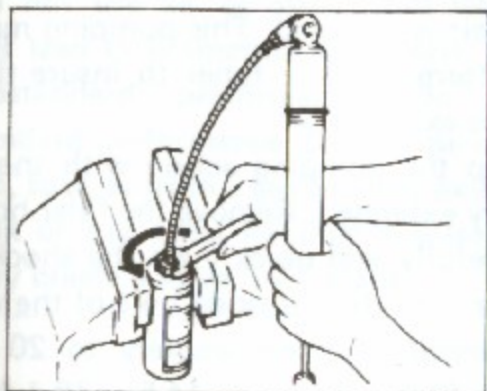
Follow the procedure below to replace the oil and nitrogen.



1. Release the gas and mount the reservoir in a vise and tighten lightly.
2. Remove the air valve.

CAUTION:

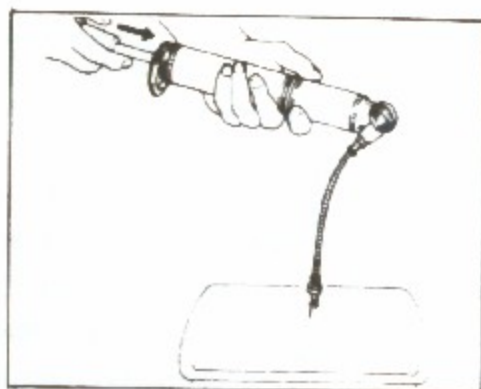
Position the reservoir as shown in the vise to avoid damage. The reservoir is easily distorted and permanently damaged.



3. Push in the piston rod of the shock unit as far as it will go.
4. Place a drain pan beneath the vise.
5. Loosen and remove the reservoir hose at the reservoir fitting using a 17 mm wrench. Inspect the hose O ring for cuts or other damage. The O ring may be re-used if still in good condition.
6. Tilt the shock body as illustrated and slowly pump all the old oil from the unit.

NOTE:

The unit may be drained overnight if time permits for more thorough purging of the oil.



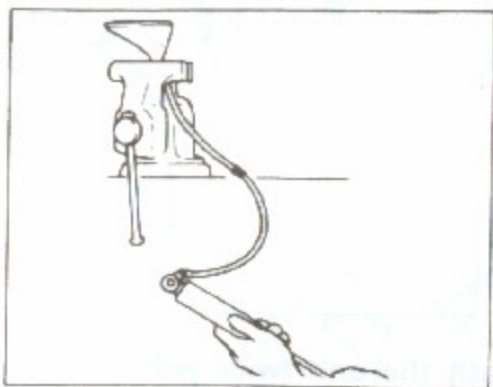
7. Flush the unit twice with fresh specified shock oil and again pump it all out. This will clean the unit thoroughly and remove the last remains of the old oil.

CAUTION:

The seals will be damaged if solvent or gasoline is used to flush the shock body or reservoir.

8. Drain the old oil from the reservoir and flush with fresh, new oil.

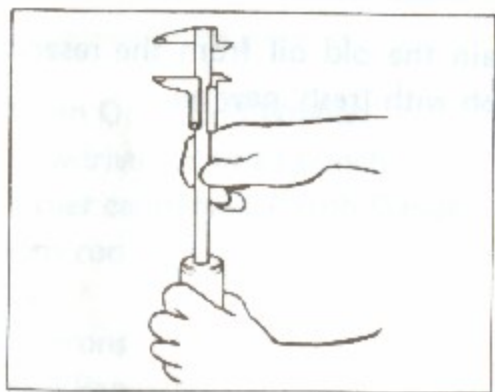
Reassembly



1. Using a funnel and filler hose, fill the shock body with fresh oil. Use recommended oil.

NOTE:

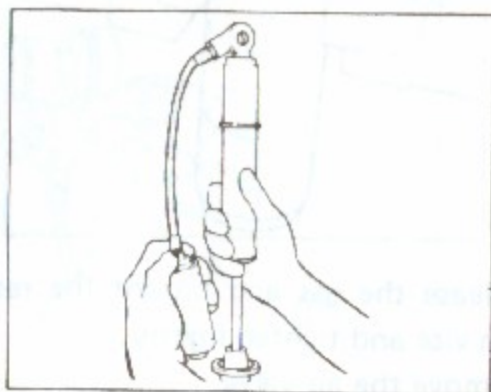
Shock absorber oil capacity is approximately 213 mm (7.8 US oz) per unit.



2. Gently push the reservoir's floating piston down with a blunt rod, so that it is positioned exactly 90.0 mm (3.54 in) from the air valve mounting surface. A vernier caliper or a depth gauge is the most accurate method of measuring the piston position.

CAUTION:

Do not "tap" or "pound" the piston into position. Apply only steady, gentle pressure with a blunt rod or tool.



