11-1 GENERAL DESCRIPTION

DESCRIPTION

The steering and the front suspension have been designed particularly to provide comfort and prevent riding fatigue caused from long distance traveling.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Steering handle type</th>
<th>Up-handle type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering handle width</td>
<td>31.89 in (810 mm)</td>
</tr>
<tr>
<td>Steering angle</td>
<td>40° right and left from center</td>
</tr>
<tr>
<td>Front suspension type</td>
<td>Telescopic fork</td>
</tr>
<tr>
<td>Front fork oil</td>
<td>SAE 10W-30 or its equivalent</td>
</tr>
<tr>
<td>Oil used</td>
<td>7.0<del>7.3 ozs. (220</del>230 cc)</td>
</tr>
<tr>
<td>Oil capacity</td>
<td></td>
</tr>
</tbody>
</table>
### 11. STEERING AND FRONT SUSPENSION

<table>
<thead>
<tr>
<th>Item</th>
<th>Standard value</th>
<th>Serviceable limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front suspension spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring outer diameter</td>
<td>0.992~1.008 in</td>
<td>25.2~25.6 mm</td>
</tr>
<tr>
<td>Free length</td>
<td>19.075 in</td>
<td>18.11 in</td>
</tr>
<tr>
<td>Coil dia</td>
<td>0.185 in</td>
<td>18.11 in</td>
</tr>
<tr>
<td>Installation load</td>
<td>484.5 mm</td>
<td>460 mm</td>
</tr>
<tr>
<td>Tilt</td>
<td>4.7 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.579 in/71.2 lbs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>446.5 mm/32.3 kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>within 1.5°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 2.5°</td>
<td></td>
</tr>
<tr>
<td>Front fork piston</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outer diameter</td>
<td>1.552~1.553 in</td>
<td>1.5512 in</td>
</tr>
<tr>
<td></td>
<td>39.425~39.45 mm</td>
<td>39.4 mm</td>
</tr>
<tr>
<td>Taper, out of round</td>
<td>within 0.0003 in</td>
<td>over 0.0006 in</td>
</tr>
<tr>
<td></td>
<td>0.008 mm</td>
<td>0.015 mm</td>
</tr>
<tr>
<td>Front fork bottom case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inner diameter</td>
<td>1.555~1.556 in</td>
<td>1.5591 in</td>
</tr>
<tr>
<td></td>
<td>39.50~39.534 mm</td>
<td>39.68 mm</td>
</tr>
<tr>
<td>Taper, out of round</td>
<td>within 0.0012 in</td>
<td>over 0.0012 in</td>
</tr>
<tr>
<td></td>
<td>0.03 mm</td>
<td>(0.03 mm)</td>
</tr>
</tbody>
</table>

### DIAGNOSIS

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Probable Causes</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy steering</td>
<td>1. Steering stem excessively tightened.</td>
<td>Loosen the steering stem nut.</td>
</tr>
<tr>
<td></td>
<td>2. Damaged steering stem steel balls.</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>3. Bent steering</td>
<td>Replace</td>
</tr>
<tr>
<td>Wheel wobble</td>
<td>Loose steering stem mounting bolts</td>
<td>Retorque</td>
</tr>
<tr>
<td>Soft suspension</td>
<td>1. Loss of spring tension</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>2. Excessive load</td>
<td></td>
</tr>
<tr>
<td>Hard suspension</td>
<td>1. Ineffective front suspension damper</td>
<td>Repair</td>
</tr>
<tr>
<td></td>
<td>2. Ineffective rear suspension damper</td>
<td>Replace</td>
</tr>
<tr>
<td>Suspension noise</td>
<td>1. Cushion case rubbing</td>
<td>Inspect cushion spring and case</td>
</tr>
<tr>
<td></td>
<td>2. Interference between cushion case and spring</td>
<td>Repair or replace</td>
</tr>
<tr>
<td></td>
<td>3. Damaged cushion stopper rubber</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>4. Insufficient spring damper oil</td>
<td>Add damper oil</td>
</tr>
</tbody>
</table>
11-2 STEERING

a. Description

The handle bar is mounted on the fork top bridge and is fixed with the two handle bar holders.

The fork top bridge is mounted on the front forks with the two front fork top bolts, the fork top bridge in turn is mounted to the steering stem with the steering stem nut.

The steering stem is mounted on the frame head pipe and pivots on the upper and lower sets of the ball bearings. (Fig. 11-1)

b. Disassembly

1. Remove the master cylinder body by unscrewing the two master cylinder body mounting bolts and disconnect the clutch cable from the clutch lever. (Fig. 11-2)

2. Remove the starter lighting ignition switch and disconnect the throttle cable from the throttle grip pipe.

3. Detach the headlight assembly from the headlight case and disconnect the wiring at the connectors.

4. Remove the two upper handle holders and then remove the handle bar. (Fig. 11-3)
5. Loosen the speedometer/tachometer holding clamp and remove the speedometer/tachometer from the fork top bridge.
6. Loosen the stem nut, two front fork top bolts, three 8 mm setting bolts and then remove the fork top bridge. (Fig. 11-4)
7. Place a support block under the engine to raise the front wheel off the ground and remove the front suspension in accordance with section 11-3b. on page 120.
8. Remove the steering stem thread. Work can be facilitated by using the special wrench (Tool No. 07902-2000000). (Fig. 11-5)
9. Pull the steering stem out the bottom, exercising care not to lose the steel balls.

c. Inspection
1. Check the steering handle bar for damage and distortion.
2. Check the steering stem for distortion or cracks.
3. Check to make sure that there is adequate grease in the cone race and also check the steel balls and if found to be excessively worn, they should be replaced.

d. Reassembly
1. Apply a liberal amount of grease on the steering ball races and assemble the steel balls 18 on the upper side and 19 on the lower side. (Fig. 11-6)
2. Exercise care installing the steering stem into the head pipe so that the steel balls are not dropped. Install the top cone race and then screw on the steering stem thread so that there is no clearance between the steering stem and the head pipe in the vertical direction and that the handle turns lightly through the full range of travel. (Fig. 11-7)
3. Assemble the front fork in accordance with 11-3d on page 121—122.
4. Install the front fork bridge, the stem nut, the two front fork bolts and then fix in place with three 8 mm bolts.
5. Install the speedo/tachometer unit and attach the drive cables.
6. Set the handle bar on the handle holder and mount in place with the upper handle holders.

Position the handle bar by aligning the punch marks on the handle bar to the upper surface of the handle holder. (Fig. 11-8)
7. Connect the electrical wires within the headlight case by matching the same colored wires.
8. Connect the throttle cable to the throttle grip pipe and then mount the throttle grip bracket on the handle. Install the lower bracket by positioning the dowel pin into the hole in the handle bar.
9. Connect the clutch cable to the clutch lever and mount the master cylinder bracket on the handle bar. The cables, wire harness and brake hose should be routed as shown in Fig. 11-9.

11-3 FRONT SUSPENSION

Piston type
a. Description

The front suspension is a telescoping oil damper type with an aluminum front fork bottom case used for lightness. (Fig. 11-10)

It consists mainly of a fork pipe 1 complete with piston 4, a fork bottom case 2 and a cushion spring. On "compression", that is, when any downward load is imposed on the front fork, for example, under heavy front braking, the piston moves down, compressing the oil in chamber "A", and forcing it into chamber "B" through orifices "a" in the periphery of the fork pipe to lift damper valve 6 off its seat. On the other hand, the cushion spring, now compressed, exerts an upward reaction to move up the piston. The piston when so moved compresses the oil in chamber "B" and forces it back into chamber "A" through orifice "b" to provide damping action. On "full bump", or bump overcoming the capacity of the cushion spring, the pipe is moved down toward the bottom end of the bottom case, trapping the oil in the space between the pipe and tapered lock piece 6 to provide maximum damping. On "full rebound", the orifice "b" is covered by guide 3 and the oil is trapped within chamber "B" to provide damping on the extension side.
b. Disassembly

1. Remove the front wheel in accordance with section 13-1b. on page 132-133.
2. Remove the three caliper setting bolts and adjuster nut, and separate the caliper from the left front fork. (Fig. 11-11)
3. Loosen the $8 \times 56$ mm front fork pipe mounting bolts (located on the fork top bridge) and the $10 \times 40$ mm front fork pipe mounting bolts (located on the steering stem). Pull the front fork gently out the bottom. (Fig. 11-12)
4. Disassemble the front fork by removing the internal circlip with a circlip pliers and separating the front fork pipe from the bottom case (Fig. 11-13).

5. By removing the fork piston snap ring, the front fork piston and the front fork damper valve may be disassembled from the front fork pipe. (Fig. 11-14)

c. Inspection

1. Checking front fork oil

To maintain good riding characteristics and increase fork service life, the oil in the front fork should be changed periodically.

Unscrew the front fork drain plug at the bottom of the fork cylinder, drain the oil by pumping the forks while plug is out. Replace the plug securely after draining. (Fig. 11-15)

Remove the top filler plug and fill the front fork cylinder with 7.0~7.3 ozs. (220 ~230 cc) of premium quality oil of SAE 10 W~30 grade. (Fig. 11-16)

Securely tighten the top filler plug after filling.

