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## ● TROUBLESHOOTING

### (IGNITION SYSTEM)

Engine Cranks but Will Not Start:

- Engine stop switch OFF
- No spark at plugs
- Defective contact breaker
- A.C. generator faulty

No Spark at Plugs:

- Engine stop switch OFF
- Poorly connected, broken or shorted wires
- Defective ignition switch
- Defective ignition coil
- Defective condenser
- Defective A.C. generator
- Defective contact breaker

Engine Starts but Runs Poorly:

- Ignition primary circuit
  - Defective ignition coil
  - Loose or bare wire
  - Intermittent short-circuit in a switch
- Secondary circuit
  - Defective plug
  - Defective high tension cord
- Ignition timing
  - Defective contact breaker
  - Defective condenser

**(CHARGING SYSTEM)****No Power — Key Turned On:**

- Dead battery
  - Battery not charged
  - Battery electrolyte low
  - Battery run down
  - Charging system failure
- Disconnected battery cable
- Main fuse burned out
- Defective ignition switch

**Low Power — Key Turned On:**

- Weak battery
  - Low battery electrolyte level
  - Battery run down
  - Charging system failure
- Loose battery connection

**Low Power — Engine Running:**

- Battery undercharged
  - Low battery electrolyte level
  - One or more dead cells
- Charging system failure

**(STARTING SYSTEM)****Starter Motor Will Not Turn:**

- Dead battery
- Defective ignition switch
- Defective starter switch
- Defective neutral switch
- Defective starter magnetic switch
- Loose or disconnected wire or cable
- Defective clutch switch

**Starter Motor Turns Engine Slowly:**

- Low battery
- Excessive resistance in circuit

**Intermittent Power:**

- Loose battery connection
- Loose charging system connection
- Loose starting system connection
- Loose connection or short circuit in ignition system
- Loose connection or short circuit in lighting system

**Charging System Failure:**

- Loose, broken, or shorted wire or connection
- Defective voltage regulator
- Defective silicon rectifier
- Defective A.C. generator

**Starter Motor Turns, But Engine Does Not Turn:**

- Defective starter clutch
- Defective starter motor gears
- Defective starter motor or idle gear

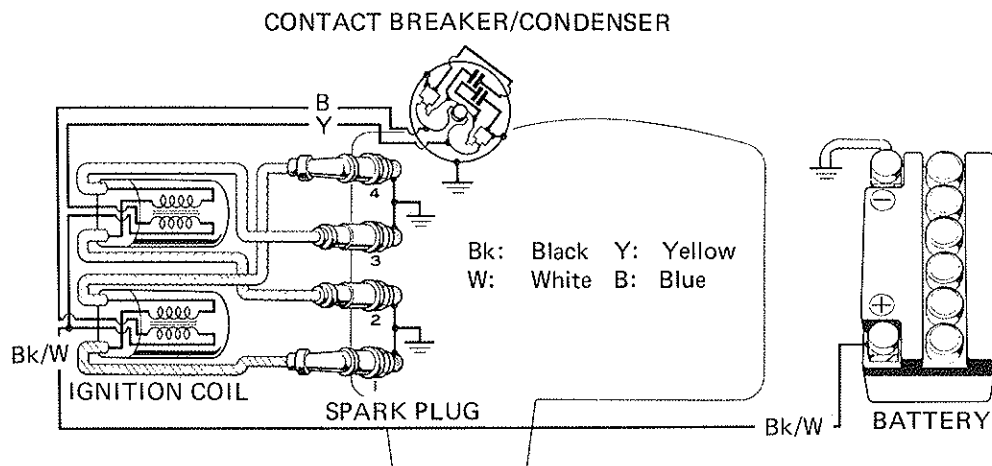
**Starter Motor and Engine Turn, But Engine Does Not Start:**

- Defective ignition system
- Engine problems



### ● IGNITION SYSTEM

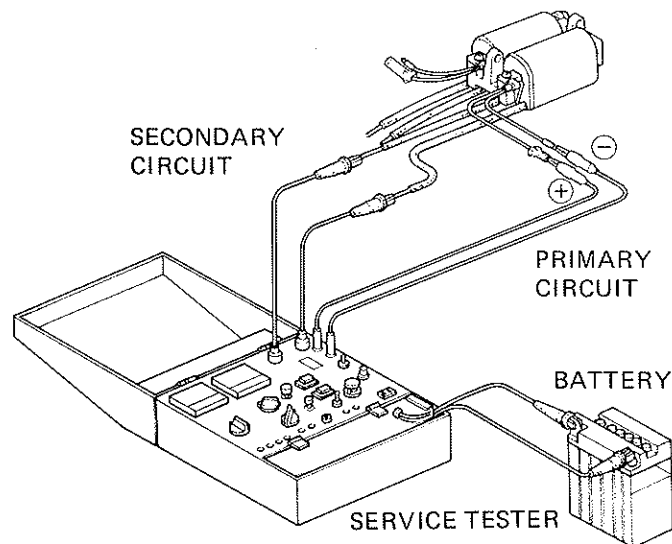
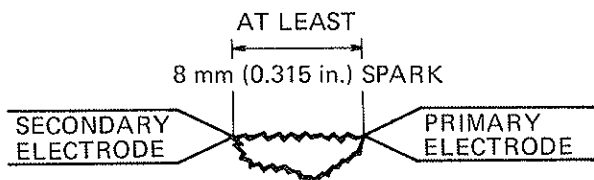
#### ● IGNITION SYSTEM DIAGRAM



#### ● INSPECTION

##### ● IGNITION COIL INSPECTION

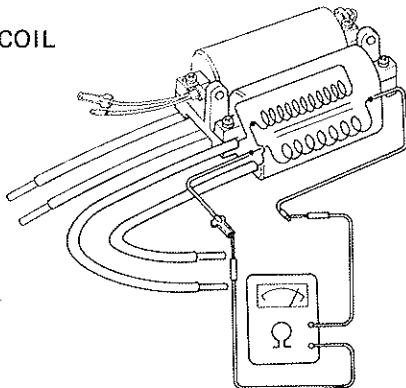
- TESTING WITH SERVICE TESTER — 3-POINT SPARK TEST  
The coil is satisfactory if sparks jump across a gap greater than 8 mm.
- Perform this test by placing the coil on an insulated surface.
- Keep the alligator clips at least 50 mm (2 in.) away from each other.
- Follow the instructions furnished with the tester.



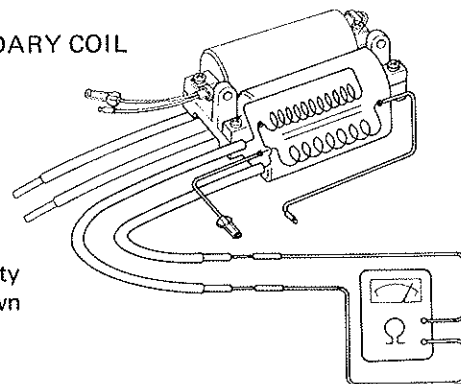
##### CONTINUITY TEST

- Remove the spark plug cap before making a continuity test.
- There should be continuity between coils.

##### PRIMARY COIL



##### SECONDARY COIL

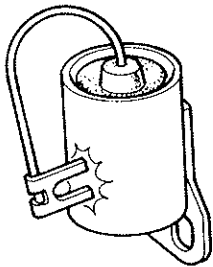


There should be continuity with the connection shown in the figure.

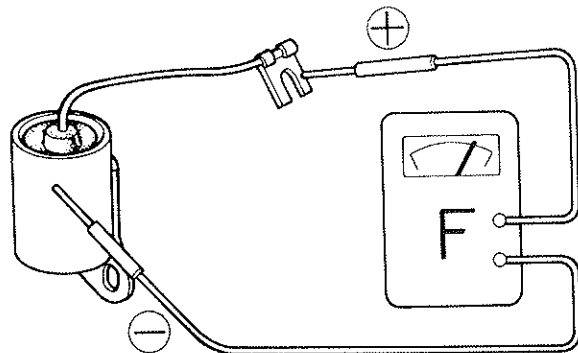


- **CONDENSER CAPACITY CHECK**

Use a radio tester to check. Before making a check, short out the stored energy by attaching the center lead (+) to the case.



I410881

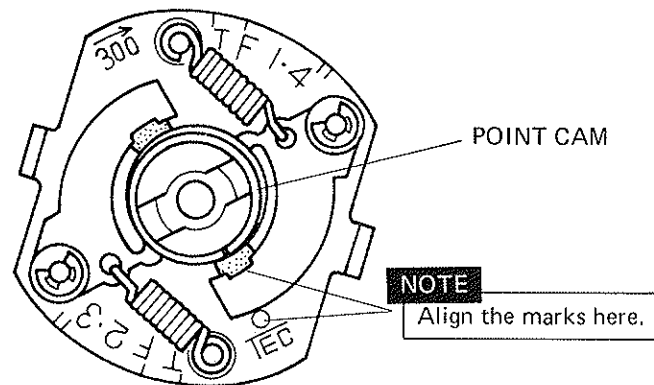


Condenser capacity	0.22—0.26 $\mu$ F
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I410879

- **SPARK ADVANCER**

- If the advancer does not operate smoothly, apply oil to the sliding surface of the advancer.



Z410630

- **SPARK ADVANCER INSPECTION -DYNAMIC TEST**

**NOTE**

Before performing this test, check and adjust the ignition timing. Refer to page 4—8.

With the engine running over 2,500 rpm, check that the index mark is within the full advance marks. If the index mark is out of the full advance marks, check the operation of the spark advancer. Repair or replace as required.

- **SPARK PLUG**

- For inspection and adjustment - - - - page 4—6.

- **CONTACT BREAKER**

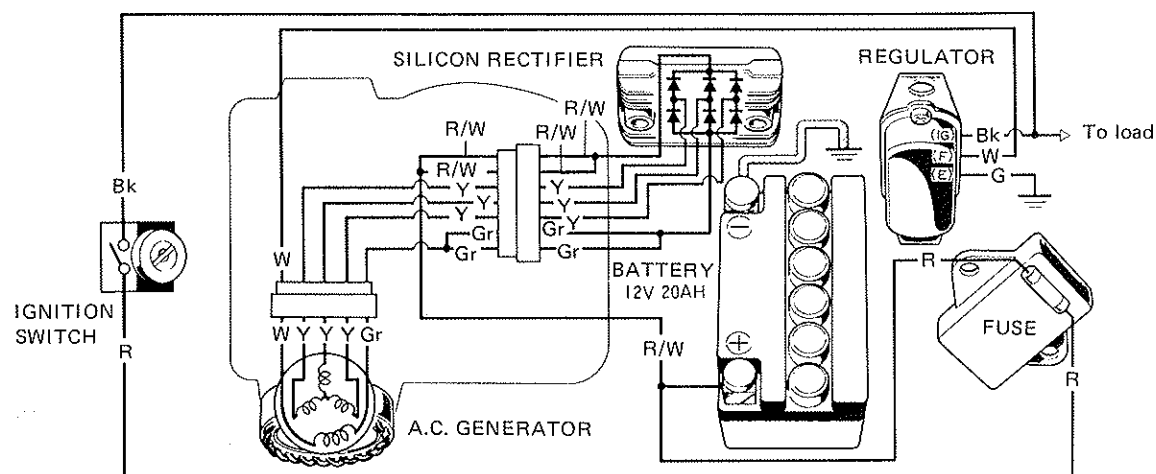
- For inspection and adjustment - - - - page 4—7.





● **CHARGING SYSTEM**

● **CHARGING SYSTEM DIAGRAM**



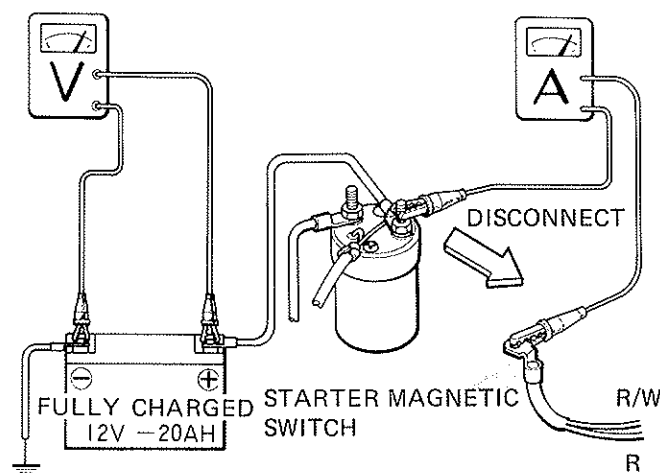
Q393526

● **CHARGING TEST**

Perform the following tests after warming up the engine:

- Check the specific gravity of battery electrolyte. Specific Gravity (fully charged): 1.260–1.280 at 20° (68°F)
- Connect a voltmeter and an ammeter as shown; set the dimmer switch to HIGH.
- Install a tachometer.

Make the connections as shown and raise the engine speed gradually in order to permit the needle of each meter to swing gently.



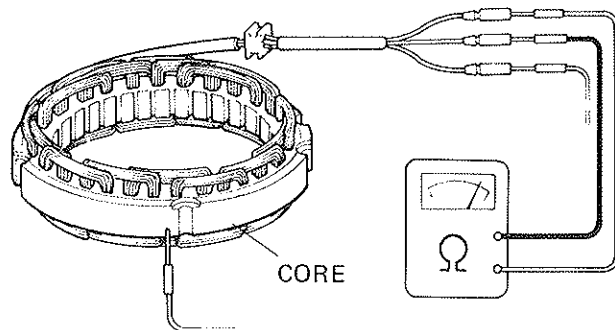
I410904

Charging rpm	3,000 rpm		8,000 rpm	
	Charging current	Battery terminal voltage	Charging current	Battery terminal voltage
1,450 rpm	8.7A max.	14.5V	13.2A max.	14.5V

- Run the engine and note the exact voltage indicated on the voltmeter. Readings in excess of specifications indicate that the generator and battery should be inspected individually.



