

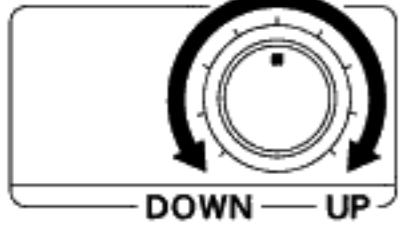
CONTENTS

 CONTROLLER	 4-PIN COUPLER CABLE	 WIRE CONNECTERS ×3	 DOUBLE-SIDED TAPE	 ELECTRICAL CURRENT TESTER
---	---	---	---	---

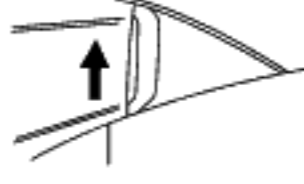
OPERATION

※Please turn the volume dial to zero (left) when you want to close head-light.

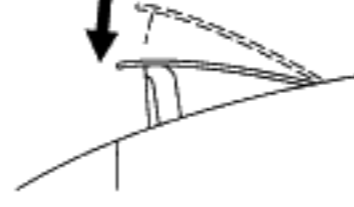
① Change the volume.



② Turn on the light.
(Cover will be open.)



③ Turn off the light.
(Cover will be half open.)



④ Adjust the volume and set the position of the cover as you want.

NOTE: Volume scale is not accurate and may differ from actual angle of cover.

NOTE

1. Angle of cover may be affected by voltage of battery. So we recommend you to operate this system when engine is working.
2. The slight difference of angle between right and left is caused by car and not caused by this unit. Please adjust it by turning volume knob of car. If difference is big, please consult with your car dealer.

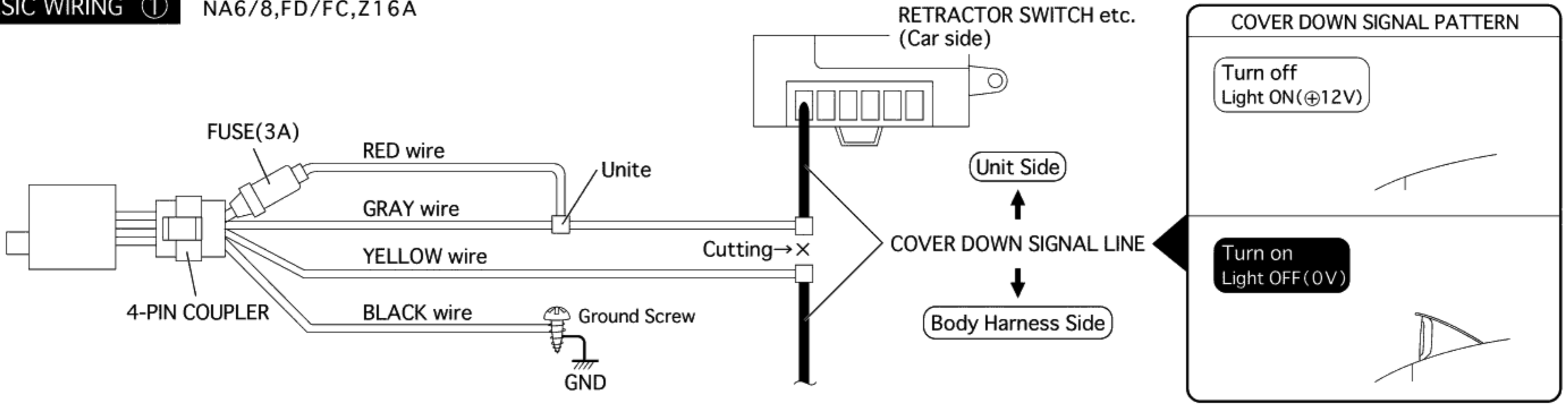
WIRING CONNECT METHOD

WARNING WHEN INSTALL

1. Please remove ⊖ terminal of the battery while installation to prevent short circuit.
2. Each connecting part must be done firmly to prevent a connection malfunction. (Un-firmly connection would be cause of abnormal operation)
3. Insulation of the each connecting part must be done firmly. (Short circuit may cause of breakdown for meter or vehicle.)
4. When wiring, please be attention for short circuit or broken wire.

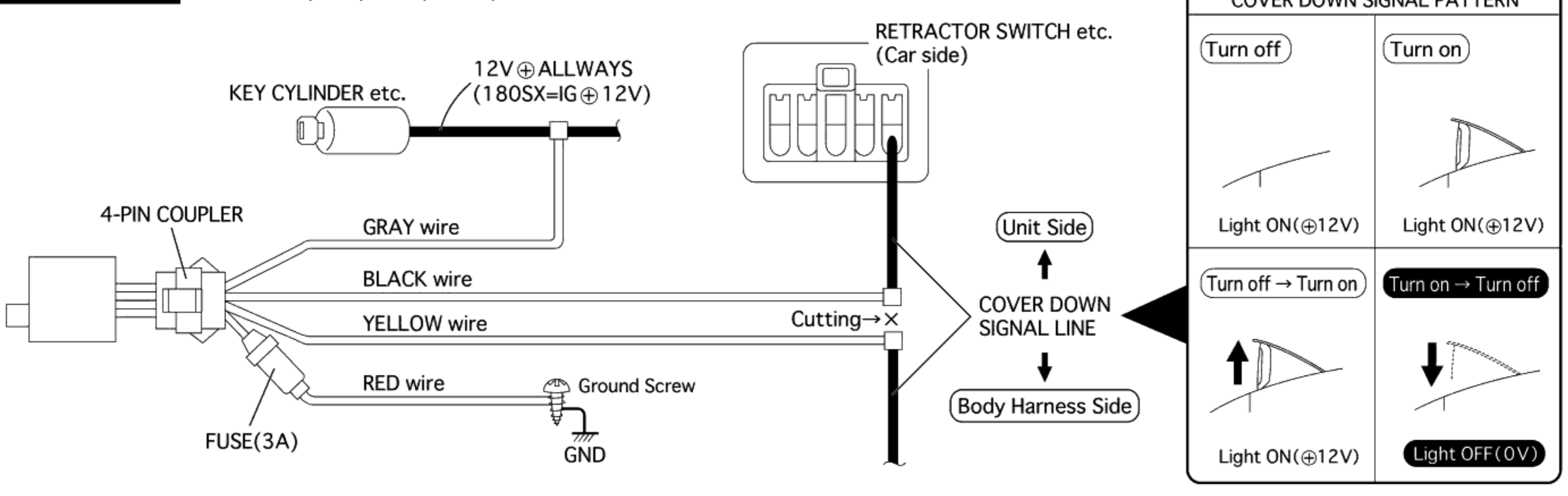
BASIC WIRING ①

NA6/8,FD/FC,Z16A



BASIC WIRING ②

RS/RPS13,A70,AE92,SW20,ST18#

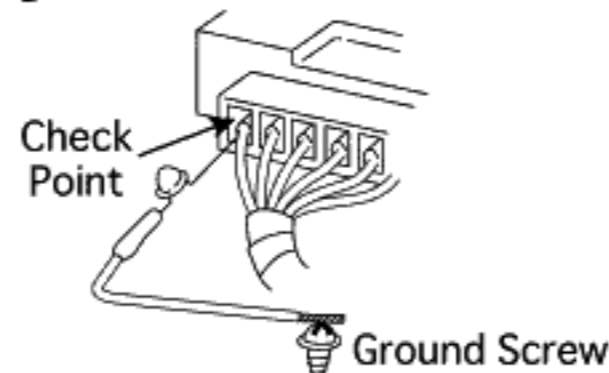


HOW TO USE AN ELECTRICAL CURRENT TESTER

※Use if you don't have a circuit tester.

- Touch the tip of the needle on the point you want to check
 - Touch the end of cable to the body ground
- Touch securely each point.

Current detected: LED Light ON(⊕ 12V)
No current detected: LED Light OFF(0V)

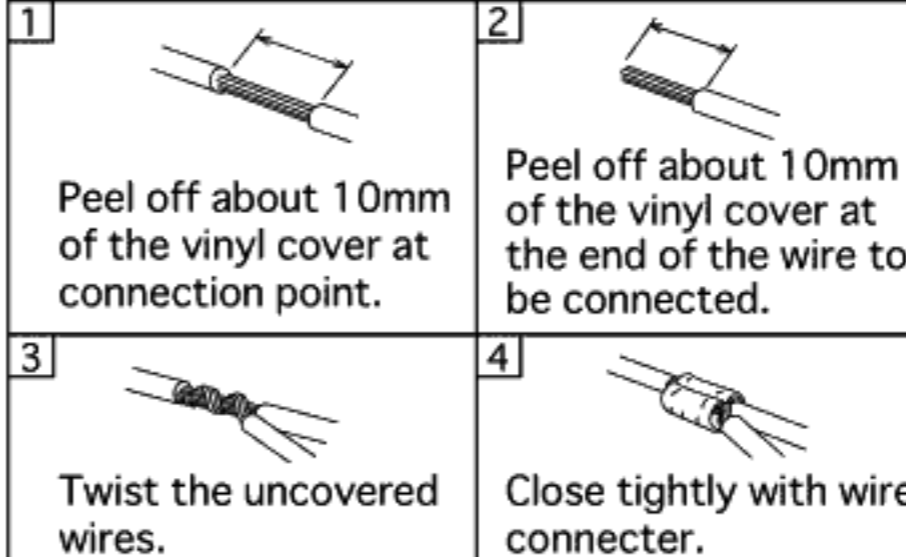


HOW TO USE THE WIRE CONNECTERS

※ If soldering is possible, please do so.

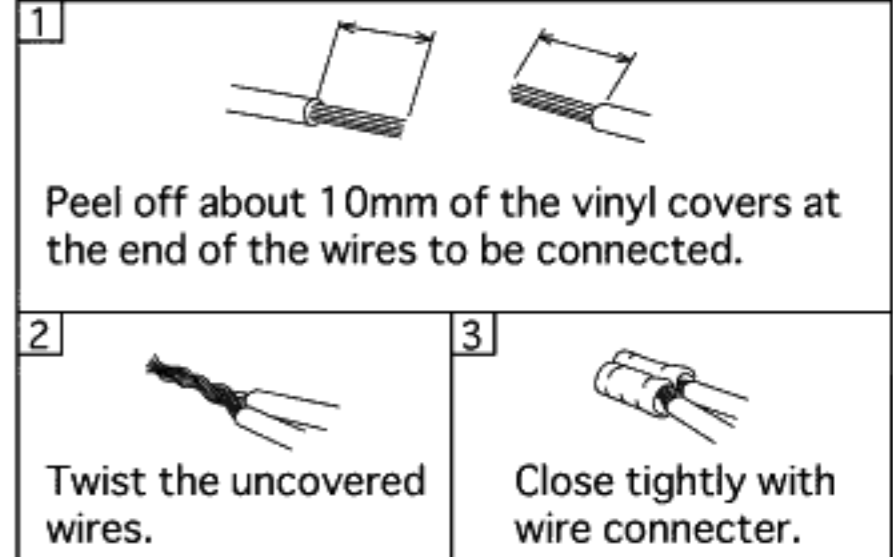
Method 1

Connecting a new wire to the middle of another wire.



Method 2

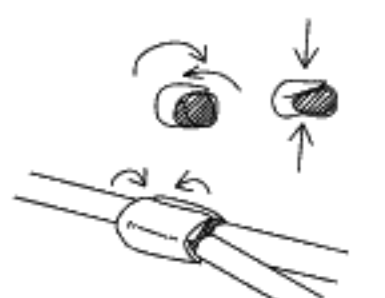
Connecting two wires at their ends.



※Use a crushing tool to press the wire connector. If you do not have such a tool, use pliers or such to fold and crush the connector together for a secure contact.

※Loose connections can cause wire to come apart, so please make sure the connection is secure.

Be sure to insulate and secure with vinyl electrical tape.



TROUBLE SHOOTING

※Please check following point before asking repairment.

Trouble	Possible Causes & Solutions
Light keeping fully open and can not close.	Imperfect wiring or connecting. Please check all wiring, connecting point of wire connectors, body ground, etc. Also check the fuse and it is burn out, please replace it.
Can not let the light half open.	Supposed to be imperfect wiring. Please refer wiring manual for each car model and check your wiring again.

1 HOW TO PULL OUT RETRACTOR SWITCH COUPLER (fig. A-B)

- ① Remove 5 screws (front-side × 2, inside of console box × 2, under ashtray × 1) from floor-console.
- ② Remove 3 screws from center-console (inside of air-con × 2, left-bottom × 1) after taking off 2 air-con stabilizers. Then take off the center-console.
- ③ Pull out 7-pin coupler from rear side of retractor switch.

2 WIRING OF 4-PIN COUPLER (fig. C)

- ① Place the gray and yellow line of 4-pin coupler close to the retractor switch through back side of center-console.
- ② Cut the red with blue line of 7-pin coupler (the first left line on bottom).

