

PIAA

Instruction manual for H.I.D. Bulb/harness kit (H4 Single , HB3/4 , H1 , H7 type)

Thank you very much for purchasing PIAA product.
Read this instruction manual thoroughly for proper use of the product.
Keep this instruction manual carefully.

※ ⚠ **Caution** marks and ⚠ **Warning** marks in this manual indicate important notices for installing this product. Be sure to follow these notices in order to ensure safe and reliable work.

(For customers) In lending or handing over this product, be sure to include this instruction manual.

(For installation service agents) ... Be sure to hand over this instruction manual to the customer after installation.

- In order to distinguish each part and area to facilitate installation, the actual shapes of the parts and areas may be slightly different from those illustrated in this manual. Common procedures for HID bulbs are described mainly using figures for the H1 type.

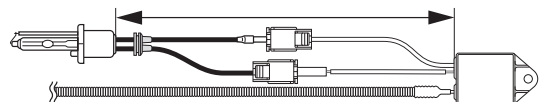
For customers

- Confirm the applicability table for each vehicle type carefully since some bulbs can not be installed due to interference between the tip of the H.I.D. bulb and either the shade or the lens in the lamp body although the bulb is otherwise suited to the customer's vehicle.
- This product is very dangerous because it generates high voltage. Ask a PIAA authorized dealer for installation and parts replacement.
- Please note that such services as maintenance-free service may become halted in some vehicles after installing this product. If you do not accept the above situation, please refrain from installing this product.
- Please note that an additional machining on the bulb-attaching part of the headlamp may become necessary in installing this product.
- Please note that the bulb burnt out monitor may become continuously turned on in some vehicles after installing this product. If you do not accept the above situation, please refrain from installing this product.
- Please note that, due to a remarkable improvement in brightness, some color of light which was not noticeable prior to installation of this product may become visible (especially in projector lamps) or that the light distribution may become different.
- Phenomena that do not arise with halogen bulbs may occur upon installing this product. They are typical of HID bulbs and are not malfunctions.(For details, refer to "In such cases" in a later section.)

⚠ Warning

- The wiring from the igniter to the H.I.D. bulb is very dangerous since a high voltage of about 20,000 volts is generated at the moment when the switch is turned on. Do not turn on the switch while holding harnesses.

A high voltage of about 20,000 volts is generated at the moment when the switch is turned on.

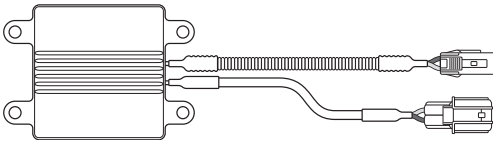


- Do not touch the lamp during lighting and immediately after turning off the headlamp since very high temperature of the lamp can cause burn injury. Turn off the switch and cool down the lamp completely before replacing the lamp.
- In any circumstances do not disassemble the PIAA H.I.D. bulb, the controller, the igniter or the low/high switching unit. Disassembling these components will not only invalidate regular maintenance but also cause serious troubles such as electrical shock if the product is used with these disassembled components.
- Do not wash the vehicle and do not pour water to the headlamp during lighting and immediately after turning off the lamp since the temperature difference can cause breakage of the lens.

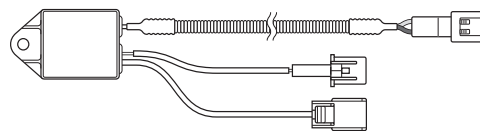
Content of the kit

※ Confirm that all parts are included in the kit.
Contact your dealer if any of the parts is missing.

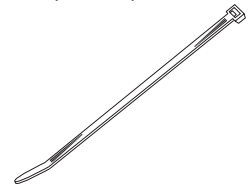
① Controller [Two pieces]



② Igniter [Two pieces]

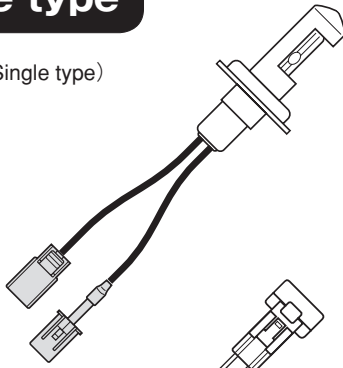


③ Tie wrap [Ten pieces]

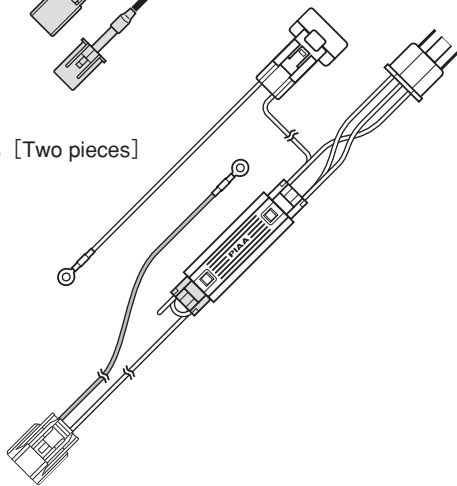


H4 Single type

④ H.I.D. bulb (H4 Single type)
[Two pieces]

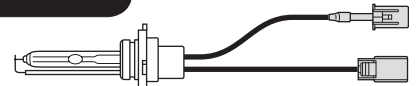


⑤ Relay harness [Two pieces]

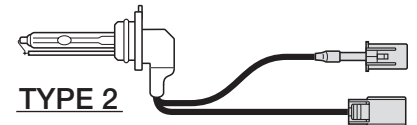


HB3/HB4 type

④ H.I.D. bulb (HB3/HB4 type)
[Two pieces]

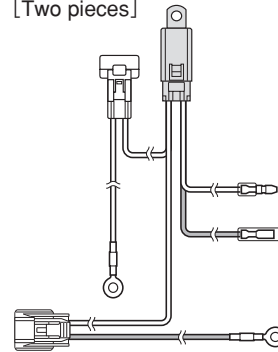


TYPE 1



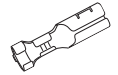
TYPE 2

⑤ Relay harness
[Two pieces]



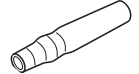
⑥ Plug (male)
[Two pieces]

⑦ Plug (female)
[Two pieces]



⑧ Plug tube (male)
[Two pieces]

⑨ Plug tube (female)
[Two pieces]

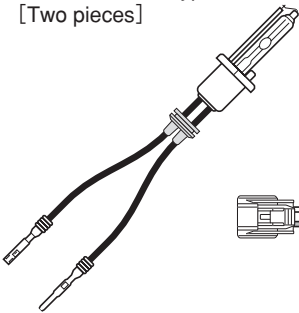


※ This product contains one of the above types of bulbs.
Make sure the shape matches the bulb contained.

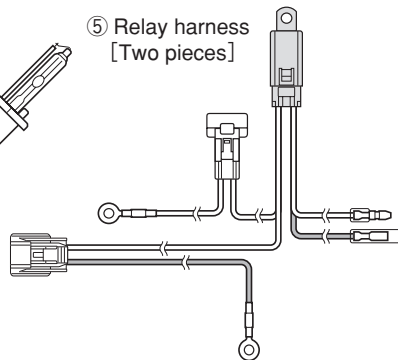
※ This manual illustrates the [TYPE 1] for the sake of explanation. [TYPE 2] should be handled in a similar manner.

