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**16. INSTRUMENT/SWITCHES/LIGHTS**

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**INSTRUMENT/SWITCHES/LIGHTS**

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# 16. INSTRUMENT/SWITCHES/LIGHTS

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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
- Faulty winker

### Light dims

- Faulty ignition coil
- Wire or switch resistance too high
- Faulty regulator/rectifier

### 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 instrument
- 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 instrument

### Fuel gauge pointer fluctuates or swings

- Loose wire connection
- Faulty fuel unit
- Faulty instrument

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## FUEL UNIT

\* **No Smoking!**

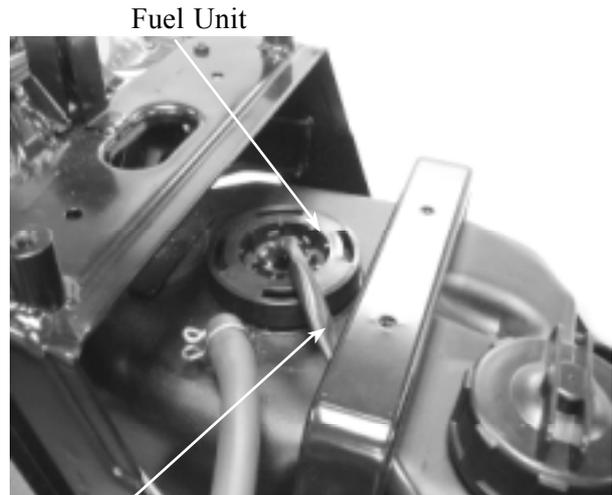
### REMOVAL

Remove the frame body cover. (⇒2-3)  
 Disconnect the fuel unit wire connectors.  
 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.

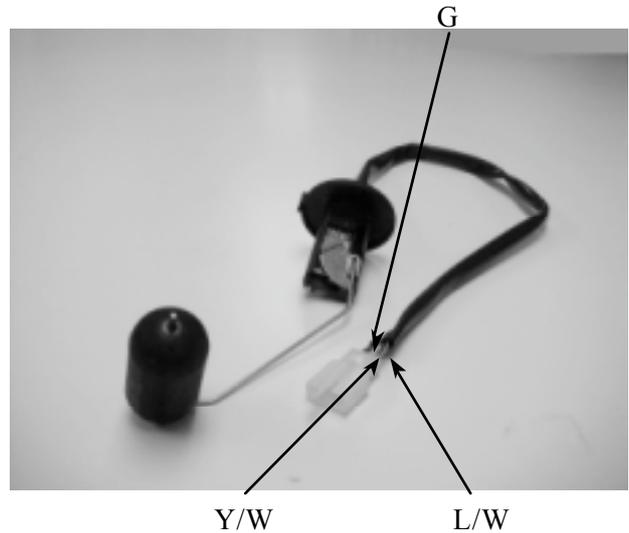


Fuel Unit Wire

### 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	53Ω
Y/W_ L/W	600Ω	600Ω



### FUEL GAUGE INSPECTION

Connect the fuel unit wire connectors 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)



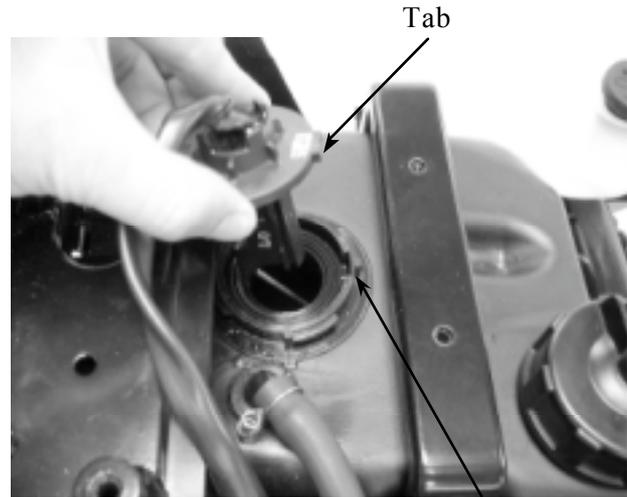
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## INSTALLATION

The installation sequence is the reverse of removal.