3. Fill the reservoir completely with fresh oil. Tap the reservoir lightly to remove any air bubbles that may be trapped. Set the reservoir aside temporarily.
4. Extend the shock shaft fully.
5. With the funnel and hose still attached slowly pump the shaft in and out until all air is expelled. This pumping must be performed many times to insure that all air is expelled.
6. Stop the pumping action with the shaft fully extended. Remove the filler hose.
7. Carefully and quickly tip the shock hose over into the threaded hole of the waiting reservoir. Tighten securely to 20 – 25 N·m (2.0 – 2.5 kg-m, 14.5 – 18.1 lb-ft).

NOTE:

The reservoir must be positioned below the shock body while the shock hose is being connected.

8. Tighten the air valve to 10 – 13 N·m (1.0 – 1.3 kg·m, 7.0 – 9.5 lb·ft).
9. Adjust the two stage regulator to 10 kg/cm² (1000 kPa, 142 psi) and carefully pressure the reservoir with nitrogen gas.

WARNING:

Do not exceed 20 kg/cm² (2000 kPa, 284 psi) or the reservoir may rupture. After pressurizing the reservoir, the removal of the filler nozzle may cause some oil to be sprayed. Do not expose your face or body to the spray.

10. Re-install the spring and mount the shock absorber.

WARNING:

Nitrogen gas has been found to deliver optimum performance and reliability. Do not use air or other gases which will lead to premature wear, rust, and substandard performance. Do not use standard performance. Do not use oxygen, such as from a gas welding oxygen tank or any other flammable gasses as they create a severe fire hazard.

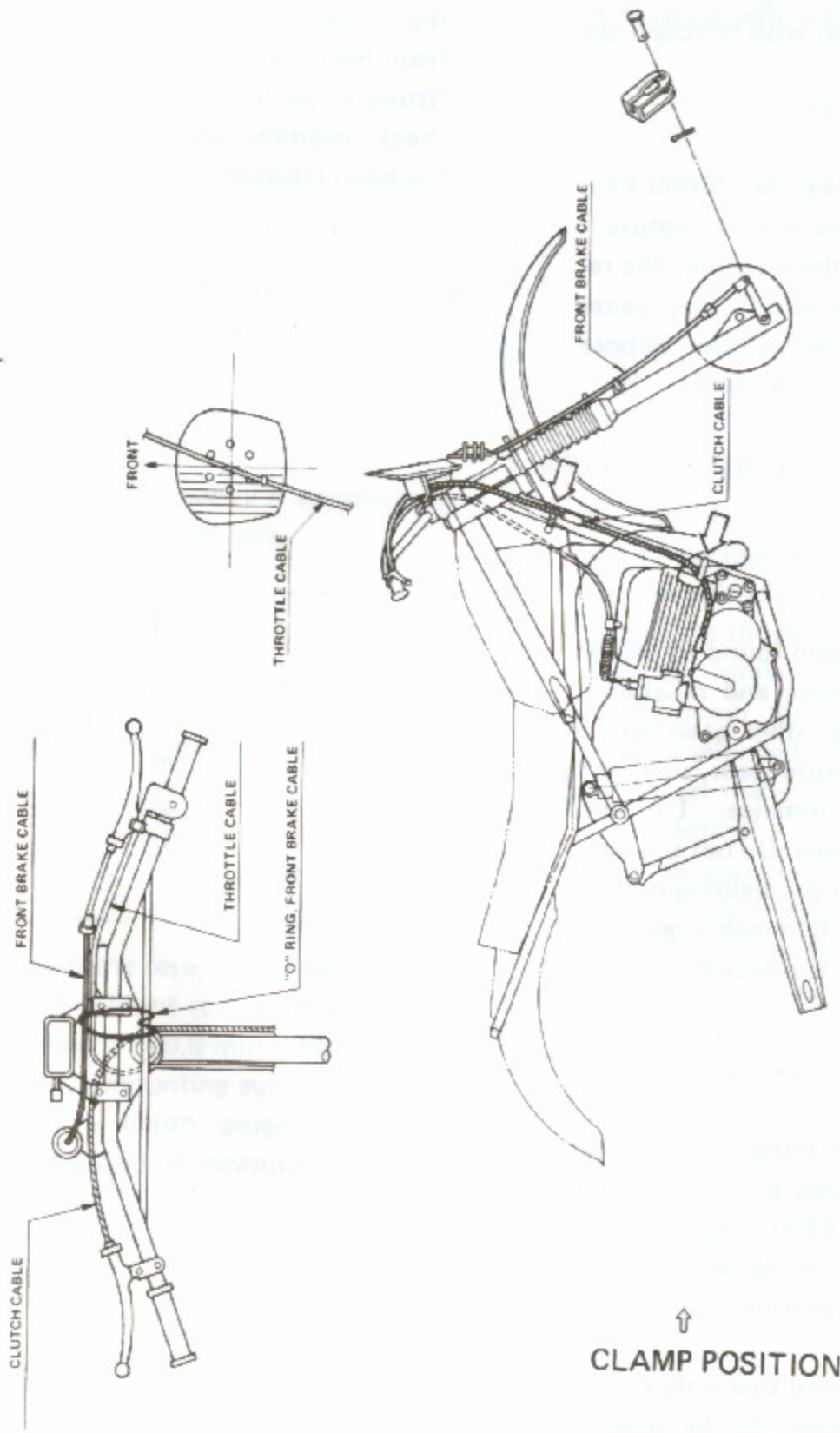
CAUTION:

1. The hose connecting the reservoir to the shock body should be visually inspected. After each race for signs of wear or damage such as cuts, rubbed portions or dented areas.
2. It is recommended that only Genuine Suzuki Shock Oil be used if available or an equivalent shock oil.

