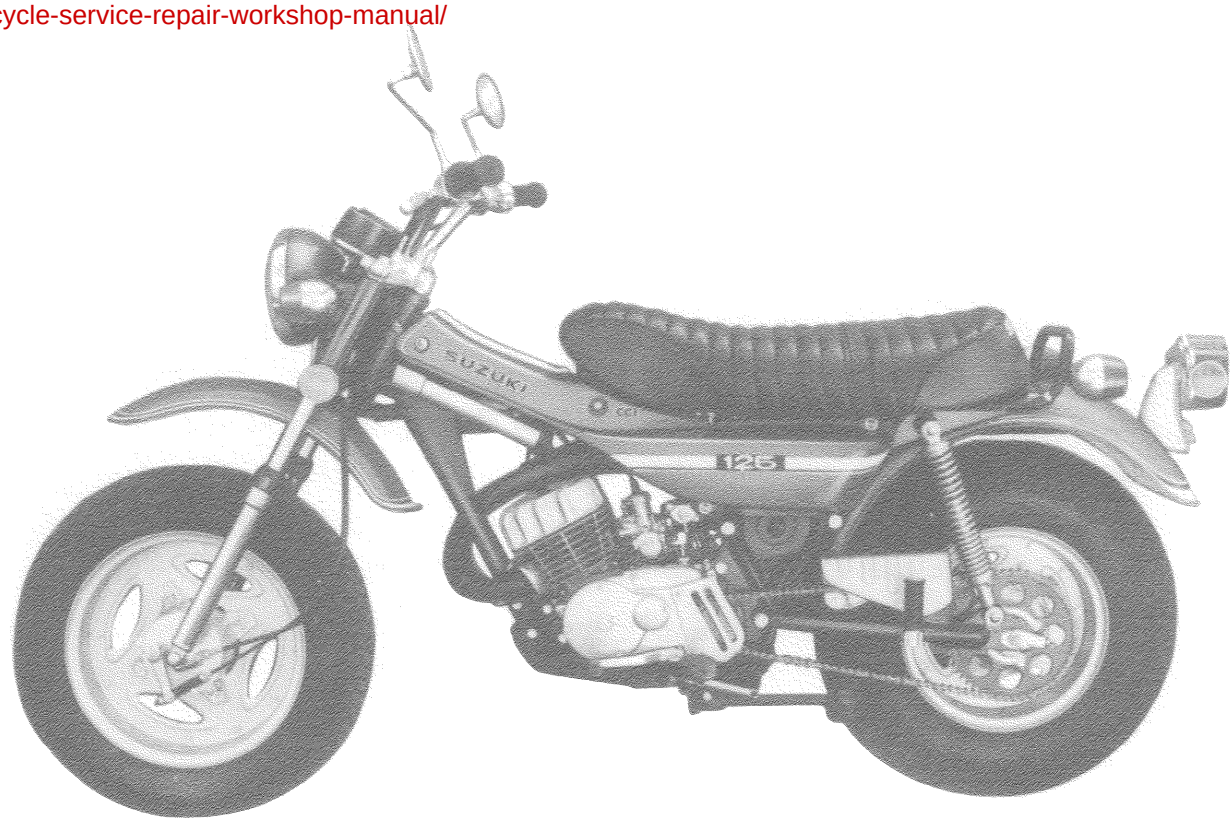
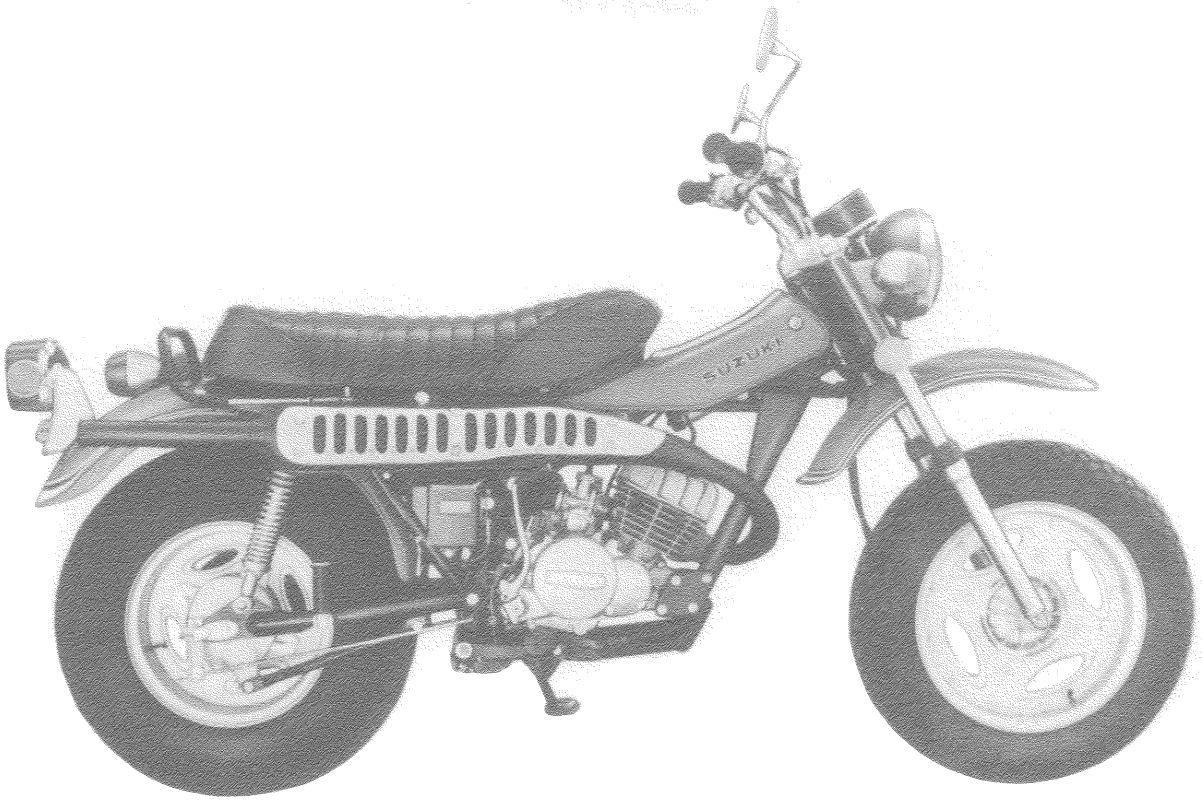
SUZUKI

SERVICE MANUAL

MODEL RV125

LEFT AND RIGHT SIDE VIEWS





INTRODUCTION

This manual has been prepared to provide service operators with necessary information for the maintenance and the repairs of the motorcycle. The contents are made plain so that less-experienced mechanics may carry out the proper jobs according to the items of assembly and disassembly instructions. For fully qualified mechanics, the necessary service data for the inspections and repairs is provided in this manual. Since it is above all important on servicing a motorcycle to know throughly its construction and the necessary data, it is highly recommended for those who are engaged in servicing RV125 to study beforehand this manual notwithstanding their technical ability.

We trust the publication of this manual would be of assistance in the service activity as well as in the study of RV125.

SUZUKI MOTOR CO., LTD.

Export Service Section

CONTENTS

1. SPECIFICATIONS

DIMENSIONS & WEIGHT

Overall length	77.2 in (1,960 mm)
Overall width	30.3 in (770 mm)
Overall height	39.6 in (1,005 mm)
Wheelbase	51.4 in (1,305 mm)
Road clearance	7.7 in (195 mm)
Tires, front	5.4–14, 4PR
rear	6.7–12, 4PR
Dry weight	244 lb (111 kg)

PERFORMANCE

Maximum speed	55–60 mph (88–96 kph)

ENGINE

Type	2 stroke, air-cooled, gasoline
Piston displacement	123 cc (7.5 cu in)
Bore x Stroke	56 x 50 mm (2.20 x 1.97 in)
Cylinders	Single, aluminium
Corrected compression ratio	6.3 : 1
Maximum horsepower	10 hp/6,000 rpm
Maximum torque	8.8 ft-lb (1.22 kg-m)/5,500 rpm
Starter	Primary kick

FUEL SYSTEM

Carburetor	VM22SH
Air cleaner	Wet polyurethane filter
Fuel tank capacity	1.2/1.0 US/Imp gal (4.7 ltr) including reserve 2.1/1.8 US/Imp pt (1 ltr)

LUBRICATION SYSTEM

Engine	Suzuki CCI
Gear box	550 cc (1.16/0.97 US/Imp pt)
Engine oil tank capacity	1.7/1.4 US/Imp pt (0.8 ltr)

IGNITION SYSTEM

Type	Flywheel magneto
Ignition timing	22° (2.41 mm in piston stroke) B.T.D.C.
Spark plug	NGK B-7HS or Nippon Denso W22FS

POWER TRANSMISSION

Clutch	Wet, multi-disc
Gear box	5-speed, constant mesh
Gear shifting	Left foot operated
Primary reduction ratio	3.562 (57/16)
Final reduction ratio	3.400 (51/15)
Gear ratios (Overall reduction ratios)	
1st	2.750 : 1 = 33/12 (33.30)
2nd	1.812 : 1 = 29/16 (21.95)
3rd	1.250 : 1 = 25/20 (15.14)
4th	1.000 : 1 = 23/23 (12.11)
5th	0.800 : 1 = 20/25 (9.69)
Drive chain, size	428D
number of links	116