- \* 

<ul style="list-style-type: none"> <li>• Align the tab on the fuel unit with the groove on the fuel tank.</li> <li>• Turn the retainer clockwise to secure it.</li> </ul>
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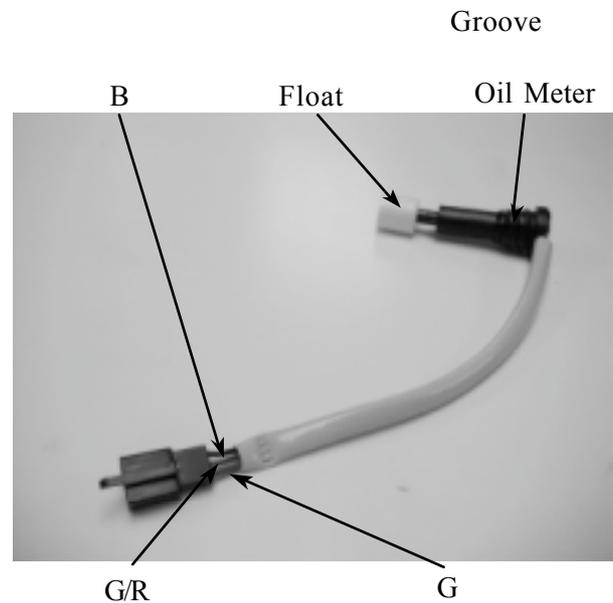


## OIL METER

### INSPECTION

Remove the met-in box. (⇒2-2)  
 Remove the frame body cover. (⇒2-2)  
 Disconnect the oil meter wire connectors and remove the oil meter. Keep the oil meter float at the lower position.  
 Measure the resistances between the wire terminals as ① and ② shown in the left figure.

Wire Terminals	Resistance
Green/Red(+)_ Black(-)	5_ 16Ω
Green(-)_ Black(+)	∞



- \* 

Before removing the oil meter, be sure to drain the motor oil and do not allow sparks or flames near the working area.
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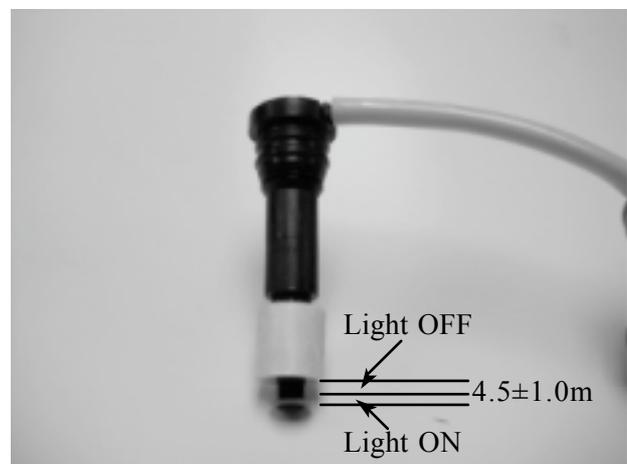
### Oil Meter Operation Inspection

Connect the oil meter wire connectors and turn the ignition switch ON.  
 Measure the resistance between the wire terminals with the float at upper position.

Green/Red(+)_ Black(-)	About 340Ω
)	

- \* 

Before performing the following test, operate the turn signals to determine that the battery circuit is normal.
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Move the oil meter float up and down to see if the oil indicator light will go out and come on.

\* If the oil indicator light does not light, check for burned bulb, loose wire or connector. After correction, check again according to the method mentioned above.

Oil Indicator Light



## SWITCHES

### IGNITION SWITCH INSPECTION

Remove the front upper/lower cover. (⇒2-3)  
Disconnect the ignition switch wire couplers and check for continuity between the wire terminals.

Color	Red	Black/White	Green	Black
Symbol	BAT <sub>1</sub>	IG	E	BAT <sub>2</sub>
LOCK		○ — ○	○	
OFF		○ — ○	○	
ON	○			○

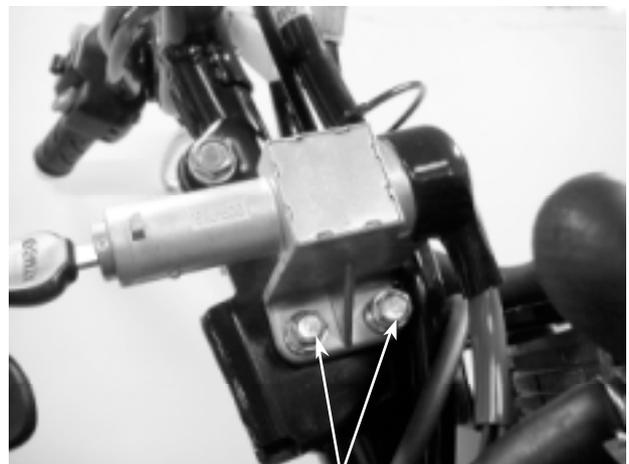


Ignition Switch Coupler

### IGNITION SWITCH REPLACEMENT

Remove the front upper/lower cover. (⇒2-3)  
Disconnect the ignition switch wire couplers. Remove the two mounting bolts and remove the ignition switch.

