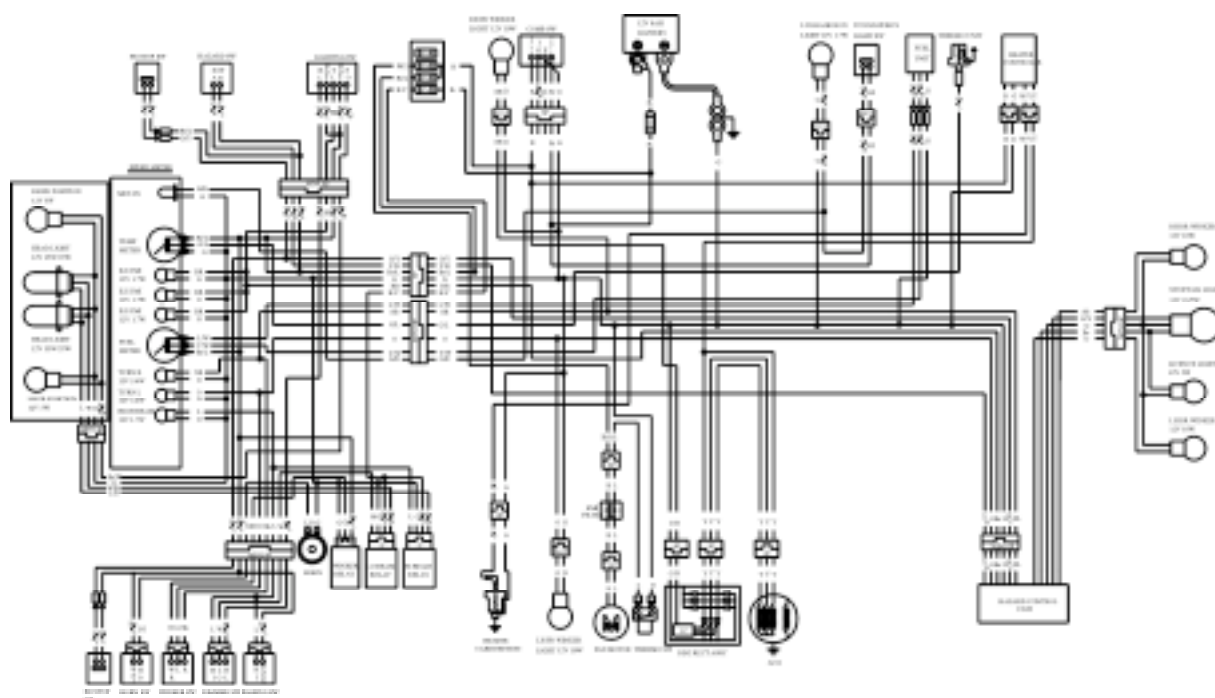

**SWITCHES/HORN/FUEL UNIT/THERMOSTATIC
SWITCH/TEMPERATURE GAUGE/ INSTRUMENTS/LIGHTS**

| | |
|----------------------------------|------|
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Headlight
Dimmer Switch
Turn Signal Switch
Horn Button
Stop Switches
Instruments
Ignition Switch
Horn
Thermostatic Switch
Fuel Unit
Starter Button
Headlight Switch
Auto Bystarter
Thermosensor



SERVICE INFORMATION

GENERAL INSTRUCTIONS

- After installation of each switch, a continuity check must be performed. A continuity check can usually be made without removing the part from the motorcycle.

TESTING INSTRUMENT

Electric tester

SPECIAL TOOL

Fuel unit wrench

TROUBLESHOOTING

Lights do not come on when ignition switch is "ON"

- Burned bulb
- Faulty switch
- Poorly connected, broken or shorted wire

Temperature gauge does not register correctly

- Faulty temperature gauge
- Faulty thermosensor
- Broken or shorted wire between temperature gauge and thermosensor

Fuel gauge pointer does not move or register correctly

- Faulty fuel gauge
- Faulty fuel unit
- Poorly connected wire between fuel gauge and fuel unit
- Fuse burned out