- INSPECTION
- STATOR COIL



I410876

**NOTE**

Perform this test on an insulated surface or non-conductive material.

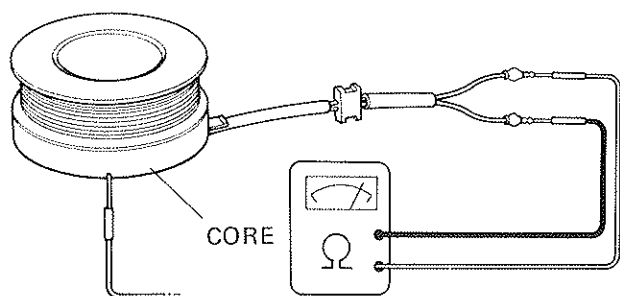
**CONTINUITY TEST:**

- There should be continuity between the three lead wires.

**INSULATION TEST:**

- There should be no continuity between each wire and the stator core.

- FIELD COIL



I410883

**NOTE**

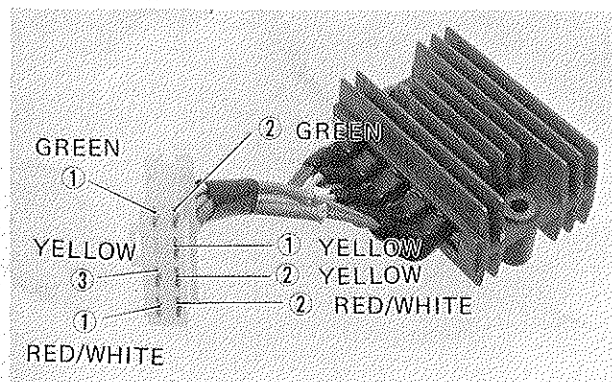
Perform this test on an insulated surface or non-conductive material.

**CONTINUITY TEST:**

- There should be continuity between the two lead wires.
- The coil is open if there is no continuity.

**INSULATION TEST:**

- No continuity should exist between the field core and each of the terminals.
- The coil is short circuited if there is continuity.

**SILICON RECTIFIER****NOTE**

- Use an ohm meter.
- Do not apply high voltages as this will ruin the diodes.

Replace the rectifier if any one of the following tests proves unsatisfactory.

Continuity should exist between:

Green (1) and Green (2) leads

Red/White (1) and Red/White (2) leads:

Continuity should exist in only one direction between:

One of the Green leads (1) and (2) and one of the Yellow leads (1), (2) and (3).

One of the Red/White leads (1) and (2) and one of the Yellow leads (1), (2) and (3).

**NOTE**

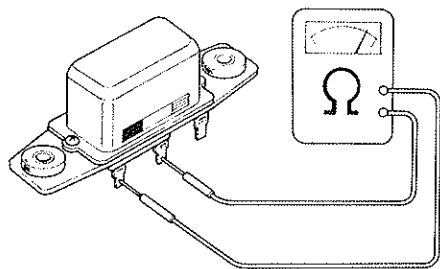
Some resistance will be indicated if there is continuity.



### VOLTAGE REGULATOR

The regulator controls the output of the A.C. generator to prevent damaging high voltage and high current from being attained within the system.

#### INSPECTION: AT TIME OF DISASSEMBLY

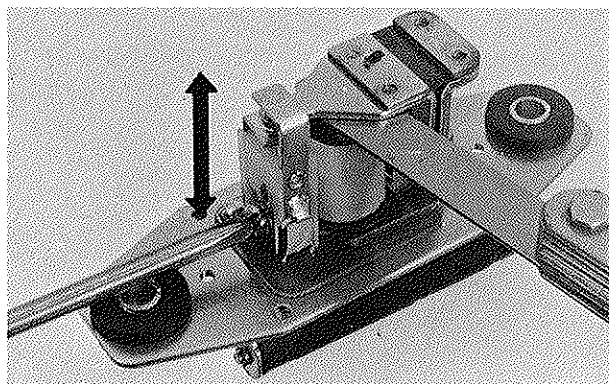


I410880

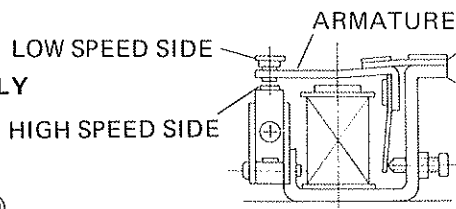
- (1) There should be continuity between "F" terminal (white) and "I" terminal (black).

#### INSPECTION AND ADJUSTMENT: AT TIME OF ASSEMBLY

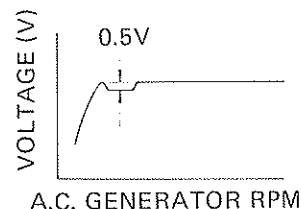
- (1) Perform the charging test. If the battery is not charged fully, proceed to the steps (2) and (5).
- (3) Adjust the core gap.



STANDARD	0.6–1.0 mm (0.024–0.040 in.)
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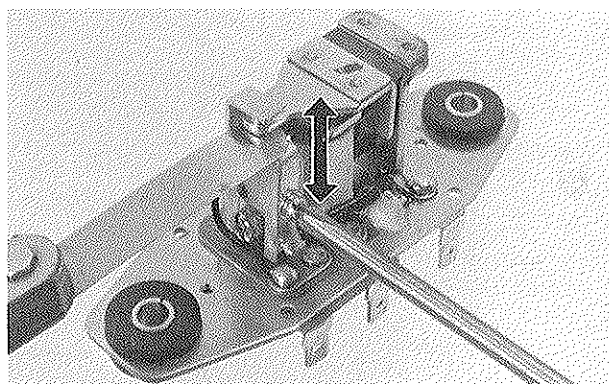


I410885

- (2) Perform charging test. The regulator is normal if the charging voltage is 14.5 V when the engine is running at 3,000 rpm or higher.

Charging voltage may vary about 0.5V when the armature is pulled down from LOW to HIGH side, but this is normal.

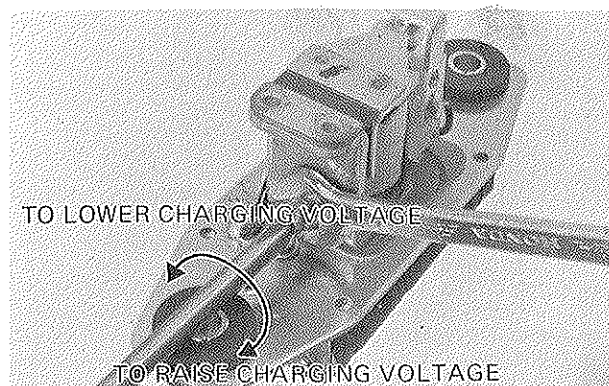
- (2) Check the points for fouling or pitting, and clean or polish if necessary.
- (4) Adjust the point gap.



STANDARD	0.3–0.4 mm (0.012–0.016 in.)
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- (5) Charging voltage:

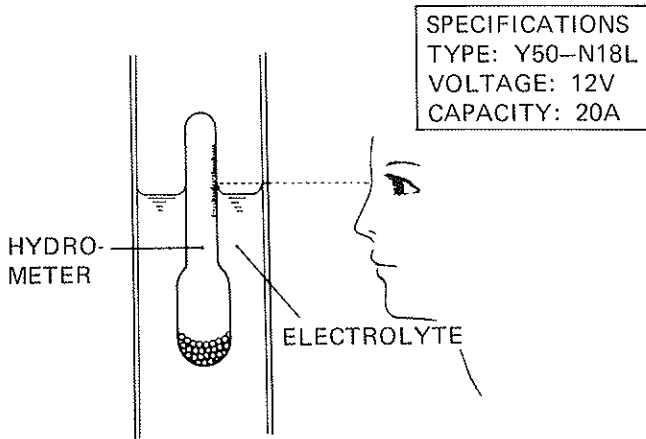
The regulator is normal if the charging voltage is 14.5 V when the engine is running at 3,000 rpm or higher.





## • BATTERY SERVICE

### SPECIFIC GRAVITY AND TEMPERATURE



- Specific gravity changes 0.007 for every 10°C (18°F) of electrolyte temperature.

#### NOTE

Replace the battery if sulfation is evident. Replace the battery if pastes have settled to the bottom in each cell.

### CHARGING BATTERY

Hooking-up instruction	Connect the positive (+) terminal of charger to the positive (+) terminal of the battery. Connect the negative (−) terminal of charger to the negative (−) terminal of the battery.
Charging current	2.0A
State of charge of battery	Continue charging until S.G. (Specific Gravity) of the battery electrolyte is 1.260 to 1.280 (20°C/68°F).
Charging time	About 3 hours if S.G. is lower than 1.220 (20°C/68°F)

#### WARNING

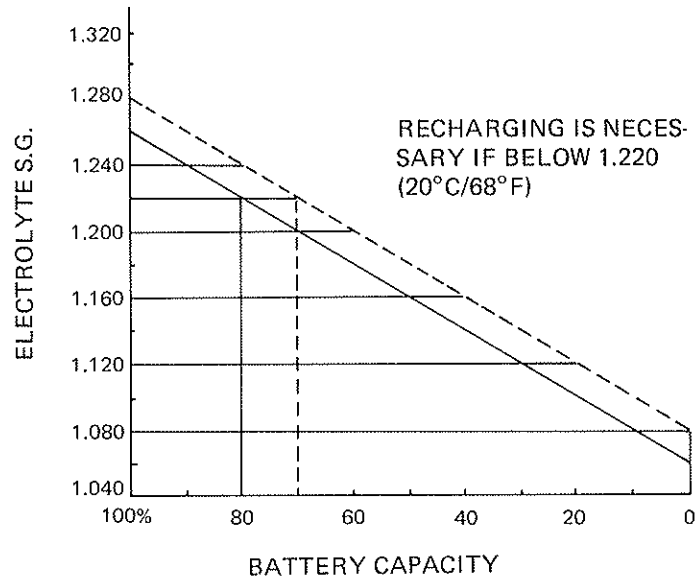
- Remove the caps when charging.
- Do not bring an open flame near the battery as explosive hydrogen gas is formed during charging.
- Avoid "QUICK CHARGING."
- Do not continue charging when the electrolyte temperature exceeds 45°C.

After charging, wash the battery with water and coat the terminals with grease.

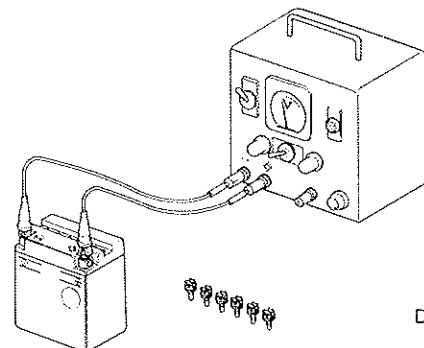
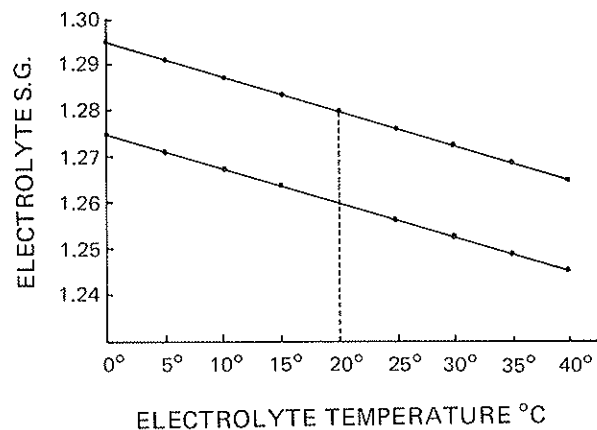
SPECIFIC GRAVITY (FULLY CHARGED): 1.260–1.280 at 20°C (68°F)

The battery should be recharged if the specific gravity falls below 1.220 at 20°C (68°F).

### • S.G. AND CAPACITY



### • ELECTROLYTE TEMPERATURE VS SPECIFIC GRAVITY



D410577





### STARTING SYSTEM

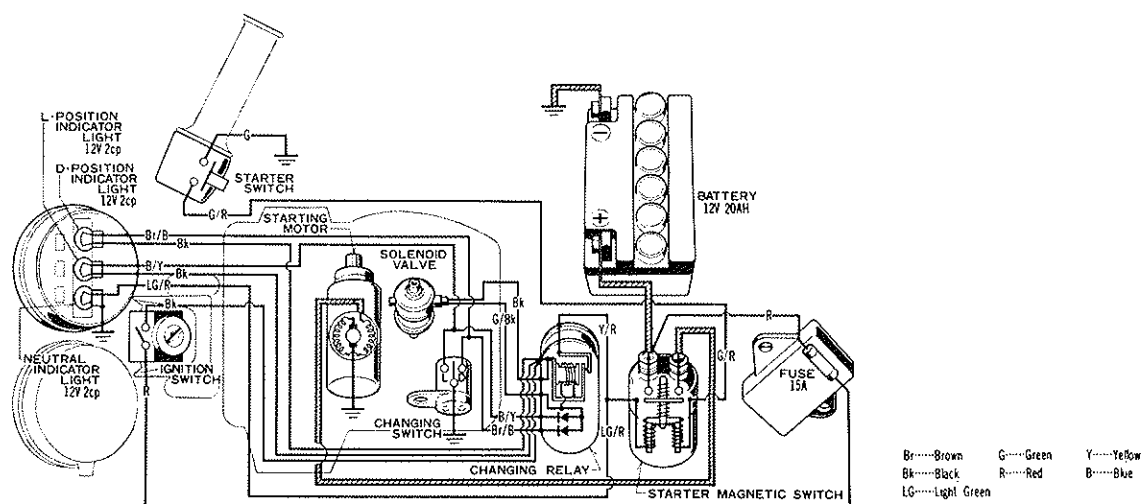
#### Specifications

Rated voltage : 12V  
Rated output : 0.6KW  
Rated operating time: 30 sec. (continuous)