2. Check the front fork assembly by locking the front brake and pumping the fork up and down vigorously.
   - Smooth cushion action.
   - Oil seepage around the cushion oil seals.
3. Measure the diameter of the front fork piston. Use a micrometer to perform this check and if it is found to be less than 1.551 in. (39.4 mm), the piston should be replaced. (Fig. 11–17)

4. Measure the inner diameter of the front fork bottom case. Use a cylinder gauge to perform this check and if it is found to be over than 1.562 in (39.68 mm), the front fork bottom case should be replaced. (Fig. 11–18)

d. Reassembly

1. Wash all the parts and then assemble the pipe guide, stopper rings, damper valve, piston and snap ring in that order on the front fork pipe. (Fig. 11–14)

2. Assemble the front fork pipe into the front fork bottom case and install the oil seal using the oil seal guide (Tool No. 07947–3290000). (Fig. 11–19)

   Exercise care that the oil seal is not damaged during installations and install the circlip into the groove in the bottom case.

   Note: To disassemble the front forks of motorcycles from Frame No. 1044650 to 2089878, proceed as follows:
   - Replace the oil seals with new ones (double lip type) (Part No. 91255–341–305).

   Replacement
   - The employment of new oil seals abolished hitherto used back-up rings due to the change in seal width.
   - Apply a coat of oil to the seals and insert them from the piston side while rotating.

3. Install the front fork upper cover on the steering stem (above and below the cushion rubbers) and insert the front fork pipe assembly through the steering stem, and temporarily tighten with the 10 mm front fork setting bolt. (Fig. 11–20)

4. Fill the front fork cylinder with 7.0–7.3 ozs (220–230 cc) of premium quality oil of SAE 10 W–30 grade, and securely tighten the top filler plug after filling.

5. Properly tighten the front fork pipe setting bolts (8, 10 mm).

6. Adjust the front brake caliper by refer ring to page 147–148.
REAR SUSPENSION

CONTENTS

12-1 GENERAL DESCRIPTION ............................................................... 123
DESCRIPTION ................................................................. 123
SPECIFICATIONS ............................................................ 123
DIAGNOSIS ................................................................. 124

12-2 REAR SHOCK ABSORBERS ...................................................... 124
a. Description .............................................................. 124
b. Disassembly ............................................................. 125
c. Inspection ............................................................... 125
d. Reassembly ............................................................. 125

12-3 REAR FORK ................................................................. 127
a. Description .............................................................. 127
b. Disassembly ............................................................. 127
c. Inspection ............................................................... 127
d. Reassembly ............................................................. 128

12-1 GENERAL DESCRIPTION

DESCRIPTION

The suspensions must not only absorb the vertical shock caused from the road conditions but must also be able to sustain applied force resulting from steering function. The rear suspension mechanism consists of the rear cushion and rear fork.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Standard value</th>
<th>Serviceable limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear cushion spring</td>
<td>1.401<del>1.429 in. 35.7</del>36.3 mm</td>
<td>8.504 in. 216 mm</td>
</tr>
<tr>
<td>Spring inner diameter</td>
<td>8.74 in. 222 mm</td>
<td></td>
</tr>
<tr>
<td>Free length</td>
<td>0.276 in. 7 mm</td>
<td></td>
</tr>
<tr>
<td>Coil diameter</td>
<td>8.17 in./66.6 lbs 207.5 mm/30.2 kg</td>
<td></td>
</tr>
<tr>
<td>Installation load</td>
<td>within 1.5°</td>
<td></td>
</tr>
<tr>
<td>Tilt</td>
<td>Over 2.5°</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Standard value</td>
<td>Serviceable limit</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Rear fork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pivot bush inner diameter</td>
<td>0.8426<del>0.8447 in. 21.403</del>21.455 mm</td>
<td>0.8504 in. 21.6 mm</td>
</tr>
<tr>
<td>Center collar outer diameter</td>
<td>0.8412<del>0.8425 in. 21.367</del>21.400 mm</td>
<td>0.8386 in. 21.3 mm</td>
</tr>
</tbody>
</table>

**DIAGNOSIS**

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Probable Causes</th>
<th>Remedy</th>
</tr>
</thead>
</table>
| Soft suspension  | 1. Loss of spring tension  
                  | 2. Excessive load                                                          | Replace              |
| Hard suspension  | 1. Ineffective front cushion damper  
                  | 2. Ineffective rear cushion damper                                         | Replace              |
| Suspension noise | 1. Cushion case rubbing  
                  | 2. Interference between cushion case and spring  
                  | 3. Damaged cushion stopper rubber  
                  | 4. Insufficient spring damper oil (frot and rear) | Inspect cushion spring and case  
                                                                                           | Repair               |
                                                                                           | Replace              |
                                                                                           | Replace              |

**12.2 REAR SHOCK ABSORBERS**

a. Description

The rear suspension is a swing arm type with a large stroke of 3.43in. (87mm).

A De Carbon type rear damper is employed on the CB750 is of a single cylinder double acting type. (Fig. 12-1)

This damper is, as shown in the figure below, a double-acting type single cylinder in which nitrogen gas and oil are used to give an optimum damping performance under all bumping and rebounding conditions. Over the damper is installed a dual-pitch spring which absorbs a wide range of vibrations or shocks and maintains the unit in accurate alignment. Another design feature is that the cushion is adjustable for different riding, loading and road conditions.

![Fig. 12-1](image-url)
Simple type of a construction the heat radiation is good, therefore, preformance be-
ing especially good at low speed. Further, vibration stabilizes very quickly.

Air and oil mixture will not occur and function will not be deteriorates even when operated for extended period over adverse road condition.

The difference in pressure between the front and rear of the valve is small; since form does not form, noise is minimized; deterioration of the damping force is pre-
vented. (Fig. 5-61)

The rear cushion employs a dual pitch spring, the section with the larger pitch absorbs the large vibration while the section with the smaller pitch absorbs the smaller vibration. This provides for exceptionally smooth riding. Further, there are three ranges of adjustment incorporated in the rear cushion, making it possible to adjust the cushion to the different riding, loading and road conditions.

b. Disassembly
1. Unscrew the rear cushion cap nut and bolt, and remove the rear cushion from the frame. (Fig. 12-2)

2. Remove the rear cushion spring using the rear cushion disassembling tool (Tool No. 07959-3290000). (Fig. 12-3)

Note: The rear cushion contains nitrogen gas under high pressure, therefore, disassembly should not be attempted because possible injury may result.

c. Inspection
1. Rear cushion spring free length
   Measure the free length of the rear cushion spring using a vernier caliper, if it is under 18.11 in. (460 mm), the spring should be replaced with a new part. (Fig. 12-4)
2. Rear cushion spring trueness
   Set the spring up on its end on the surface gauge and measure the amount of tilt with a square and vernier caliper.
   If the tilt is over 2.5°, the rear cushion should be replaced.

3. Inspect the cushion damper to insure that there is no fluid leakage.

4. Inspect the damper case and rod to insure that they are not damper or deformed.

5. Inspect the rear cushion stopper to insure that it is not damaged or deformed.

d. Reassembly
1. Assemble the under seat, spring and upper case to the damper. Compress the assembly using a rear cushion assembly tool (Tool No. 07959-3290000) and lock the assembly with spring seat stopper. (Fig. 12-5)

   Note: Upon completing the assembly, actuate the cushion assembly by hand to make sure that they are not binding.

2. Mount the rear cushion on the frame with the rear cushion cap nut and bolt.

   Note: After installing the cushion, check the alignment of the right and left cushion and also the alignment of the cushion mounting bolt for both right and left sides (Fig. 12-6).
12-3 REAR FORK

a. Description

The rear fork has a rectangular cross section made from pressed steel plate to provide greater rigidity at the wheel mounting which is a clamp design.

One end of the rear fork is fitted to a section on the frame and the other end is fitted to the frame through the rear cushion. When the rear wheel moves in the vertical direction, the section which is fitted to the frame becomes the pivot point and the rear wheel moves in an arc.

The close proximity of the pivot point to the drive sprocket possesses negligible effect on the chain tension.

b. Disassembly

1. The exhaust mufflers must first be removed before the rear fork can be removed.
2. Remove the cotter pin from the rear wheel axle, loosen the axle nut and remove the drive chain.
3. Unscrew the rear brake adjuster nut, the rear brake torque bolt and remove the axle to separate the rear wheel. (Refer to page 137)
4. Unscrew the rear fork pivot nut and bolt, and then separate the rear fork from the frame. The rear fork side washer and the pivot collar can be removed. (Fig. 12-8)

c. Inspection

1. Visually check the rear fork for bend and distortion, and if found to be excessive, it should be replaced with a new part.
2. Scratched and deformed part should be either repaired or replaced.
3. Measure the bores of the rear fork pivot bushing with a inner dial gauge and the outside diameter of the center collar with micrometer, and if they are not within the serviceable limit shown below, they should be replaced. (Fig. 12-9)
4. There are two lubrication points as shown in the Fig. 19–18. It is recommended that lubrication be performed in accordance with section 19 on page 185.

d. Reassembly

1. Apply a liberal amount of grease on the pivot collar and assemble it into the rear fork. Insert the pivot bolt from the right side while holding the dust seal caps on both sides of the rear fork, and then install and tighten the 14 mm self lock nut.

