

13. Install the special advancer washer with the 6 mm bolt, and install the point cover.
14. Mount the generator rotor with the 16 mm bolt.
15. Install the generator cover.
15. Assemble the piston, cylinder, cylinder head, and head cover in accordance with section 3. C.

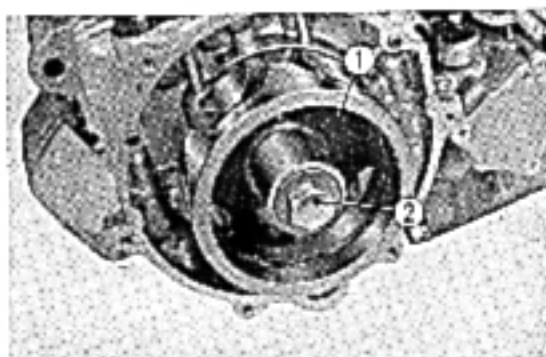


Fig. 157 ① Generator rotor
② 16 mm bolt

10. TRANSMISSION, KICK STARTER AND PRIMARY SHAFT

A. Disassembly

1. Dismount the engine from the frame in accordance with section 2. A.
2. Remove the clutch in accordance with section 5. A.
3. Separate the upper and lower crankcase in accordance with section 9. A.
4. Remove the transmission and disassemble the gears from the respective shafts.

Kick Starter

5. Remove the 18 mm snap ring and the return spring.
6. Remove the 12 mm snap ring and disassemble the kick starter shaft from the lower crankcase.



Fig. 158 ① 16 mm snap ring
② Return spring



Fig. 159 ① 12 mm snap ring ② Kick starter shaft



Fig. 160 ① Primary drive gear ② 20 mm snap ring

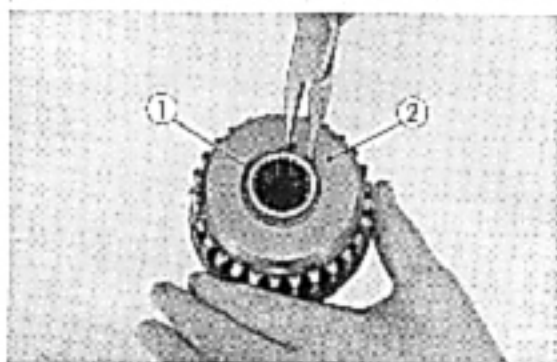
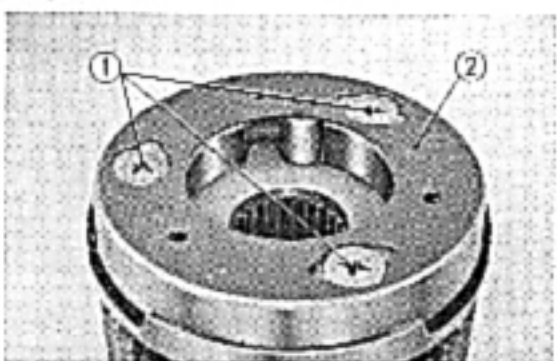
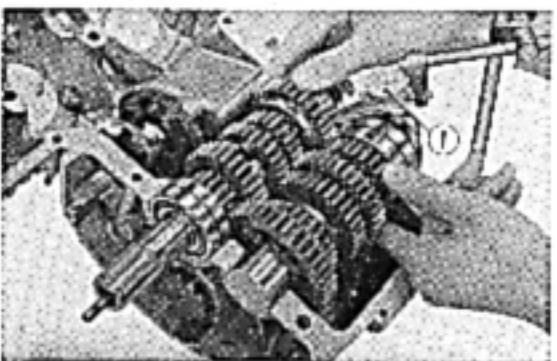
Fig. 161 ① 30 mm snap ring
② Primary driven sprocketFig. 162 ① 6 mm flat head screws
② Starting clutch outer

Fig. 163 ① Dial gauge

Primary Shaft

7. Remove the primary shaft in accordance with section 9. A, and remove the 20 mm snap ring and primary drive gear.

8. Remove the side collar and pull out the #6205 ball bearing.

9. Remove the 50 mm snap ring, primary driven sprocket, starting clutch, and pull out the damper rubbers.

10. Unscrew the three 6 mm flat head screws and remove the starting clutch outer.

H. Inspection

1. Measure gear backlash.

Set the pointer of a dial gauge against the tooth of the gear and measure the backlash.

