

PIAA LPW550

Installation Instructions

Thank you very much for purchasing PIAA product. Please read this instruction manual thoroughly for proper use of the product. After completing your installation, keep this manual for future reference.

CAUTION **WARNING**

The ● marks indicated in this manual are cautionary points related to the installation of the product. To ensure safe and secure installation of the product, please follow these points closely.

To user

... Please keep this manual and a receipt with the name of the shop where purchased. When giving this product to a third party, always include this manual together with the product.

To shop owners installing the product

... After installation of the product, make sure the customer is provided with this owner's manual.

Please read the cautionary points before installation to ensure safe utilization of the product.

WARNING

- The lamp becomes hot when turned on. When parking your vehicle near flammable items, turn off the lamp as it may catch fire.
- Do not look directly into the light. Doing so may cause eye irritation or visual impairment.

CAUTION

- The lamp and the switch harness are intended for motorized vehicle use only. Do not use for any other purpose.
- This lamp is intended for use in rain (day or night), during foggy or snowy conditions where visibility is hampered. Do not use during normal driving conditions.
- Do not operate the switch while driving, unless allowed by local regulation.
- If the lamp is kept on when the engine is off, the lamp will consume electricity from the battery.
- Make sure the lamp is installed securely before driving the vehicle. If a problem is found, immediately stop the vehicle and make necessary repairs.
- Check for any loose screws that holds the lamp in place before driving. If you find any loose screws or bolts, tighten them securely.
If you notice a loose part while driving, inspect the section immediately and make necessary adjustments.
- Avoid repeatedly turning the lamp on and off as it may reduce the overall life of the LED.
- Some vehicles produce a high voltage electric charge when the engine is started. To avoid loading surge voltage to the lamp, turn off the lamp when starting the engine.
- Do not disassemble the lamp or the switch harness as it may cause malfunction.
- If the lamp and/or the switch harness is removed and set aside for safekeeping, clean all dust or grime and store in a place free of moisture.
- If the lens is cracked or damaged in any way, verify whether there is any damage to the harness. If there is any damage to the code covering, immediately replace the harness unit.

Please read the installation procedures thoroughly beforehand.

CAUTION

- In order for the lamp to safely perform at its full potential, use the relay harnesses that comes with your PIAA light kit.
- All work procedures should be carried out in a location with adequate space. Set the vehicle's transmission to parking position. Turn off the engine and apply the parking brake.
- Make sure the engine compartment is adequately cool before starting work. Do not begin work if engine parts such as radiator, oil-cooler or turbo parts are still hot.
- Do not add additional holes to the main body of the lamp. Do not apply adhesives or stickers to the lamp parts.
- Do not modify the lamp harness or the switch harness in any way. Such modifications may cause overheating or short circuit. It may cause the vehicle to catch fire. PIAA will not be liable for any damage caused by such modifications.
- When removing the battery terminals, do not touch the (-) and (+) terminals simultaneously. An electrical shock may occur. Wear rubber gloves when carrying out work procedures.
- Make sure the (-) and (+) terminals do not make contact with metal. It can be extremely dangerous if a short circuit occurs.
- Make sure all bolts are tightly secure. If there are any loose bolts, tighten them accordingly.
- After installing the lamp, adjust the lamp so the beam illuminates at least 40m in front of the vehicle. Also, adjust the lamp slightly aside so that it does not shine directly into the eyes of the opposing vehicle's driver. (as traffic laws stipulate -refer to p.7 for adjustment procedures)
- When the battery terminal is removed, memory related to the clock, radio, audio system etc. will be affected. After all work procedures are completed, reset to the original settings.
(For adjustment procedures refer to your vehicle's instruction manual)

Caution Regarding Wiring / Please read thoroughly

WARNING

- When installing the wiring harness, strictly follow the cautionary points mentioned below. Incorrect or faulty wiring may cause the lamp to operate incorrectly. In some cases, it may cause the vehicle to catch fire.
- The relay is not waterproof. Always install it in a dry location, protected from water exposure.

