

# 17. LIGHTS/INSTRUMENTS/SWITCHES

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## SERVICE INFORMATION

### GENERAL INSTRUCTIONS

- Wires should be connected to other wires of the same color. Couplers must be connected to other couplers of the same color.
- All plastic plugs have locking tabs that must be released before disconnecting, and must be aligned when reconnecting.
- After installation of each switch, a continuity check must be performed.

### TROUBLESHOOTING

#### Lights do not come on when ignition switch is “ON”

- Burned bulb
- Faulty switch
- Broken or shorted wire
- Fuse burned out
- Weak battery
- Poorly connected wire

#### Light dims

- Discharged battery
- Wire or switch resistance too high

#### Headlight does not change when dimmer switch is turn to Hi or Lo

- Faulty or burned bulb
- Faulty dimmer switch

#### Motor oil indicator light does not come on (when motor oil is insufficient)

- Fuse burned out
- Dead battery
- Faulty ignition switch
- Faulty instruments
- Faulty oil meter

#### Motor oil indicator light winks

- Loose wire connection
- Broken wire
- Faulty oil meter

#### Fuel gauge pointer does not register correctly

- Disconnected wire or connector
- Broken wire
- Faulty float
- Faulty fuel unit
- Faulty instruments

#### Fuel gauge pointer fluctuates or swings

- Loose wire connection
- Faulty fuel unit
- Faulty instruments

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## FUEL UNIT

**i** No Smoking!

### REMOVAL

Remove the right and left side covers.  
 (⇒11-2)  
 Disconnect the fuel unit wire connector.  
 Turn the fuel unit retainer counterclockwise to remove it.

\* Do not damage the fuel unit wire.

Remove the fuel unit.

\* Be careful not to bend or damage the fuel unit float arm.

### INSTALLATION

The installation sequence is the reverse of removal.

\* 

- Align the groove on the fuel unit with the tab on the fuel tank.
- Align the arrow on the retainer with the arrow on the fuel tank.
- Turn the retainer clockwise to secure it.

### INSPECTION

Remove the fuel unit.  
 Measure the resistance between the fuel unit wire terminals with the float at upper and lower positions.

Wire Terminals	Upper	Lower
G~Y/W	33Ω	686Ω
G~L/W	566Ω	153Ω
Y/W~L/W	600Ω	600Ω

### FUEL GAUGE INSPECTION

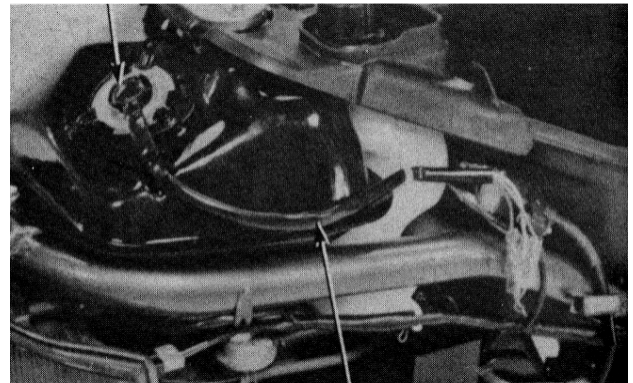
Connect the fuel unit wire connector and turn the ignition switch "ON".

\* Before performing the following test, operate the turn signals to determine that the battery circuit is normal.

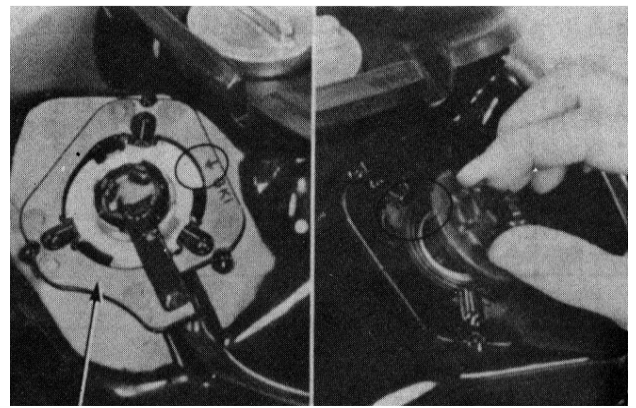
Check the fuel gauge needle for correct indication by moving the fuel unit float up and down.