WARNING:

When discarding the shock unit release the high pressure nitrogen gas. Keep the shock absorber assembly away from heat and fire. Do not loosen any fitting or perform any servicing on the shock assembly until the nitrogen gas has been released.

CABLE ROUTING



TROUBLESHOOTING

There can be various causes for problems which might occur on the motorcycle. The following procedures may be used to troubleshoot possible trouble spots.

ENGINE WILL NOT START

Fuel system

1. Check that there is sufficient gasoline in the fuel tank.
2. Make sure the fuelcock lever and fuel tank breather hose are not clogged.

Spark plug

1. Check that the spark plug gap has not been bridged and short circuited by carbon.
2. Check that the plug is not fouled with wet gasoline or oil.
3. Clean the spark plug gap and lay the spark plug connected to the plug lead against the cylinder head. Kick over the engine and see if a spark is produced. If not, replace the spark plug or check your ignition system.
4. To check the ignition system, remove the spark plug cap from the high tension wire and hold it about 7 mm (0.28 in.) from the cylinder head (ground). Kick the engine over and see if a spark jumps this gap. If so, the system is functioning and the problem is probably in the spark plug cap. If this does not produce a spark, have your Suzuki dealer check your ignition system.

CLUTCH SLIPPAGE

1. If there is no clutch lever play, adjust the cable adjuster for 2 – 3 mm (0.08 – 0.12 in.) play.
2. The clutch will also slip if the plates are worn or the springs have weakened. If so, these items must be replaced.

EXCESSIVE ENGINE VIBRATION

1. Loose engine mounting bolt.
2. Crack in the frame.

ENGINE OVERHEATS

1. Carburetion is lean caused by the carburetor setting (main jet selection) not being suitable for running conditions and weather.
2. Carbon has collected on the combustion chamber, piston crown, cylinder exhaust port and expansion chamber.
3. The spark plug has too hot a heat range.

BAD RUNNING STABILITY

1. Improper front or rear tire pressure.
2. Improper front or rear wheel alignment.
3. Improperly tightened front axle nut or steering stem lock nut.

ENGINE WILL NOT REV UP OR WILL NOT RUN SMOOTHLY

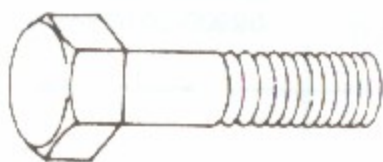
1. The carburetor choke knob is not fully returned.
2. Too rich carburetion.
3. Clogged air cleaner element.

TIGHTENING TORQUE

PART	Kg-m	lb-ft
Handlebar clamp bolts	1.2 ~ 2.0	8.5 ~ 14.5
Front fork upper clamp bolts (right and left)	2.0 ~ 3.0	14.5 ~ 21.5
Front fork lower clamp bolts (right and left)	1.5 ~ 2.5	11.0 ~ 18.0
Steering stem upper clamp bolt	1.5 ~ 2.5	11.0 ~ 18.0
Steering stem head center bolt	3.5 ~ 5.0	25.5 ~ 36.0
Front fork cap bolt	1.5 ~ 3.0	11.0 ~ 21.5
Front fork damper rod bolt	2.0 ~ 2.6	14.5 ~ 18.5
Front fork oil drain screw	0.1 ~ 0.2	0.7 ~ 1.5
Front fork air valve	1.0 ~ 1.3	7.5 ~ 9.5
Front brake cam lever bolt	0.5 ~ 0.8	3.5 ~ 6.0
Front axle nut	3.6 ~ 5.2	26.0 ~ 37.5
Rear swinging arm pivot nut	4.5 ~ 7.0	32.5 ~ 50.5
Rear shock absorber fitting bolts (Upper and Lower)	4.0 ~ 6.0	29.0 ~ 43.5
Bell crank pivot shaft	4.5 ~ 7.0	32.5 ~ 50.5
Push rod upper joint bolt	1.0 ~ 1.6	7.0 ~ 11.5
Push rod lower joint bolt	1.8 ~ 2.8	13.0 ~ 20.0
Rear brake cam lever bolt	0.5 ~ 0.8	3.5 ~ 6.0
Rear axle shaft	5.0 ~ 8.0	36.0 ~ 58.0
Rear axle sleeve nuts	7.0 ~ 9.0	50.5 ~ 65.0
Cylinder head nuts	2.0 ~ 2.5	14.5 ~ 18.0
Magneto rotor nut	3.0 ~ 4.0	21.5 ~ 29.0
Engine sprocket nut	4.0 ~ 6.0	29.0 ~ 43.5
Clutch sleeve hub nut	4.0 ~ 6.0	29.0 ~ 43.5
Primary drive gear nut	9.0 ~ 11.0	65.0 ~ 79.5
Rear sprocket screw	2.5 ~ 4.0	18.0 ~ 29.0
Spoke nipple	0.4 ~ 0.5	3.0 ~ 3.5
Kick starter bolt	0.6 ~ 1.0	4.5 ~ 7.5
Gear shifting lever bolt	1.3 ~ 2.3	9.5 ~ 16.5

For other bolts and nuts not listed above, refer to this chart.