The installation sequence is the reverse of removal.



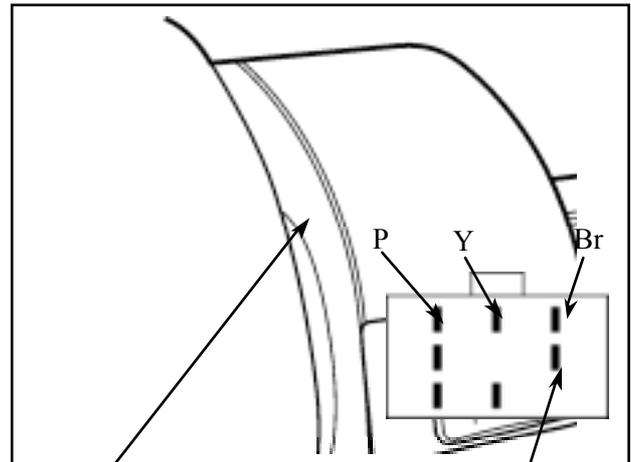
Bolts

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## HEADLIGHT SWITCH INSPECTION

Remove the handlebar lower cover. (⇒2-7)  
 Disconnect the headlight switch wire coupler and check for continuity between wire terminals.

Color	Blue/White	Yellow	Brown	Pink
Symbol	HL	CI	TL	RE
OFF		○ —	—	○
P		○ —	○	
H	○ —	○ —	○	



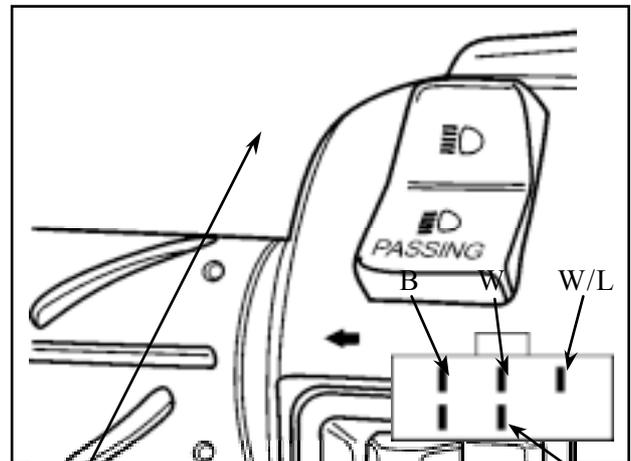
Headlight Switch

L/W

## DIMMER SWITCH INSPECTION

Check for continuity between wire terminals.

Color	White/Blue	Blue	White	Black
Symbol	HL	HI	LO	BAT <sub>2</sub>
HI	○ —	○		
LO	○ —		○	
PASSING		○ —	—	○



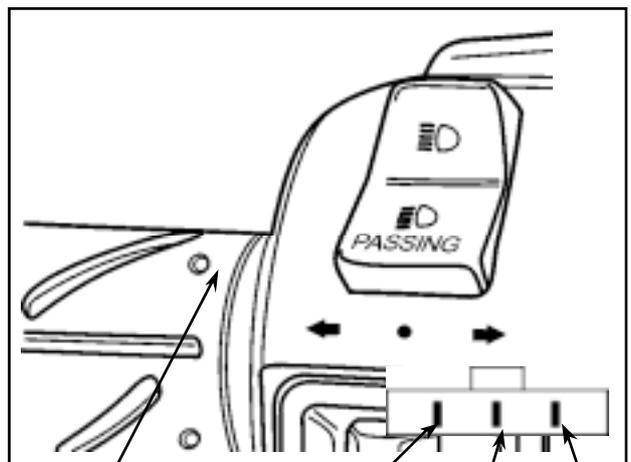
Dimmer Switch

L

## TURN SIGNAL SWITCH INSPECTION

Check for continuity between the wire terminals.