H1 type

④ H.I.D. bulb (H1 type)
[Two pieces]



⑤ Relay harness
[Two pieces]



⑥ Plug (male)
[Two pieces]

⑦ Plug (female)
[Two pieces]

⑧ Plug tube (male)
[Two pieces]

⑨ Plug tube (female)
[Two pieces]

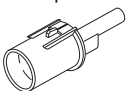


⑩ Bulb coupler A
[Two pieces]

⑪ Bulb coupler B
[Two pieces]

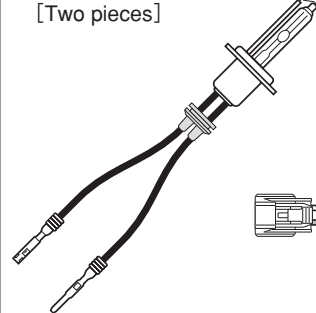
⑫ Stopper A
[Two pieces]

⑬ Stopper B
[Two pieces]

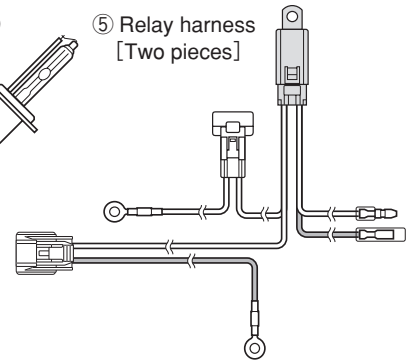


H7 type

④ H.I.D. bulb (H7 type)
[Two pieces]



⑤ Relay harness
[Two pieces]



⑥ Plug (male)
[Two pieces]

⑦ Plug (female)
[Two pieces]

⑧ Plug tube (male)
[Two pieces]

⑨ Plug tube (female)
[Two pieces]

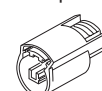
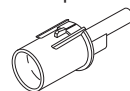


⑩ Bulb coupler A
[Two pieces]

⑪ Bulb coupler B
[Two pieces]

⑫ Stopper A
[Two pieces]

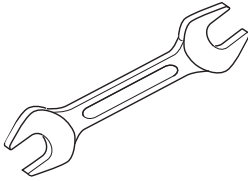
⑬ Stopper B
[Two pieces]



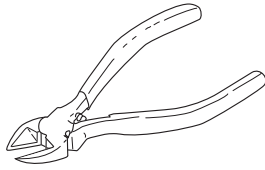
Tools

※ Use the following tools where necessary.

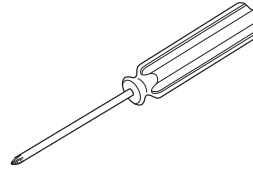
- Wrench (8mm, 10mm, 14mm)



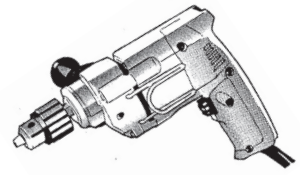
- Wire Cutters



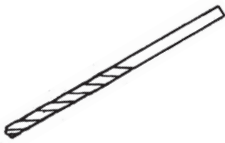
- Philips head screwdriver (+)



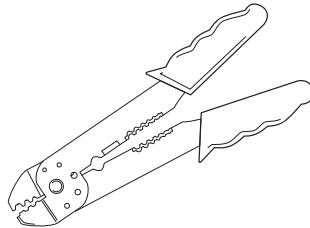
- Drill



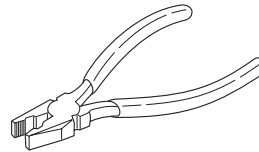
- Drill Bits



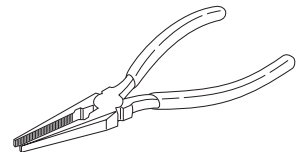
- Solderless terminal crimper



- Pliers

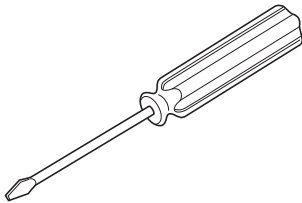


- Long-nose plier

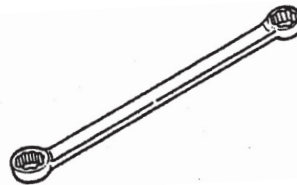


※ Use the following tools where necessary.

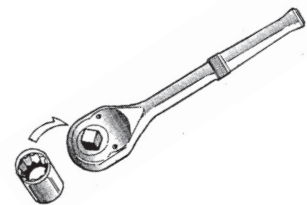
- Philips head screwdriver (-)



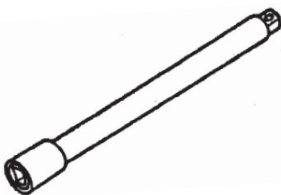
- Closed wrench



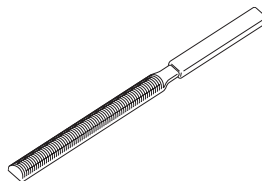
- Ratchet wrench



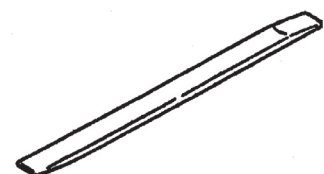
- Extension bar



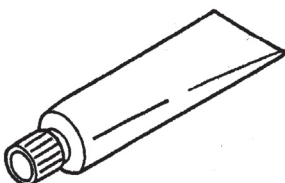
- File



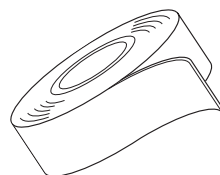
- Ornament remover



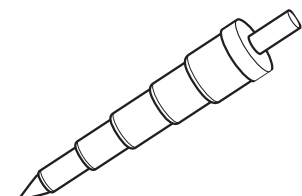
- Black seal adhesive



- Both side vinyl tape



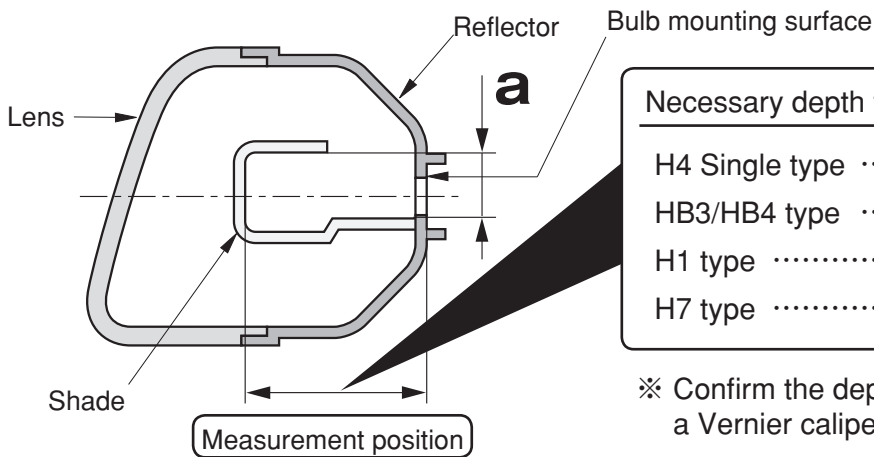
- Step Drill



Before starting installation 1

Confirmation whether installable or not

- The H.I.D. bulb can not be installed to those headlamps which have shallow bulb-installing depth (the distance between the bulb-fitting plane (reference plane) and the shade or the lens) since there will be interference between the tip of the H.I.D. bulb and the shade or the lens. The bulb-installing depth which allows installation of PIAA H.I.D. bulbs differs by the bulb types. Refer to the table below for necessary depth.
- The H4 type HID has a ϕ 24mm shade mounted on the bulb itself, and can not be mounted if the diameter of "a" is smaller than the bulb shade.

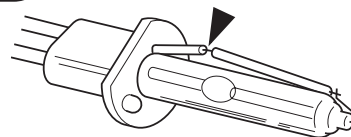


Necessary depth for installing PIAA H.I.D. bulbs	
H4 Single type	Not smaller than 60mm
HB3/HB4 type	Not smaller than 51mm
H1 type	Not smaller than 46mm
H7 type	Not smaller than 46mm

※ Confirm the depth by using an H.I.D. tester or a Vernier caliper.

Confirmation of the outer appearance of the bulb

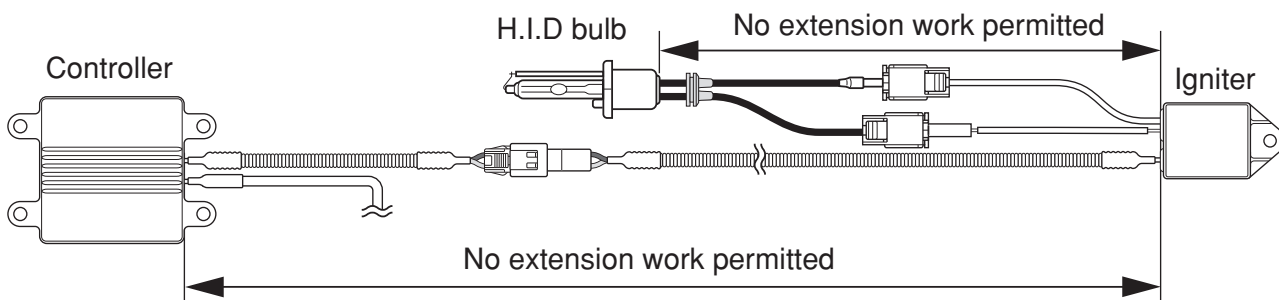
- Make sure that there are no breakage, no scratch and no stain on the bulb. Breakage, scratch or stain of the bulb can cause lighting failure.