2. Install the rear wheel.

3. Install the drive chan.

4. When the assembly is completed, adjust the rear brake pedal and drive chain tension. (refer to page 149 and 186)
13-1 GENERAL DESCRIPTION

DESCRIPTION

Carefully check to make sure that the front and rear wheels are properly aligned and both tires have specified air pressure. If these are not properly maintained, it will be dangerous, especially when riding at a high speed.
SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Standard value</th>
<th>Serviceable limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rim runout</td>
<td>Within 0.02 in. 0.5 mm</td>
<td>Over 0.08 in. 2.0 mm</td>
</tr>
<tr>
<td>Ball bearing diametrical runout (F)</td>
<td>Within 0.00012 in. 0.003 mm</td>
<td>Over 0.002 in. 0.05 mm</td>
</tr>
<tr>
<td></td>
<td>Within 0.0002 in. 0.005 mm</td>
<td>Over 0.0024 in. 0.06 mm</td>
</tr>
<tr>
<td>Ball bearing axial runout</td>
<td>Within 0.0028 in. 0.07 mm</td>
<td>Over 0.004 in. 0.1 mm</td>
</tr>
<tr>
<td>Rear brake lining</td>
<td>7.0787<del>7.0866 in. 179.8</del>180 mm</td>
<td>7.205 in. 183 mm</td>
</tr>
<tr>
<td>Rear brake shoe thickness</td>
<td>0.197 in. 5.0 mm</td>
<td>0.08 in. 2.0 mm</td>
</tr>
</tbody>
</table>

DIAGNOSIS

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Probable Causes</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy steering</td>
<td>Low tire pressure</td>
<td>Add air to the specified tire pressure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28.5 lbs/in²/(2 kg/cm²)</td>
</tr>
<tr>
<td>Front and real wheel wobble</td>
<td>1. Worn front and rear wheel bearings. 2. Front or rear wheel runout of distorted. 3. Loose spoke. 4. Defective tire.</td>
<td>Replace bearing. Repair or replace. Retorque. Replace.</td>
</tr>
</tbody>
</table>
13-2 FRONT WHEEL AND TIRE

a. Description

For the front wheel, large size tire, 3.25–19, is used to provide a greater safety factor and a comfortable riding.

The cast aluminum hub houses the front brake disc, two 6302 Z ball bearings, front axle distance collar, dust seal and bearing retainer.

The Fig. 13-1 shows the front wheel component parts.

![Diagram of front wheel components](image)

- ① 8 × 10 mm bolt
- ② Gear box retainer cover
- ③ Gear box retainer
- ④ 6302 Z ball bearing
- ⑤ Front wheel axle
- ⑥ 5 × 15 mm oval screw
- ⑦ Speedometer gear box
- ⑧ Front axle distance collar
- ⑨ 6302 Z ball bearing
- ⑩ 22368 dust seal
- ⑪ Front wheel bearing retainer
- ⑫ Front wheel collar
- ⑬ Front wheel axle nut
- ⑭ Wheel balancer
- ⑮ Front wheel hub
- ⑯ Front spoke A
- ⑰ Front spoke B
- ⑱ Front wheel rim
- ⑲ Front tire flap
- ⑳ Front wheel tube
- ⑳ Front wheel tire

**Fig. 13-1**
13-2 FRONT WHEEL AND TIRE

a. Description
For the front wheel, large size tire, 3.25-19, is used to provide a greater safety factor and a comfortable riding.
The cast aluminum hub houses the front brake disc, two 6302Z ball bearings, front axle distance collar, dust seal and bearing retainer.
The Fig. 13-1 shows the front wheel component parts.

---

Fig. 13-1

1. 8 x 10 mm bolt
2. Gear box retainer cover
3. Gear box retainer
4. 6302Z ball bearing
5. Front wheel axle
6. 5 x 15 mm oval screw
7. Speedometer gear box
8. Front axle distance collar
9. 6302Z ball bearing
10. 22368 dust seal
11. Front wheel bearing retainer
12. Front wheel collar
13. Front wheel axle nut
14. Wheel balancer
15. Front wheel hub
16. Front spoke A
17. Front spoke B
18. Front wheel rim
19. Front tire flap
20. Front wheel tube
21. Front wheel tire
ceed in this manner until the entire side of the tire casing is above and clear of the rim edge.
e. The deflated inner tube can now be pulled from the tire casing and the inner tire casing inspected for damage or protruding sharp object etc. Locate and eliminate cause of flat or puncture.
c. Inspection
1. Check the flatness of front brake disc.
   Place the disc on the surface plate and measure the flatness using the dial gauge. If the difference is greater than 0.012 in. (0.3 mm), the disc should be replaced with a new part. Further, the disc should also be changed if the thickness of the disc is less than 0.217 in. (5.5 mm). (Fig. 13-6)
2. Checking the rim runout
   Pass a shaft through the front wheel and spin the wheel by hand, and read the runout at the rim using a dial gauge. If the runout is greater than 0.080 in. (2.0 mm), the rim should be either repaired or replaced. (Fig. 13-7)
3. Wheel ball bearing
   Measure the axial and diametrical runout of the ball bearing with a dial gauge. If the value is over serviceable limit listed below the ball bearing should be replaced. (Fig. 13-8)

<table>
<thead>
<tr>
<th>Item</th>
<th>Serviceable limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axial runout</td>
<td>0.004 in (0.1 mm)</td>
</tr>
<tr>
<td>Diametrical runout</td>
<td>0.002 in (0.05 mm)</td>
</tr>
</tbody>
</table>

d. Reassembly
1. Install the tire in accordance with following manner.
a. Install a new inner tube of the correct size by inflating very slightly, leave the valve core in the valve stem.
b. Inspect the wheel rim strip inner tube protector to see that it is in good condition and centered over the spoke nipples in the rim recess.
c. Align the tire balance mark with the valve stem hole in the rim and insert the partially inflated inner tube into the tire casing. With the valve stem aligned with the valve stem hole in the rim.
d. Work the inner tube into proper position in the tire casing and insert the valve stem through the valve stem hole in the rim. Install a valve stem retaining nut partially on to the valve stem. (1/4–1/2 in. do not tighten.) Remove valve core.
e. Apply a light coating of tire mounting solution (liquid detergent can be used in an emergency) to each of the tire bead surfaces and between the tire bead surfaces and the rim edge.
f. The tire can now be stepped into place using your heels. Placing both heels on the tire bead opposite the valve core and depressing the tire bead into place a slight amount with each step in opposite directions around the wheel.
g. When 80–90% of the tire bead is in place, use a tire mounting mallet (heavy rub-
ber, leather or plastic hammer) to force the remaining to section into position. Avoid using tire irons or screw drivers for this operation as inner tube punctures will result due to pinching with the tool.

h. Insert the valve core and over inflate the standard pressure by approximately 10 psi. This will help to properly seat the tire beads into the rim. Inspect for proper tire bead seating and deflate the tire. Reinflate to the correct specified pressure 28.5 lb/in² (2.0 kg/cm²), and tighten the valve stem retaining nut lightly.

i. Recheck the tire pressure and install the valve stem cap.

2. Drive the wheel bearing into the wheel using a bearing driver (Tool No. 07949-3000100). (Fig. 13-9)

3. Install the dust seal into the front wheel bearing retainer, mount the front wheel bearing retainer into the wheel hub.

4. Align the gear box retainer to the cutout in the wheel hub and install the gear box retainer cover from above, and install the six disc mounting bolts. Mount the disc of the opposite side and fix in place with the nuts. (Fig. 13-10)

Note: New tongued washers should be used and the tab on the washers bent up to lock. (Fig. 13-11)

5. Insert the front axle through the speedometer gear box from the right side and tighten the front axle nut. (Fig. 13-12)

6. Mount the front wheel on the front forks and mount the axle holders and tighten the setting nuts.
7. Connect the speedometer cable to the gear box. (Fig. 13-13)

8. Balance the wheel (Fig. 13-22)
   Perform the balancing in the following manner.
   a. Raise the wheel off the ground and lightly rotate.
      Note: If the front wheel does not rotate freely, turn the front drake stopper bolt clockwise until the front wheel rotate freely.
   b. Lightly attach an appropriate weight on the spoke adjacent to the nipple which stop at the highest position. Weights are available in four types, 5 gr, 10 gr, 15 gr and 20 gr.
   c. The wheel is in proper balance if the wheel after spinning will come to rest at no definite position.
   d. If the wheel does not statically balance, change the weight and reperform items b and c.
   e. Lock the weight with pliers after completing the balance.