SUSPENSION

Front suspension	Telescopic forks with hydraulic damper
Rear suspension	Swinging arm with hydraulic damper

STEERING

Steering angle	42° (right & left)
Castor	61°
Trail	3.78 in (96 mm)
Turning radius	6.6 ft (2 m)

BRAKES

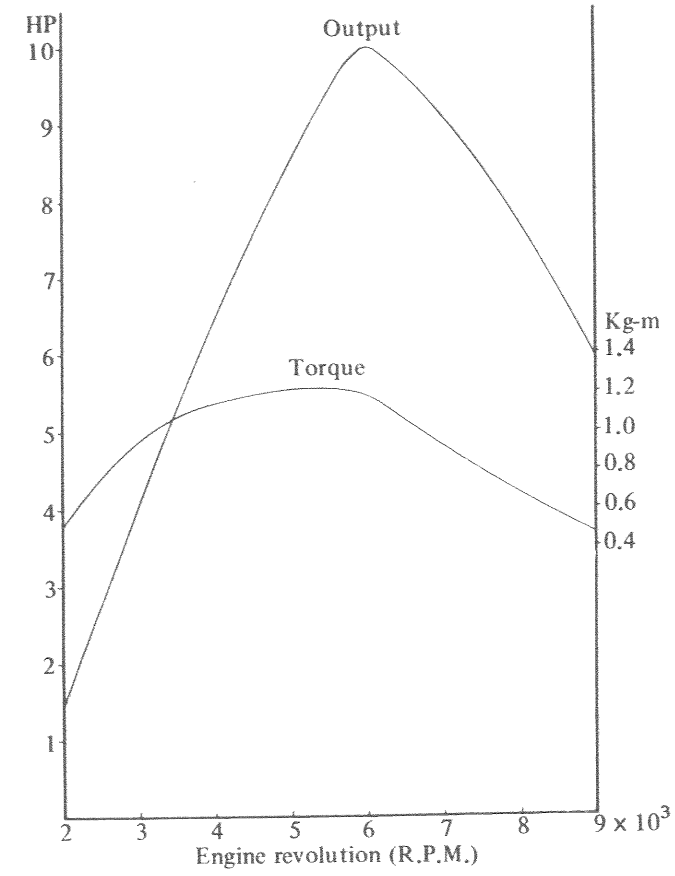
Front brake	Right hand, internal expanding
Rear brake	Right foot, internal expanding

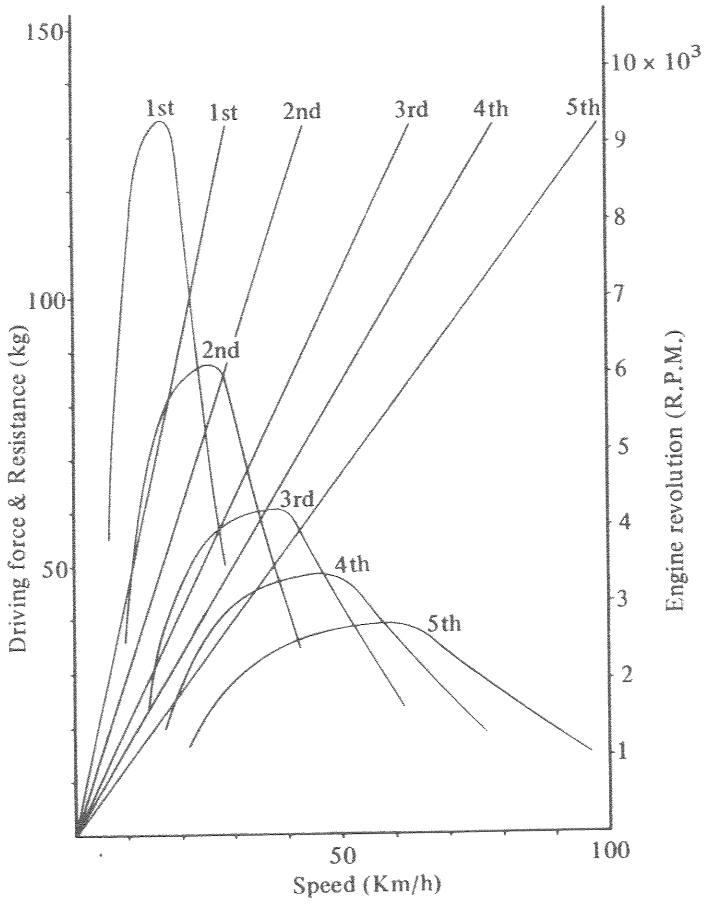
ELECTRICAL EQUIPMENT

Generator	Flywheel magneto
Battery	6V 4AH
Fuse	15A
Head lamp	6V 25/25W
Tail/Brake lamp	6V 3/21CP (3/10W)
Turn signal lamp	6V 8W x 4
Speedometer lamp	6V 3W
Tachometer lamp	6V 3W
Neutral indicator lamp	6V 3W
High beam indicator lamp	6V 1.7W
Turn signal indicator lamp	6V 1.7W

*The specifications subject to change without notice.

2. PERFORMANCE CURVES





3. GENERAL INSTRUCTION

To keep the motorcycle in peak condition, advise your customers to follow these instructions and this will give top performance at all times.

3–1. BREAKING-IN

The life of the motorcycle depends on the breaking-in of the engine and the way in which the motorcycle is treated. Therefore, breaking-in with the best care is much important to prevent excessive wear of the parts and noise and to prolong the engine life. During the breaking-in period, do not operate the motorcycle at high speed nor allow the engine to run wide open. Keep to specified breaking-in engine speed limit. Gradually raise the speed as covered mileage increases.

First 500 miles (800 Km) . . . . . below 4,500 rpm
Up to 1,000 miles (1,600 Km) . . . . . below 5,500 rpm

3–2. FUEL AND OIL

The engine's moving parts such as crankshaft, crankshaft bearings, con-rod, piston and cylinder wall are lubricated by fresh oil pressure-delivered by Suzuki CCI system separately from the fuel supply. Put gasoline only in the fuel tank and engine oil in the oil tank.

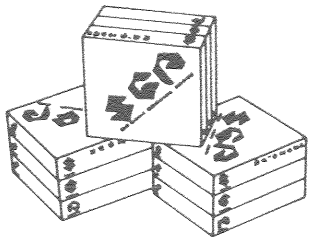
FUEL . . . . . GASOLINE OF 85–95 OCTANE IN RESEARCH METHOD
ENGINE OIL . . . SUZUKI CCI OIL

* If Suzuki CCI oil is not available, non-diluent (non-self mixing type) two stroke oil with around SAE No. 30 may be used instead.

TRANSMISSION OIL . . . . . SUZUKI TRANSMISSION OIL, 550cc (1.16/0.97 US/Imp pt) CHANGE FIRST 750 MILES (1,000 KM) AND 2,000 MILES (3,000 KM) THEREAFTER.

* If Suzuki transmission oil is not available, a good quality 20W/40 multi-grade motor oil may be used instead.

3–3. GENUINE PARTS



When replacing parts, always use Suzuki genuine parts, which are precision-made under severe quality control. If imitation parts (not genuine parts) are used, good performance cannot be expected from the motorcycle and in the worst case, they may cause a breakdown.

3–4. PERIODICAL INSPECTION

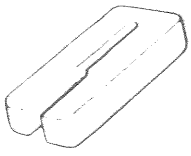
To prolong the life of the motorcycle and avoid unforeseen occurrence of serious troubles, the periodical inspection is indispensable. Be sure to check the motorcycle periodically according to the list given at the end of this manual.

4. SPECIAL TOOLS

Special tools listed below are used to disassemble, assemble and to perform maintenance and service. These special tools make works easy which can not be done simply with ordinary tools and prevent the parts from damage. It is recommended to provide these special tools as shop equipment.

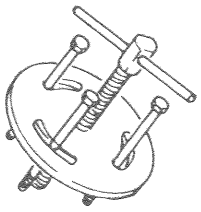
Ref. No.	Part Number of Tool	Use for
1	09910–20113	Locking crankshaft
2	09910–92810	Separating crankcase
3	09910–32811	Assembling crankcase
4	09930–10111	Removing or installing spark plug
5	09910–10710	Installing 8 mm stud bolt
6	09930–30113	Removing flywheel rotor
7	09930–40113	Locking flywheel rotor and engine sprocket
8	09930–20111	Adjusting contact point gap
9	09920–52810	Locking clutch sleeve hub
10	09920–60310	Locking clutch sleeve hub
11	09920–20310	Removing or installing clutch spring pin
12	09913–70122	Installing bearing and oil seal
13	09913–80111	Installing bearing and oil seal
14	09913–50110	Removing oil seal
15	09920–70111	Removing snap ring
16	09920–70120	Removing snap ring
17	09900–09002	Tightening or loosening cross-head screw
18	09910–70110	Removing carbon
19	09940–10122	Loosening or tightening steering stem nut
20	09941–00110	Loosening or tightening fork outer tube nut
21	09931–00112	Checking or adjusting ignition timing
22	09900–27002	Checking or adjusting ignition timing
23	09900–28102	Checking electrical equipment
24	09900–28401	Checking battery capacity