SPECIFICATIONS

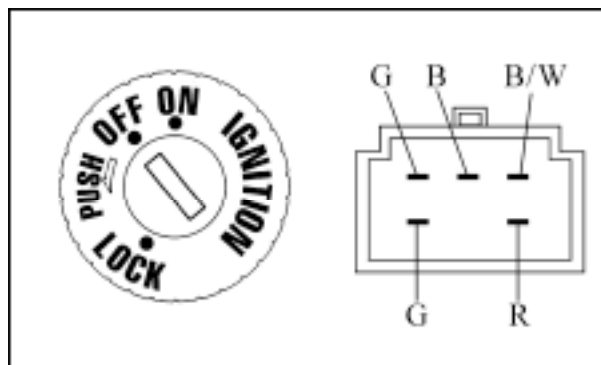
| | |
|-----------------------------|-------------|
| Fuse | 20A |
| Headlight bulb | 12V 35W/35W |
| Turn signal light bulb | 12V 10W |
| Stoplight/taillight | 12V 21/5W |
| License plate light | 12V 5W |
| Instrument light | 12V 1.7W |
| Position light | 12V 5W |
| Turn signal indicator light | 12V 3.4W |

SWITCHES

IGNITION SWITCH INSPECTION

Remove the frame front covers. (⇒2-5)
Disconnect the ignition switch wire couplers.
Check for continuity between the wire terminals.

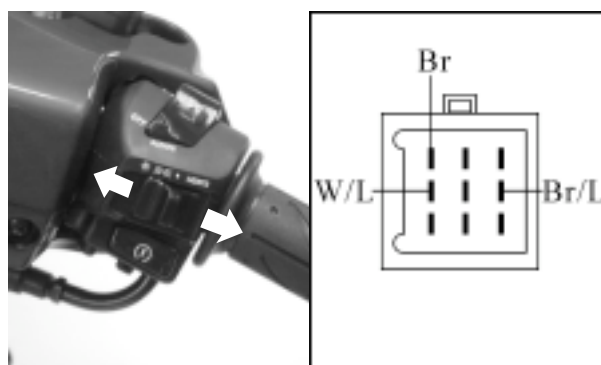
| Color Position | Red2 | Black/Wh ite | Green | Black |
|-------------------|------|-----------------|-------|-------|
| PARK | | | | |
| LOCK | | ○ | ○ | |
| OFF | | ○ | ○ | |
| ON | ○ | | | ○ |



HEADLIGHT SWITCH INSPECTION

Remove the frame front covers. (⇒2-5)
Disconnect the headlight switch wire couplers.
Check for continuity between the wire terminals.

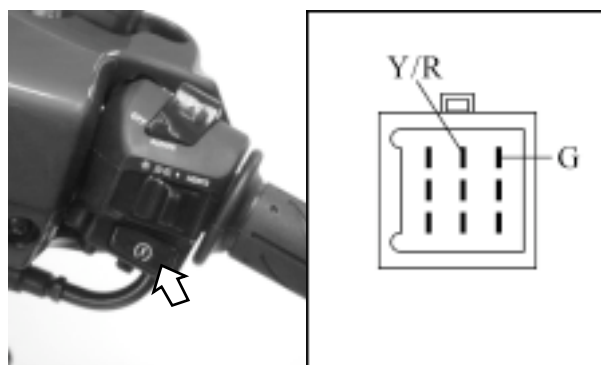
| Color Position | White / Blue | Brown/ Blue | Brown |
|-------------------|-----------------|----------------|-------|
| ■ | | | |
| P | | ○ | ○ |
| H | ○ | ○ | ○ |



STARTER SWITCH INSPECTION

Remove the frame front covers. (⇒2-5)
Disconnect the starter switch wire couplers.
Depress the starter button and check for continuity between the wire terminals.

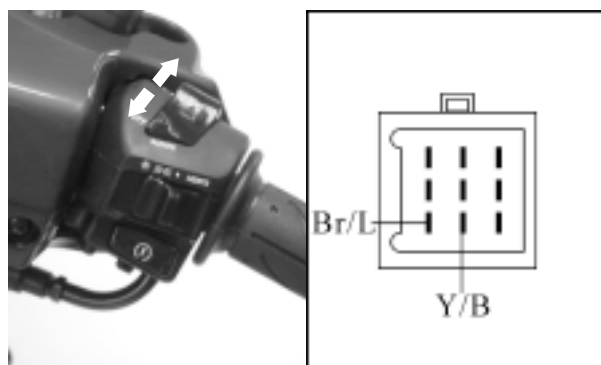
| Color Position | Yellow/Red | Green |
|-------------------|------------|-------|
| FREE | | |
| PUSH | ○ | ○ |



HAZARD SWITCH

Remove the front upper cover. (⇒2-5)
Disconnect the headlight switch wire couplers.
Check for continuity between the hazard switch wire terminals.