Color	Light Blue	Orange	Gray
Symbol	R	L	WR
R	○ —	—	○
L		○ —	○



Turn Signal Switch

SB

O

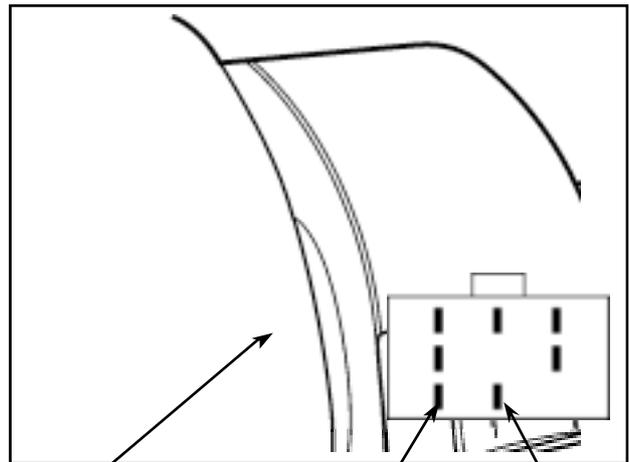
Gr

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## STARTER SWITCH INSPECTION

Check for continuity between wire terminals.  
Push the starter button when measuring.

Color	Yellow/Red	Green
Symbol	ST	E
FREE		
PUSH		



Starter Switch

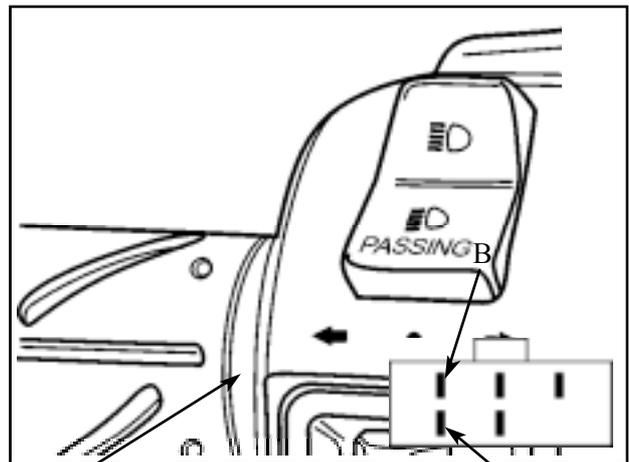
G

Y/R

## HORN SWITCH INSPECTION

Check for continuity between wire terminals.  
Push the horn button when measuring.

Color	Light Green	Black
Symbol	HO	BAT <sub>2</sub>
FREE		
PUSH		



Horn Switch

Lg

## STOP SWITCH INSPECTION

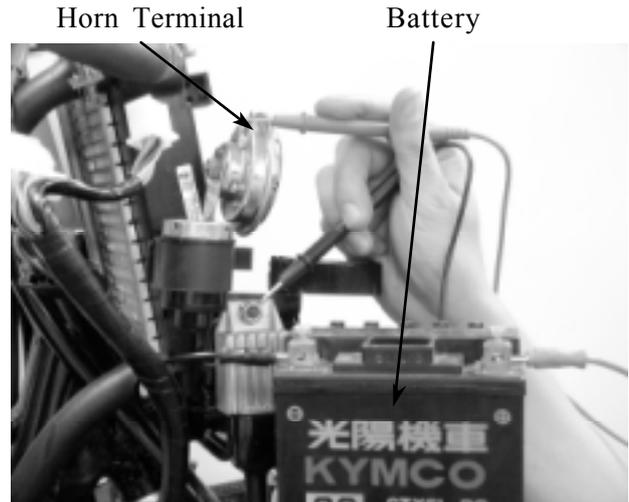
Remove the handlebar lower cover. (⇒2-7)  
Disconnect the front and rear stop switch wire couplers.  
Check for continuity between the wire terminals when the front/rear brake lever is applied.



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## HORN INSPECTION

Remove the front upper/lower cover. (⇒2-3)  
 Disconnect the horn wire couplers. The horn is normal if it sounds when a 12V battery is connected across the horn wire terminals.



## FRONT TURN SIGNAL LIGHT REPLACEMENT

Remove the turn signal light shell and the bulb.  
 Replace with new ones.

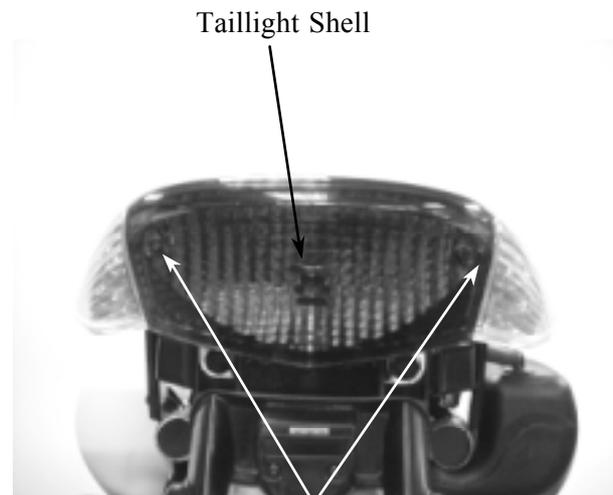
\* Replace with new bulbs of the same specifications.