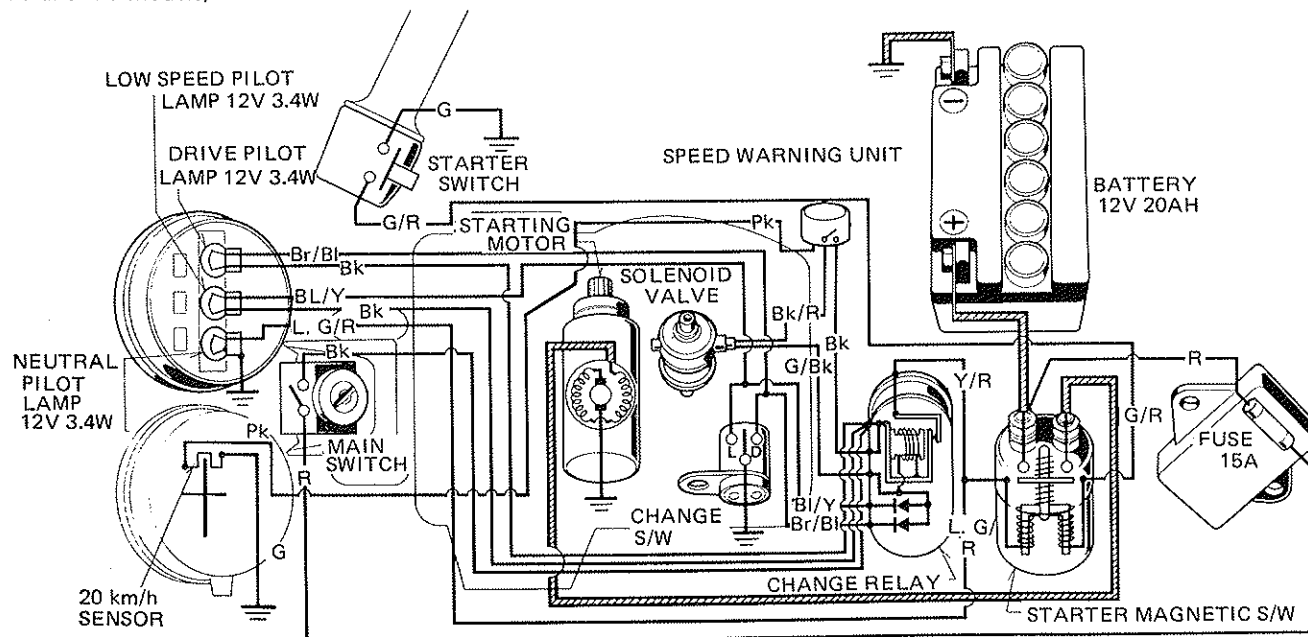
	On-load	No-load	When locked
Voltage (V)	11	8.5	5
Amperage (A)	35	120	280
Torque (kg-m) (lb.-ft.)	—	0.12 (0.795)	0.32 (1.880)
Speed (rpm)	11,000—22,000	3,200	—

### STARTING SYSTEM DIAGRAM

('76 model)



('77 and '78 models)

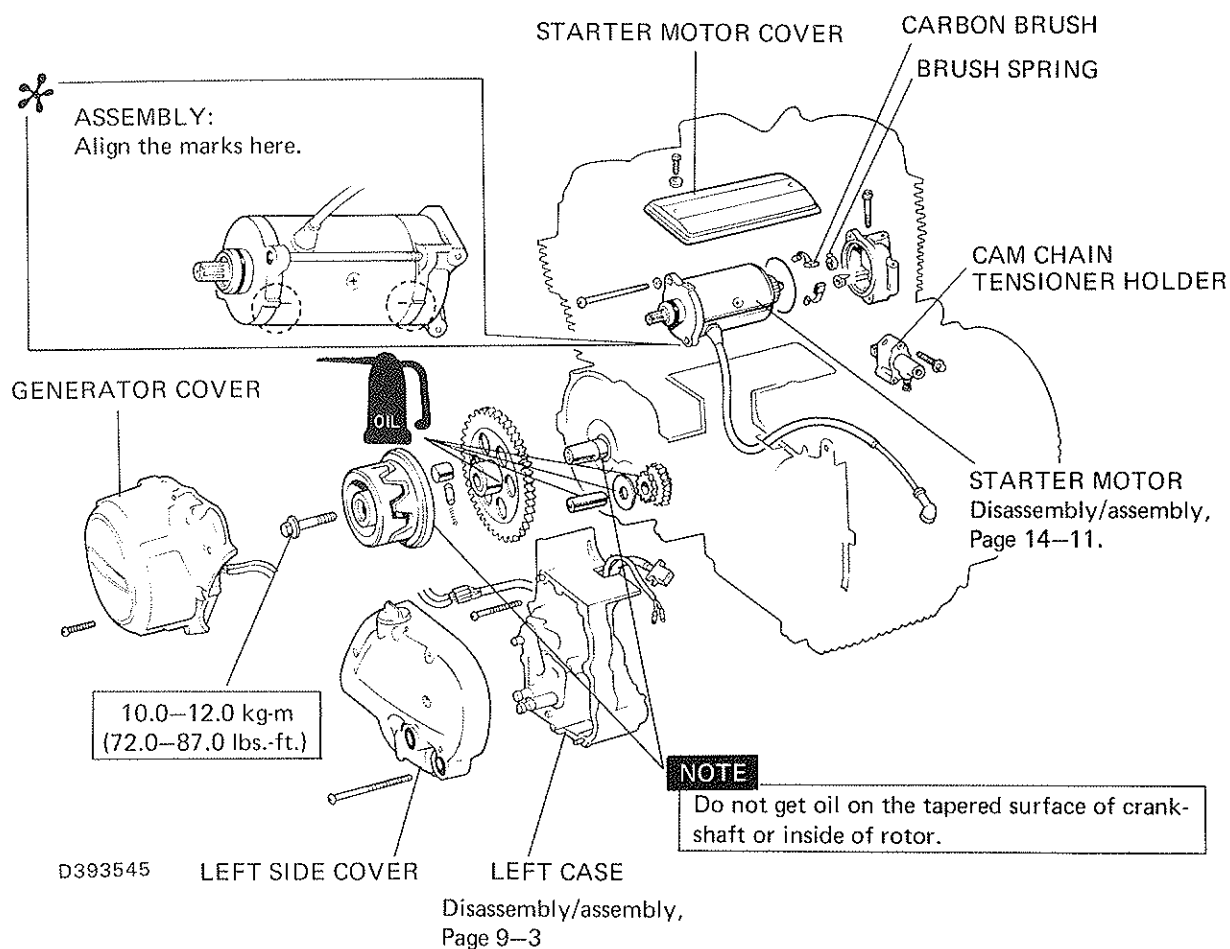


#### SAFETY CIRCUIT

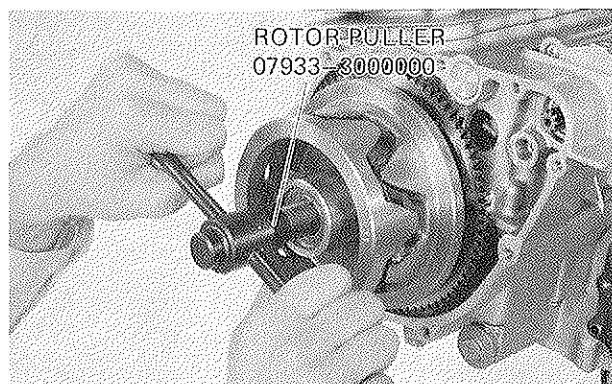
The change switch prevents the starter from being turned when the transmission is in gear even if the starter switch is turned on.



• DISASSEMBLY/ASSEMBLY



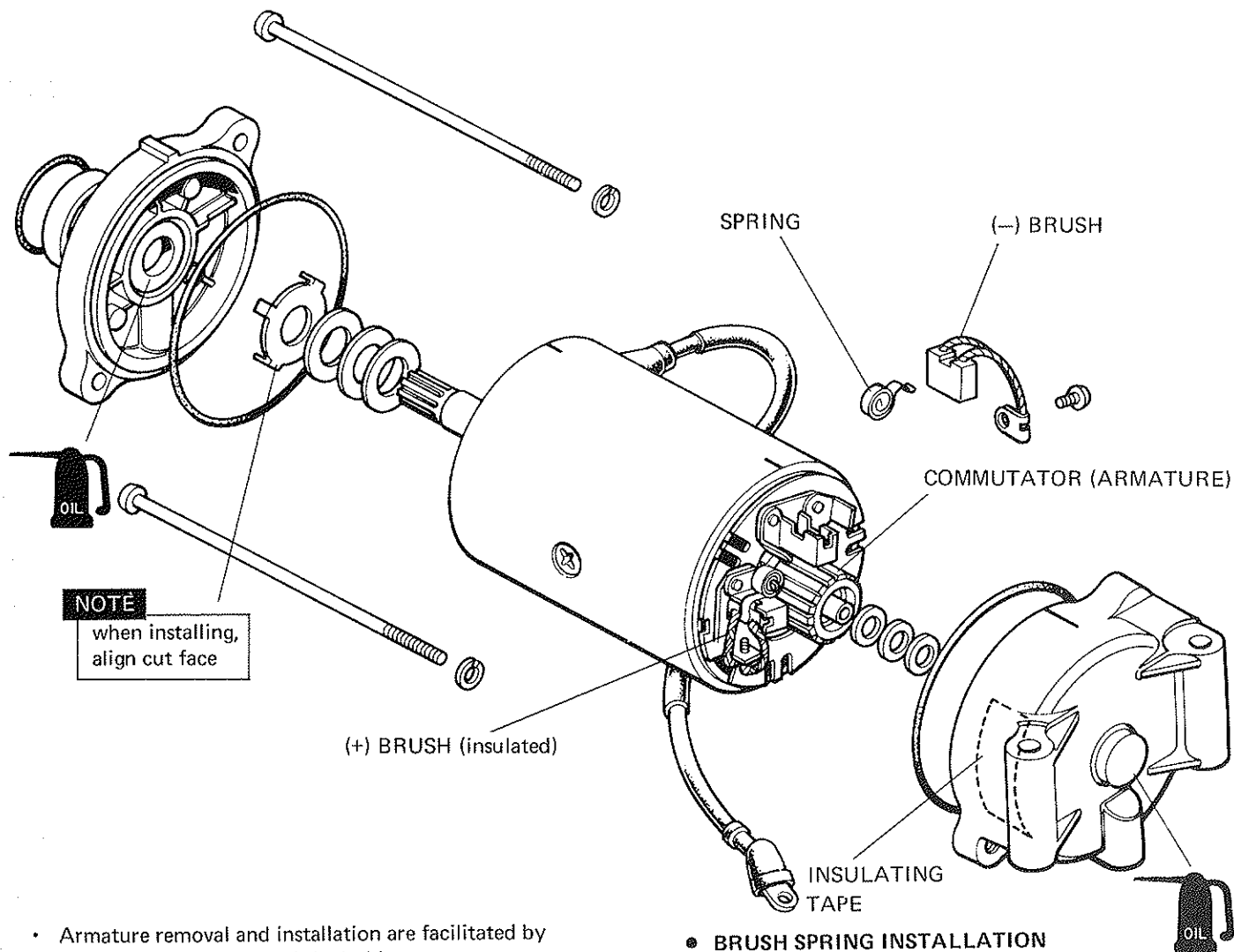
• ROTOR DISASSEMBLY



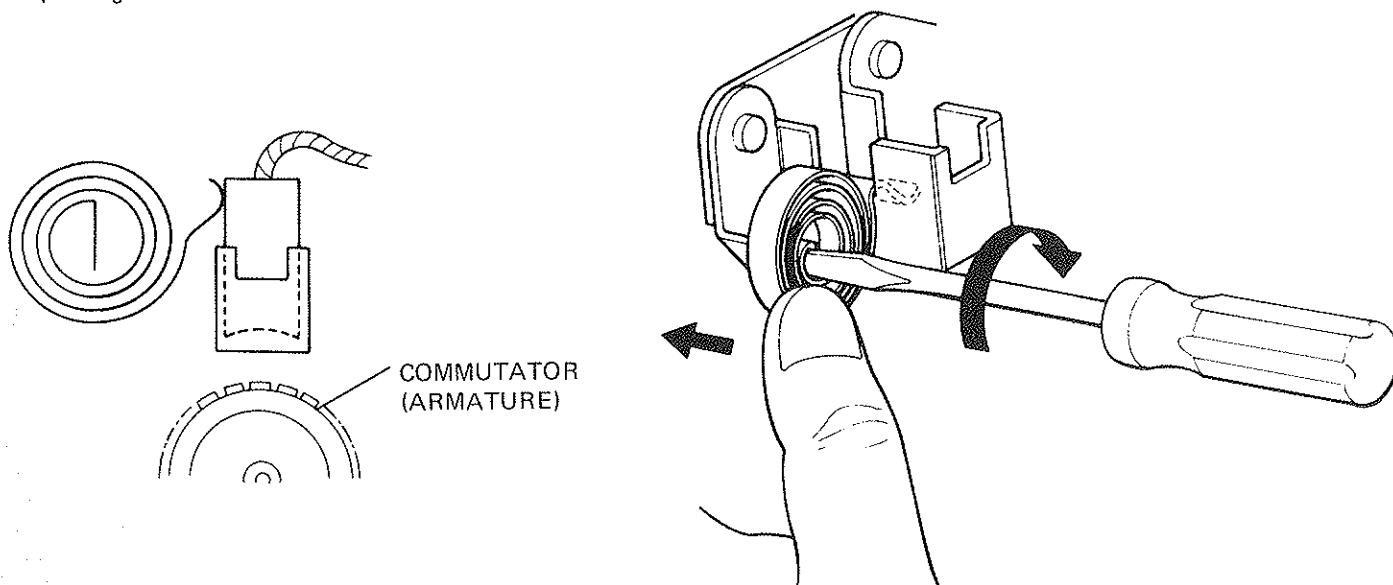
Before assembling, clean the crankshaft taper and inside surface of the rotor.