※ This illustration is H1 H.I.D. bulb.

Confirmation of installing location for the controller and the igniter

- No extension or processing of the wiring from the controller through the igniter to the H.I.D. bulb is permitted. This is because any extension of the wiring can cause lighting failure due to voltage drop. Be sure to confirm installing locations for the controller, the igniter and the low/high switching unit before installation.



■ The installation work varies by the type of the H.I.D. bulb. Follow the procedures below for installation of each bulb.

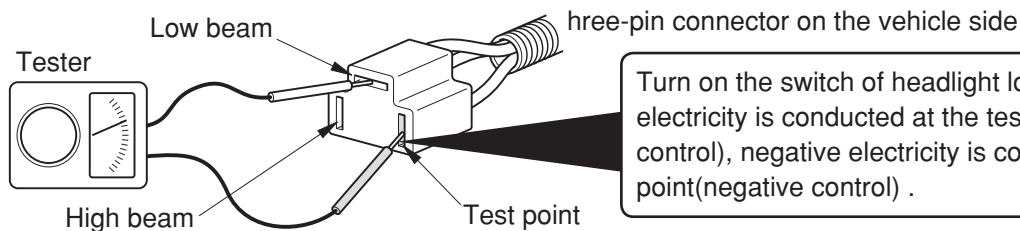
● For H4 Single bulbs Proceed to **Bulb lighting test - 1** on page 5.

● For HB3/4,H1,H7 bulbs . . . Proceed to **Bulb lighting test - 2** on page 6.

Bulb lighting test-1 [For H4 Single bulbs]

《Procedure for lighting test》

(1) There are 2 types of lighting polarities of the vehicle harness, one is positive control and the other is negative control. Remove the vehicle three-pin connector from the headlamp. Touch a tester to the connector and check the polarity. In case of positive control, replace both black and white connectors reversely as shown in figure below. (Factory setting :Negative control)



Turn on the switch of headlight low beam, positive electricity is conducted at the test point (positive control), negative electricity is conducted at the test point (negative control).

For negative control

Install as factory setting.



For positive control

Replace both black and white connectors reversely as shown in figure below.

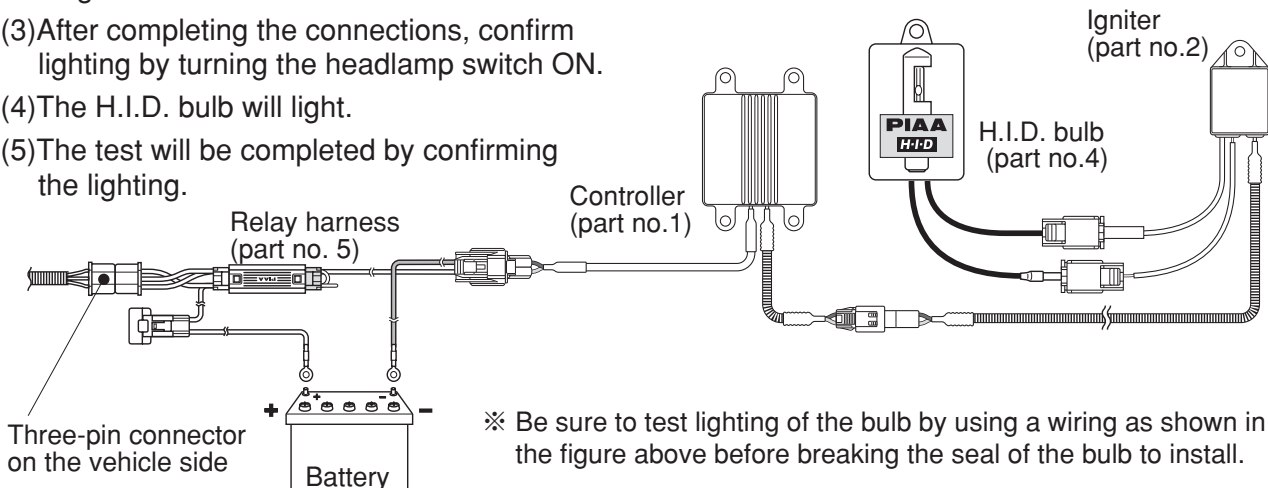


(2) Before breaking the seal of the H.I.D. bulb (part no.4), connect the bulb to the igniter (part no.2) and the controller (part no.1) respectively, then temporarily connect the relay harness (part no.5) to the battery terminals and the three-pin connector on the vehicle side according to the wiring diagram.

(3) After completing the connections, confirm lighting by turning the headlamp switch ON.

(4) The H.I.D. bulb will light.

(5) The test will be completed by confirming the lighting.



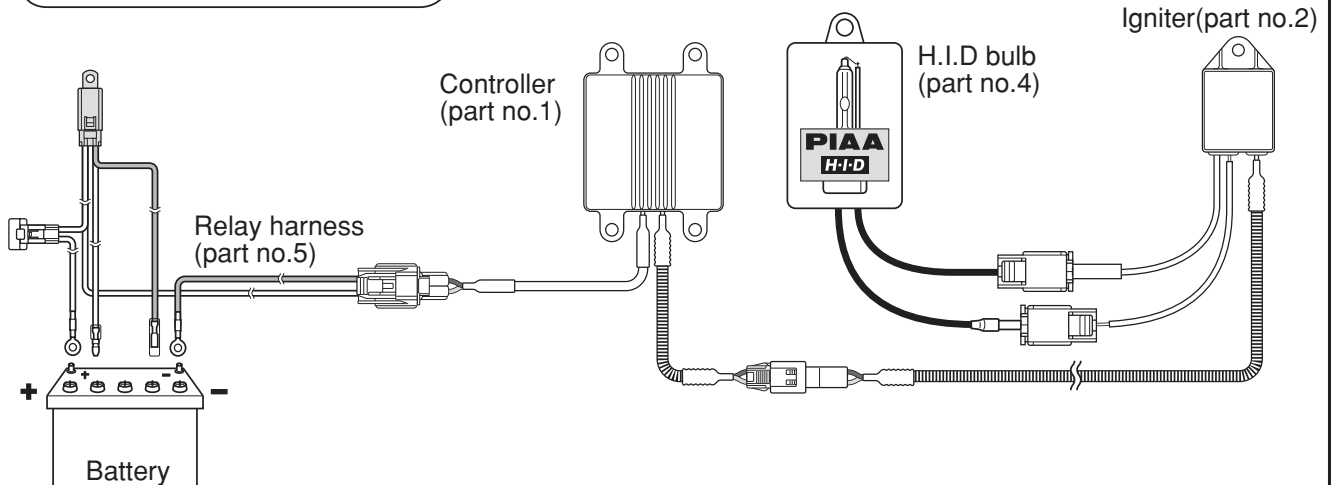
※ Be sure to test lighting of the bulb by using a wiring as shown in the figure above before breaking the seal of the bulb to install.

- Bulb should be tested for no longer than 10 seconds.
- In case the lighting test has been omitted, any damage happened during installation shall be out of complaint procedure.

● Proceed to **Caution for use / Be sure to read the notice for safe use** on page 6 after completing the bulb lighting test correctly.

Bulb lighting test-2

[For HB3/4,H1,H7 bulbs]



Be sure to test lighting of the bulb by using a wiring as shown in the figure above before breaking the seal of the bulb to install.

《 Procedure for lighting test 》

- (1) Before breaking the seal of the H.I.D. bulb (part No.9), connect the bulb harness to the wires of the igniter (part No.2) and the controller (part No.1), then temporarily connect two back wires of the relay harness (part No.3) to the negative terminal of the battery according to the wiring diagram.
- (2) After completing the above wiring, connect two white wires of the relay harness to the positive terminal of the battery.
- (3) The H.I.D. bulb will light.
- (4) The test will be completed by confirming the lighting.

● Bulbs should be tested for no longer than 10 seconds.

● In case the lighting test has been omitted, any damage happened during installation shall be out of complaint procedures.