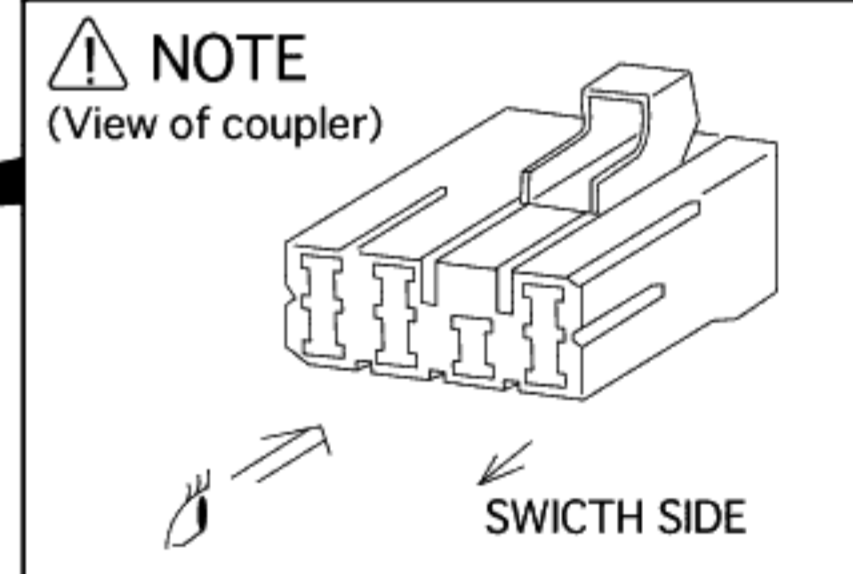
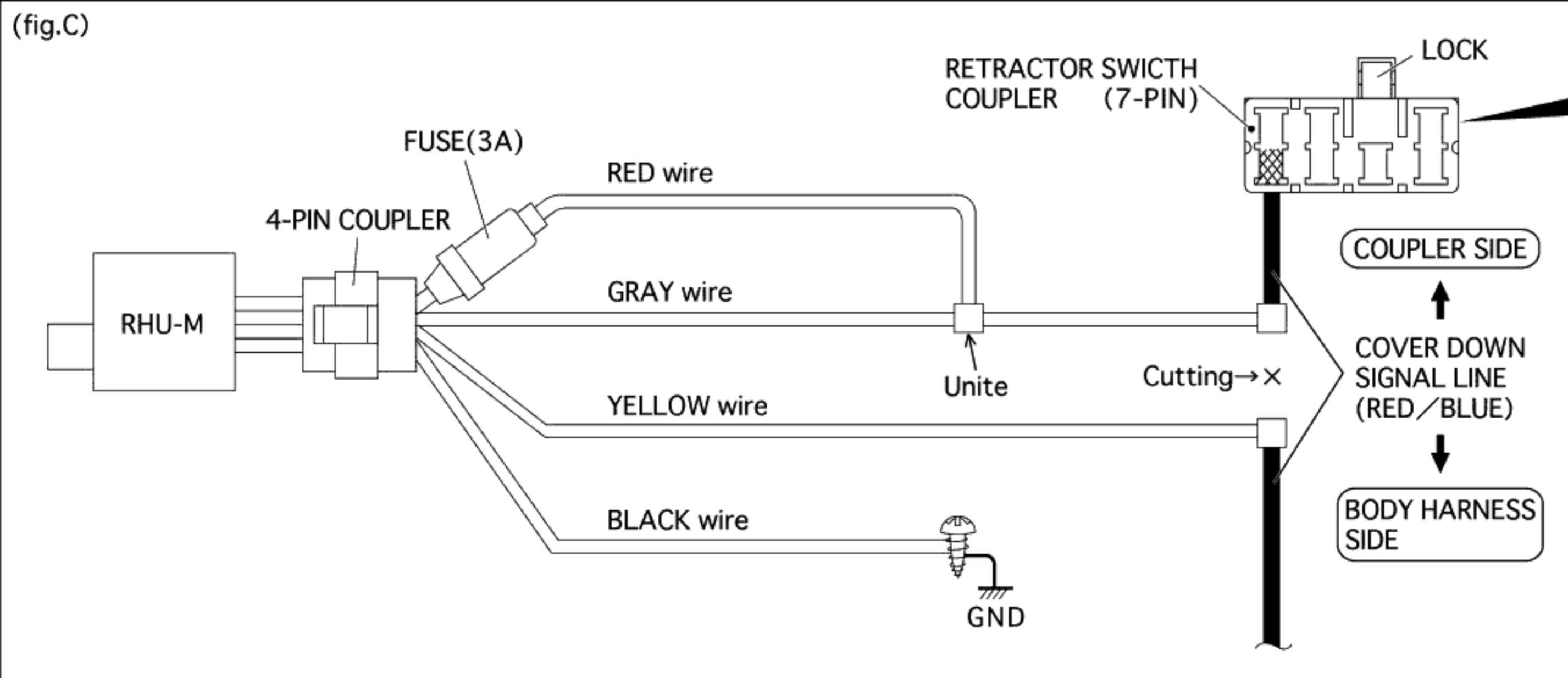
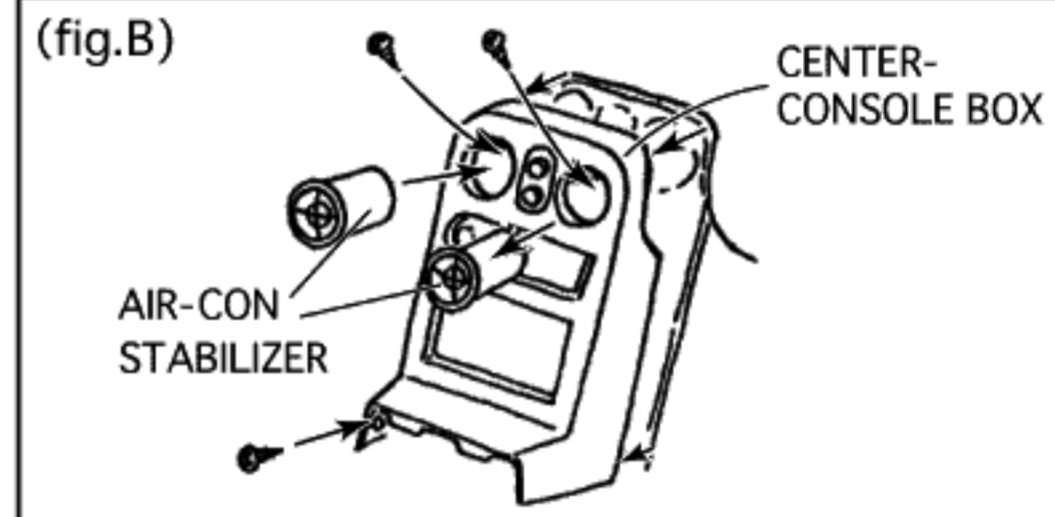
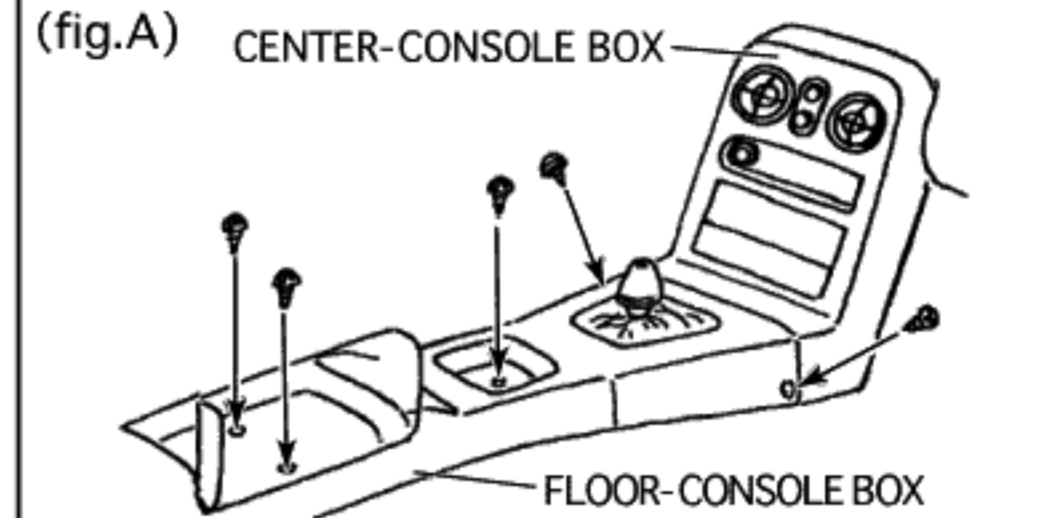
※ The line to cut is that an electrical current tester get response (= +12V) when turn off the head-light and get no response (=0V) when turn on the head-light.

- ③ Connect gray line to 7-pin coupler side of red with blue line and connect yellow line to the other side using the a connecting wire connectors.
- ④ Unite the red line to gray line with a diverging wire connectors.
- ⑤ Connect the black line to a screw on car body for body ground.
- ⑥ Connect 4-pin coupler of control unit correctly.

Electrical current tester
Light on (+12V) / off (0V)
(Operating retractor switch)

Turn off
Light on (+12V)

Turn on
Light off (0V)



⚠ NOTE

If the head-light keepign fully open and can not close.

↓

Imperfect wiring or connecting.
Please check all wiring, connecing point of wire connecter, body ground, etc.
Also check the fuse and it is burn out, please replace it.

1 HOW TO FIND OUT RETRACTOR RELAY UNIT (fig. A)

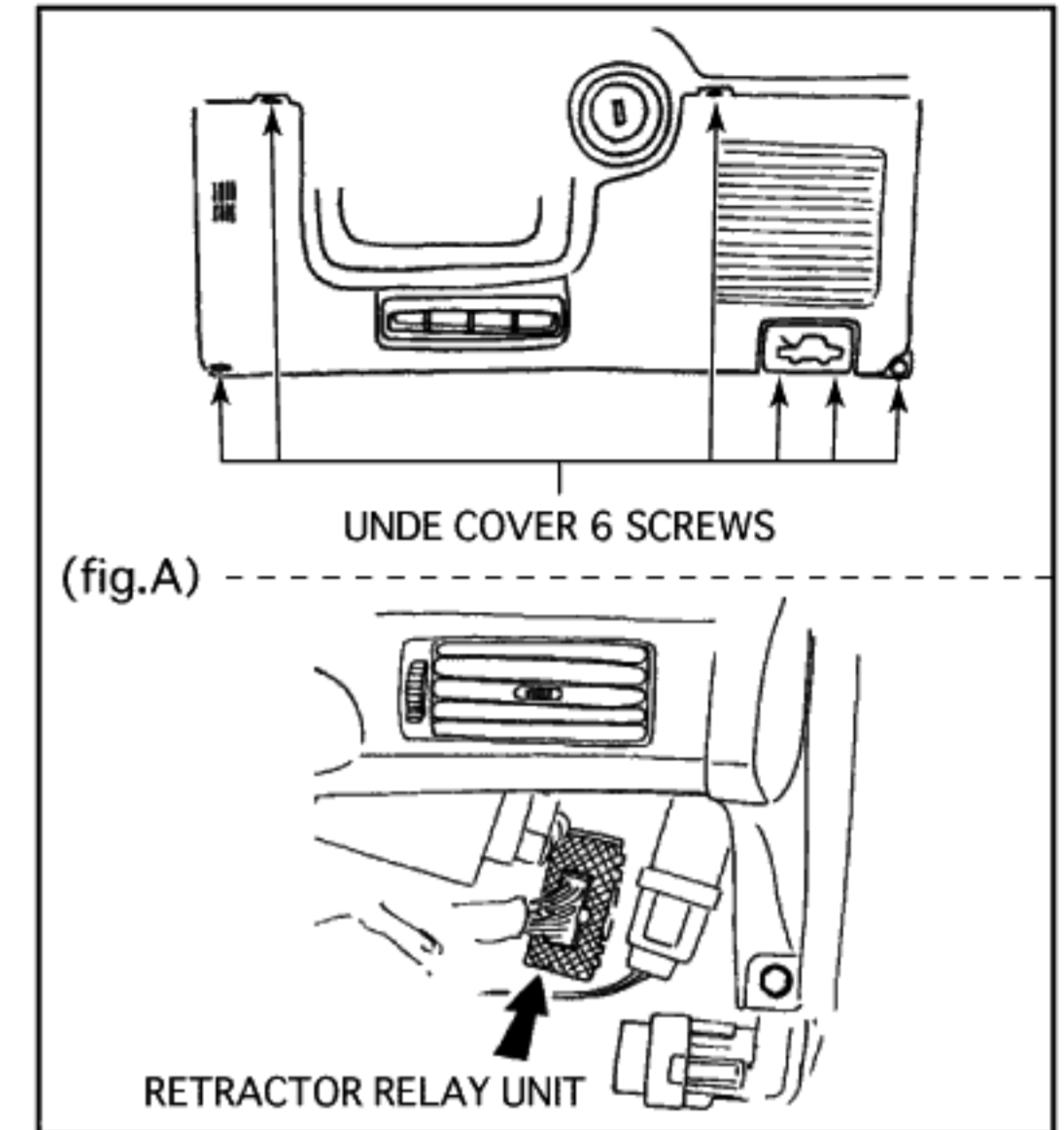
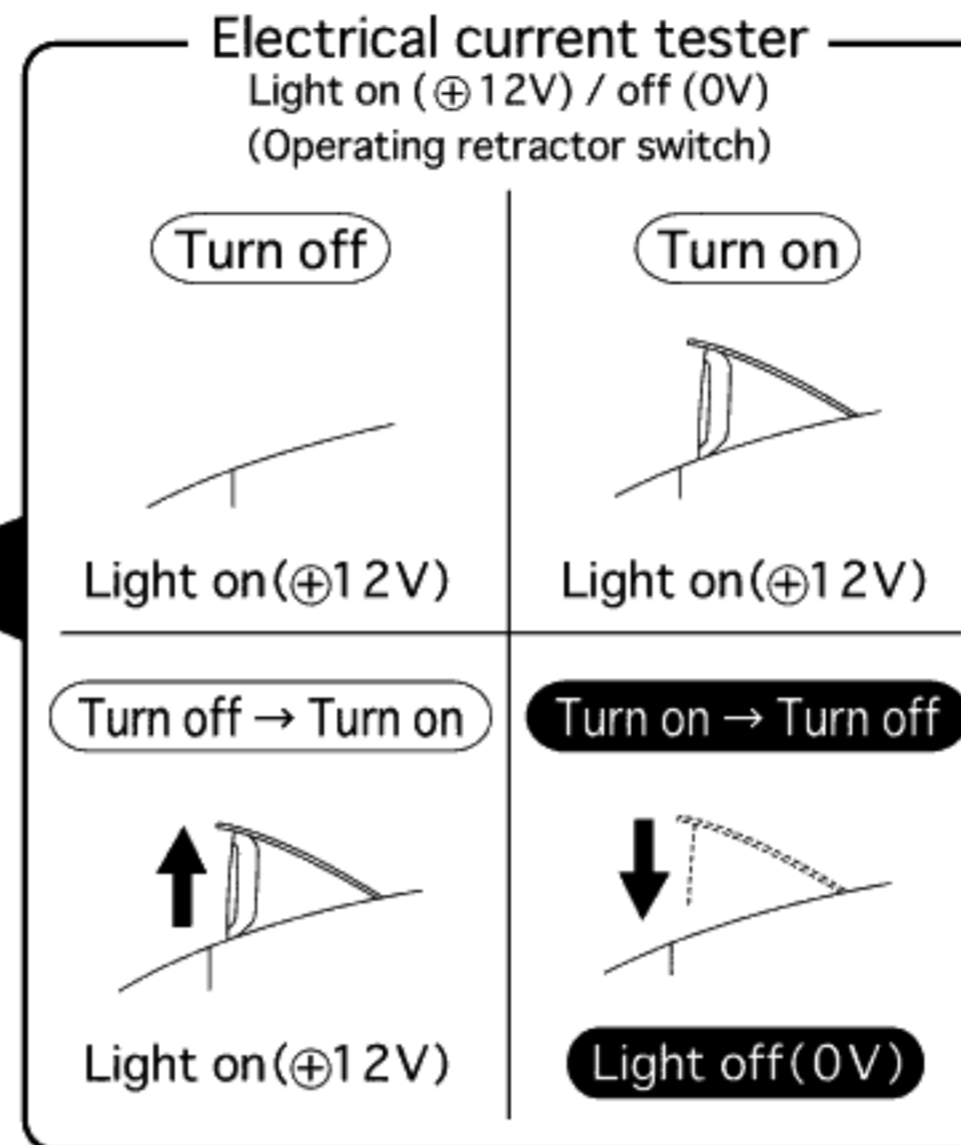
You can find retractor relay unit inside of dashboard when you remove under cover of drivers seat.