Piston holder



①

Crankshaft remover



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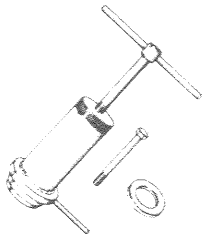
Crankshaft assembling tool



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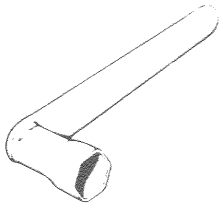
Spark plug wrench



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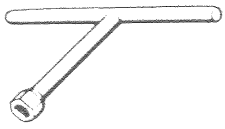
8 mm stud installing tool



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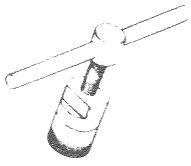
Flywheel rotor remover

Flywheel rotor & Engine sprocket holder

Contact point wrench

Clutch sleeve hub holder

Clutch sleeve hub holder handle



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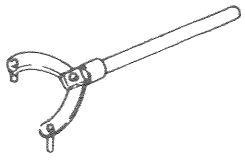
Clutch spring hook



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Bearing & Oil seal installing tool

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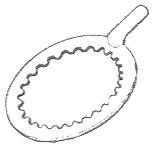
Bearing & Oil seal installing tool



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Oil seal remover

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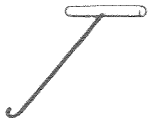
Snap ring opener



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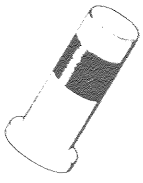
Snap ring opener



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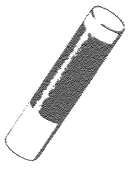
Shock driver set



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Exhaust pipe cleaner

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Steering stem lock nut wrench

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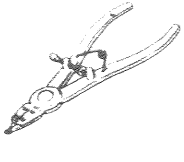
Front fork outer tube nut wrench set



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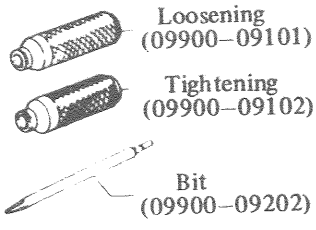
Timing gauge



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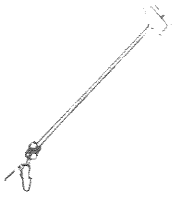
Timing tester



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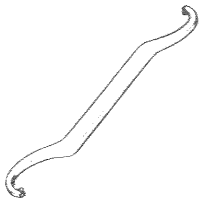
Electro tester



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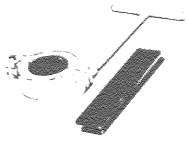
Hydrometer



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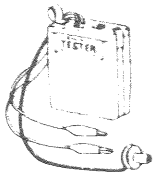

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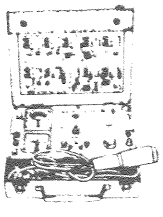

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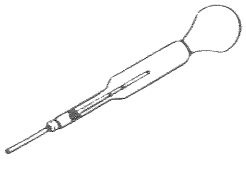

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5. NECESSARY MATERIALS

RV125 necessitates the following materials in addition to the general service equipment, tools and other materials like lubricant, cleaning solvent, emery cloth and so forth. For further details, refer to the pertinent items in this manual.

5–1. THREAD CEMENT

Fig. 5–1–1 Optional part No. 99000–32010

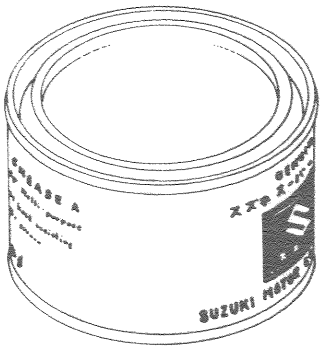
This cement is applied to the thread of screw such as the fitting screw for the shifting cam guide, kick starter stopper and gear shifting arm stopper.

Fig. 5–1–2 Optional part No. 99000–32030

This cement is only used for securing the 2nd drive gear press-fitted over the counter-shaft end. Apply the cement to the inside surface of the gear when pressing it in.

5–2. GREASE

One of these two types should be used for lubrication of the crank and other oil seals. These grease are applied to the inside of oil seal where it meets with a shaft.



A type Optional part No. 99000–25010

C type Optional part No. 99000–25030

Fig. 5–2–1

6. TROUBLE SHOOTING

When trouble occurs with a motorcycle, it is important to find the source of the trouble as rapidly as possible. It is also necessary to perform only the work required to repair the machine without bothering with parts which are functioning correctly. The list of possible troubles and their causes given below should help the service man to repair motorcycles quickly without loss of effort.

6–1. IF ENGINE IS HARD TO START

Check fuel in the fuel tank first. When a proper amount of fuel is in the tank, check the following points.

Order and Description	Check Points	Remedy
1. Check to see that fuel flows into carburetor	* If fuel does not enter into carburetor	
	1. Fuel strainer clogged	Remove and clean
	2. Fuel pipe clogged or damaged	Clean or replace
	3. Tank cap air vent clogged	Clean with wire
	4. Fuel cock clogged	Clean
2. Check to see that spark jumps in spark plug. (Turn engine with kick starter).	* If blue or hot spark jumps in the spark plug, check the following points.	
	1. Ignition timing	Adjust
	2. Carburetion	Adjust
	3. Engine compression	Recover it
	* If spark is weak	
	1. Damage in spark plug	Replace
	2. Incorrect spark plug gap	Adjust
	3. Damage in spark plug cap	Replace
	4. Dirty contact points	Clean and adjust
	5. Bad insulation in condenser	Replace
	6. Damage in ignition coil	Replace
	* If there is no spark	
	1. Damage in spark plug	Replace
	2. Dirty or wet spark plug	Clean
	3. Incorrect spark plug gap	Adjust
	4. Dirty or incorrect contact point gap	Clean and adjust
	5. Bad insulation in condenser	Replace
	6. Damage in ignition coil or primary coil	Replace
	7. Damage in ignition switch	Replace
	8. Damage in wiring harness	Repair or replace
	9. Incorrect spark plug heat range	Replace

3. Check to see that engine compression is proper (Turn engine with kick starter).	* If engine compression is improper	
	1. Cylinder and piston rings worn	Repair or replace
	2. Piston ring stick on piston	Repair or replace
	3. Cylinder head gasket damaged	Replace
	4. Cylinder base gasket damaged	Replace
	5. Piston damaged	Replace
	6. Spark plug improperly tightened	Tighten securely
	7. Spark plug gasket faded	Replace
	8. Cylinder head improperly tightened	Tighten securely
	9. Gas leakage from crankcase	Repair or replace
	10. Cylinder or cylinder head damaged	Replace
	11. Oil seals damaged	Replace

6–2. IF ABNORMAL NOISE IS HEARD IN ENGINE

	Check Points	Remedy
	1. Too big clearance between piston and cylinder	Repair or replace
	2. Too big clearance between piston rings and grooves	Replace piston
	3. Piston rings stiff with carbon	Clean
	4. Con-rod big end worn	Replace
	5. Con-rod small end bearing worn	Replace
	6. Piston rings damaged	Replace
	7. Ignition timing too advanced	Adjust
	8. Defective primary pinion and gear	Replace
	9. Crankshaft bearings worn	Replace
	10. Defective transmission gear	Replace
	11. Defective transmission bearings	Replace

6–3. IF ENGINE OVERHEATS

If engine overheats at high speed running after it is broken in, check to see if the oiling system is in good condition, the brake is dragging, or cylinder cooling fins are dirty. Inspect the following points.

Description	Check Points	Remedy
1. Check to see if oiling system functions properly.	1. Improperly adjusted oil pump control lever	Adjust
	2. Air in oil lines	Remove air
	3. Oil tank cap breather hole clogged.	Repair
	4. Incorrect oil used	Use prescribed oil

2. Check to see if engine compression is higher than standard	* Too high compression 1. Carbon deposits in combustion chamber 2. Too thin cylinder head gasket	 Remove carbon deposit Replace
3. Check carbon deposit	* Check carbon deposit in muffler, exhaust pipe, exhaust port and combustion chamber	Disassemble and remove carbon deposit
4. Check to see that piston rings move smoothly in grooves	* Piston rings stiff by carbon deposit	Remove carbon deposit
5. Check to see that the clutch works properly	Clutch slippage	Adjust
6. Check to see that the ignition timing is correct		Adjust
7. Drive chain too tight		Adjust
8. Incorrect spark plug heat range		Replace with colder plug
9. Too lean fuel mixture		Adjust carburetor

6–4. DEFECTIVE CLUTCH

Description	Check Points	Remedy
1. Clutch slippage	1. Improperly adjusted clutch	Adjust
	2. Clutch springs worn	Replace
	3. Clutch plates worn	Replace
2. If clutch drags	1. Improper weight oil	Replace
	2. Uneven clutch spring tension	Replace

6–5. GEAR SHIFTING TROUBLES

Description	Check Points	Remedy
1. Gear engagement	* If gears do not engage	
	1. Gear shifting cam groove damaged	Replace shifting cam
	2. Gear shifting forks not moved smoothly on cam	Rectify with emery paper
	3. Gear shifting fork damaged	Replace
	4. Gears seized	Replace
2. Gear shifting lever	* If gear shifting lever does not return to normal position.	