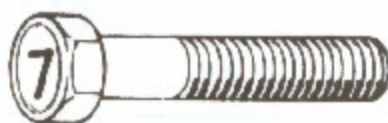
Bolt Diameter (mm)	Conventional or "4" marked bolt			"7" marked bolt		
	kg-m	lb-ft	N.m	kg-m	lb-ft	N.m
4	0.1 ~ 0.2	0.7 ~ 1.5	1.0 ~ 2.0	0.15 ~ 0.3	1.0 ~ 2.0	1.5 ~ 3.0
5	0.2 ~ 0.4	1.5 ~ 3.0	2.0 ~ 4.0	0.3 ~ 0.6	2.0 ~ 4.5	3.0 ~ 6.0
6	0.4 ~ 0.7	3.0 ~ 5.0	4.0 ~ 7.0	0.8 ~ 1.2	6.0 ~ 8.5	8.0 ~ 12.0
8	1.0 ~ 1.6	7.0 ~ 11.5	10.0 ~ 16.0	1.8 ~ 1.2	13.0 ~ 20.0	18.0 ~ 28.0
10	2.2 ~ 3.5	16.0 ~ 25.5	22.0 ~ 35.0	4.0 ~ 6.0	29.0 ~ 43.5	40.0 ~ 60.0
12	3.5 ~ 5.5	25.5 ~ 40.0	35.0 ~ 55.0	7.0 ~ 10.0	50.5 ~ 72.5	70.0 ~ 100.0
14	5.0 ~ 8.0	36.0 ~ 58.0	50.0 ~ 80.0	11.0 ~ 16.0	79.5 ~ 115.5	110.0 ~ 160.0
16	8.0 ~ 13.0	58.0 ~ 94.0	80.0 ~ 130.0	17.0 ~ 25.0	123.0 ~ 181.0	170.0 ~ 250.0
18	13.0 ~ 19.0	94.0 ~ 137.5	130.0 ~ 190.0	20.0 ~ 28.0	144.5 ~ 202.5	200.0 ~ 280.0



Conventional bolt


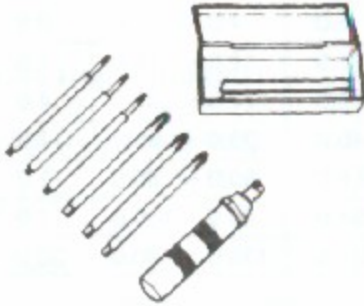

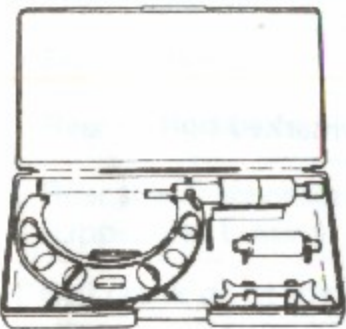
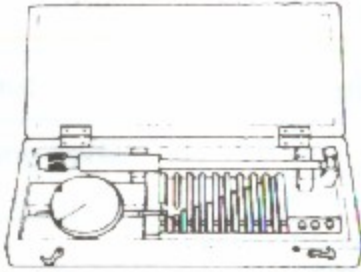






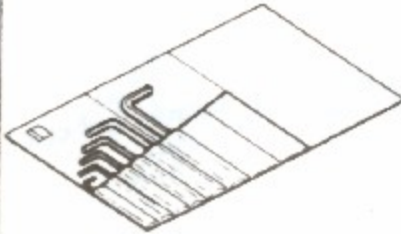
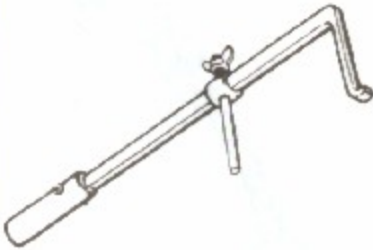

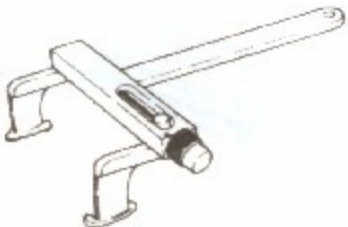
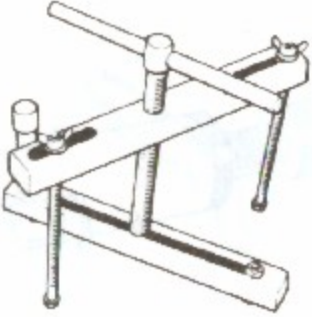
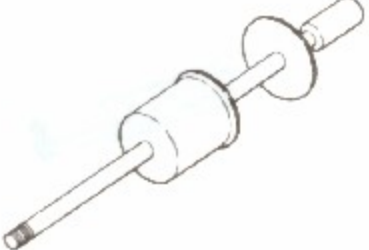