2 WIRING OF 4-PIN COUPLER (fig. B)

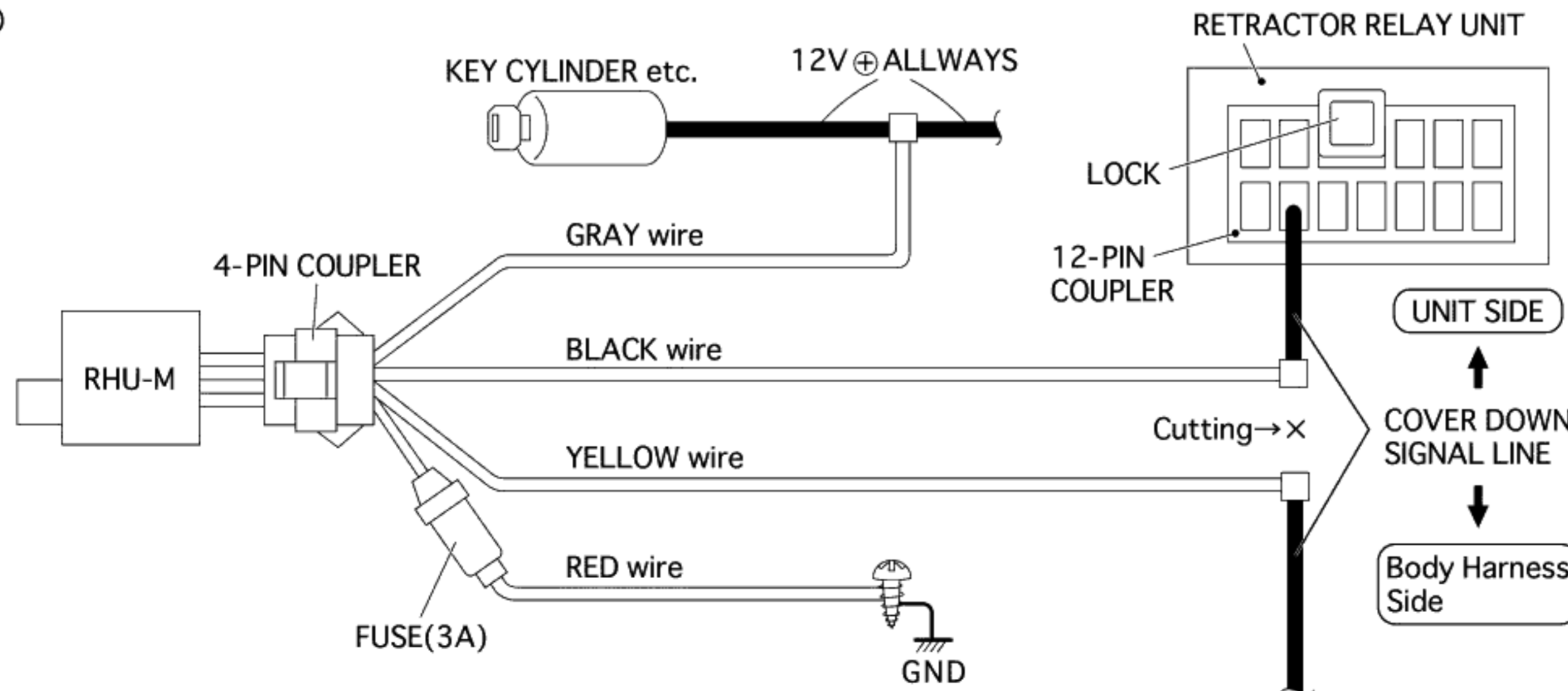
① Cut the middle of line which located lower second line from the left of 12-pin coupler when place the lock on top.

※ The line to cut is that an electrical current tester always get response (= +12V) except operating retractor switch from open to down. (During this operation, an electrical current tester get no response, =0V.)

- ② Connect black line to 12-pin coupler side of cut line and connect yellow line to the other side using the a connecting wire connector.
- ③ Unite the gray line to the line that 12V electrical current always go through it even when ignition key is turned off. (You can find out this line easily when you check the lines from key cylinder with an electrical current tester.)
- ④ Connect red line to a screw on car body for body ground.
- ⑤ Connect 4-pin coupler of control unit correctly.



(fig.B)



⚠ NOTE

If the head-light keepign fully open and can not close.



Imperfect wiring or connecting.

Please check all wiring, connecting point of wire connector, body ground, etc. Also check the fuse and it is burn out, please replace it.

1 HOW TO FIND OUT RETRACTOR CONTROL UNIT (fig. A)

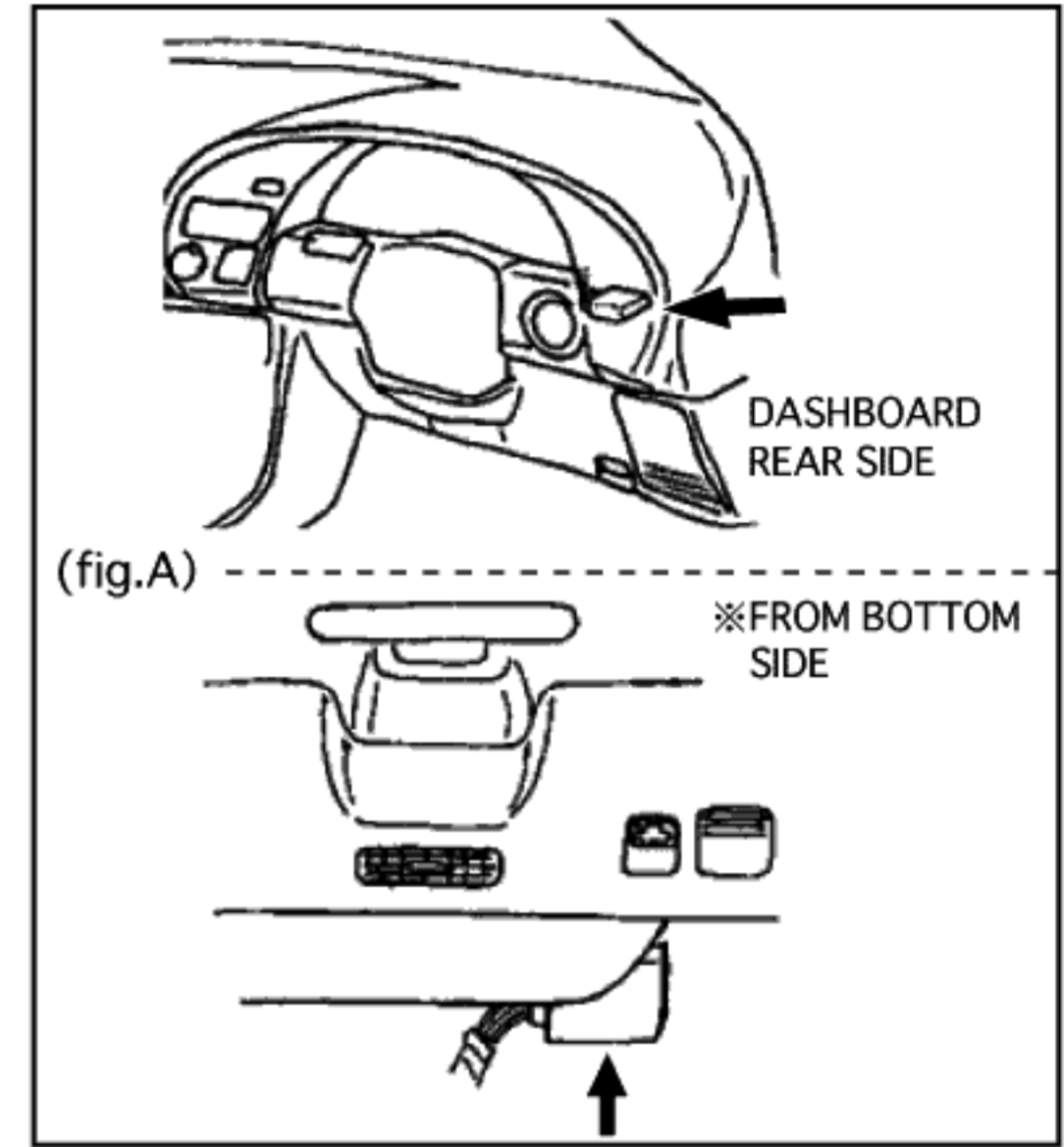
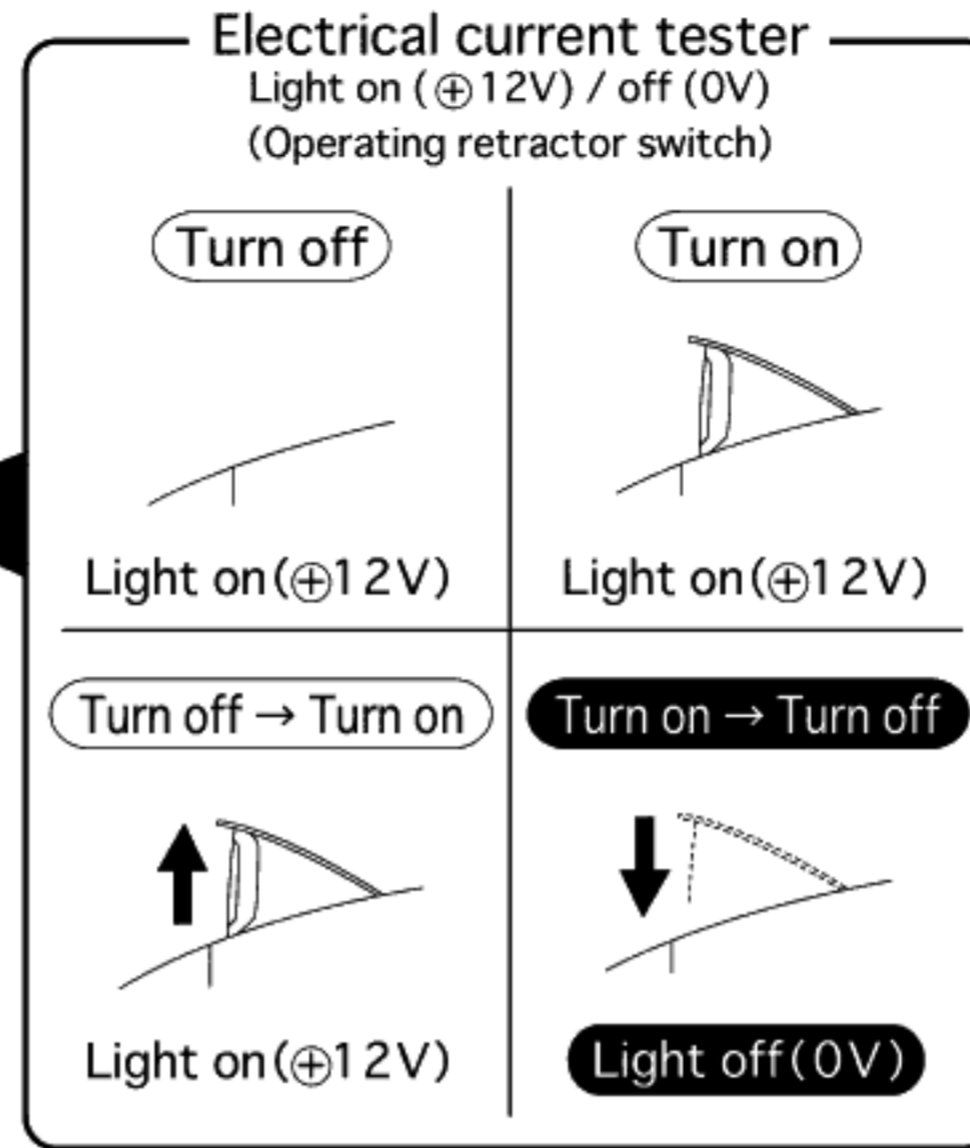
"RETRACTOR CONTROL" unit is located at rear side of dashboard.