| Color Position | Yellow/Black | Gray |
|-------------------|--------------|------|
| OFF | | |
| ON | ○ | ○ |

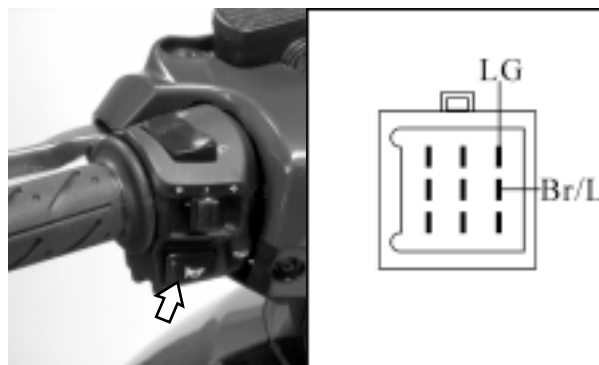


19. SWITCHES/HORN/FUEL UNIT/THERMOSTATIC SWITCH /TEMPERATURE GAUGE/INSTRUMENTS/LIGHTS

HORN BUTTON INSPECTION

Remove the frame front covers. (⇒2-5)
Disconnect the horn wire couplers.
Depress the horn button and check for continuity between the wire terminals.

| Color Position | Light Green | Brown/Blue |
|-------------------|-------------|------------|
| FREE | | |
| PUSH | ○ — | — ○ |

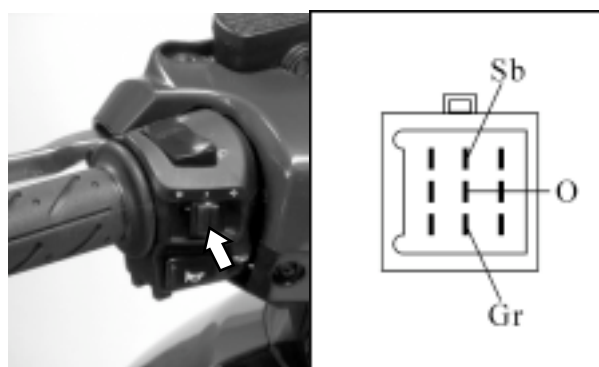


Horn Button

TURN SIGNAL SWITCH INSPECTION

Remove the frame front covers. (⇒2-5)
Disconnect the turn signal switch wire couplers and turn on the turn signal switch.
Check for continuity between the wire terminals.

| Color Position | Light Blue/ White | Gray | Orange/ White |
|-------------------|----------------------|------|------------------|
| L | | ○ — | — ○ |
| N | | | |
| R | ○ — | — ○ | |

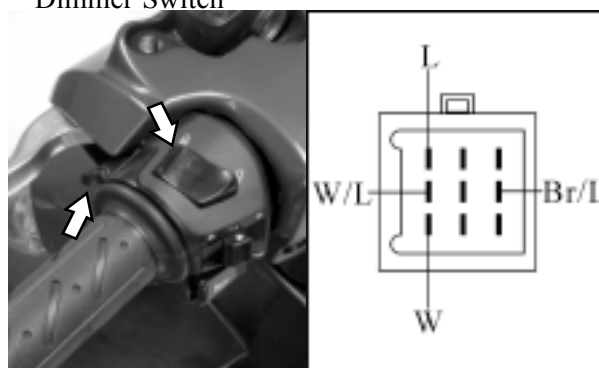


Turn Signal Switch

DIMMER SWITCH INSPECTION

Remove the frame front covers. (⇒2-5)
Disconnect the headlight dimmer switch wire couplers.
Turn on the dimmer switch and check for continuity between the wire terminals.

| Color Position | White/ Blue | Blue | White | Brown/ Blue |
|-------------------|----------------|------|-------|----------------|
| LO | ○ — | | ○ | |
| HI | ○ — | ○ | | |
| PASSING | | ○ — | | ○ |

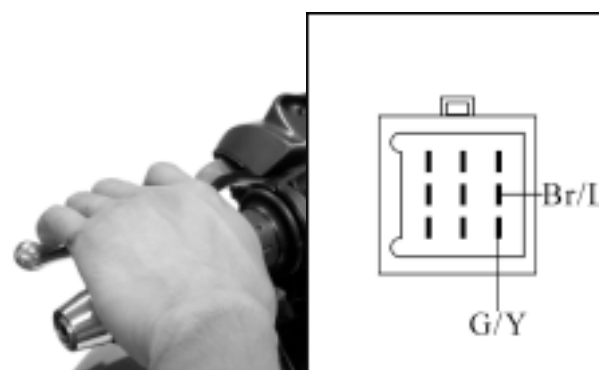


PASSING

STOP SWITCH INSPECTION

Remove the frame front covers. (⇒2-5)
Disconnect the front/rear stop switch wire couplers.
Check for continuity between the wire terminals when the front brake lever is applied.