• **STARTER MOTOR DISASSEMBLY**



- Armature removal and installation are facilitated by pushing the brush toward the holders.



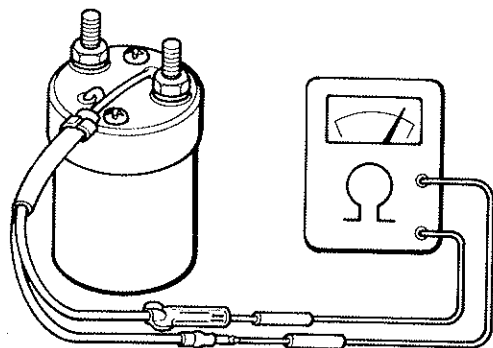


- INSPECTION

- STARTER MAGNETIC SWITCH

## CONTINUITY TEST:

There should be continuity between two lead wires.

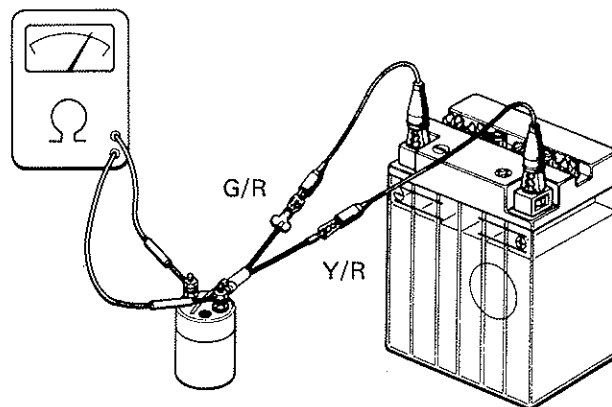


(Shows 3Ω)

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## SWITCH TEST:

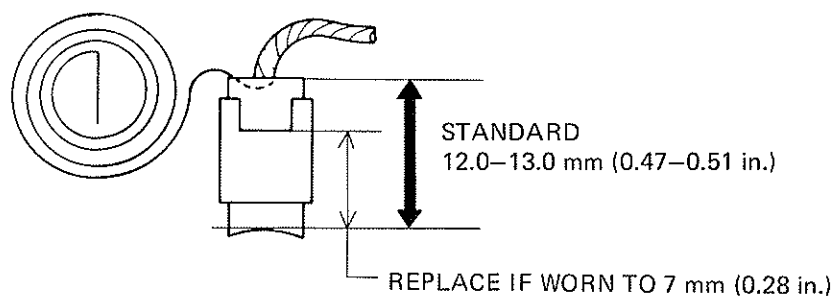
The switch is satisfactory when there is continuity between the switch lead wires.



- No continuity indicates an open circuit in the stator coil.

- CARBON BRUSH/SPRING

## CARBON BRUSH



- BRUSH LENGTH

STANDARD	SERVICE LIMIT
12–13 mm (0.47–0.51 in.)	7.0 mm (0.28 in.)

- SPRING TENSION

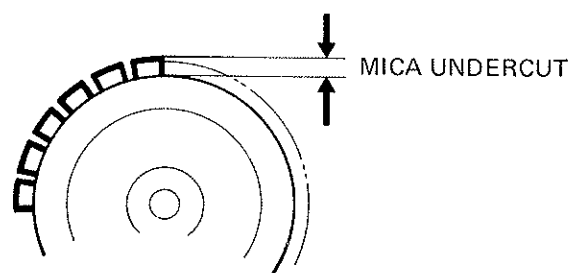
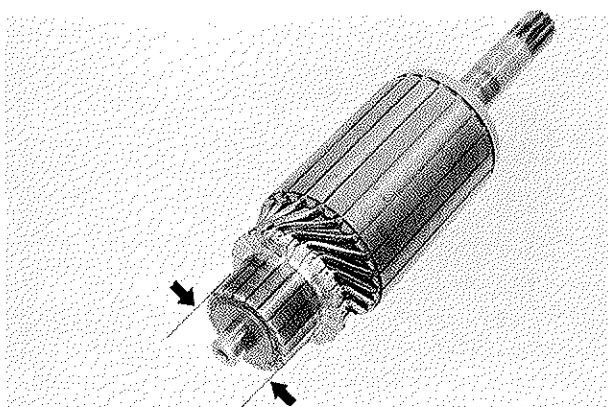
STANDARD	SERVICE LIMIT
560–680 g (19.7–24.0 oz)	400 g (14.0 oz)



### • COMMUTATOR CLEANING

- Clean the commutator surface of dirt and metal particles and polish with an emery cloth (#500–600), if necessary. Blow with compressed air after cleaning.

### • COMMUTATOR O.D.



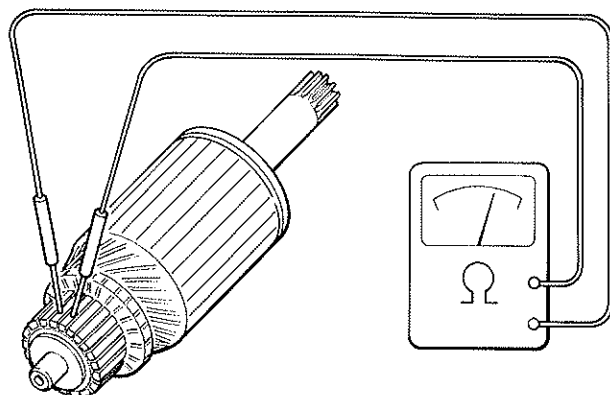
1410874

STANDARD	SERVICE LIMIT
28.0 mm (1.10 in.)	27.0 mm (1.06 in.)

STANDARD	SERVICE LIMIT
0.5–0.8 mm (0.020–0.031 in.)	0.2 mm (0.008 in.)

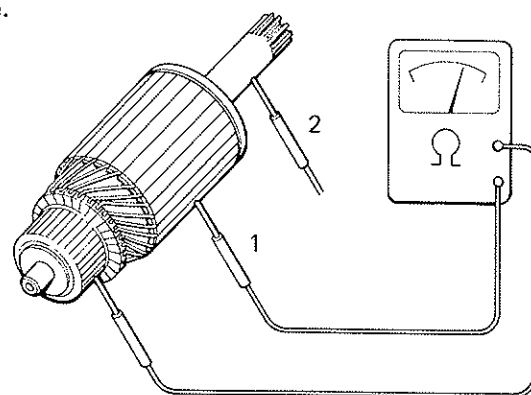
### • ARMATURE COIL CONTINUITY TEST

There should be continuity between any two segments.



### • ARMATURE COIL INSULATION TEST

There should be no continuity between commutator and core.

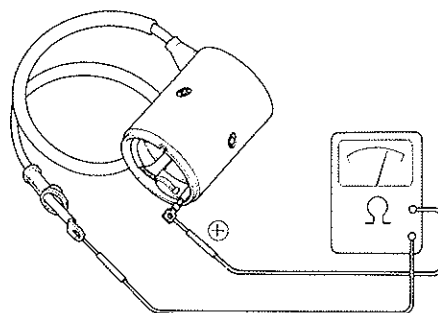


### • STATOR COIL CONTINUITY TEST

There should be continuity between starter cord and positive (+) terminal.

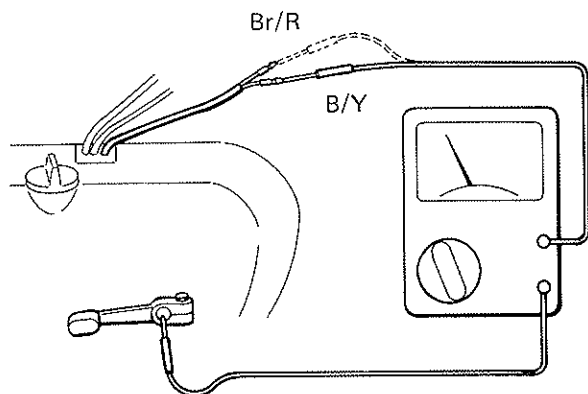
### • STATOR COIL INSULATION TEST

There should be no continuity between starter cord and body.





### • CHANGE SWITCH INSPECTION



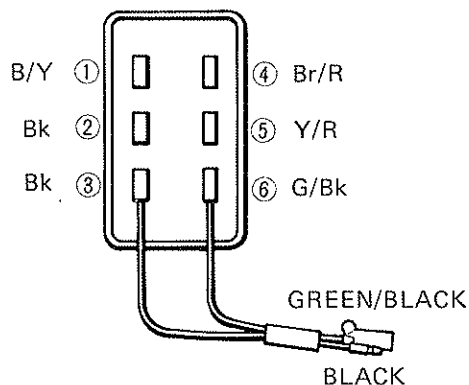
#### CONTINUITY TEST: "D" or "2" POSITION

There should be continuity between brown/red wire and ground.

#### INSULATION TEST: "L" or "1" POSITION

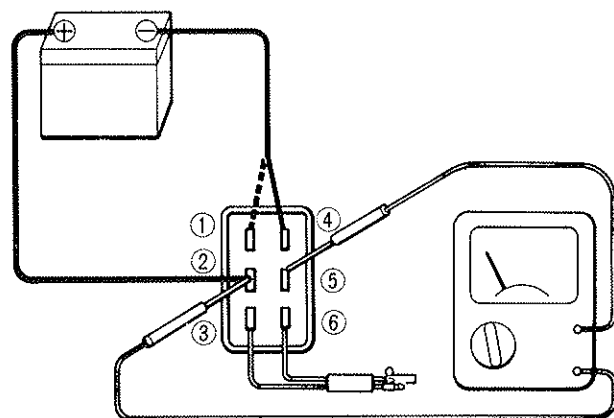
There should be no continuity between blue/yellow wire and ground.

### • CHANGE RELAY INSPECTION



#### CONTINUITY TEST

- BETWEEN TERMINAL (2) and TERMINAL (5): Continuity should exist. If there is no continuity, this indicates that the relay points are poorly contacted.
- BETWEEN TERMINAL (2) and TERMINAL (6): Continuity should exist. If there is no continuity, the relay coil is open.
- BETWEEN TERMINAL (2) and TERMINAL (1), and TERMINAL (2) and TERMINAL (4): Continuity should exist in only one direction



BETWEEN TERMINAL (2) and TERMINAL (5): There should be no continuity.

#### **WARNING**

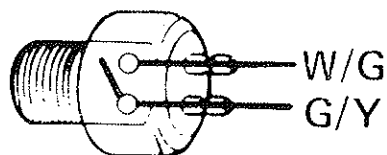
Make sure of proper battery polarity when making connection, as shown.



## ● ALL OTHER ELECTRICAL PARTS INSPECTION

### ● FRONT BRAKE STOPLIGHT SWITCH

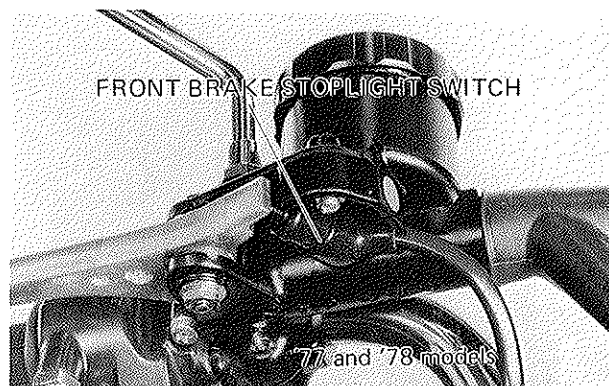
Check the front brake stoplight switch for continuity with the front brake applied.



'76 model

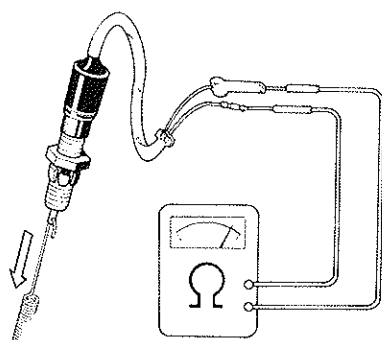
#### NOTE

Bleed the front brake system when the front brake stoplight switch is replaced. ('76 model)



### ● REAR BRAKE STOPLIGHT SWITCH

Check the rear brake stoplight switch for continuity with the rear brake applied.



Adjust the rear brake stoplight switch after the rear brake pedal free play has been adjusted.

- Turn the adjusting nut so that the rear brake stoplight comes on just before the brake takes hold.

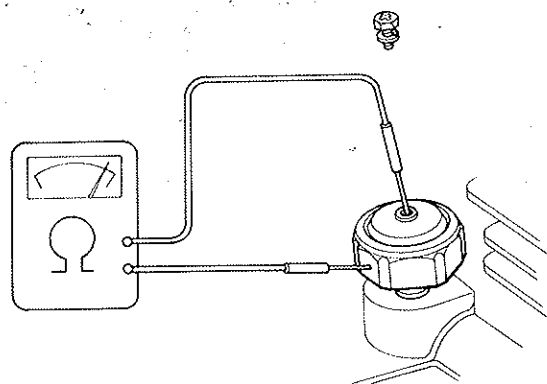
### ● PARKING BRAKE SWITCH



The switch is normal if there is continuity between the green/yellow (yellow banded) and green/yellow (red banded) wires with the brake applied. There should be continuity between the green and white/green wires when the brake is released.



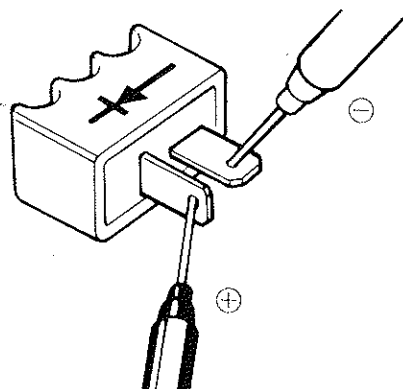
- OIL PRESSURE WARNING SWITCH



I410878

Check for continuity with the engine running. The switch is normal if there exists no continuity. If there is continuity, check the switch and oil circuits.

- SILICON RECTIFIER (PARKING BRAKE SWITCH)



The rectifier is correct if there is continuity only in the arrow direction. Replace the rectifier if there is continuity in reverse direction.