2 WIRING OF 4-PIN COUPLER (fig. B)

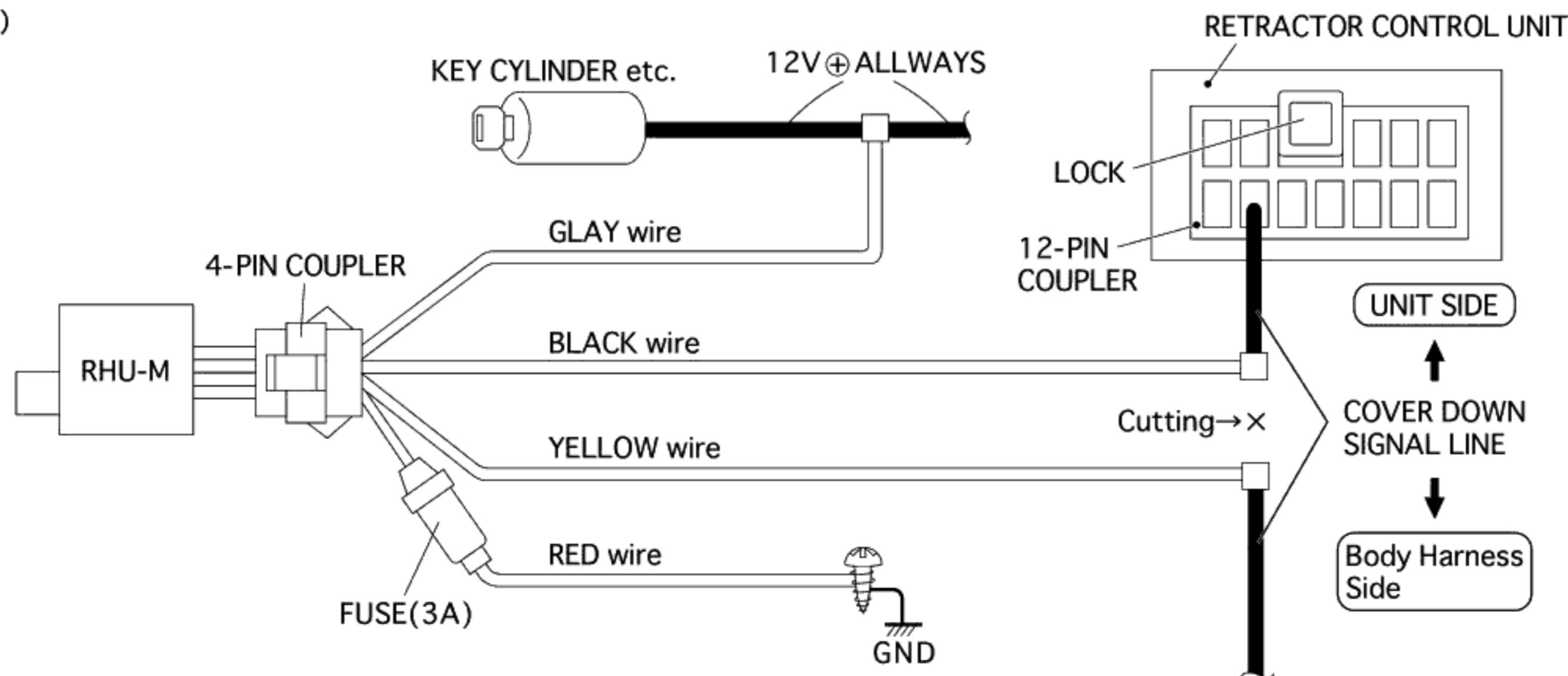
- ① Cut the middle of line which located lower second line from the left of 12-pin coupler when place the lock on top.

※ The line to cut is that an electrical current tester always get response (= +12V) except operating retractor switch from open to down. (During this operation, an electrical current tester get no response, =0V.)

- ② Connect black line to 12-pin coupler side of cut line and connect yellow line to the other side using the a connecting wire connector.
- ③ Unite the gray line to the line that 12V electrical current always go through it even when ignition key is turned off. (You can find out this line easily when you check the lines from key cylinder with an electrical current tester.)
- ④ Connect red line to a screw on car body for body ground.
- ⑤ Connect 4-pin coupler of control unit correctly.



(fig.B)



⚠ NOTE

If the head-light keepign fully open and can not close.



Imperfect wiring or connecting.

Please check all wiring, connecting point of wire connector, body ground, etc. Also check the fuse and it is burn out, please replace it.

1 HOW TO PULL OUT RETRACTOR TIMER UNIT (fig. A-B)

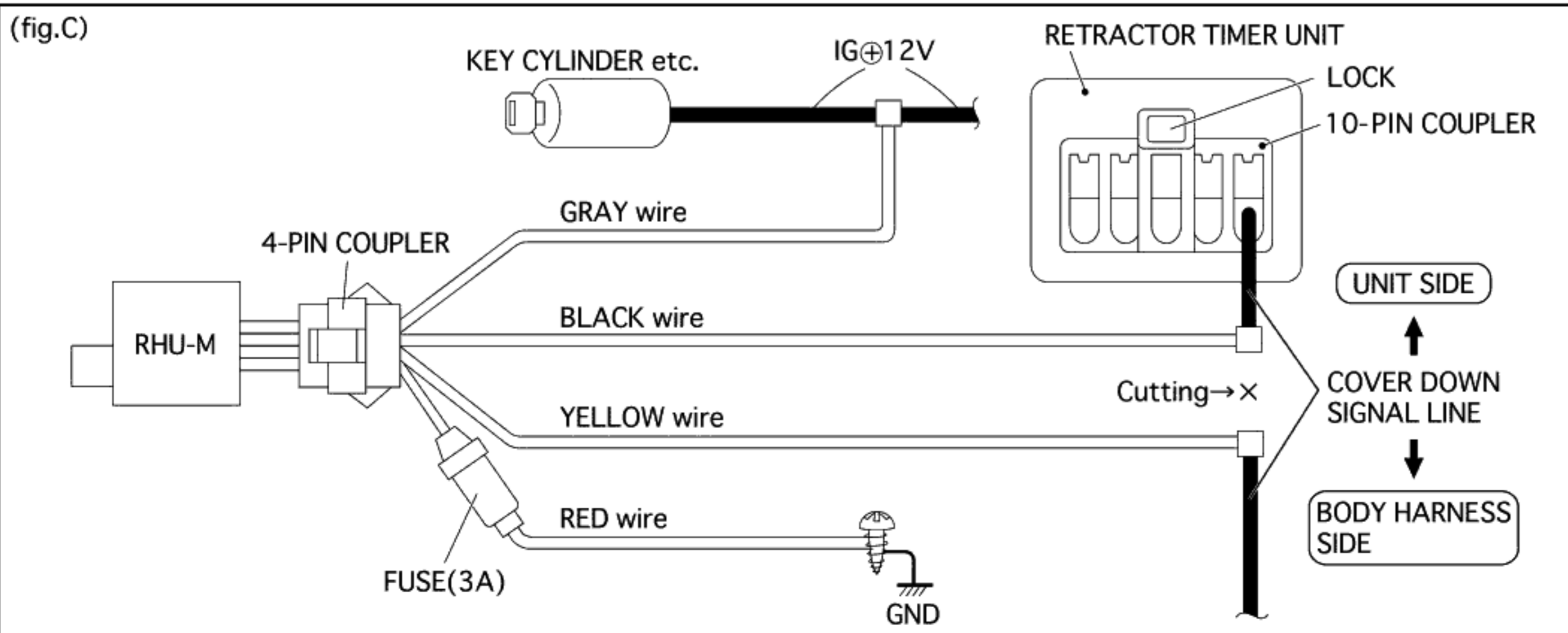
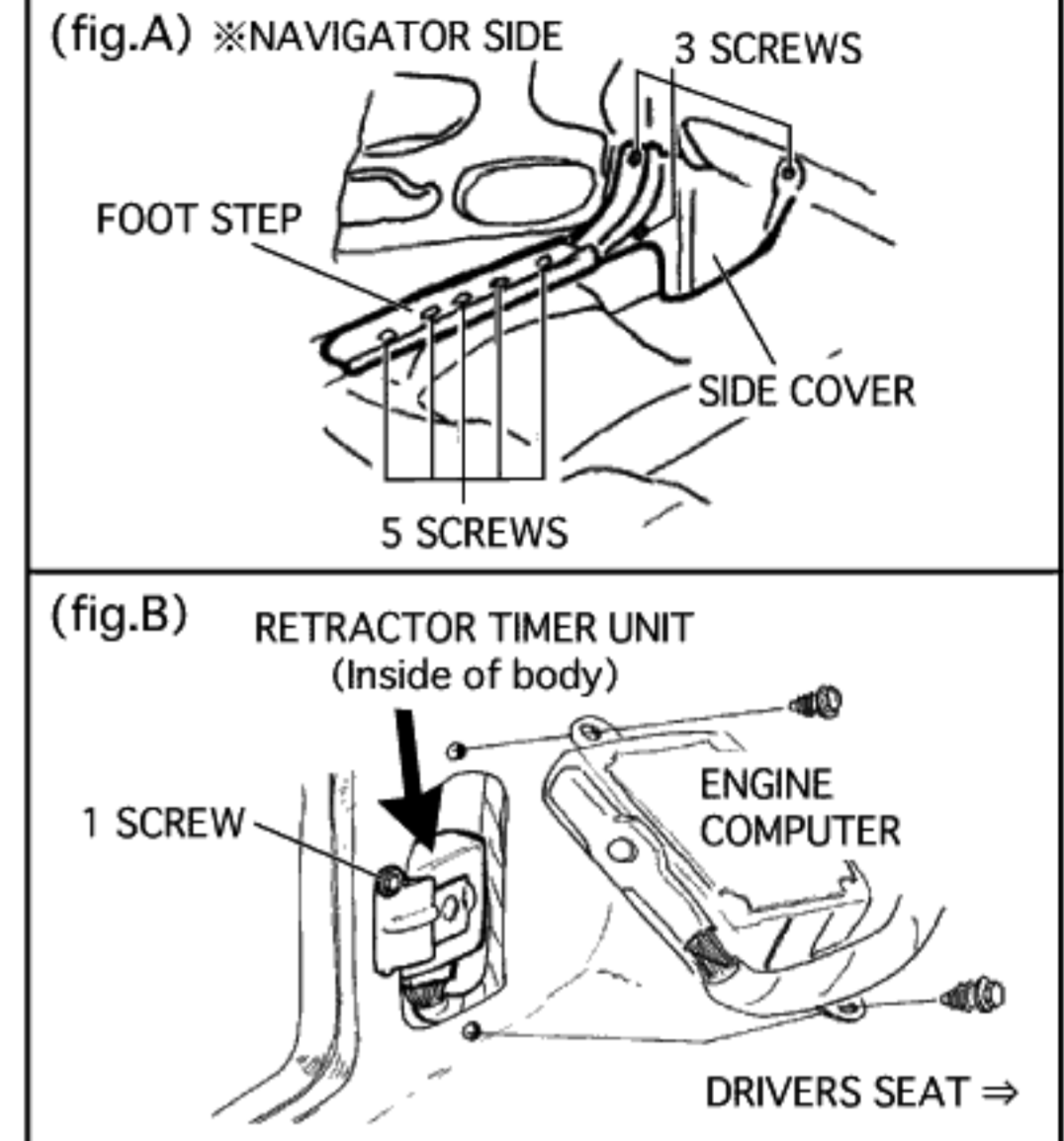
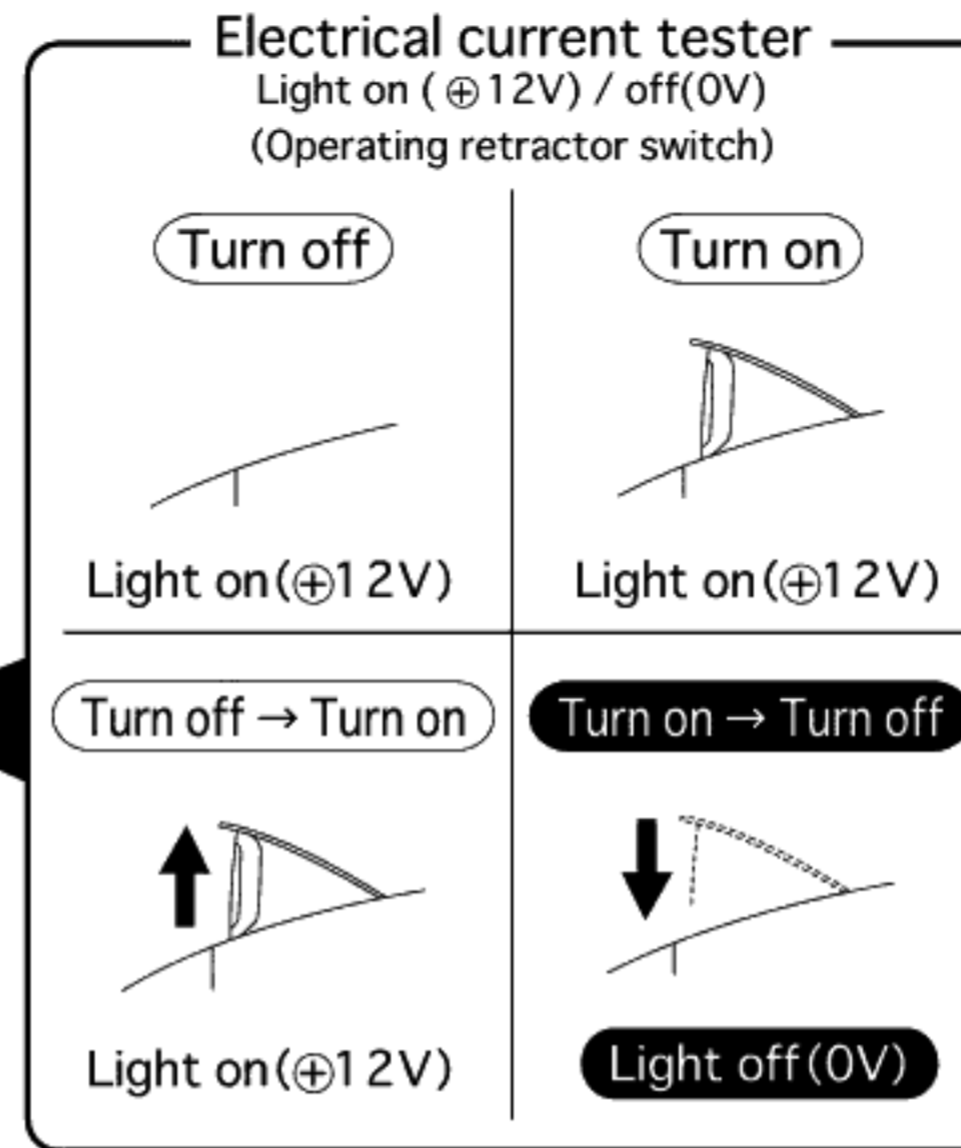
- ① Remove the foot step of navigator side after pull out 5 screws.
- ② Remove side cover after pull out 3 screws, and you can find engine computer inside.
- ③ Pull out 2 screws of engine computer and out it aside to make installation easier.
- ④ Pull out the retractable timer unit which is behind engine computer after pull off a screw.