2. Inspect the dogs and replace any gears with excessively worn dogs. Also, make sure that the gears slide smoothly over the splined shaft.

C. Reassembly

Primary Shaft

1. Install the starting clutch outer and primary driven sprocket hub with the three 6 mm flat head screws coated with thread lock cement, and then stake the screw heads with a punch to prevent loosening.

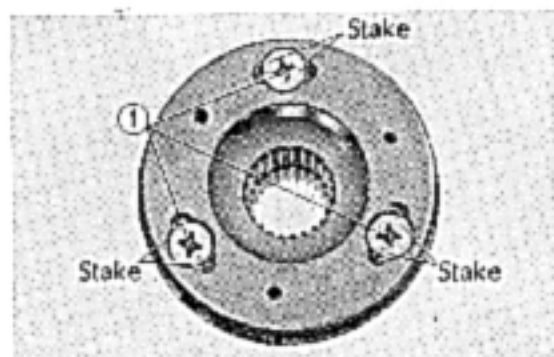


Fig. 161 ① 6 mm flat head screw

2. Assemble the damper rubbers on the primary driven sprocket, and install on the starting clutch with 30 mm set ring.
3. Drive the #6205 ball bearing into the primary shaft.

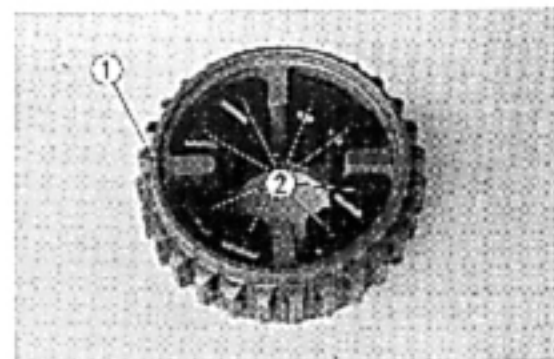


Fig. 165 ① Primary driven sprocket
② Damper rubbers

4. Mount the starting clutch gear on the starting clutch, insert the needle bearing and 25 mm spacer into the starting clutch gear, fit the 25 mm thrust washer and the snap ring on the primary shaft, and install the primary shaft in the crankcase.

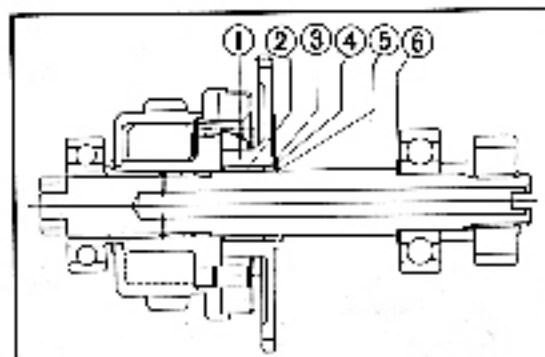


Fig. 166 ① Starting clutch gear
② Needle bearing (25×29×17)
③ 25 mm spacer
④ 25 mm thrust washer
⑤ 25 mm snap ring
⑥ 22 mm thrust washer



Kick Starter

5. Reassemble the kick starter components in accordance with Fig. 166.

Note:

Do not forget to install the 18 mm washer.