13-3 REAR WHEEL AND TIRE
a. Description
   For the rear wheel, a tire size, 4.00-18, is used to provide a greater safety factor. The wheel consists of an aluminum casting rear wheel hub which contain two 6304 ball bearings, final drive flange and brake panel. Also, eight rear wheel dampers are mounted in the wheel hub to reduce the vibration or shock from the final driven sprocket. Fig. 13-14 shows the rear wheel component parts.
13. WHEELS, TIRES AND FINAL DRIVE

1. 4×30 Cotter pin
2. Rear axle nut
3. 18.5×34 washer
4. Chain adjuster
5. 8 mm hex nut
6. Chain adjusting bolt
7. Rear brake panel side collar
8. 6304 ball bearing
9. Rear wheel hub
10. Wheel balancer
11. Rear wheel tube
12. Rear wheel flange
13. Rear wheel rim
14. Rear spoke B
15. Rear spoke A
16. 68×2.6 "O" ring
17. Rear wheel tire
18. Left rear wheel damper
19. Right rear wheel damper
20. Driven sprocket fixing bolt
21. Rear axle distance collar
22. 6304 ball bearing
23. Rear wheel bearing retainer
24. Final drive flange
25. Rear axle sleeve
26. 6305 ball bearing
27. 34×56×9 Oil seal
28. Rear wheel bearing retainer
29. Rear wheel side collar
30. Final driven sprocket
31. 12 mm tongued washer
32. 12 mm hex nut
33. Rear wheel axle

Fig. 13-14
b. Disassembly
1. Place the motorcycle on the main stand.
2. Remove the rear brake adjusting nut and brake rod from the brake arm. (Fig. 13-15)
3. Remove rear brake stopper arm lock pin, nut, flat washer, spring washer and bolt. (Fig. 13-16)
4. Remove the cotter pin from the right side of the rear axle and loosen the axle nut. (Fig. 13-17)
5. Loosen the drive chain adjusting bolt lock nuts, back out the adjuster bolts and turn the chain adjusters downward. Remove the rear fork cap fixing bolts and fork caps. (Fig. 13-17)
6. Push the wheel forward, lift the chain off the sprocket, then pull the wheel rearward, clear of the rear fork.
7. Remove the rear wheel from the frame.
8. Unlock the tongued washers, remove the nuts and the driven sprocket can then be removed. (Fig. 13-18)
9. Remove the rear wheel bearing retainer, and remove the bearing from the wheel hub. (Fig. 13-19)
10. Remove the two cotter pin, washer and then the rear brake shoes can be removed from the rear brake panel. (Fig. 13-20)

c. Inspection
1. Rear brake lining
   Refer to section 14-3c on page 148.
2. Rear brake shoes
   Refer to section 14-3c on page 148.
3. Wheel ball bearing (Fig. 13-8)
   Measure the axial and diametrical runout of the ball bearing with a dial gauge. If the value is over serviceable limit listed below the ball bearing should be replaced.

<table>
<thead>
<tr>
<th>Item</th>
<th>Serviceable limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axial runout</td>
<td>0.004 in. (0.1 mm)</td>
</tr>
<tr>
<td>Diametrical runout</td>
<td>0.002 in. (0.05 mm)</td>
</tr>
</tbody>
</table>

d. Reassembly
1. Install the rear brake shoes on the rear brake panel and install the washer, two cotter pins and bend the pins.
2. Clean the inside of the drum so that it is free of oil, dust and other foreign objects, and then install the brake panel.
3. Mount the bearing retainer on the wheel hub, install the driven sprocket with the mounting nuts and bend up the tab on the locking washer to prevent loosening.
4. Install the rear wheel on the frame.
5. Assemble the torque link bolt, washers, nut and lock pin on the rear brake panel. Install the brake lever rod on the brake arm and install the brake adjusting nut.
6. Adjust the drive chain tension with the adjuster bolt so that there is a slack of 0.40 to 0.80 in. (10~20 mm), at the center of the chain. After completing the adjustment tighten the axle nut and lock with a cotter pin. (Fig. 13-21)
7. Adjust rear brake pedal free play. (refer to page 48).

Note: At any time the front or rear wheel is removed, take the opportunity to thoroughly inspect the suspension components, brake friction linings and wheel assemblies. Pay particular attention to the condition of the wheel bearings, wheel rim, tire bead seating and spoke tension.

8. Balance the wheel
   Perform the balancing in the following procedures. (Fig. 13-22)
   a. Raise the wheel off the ground and lightly rotate.
   b. Lightly attach an appropriate weight on the spoke adjacent to the nipple which stop at the highest position. Weights are available in four types, 5 gr, 10 gr, 15 gr and 20 gr.
   c. The wheel is in proper balance if the
wheel after spinning will come to rest at no definite position.
d. If the wheel does not statically balance, change the weight and reperform items b and
c.
e. Lock the weight with pliers after completing the balance.

13-4 FINAL DRIVE

a. Description
The power from the engine is transmitted from the final drive sprocket by the drive chain to
the final driven sprocket mounted on the rear wheel and turns the rear wheel.

b. Disassembly
1. Remove the rear crankcase cover.
2. Remove the joint clip with a pliers to disconnect the chain. (Fig. 13-23)
3. Disconnect the chain by separating the retainer plate and retainer, and remove the
chain from the sprocket.
4. For the procedure on the removal of the final drive sprocket, refer to page 137, rear
wheel removal section.

c. Inspection
1. Check the chain stretch
   Hang the chain by one end and measure the entire length of the chain between the
two pin holes. If the stretch of the chain in computed to be greater than 0.4 in (10 mm)
for one meter of length, the chain should be replaced. (Fig. 13-24)
2. Check for any cracks in the chain.
3. Visually inspect the sprocket teeth and replace the sprocket if there are any broken
teeth or excessively worn teeth.
4. If the chain is excessively dirty, clean the drive chain by referring to page 187.

d. Reassembly
1. Reassembly is performed in the reverse order of disassembly, however, exercise care on the following points:
a. After reassembly, perform the drive chain adjustment by referring to page 178.
b. The drive chain clip must be installed so that the cutout is toward the trailing end.
14-1 GENERAL DESCRIPTION

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Standard value</th>
<th>Serviceable limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front brake disc thickness</td>
<td>0.272~0.279 in</td>
<td>under 0.217 in</td>
</tr>
<tr>
<td></td>
<td>6.9~7.1 mm</td>
<td>5.5 mm</td>
</tr>
<tr>
<td></td>
<td>Max. 0.004 in</td>
<td>over 0.012 in</td>
</tr>
<tr>
<td></td>
<td>0.1 mm</td>
<td>0.3 mm</td>
</tr>
<tr>
<td>Front brake disc deflection</td>
<td>0.5512~0.5529 in</td>
<td>over 0.553 in</td>
</tr>
<tr>
<td></td>
<td>14.0~14.043 mm</td>
<td>14.055 mm</td>
</tr>
<tr>
<td>Master cylinder inner diameter</td>
<td>0.550~0.5506 in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.957~13.984 mm</td>
<td></td>
</tr>
<tr>
<td>Master cylinder piston diameter</td>
<td>1.503~1.504 in</td>
<td>under 1.504 in</td>
</tr>
<tr>
<td></td>
<td>38.18~38.20 mm</td>
<td>38.215 in</td>
</tr>
<tr>
<td>Caliper cylinder inner diameter</td>
<td>1.505~1.515 in</td>
<td>over 1.504 in</td>
</tr>
<tr>
<td></td>
<td>38.115~38.48 mm</td>
<td>38.105 mm</td>
</tr>
<tr>
<td>Caliper cylinder piston diameter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**DIAGNOSIS**

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Probable Causes</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defective brake</td>
<td>1. Front brake&lt;br&gt;• Insufficient brake fluid.&lt;br&gt;• Air in the brake system.&lt;br&gt;• Worn brake pad.&lt;br&gt;• Worn piston.&lt;br&gt;• Worn or distorted front brake disc.&lt;br&gt;• Brake lever out of adjustment.&lt;br&gt;2. Rear brake&lt;br&gt;• Worn brake lining.&lt;br&gt;• Worn brake shoe or poor contacts.&lt;br&gt;• Worn brake cam.&lt;br&gt;• Wet brake from water or oil.&lt;br&gt;• Worn brake shaft.&lt;br&gt;• Brake pedal out of adjustment.</td>
<td>Add brake fluid.&lt;br&gt;Bleed brake system&lt;br&gt;Replace pad&lt;br&gt;Replace piston&lt;br&gt;Replace disc&lt;br&gt;Readjust&lt;br&gt;Replace&lt;br&gt;Replace&lt;br&gt;Clean&lt;br&gt;Replace&lt;br&gt;Readjust</td>
</tr>
</tbody>
</table>

**14-2 FRONT BRAKE**

a. Description

The CB 750 employs a hydraulically operated disc brake on the front wheel which provides smooth and stable braking from slow to high speed.

The disc brake system is composed of the brake lever and master cylinder on the right handle bar, a caliper mounted on the left side front fork and the stainless steel disc mounted on the wheel hub.

Operation takes place in the following sequence. (Fig. 14-1)

1. When the front brake lever \( \textcircled{1} \) is gripped, the cam \( \textcircled{2} \) at the base of the brake lever will actuate the master cylinder \( \textcircled{3} \) and pressurizes the fluid within chamber A.