2 WIRING OF 4-PIN COUPLER (fig. C)

- ① Cut the middle of line which located lower first line from the right 10-pin coupler when place the lock on top.

※ The line to cut is that an electrical current tester always get response (= +12V) except operation, an electrical current tester get no response (=0V).

- ② Connect black line to 12-pin coupler side of cut line and connect yellow line to the other side using the a connecting wire connector.
- ③ Unite the gray line to the line that 12V electrical current always go through it even when ignition key is ON (IG +12V=You can find out this line easily when you check the lines from key cylinder with an electrical current tester.)
- ④ Connect red line to a screw on car body for body ground.
- ⑤ Connect 4-pin coupler of control unit correctly.



NOTE

If the head-light keepign fully open and can not close.

↓

Imperfect wiring or connecting. Please check all wiring, connecting point of wire connector, body ground, etc. Also check the fuse and it is burn out, please replace it.

1 HOW TO PULL OUT RETRACTOR SWITCH COUPLER (fig. A)

- ※ Pull out the coupler of retractor switch on switch panel.
- ① Remove 5 screws (3 pcs in upper, 2 pcs in lower) and down steering wheel, then pull out switch panel without brake it.
- ② Pull out all wire coupler and take out switch panel.

2 WIRING OF 4-PIN COUPLER (fig. B)

- ① Cut the middle of red/yellow line of 14-pin coupler (the third line from right side in upper when place the lock on top).

※ The line to cut is that an electrical current tester get response (= +12V) when turn off the head-light and get no response (=0V) when turn on the head-light.

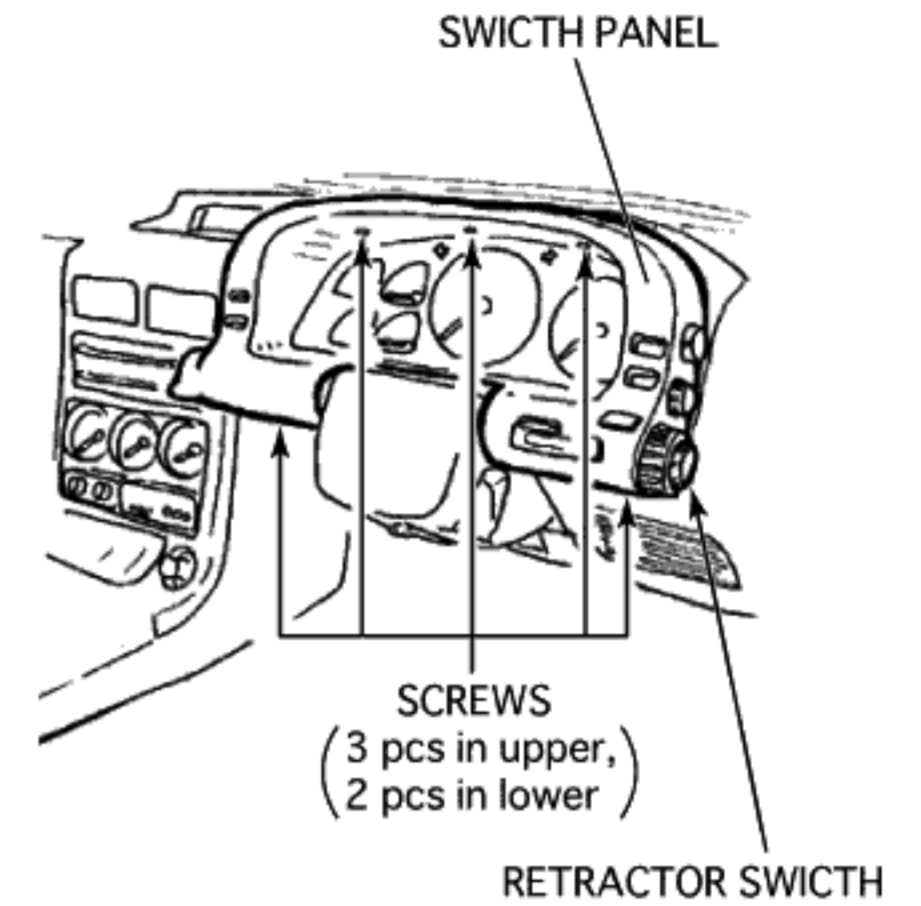
- ② Lead the gray & yellow lines of 4-pin coupler through rear side of dashboard and connect gray line to the other side using the a connecting wire connector.
- ③ Unite the red line to gray line with a diverging wire connector.
- ④ Connect the black line to a screw on car body for body ground.
- ⑤ Connect 4-pin coupler of control unit correctly.

Electrical current tester
Light on (+12V) / off (0V)
(Operating retractor switch)

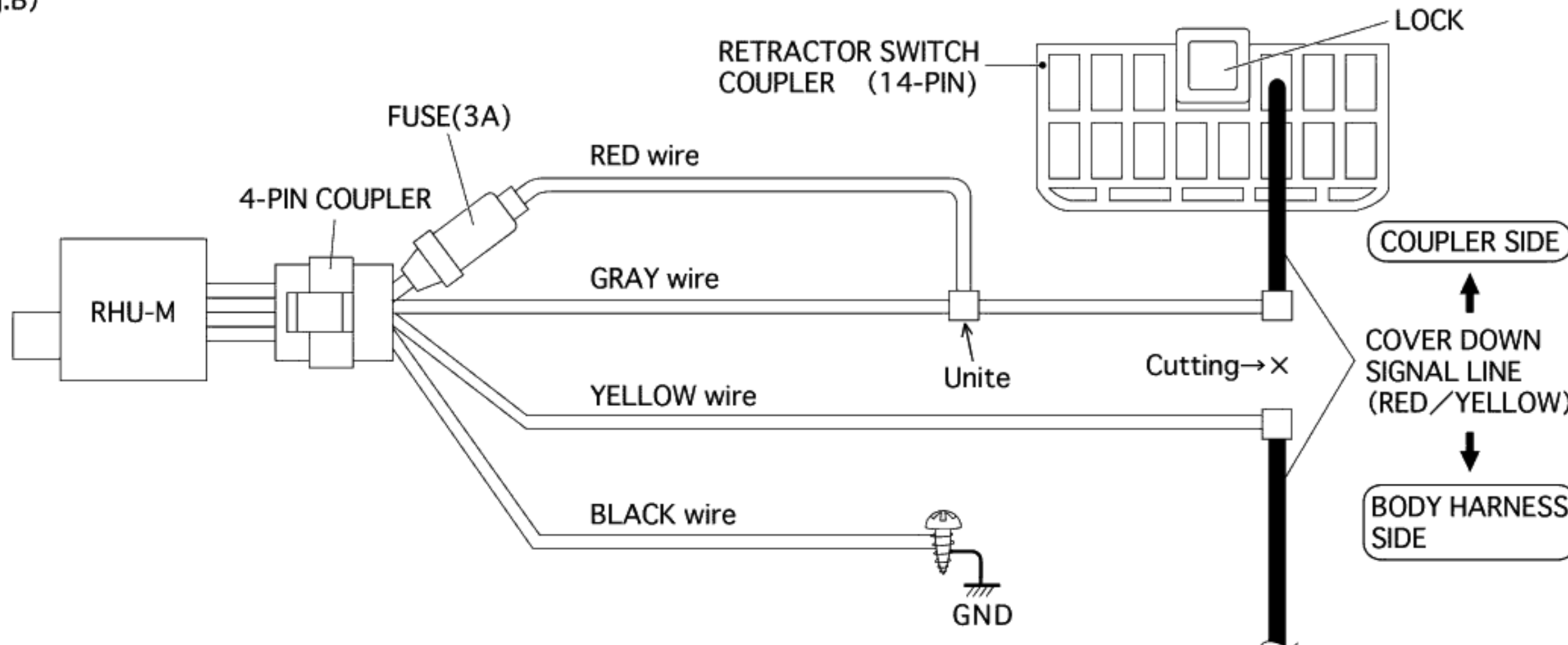
Turn off
Light on(+12V)

Turn on
Light off(0V)

(fig.A)



(fig.B)



⚠ NOTE

If the head-light keepign fully open and can not close.

⇓

Imperfect wiring or connect-ing.

Please check all wiring, connecing point of wire connector, body ground, etc.

Also check the fuse and it is burn out, please replace it.

1 HOW TO PULL OUT RETRACTOR SWITCH COUPLER (fig. A-B)

- ※ Pull out the retractor switch coupler next to meter unit.
- ① Remove the air duct next to dashboard then remove under after removing 3 screws (1 in side and 2 pcs in bottom).
- ② Remove column cover after removing 3 screws on the bottom.
- ③ Pull the meter unit to front and remove it after removing 2 screws on the bottom.

2 WIRING OF 4-PIN COUPLER (fig. C)

- ① Cut the middle of red/yellow line of 6-pin coupler (the first left line when place the lock on bottom).

※ The line to cut is that an electrical current tester get response (= +12V) when turn off the head-light and get no response (=0V) when turn on the head-light.

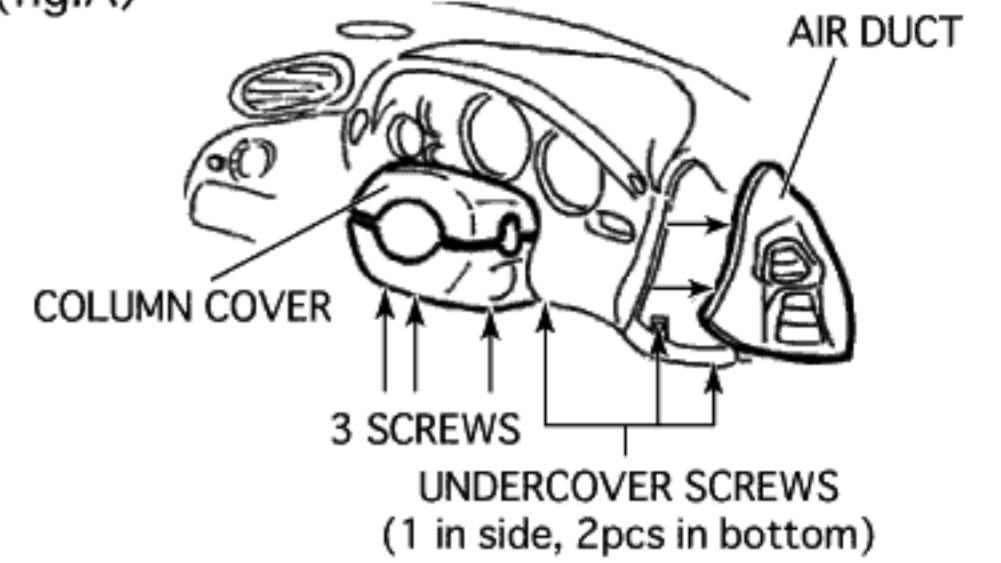
- ② Connect the gray lines to 6-pin coupler side of red/yellow line and connect yellow line to the other side using the a connecting wire connector.
- ③ Unite the red line to gray line with a diverging wire connector.
- ④ Connect the black line to a screw on car body for body ground.
- ⑤ Connect 4-pin coupler of control unit correctly.