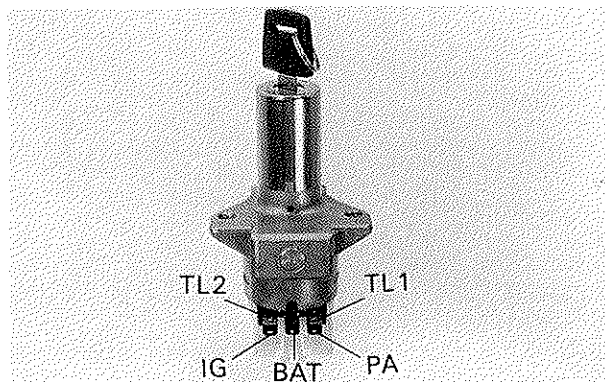
- HORN

Check for continuity between the horn cord terminals or check to make sure the horn will sound when it is connected to a fully charged 12V battery.

- IGNITION SWITCH

There should be continuity between circuits "○ — ○".

	BAT	IG	TL1	TL2	PA
LOCK					
OFF					
RUN	○ — ○	○ — ○	○ — ○	○ — ○	
PA	○ — ○				○ — ○
Color	Red	Black	Black/White	Black	Black







#### • HANDLEBAR SWITCHES

There should be continuity between circuits "○—○".

#### ENGINE STOP · STARTER SWITCHES

('76 Model)

	KB	KW		IG	HL	ST	E
OFF			FREE	○—○			
RUN	○—○						
OFF			PUSH			○—○	
Color	Black	Black/White	Color	Black	Black/Red	Green/Red	Green

#### STARTER · ENGINE STOP SWITCH

('77 and '78 Models)

	IG	KW		IG	HL1	ST	E
OFF	○—○		FREE	○—○			
RUN	○—○						
OFF			PUSH			○—○	
Color	Black	Black/White	Color	Black	Black/Red	Green/Red	Green

#### TURN SIGNAL · HORN · DIMMER SWITCHES

('76 Model)

	W	B	L	R		TL1	PL	PR	HO
L2	○—○	○—○	○—○			○—○		○—○	○—○
L1	○—○		○—○			○—○		○—○	○—○
N						○—○	○—○	○—○	○—○
R1	○—○			○—○		○—○	○—○		○—○
R2	○—○	○—○		○—○		○—○	○—○		○—○
Color	Green	Brown/Blue Yellow tube	Orange	Light Blue		Black/White	Orange/White	Light Blue/White	Light Green

	HL	Hi	Lo
Hi	○—○	○—○	
(N)	○—○	○—○	○—○
Lo	○—○		○—○
Color	Black/Yellow	Blue	White

#### NOTE

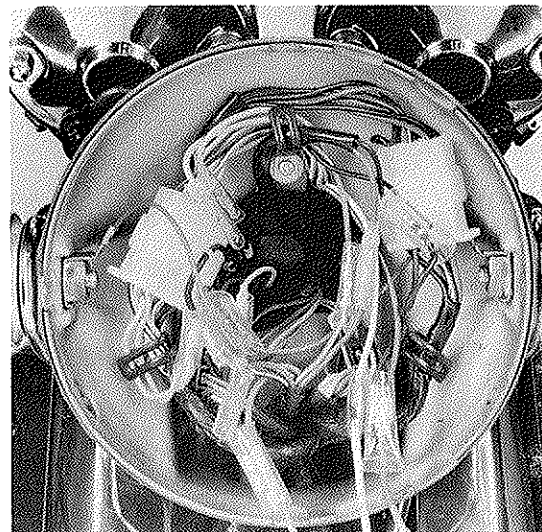
Handlebar switch wires, couplers and connectors are connected and clamped behind the headlight case.

#### TURN SIGNAL · HORN · DIMMER SWITCHES

('77 and '78 Models)

	W	B	L	R		TL1	PL	PR	HO
L2	○—○	○—○	○—○			○—○		○—○	○—○
L1	○—○		○—○			○—○		○—○	○—○
N						○—○	○—○	○—○	○—○
R1	○—○			○—○		○—○	○—○		○—○
R2	○—○	○—○		○—○		○—○	○—○		○—○
Color	Green	Brown/Blue	Orange	Light Blue		Black/White	Orange/White	Light Blue/White	Light Green

	HL2	Hi	Lo
Hi	○—○	○—○	
(N)	○—○	○—○	○—○
Lo	○—○		○—○
Color	Black/Yellow	Blue	White







**HONDA**  
**CB750A**

# 15. FRONT WHEEL/ SUSPENSION/BRAKE / STEERING SYSTEM

<b>SERVICE INFORMATION</b>	<b>15—1</b>	● <b>FRONT DISC BRAKE</b>	<b>15—8</b>
<b>TROUBLESHOOTING</b>	<b>15—2</b>	● <b>STEERING STEM</b>	<b>15—10</b>
<b>DISASSEMBLY/ ASSEMBLY</b>	<b>15—3</b>	● <b>BALL RACE</b>	<b>15—11</b>
● <b>FRONT WHEEL</b>	<b>15—5</b>	● <b>HANDLEBAR</b>	<b>15—12</b>
● <b>WHEEL BEARING</b>	<b>15—6</b>	<b>INSPECTION</b>	<b>15—13</b>
● <b>FRONT SUSPENSION</b>	<b>15—7</b>	<b>FRONT FORK OIL</b>	<b>15—16</b>
		<b>BRAKE CALIPER ADJUSTMENT</b>	<b>15—16</b>

## ● SERVICE INFORMATION

### SPECIFICATIONS

Unit: mm (in.)

Item		Standard	Service Limit
Wheel axle runout		0—0.050 (0.002)	0.2 (0.008)
Wheel rim runout	Axial	0—1.0 (0—0.039)	2.0 (0.08)
	Radial	0—1.0 (0—0.039)	2.0 (0.08)
Front brake disc face runout		0—0.15 (0—0.006)	0.3 (0.012)
Front brake disc thickness		7.0 (0.276)	6.0 (0.236)
Front brake master cylinder I.D.		14.000—14.043 (0.5512—0.5529)	14.055 (0.5533)
Front brake master cylinder piston O.D.		13.957—13.984 (0.5495—0.5506)	13.945 (0.5490)
Front brake caliper cylinder I.D.		42.85—42.90 (1.6870—1.6889)	42.915 (1.6896)
Front brake caliper cylinder piston O.D.		42.82 (1.6858)	42.805 (1.6852)
Front fork tube O.D.		34.925—34.950 (1.375—1.376)	34.900 (1.374)
Front fork slider I.D.		35.065—35.104 (1.381—1.382)	35.250 (1.388)
Front fork spring free length		504.3 (19.85)	495 (19.5)

### TORQUE VALUES

Listed below are the special fastener torque limits. These fasteners except the standard parts should be tightened to the torques shown below:

Disc plate fixing nuts	2.7—3.3 kg-m (19.5—23.9 lbs.-ft.)
Wheel spokes	0.3—0.4 kg-m (2.2—2.9 lbs.-ft.)
Front axle nut	5.5—6.5 kg-m (39.8—47.0 lbs.-ft.)
Front caliper set bolts	3.0—4.0 kg-m (21.7—28.9 lbs.-ft.)
Bleeder valve	0.7—0.9 kg-m (5.1—6.5 lbs.-ft.)
Front axle holder nuts	1.8—2.5 kg-m (13.0—18.1 lbs.-ft.)
Steering stem nut	8.0—12.0 kg-m (57.9—86.8 lbs.-ft.)
Front fork top bridge nuts (7 mm)	0.9—1.3 kg-m (6.5—9.4 lbs.-ft.)
Front fork bottom bridge nuts	3.0—4.0 kg-m (21.7—28.9 lbs.-ft.)
Handlebar upper holder bolts	1.8—2.5 kg-m (13.0—18.1 lbs.-ft.)

**SPECIAL TOOLS**

Front bearing retainer wrench	07910-3230101
Bearing driver attachment	07945-3330100
Driver handle	07949-6110000
Snap ring pliers	07914-3230001
Fork seal driver	07947-3290000
Ball race driver	07946-3710400
48 mm Pin spanner	07902-2000000
6 mm hollow set wrench	07917-3230000

**● TROUBLESHOOTING****SYMPTOM****POSSIBLE CAUSE**

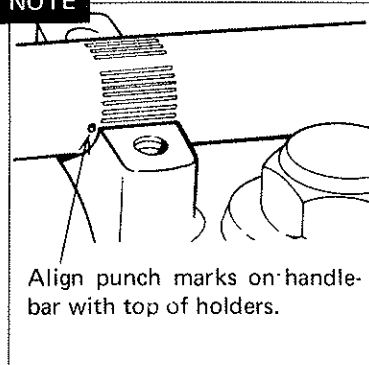
Hard Steering	<ul style="list-style-type: none"> <li>Steering stem nut too tight</li> <li>Defective steering stem bearings</li> <li>Damaged steering stem ball race and/or cone race</li> <li>Insufficient tire pressure</li> </ul>
Steers to One Side or Does Not Track Straight	<ul style="list-style-type: none"> <li>Unbalanced right and left shock absorbers</li> <li>Bent front forks</li> <li>Bent front axle; wheel installed incorrectly</li> </ul>
Front Wheel Wobbling	<ul style="list-style-type: none"> <li>Distorted rim</li> <li>Worn front wheel bearing</li> <li>Distorted wheel spokes</li> <li>Defective tire</li> <li>Axle not tightened properly</li> </ul>
Soft Suspension	<ul style="list-style-type: none"> <li>Weakened fork spring</li> <li>Insufficient fluid in front fork</li> </ul>
Hard Suspension	<ul style="list-style-type: none"> <li>Incorrect fluid weight in front fork</li> </ul>
Front Suspension Noise	<ul style="list-style-type: none"> <li>Cushion case binding</li> <li>Loose front fork or springs</li> </ul>
Poor Brake Performance	<ul style="list-style-type: none"> <li>Insufficient fluid in system</li> <li>Air in system</li> </ul>
Brakes Chatter or Squeal	<ul style="list-style-type: none"> <li>Worn brake pads</li> <li>Caliper return out of adjustment</li> </ul>



● **DISASSEMBLY/ASSEMBLY**

('76 Model)

**NOTE**



Align punch marks on handlebar with top of holders.

(4) **STEERING STEM**  
Assembly/Disassembly,  
Page 15-10.

1.8-2.5 kg-m  
(13.0-18.1 lbs.-ft.)

**NOTE**

Tighten the forward bolts first.

**NOTE**

Do not depress the brake lever when the wheel is off the motorcycle.

0.9-1.3 kg-m  
(6.5-9.4 lbs.-ft.)

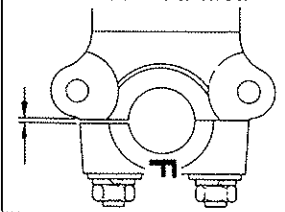
3.0-4.0 kg-m  
(21.7-28.9 lbs.-ft.)

(2) **FRONT FENDER**

(1) **FRONT WHEEL**  
Assembly/Disassembly,  
Page 15-5.

**NOTE**

Install the axle holders with the "F" mark forward and tighten the forward holder nuts first.



**BRAKE CALIPER**  
Assembly/Disassembly,  
Page 15-8.  
Adjustment, Page 15-16.  
**FRONT FORKS**  
Assembly/Disassembly,  
Page 15-7.

1.8-2.5 kg-m  
(13.0-18.1 lbs.-ft.)

After assembling, make sure that each cable and wiring is free from binding or twisting when turning the handlebar full right and left.



('77 and '78 Models)

(COMSTAR WHEEL  
for '78 model)  
Assembly/Disassembly,  
Page 15-5.

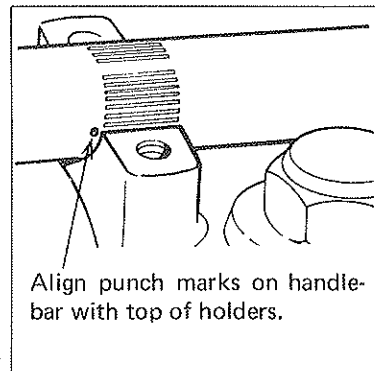
**NOTE**

Do not depress the brake lever  
when the wheel is off the motor-  
cycle.

1.8-2.5 kg-m  
(13.0-18.1 lbs.-ft.)

**NOTE**

Tighten the for-  
ward bolts first.



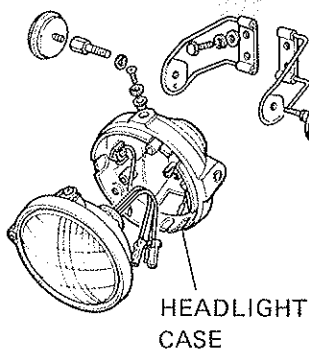
Align punch marks on handle-  
bar with top of holders.

HANDLEBAR  
Disassembly/assembly,  
Page 15-12

0.9-1.3 kg-m  
(6.5-9.4 lbs.-ft.)

3.0-4.0 kg-m  
(21.7-28.9 lbs.-ft.)

(4) STEERING STEM  
Assembly/Disassembly,  
Page 15-10.



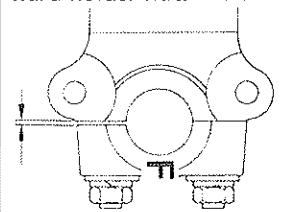
HEADLIGHT  
CASE

(2) FRONT FENDER

(1) FRONT WHEEL  
Assembly/Disassembly,  
Page 15-5.

**NOTE**

Install the axle holders  
with the "F" mark for-  
ward and tighten the for-  
ward holder nuts first.



1.8-2.5 kg-m  
(13.0-18.1 lbs.-ft.)

BRAKE CALIPER  
Assembly/Disassembly,  
Page 15-9.  
Adjustment,  
Page 15-16.

(3) FRONT FORK  
Assembly/Disassembly,  
Page 15-7.

\* After assembling, check that each cable and wiring is free from binding or twisting when turning the handlebar full right and left.