Transmission

6. Assemble the transmission gears on the respective main and counter shafts.

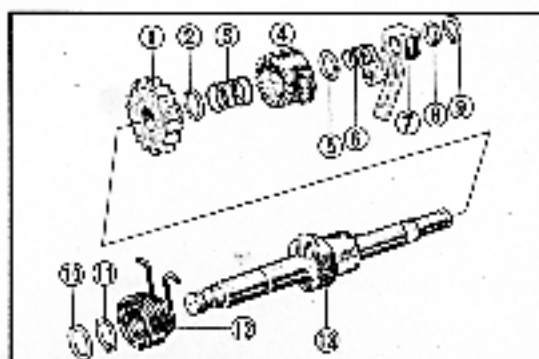
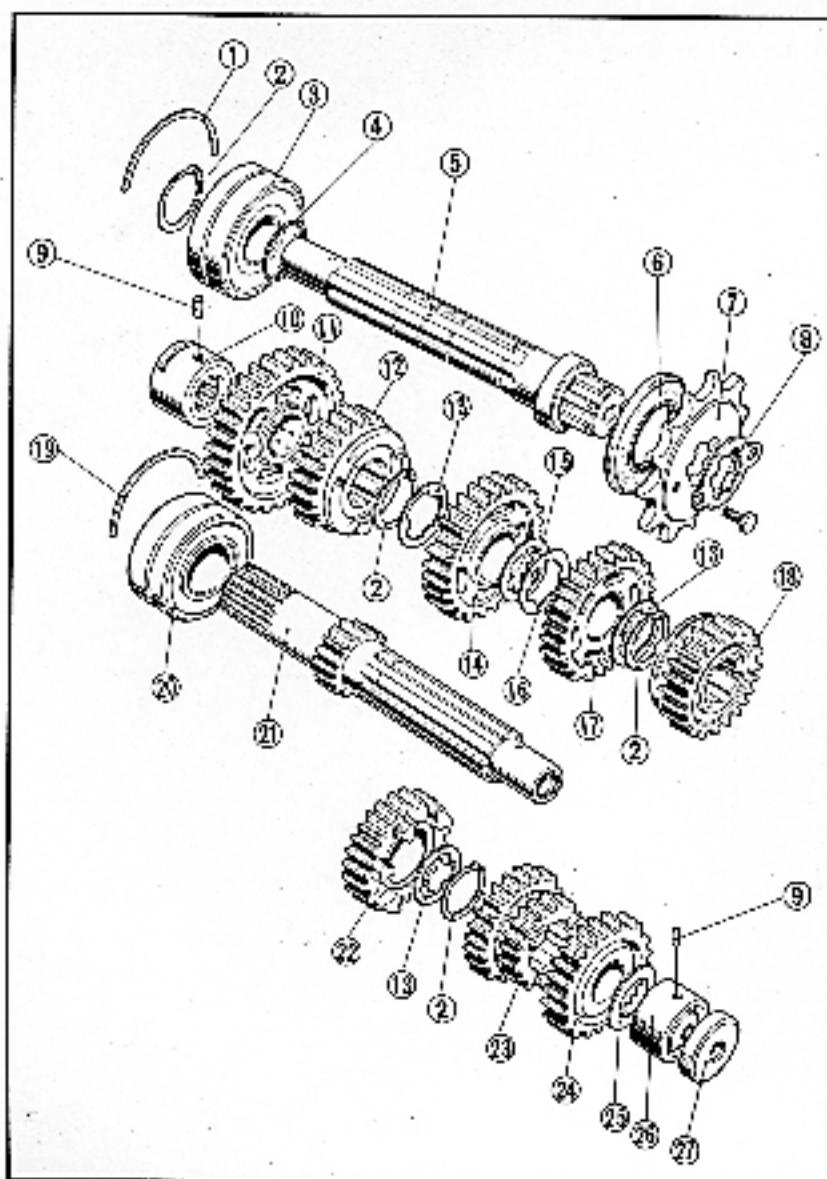


Fig. 167 ① Kick starter pinion
② 26 mm thrust washer
③ Starter pinion set spring
④ Kick starter ratchet