2. Pressurized fluid in the system actuates the stop light switch \( \textcircled{8} \) installed in the 3-way joint \( \textcircled{7} \), and pad A \( \textcircled{10} \).

   The pressure built-up within chamber B forces pad A \( \textcircled{10} \) against disc to produce braking. As the caliper assembly is pivoted to the front fork housing, the reaction from pad A \( \textcircled{10} \) is transmitted to pad B \( \textcircled{11} \).

3. The clearance of 0.002~0.004 in (0.05~0.1 mm) between the disc and the pad to be consistent with the wear of the pad. When hydraulic pressure is applied against the back of the piston, the piston seal first deforms and as the piston moves further, the piston slides over the piston seal until the pad contacts the disc (Fig. 14-2). When the hydraulic pressure is released, the deformed piston seal will return to its normal shape, and consequently, pulls the piston away from the disc by the amount of the piston seal deformation.

4. When the brake lever is released, the spring within the master cylinder returns the primary cup and the piston to their original positions, pressure within the brake system is relieved.
b. Disassembly

1. Remove the front wheel by referring to page 132.

2. Disconnect the front brake hose at the joint by removing the oil bolt. (Fig. 14-3)

3. Unscrew the three caliper mounting bolts from the fork bottom case, and remove the caliper assembly.

   To remove caliper B, unscrew the two hollow head set bolts and this will also permit caliper A to remove. (Fig. 14-4)
4. Remove the pad A, pad seat and cylinder piston from caliper A. (Fig. 14-5)

5. Remove the pad B from the caliper B by removing the cotter pin.

6. The master cylinder assembly removal can be performed in the following manner. First unscrew the oil bolt at the master cylinder. (Fig. 14-6)

7. Unscrew the two master cylinder setting bolts and remove the master cylinder from the right side handle grip.

8. Remove the stopper washer and boot from the master cylinder body. (Fig. 14-7)
9. Remove the circlip from the master cylinder body using the special circlip pliers (Tool No. 07914-3230000). (Fig. 14-8)

10. Next, remove 10.5 mm washer, piston, secondary cup, primary cup, spring and check valve. (Fig. 14-7)

c. Inspection

1. Brake friction pads

If the clearance between the front of the caliper and brake disc face becomes 0.06~0.08 in. (1.5~2 mm), friction pads should be replaced with new Honda genuine friction pads. (Refer to page 185)

Both friction pads (the one which is on the caliper piston and the other on the opposite side) should be changed in set at the same time.

2. Front disc brake inspection

Raise the stand, push the motorcycle, apply the brake lever and check to make sure that the front brake is fully operational. If a large stroke of the lever is required before the braking becomes effective, the cause may be either low brake fluid in the system or air may be present in the system; in which case, check the reservoir and replenish the fluid if necessary or if air bleeding is required, refer to the section on bleeding of braking system (page 138~139). This should automatically correct the level breaking stroke.

However, if the length of the free stroke is excessively large, brake lever adjustment may be necessary.

Loosen the brake lever adjusting lock nut and turn the adjusting bolt to obtain the proper play.

After completing the adjustment, do not forget to tighten the lock nut. (Fig. 14-9)

3. Caliper cylinder piston

Accurately measure the caliper cylinder using inside dial gauge, and the piston using a micrometer. When the clearance between piston and the cylinder is greater than 0.004 in. (0.11 mm), the worn parts
should be replaced. (Fig. 14-10)

<table>
<thead>
<tr>
<th>Inspecting item</th>
<th>Serviceable limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder</td>
<td>Replace if beyond 1.504 in. (38.215 mm)</td>
</tr>
<tr>
<td>Piston</td>
<td>Replace if under 1.500 in. (38.105 mm)</td>
</tr>
</tbody>
</table>

4. Master cylinder piston (Fig. 14-11)

Accurately measure the cylinder using an inside dial gauge, and the piston using a micrometer. If the clearance between the cylinder and piston is greater than 0.0045 in. (0.115 mm), the worn parts should be replaced.

<table>
<thead>
<tr>
<th>Inspecting item</th>
<th>Serviceable limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master cylinder</td>
<td>Replace if beyond 0.053 in. (1.349 mm)</td>
</tr>
<tr>
<td>Master cylinder piston</td>
<td>Replace if under 0.049 in. (1.249 mm)</td>
</tr>
</tbody>
</table>

5. Check seal of the caliper piston and if found to be damaged, replace with a new part.

6. Check the oil hose for damage, if it is defective, replace it with new part.

d. Reassembly

1. Before mounting the pads A and B, apply a small amount of the specified grease (0.3~0.5 g) evenly on the caliper as shown in Fig. 14-12. When mounting the pads, take care not to smear the braking surface of the pad with grease. The applied grease serves to prevent dust and water from entering the pad sliding surface, as well to lubricate the sliding surface in order to ensure the smooth operation of the pads.

**Note:** Use silicon sealing grease (temperature range of -67~392°F, -55~200°C). Do not use molybdenum grease known as brake grease.

2. Mount the component parts into the caliper and assemble it on the front fork bottom case.

3. Install the front wheel (Refer to page 133~134).

4. Bleeding the brake system

The brakes must be bled with great care subsequent to work performed on the brake system, when the lever becomes soft or spongy or when lever travel is excessive. This procedure is best performed by two mechanics.

a. Remove the dust cap from the bleeder valve and attach bleeder hose. (Fig. 14-13)
Place the free end of the bleeder hose into a glass container.
b. Remove the reservoir cap and fill the reservoir with DOT 3 or SAE J1703a BRAKE FLUID. Place the cap on the reservoir to prevent the entry of dust. (Fig. 14-14)
c. As shown at right, attach a rubber of about 15 mm thick to the end of the handle grip to decrease the stroke as measured at the tip of the handle lever.

Rapidly pump the brake lever several times until pressure can be felt, holding the lever tight, open the bleeder valve by about one half turn and squeeze the lever all the way down. Do not release the lever until the bleeder valve has been closed again.

Repeat this procedure until bubbles cease to appear in the fluid at the end of the hose. Do not allow the fluid reservoir to become empty during the bleeding operation as this will allow air to enter the system again. Replenish the fluid as often as necessary while bleeding.
d. Remove the bleeder hose, tighten the bleeder valve and install the bleeder valve dust cap. Tighten the reservoir cap after filling brake fluid to proper level.
e. Check for proper effect of bleeding and absence of leaks while holding pressure against the brake lever.

When the hydraulic brake system has been drained, the reservoir should be first filled with brake fluid.

Open the bleeder valve by one half turn, squeeze the brake lever, close the valve and release the brake lever. This procedure must be repeated in this sequence until hydraulic fluid begins to flow through the bleeder hose. Having filled the hydraulic system with fluid, proceed with the actual bleeding operation.

Note:

- Brake fluid which has been pumped out of the system must not be used again.
- Brake fluid will damage the paint finish and meter cases.
- The hydraulic fluid level in the reservoir must be checked at regular intervals and replenished whenever low. Use only SAE TYPE 70R3 BRAKE FLUID in this system.

5. Brake caliper adjustment

The brake caliper must be adjusted so that there is a small clearance between the fixed friction pad and the brake disc. This adjustment is made in the following manner. (Fig. 14-15)
a. Raise the front wheel off the ground using a suitable prop.
b. Loosen the caliper stopper bolt lock nut.
c. Turn the stopper bolt in direction ③ until the friction pad contacts the brake disc. When the wheel is rotated some resistance should be noticed.
d. While rotating the front wheel, turn the stopper bolt in direction ③ 1/8 ~ 1/4 turn further and tighten the lock nut.

text:

14.3 REAR BRAKE

a. Description

The rear brake has a large 7.09 in. (180 mm) diameter drum, providing a large friction surface for an effective braking performance.

b. Disassembly

1. Unscrew the rear brake pedal mounting bolt, disconnect the stop switch spring and remove the rear brake pedal from the shaft.
2. Unscrew the rear brake adjuster nut and remove the rear brake rod from the rear brake arm.
3. Unhook the rear brake return spring, and remove the rear brake shaft. (Fig. 14–16)
3. Remove the rear brake shoe from the rear wheel in accordance with page 130.

c. Inspection

1. Rear brake lining

Measure the rear brake drum diameter with a vernier caliper and if it is greater than 7.205 in. (183 mm), the rear wheel should be replaced. (Fig. 14–17)

Further, the rear wheel should also be replaced, if there are severe grooves in the drum.
2. Rear brake shoes

Measure the thickness of the brake shoe with a vernier caliper and if it is less than 0.080 in. (2.0 mm) the shoe should be replaced. Further, shoe should also be replaced, if there is severe uneven wear to the lining. (Fig. 14–18)

d. Reassembly

1. Connect the rear brake rod to the rear brake shaft.
2. Hook the rear brake return spring and connect the rear brake shaft to the frame.
3. Install the rear brake rod on the rear brake arm.
4. Install the rear brake pedal and tighten the setting bolt. (Fig. 14–19)
5. Mount the rear wheel in accordance with group rear wheel on page 138.
6. To check the rear brake pedal free travel, raise the rear wheel off the ground by placing the motorcycle on the main stand. Rotate the wheel by hand and note the distance the pedal tip travel before the brake takes hold. Nominal free travel is approximately 1 in. (25 mm) (Fig. 14–20). If adjustment is necessary, make the adjustment by turning the adjusting nut. Turn clockwise for less free travel, counterclockwise for greater free travel. (Fig. 14–21)