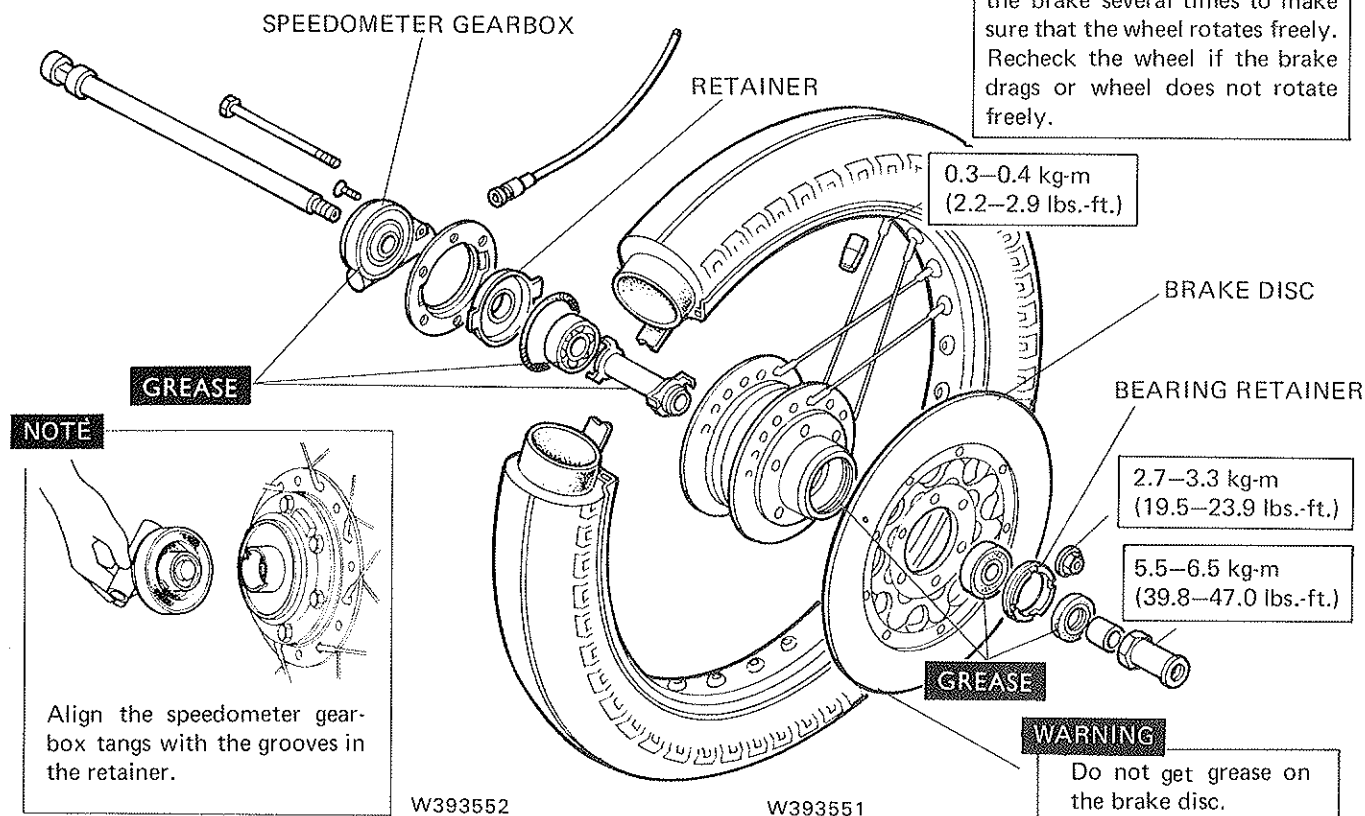


# HONDA CB750A

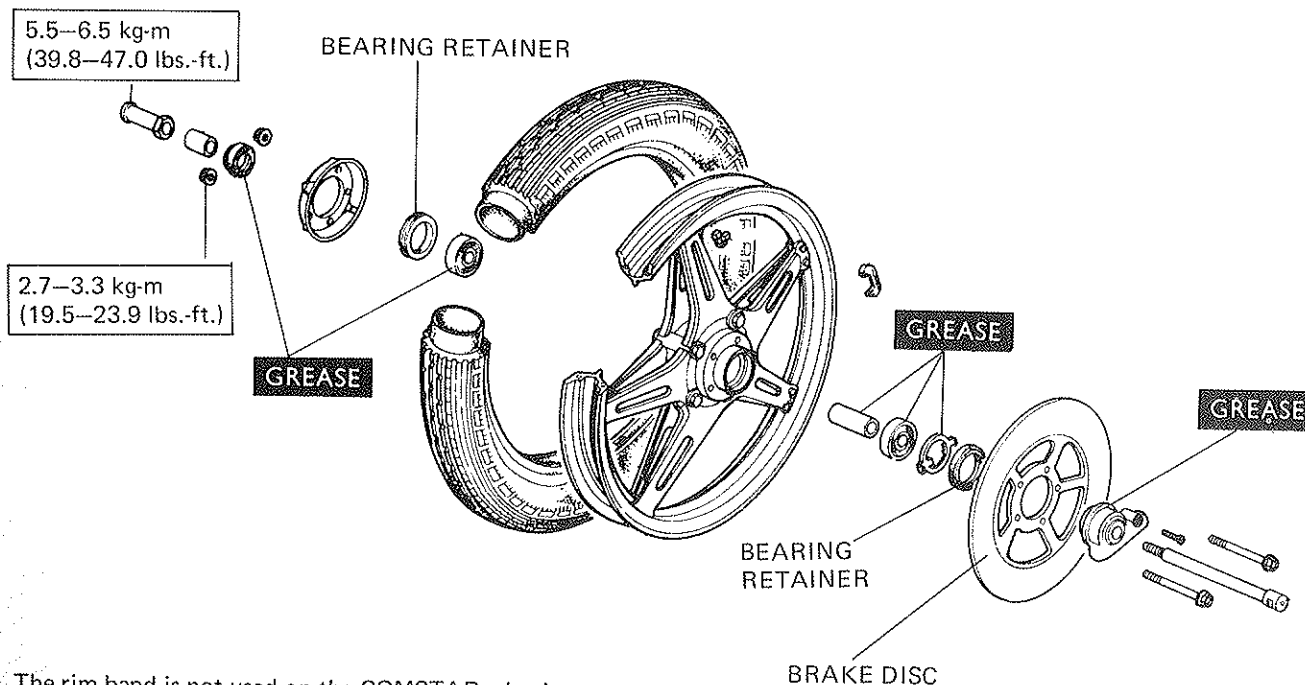
## FRONT WHEEL/SUSPENSION/ BRAKE/STEERING SYSTEM

DISASSEMBLY/ **15**  
ASSEMBLY

### • FRONT WHEEL ( '76 and '77 Models)

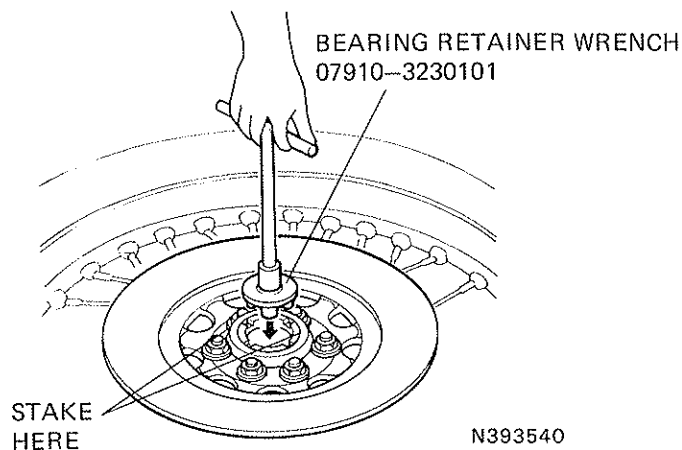


### ( '78 Model)

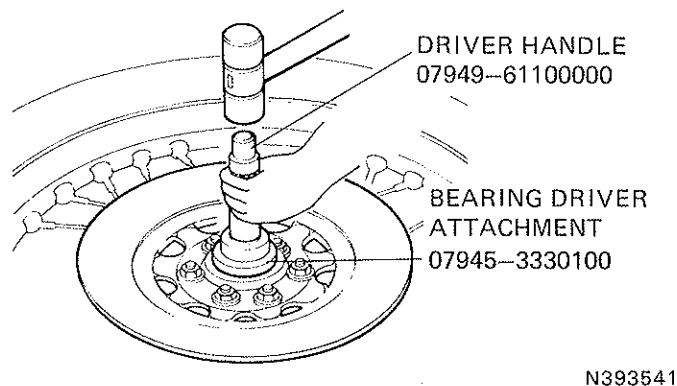




• WHEEL BEARING



- Inspect the retainer and replace if cross threaded.
- After installing, stake at two places as shown.

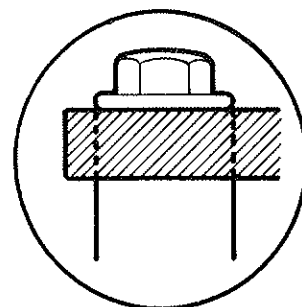
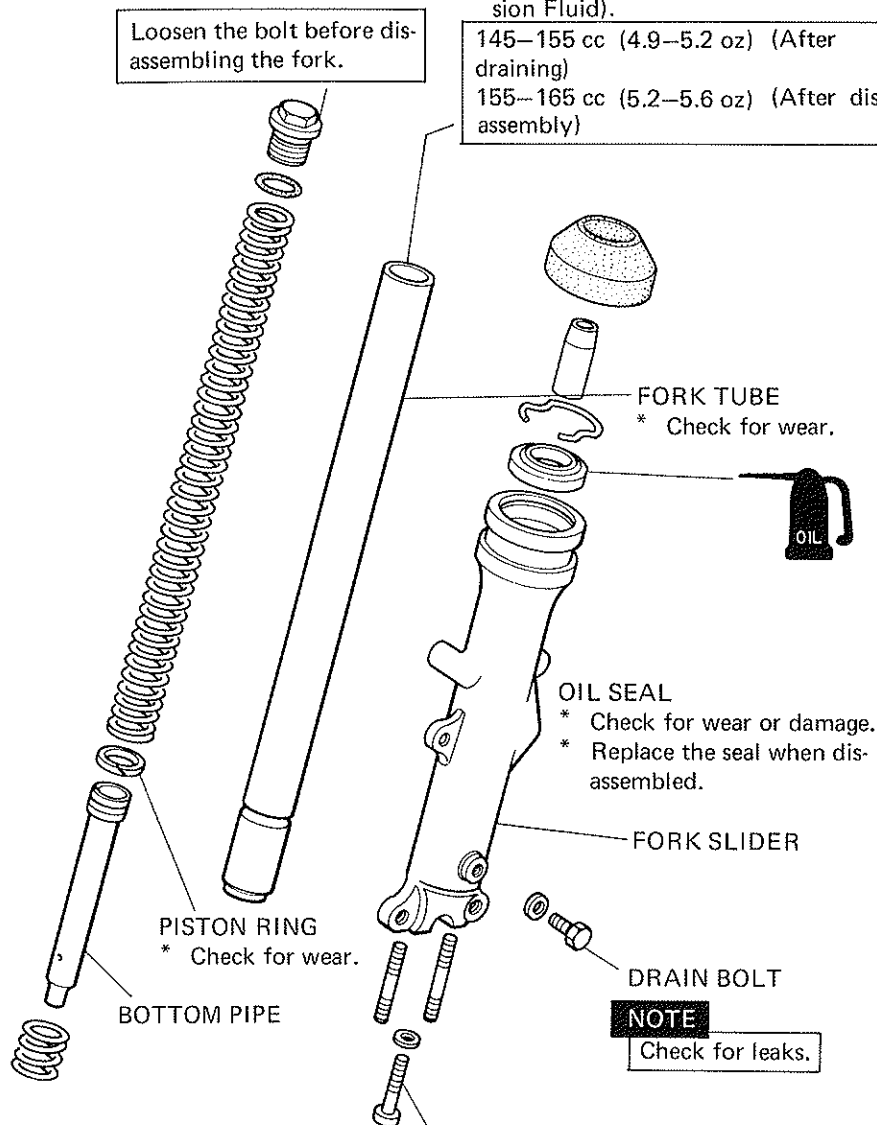


- Drive the bearing squarely with the sealed end outward.
- Install the left bearing and retainer first, then install the collar and right bearing.
- Take care not to allow the distance collar to tilt.



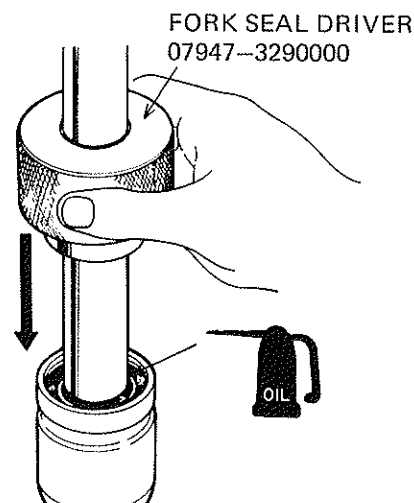


#### • FRONT SUSPENSION

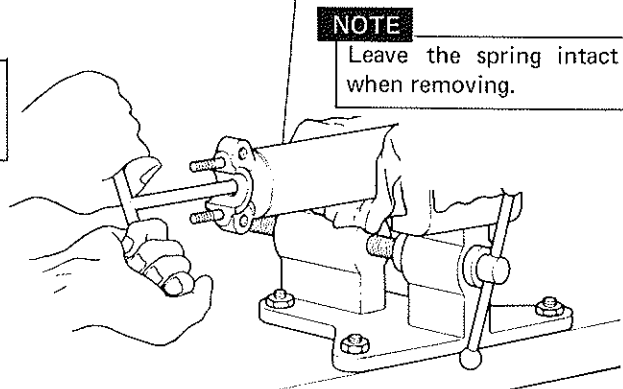


S410615

Install the front fork assembly with the chamfered edge on the fork tube flush with the top of the fork top bridge.