	1. Gear shifting shaft return spring damaged	Replace
	2. Friction between gear shifting shaft and crankcase	Repair bent shaft or replace
3. Jumping out of gear	* If the gears disengage while running.	
	1. Gear shifting fork worn or bent	Replace
	2. Gear dog teeth worn	Replace gear
	3. Gear shifting cam worn or damaged	Replace

6–6. BAD STABILITY AND STEERING

Description	Check Points	Remedy
1. Handlebar is stiff	1. Steering stem lock nut tight	Adjust
	2. Steering stem bent	Repair or replace
	3. Steel balls damaged	Replace
2. Handlebar is not stable	1. Incorrect wheel alignment	Adjust
	2. Steel balls damaged	Replace
	3. Fork stem bent	Repair or replace
	4. Bearing races worn or damaged	Replace
	5. Front fork bent	Repair or replace
	6. Swinging arm bent	Repair
	7. Fork spring worn	Replace
3. Wheel is not true	1. Up-and-down play in hub bearings	Replace
	2. Wheel rim deformed	Repair or replace
	3. Loose rim fitting nuts	Tighten
	4. Chain too tight	Adjust
	5. Loose swinging arm fitting	Tighten
	6. Frame warped	Replace
	7. Incorrect tire pressure	Correct

7. ENGINE

7–1. REMOVAL

Prior to the removal operation, throughly clean the engine with a steam cleaner or cleaning solvent to remove road dirt. The removal procedure is as follow.

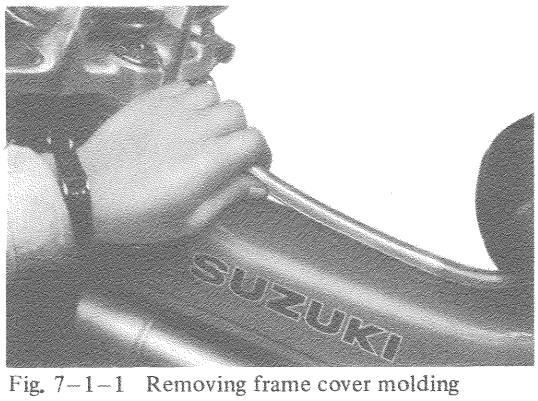


Fig. 7–1–1 Removing frame cover molding

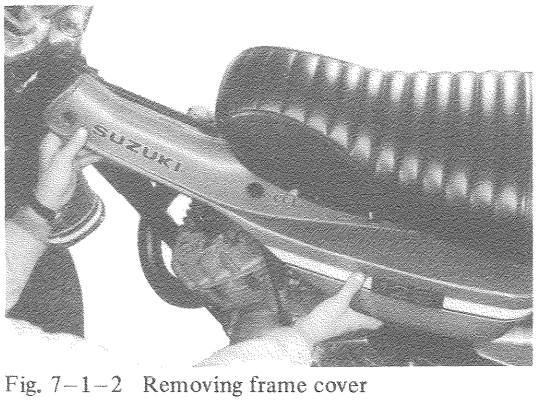


Fig. 7–1–2 Removing frame cover

Required tool:

big size

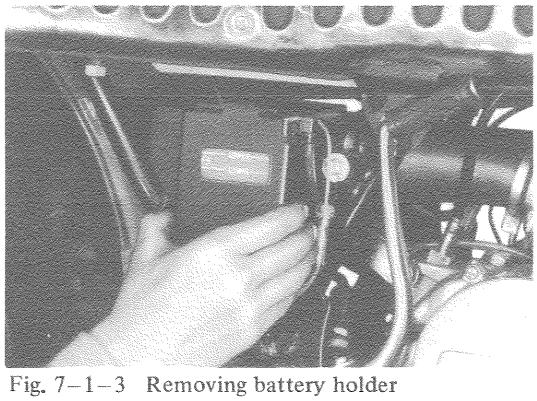


Fig. 7–1–3 Removing battery holder

Required tool:

or 10 mm

Tightening torque:
40 ~ 70 Kg-cm (2.9 ~ 5.1 lb-ft)

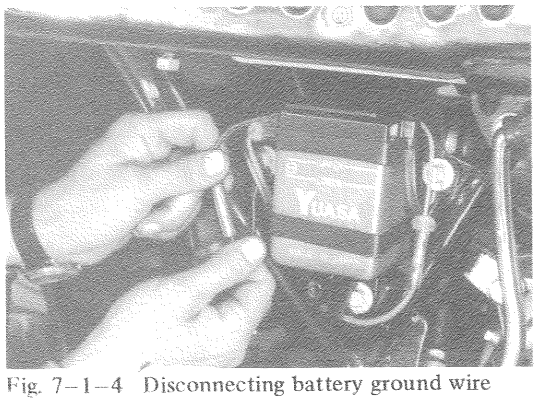


Fig. 7–1–4 Disconnecting battery ground wire

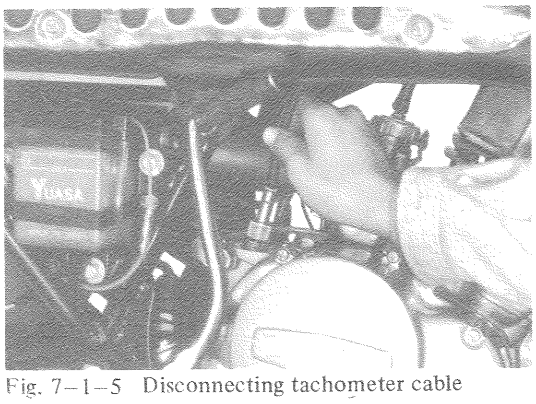


Fig. 7–1–5 Disconnecting tachometer cable

Required tool:

Be sure not to lose the oil seal installed at the joint when removing the cable.

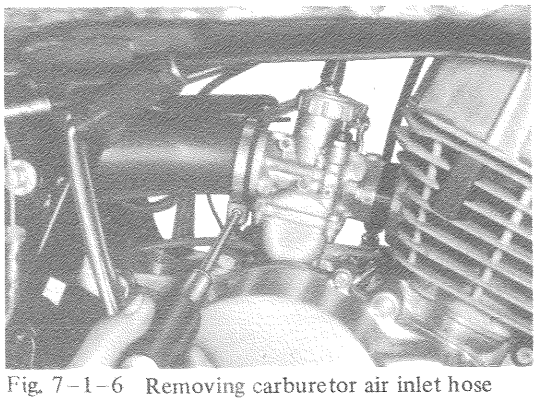


Fig. 7–1–6 Removing carburetor air inlet hose

Required tool:

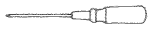

small size


Fig. 7–1–7 Removing kick starter lever

Required tool:


14 mm

Tightening torque:
250 ~ 400 Kg (18 ~ 29 lb-ft)

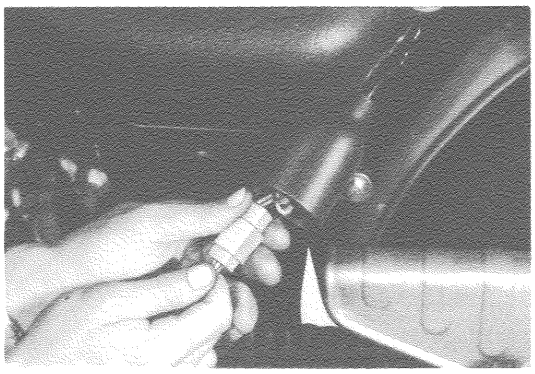


Fig. 7–1–8 Disconnecting magneto lead wire

Disconnect the magneto lead wires at the coupler located behind the air cleaner box.

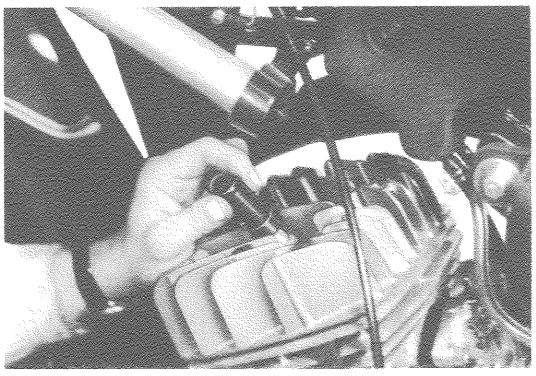


Fig. 7–1–9 Removing spark plug cap

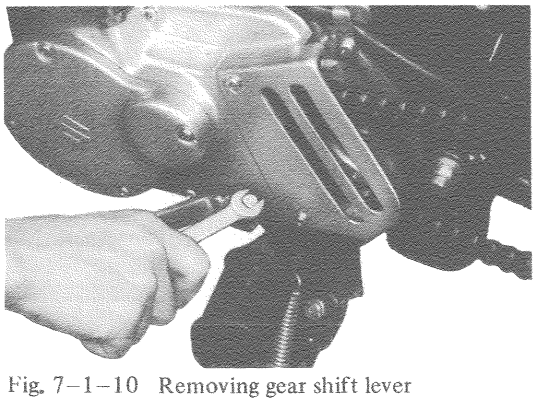


Fig. 7–1–10 Removing gear shift lever

Required tool:

10 mm

Tightening torque:
60 ~ 100 Kg-cm (4.4 ~ 7.3 lb-ft)