| Color Position | Brown/Blue | Green/Yellow |
|-------------------|------------|--------------|
| FREE | | |
| APPLY | ○ — | — ⊖ |



Stop Switch

19. SWITCHES/HORN/FUEL UNIT/THERMOSTATIC SWITCH /TEMPERATURE GAUGE/INSTRUMENTS/LIGHTS

HORN INSPECTION

Remove the front upper cover. (⇒2-5)
Disconnect the horn wire couplers.
The horn is normal if it sounds when a 12V battery is connected across the horn wire terminals.



Horn

FUEL UNIT

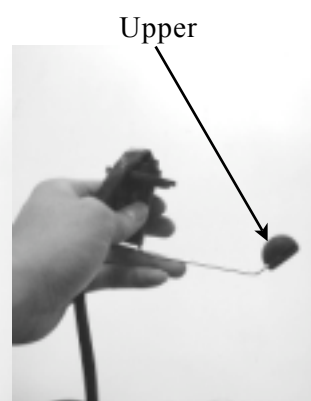
FUEL UNIT INSPECTION

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

| Wire Terminals | Upper | Lower |
|----------------|---------------|---------------|
| Y/W_ G | 33_ 45□ | 500_ 850 □ |
| L/W_ G | 400_ 700 □ | 100_ 200 □ |
| Y/W_ L/W | 450_ 750 □ | 450_ 750 □ |



Lower



Upper

FUEL GAUGE INSPECTION

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

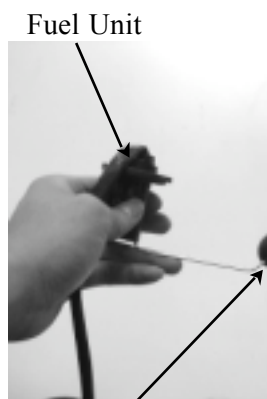
* Before performing the following test, operate the turn signals to determine that the battery circuit is normal.

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) |

| Wire Terminals | Needle Position |
|----------------|-----------------|
| Y/W_ G | From E to F |
| L/W_ G | From F to E |

The fuel gauge is normal if it operates as above indicated. If not, check for loosely tightened nuts, poorly connected terminals or shorted wires.



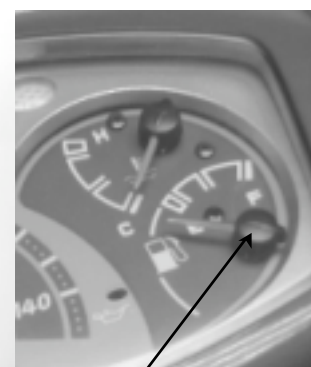
Upper



Fuel Gauge



Lower



Needle moves from F to E.

THERMOSTATIC SWITCH

INSPECTION

Remove the front covers. (⇒2-5)

Start and run the engine to make the water temperature reaches 85°C _ 90°C and check if the cooling fan motor operates. Lower the water temperature to 85°C and check if the fan motor stops.

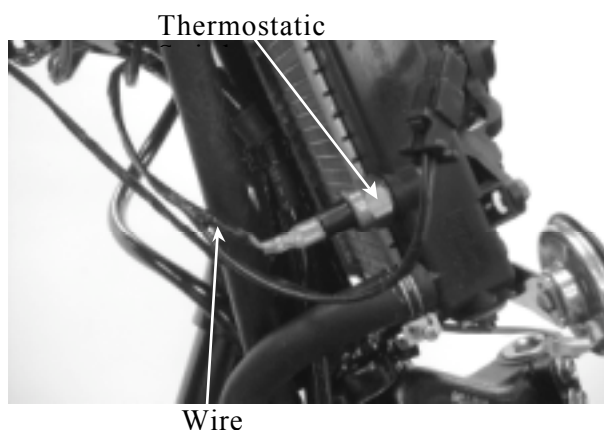
If the fan motor does not start, disconnect the wires from the thermostatic switch and then connect a jumper wire between the wire harness and thermosensor wires (black and green wires).