- ⑤ 16 mm thrust washer
⑥ Kick starter ratchet spring
⑦ Ratchet guide plate
⑧ Chain guide thrust
⑨ 12 mm snap ring
⑩ 18 mm washer
⑪ 18 mm snap ring
⑫ Kick starter spring
⑬ Kick starter spindle
⑭ 57 mm bearing set ring
⑮ 25 mm snap ring
⑯ 5205 special ball bearing
⑰ 24.5 mm O-ring
⑱ Transmission counter shaft
⑲ 33x57x7 oil seal
⑳ Drive sprocket (17T)
㉑ Drive sprocket fixing plate
㉒ Gear shift fork pin
㉓ 20 mm needle bearing
㉔ Counter shaft low gear (40 T)
㉕ Counter shaft fourth gear (23 T)
㉖ 25 mm thrust washer
㉗ Counter shaft third gear (33T)
㉘ 25 mm lock washer
㉙ 25 mm thrust washer
㉚ Counter shaft second gear (26 T)
㉛ Counter shaft top gear (27 T)
㉜ 52 mm bearing set ring
㉝ 5205 IIS ball bearing
㉞ Transmission main shaft (24 T)
㉟ Main shaft fourth gear (28 T)
㊱ Main shaft second, third gear (22 T, 26 T)
㊲ Main shaft top gear (30T)
㊳ 23 mm thrust washer
㊴ 22 mm needle bearing
㊵ 8x34x8 oil seal

Fig. 168



7. Install the two each bearing set rings and the dowel pins in the upper crankcase, and install the transmission.
8. Reassemble the upper and the lower crankcase in accordance with section 9. C.
9. Install the clutch in accordance with section 6. C.
10. Mount the engine in the frame in accordance with 2. B.

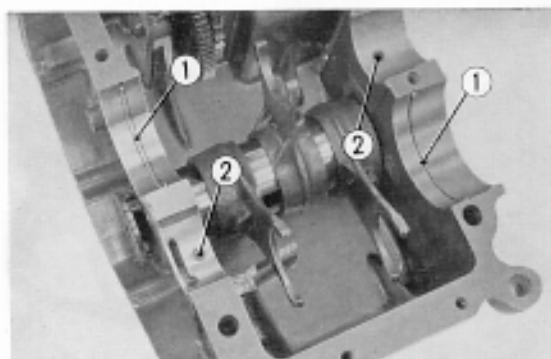


Fig. 169 ① Bearing set rings ② Dowel pins

11. CARBURETOR

A. Disassembly

1. Remove the carburetor unit from the engine in accordance with section 2. A.

Stay Plate And Carburetor

2. Unhook the throttle return spring off the link lever.

Note:

Exercise care not to damage the hook end of the spring.