Fig. 7–1–11 Removing crankcase left cover

Required tool:

big size

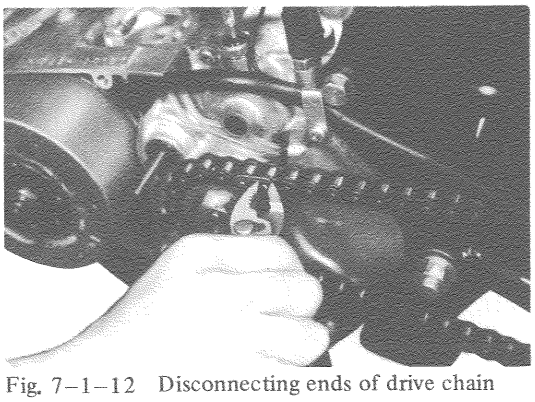


Fig. 7–1–12 Disconnecting ends of drive chain

Required tool:

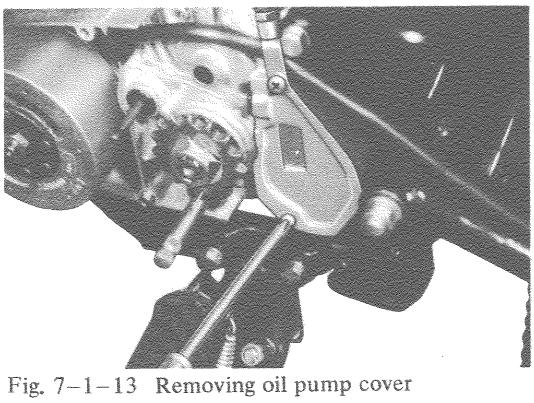
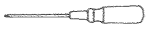


Fig. 7–1–13 Removing oil pump cover

Required tool:



big size

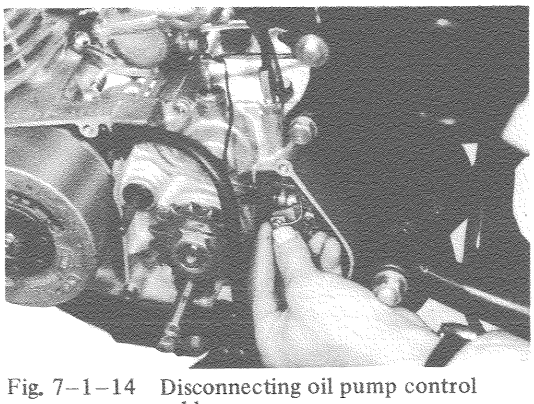


Fig. 7–1–14 Disconnecting oil pump control cable

Disconnect the oil control cable at the oil pump by removing the cable end piece.

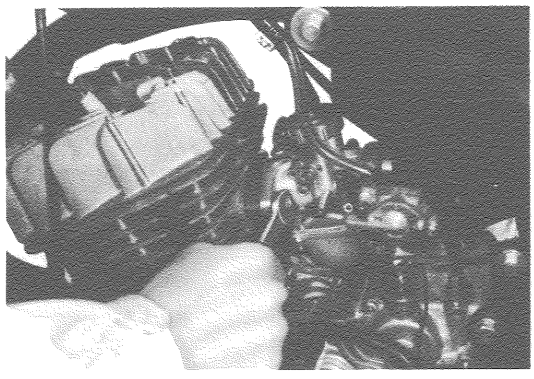


Fig. 7–1–15 Removing carburetor

Required tool:

12 mm

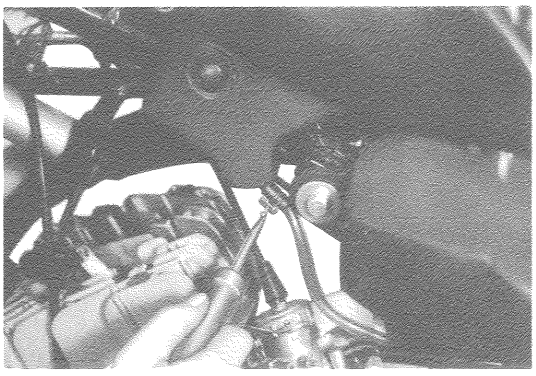


Fig. 7–1–16 Disconnecting oil inlet pipe

Required tool:

small size

Disconnect the oil pump inlet pipe at the oil tank outlet and block the outlet hole by the rubber cap of wheel inner tube inflator valve.

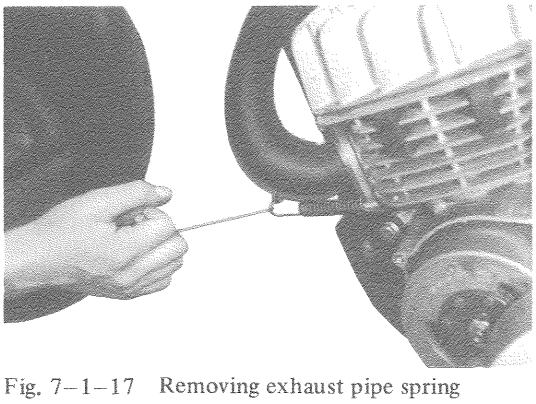


Fig. 7–1–17 Removing exhaust pipe spring

Required tool:

special tool 09920–20310

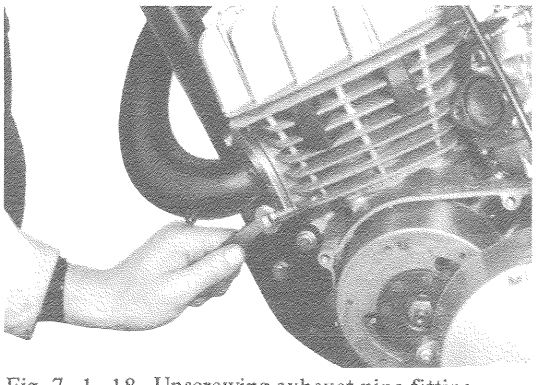


Fig. 7–1–18 Unscrewing exhaust pipe fitting bolt

Required tool:

or 10 mm

Tightening torque:
60 ~ 100 Kg-cm (4.4 ~ 7.3 lb-ft)

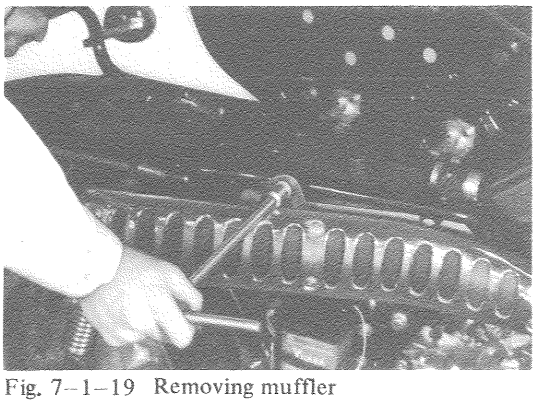


Fig. 7–1–19 Removing muffler

Required tool:

or 14 mm

Tightening torque:
180 ~ 280 Kg-cm (13 ~ 20 lb-ft)

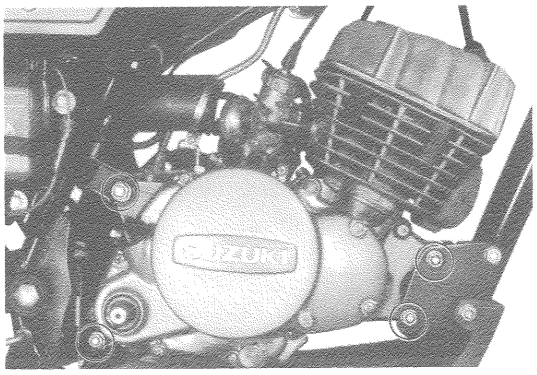


Fig. 7–1–20 Removing engine mounting bolts

Required tool:

12, 14 mm and 12, 14 mm

Tightening torque:
"S" marked bolt 130 ~ 230 Kg-cm (9.5 ~ 17 lb-ft)
Usual bolt 180 ~ 280 Kg-cm (13 ~ 20 lb-ft)

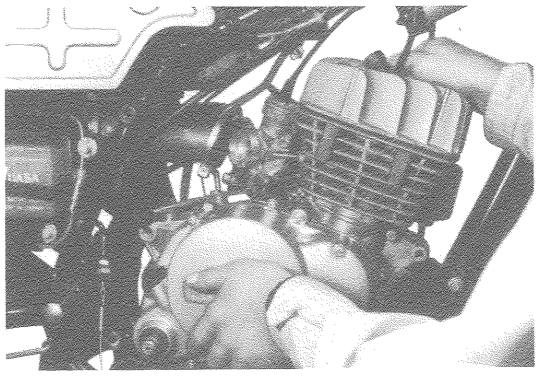


Fig. 7–1–21 Dismounting engine

Lift up the engine and move it.

CAUTION :
Do not pull up or move the engine by holding the gear shifting shaft otherwise the shaft may bend making it difficult to pull the shaft out.

7–2. DISASSEMBLY AND ASSEMBLY

This section gives an explanation of all the jobs necessary for separating the crankcase. When disassembling the engine, take the following steps. For reassembling the engine after necessary inspections or repairs, follow the reverse order of the disassembly.