6 mm HOLLOW SET WRENCH  
07917-3230000



#### **NOTE**

After assembling, clean the fork tube.

\* After assembling, check the fork for smooth operation and oil leaks past the oil seal.

N283524



• FRONT DISC BRAKE — ('76 Model)

**CAUTION**

- Avoid spilling fluid on painted surfaces or plastic parts.

Fill the reservoir with DOT 3 brake fluid to UPPER level.

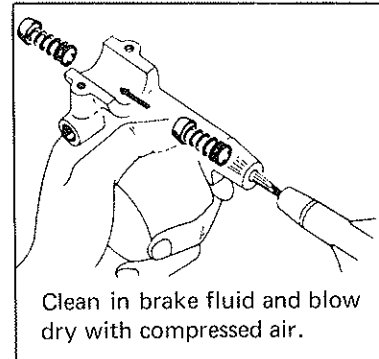
**NOTE**

- Install the holder with the punch mark down. Tighten the upper bolt first.
- Install the master cylinder so that it is horizontal when the handlebar is turned full left.

**WARNING**

- Keep dust and dirt out of master cylinder.

Remove the piston cups and valve by blowing air.



Clean in brake fluid and blow dry with compressed air.

**NOTE**

- When the system is disconnected or when the lever feels spongy, bleed the system. See Page 4-18.

- Avoid damaging the cup.
- Before installing, wipe oil off the cylinder.

PRIMARY CUP

**NOTE**

- Note the installation direction.

FRONT BRAKE STOPLIGHT SWITCH

BRAKE HOSE

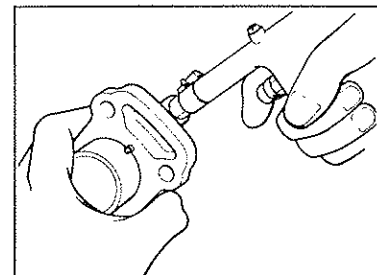
Insert the brake hose in the fender hook.

SNAP RING PLIERS  
07914-3230001

Apply silicon grease to the back.

0.7-0.9 kg-m  
(5.1-6.5 lbs.-ft.)

Remove the piston using compressed air.



**WARNING**

- Do not get oil or grease on the brake pads.

GREASE  
SILICON GREASE

- Adjust the brake caliper after installation. See Page 15-16.

B393531



#### • FRONT DISC BRAKE – ('77 and '78 Models)

##### WARNING

- Keep dust and dirt out of master cylinder.

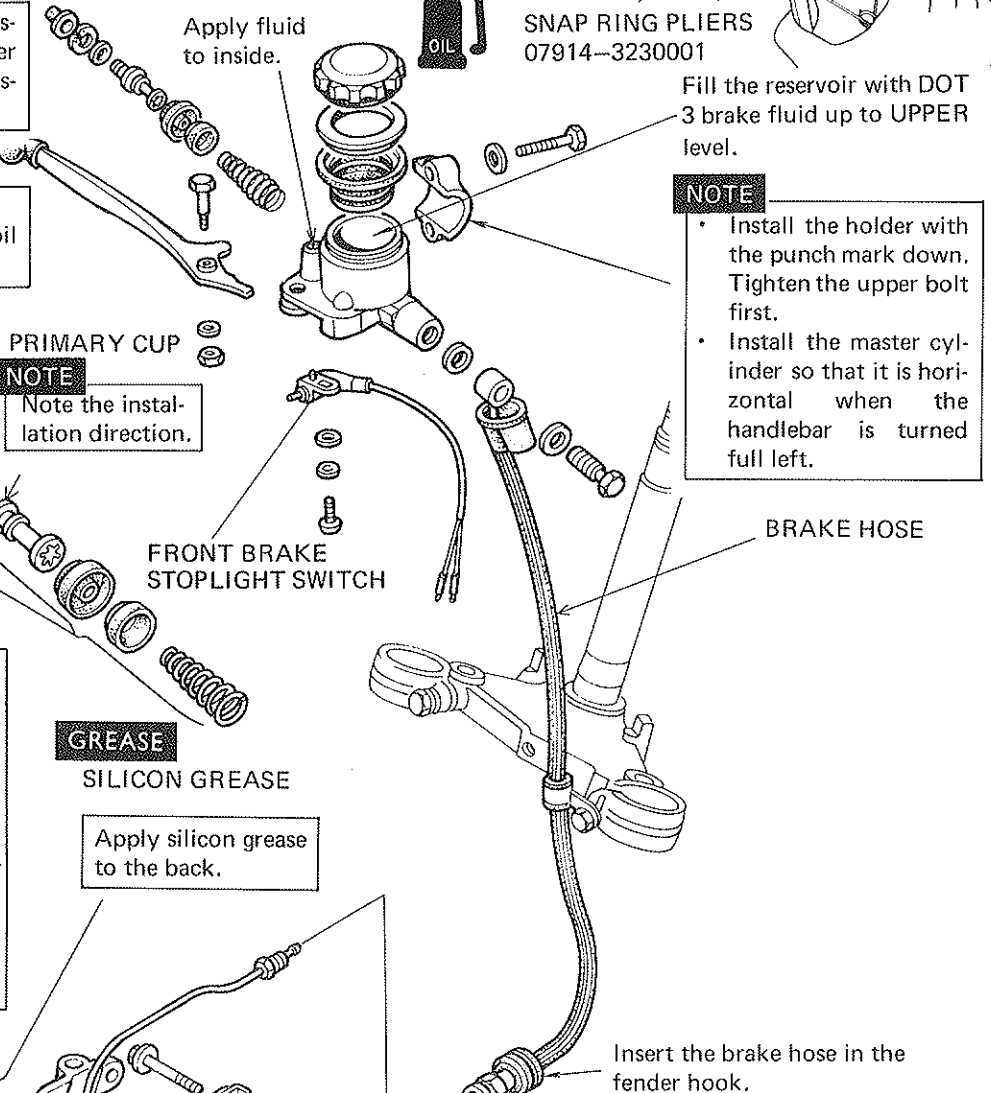
##### CAUTION

- Avoid spilling fluid on painted surfaces or plastic parts.

##### NOTE

- When the system is disconnected or when the lever feels spongy, bleed the system. See Page 4–18.

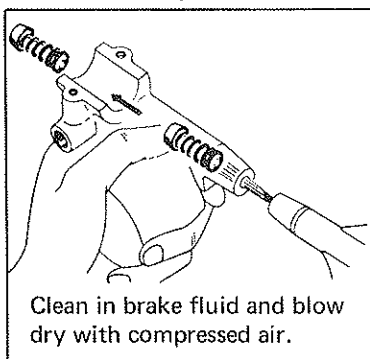
- Avoid damaging the cup.
- Before installing, wipe off oil from the cylinder.



##### NOTE

- Install the holder with the punch mark down. Tighten the upper bolt first.
- Install the master cylinder so that it is horizontal when the handlebar is turned full left.

Remove the piston cups and valve by blowing air.



Clean in brake fluid and blow dry with compressed air.

##### GREASE

SILICON GREASE

Apply silicon grease to the back.

##### WARNING

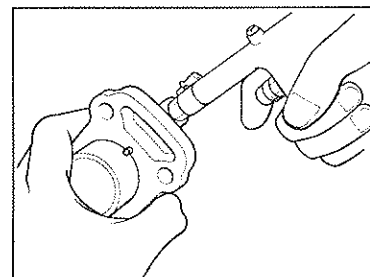
- Do not get oil or grease on the brake pads.

##### GREASE

SILICON GREASE

0.7–0.9 kg-m  
(5.1–6.5 lbs.-ft.)

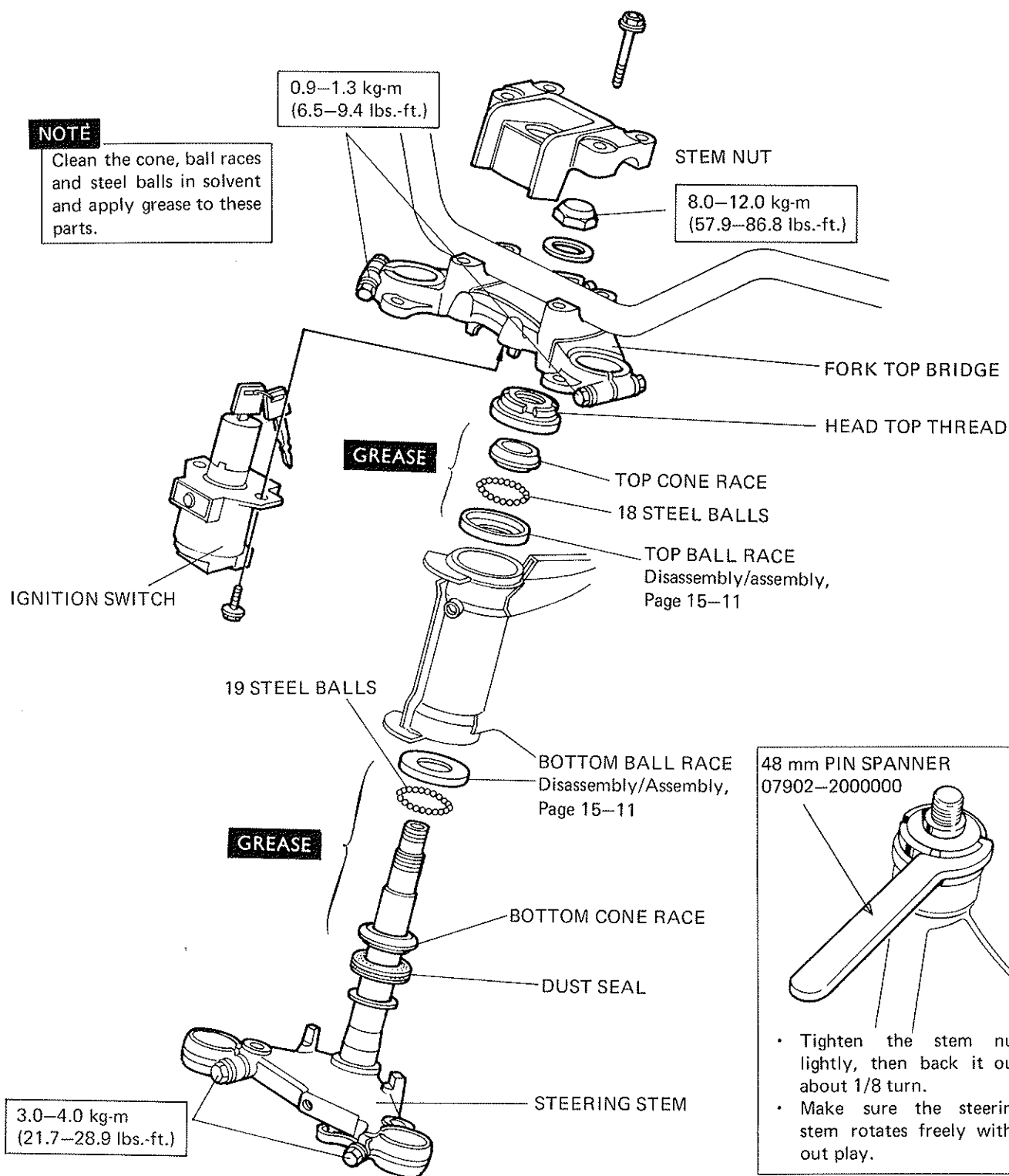
Remove the piston using compressed air.



- Adjust the brake caliper after installation. See Page 15–16.



### • STEERING STEM





**HONDA**  
**CB750A**

FRONT WHEEL/SUSPENSION/  
BRAKE/STEERING SYSTEM

DISASSEMBLY/  
ASSEMBLY

15

• BALL RACE

TOP/BOTTOM BALL RACE DISASSEMBLY

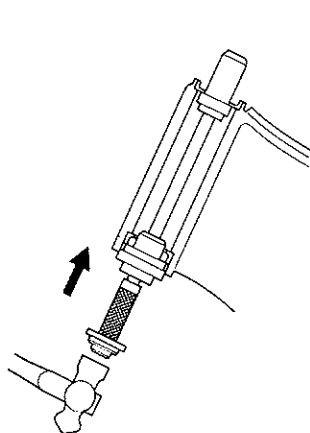
TOP/BOTTOM BALL RACE ASSEMBLY

TOP

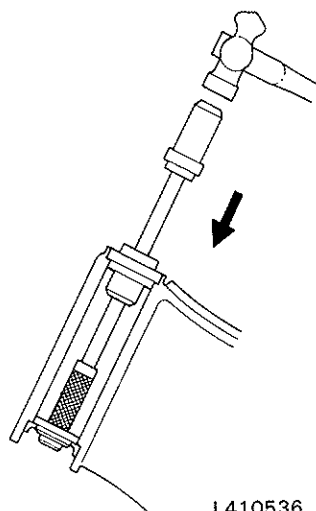
BOTTOM

TOP

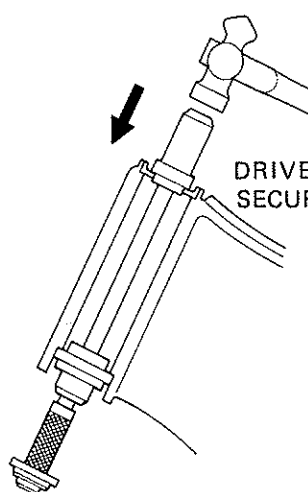
BOTTOM



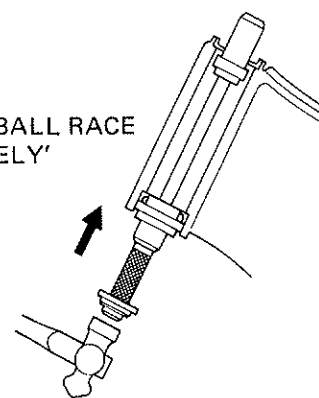
L410537



L410536



L410535



L410532

BALL RACE DRIVER  
07946-3710400



### • HANDLEBAR

PULL WIRE THROUGH  
WIRE LOOM ('76 Model only)

#### NOTE

Attach a wire to the ends of the switch loom and pull it through the handlebar. Use this wire to pull the new switch wiring through the handlebar.