Turn Signal Light Bulb

## TAILLIGHT/S TOPLIGHT/REAR TURN SIGNAL LIGHT BULB REPLACEMENT

Taillight Shell Removal:  
 Remove two screws attaching the taillight shell.  
 Remove the taillight shell and stop light bulb.  
 Remove the rear turn signal light bulbs.  
 The installation sequence is the reverse of removal.



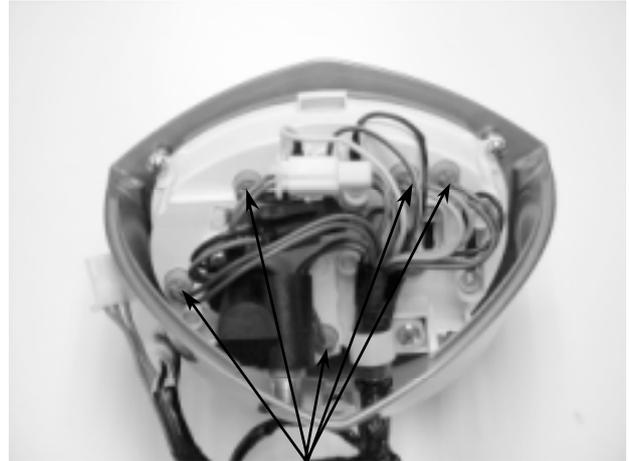
Screws

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## INSTRUMENT

### Instrument Bulbs Replacement

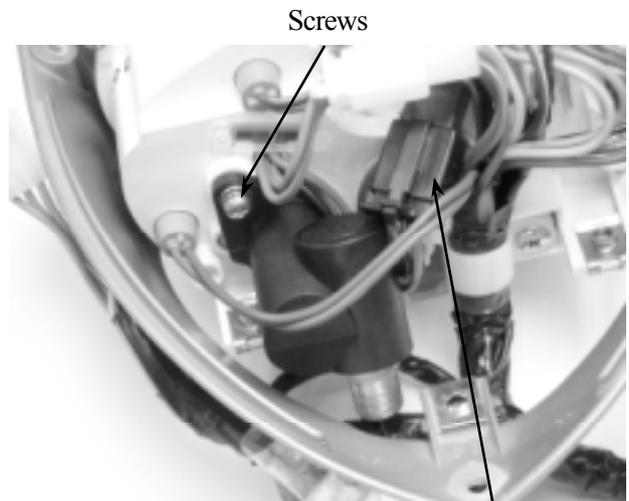
Remove three screws attaching the instrument bulbs.  
 Remove the instrument bulbs cover.  
 Remove the bulbs and replace with new ones.



Bulb Sockets

### SPEEDOMETER REMOVAL

Disconnect the speedometer cable.  
 Disconnect the speedometer wire connector.  
 Remove the two screws attaching the speedometer.  
 Remove the speedometer.  
 The installation sequence is the reverse of removal.



Wire Couplers

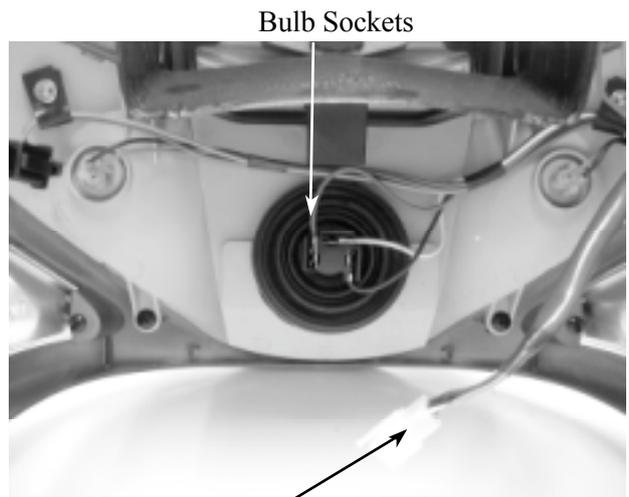
## HEADLIGHT

### REMOVAL/BULB REPLACEMENT

Remove the front upper/lower cover. (⇔2-3)  
 Remove the bulb sockets and bulbs.

- \* 
 • The model adopts krypton gas bulb.  
 When installing, do not directly touch the bulb glass with fingers.  
 • Use bulbs of the same specifications for replacement.

The installation sequence is the reverse of removal.



Coupler