Turn the ignition switch ON. The thermostatic switch is faulty if the cooling fan motor runs properly.

If it does not start, check for voltage between the fan motor coupler wire terminals (black _ green).

If there is no voltage, check for the following:

- Blown or faulty fuse
- Loose terminals or connectors
- Shorted wire in the wire harness



TEMPERATURE GAUGE

Disconnect the wire from the thermosensor and ground it to the engine.

Turn the ignition switch ON.

The temperature gauge needle should move all the way to "H".

* Do not leave the thermosensor wire grounded for longer than 5 seconds or the temperature gauge will be damaged.



HEATER CONTROLLER UNIT

INSPECTION

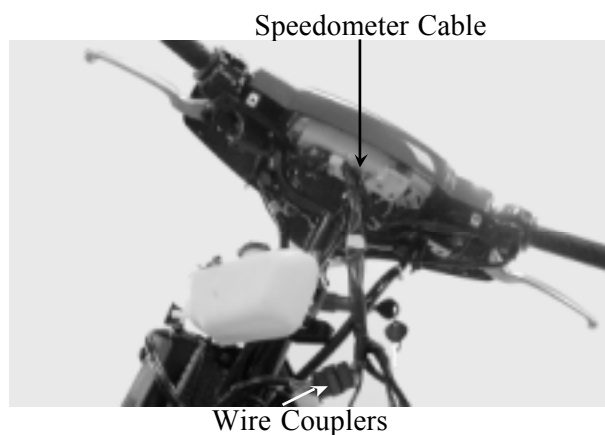
1. Open ignition switch to check if the black wire of it is enough voltage.
 2. Put the heater controller unit in refrigerator. Start engine after keeping the temperature under $10 \pm 4^{\circ}\text{C}$.
 3. Check if the yellow wire of heater controller unit has output voltage.
- Start engine and if the temperature of heater controller unit is under $10 \pm 4^{\circ}\text{C}$. Check if the white/blue wire of heater controller unit has output voltage. If it has not any voltage. It is damaged.



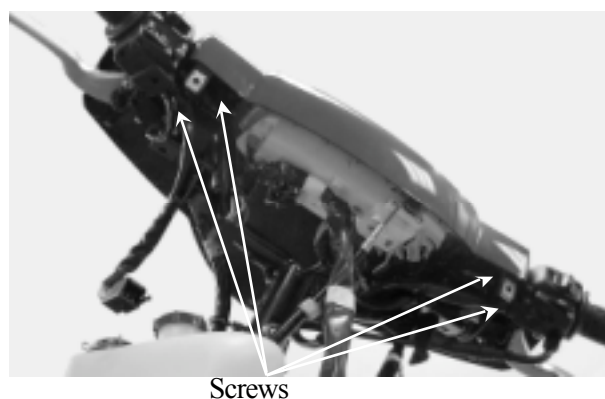
INSTRUMENTS

REMOVAL

Remove the front upper cover. (⇒2-5)
Disconnect the instrument wire couplers and connectors.
Disconnect the speedometer cable.

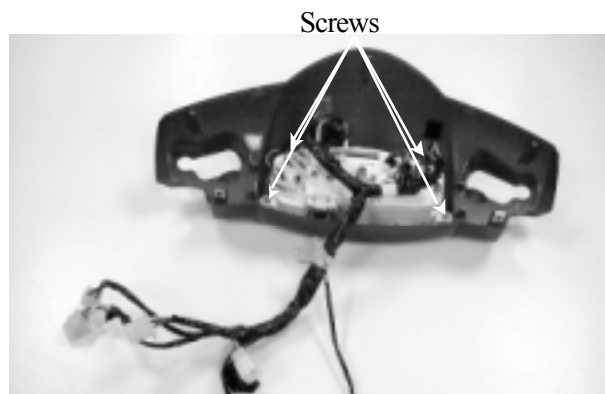


Remove the four instrument cover and leg shield screws.
Remove the instruments.



DISASSEMBLY/ASSEMBLY

Remove the three instrument holder nuts.
Remove the holder.
Remove the four screws to disassemble the instruments and instrument cover .
Assemble the instruments in the reverse order of disassembly.