- Proceed to **Caution for use / Be sure to read the notice for safe use** on page 6 after completing the bulb lighting test correctly.

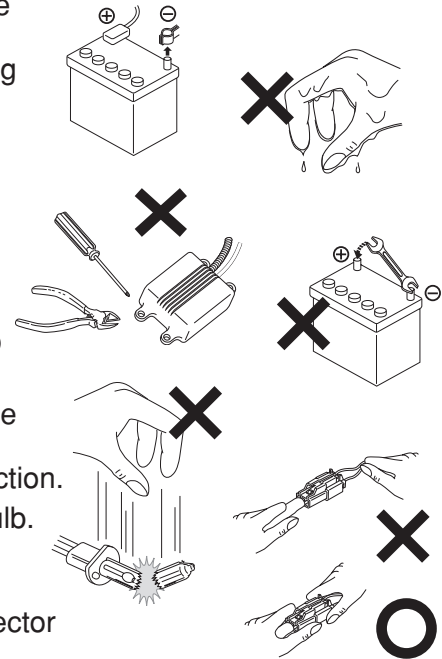
Caution for use / Be sure to read the notice for safe use

⚠ Caution

- In case the lamp will not light, read "In such cases..." described later
- Please ask a PIAA authorized dealer if replace the bulb or other parts.
- This product is designed and manufactured for automobiles. Do not install it to any object other than an automobile.
- Do not light the lamp near flammable material such as paper and fabric to avoid fire disaster.
- Do not light the lamp near inflammable material such as gasoline, combustible spray cans, thinner and lacquer to avoid fire disaster.
- Lighting the lamp while the engine is not running can cause the battery to run out which will result in a failure of starting the engine.
- Do not switch head light beam many times. Because these can cause shorted life of the HID bulb.
- Always turn the headlamp switch OFF before turning off the engine. If you start the engine with the headlamp switch ON, the life of HID bulbs may be shortened due to changes in the vehicle voltage, etc.

Caution for installation / Be sure to read the cautions**⚠ Warning**

- Be sure to disconnect the positive and negative terminals of the battery before starting installation. Disconnect the negative terminal of the battery first, while taking care not to short-circuit.
- Avoid work in a place where rain falls. Working with wet hands can cause electrical shock which is very dangerous.
- Do not disassemble or alter the bulb, harnesses, the controller, the igniter or the low/high switching unit. Disassembling or remodeling of these components can cause overheating or short-circuit as well as fire disaster of the vehicle in the worst case. PIAA will not assume responsibility on any trouble due to remodeling.
- Be careful not to contact a metallic object to the positive and the negative terminals of the battery at the same time to avoid electrical shock and short-circuit. Wear rubber gloves for protection.
- Do not drop, apply unreasonable force, or scratch the H.I.D. bulb. Breakage of the bulb can cause injury. Also it may lead to deterioration of function or shortened life.
- Attach and detach the connector correctly by holding the connector body. Incorrect connection can cause lighting failure.

**⚠ Caution**

- Install the product in a level place by ensuring sufficient area and safety. Put the gearshift lever into either neutral or parking, apply the parking brake, stop the engine, turn off the headlamp switch and pull out the ignition key.
- Install the product after the temperature inside the engine room becomes sufficiently low. Do not work while high temperature sections such as the engine unit, the radiator, the oil cooler and the turbine of the turbocharger are hot.
- Be careful to handle bulbs, harnesses, the controller, and the igniter. Giving shock by dropping or hitting any object can cause damage to bulbs, harnesses, the controller and the igniter.
- Be careful not scratch bulbs, harnesses, the controller, the igniter, and body parts such as bumpers during detaching and attaching the product.
- Be careful not lose any parts detached.
- Install the product by two or more persons.
- Fasten bolts tightly. Make a test run and fasten the bolt again if it works loose.
- After installing the bulb, be sure to have the light axis adjusted by a PIAA authorized dealer. Adjust the headlamps so that the main light axis of the low beam reaches within 40m in front of the vehicle and is directed to the left of the moving direction in order not to dazzle oncoming cars. (This is as regulated by law.)
- Confirm normal operation of lamps including the headlamp, wipers, and horns after installation of this product.
- Detaching the battery terminals will erase the memories of the clock, the radio and the audio equipment. Readjust them after completing installation. (Refer to the instruction manual of the vehicle for adjustment.)
- Do not touch the glass part of the H.I.D. bulb during handling. Also do not stain the bulb. These can shorten the life as well as deteriorate the function of the bulb.
- Install the H.I.D. bulb correctly by confirming the shape of its metal socket. Also connect the harness correctly and securely. Wrong installation or inaccurate connection can cause lighting failure, dropping or overheating of the bulb and shortened life of the bulb.
- Do not light the H.I.D. bulb outside the lighting fixture except for test lighting.



For authorized dealers

※ Customers are strongly required to refrain from installing the product by themselves.

Caution for wiring / Be sure to read the cautions

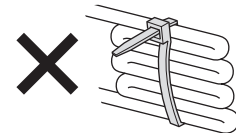
⚠ Warning

- Insert the connector firmly to the end until you hear a click to set it in place.
- Pull the body of the connector to disconnect. It is dangerous to pull the cord since this can damage the connecting part which will result in overheating.



⚠ Caution

- In disconnecting the battery terminal, if any cord is connected to other electrical component, bundle the positive and the negative cords separately by using adhesive vinyl tapes in order not to mix up the positive and the negative cords.
- Connect the positive power supply cord as well as the negative ground cord correctly by confirming the color of the cords.
- Do not take the positive power supply from the alternator (generator).
- Rout the harness so that it will not contact high temperature sections in the engine room such as the engine unit and the radiator.
- Fasten the relay and the fuse box tightly by using bolts or tie-wraps with the harness pointing downward. Fastening the harness to point either sideways or downward may allow water to enter, which will result in malfunctions.
- Do not tug the harness sideways at the end of the relay or the fuse box. This can cause detaching of the terminal caulking, which will result in bad electrical contact.
- Rout the harness so that it will not be wedged by moving parts.
- Do not fasten the harness to high pressure piping such as brake piping and air conditioner piping.
- In case the harness contacts a sharp edge, use commercially available cushioning tapes to protect the harness.
- Do not fasten the relay harness by folding it to a very small bundle since this may cause overheating of the harness.
- Make sure that the wiring is correct before connecting the battery.
- In connecting the battery terminals and the cords of electrical components, make sure that the positive and the negative cords will never be mixed up. Be sure to connect the positive terminal first.
- Confirm operation after completing the wiring. In case the lamp will not light, read “In such cases...” described later.

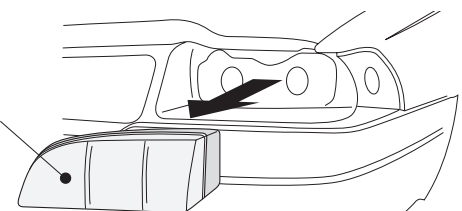


Procedure for installing the wiring

1 Disconnect the negative and the positive terminals of the battery.

2 Detach the headlamp unit from the vehicle by referring to the instruction manual of the vehicle.

Headlamp unit



3 The installation work after removing the headlamp unit varies by the type of the H.I.D. bulb. Follow the procedures below for installation of each bulb.

- For H4 Single bulbs . . . Proceed to **3** - 1 on page 9.
- For HB3/4 bulbs Proceed to **3** - 2 on page 9.
- For H1 bulbs Proceed to **3** - 3 on page 10.
- For H7 bulbs Proceed to **3** - 4 on page 11.

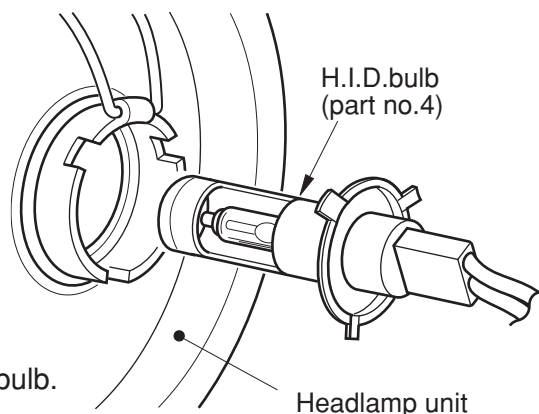
3 - 1 For H4 Single bulbs

- (1) Detach the bulb from the headlamp unit and install the H.I.D. bulb (part no.4).