Note: Make sure that the cut-out on the adjusting nut is seated on the brake arm pin after the final adjustment has been made. If the rear wheel assembly has been moved forward or rearward, as during drive chain adjustment, the rear brake may require adjustment.
15-1. GENERAL DESCRIPTION

DIAGNOSIS

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handle pull to one side</td>
<td>Bent frame</td>
<td>Repair or replace</td>
</tr>
<tr>
<td>Poor high speed operation</td>
<td>Dirty air cleaner</td>
<td>Clean or replace</td>
</tr>
</tbody>
</table>
15-2. BODY

a. Description
The frame of the CB750 is of a double cradle steel tubing construction with a triple down tube head pipe section to provide the higher rigidity required for high speed riding. (Fig. 15-1)

b. Disassembly
1. Refer to engine removal section on page 17-18 to remove the engine.
2. Refer to steering group on page 117-118 to remove the handle, steering stem.
3. Refer to wheel group on page 132 and 137 to remove front and rear wheels.
4. Refer to suspension group on page 120 and 125 to remove the front and rear suspensions.
5. Refer to electrical instrument group on page 160-167 to remove the electrical still going.
6. Remove the cotter pin from the main stand shaft collar and remove the two mounting bolts. (Fig. 15-2)
7. Unhook the main stand spring and remove the main stand.
8. Remove the two seat hinge bars and remove the seat from the frame. (Fig. 15-3)
9. Remove the two 6mm and two 8mm bolts and separate the rear fender, rear fender B from the frame.
10. Remove the upper and lower ball races from the steering head. Use wood blocks to prevent damage when driving out. (Fig. 15-4)

c. Inspection
1. Check for bend and damage to the frame and repair using a press. (Fig. 15-5 shows the dimensions of the frame body.
2. Check the damages to the lower and top ball races and replace if necessary.
3. Inspect the main stand damage, crack bent and repair if condition is serious, the main stand should be replaced.

d. Reassembl
1. Install the upper and lower steering ball races fully into the steering head.
2. Assemble the rear fender and rear fender B on the frame with the 6mm and 8mm bolts (2 of each).
3. Refer to the electrical and instrument group on page 161~170 and install the electrical equipments.
4. Place the main stand against the bracket and insert the main stand shaft and then torque the two mounting bolts.

Note: These bolts should not be over tightened.
5. Install a new cotter pin and lock.
6. Install the seat with the two hinge bars.
7. Refer to the suspension group on page 121 and 125 and install front and rear suspensions.
8. Refer to the wheel group on page 133 and 138 and install front and rear wheels.
9. Refer to the steering group on page 118~119 and install handle steering stem.
10. Refer to the engine installation on page 19, install the engine and also install fuel tank and oil tank.

15-3. OIL TANK

a. Description
The oil tank is mounted on the right side center of the motorcycle and connected to the engine with two hoses. As shown in Fig. 15-6, the oil from the engine is routed through hose B under pressure and is returned to the oil tank: in the reverse, the oil flows through hose A to the engine.

A breather chamber is incorporated within the tank where the oil and air is separated. The air is released through the breather pipe to the atmosphere while the oil entering the breather chamber is returned to the engine through the breather tube A.

b. Disassembly
1. Remove the oil tank cover.
2. Remove the oil tank and crankcase drain plugs, and drain the oil. (Fig. 15-7, 8)
3. Disconnect the two oil hoses at the engine fittings. (Fig. 15-9)
4. Remove the three oil tank mounting bolts and dismount the oil tank. (Fig. 15-10)

c. Inspection
1. Check the oil tank for damages and defects, and replace if tank is leaking.
2. Check the oil hoses fittings for tightness and free from leaks.

d. Reassembly
1. Install the breather pipe and oil hoses securely on the tank.

   Note: Make sure that hoses A and B are installed in their respective locations. (Fig. 15-11)

2. Make sure that the oil tank is mounted on the rubber mounts and install three mounting bolts.

3. Install the oil hoses to their respective fittings on the engine.

   Note: Make sure not to forget the 15 mm O ring.

4. Install and tighten both the oil tank and crankcase drain plugs.

5. Refill tank with oil (refer to page 178).

15-4. AIR CLEANER

a. Description

   The air cleaner is mounted at the center of the motorcycle under the fuel tank. The air cleaner element is of filter paper. The clean air which passes through the air cleaner is fed to each carburetor. (Fig. 15-12)
b. Disassembly
1. Remove the air cleaner cover by loosening the two wing nuts and remove the air cleaner element. (Fig. 15-13)
2. Remove the air cleaner upper case by loosening the four air cleaner hose clamp screws and the two mounting bolts.

c. Inspection
1. Dust on the air cleaner element can be removed by tapping lightly and blowing off the loose dust particles with compressed air. (Fig. 15-14)
2. Inspect the air cleaner element to make sure that it is not damaged or clogged by soilage.
3. Also inspect the bonded section to make sure that the joints are not cracked or open.

d. Reassembly
1. Install the air case by screwing the two air cleaner case setting bolts.
2. Install the air cleaner to the carburetors and clamp the hoses with screws.
3. Install the air cleaner element together with the air cleaner cover and mount with the two wing nuts.

15-5 EXHAUST SYSTEM

a. Description
The CB 750 mounts on individual muffler for each of the four cylinders.
Though the mufflers have only a small expansion chamber capacity, the unique design of the exhaust system provides effective silencing without sacrifice to power output by joining the two mufflers on each side with muffler connecting tube at the silencing compartments. This is effect provides an added silencing capacity, with a minimum of power loss due to the reduction in exhaust back pressure. (Fig. 15-15)

b. Disassembly
1. Loosen the 8 mm bolt on the exhaust joint and remove the pillon step bolt on both sides at the same time.
2. Loosen the muffler connecting band and disassemble the mufflers.

c. Inspection
1. Inspect the muffler gasket for damage.
2. Inspect the muffler for cracks, dents and other defects.

d. Reassembly
1. Install the exhaust pipe gasket on the cylinder head and mount the exhaust flange on the head with two 8 mm screws.
2. Install the exhaust pipe joint on the exhaust flange and mount the muffler to the frame with pillon step bolt and 8 mm bolt.

Note: Make sure that the muffler connecting tube is connecting the upper and lower sections of the muffler. (Fig. 2-9 on page 19)
# CONTENTS

16-1 GENERAL DESCRIPTION
   DESCRIPTION ........................................... 159
   SPECIFICATIONS ........................................ 159

16-2 SPEEDO/TACHOMETER .................................... 159
   a. Description ........................................... 159
   b. Disassembly .......................................... 160
   c. Inspection ............................................. 160
   d. Reassembly ........................................... 160

16-3 HEADLIGHT ........................................... 160
   a. Description ........................................... 160
   b. Disassembly .......................................... 161
   c. Inspection ............................................. 161
   d. Reassembly ........................................... 161

16-4 TAIL/STOP LIGHT ................................... 161
   a. Description ........................................... 161
   b. Disassembly .......................................... 161
   c. Inspection ............................................. 162
   d. Reassembly ........................................... 162

16-5 TURN SIGNAL LIGHT ................................ 162
   a. Description ........................................... 162
   b. Disassembly .......................................... 162
   c. Inspection ............................................. 162
   d. Reassembly ........................................... 162

16-6 FLASHER RELAY .................................... 162
   a. Description ........................................... 162
   b. Disassembly .......................................... 162
   c. Inspection ............................................. 163
   d. Reassembly ........................................... 163

16-7 MAIN IGNITION KEY SWITCH ......................... 163
   a. Description ........................................... 163
   b. Disassembly .......................................... 163
   c. Inspection ............................................. 164
   d. Reassembly ........................................... 164
<table>
<thead>
<tr>
<th>16-8 STARTER LIGHTING IGNITION SWITCH</th>
<th>16-9 TURN SIGNAL LIGHT/HORN SWITCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-10 HORN</td>
<td></td>
</tr>
<tr>
<td>16-11 STOP SWITCH (FRONT)</td>
<td></td>
</tr>
<tr>
<td>16-12 STOP SWITCH (REAR)</td>
<td></td>
</tr>
<tr>
<td>16-13 OIL PRESSURE SWITCH</td>
<td></td>
</tr>
<tr>
<td>16-14 NEUTRAL SWITCH</td>
<td></td>
</tr>
<tr>
<td>16-15 WIRE HARNESS</td>
<td></td>
</tr>
<tr>
<td>a. Description</td>
<td>b. Description</td>
</tr>
<tr>
<td>b. Disassembly</td>
<td>c. Inspection</td>
</tr>
<tr>
<td>c. Inspection</td>
<td>d. Reassembly</td>
</tr>
<tr>
<td>d. Reassembly</td>
<td></td>
</tr>
</tbody>
</table>

Note: The table and diagram are not clearly visible due to the rotation and quality of the image.
16-1 GENERAL DESCRIPTION

DESCRIPTION

The following equipments are installed on the motorcycle to insure safe riding. Also included are control to operate these equipments.