#### NOTE

Align the end of the switch housing with the punch mark on the handlebar.

#### GREASE

Install the holder so that the cable relief is facing down.

THROTTLE CABLE (CLOSE)

THROTTLE CABLE (OPEN)

#### NOTE

Tighten the forward screw first.

After installing, make sure that the cable is not binding.

R410548

#### NOTE

- After tightening the bolt, check that the lever moves freely. Secure with the lock nut.

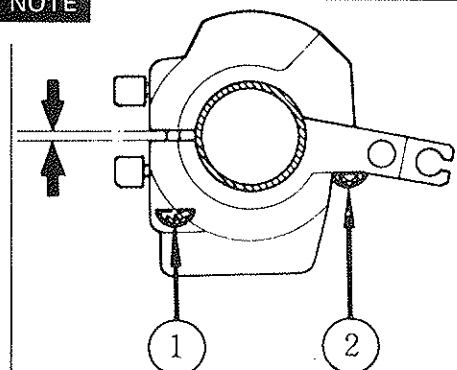
#### NOTE

Align the punch mark on the handlebar with the end of the switch housing.

CLUTCH SWITCH

WIRE BAND  
( '77 and '78 models only)

#### NOTE



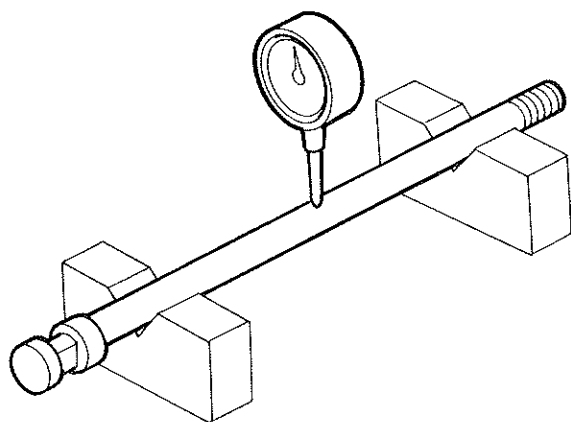
Tighten the two forward screws (2) first.

R410547



## ● INSPECTION

### ● FRONT WHEEL AXLE RUNOUT

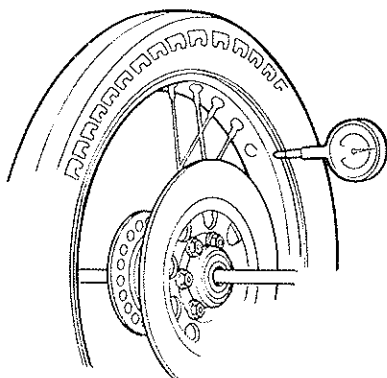


I393630

Use 1/2 of T.I.R. (Total indicator reading).

Standard	0–0.05 mm (0–0.002 in.)
Service Limit	0.2 mm (0.008 in.)

### ● FRONT WHEEL RUNOUT



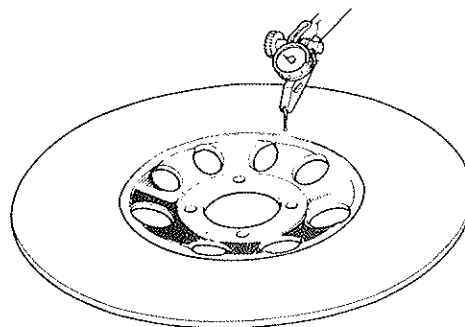
I393632

- Check the rim for distortion, damage or other defects.

(The COMSTAR wheel cannot be repaired.)

	Standard	Service Limit
Axial	0–1.0 mm (0.039 in.)	2.0 mm (0.08 in.)
Radial	0–1.0 mm (0.039 in.)	2.0 mm (0.08 in.)

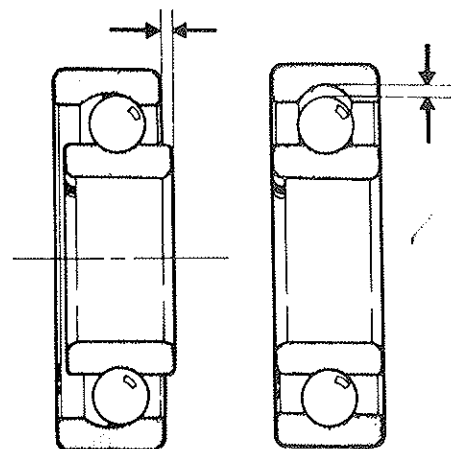
### ● FRONT BRAKE DISC WARPAGE



Hold the disc on a surface plate, set a dial indicator against the contact surface. Rotate the disc.

Disc runout	0–0.15 mm (0–0.006 in.)
Service Limit	0.3 mm (0.012 in.)
Disc thickness	7.0 mm (0.276 in.)
Service Limit	6.0 mm (0.236 in.)

### ● WHEEL BEARING PLAY



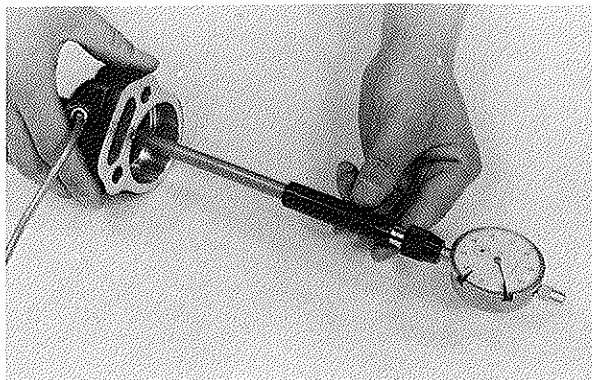
(REPLACE)

(REPLACE)

- Replace the bearing if there is excessive play.
- Replace the bearing if noisy when spinning the outer race by hand.

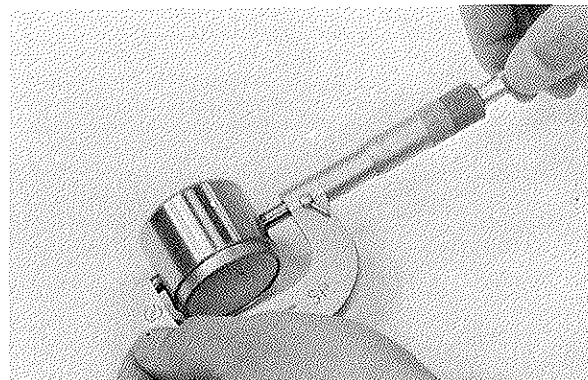


## • CALIPER CYLINDER I.D.



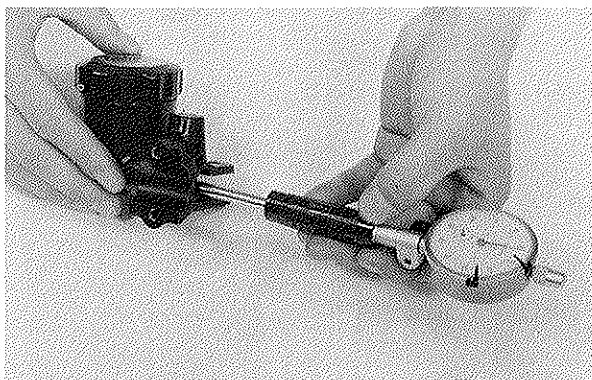
Standard	42.85–42.90 mm (1.6870–1.6889 in.)
Service Limit	42.915 mm (1.6896 in.)

## • CALIPER PISTON O.D.



Standard	42.82 mm (1.6858 in.)
Service Limit	42.805 mm (1.6852 in.)

## • MASTER CYLINDER I.D.



Standard	14.000–14.043 mm (0.5512–0.5529 in.)
Service Limit	14.055 mm (0.5533 in.)

## • MASTER CYLINDER PISTON O.D.



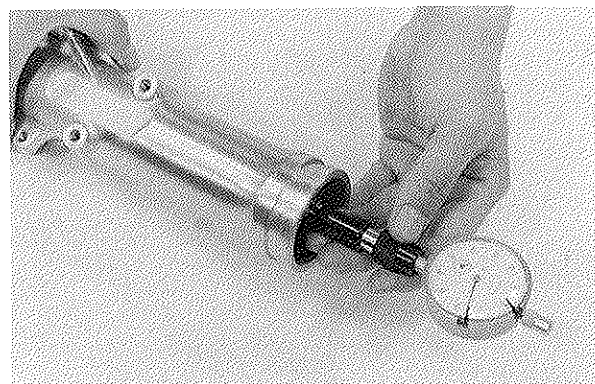
Standard	13.957–13.984 mm (0.5495–0.5506 in.)
Service Limit	13.945 mm (0.5490 in.)



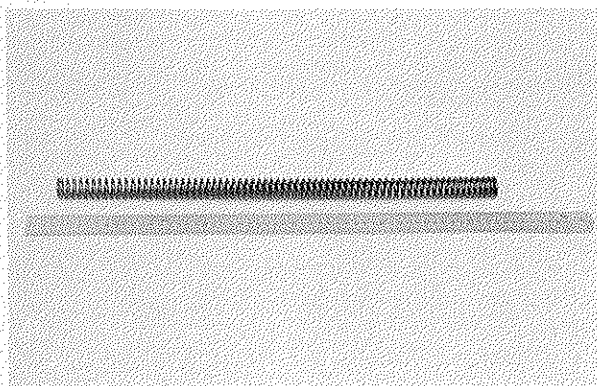
**• FRONT FORK TUBE O.D.**

Replace the oil seals as a set if there are scores or scratches on the sliding surfaces.

Standard	34.925–34.950 mm (1.375–1.376 in.)
Service Limit	34.900 mm (1.374 in.)

**• FRONT FORK SLIDER I.D.**

Standard	35.065–35.104 mm (1.381–1.382 in.)
Service Limit	35.250 mm (1.388 in.)

**• FRONT FORK SPRING FREE LENGTH**

Standard	504.3 mm (19.85 in.)
Service Limit	495 mm (19.5 in.)



# 15 FRONT FORK OIL CALIPER ADJUSTMENT

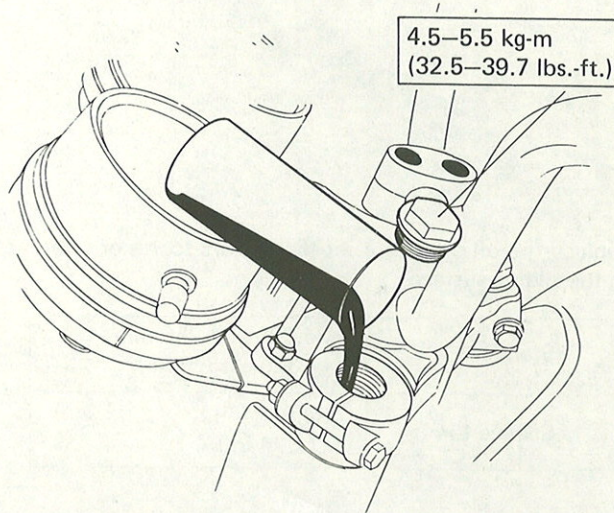
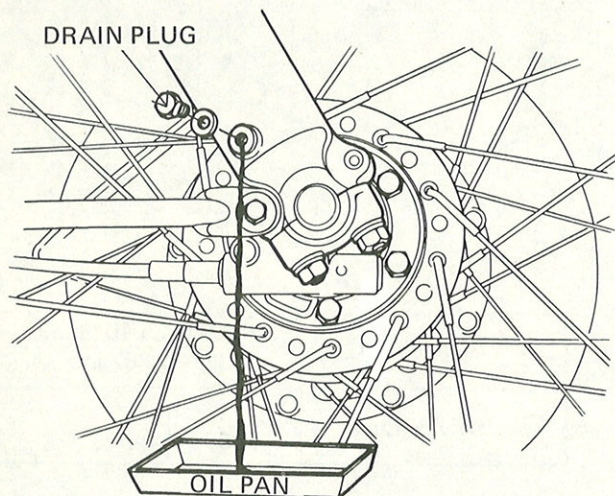
## FRONT WHEEL/SUSPENSION/ BRAKE/STEERING SYSTEM

**HONDA**  
**CB750A**



### ● FRONT FORK OIL

- (1) Remove the drain plug.
- (2) Drain oil by pumping the forks while the plug is out.
- (3) Reinstall the plug securely after draining.



- (4) Place the motorcycle on its center stand.
- (5) Remove the front fork filler bolt.
- (6) Pour premium quality ATF into the fork leg.
- (7) Securely tighten the front fork filler bolt.

ATF (Automatic Transmission Fluid)

155–165 cc (5.2–5.6 oz)

To fill after disassembly

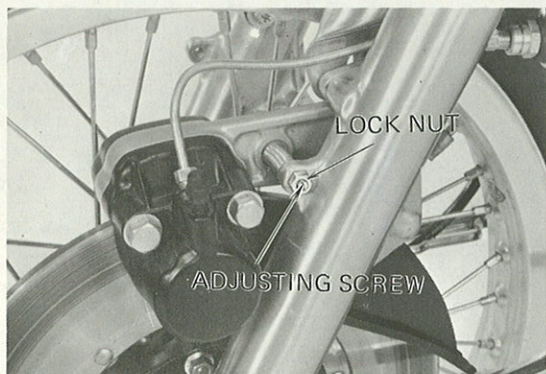
145–155 cc (4.9–5.2 oz)

To fill after draining

### ● BRAKE CALIPER ADJUSTMENT

#### NOTE

Whenever the brake pads are replaced, the brake caliper must be adjusted.



- (1) Raise the front wheel off the ground.
- (2) Loosen the lock nut.
- (3) Turn the screw out until it stops lightly and then turn it in ½ turn.
- (4) Tighten the lock nut.