※ Install the genuine rubber cap as it had been after installing the H.I.D. bulb.

● Some types of bulb springs can make it difficult to install the H.I.D. bulb.

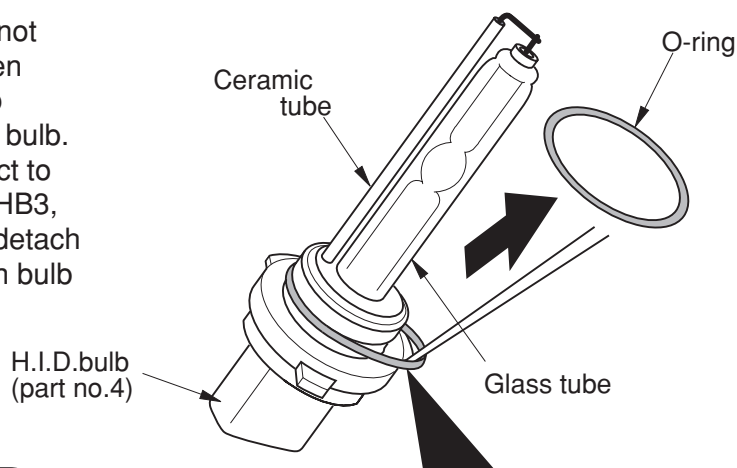
- Proceed to **4** on page 12 after attaching the H.I.D. bulb.



3 - 2 For HB3/HB4 bulbs

※ There are [TYPE 1] and [TYPE 2] of HB3/HB4 type HID bulbs. This manual illustrates the [TYPE 1] for the sake of explanation. [TYPE 2] should be handled in a similar manner.

- (1) Replace the O-ring as needed. It is not necessary to replace the O-ring when installing this product to a headlamp using either 9006/HB4 or HIR2 type bulb. However, when installing this product to a headlamp using any one of 9005/HB3, 9005J, 9006J and HIR1 type bulbs, detach the O-ring from the installed halogen bulb and attach it to the H.I.D. bulb.

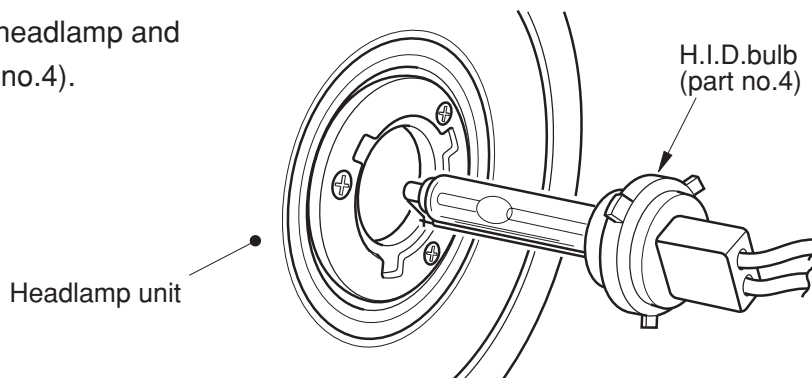


Caution

- Be careful not to scratch or stain the glass tube part and the ceramic tube part of the H.I.D. bulb during replacing the O-ring.

Take off the black O-ring from the installed bulb by using a fine tool as shown in the figure and put the O-ring attached to the bulb on the groove of the H.I.D. bulb.

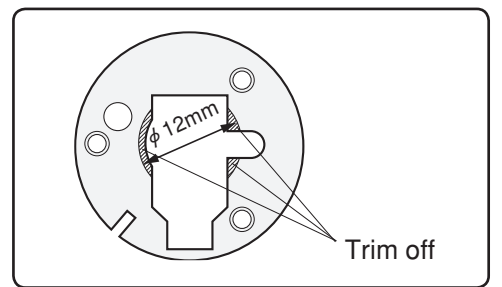
- (2) Remove the bulb from the headlamp and attach the H.I.D. bulb (part no.4).



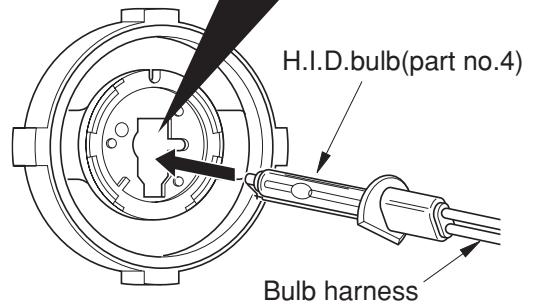
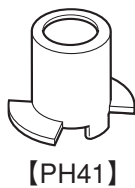
- Proceed to **4** on page 12 after attaching the H.I.D. bulb.

3 - 3 For H1 bulbs

- (1) Remove the bulb from the headlamp unit. Drill a hole with a diameter of ϕ 12mm to the bulb-attaching part as shown in the figure to the right by using a step drill or a file to attach the H.I.D. bulb (part no.4). Be careful not to allow shavings to enter the headlamp.
- (2) For a vehicle equipped with connection couplers or bulb covers, position the bulb harness through an optional HID bulb adapter (PH41)*1 or a modified bulb cover. [When connection couplers and bulb covers are not used, this procedure is not necessary.]



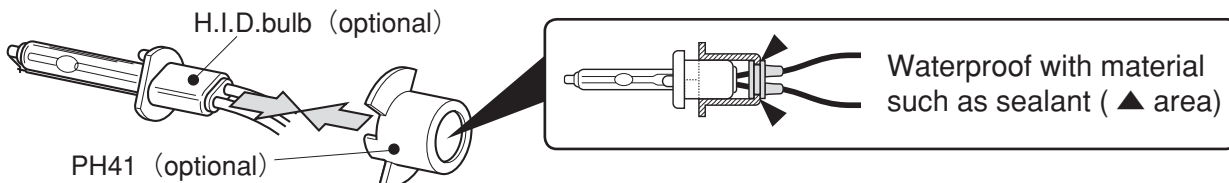
※ The HID adapter (part number PH41), which allows you to install bulbs without any modification, is available as an option. For details, please contact the PIAA authorized dealer.



- Proceed to 4 on page 12 after attaching the H.I.D. bulb to the headlight unit.

When connection couplers are used

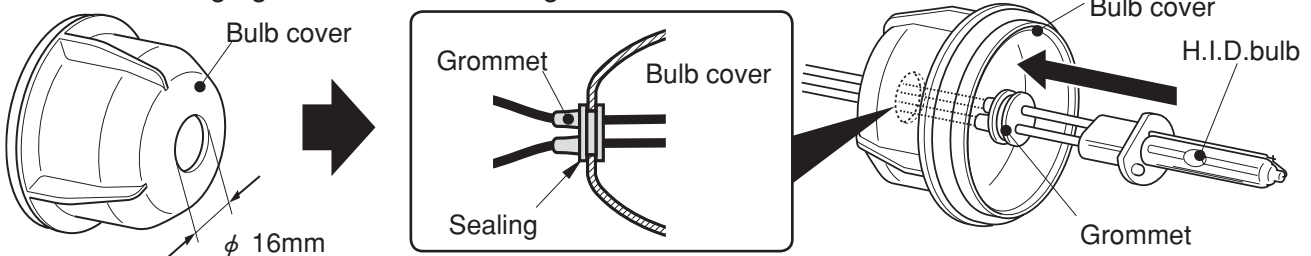
For a vehicle equipped with connection couplers, position the bulb harness through an optional HID adapter (PH41) and install the grommet attached to the bulb harness as shown in the figure below, and waterproof it with material such as sealant.



- ※ You can also install with a genuine connection coupler by drilling a ϕ 16 mm hole and waterproofing. However, we recommend using the optional PH41 as the coupler may be damaged during modification.

When resin bulb covers are used

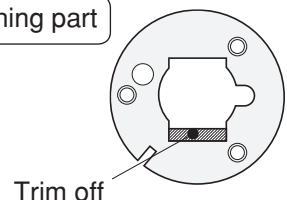
For a vehicle using bulb covers made of plastic resin, drill a hole with a diameter of ϕ 16mm to the bulb cover, attach the grommet included in the H.I.D. bulb set to the hole, and waterproof the bulb cover with sealing agent as shown in the figure below.