Float Position	Needle Position
Upper	"F" (Full)
Lower	"E" (Empty)

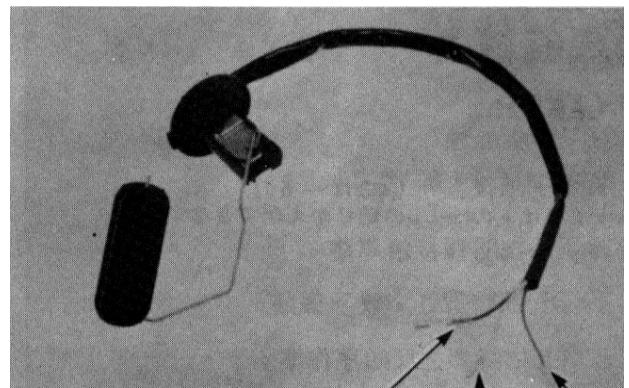
Fuel Unit



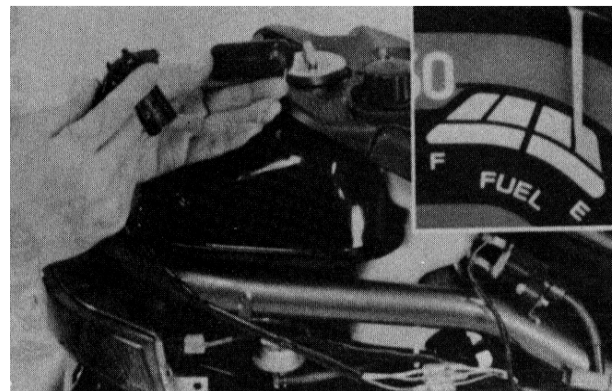
Fuel Unit Wire



Retainer



L/W Y/W G



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## OIL METER

### INSPECTION

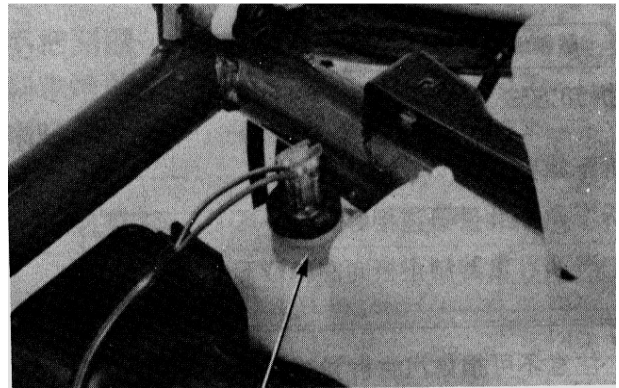
Remove the right and left side covers.  
(⇒11-2)

Turn the ignition switch ON.

Disconnect the wires from the oil meter and short the oil meter wire terminals. The oil meter is normal if the oil meter indicator light comes on.

If the oil meter indicator light does not come on, check the wires between the oil meter and instruments and also check the oil meter power supply.

If they are normal, it means that the oil meter is faulty.



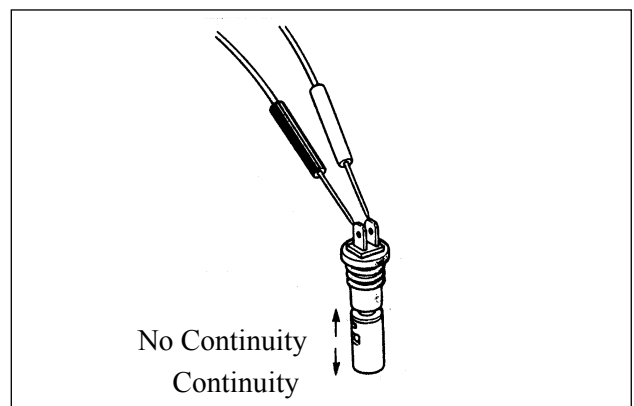
Oil Meter

### OIL METER SWITCH INSPECTION

Disconnect the oil meter wires and remove the oil meter from the oil tank.

Check the oil meter switch for continuity by moving the fuel unit float up and down.