Electrical current tester
Light on (+12V) / off (0V)
(Operating retractor switch)

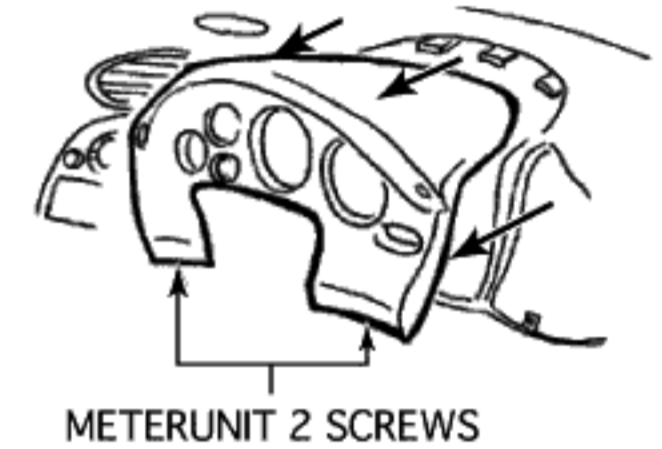
Turn off
Light on (+12V)

Turn on
Light off (0V)

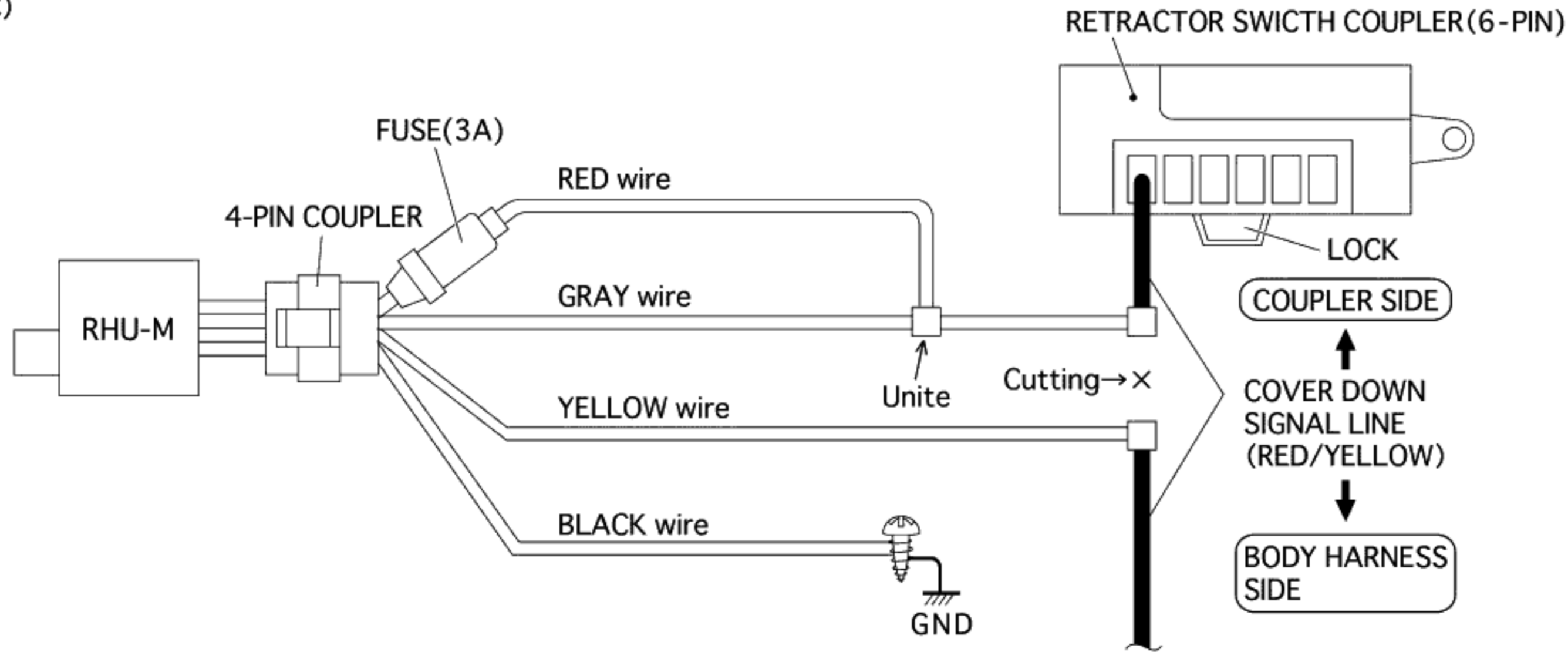
(fig.A)



(fig.B)



(fig.C)



⚠ NOTE

If the head-light keepign fully open and can not close.



Imperfect wiring or connect-ing.

Please check all wiring, connecing point of wire connector, body ground, etc. Also check the fuse and it is burn out, please replace it.

1 HOW TO FIND OUT "ETACS" UNIT (fig. A)

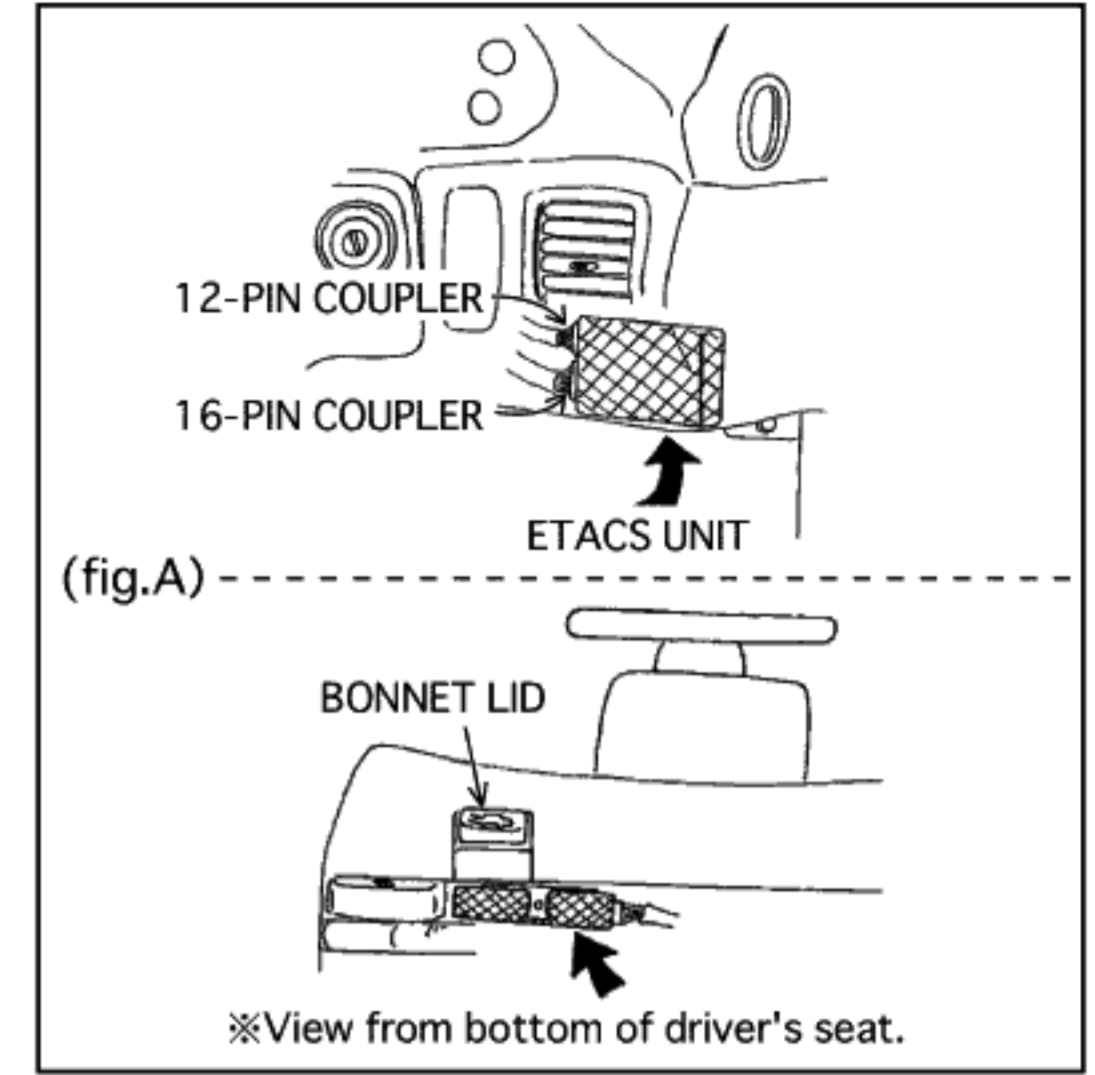
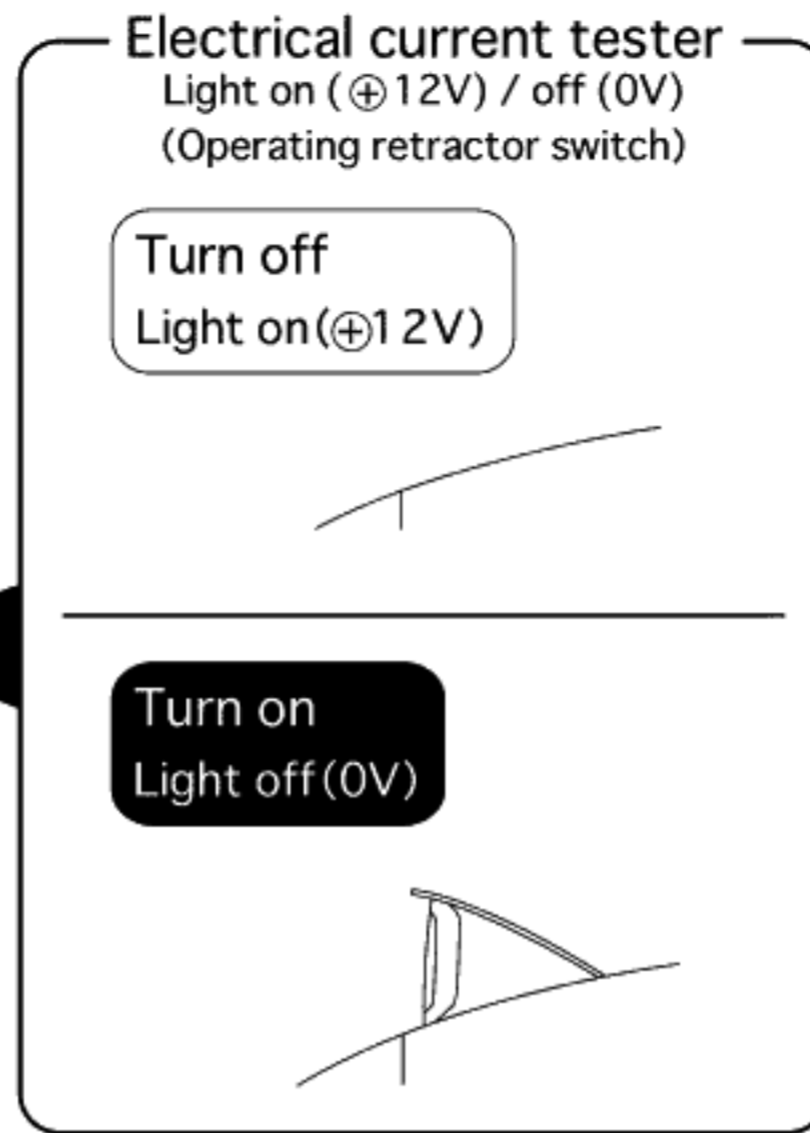
※ ETACS unit is located rear of bonnet lid. When you see from under cover side of drivers seat.
ETACS have 16-pin coupler at lower side and 12-pin coupler at upper side.

2 WIRING OF 4-PIN COUPLER (fig. B)

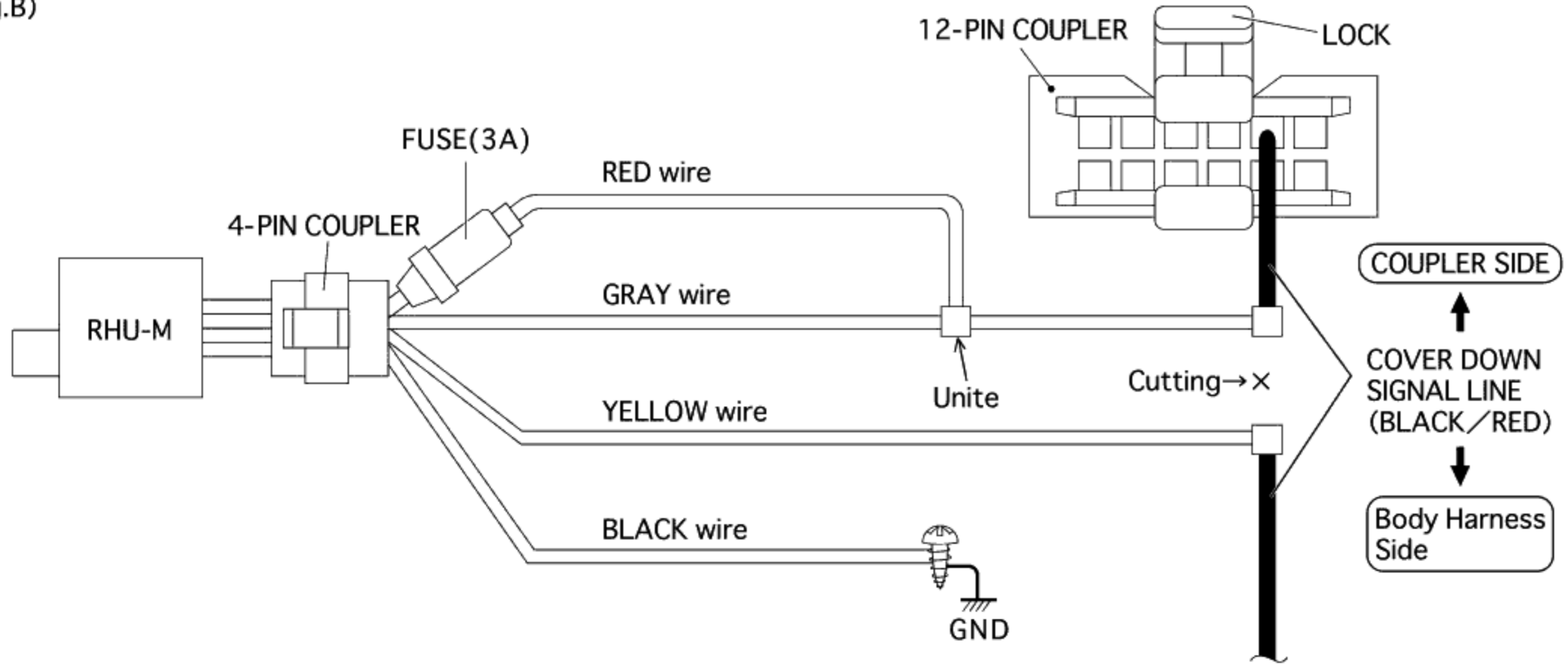
① Pull out the 12-pin coupler and cut the middle of black/red line (the upper second line from the right side).