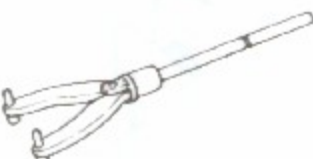

"4" marked bolt






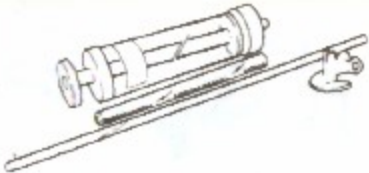
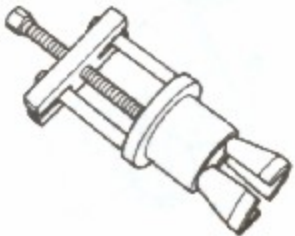
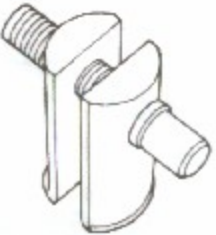
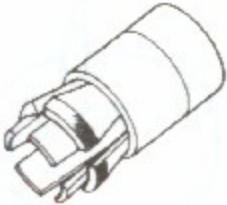


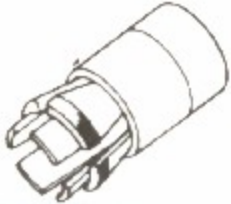
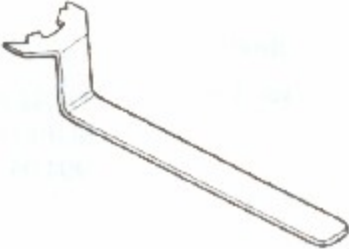
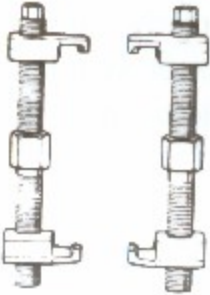


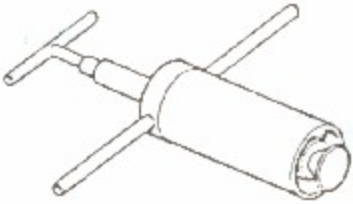
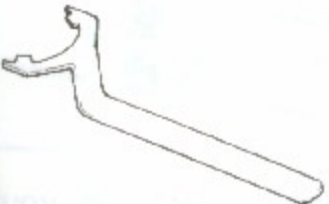
"7" marked bolt

SPECIAL TOOLS

		
Snap ring pliers 09900-06104	Impact driver set 09900-09003	Vernier caliper 09900-20101
		
Micrometer 50 - 75 mm 09900-20203	Cylinder gauge set 09900-20508	Thickness gauge 09900-20803
		
Pocket tester 09900-25002	Electro-tester 09900-28106	Conrod holder 09910-20115

		
<p>L-type hexagon wrench set 09900-00401</p>	<p>Oil seal remover 09913-50121</p>	<p>Clutch spring hook 09920-20310</p>
		
<p>Clutch sleeve hub holder 09920-53710</p>	<p>Crankcase separating tool 09910-80115</p>	<p>Rotor remover slide shaft 09930-30102</p>
		
<p>Attachment F 09930-30190</p>	<p>Rotor holder 09930-40113</p>	<p>Steering stem nut socket wrench 09940-14910</p>

		
<p>T-handle of front fork 09940-34520 Attachment F 09940-34580</p>	<p>Front fork pressure regulating gauge 09940-44120</p>	<p>Steering race and swinging arm bearing installer 09941-34511</p>
		
<p>Bearing puller 09923-73210</p>	<p>Front fork oil seal remover 09941-64910</p>	<p>Front fork oil level gauge 09943-74111</p>
		
<p>Bearing inner race remover 09941-84510</p>	<p>Steering race remover 09941-54910</p>	<p>Front fork oil seal installer 09940-50111</p>

		
<p>Rear suspension spring retainer wrench 09940-71411</p>	<p>Rear suspension spring lock ring wrench 09940-71421</p>	<p>Rear suspension spring compressor 09940-71430</p>
		
<p>Universal clamp wrench 09910-60611</p>	<p>Steering stem lock nut wrench 09940-10122</p>	<p>Swinging arm bearing remover 09941-44510</p>
		
<p>Rear suspension spring lock ring wrench 09940-71420</p>		

MATERIALS

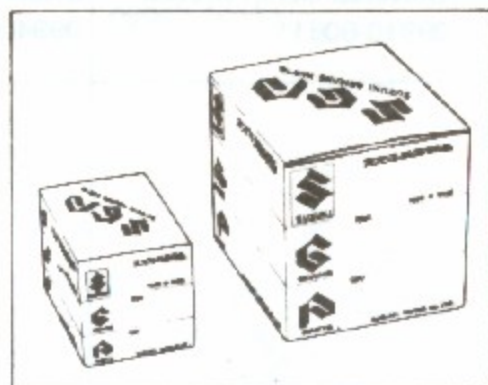
The materials listed below are required for maintenance operations, and should be kept on hand for ready use.