Float Position	Continuity
Upper (Full)	No continuity
Lower (Empty)	Continuity



## INSTRUMENTS

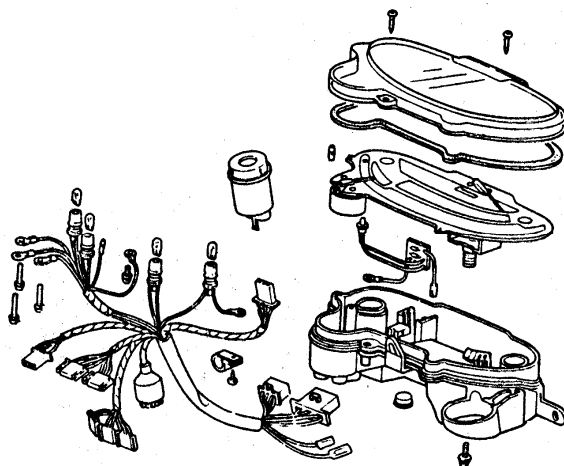
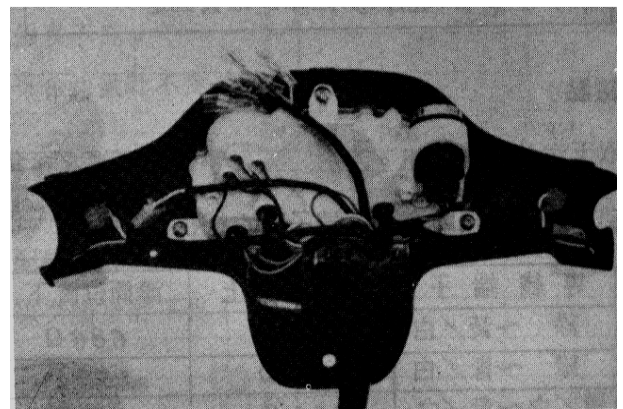
### REMOVAL

Remove the handlebar rear cover. (⇒11-6)

Disconnect the handlebar switch wire couplers.

Remove the screws attaching the instruments to remove the instruments.

The installation sequence is the reverse of removal.



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## IGNITION SWITCH

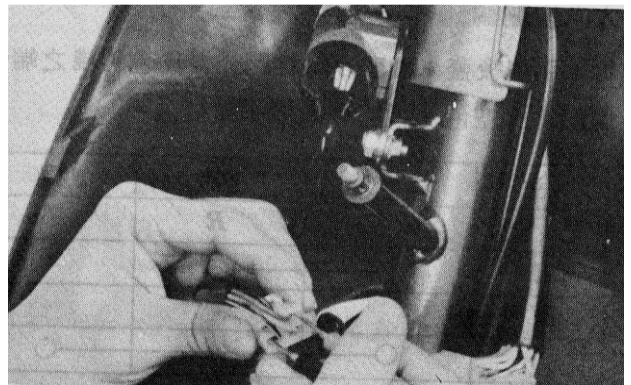
### INSPECTION

Remove the front cover. (⇒11-3)  
 Disconnect the ignition switch wire couplers and check for continuity between the wire terminals.

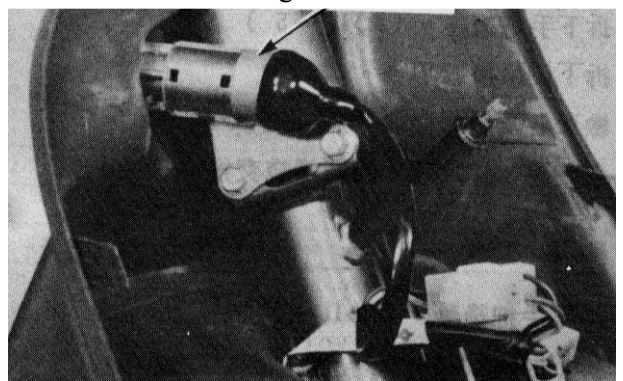
Color	Red	Black	Black/White	Green
Symbol	<i>BAT1</i>	<i>BAT2</i>	<i>IG</i>	<i>E</i>
<i>ON</i>	○	○		
<i>OFF</i>			○	○

### REPLACEMENT

Remove the front cover. (⇒11-3)  
 Disconnect the ignition switch wire couplers.  
 Remove the two mounting bolts and remove the ignition switch.  
 Remove the two screws to remove the ignition switch from the holder.  
 The installation sequence is the reverse of removal.