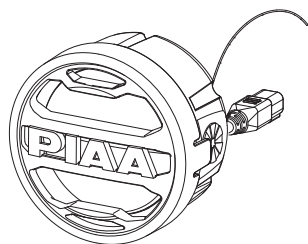
CAUTION

- Before starting installation, always remove the (-) and (+) terminals.
Always remove the (-) terminal first and make sure a short circuit does not occur.
- When removing the battery terminals, always turn the key to OFF and remove the key. Turn off all other electrical units off such as the light switch.
- When removing the battery terminals, if a code (for an electrical unit) is connected, wind a length of vinyl tape around the (-) and (+) terminals to clearly identify them.
- Verify the (+) terminal (white) and earth (black) before connecting.
- Do not obtain (+) voltage from the alternator.
- Install the switch harness in a position where it will not make contact with any high temperature parts such as the engine, radiator or engine compartment.
- Arrange the switch harness so that it does not make contact with moving parts.
- If the switch harness makes contact with a part of the engine, apply heat-resistant cushioned tape around the harness.
- When connecting the connector, insert until you hear an audible "click".
- When removing the connector, hold the main body of the connector, press the locking tab down and pull outwards. If excess force is used to pull the code, it may damage the connection, which could cause overheating.
- Make sure the harness does not sag. Use a harness band or vinyl tape to secure the harness to the intended position.
- Before connecting lamp wires to the battery, verify the wiring arrangement.
- When connecting the battery terminal and or other electrical units, do not mistake the (-) and (+) terminals. Always start with the (+) terminal.
- After all wiring is complete, confirm that it works properly. If it fails to activate, refer to "8 Troubleshooting" section of this manual.

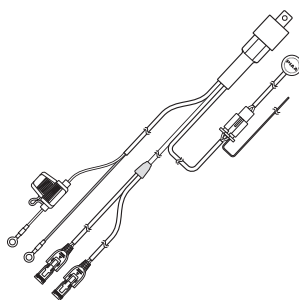
Product Details

※ Verify all the parts are included. If a part is missing, please contact your local distributor.

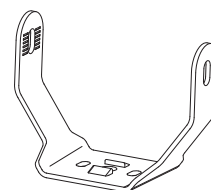
Two Lamps
(with Stone guard and Lamp cover)



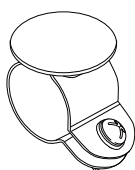
One Relay harness and switch



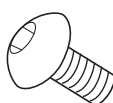
Two Lamp brackets



One Handle fixing bracket



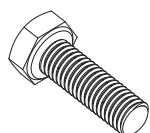
Four 8mm Hexagon
socket head bolts



Four 8mm Spring washers



Two 10mm Hex bolts



Two 10mm Spring washers



Two 10mm Flat washers



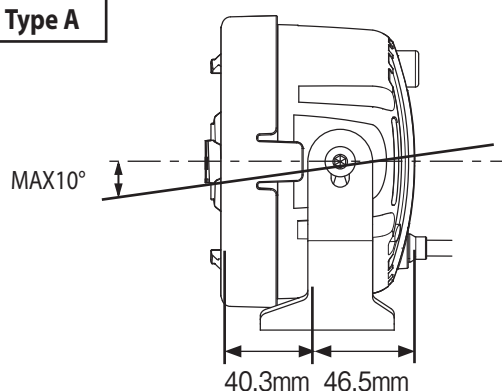
Two 10mm Nuts



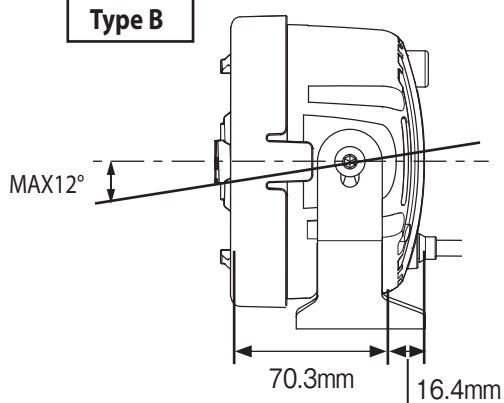
【1】 Lamp installation preparations and temporary setup

Aiming angle (downward) will be different depending on the direction of the mounting bracket.
Please make sure to follow the instructions.