In addition, such standard materials as cleaning fluids, lubricants, etc., should also be available.

Material	Part
 SUZUKI SUPER GREASE "A" 99000-25030	<ul style="list-style-type: none"> • Oil seals • Brake cam • Throttle grip • Speedometer cable • Gearshift lever shaft • Steering stem bearings • Swinging arm bearing and dust seal • Full-Floating Suspension System pivoting portion
 SUZUKI BOND "1215" 99104-31100	<ul style="list-style-type: none"> • Front fork damper rod bolt • Front fork oil drain screw
 THREAD LOCK "1363C" 99104-32050	<ul style="list-style-type: none"> • Gearshift cam guide screw • Gearshift pawl screw • Bearing retainer screw • Front fork air valve • Front fork damper rod bolt
 SUZUKI MOLY PASTE 99000-25140	<ul style="list-style-type: none"> • Rear suspension linkage

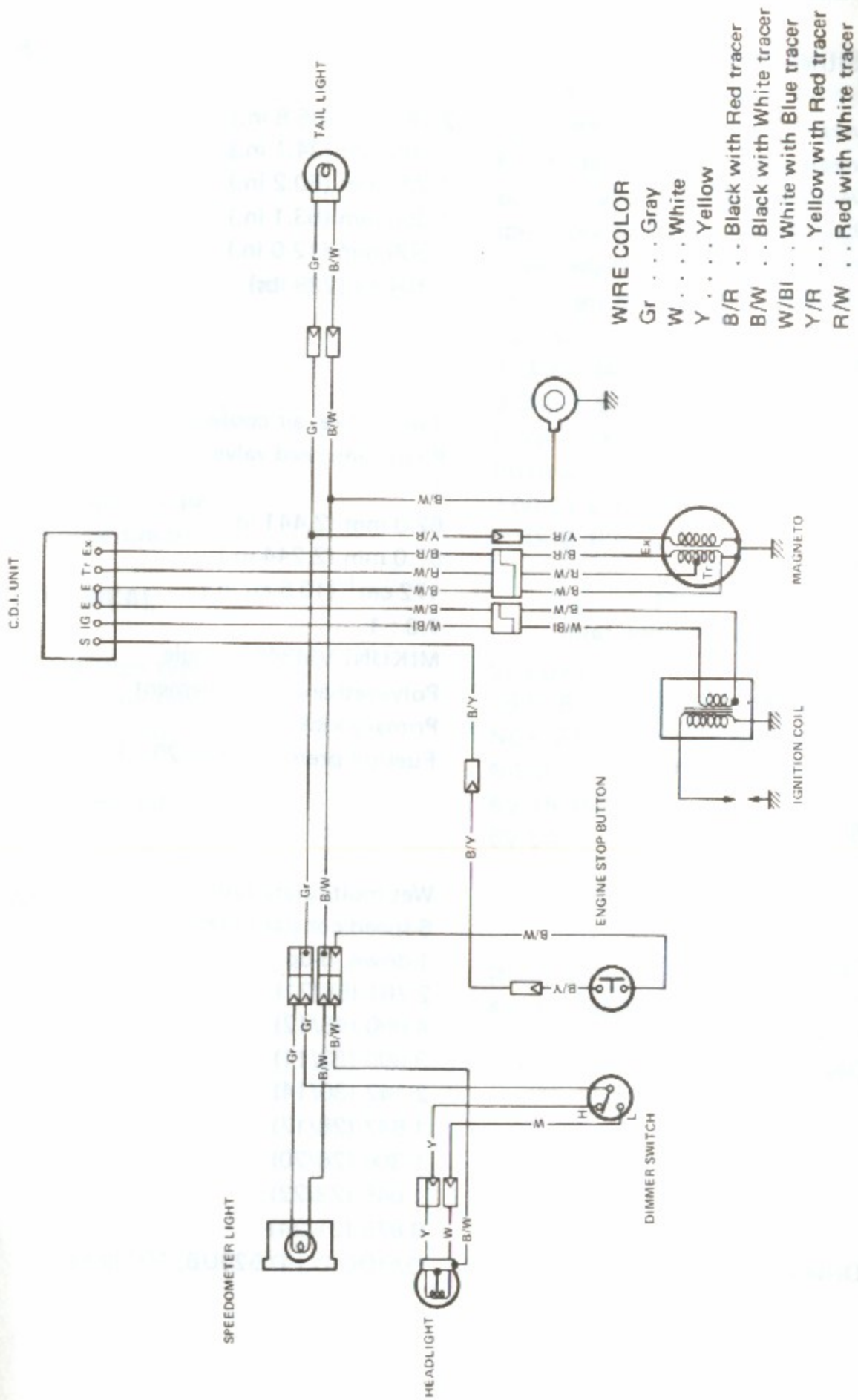
Material	Part
 THREAD LOCK SUPER "1332B" 99104-32090	<ul style="list-style-type: none"> • Magneto rotor bolt
 THREAD LOCK SUPER "1361A" 99104-32020	<ul style="list-style-type: none"> • Kick starter return spring stopper screw • Kick starter stopper bolt • Full-Floating Suspension rubber damper bolt
 THREAD LOCK SUPER "1363A" 99104-32030	<ul style="list-style-type: none"> • Countershaft 2nd drive gear