When modifying the bulb installation area

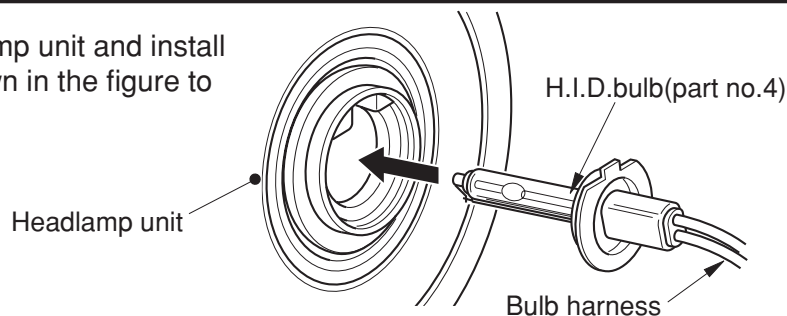
In some types of vehicles it is impossible to install the H.I.D. bulb by only drilling a hole with a diameter of ϕ 12mm to the bulb-attaching part. In such cases trim the portion of the bulb-attaching part on head lamp unit where the ceramic tube runs through as shown in the figure below in order that there will be no interference between the H.I.D. bulb and the bulb-attaching part.

Bulb attaching part



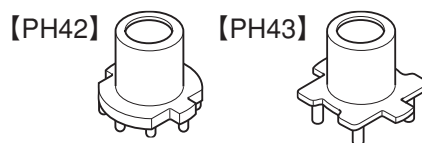
3 - 4 For H7 bulbs

- (1) Remove the bulb from the headlamp unit and install the H.I.D. bulb (part no.4) as shown in the figure to the right.



- (2) For a vehicle equipped with connection couplers or bulb covers, position the bulb harness through an optional HID bulb adapter (PH42 / 43)*1 or a modified bulb cover.
[When connection couplers and bulb covers are not used, this procedure is not necessary.]

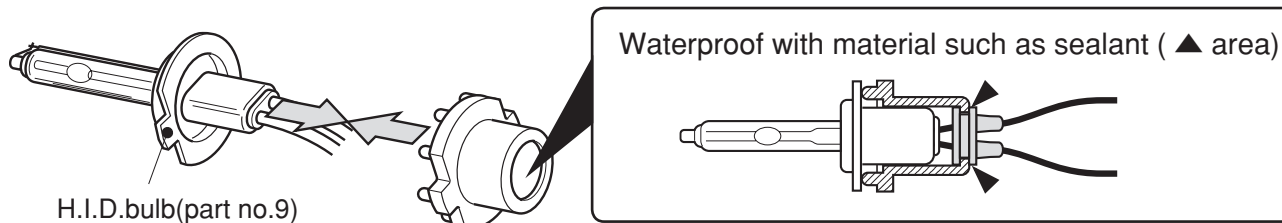
※ The HID adapter (part number PH42 / 43), which allows you to install bulbs without any modification, is available as an option. For details, please contact the PIAA authorized dealer.



● Proceed to **4** on page 12 after attaching the H.I.D. bulb.

When connection couplers are used

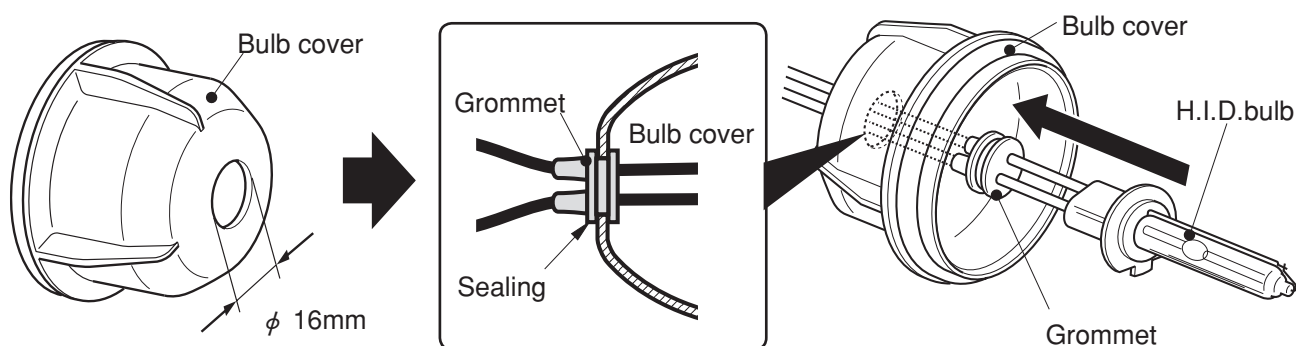
For a vehicle equipped with connection couplers, position the bulb harness through an optional HID adapter (PH42 / 43) and install the grommet attached to the bulb harness as shown in the figure below, and waterproof it with material such as sealant.



※ You can also install with a genuine connection coupler by drilling a ϕ 16 mm hole and waterproofing. However, we recommend using the optional PH42 / 43 as the coupler may be damaged during modification.

When resin bulb covers are used

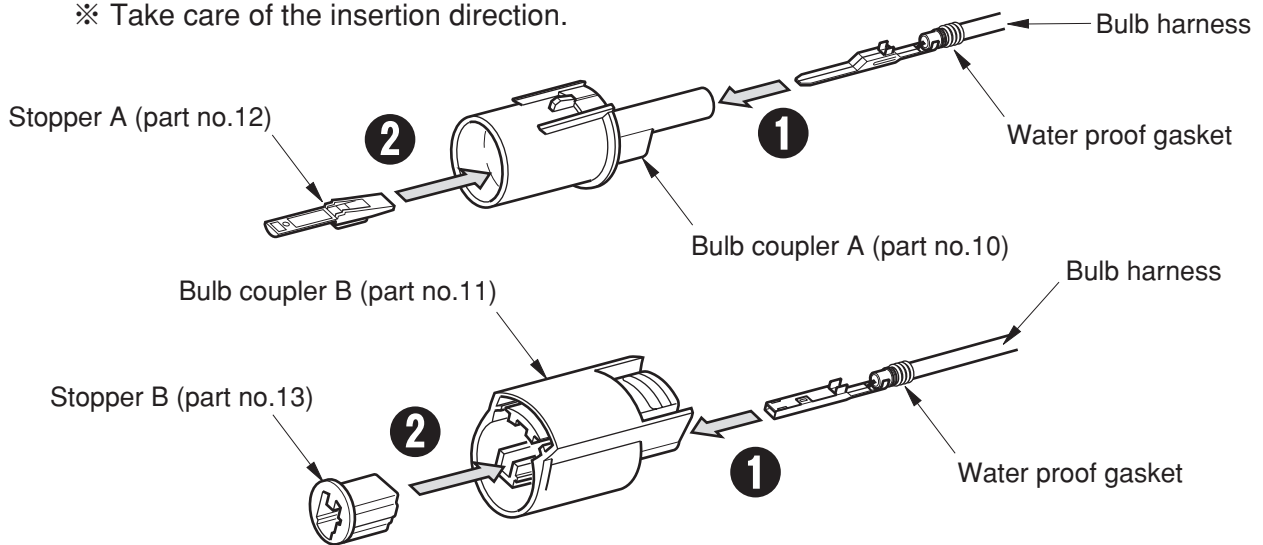
For a vehicle using bulb covers made of plastic resin, drill a hole with a diameter of ϕ 16mm to the bulb cover, attach the grommet included in the H.I.D. bulb set to the hole, and waterproof the bulb cover with sealing agent as shown in the figure below.



4 Please attach a stopper and bulb coupler in the following way.

Some types of vehicles require additional drilling to the intermediate coupler or the bulb cover. For such cases install the bulb coupler and the stopper after routing the bulb harness through the worked intermediate coupler or the bulb cover.

- 1 Insert the bulb harness to the bulb coupler A (part no.10) and the bulb coupler B (part no.11) respectively.
 - 2 Insert the stopper A (part no.12) to the bulb coupler A (part no.10) and insert the stopper B (part no.13) to the bulb coupler B (part no.11) respectively.
- ※ Take care of the insertion direction.