Type A



Type B

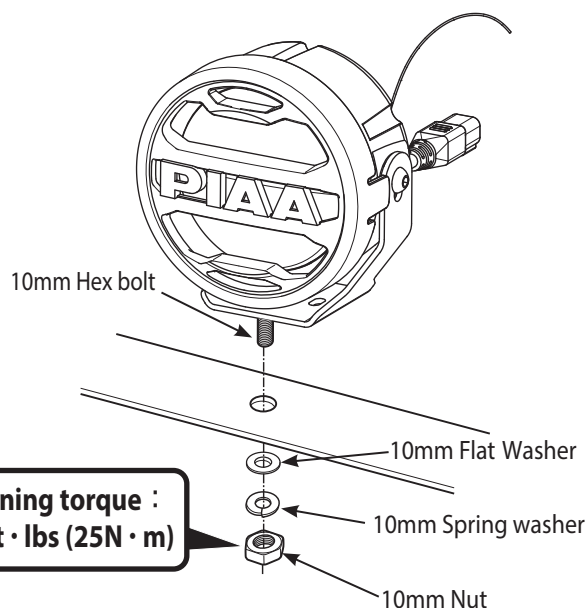
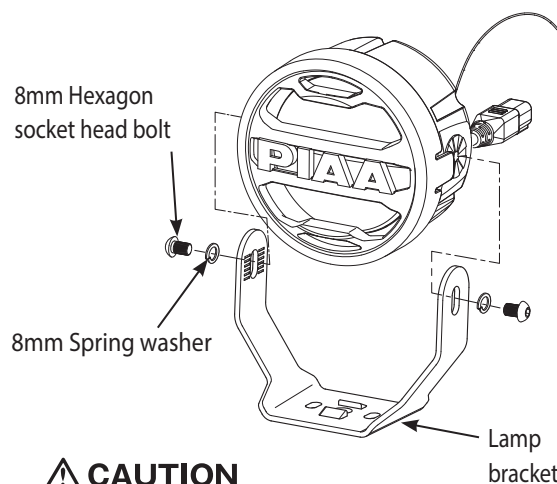


⚠ CAUTION

- When using a bracket other than the bracket included in this Kit, make sure the bolts you remove from the vehicle does not hinder its performance.
- Do not install on an unstable location, it may become lose while driving. This may affect the overall life of the lamp.
In addition it may damage the vehicle or the main body of the lamp.
Make sure you install the lamp on a stable and secure location.

【2】 Lamp installation

For lamp installation, a hole with a diameter of 8mm is required. Make necessary preparation such as installation of a lamp bracket.

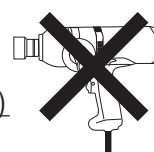


Tightening torque :
18.4ft · lbs (25N · m)

⚠ CAUTION

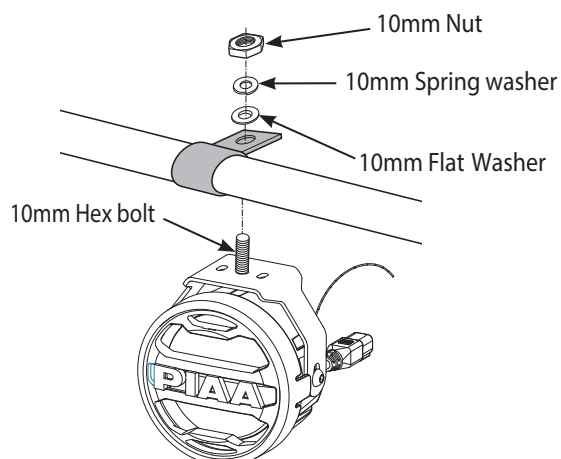
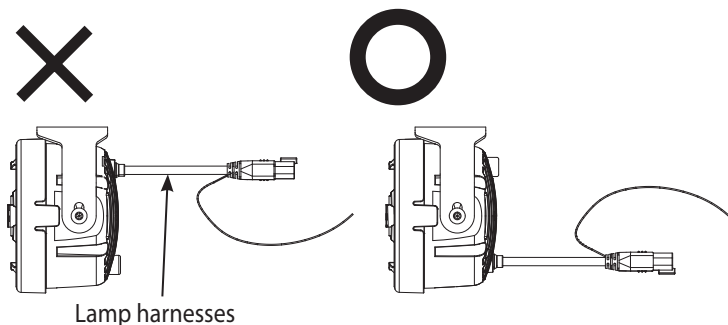
- Before removing the bolt that is already installed to the vehicle's body, please make sure it is safe to do so, in case a bracket other than the one included in this Kit is used.
- The lamp should be mounted on an area sufficient to support its size and weight.
- Failure to do so may result in excess vibration leading to shorter life and or physical damage to the lamp or to your vehicle.
- Do not attempt to install the lamp directly to any plastic part of the vehicle's body.
- If the lamp needs to be installed on a plastic reinforcement material, the lamps should be placed on both sides of the plastic part.
- When installing, make sure the lamp body, lens and rim are not touching the bumper and other plastic parts. Such plastic parts might deform.
- The default mounting bracket setting is for upright mounting. However the mounting brackets can be rotated for hanging pendant mounting.
- Torque specification on the base mounting nut is 18.4ft · lbs (25N · m)