USE OF GENUINE SUZUKI PARTS



Whenever replacing parts on your motorcycle, it is recommended that you use Genuine Suzuki replacement parts or.

WIRING DIAGRAM



SPECIFICATIONS

DIMENSIONS AND MASS

Overall length	2 180 mm (85.8 in.)
Overall width	865 mm (34.1 in.)
Overall height	1 275 mm (50.2 in.)
Wheelbase	1 350 mm (53.1 in.)
Ground clearance	305 mm (12.0 in.)
Dry mass	104 kg (229 lbs)

ENGINE

Type	Two-stroke, air cooled
Intake system	Piston and reed valve
Number of cylinder	1
Bore	62.0 mm (2.441 in.)
Stroke	57.0 mm (2.244 in.)
Piston displacement	172 cm ³ (10.5 cu.in.)
Corrected compression ratio	7.9 : 1
Carburetor	MIKUNI VM34SS, single
Air cleaner	Polyurethane foam element
Starter system	Primary kick
Lubrication system	Fuel/oil premixture of 20 : 1

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	6-speed constant mesh
Gearshift pattern	1-down, 5-up
Primary reduction	2.761 (58/21)
Final reduction	4.000 (48/12)
Gear ratios, Low	3.000 (33/11)
2nd	2.142 (30/14)
3rd	1.647 (28/17)
4th	1.300 (26/20)
5th	1.045 (23/22)
Top	0.875 (21/24)
Drive chain	DAIDO D.I.D 520UB, 106 links

CHASSIS

Front suspension	Telescopic pneumatic/coil spring, oil damped
Rear suspension	Full-floating suspension system, swinging arm, gas/oil damped, spring preload adjustable, damper 4-way adjustable
Steering angle	45° (right & left)
Caster	62° 00'
Trail	113 mm (4.45 in.)
Turning radius	2.3 m (6.9 ft)
Front brake	Internal expanding
Rear brake	Internal expanding
Front tire size	3.00-21 4PR
Rear tire size	4.10-18 4PR

ELECTRICAL

Ignition type	SUZUKI "PEI"
Ignition timing	19.5° B.T.D.C. at 8 000 rpm
Spark plug	NGK B10EGV or CHAMPION N-59G
Headlight	6V 15/15W
Tail light	6V 5W

CAPACITIES

Fuel tank	10.6 L (2.8 US gal)
Front fork oil	451 ml (18.24 US oz)
Transmission oil	800 ml (0.85 US qt)

SERVICE DATA

Piston + Ring + Cylinder

Unit : mm (in)

ITEM	STANDARD	LIMIT
Piston - Cylinder clearance	0.06 ~ 0.07 (0.0024 ~ 0.0028)	0.120 (0.0047)
Cylinder bore / Measurement Point	62.000 ~ 62.015 20 (0.79)	62.070 (2.444)
Piston dia. / Measurement point	61.935 ~ 61.950 (2.438 ~ 2.439)/26(1.02)	61.880 (2.436)
Cylinder head distortion	—	0.05 (0.002)
Cylinder distortion	—	0.05 (0.002)
Piston ring free end gap 1st & 2nd:	Approx. 4.5 (0.18)	3.6 (0.14)
Piston ring end gap 1st & 2nd:	0.20 ~ 0.35 (0.008 ~ 0.014)	0.85 (0.033)
Piston ring - Groove clearance 1st & 2nd:	0.02 ~ 0.06 (0.0007 ~ 0.0024)	—
Piston pin bore I.D.	16.002 ~ 16.010 (0.6300 ~ 0.6306)	16.030 (0.6311)
Piston pin O.D.	15.995 ~ 16.000 (0.6297 ~ 0.6299)	15.980 (0.6291)

Crankshaft + Connecting rod

Unit : mm (in)

ITEM	STANDARD	LIMIT
Con-rod small end bore	21.003 ~ 21.011 (0.8269 ~ 0.8272)	21.040 (0.8283)
Con rod deflection (small end)	—	3.0 (0.12)
Crankshaft runout	—	0.05 (0.002)
Crank web to web width	56 ± 0.1 (2.205 ± 0.004)	—

Clutch

Unit : mm (in)

ITEM	STANDARD	LIMIT
Drive plate thickness	2.9 ~ 3.1 (0.11 ~ 0.12)	2.6 (0.10)
Driven plate thickness	1.6 ± 0.06 (0.06 ± 0.002)	—
Driven plate distortion	—	0.1 (0.004)
Drive plate claw width	11.8 ~ 12.0 (0.46 ~ 0.47)	11.0 (0.43)
Clutch spring free length	—	32.0 (1.26)