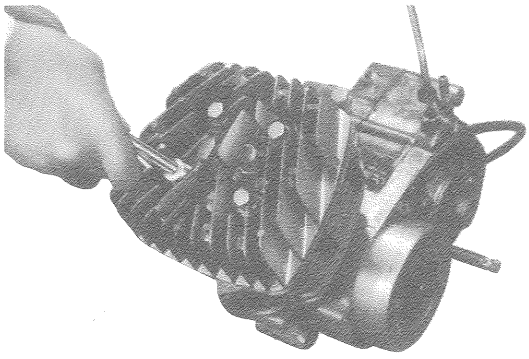


Fig. 7–2–1 Removing cylinder head

1. Remove the cylinder head after unscrewing the fitting nuts.

   Required tool:

    14 mm

   Tightening torque:
   230 ~ 270 Kg-cm (17 ~ 20 lb-ft)

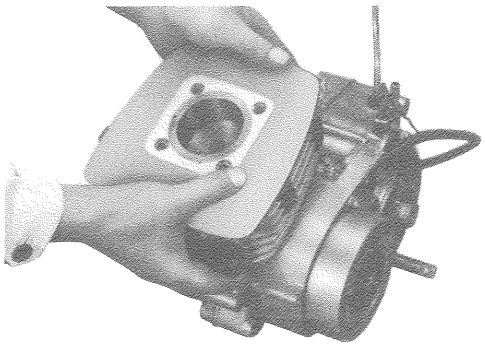


Fig. 7–2–2 Removing cylinder

2. Remove the cylinder by pulling it up.

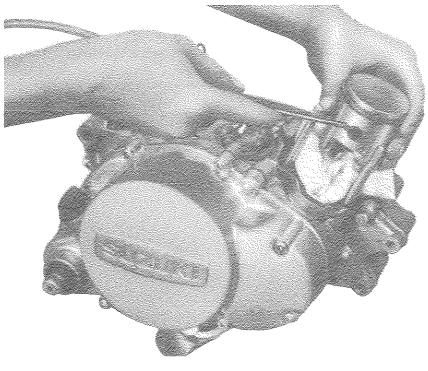
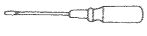


Fig. 7–2–3 Removing piston pin circlip

3. Remove the piston pin circlip from piston.

   Required tool:

    small size

   CAUTION :
   Cover the crank chamber with clean rag to prevent a piston pin circlip or a foreign substance from dropping into it.

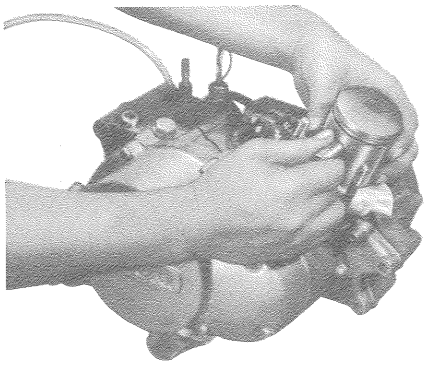


Fig. 7–2–4 Removing piston pin

4. Remove the piston pin by pushing the other end of the pin with a rod.

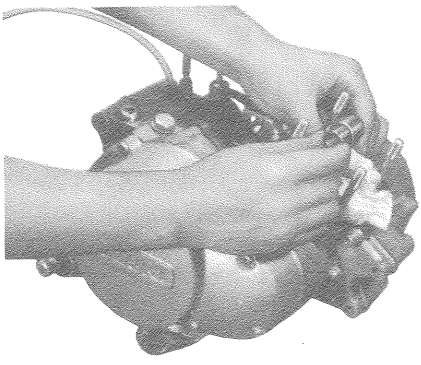


Fig. 7–2–5 Removing piston pin bearing

5. Remove the piston pin bearing.

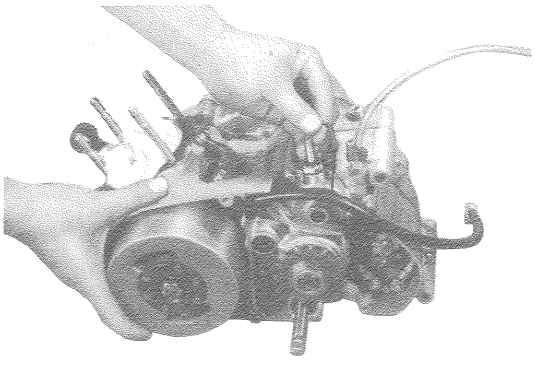


Fig. 7–2–6 Disconnecting neutral indicator switch wire

6. Disconnect the neutral indicator switch wire.

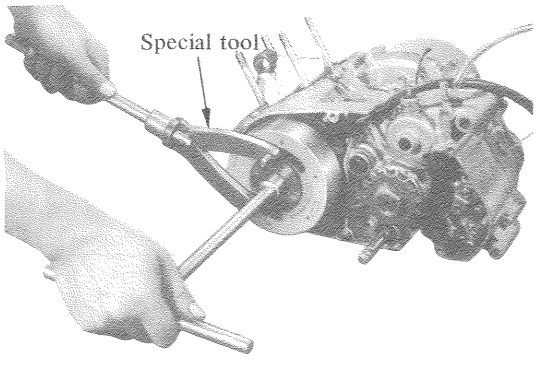


Fig. 7–2–7 Loosening flywheel rotor nut

7. Loosen the flywheel rotor nut by holding the rotor with the special tool.

Required tool:

 17 mm

 special tool 09930–40113

Tightening torque:
300 ~ 400 Kg-cm (22 ~ 29 lb-ft)

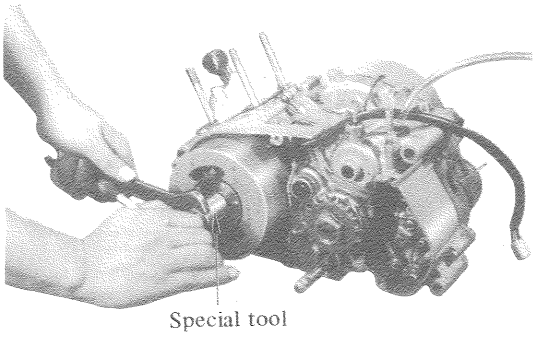
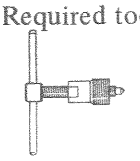


Fig. 7–2–8 Removing flywheel rotor

8. Remove the flywheel rotor with the special tool.

Required tool:

 special tool 09930–30113

 19 mm

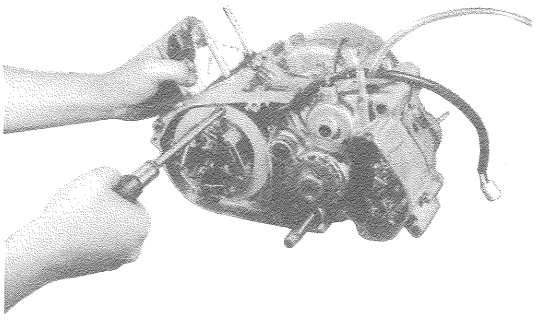


Fig. 7–2–9 Removing magneto stator

9. Remove the magneto stator by unscrewing the fitting screws and woodruff key on the crankshaft.

Required tool:

 big size

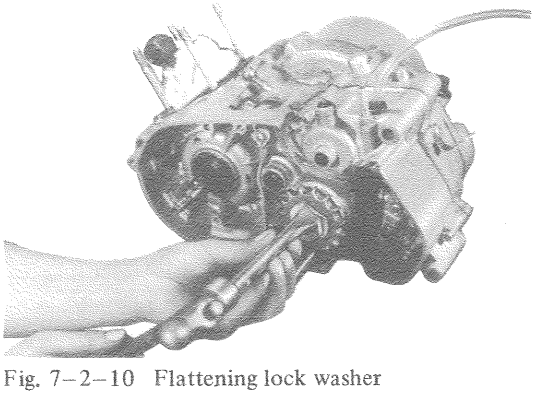


Fig. 7–2–10 Flattening lock washer

10. Flatten the engine sprocket washer with a chisel and a hammer.

Required tool:

 and 

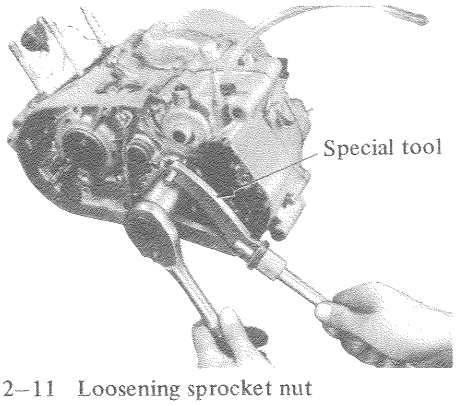


Fig. 7–2–11 Loosening sprocket nut

11. Loosen the sprocket nut by holding the sprocket with the special tool.

Required tool:

 special tool 09930–40113

 27 mm

Tightening torque:
400 ~ 600 Kg-cm (29 ~ 43 lb-ft)

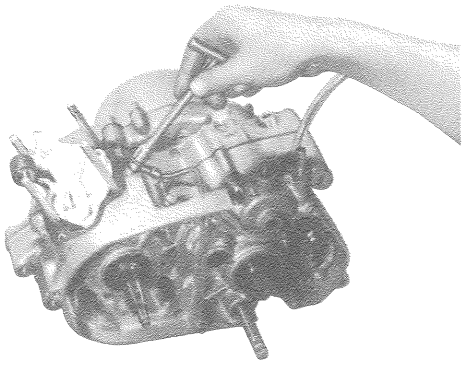


Fig. 7–2–12 Removing oil pipe union bolts

12. Loosen the oil pipe union bolts.

Required tool:

or 8 mm

Tightening torque:
20 ~ 30 Kg-cm (1.4 ~ 2.2 lb-ft)