3. Unscrew the hex. nuts, and remove the dust plate B. Remove the cap nuts.

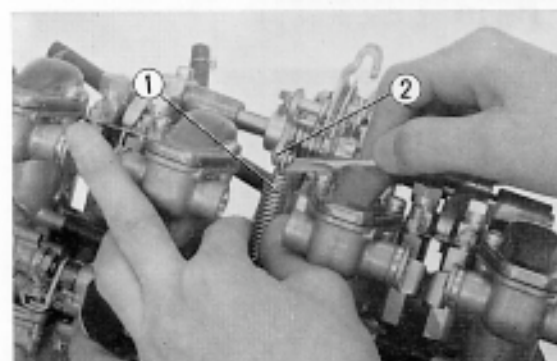


Fig. 170 ① Throttle return spring
② Link lever

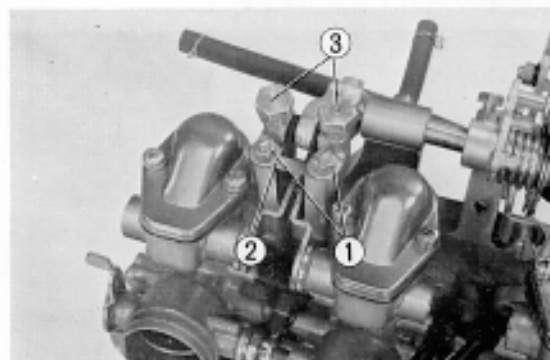


Fig. 171 ① Hex. nuts ③ Cap nuts
② Dust plate B

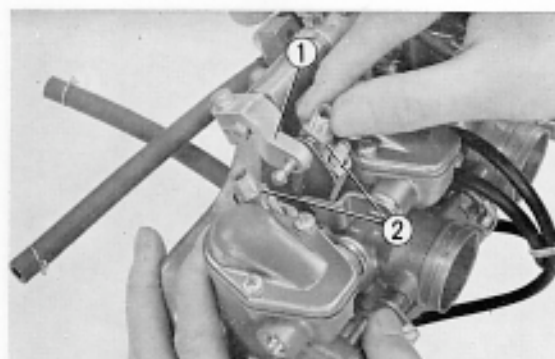


Fig. 172 ① Link arm ② Adjuster holders

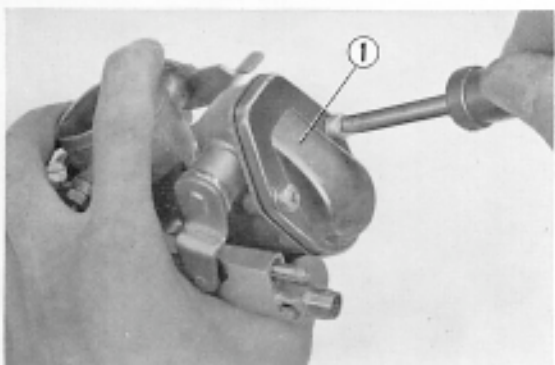


Fig. 173 ① Carburetor top

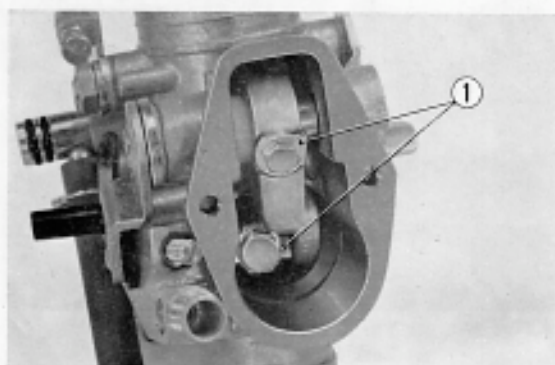


Fig. 174 ① Tongued washer

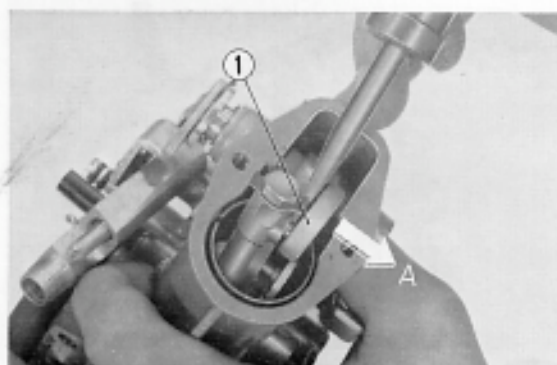


Fig. 175 ① Link arm

4. Remove the adjuster holders from the link arm.

5. Unscrew the eight 6 mm flat head screws from the stay plate and remove the carburetor unit.

Throttle Valve And Jet Needle

6. Unscrew the two carburetor top mounting screws from each carburetor and remove the tops.

7. Position the throttle valve to full open and straighten the tab of the two tongued washers.

8. Remove the 6 mm bolt from the shaft end and remove the link arm in direction A using a screw driver.



9. Loosen the 6 mm bolt on the throttle side about 1/2 turn, insert a screwdriver between the throttle shaft and link arm and pry loose in direction A.

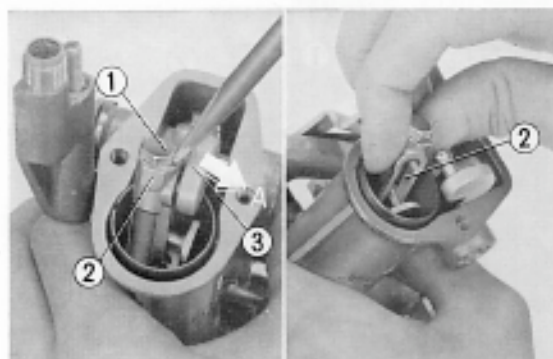


Fig. 176 ① 6 mm bolt ② Throttle shaft ③ Link arm

10. Unscrew the two 3 mm screws, rotate the valve plate 90° in either direction and align the tab on the valve plate to the groove in the shaft, and remove the valve plate.
11. Remove the jet needle from the throttle valve.



Fig. 177 ① 3 mm screws ② Valve plate

Adjuster Holder

1. Remove the carburetor from the stay plate in accordance with section 1~5.
2. Remove the adjusting screw from the adjuster holder.