Transmission

Unit : mm (in)

ITEM		STANDARD	LIMIT
Shift fork – Groove clearance	No. 1	0.05 ~ 0.25 (0.002 ~ 0.010)	0.45 (0.018)
	No. 2		
Shift fork groove width	No. 1	4.45 ~ 4.55 (0.175 ~ 0.179)	—
	No. 2	5.45 ~ 5.55 (0.215 ~ 0.219)	
Shift fork thickness	No. 1	4.30 ~ 4.40 (0.169 ~ 0.173)	—
	No. 2	5.3 ~ 5.4 (0.209 ~ 0.212)	
Drive chain	Size	DAIDO D.I.D. 520UB 106 links	—
	20 pitch length	—	324 (12.76)
Distance between Low and 2nd gears on countershaft		91.85 ± 0.05 (3.616 ± 0.002)	—
Drive chain slack		15 ~ 20 (0.6 ~ 0.8)	—

Carburetor

ITEM	SPECIFICATION
Carburetor type	MIKUNI VM34SS, Single
I.D. No.	14400
Bore size mm (in.)	34 (1.3)
Float height mm (in.)	29.2 ± 1.0 (1.15 ± 0.04)
Air screw	1½
Throttle valve cut-away	2.0
Jet needle	6DP17-4
Air jet	2.5
Pilot jet	#25
Pilot outlet	0.8
Needle jet	R-3
By-pass	1.0
Main jet	# 250
Valve seat	3.0
Starter jet	60

Electrical

ITEM	SPECIFICATION	
Ignition timing	19.5° ± 2° B.T.D.C. at 8 000 r/min	
Spark plug	NGK B10EGV or CHAMPION N-59G	
Spark plug gap mm (in.)	0.5 ~ 0.6 (0.019 ~ 0.024)	
Spark performance mm (in.)	Over 8 (0.3) at 1 atm	
Ignition coil resistance (primary)	B/W-W/BI	Approx. 0 – 1 Ω
Ignition coil resistance (secondary)	Plug cap – B/W or W/BI	Approx. 10 – 11 Ω
Magneto coil resistance	R/W-B/R	Approx. 20 – 30 Ω
	R/W-B/W	Approx. 200 – 260 Ω
	Y/R-B/W	Approx. 0.5 – 1.5 Ω
Lighting coil output	Above 5.5 V at 2 500 rpm Below 8.0 V at 8 000 rpm	

Brake + Wheel

Unit : mm (in)

ITEM		STANDARD	LIMIT
Front brake lever distance		20 ~ 30 (0.8 ~ 1.2)	—
Rear brake pedal free travel		20 ~ 30 (0.8 ~ 1.2)	—
Axle runout (Front and Rear)		—	0.25 (0.010)
Brake drum I.D.	Front	—	130.7 (5.15)
	Rear	—	130.7 (5.15)
Brake lining thickness (Front & Rear)		—	1.5 (0.06)
Wheel rim runout (Radial & Axial)		—	2.0 (0.08)
Tire size	Front	3.00 – 21 4PR	—
	Rear	4.10 – 18 4PR	—
Tire tread depth	Front	—	4.0 (0.16)
	Rear	—	4.0 (0.16)

Tire Air Pressure

ITEM		STANDARD	LIMIT
Cold inflation pressure	Front & Rear	0.7 ~ 1.0 kg/cm ² (10 ~ 14 psi)	—

Suspension

Unit : mm (in)

ITEM	STANDARD	LIMIT
Front fork stroke	270 (10.6)	—
Rear wheel travel	270 (10.6)	—
Fork spring free length	—	509 (20.0)
Fork oil level	157 (6.2)	—
Swinging arm pivot shaft runout	—	0.3 (0.01)

ITEM	SPECIFICATION
Fuel tank	10.6 L (2.80/2.33 US/Imp gal)
Transmission oil	Change Overhaul
	800 ml (0.85/0.70 US/Imp qt) 900 ml (0.95/0.79 US/Imp qt)
Front fork oil (each leg)	451 ml (15.24/15.88 US/Imp oz)
Fuel type	Premium gasoline
Engine oil type	SUZUKI CCI SUPER 2-CYCLE MOTOR LUBRICANT
Transmission oil type	SAE 20W/40
Front fork oil type	# 10

Prepared by

SUZUKI MOTOR CO., LTD.

Administration Department
Overseas Service Division

September, 1982

Part No. 99011-14421-03A

Printed in Japan

Copying, quoting or reproducing any part of this manual is not permitted without explicit approval by SUZUKI MOTOR CO., LTD.

All information, illustrations, photographs and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or other changes, there may be some discrepancies in this manual. Suzuki reserves the right to make changes at any time.

SUZUKI MOTOR CO.,LTD.

Part No. 99011-14421-03A
September 1982 C
Printed in Japan