- Speedo/tachometer
- Lighting equipments
- Switches
- Horn
- Flasher relay
- Wire harness

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Headlight type</th>
<th>Sealed lamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headlight bulb</td>
<td>12 V-50/40 W</td>
</tr>
<tr>
<td>Tail/stop light bulb</td>
<td>12 V-7/23 W</td>
</tr>
<tr>
<td>Turnsignal light bulb</td>
<td>12 V-25 W</td>
</tr>
<tr>
<td>Meter lamp bulb</td>
<td>12 V-3 W</td>
</tr>
<tr>
<td>Flasher relay type</td>
<td>Signal-stat 142</td>
</tr>
<tr>
<td>Horn</td>
<td>Curling type</td>
</tr>
</tbody>
</table>

DIAGNOSIS

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Probable Causes</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lights do not operate</td>
<td>1. Broken filament of bulb</td>
<td>Replace bulb</td>
</tr>
<tr>
<td></td>
<td>2. Poor contact of socket</td>
<td>Repair</td>
</tr>
<tr>
<td></td>
<td>3. Low charge battery</td>
<td>Charge battery</td>
</tr>
<tr>
<td></td>
<td>4. Defective wires</td>
<td>Repair or replace</td>
</tr>
<tr>
<td>Turn signal light does not</td>
<td>1. Defective flasher relay</td>
<td>Replace</td>
</tr>
<tr>
<td>operate</td>
<td>2. Broken filament of bulb</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>3. Poor contact of socket</td>
<td>Repair</td>
</tr>
<tr>
<td></td>
<td>4. Defective wires</td>
<td>Repair or replace</td>
</tr>
<tr>
<td>Horn does not operate</td>
<td>1. Low charge battery</td>
<td>Charge battery</td>
</tr>
<tr>
<td></td>
<td>2. Poor contact of switch</td>
<td>Repair</td>
</tr>
<tr>
<td></td>
<td>3. Defective wires</td>
<td>Repair or replace</td>
</tr>
</tbody>
</table>

16-2 SPEEDO/TACHOMETER

a. Description

Speedometer and tachometer are separate units. The speedometer including the odometer and the trip meter is driven from the front wheel through a flexible shaft. Tachometer is driven off the camshaft, also through a flexible shaft. Constructions of both the speedometer is shown in Fig. 16-1.
b. Disassembly

1. Remove the headlight unit in accordance with 16-3.b on page 161, and disconnect the electrical leads which are from the speedo/tachometer.

2. Disconnect the speedometer and tachometer cables from back of the respective meter.

3. Loosen the meter setting screw and remove the meter from the meter bracket. (Fig. 16-2)

4. Remove the meter under plate by unscrewing the two cross screws and remove the meter bulbs.

c. Inspection

1. Inspect the respective meter for defect or crack.

d. Reassembly

Perform the reassembly in the reverse order of disassembly.

16-3 HEADLIGHT

a. Description

The headlight is of sealed beam type and adjusted in the vertical and horizontal directions. (Fig. 16-3)
c. Disassembly
1. Loosen the three headlight mounting screws and remove the headlight unit from the headlight case.
2. Disconnect the leads from the headlight unit. (Fig. 16-4)
3. Unscrew the two headlight units setting screws, the beam adjusting screw and remove the unit from the headlight rim. (Fig. 16-5)
4. Loosen the two headlight screws and remove the beam unit. (Fig. 16-5)

c. Inspection
1. If the headlight is inoperative, remove the headlight unit and check for broken filament either visually or with a tester.
   If the filament is broken, replace it with a specified headlight unit.
2. Also check the condition of the wiring and if they are damaged or frayed, make a repair or replace the wiring.

d. Reassembly
   Perform the reassembly in the reverse order of disassembly.

16-4 TAIL/STOPLIGHT

a. Description
   The tail/sto plight contains two filaments within a bulb. (Fig. 16-6)

b. Disassembly
1. Disconnect the tail/sto plight leads at the connectors and then remove the tail/sto plight bracket. (Fig. 16-7)
2. Remove the taillight lens and then remove the tail/sto plight bulb. (Fig. 16-8)
c. Inspection
When the bulb does not operate, remove the bulb and check for broken filament visually or with a tester and if found defective, replace the bulb with one that is of a specified rating.

d. Reassembly
Perform the reassembly in the reverse order of removal.

Note: When installing the taillight lens, do not overtighten the screws, as this may damage the lens.

16-5 TURN SIGNAL LIGHT

a. Description
A large type turn signal light is used. (Fig. 16-9)

b. Disassembly
The removal procedure is identical with that of the tail/stop light described on page 161.

c. Inspection
1. If the bulb is inoperative, remove the bulb and check for broken filament and if found to be defective, replace the bulb with one of specified rating.

2. Check the wiring for loose connectors or break in the wires and if found defective, repair or replace.

d. Reassembly
Perform the reassembly in the reverse order of removal.

16-6 FLASHER RELAY

a. Description
The signal-stat 142 flasher relay is used on this model. (Fig. 16-10)

b. Disassembly
1. Remove the battery cover.
2. Disconnect the electrical leads from the signal stat and remove it.
c. Inspection
1. Make sure that the turn signal light bulb of the proper rating is used. If bulbs of different rating are used, the flashing rate will be affected.
2. Check the operation of the flasher relay.
   When the turn signal light flashing rate is not uniform, the flasher relay should be checked. Disconnect the leads from the left terminal of the relay and connect it to a 12 V-25 W bulb. If the flashing rate is between 65 to 90 cycles per minute, the relay is satisfactory.
   **Note: During the test make sure that the flasher is properly ground.**
3. Switch on the turn signal switch and if the lamp stays on continuously and accompanied by a buzzing noise in the relay, check to make sure that the relay is properly ground or that the ground lead is not broken.
4. When the flasher switch is turned on, and the lamp does not flash, flasher bulb is probably defective. Check the bulb immediately.

d. Reassembly
   Perform the installation in the reverse order of removal.

16-7 MAIN IGNITION KEY SWITCH

a. Description
   This switch controls the entire electrical circuit including the OFF, ON (riding) and the parking position. (Fig. 16-13)

<table>
<thead>
<tr>
<th>BAT (red)</th>
<th>IG (black)</th>
<th>TL 1 (brown/white)</th>
<th>TL 2 (brown)</th>
<th>Function</th>
<th>Key removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td></td>
<td></td>
<td></td>
<td>Electrical equipments are inoperative and the engine cannot be started</td>
<td>Removal</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td>Electrical equipments are operative, the engine will start.</td>
<td>Not removal</td>
</tr>
<tr>
<td>II</td>
<td></td>
<td></td>
<td></td>
<td>Parking light is operative, engine cannot be started.</td>
<td>Removal</td>
</tr>
</tbody>
</table>

b. Disassembly
1. Remove the fuel tank.
2. Unscrew the main ignition key switch lock nut. (Fig. 16-14)
3. Disconnect the switch connector and remove the switch. (Fig. 16-14)
c. Inspection

1. Continuity test
   Perform a continuity check to determine if there is a break in the switch lead or defective condition of the contacts. Insert the leads into the X terminal of the tester, turn the selector knob to the continuity position and then turn the main key switch to the ON position using the key. Apply the test leads across the points to be checked; if the red continuity lamp is lit, the continuity condition is satisfactory. If the lamp does not come on, it indicates an open circuit. (Fig. 16-15)

2. Disassembly
   Perform the installation in the reverse order of the removal.

16-8 STARTER LIGHTING
IGNITION SWITCH

a. Description

The starter lighting ignition switch is incorporated in the right handle bracket. (Fig. 16-16)

b. Disassembly

1. Loosen the two switch mounting screws and separate the switch bracket at the right of the handle bar.
2. Disconnect the throttle cable from the throttle control and then remove the throttle cable connector from the switch lower side. (Fig. 16-17)
3. Disconnect the wiring within the headlight case and remove the switch assembly.

c. Inspection

1. Check to make sure that the respective switch positions are functioning properly. Turn the main key switch to the ON position and set the headlight control switch to the red dot position; the headlight and taillight will not be on.
   In the L position the headlight low beam will be on; in the H position the headlight high beam will be on. Further, the taillight will be on in both the H and L positions.
2. Push the starter button and check to see if the starting motor turn over.

d. Reassembly

Perform the reassembly in the reverse order of disassembly.