※ The line to cut is that an electrical current tester get response (= +12V) when turn off the head-light and get no response (=0V) when turn on the head-light.

- ② Connect gray line to 12-pin coupler side of black/red line and connect yellow line to the other side using the a connecting wire connector.
- ③ Unite the red line to gray line with a diverging wire connector.
- ④ Connect the black line to a screw on car body for body ground.
- ⑤ Connect 4-pin coupler of control unit correctly.



(fig.B)



NOTE

⚠ If the head-light keepign fully open and can not close.

⇓

Imperfect wiring or connect-ing.

Please check all wiring, connecing point of wire connector, body ground, etc.

Also check the fuse and it is burn out, please replace it.

1 HOW TO FIND OUT RETRACTOR CONTROL UNIT (fig. A)

You can find "RETRACTOR CONTROL" unit at rear side of left head-light when you open front trunk.

※ Pull out the black & yellow line of 4-pin coupler from cabin to front trunk.

2 WIRING OF 4-PIN COUPLER (fig. B)

① Cut the middle of line which located lower second line from the left of 12-pin coupler when place the lock on top.

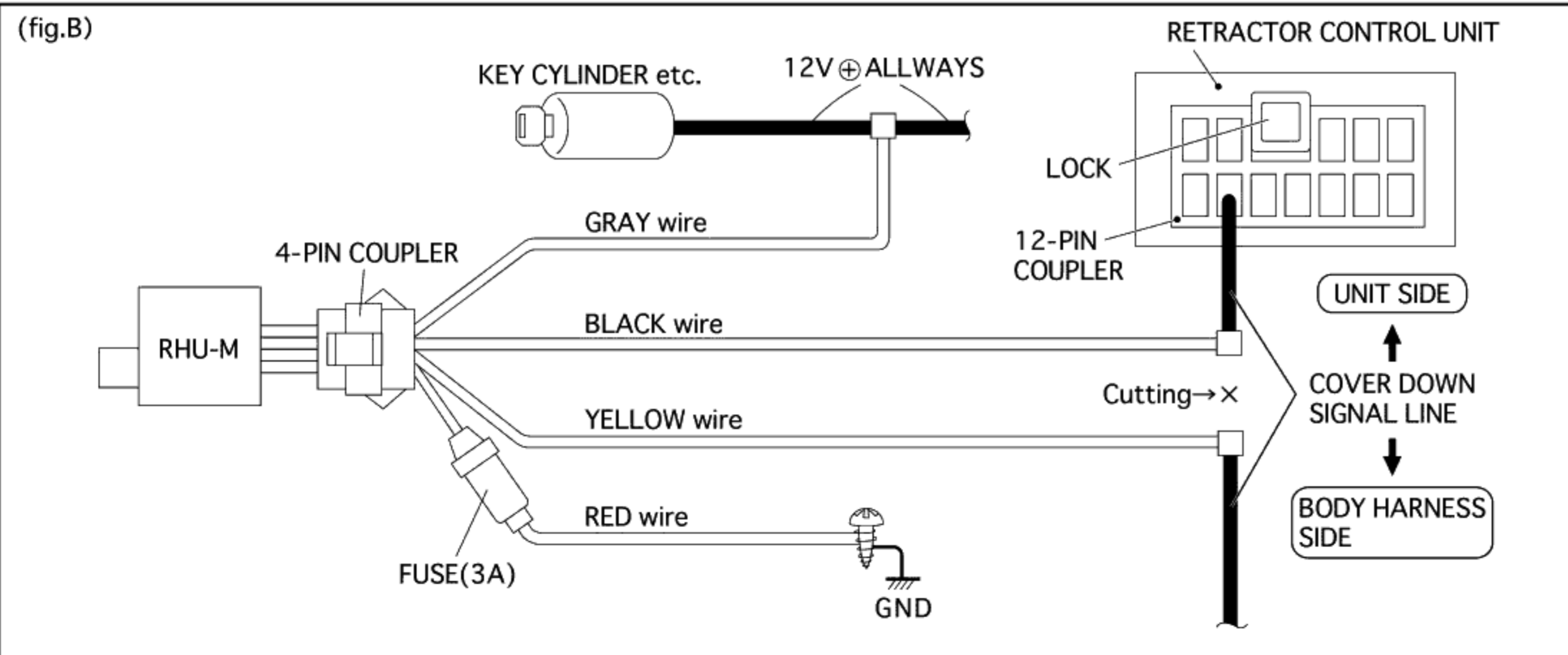
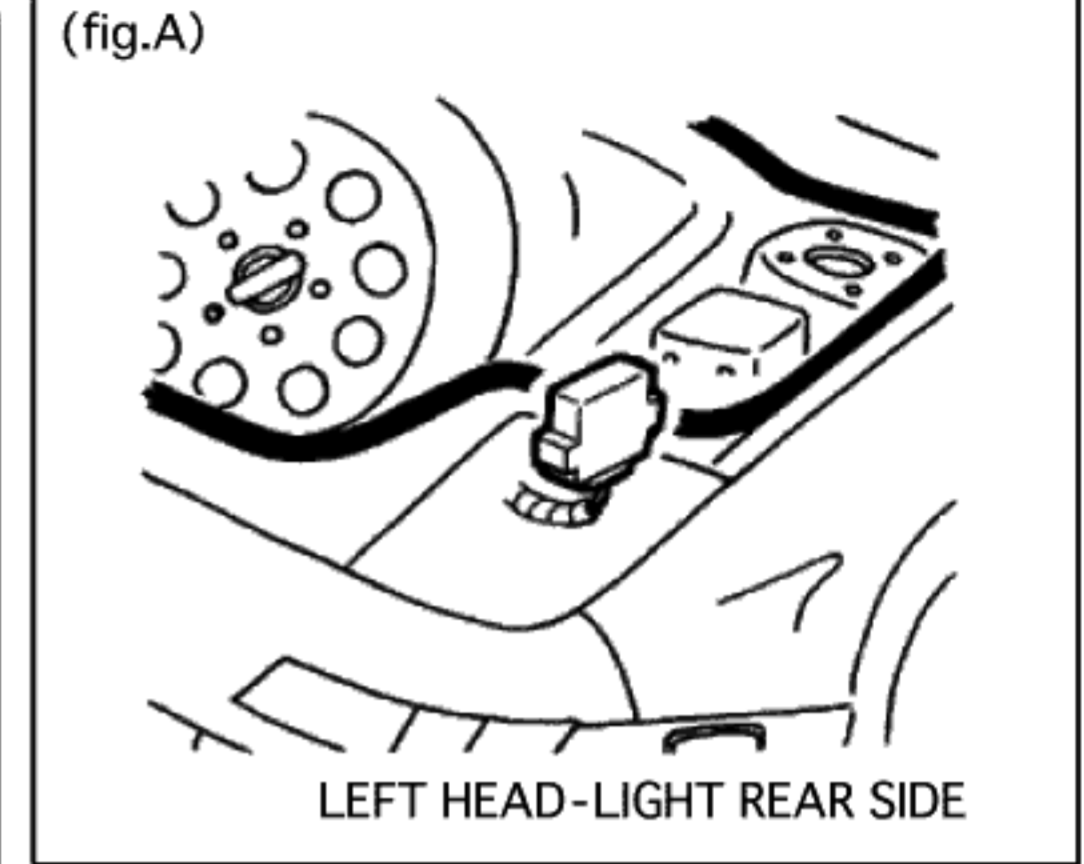
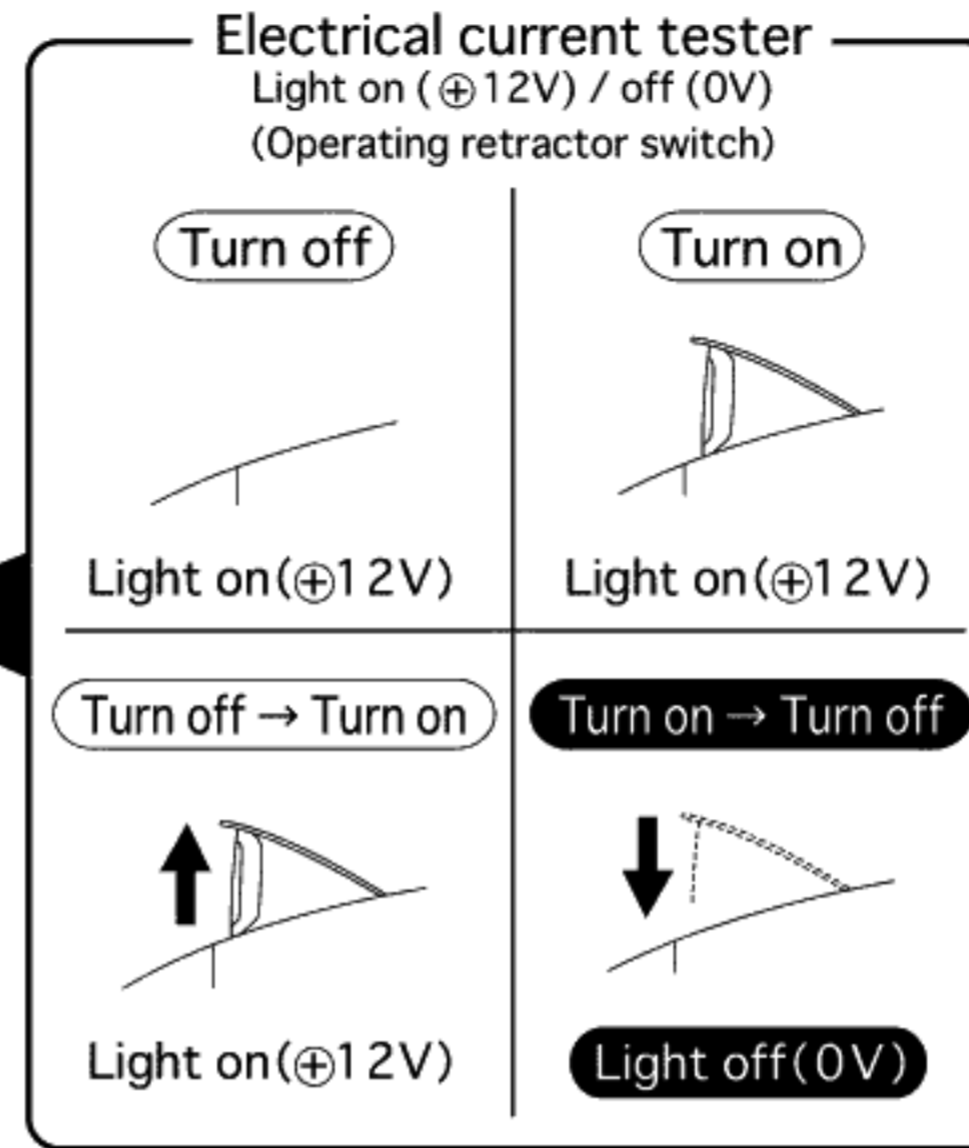
※ The line to cut is that an electrical current tester always get response (= +12V) except operating retractor switch from open to down. (During this operation, an electrical current tester get no response, =0V.)

② Connect black line to 12-pin coupler side of cut line and connect yellow line to the other side using the a connecting wire connector.

③ Unite the gray line to the line that 12V electrical current always go through it even when ignition key is turned off. (You can find out this line easily when you check the lines from key cylinder with an electrical current tester.)

④ Connect red line to a screw on car body for body ground.

⑤ Connect 4-pin coupler of control unit correctly.



NOTE

If the head-light keepign fully open and can not close.

↓

Imperfect wiring or connect-ing.

Please check all wiring, connecing point of wire connector, body ground, etc.

Also check the fuse and it is burn out, please replace it.

1 HOW TO FIND OUT RETRACTOR RELAY (fig. A-B)

Open the bonnet and remove the cover located on inner right. Then you can find retractor relay.

2 WIRING OF 4-PIN COUPLER (fig. C)

- ① Lead the gray & yellow line of 4-pin coupler to the engine room through the harness gromet located near retractor relay.
- ② Cut the middle of white with red line of from 5-pin retractor relay.