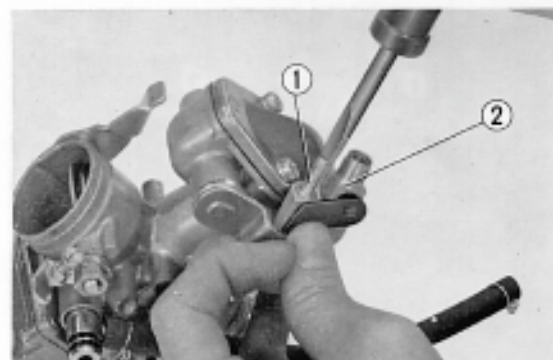


Fig. 178 ① Adjusting screw ② Adjuster holder

3. Position the throttle valve at the intermediate position and remove the adjuster holder.

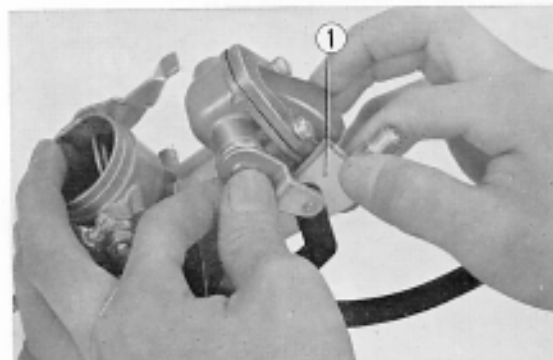


Fig. 179 ① Adjuster holder

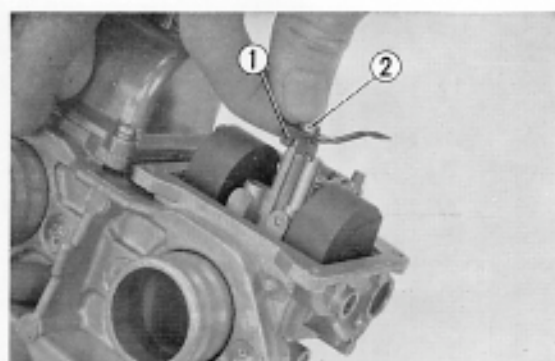


Fig. 180 ① Leaf spring ② Main jet

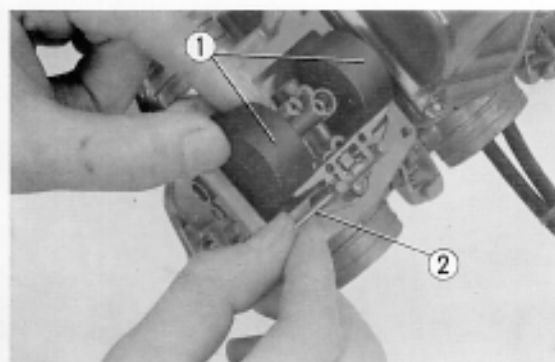


Fig. 181 ① Float ② Float arm pin

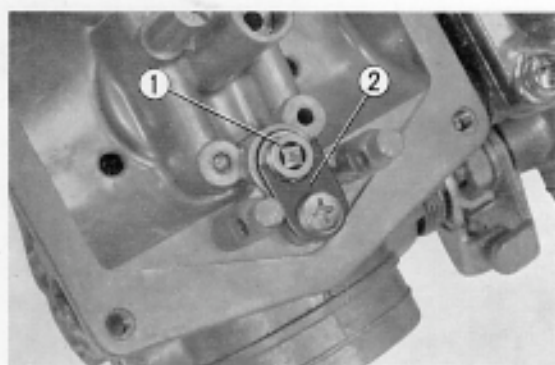


Fig. 182 ① Valve seat ② Clip plate

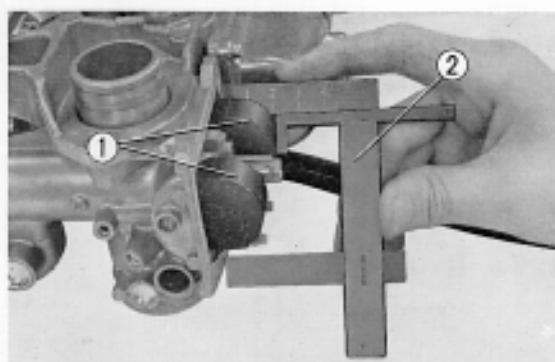


Fig. 183 ① Floats ② Float level gauge

Float, Main Jet, And Slow Jet

1. Remove the float chamber body.
2. Remove the leaf spring and the main jet.

3. Pull out the float arm pin and remove the float.

4. Disengage the clip plate and remove the valve seat.

B. Inspection

1. Fuel level adjustment.
Position the float so that the float arm barely touches the tip of the float valve. Measure the distance from the flange to the top of the float with the float level gauge. The standard value is 22 mm (0.89 in.)



C. Reassembly

Float, Main Jet, And Slow Jet

1. Install the valve seat with the clip plate.
2. Install the float.
3. Place the leaf spring on the main jet, and install them on top of the needle jet holder.
4. Install the float chamber body.