Ignition Switch



## HANDLEBAR SWITCHES

### INSPECTION

Remove the handlebar covers. (⇒11-5)  
 Disconnect the handlebar switch couplers and check for continuity between wire terminals.  
 If there is any abnormality found, check each switch. (⇒17-5)

### HEADLIGHT SWITCH

Color	Brown	Yellow	Pink
Symbol	<i>HL</i>	<i>CI</i>	<i>RE</i>
<i>OFF</i>		○	○
<i>ON</i>	○	○	

### STARTER SWITCH

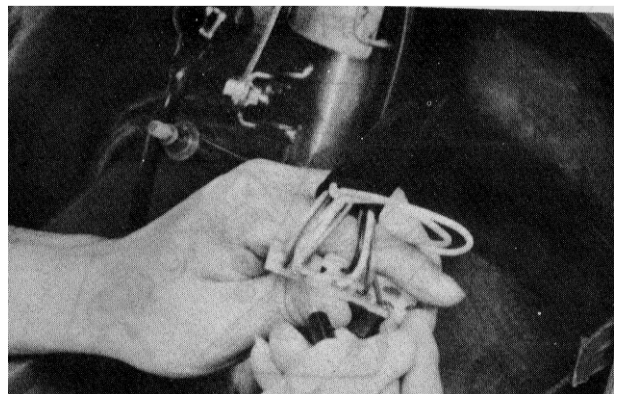
Color	Yellow/Red	Green
Symbol	<i>ST</i>	<i>E</i>
FREE		
PUSH	○	○

### HORN SWITCH

Color	Light Green	Black
Symbol	<i>HO</i>	<i>BAT2</i>
FREE		
PUSH	○	○

### DIMMER SWITCH

Color	Brown	Blue	White
Symbol	<i>HL</i>	<i>HI</i>	<i>LO</i>
<i>D</i>	○	○	
<i>(N)</i>	○	○	○
<i>D</i>	○		○



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## TURN SIGNAL SWITCH

Remove the handlebar rear cover and check for continuity between the winker gray wire and turn signal switch light blue and orange wire terminals.

Color	Gray	Light Blue	Orange
Symbol	<i>WR</i>	<i>R</i>	<i>L</i>
<i>R</i>	○	○	
<i>N</i>			
<i>L</i>	○		○

## EACH SWITCH INSPECTION

Remove the handlebar rear cover. (⇒11-5)  
 Disconnect each switch coupler and check for continuity between the wire terminals.  
 If the switch is normal, replace or repair the switch wires.

## SWITCH REPLACEMENT

Remove the handlebar rear cover. (⇒11-5)  
 Disconnect the switch coupler.  
 Press down the switch tabs to remove the switch from the handlebar cover.  
 Install a new switch in the reverse order of removal.

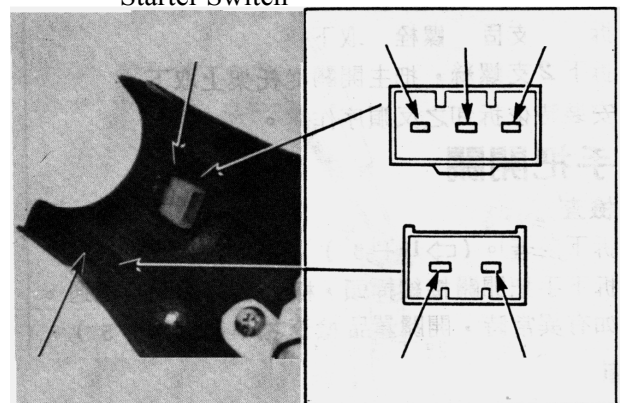
\* Make sure that the switch is installed securely.

## STOP SWITCH

### INSPECTION

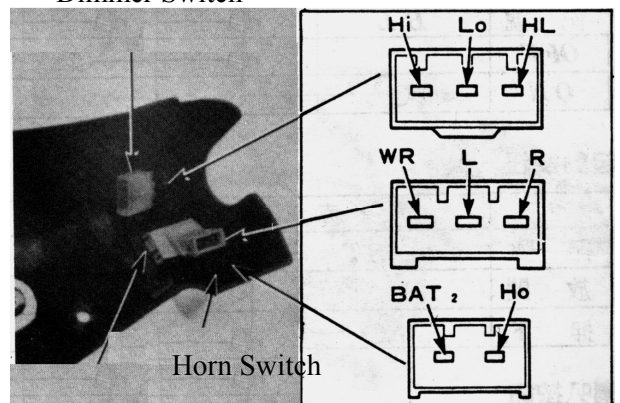
Remove the handlebar rear cover. (⇒11-5)  
 Disconnect the front stop switch wire coupler.  
 Check for continuity between the wire terminals with the front brake lever applied. The switch is normal if there is continuity.  
 Disconnect the rear stop switch wire coupler.  
 Check for continuity between the wire terminals when the rear brake lever is applied. The switch is normal if there is continuity.