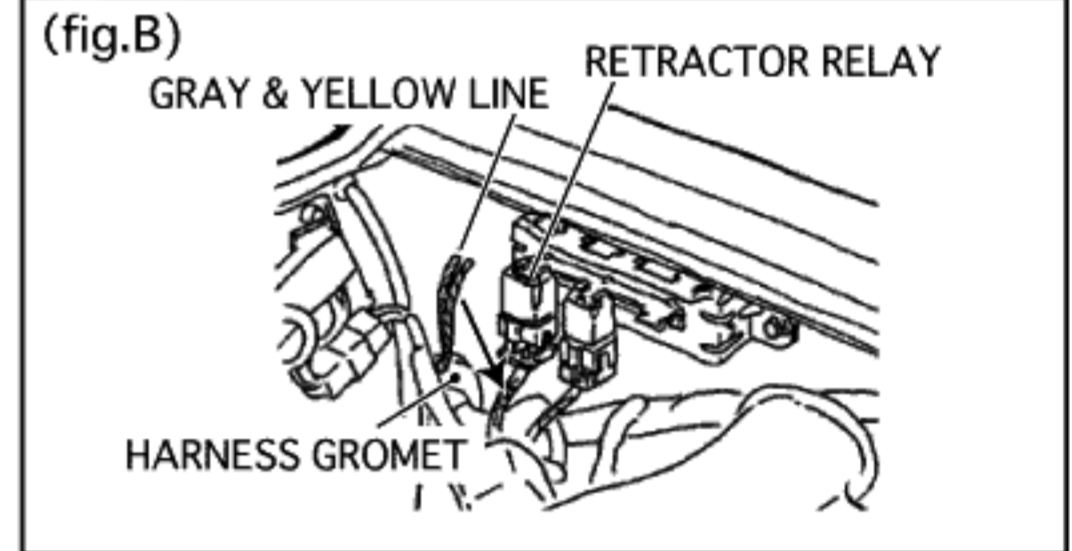
※ The line to cut is that an electrical current tester get response (= +12V) when turn off the head-light and get no response (=0V) when turn on the head-light.

- ③ Connect gray line to retractor relay side of white with red line and connect yellow line to the other side using the a connecting wire connectors.
- ④ Unite the red line to gray line with a diverging wire connectors.
- ⑤ Connect the black line to a screw on car body for body ground.
- ⑥ Connect 4-pin coupler of control unit correctly.

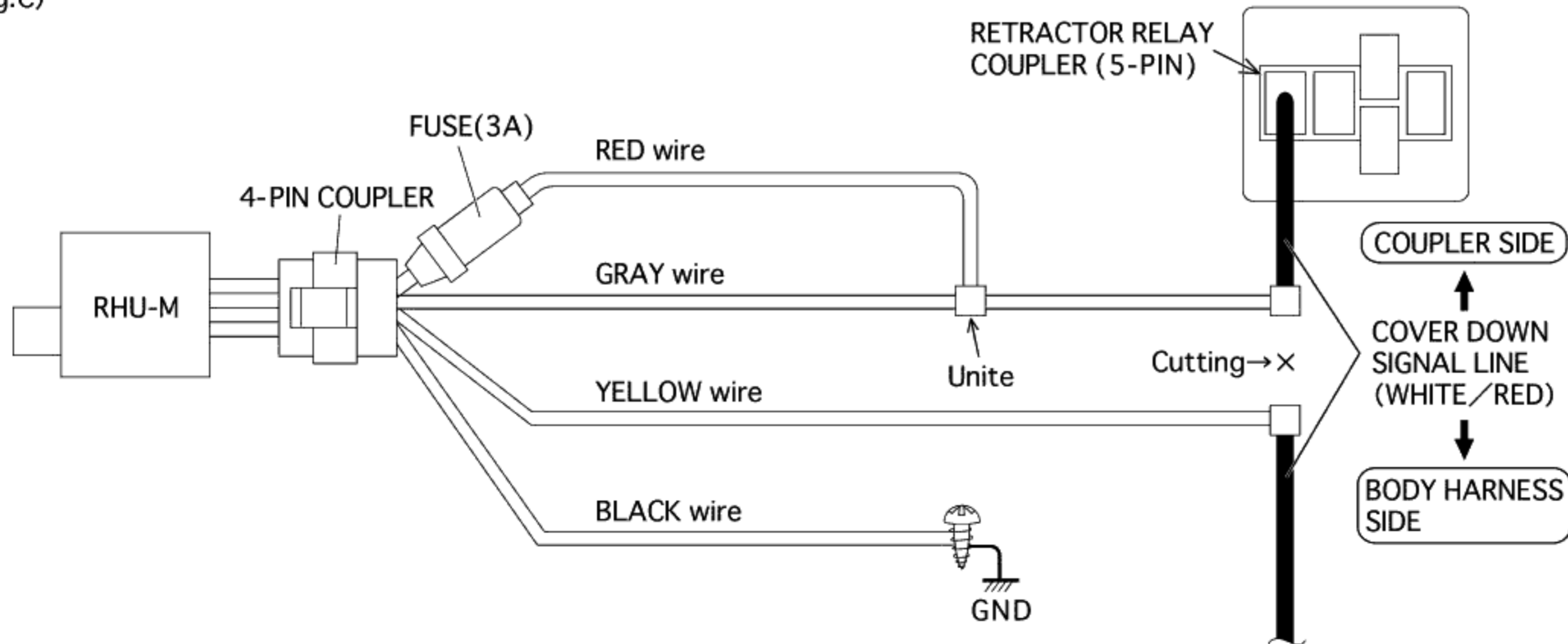
Electrical current tester
Light on (+12V) / off (0V)
(Operating retractor switch)

Turn off
Light on(+12V)

Turn on
Light off(0V)



(fig.C)



⚠ NOTE

If the head-light keepign fully open and can not close.

⇓

Imperfect wiring or connect-ing.

Please check all wiring, connecing point of wire connector, body ground, etc.

Also check the fuse and it is burn out, please replace it.

1 HOW TO FIND OUT RETRACTOR CONTROL UNIT (fig. A)

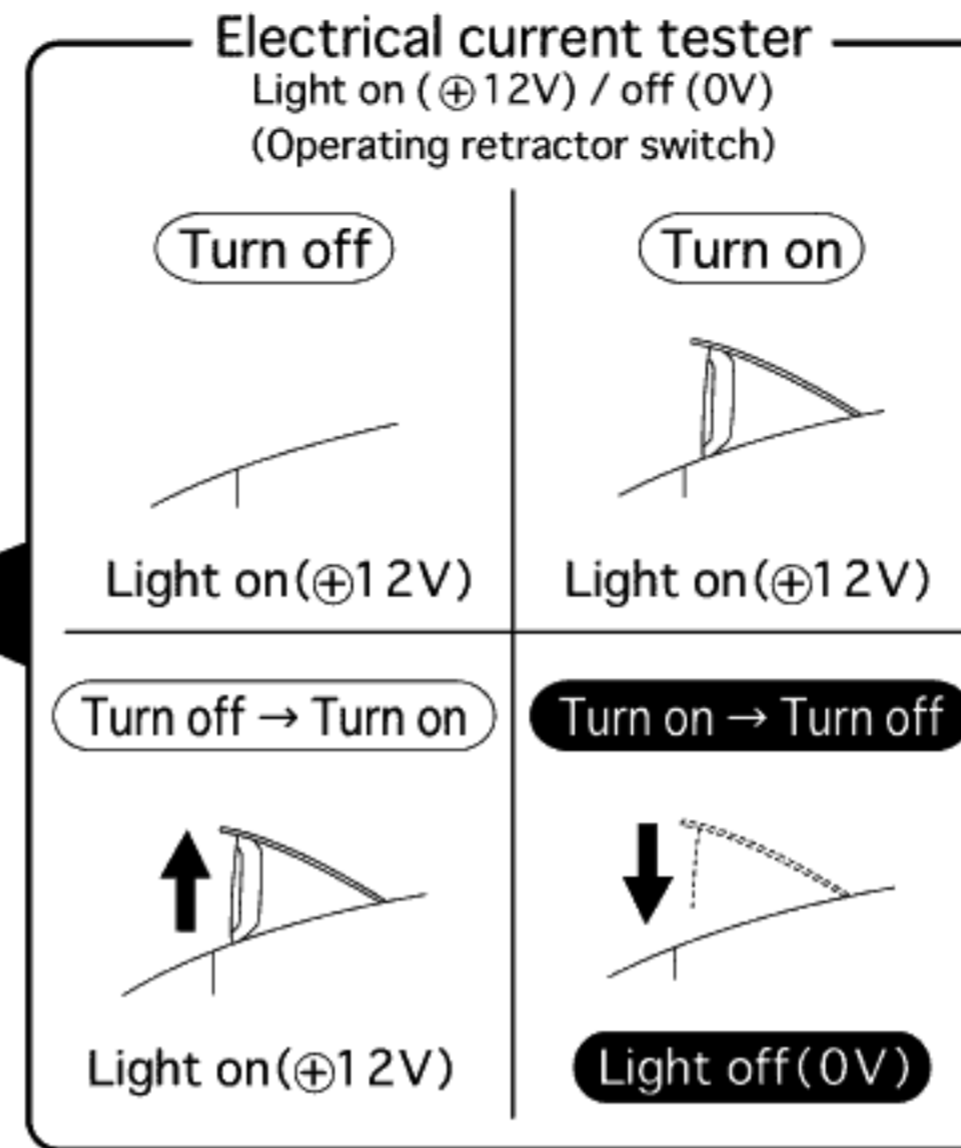
- ① Remove the under cover of drivers side after pull out 6 screws.
- ② And you can find a unit mentioning "RETRACTOR CONTROL" at upper right side inside of dashboard.

2 WIRING OF 4-PIN COUPLER (fig. B)

- ① Cut the middle of line which located upper right of 18-pin coupler when place the lock on top.

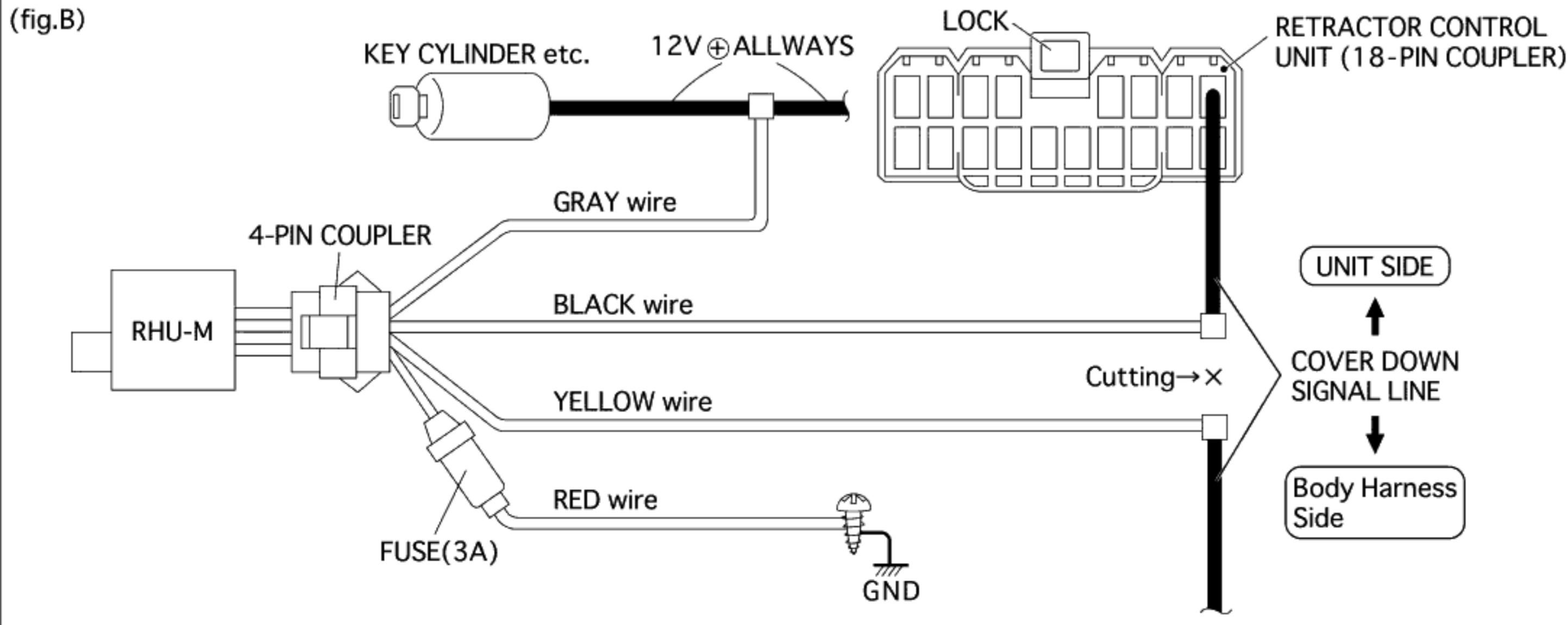
※ The line to cut is that an electrical current tester always get response(= ⊕12V) except operating retractor switch from open to down. (During this operation, an electrical current tester get no response, =0V.)

- ② Connect black line to 18-pin coupler side of cut line and connect yellow line to the other side using the a connecting wire connector.
- ③ Unite the gray line to the line that 12V electrical current always go through it even when ignition key is turned off. (You can find out this line easily when you check the lines from key cylinder with an electrical current tester.)
- ④ Connect red line to a screw on car body for body ground.
- ⑤ Connect 4-pin coupler of control unit correctly.



(fig.A)

In right side of dashboard, upper corner of side cover.



⚠ NOTE

If the head-light keepign fully open and can not close.



Imperfect wiring or connecting.

Please check all wiring, connecting point of wire connector, body ground, etc. Also check the fuse and it is burn out, please replace it.