Adjuster Holder

1. Insert the coil spring B and spring seat B into the adjuster holder. Position the throttle valve to about 1/2 open and insert approximately 1/4 of the connector shaft into the holder window. Install them while holding the spring seat down with a thin screwdriver.
2. Mount the carburetor on the stay plate in accordance with section 7 and 8.

Throttle Valve And Jet Needle

1. Install the jet needle on the throttle valve.
2. Place two each spring washers and 3 mm screws on the valve plate, and then place the tab of the valve plate to the slot of the throttle valve and push down to the bottom. Then rotate the valve plate 90° toward the link arm and install the 3 mm screws.

3. Install the throttle valve in the carburetor body so that the throttle valve cutaway section is toward the choke valve.

Carburetor setting data

Description	No.
Main jet	± 100
Air jet	± 150
Slow jet	± 40
Throttle valve	± 2.5
Air screw opening	1 ± 1/8

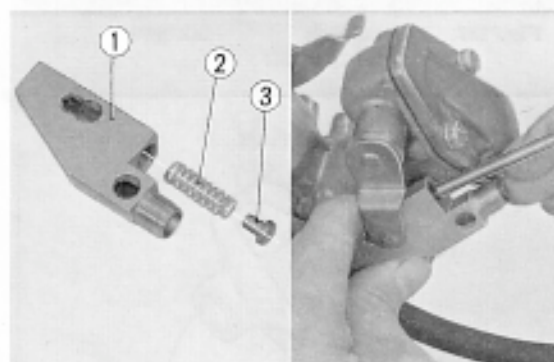


Fig. 184 ① Adjuster holder ② Coil spring B ③ Spring seat B

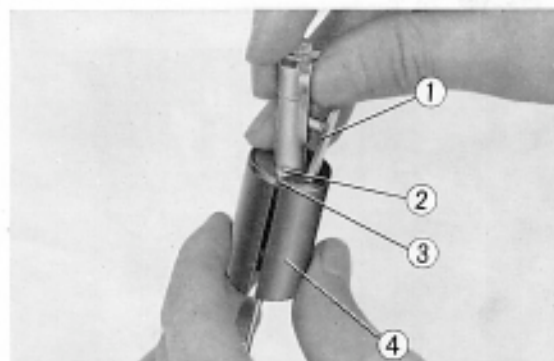


Fig. 185 ① Valve plate ② 3 mm screw ③ Spring washer ④ Throttle valve

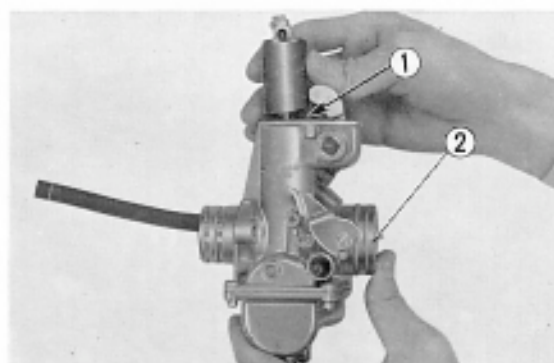


Fig. 186 ① Cutaway section ② Choke valve