Starter Switch



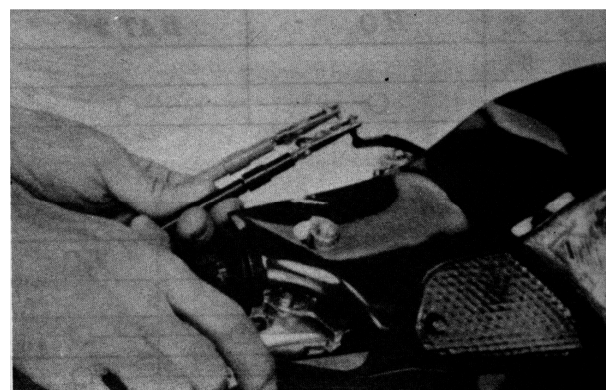
Headlight Switch

Dimmer Switch



Horn Switch

Turn Signal Switch



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## HORN

### INSPECTION

Remove the front cover. (⇒11-3)  
Disconnect the horn wire coupler.  
The horn is normal if it sounds when a 12V battery is connected across the horn wire terminals.

### REPLACEMENT

Remove the two screws attaching the front fender.  
Remove the nut attaching the front fender.  
Remove the three front cover nuts and remove the horn.  
The installation sequence is the reverse of removal.

## HEADLIGHT

### REMOVAL

Remove the left and right turn signal light shells.  
Remove the headlight shell by removing the mounting bolt.  
Turn the bulb socket to remove the bulb for replacement.  
The installation sequence is the reverse of removal.

- \* • Align the tab on the headlight with the groove on the handlebar cover.  
• After installation, adjust the headlight beam. (⇒2-9)

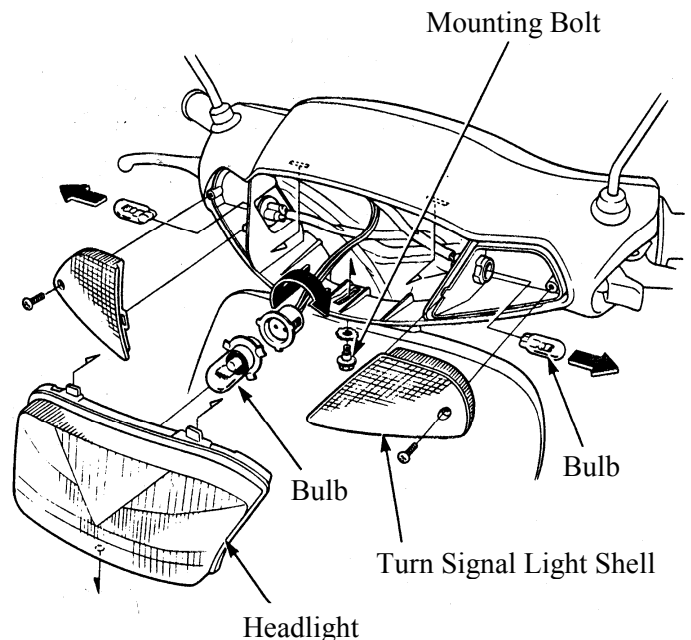
## BULB REPLACEMENT

### FRONT TURN SIGNAL LIGHT

Remove the screws to remove the turn signal light shells.  
Remove the bulbs and replace with new ones.

### INSTRUMENT BULB

Remove the handlebar rear cover. (⇒11-5)  
Remove the bulb and replace with a new one.



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### TAILLIGHT/STOPLIGHT/REAR TURN SIGNAL LIGHT

Remove the two screws to remove the taillight/stoplight shell.  
Remove the rear turn signal light shells.  
Remove the bulbs and replace with new ones.