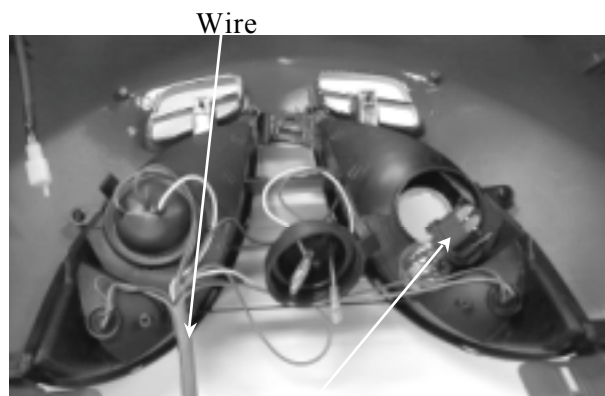
INSTALLATION

The installation sequence is the reverse of removal.

LIGHTS

HEADLIGHT BULB REPLACEMENT

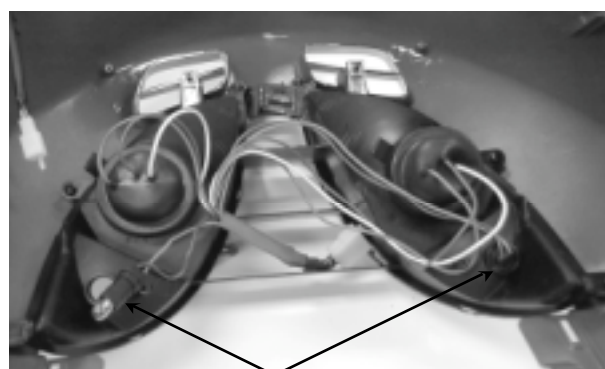
Remove the front upper cover. (⇒2-5)
Disconnect the headlight and turn signal light wire couplers.
Remove the rubber boot from the bulb socket.
Remove the bulb socket and replace the bulb.
Install the bulb socket, aligning the bulb socket tab with the groove.
Install the rubber boot.
Install the front cover in the reverse order of removal.



Wire
Bulb Socket
Wire

FRONT POSITION LIGHT BULB REPLACEMENT

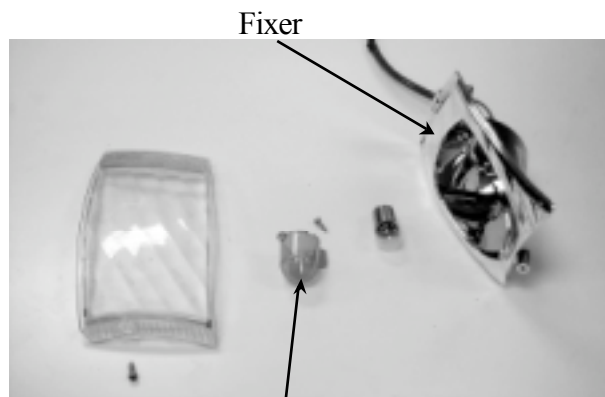
Remove the front upper cover. (⇒2-5)
Disconnect the headlight and turn signal light wire couplers.
Remove the bulb sockets by turning them counterclockwise.
Remove the bulbs and replace them with new ones.



Front Position Light Bulb Sockets

FRONT TURN SIGNAL LIGHT BULB REPLACEMENT

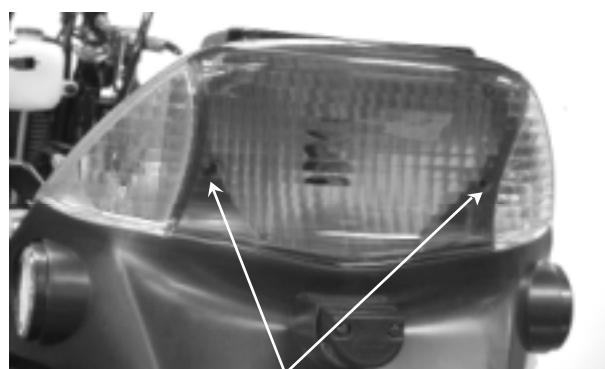
Remove the one screw attaching the turn signal light shell and remove the light shell.
Remove the turn signal fixer two screws.
Remove the bulb protector screw.
Remove the bulb and replace with a new one.



Fixer
Protector

TAILLIGHT/REAR TURN SIGNAL LIGHT BULB REPLACEMENT

Remove the rear protective cover. (⇒2-3)
Remove the two screws attaching the rear light shell and remove the light shell.
Remove the bulbs and replace with new ones.
The installation sequence is the reverse of removal.



Screws

HEATER WIRING DIAGRAM