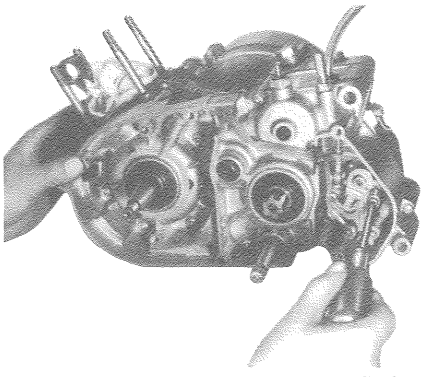


Fig. 7–2–13 Loosening oil pump fitting screws

13. Unscrew 2 pcs of the screws and remove the oil pump.

Required tool:

small size

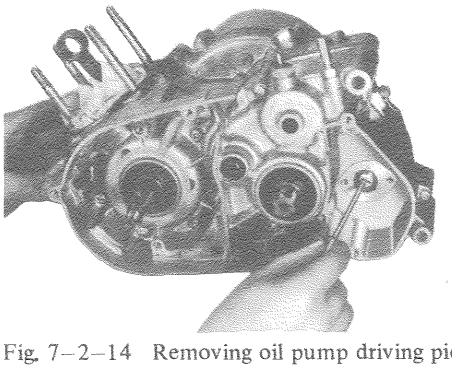


Fig. 7–2–14 Removing oil pump driving piece

14. Remove the oil pump driving piece.

Required tool:

small size

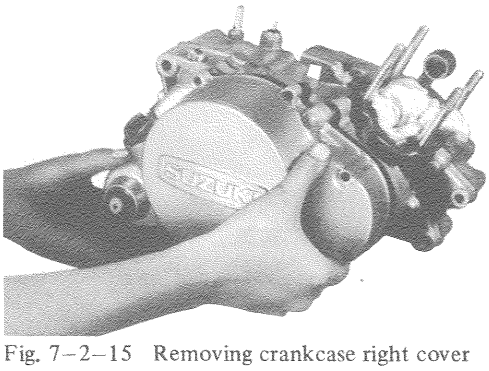


Fig. 7–2–15 Removing crankcase right cover

15. After loosening the fitting screws, remove the crankcase right cover and oil drain guide.

Required tool:

big size

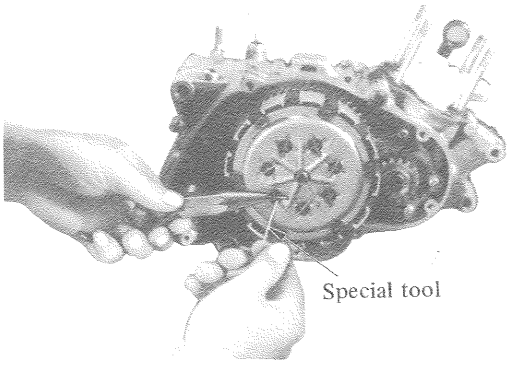
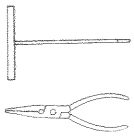


Fig. 7–2–16 Removing clutch spring pins

16. Remove the clutch spring pins by pulling the clutch spring with the special tool.

Required tool:



special tool 09920–20310

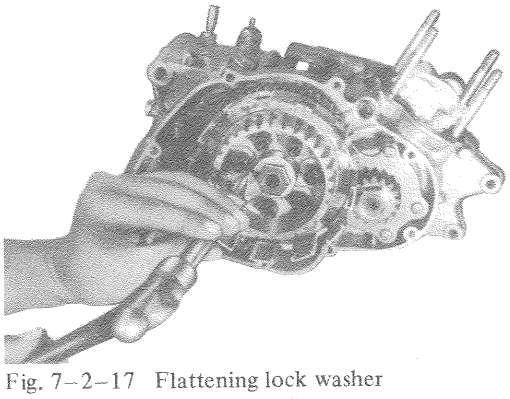
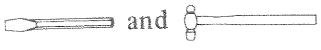


Fig. 7–2–17 Flattening lock washer

17. After removing the clutch plates and the clutch release rod fitted on the end of the shaft by hand, flatten the clutch sleeve hub washer with a chisel and a hammer.

Required tool:



and

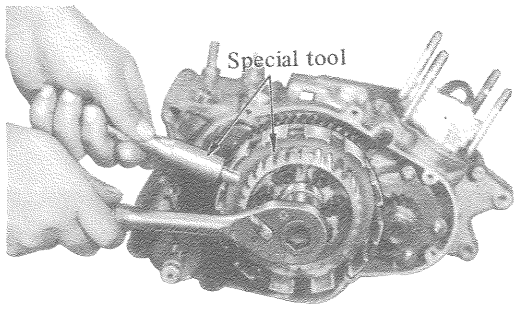


Fig. 7–2–18 Loosening clutch sleeve hub nut

18. Loosen the clutch sleeve hub nut by holding the hub with the special tools.

Required tool:

22 mm

special tool 09920–52810

special tool 09920–60310

Tightening torque:
200 ~ 300 Kg-cm (14 ~ 22 lb-ft)

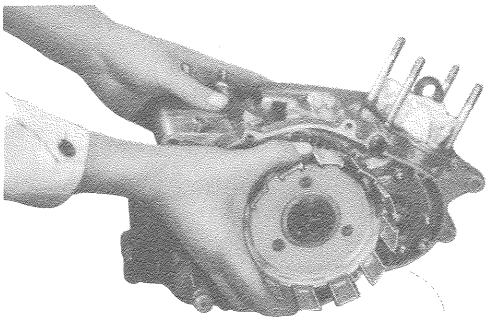


Fig. 7–2–19 Removing clutch housing

19. After taking out the clutch sleeve hub by hand, remove the clutch housing and the primary gear spring.

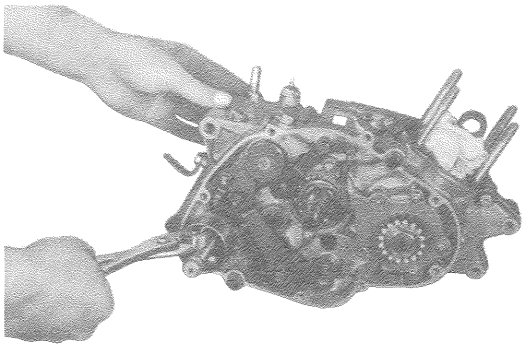


Fig. 7–2–20 Removing shaft spring

20. After taking out the kick shaft spring guide by hand, remove the shaft spring and the spring holder.

Required tool:

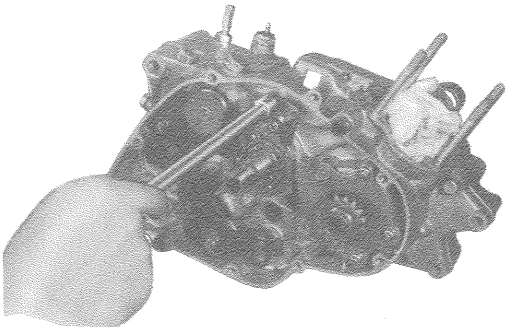


Fig. 7–2–21 Removing shifting cam stopper

21. Remove the shifting cam stopper.

Required tool:

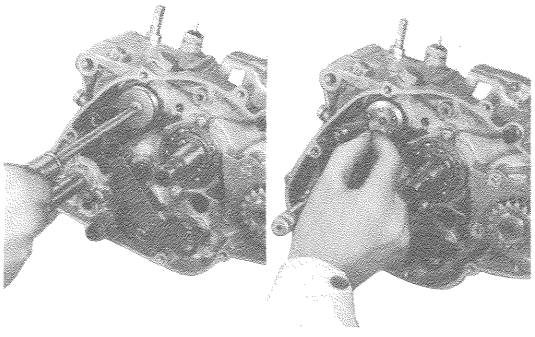
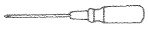


Fig. 7–2–22 Removing shifting cam pins

22. After taking off the shifting cam pin retainer by unscrewing the fitting screw, remove the shifting cam pins.

Required tool:



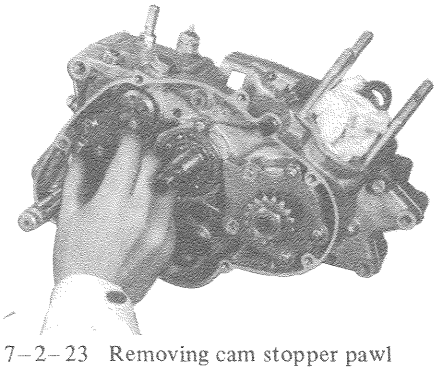


Fig. 7–2–23 Removing cam stopper pawl

23. After removing the cam stopper pawl circlip, take off the cam stopper pawl.

Required tool:

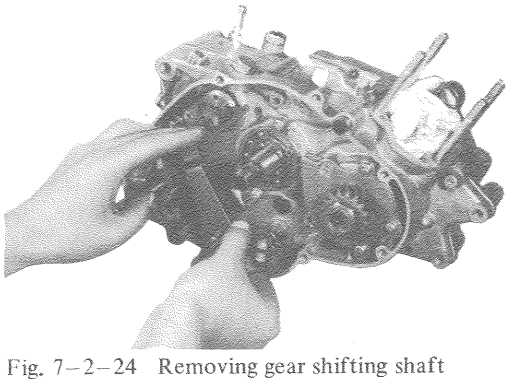


Fig. 7–2–24 Removing gear shifting shaft

24. Pull out the gear shifting shaft.

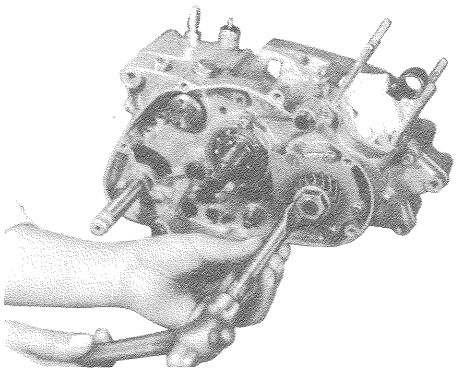
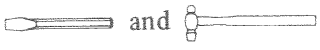


Fig. 7–2–25 Flattening lock washer

25. Flatten the primary pinion washer with a chisel and a hammer.

Required tool:



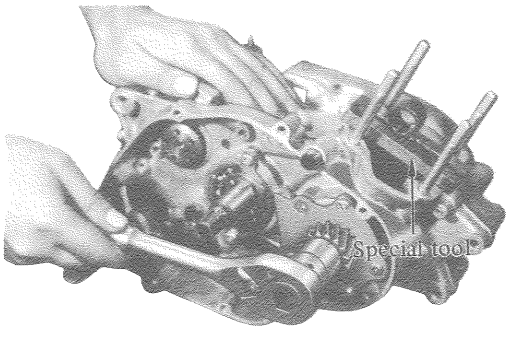


Fig. 7–2–26 Loosening primary pinion nut

26. Place the piston holder between the connecting rod and the crankcase in order to lock the crankshaft and loosen the primary pinion nut.

Required tool:

special tool 09910–20113

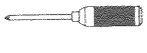
24 mm

Tightening torque:
400 ~ 550 Kg-cm (29 ~ 40 lb-ft)

27. After taking off the primary pinion key with the pliers, remove the oil reservoir plate by unscrewing its fitting screws.

Required tool:

big size



impact driver

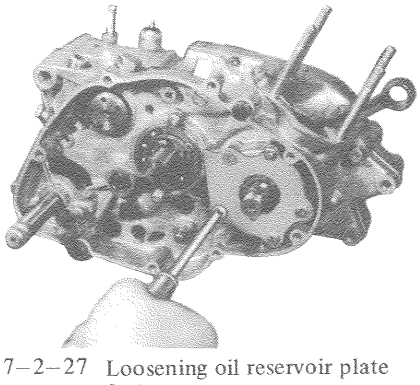


Fig. 7–2–27 Loosening oil reservoir plate fitting screws

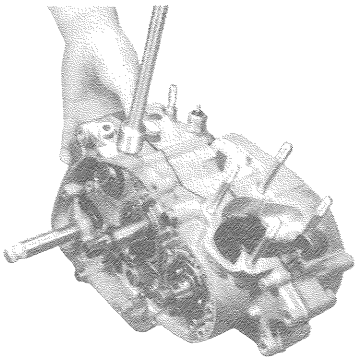


Fig. 7–2–28 Removing gear shifting cam stopper

28. Remove the gear shifting housing together with the cam stopper and the stopper spring.

Required tool:

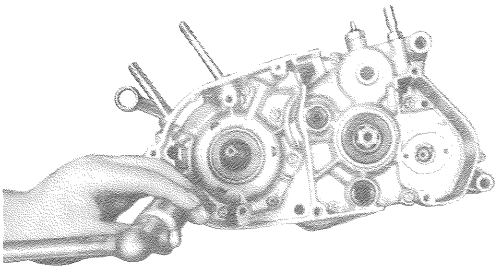


Fig. 7–2–29 Loosening crankcase screws

29. Loosen all the crankcase joining screws on the left crankcase half.

Required tool:

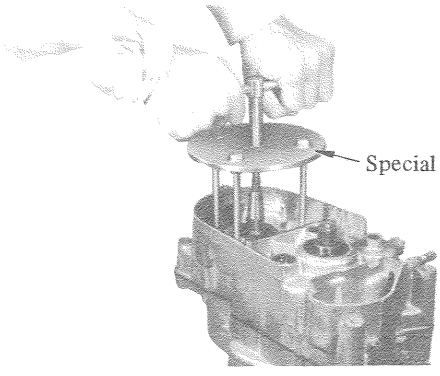
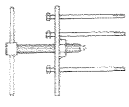


Fig. 7–2–30 Separating crankcase

30. Place the special tool on the left crankcase half and separate it into left and right halves leaving inside parts on the right half of the case.

Required tool:



special tool 09910–92810

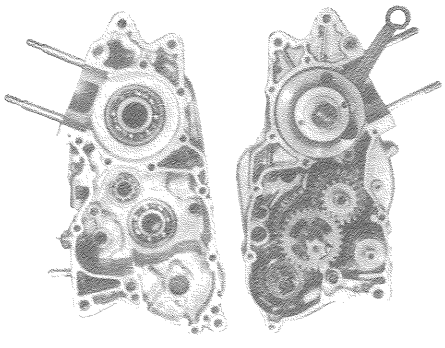


Fig. 7–2–31 Separated crankcase

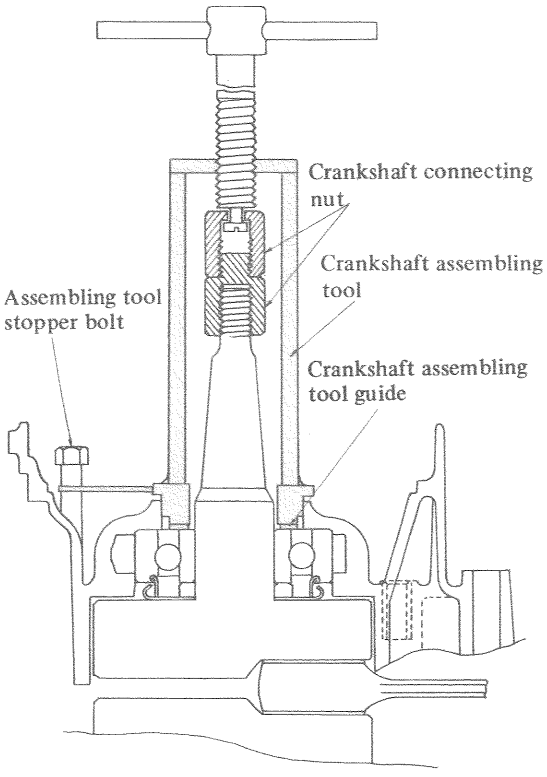
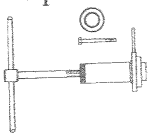


Fig. 7–2–32 Special tool 09910–32811

When combining the left crankcase with the right crankcase, the special tool is required.
Place the special tool on the crankcase left half as shown in Fig. 7–2–32 and assemble them by turning the handle of the special tool.

Required tool:



special tool 09910–32811

mallet or soft hammer

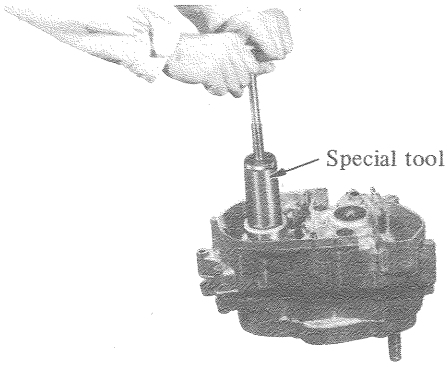


Fig. 7–2–33 Assembling crankcase

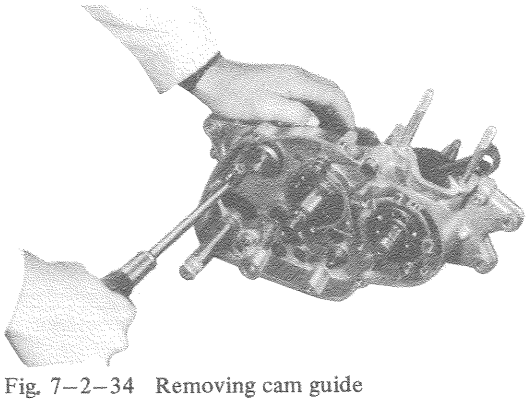
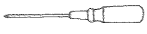


Fig. 7–2–34 Removing cam guide

31. Remove the cam guide.

Required tool:



big size

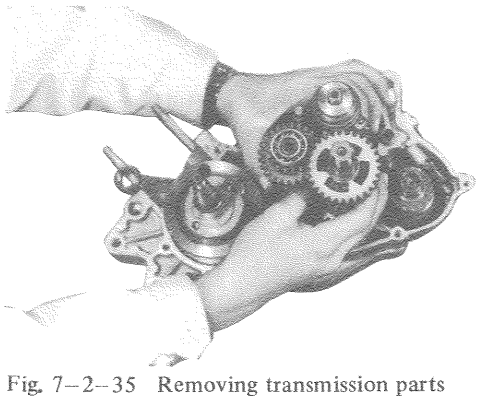


Fig. 7–2–35 Removing transmission parts

32. Remove the transmission parts.