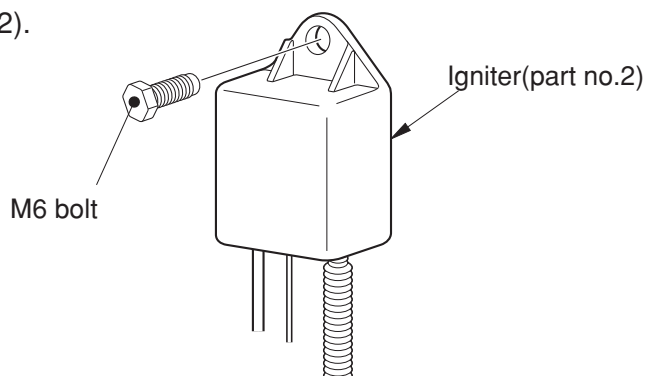
Caution

- Insert the bulb harness into the bulb coupler firmly to the end until you hear a click. Loose insertion may cause lighting fault. The waterproof gasket attached on the bulb harness can make insertion difficult. Apply grease lightly on the waterproof gasket on such occasion.

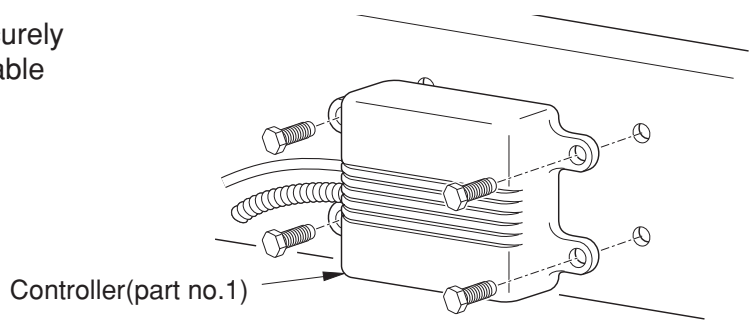
5 Install the removed headlamp unit to its original position.

- ※ Confirm installation locations for the controller and the igniter before installing the headlamp unit.
Fasten the controller and the igniter before installing the headlamp unit where it is necessary.

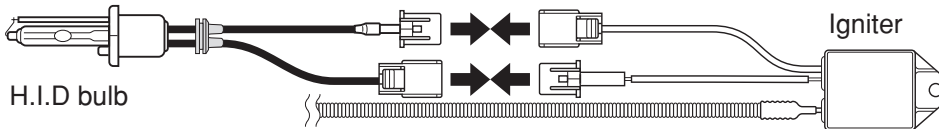
6 Fasten the igniter (part no.2).



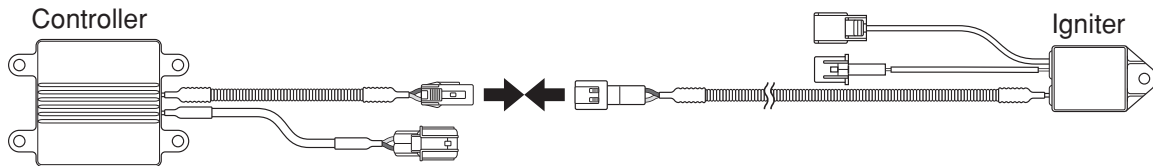
- 7** Fasten the controller (part no.1) securely to the body with commercially available brackets as needed.



- 8** Connect the HID bulb to the igniter.



- 9** Connect the controller to the igniter.

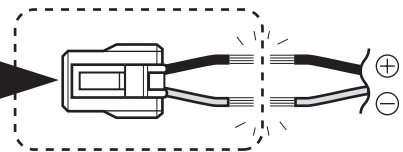


※ This installation work **10** is only for HB3/HB4, H1, H7 bulbs. For H4 Single bulbs, proceed to **11** -1 on page 14

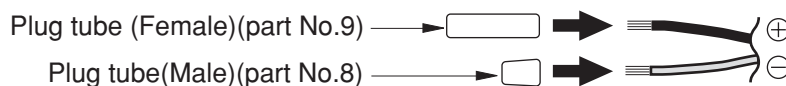
- 10** Trade the headlamp connector on the vehicle side for a plug.

- (1) Cut off the connector on the vehicle side.

Be sure to keep the connector cut off from the vehicle after attaching a commercially available plug and receptacle to its wire ends. This will enable re-installation of the normal (halogen) lamp by connecting this connector to the cord on the vehicle side in order to recover the original state when it becomes necessary for some reason.

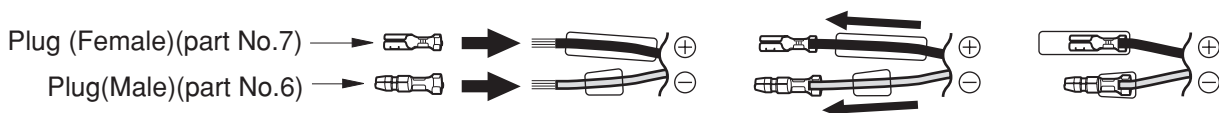


- (2) Attach a plug tube (Female) (part No.9) to the positive cord on the vehicle side, and attach a plug tube (Male) (part No.8) to the negative cord on the vehicle side.



- (3) Attach a plug (Female) (part No.7) to the positive cord on the vehicle side, and attach a plug (Male) (part No.6) to the negative cord on the vehicle side.

※ Be careful not to connect the positive and the negative cords reversely.

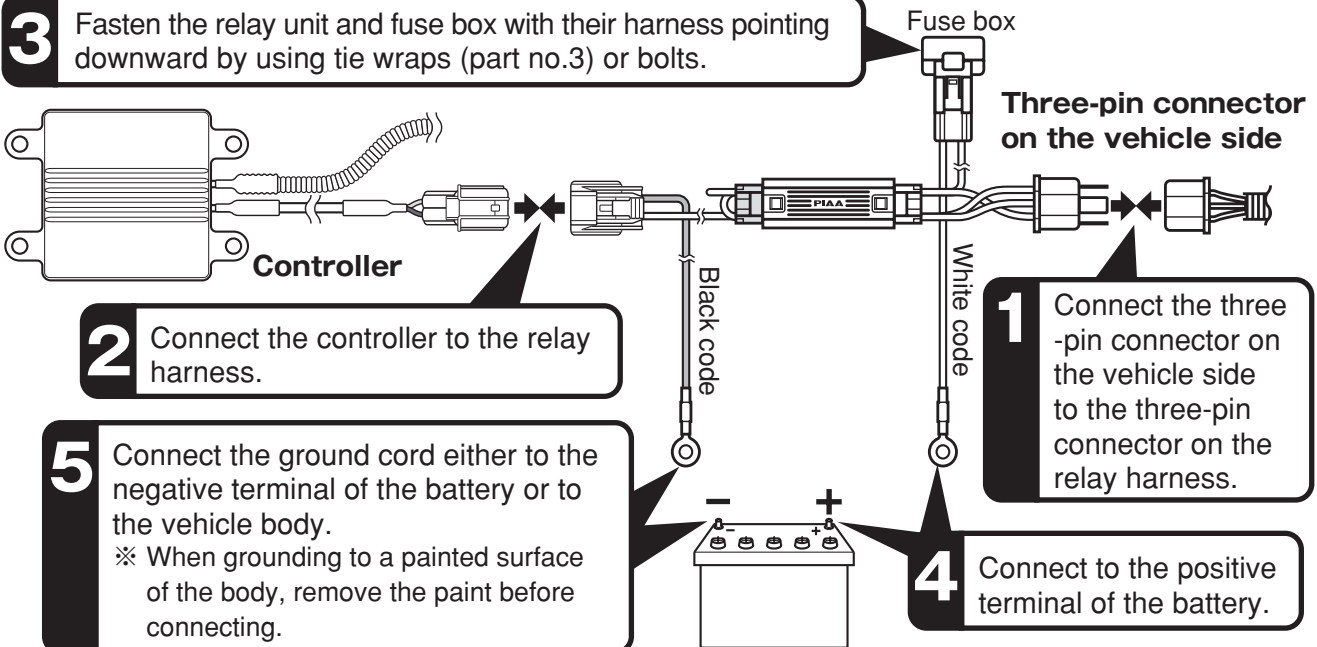


● Proceed to **11** -2 on page 14 after trading the headlamp connector.

11 - 1 For H4 Single bulbs

Connect the relay harness (part No.5) between the vehicle harness and the controller by following the installation sequence as shown below.