Note: When installing the switch lower half on the handle, make sure that the pin is inserted into the handle bar stopper hole and is tightened together with the switch upper half.
16-9 TURN SIGNAL LIGHT/HORN SWITCH

a. Description
The turn signal light/horn switch is located on the left handle bar adjacent to the grip. The upper switch is the turn signal light switch and the lower is the horn button switch. (Fig. 16-18)

b. Disassembly
1. Remove the headlight unit and disconnect the wiring within the headlight case.
2. Unscrew the two switch mounting screws and disassemble the switch upper and lower halves.

c. Inspection
1. Turn the main key switch to the on position and set the turn signal control switch to the L position. The turn signal lights on the left side should be flashing and when the switch to the R position the right hand turn signal lights should be flashing.
2. Set the main key switch to the on position and when the horn button is pressed, the horn should operate.

d. Reassembly
Perform the reassembly in the reverse order of disassembly.

Note: When assembling the switch lower half on the handle, make sure that the pin is inserted into the handle bar stopper hole and then tighten together with the switch upper half.

16-10 HORN

a. Description
The horn is of a curling type. The action of the electronic magnet within the horn sets up the specified vibrating frequency of a metal diaphragm and this produces the sound.
The construction of the horn is shown in (Fig. 16-19).

b. Disassembly
1. Disconnect the electrical leads. (Fig. 16-20)
2. Remove the horn by unscrewing the two bolts from the frame. (Fig. 16-20)
16. **BODY ELECTRICAL AND INSTRUMENTS**

Note: The horn is accurately adjusted to produce the desired sound, therefore, the horn should not be disassembled if it is operating properly.

c. **Inspection**
   If there is a change in pitch of the sound or if the loudness has decreased, check the horn by connecting it to a fully charged battery. If the quality of the sound is still poor, remove the horn cover and adjust by turning the adjusting screw. Turning the screw to the right will increase the loudness. (Fig. 16-21)

d. **Reassembly**
   Perform the reassembly in the reverse order of disassembly.

**16-11 STOP SWITCH (FRONT)**

a. **Description**
   The front switch is actuated by the brake oil pressure and is located at the brake hose joint. (Fig. 16-22)

b. **Disassembly**
   1. Remove the electrical leads from the front stop switch.
   2. Loosen the joint mounting bolts and remove the front stop switch from the joint. (Fig. 16-23)

c. **Inspection**
   1. Check to make sure that the stoplight is on when the front brake lever is applied, if the light will not be on the stop switch should be replaced.

d. **Reassembly**
   Perform the reassembly in the reverse order of the disassembly.

**16-12 STOP SWITCH (REAR)**

a. **Description**
   The stoplight switch is a pull type switch operated by the brake pedal. (Fig. 16-24)

b. **Disassembly**
   Disconnect the wiring and remove the stoplight switch from the bracket.

c. **Inspection**
   1. Adjusting the position of the stoplight switch operation. (Fig. 16-24)
a. First, check the adjustment of the rear brake pedal in accordance with the procedure on page 149 to make sure that the brakes are properly adjusted.
b. Turn on the main key switch (main key switch position “red” dot).
c. Adjust the stoplight switch so that the stoplight will come on when the brake pedal is depressed to the point where the brake just starts to take hold. If the stoplight switch is late in switching on the stoplight, screw in the switch lock nut, and if the stoplight comes on too early, screw out the switch lock nut.

d. Reassembly
Perform the reassembly in the reverse order of the disassembly.

16-13 OIL PRESSURE SWITCH

a. Description
The oil pressure switch is mounted on the upper crankcase behind the cylinder. When the oil pressure is over 56.9~85.3 lbs/in² (4~6 kg/cm²), the switch operates.

b. Disassembly
1. Remove the oil pressure switch from the upper crankcase. (Fig. 16-25)
2. Disconnect the electrical lead.

c. Inspection
The oil pressure warning lamp does not come on when the main key switch is switched on or the lamp does not go off when the engine is started, it is indication that the oil pressure switch is defective.

d. Reassembly
Perform the installation in the reverse order of the removal.

16-14 NEUTRAL SWITCH

a. Description
The neutral switch is mounted under the lower crankcase.
This switch operates the neutral indicator lamp located on the tachometer.

b. Disassembly
1. Unscrew the neutral switch screw and disconnect the electrical lead.
2. Remove the neutral switch mounting bolt from the lower crankcase and remove the neutral switch. (Fig. 16-26)

c. Inspection
1. Check to make sure that the green neutral pilot lamp comes on when the gear is shifted into the neutral position by the gear change pedal.
2. Check the operation and condition of the neutral switch.

d. Reassembly
Perform the installation in the reverse order of the removal.
16-15 WIRE HARNESS

a. Description
The respective circuits in the wire harness are coded with different colors to make it easy to service electrical system.

b. Disassembly
1. Open the seat and remove the fuel tank.
2. Remove the headlight and disconnect the leads installed on the inside of the head light case.
3. Disconnect the ignition coil leads.
4. Disconnect the horn leads.
5. Disconnect the front stop switch leads.
6. Disconnect the main key switch leads.
7. Disconnect the generator connector.
8. Disconnect the contact breaker/stop switch leads.
9. Remove the battery cover, and then remove the following parts: regulator, starter magnetic switch, rectifier connector, fuse case, and signal stat. (Fig. 16-27)
10. Remove the leads on the rear fender. (Fig. 16-28)
11. Remove the wire harness bands, and then remove the wire harness from the frame.

c. Inspection
1. Perform the continuity test for each socket connected wire leads in the same color. (Fig. 16-29)
2. If the wire harness tape is torn or deteriorated, replace it.
Fig. 16-29

<table>
<thead>
<tr>
<th>No.</th>
<th>Lead color</th>
<th>Connection</th>
<th>No.</th>
<th>Lead color</th>
<th>Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>Brown/White</td>
<td>Speedometer lamp,</td>
<td>④</td>
<td>Yellow</td>
<td>Contact breaker</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beam selector switch,</td>
<td></td>
<td>Blue</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tachometer lamp</td>
<td></td>
<td>Black</td>
<td>&quot;</td>
</tr>
<tr>
<td>②</td>
<td>Green</td>
<td>Headlight, Speedometer,</td>
<td>⑤</td>
<td>Green/Yellow</td>
<td>Stop switch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tachometer</td>
<td></td>
<td>Light green/Red</td>
<td>Neutal switch</td>
</tr>
<tr>
<td>③</td>
<td>Green</td>
<td>R. L. front turn signal light</td>
<td></td>
<td>Blue/Red</td>
<td>Oil pressure switch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>starter switch, turn signal pilot lamp</td>
<td></td>
<td>Green</td>
<td>A.C generator</td>
</tr>
<tr>
<td>④</td>
<td>Light blue</td>
<td>R. front turn signal light,</td>
<td>⑥</td>
<td>Yellow</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>starter switch, turn signal pilot lamp</td>
<td></td>
<td>White</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑤</td>
<td>Orange</td>
<td>Turn signal pilot lamp,</td>
<td>⑦</td>
<td>Green</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L. front turn single light,</td>
<td></td>
<td>White</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Starter/turn signal switch</td>
<td></td>
<td>White</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑥</td>
<td>Yellow/Red</td>
<td>Neutral pilot lamp,</td>
<td>⑧</td>
<td>White</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oil pressure lamp,</td>
<td></td>
<td>Black</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head light beam selector switch,</td>
<td></td>
<td>Black</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑦</td>
<td>Black</td>
<td>Starter switch, turn signal switch</td>
<td></td>
<td>Black</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;</td>
<td></td>
<td>Yellow/Red</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑧</td>
<td>Grey (white tube)</td>
<td>&quot;</td>
<td></td>
<td>Red</td>
<td>Starter magnetic switch</td>
</tr>
<tr>
<td></td>
<td>Blue/Red</td>
<td>Oil pressure lamp</td>
<td></td>
<td>Yellow</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑨</td>
<td>Light green/Red</td>
<td>Neutral pilot lamp</td>
<td></td>
<td>&quot;</td>
<td>Silicon rectifier</td>
</tr>
<tr>
<td></td>
<td>Light green</td>
<td>Horn switch,</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ignition switch</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑪</td>
<td>Black/White</td>
<td>Beam selector switch,</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑫</td>
<td>Green/Yellow</td>
<td>Front stop switch</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑬</td>
<td>Black</td>
<td>Front stop switch</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑭</td>
<td>Brown/White</td>
<td>Main key switch</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑮</td>
<td>Black</td>
<td>&quot;</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑯</td>
<td>Brown</td>
<td>&quot;</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑰</td>
<td>Red</td>
<td>&quot;</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑱</td>
<td>Black/White</td>
<td>Ignition coil</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑲</td>
<td>Light green</td>
<td>Horn</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>⑳</td>
<td>Black</td>
<td>Horn, ignition coil</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>㉑</td>
<td>Blue</td>
<td>Ignition coil</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>㉒</td>
<td>Yellow</td>
<td>Ignition coil</td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>
d. Reassembly

Perform the reassembly in the reverse order of disassembly by connecting each lead correctly in place. (Fig. 16-30)

![Diagram of motorcycle electrical system]

Fig. 16-30

- Headlight
- Stop switch (front)
- Wire harness band
- To horn and ignition coil
- To stop switch and contact breaker
- To battery
- To regulator
- To rectifier

- To fuse
- To flasher relay
- To tail/stop light and turn signal light
- Wire harness
- Main key switch coupler
- Ignition coil
- Stop switch (rear)
- To contact breaker points