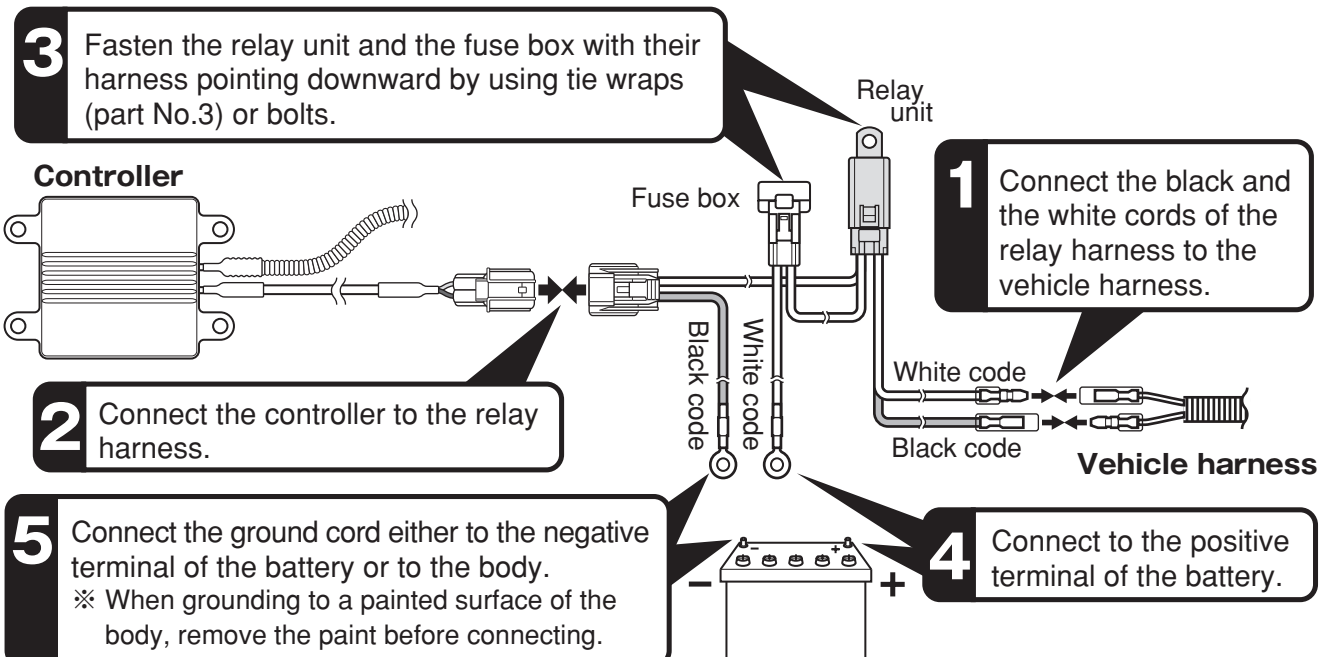
There are two types of relay harnesses, one with longer cords and the other with shorter cords. The harness with shorter cords is to connect to a vehicle harness located near the battery, while the harness with longer cords is to connect to a vehicle harness located farther from the battery.



11 - 2 For HB3/4 , H1 , H7 bulbs

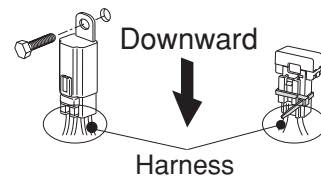
Connect the relay harness (part No.5) between the vehicle harness and the controller by following the installation sequence as shown below.

There are two types of relay harnesses, one with longer cords and the other with shorter cords. The harness with shorter cords is to connect to a vehicle harness located near the battery, while the harness with longer cords is to connect to a vehicle harness located farther from the battery.



Caution

- Fasten the relay unit and the fuse box tightly by using tie-wraps (part No.3) or bolts with the harness pointing downward as shown below.



- Fastening the harness of the relay unit or the fuse box to point either sideways or downward may allow water to enter, which may result in malfunctions.



- 12** Re-connect the battery terminals which have been detached in procedure 1.
(Connect the positive terminal first and then connect the negative terminal.)

- 13** Confirm lighting after completing installation.

- 14** Attach the parts which have been detached.

- 15** Adjust light distribution to a proper state.
(Due to a remarkable improvement of brightness, some color of light which was not noticeable prior to installation of this product may become visible and the light distribution may appear differently.)

In such cases

Check out each part by following the description below.

For customers In case of abnormality such as lighting failure, halt the use of this product and ask a PIAA authorized dealer for maintenance. Do not touch any parts such as the bulb, the harness, the controller and the igniter.

For dealers Be sure to hand over this instruction manual to the customer after installation.

■ The following conditions are not malfunctions.

● The left and right bulbs glow different colors:

Each bulb may glow a different color due to the characteristics of HID; the bulbs do not glow with exactly the same color. The amount of color change may also vary over time with each bulb.

● The color changes immediately after the bulb is turned on:

Because of the characteristics of HID, the color changes immediately after the bulb is turned on. It will stabilize within 10 to 60 seconds.

● There is high-frequency sound from the controller or igniter:

This is the sound of the voltage being controlled, and is not a malfunction.

If problems other than the above are found, inspect each part according to the table below.

[1] In case the lamp will not light after installation

Check out whether the positive and the negative terminals of the battery are connected.

NG

Connect the positive and the negative terminals of the battery.

OK

Check out all connectors and terminals being connected correctly and properly.

NG

Connect them properly according to the instruction manual.

OK

● H4 type

Check whether the connectors are firmly connected.

● HB3/HB4 type

Check whether the plugs and sockets are firmly installed and connected, and whether the connectors are firmly connected.

● H1/H7 type

Check whether the HID bulb harness (terminal) is firmly connected to the HID bulb couplers, whether the plugs and sockets are firmly installed and connected, and whether the connectors are firmly connected.

NG

Firmly connect all parts.

OK

Check out whether grounding to the body is securely connected.

NG

Connect grounding to the body securely. (The painted surface of the body can cause bad electrical conduction.)

OK

Check out whether the fuse of the harness is blown out.

NG

Replace the fuse after removing the cause of blowout.

OK

Contact the PIAA authorized dealer to ask for maintenance.

[2] In case the lamp goes out suddenly

The safety device of the controller may be activated.
Turn off the headlamp switch and wait for a few minutes. Then turn on the switch again.

● H4 type

Check whether the connectors are firmly connected.

● HB3/HB4 type

Check whether the plugs and sockets are firmly installed and connected, and whether the connectors are firmly connected.

● H1/H7 type

Check whether the HID bulb harness (terminal) is firmly connected to the HID bulb couplers, whether the plugs and sockets are firmly installed and connected, and whether the connectors are firmly connected.

Firmly connect all parts.

NG

OK

Check out whether grounding to the body is securely connected.

Connect grounding to the body securely. (The painted surface of the body can cause bad electrical conduction.)

NG

OK

Check out whether the fuse of the harness is blown out.

Replace the fuse after removing the cause of blowout.

NG

OK

Contact the PIAA authorized dealer to ask for maintenance.

[3] In case the lamp blinks

● H4 type

Check whether the connectors are firmly connected.

● HB3/HB4 type

Check whether the plugs and sockets are firmly installed and connected, and whether the connectors are firmly connected.

● H1/H7 type

Check whether the HID bulb harness (terminal) is firmly connected to the HID bulb couplers, whether the plugs and sockets are firmly installed and connected, and whether the connectors are firmly connected.

Firmly connect all parts.

NG

OK

Check out the voltage of the battery.
(12 volts during idling is a rough standard.)

Either recharge or replace the battery.

NG

OK

Check out whether the H.I.D. bulb is damaged.

Replace the H.I.D. bulb.

NG

OK

Contact the PIAA authorized dealer to ask for maintenance.

[4] In case the lamp is always lighted

Check out whether relay for relay harness is damaged.



Replace the relay and check out whether wiring.



Contact the PIAA authorized dealer to ask for maintenance.

[5] In case proper light distribution is not obtained after lighting

Adjustment of the light axis is required since the light emitting point may vary to some extent for each bulb. However, if the deviation of the light distribution exceeds the adjustable range of the headlamp unit, refer to the description below.

Check out whether the H.I.D. bulb is properly installed to the socket.



Install the H.I.D. bulb properly to the socket.



Contact the PIAA authorized dealer to ask for maintenance.

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