18.4ft · lbs (25N · m)



Impact wrench

When hanging the lamp, remove the bracket and rearrange. At that time, arrange the lamp harness to be under the lamp body.



[3] Relay harness and switch Installation Sequence

The numbers shown in the overview below indicate the sequence the parts should be installed.

2

Remove the (+) terminal from the battery.

1

Remove the (-) terminal from the battery.

8

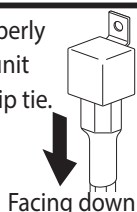
Take the (+) terminal code (Red) and attach to the (+) terminal and connect to the battery

9

First ground the terminal then take the (-) cord (black) and connect it to the (-) terminal.

6

Make sure to properly secure the relay unit using abolt or a zip tie. The harness must be facing downward.

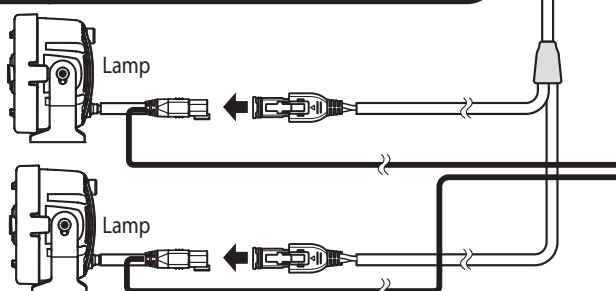


4

The switch can be mounted anywhere in the vehicle that will be free of moisture or other electrical hazards.

5

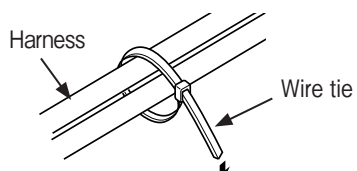
Yellow (+) cord connection:
Connect the yellow (+) cord using one of the following methods:
* To synchronize the lamp with the vehicle's headlamp high beam: Connect to the vehicle's headlamp high beam wire.
* To turn on the lamp at ACC or IG position: Connect to a vehicle's wire that is powered when ACC or IG is ON.
* For constant lamp operation: Connect to the battery or a vehicle's wire with constant power supply.



7

For the DRL harness, decide the connection point according to the timing when you want to turn on the DRL of the lamp.
Example : A place where +12V flows when the engine starts, or a place where + 12V flows when the position light is ON. If you choose not to use the DRL, do not connect the DRL harness and insulate the conversion harness bullet connector with a vinyl tape.

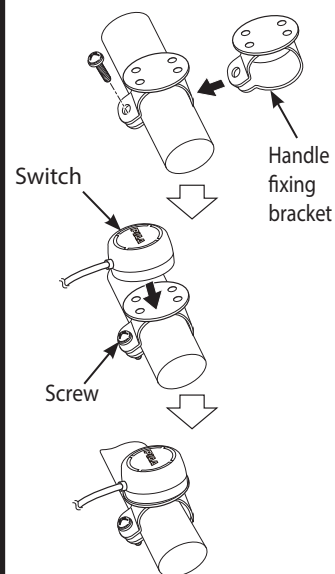
10



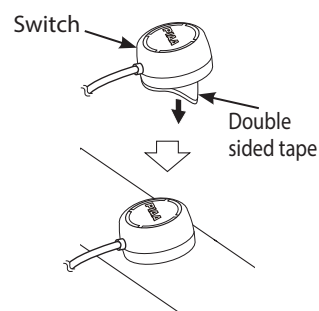
After the lamps are installed, verify the lamp and switch harness does not make contact with the engine's moving parts or sections that emit high heat. Use the wire tie included and secure the lamp and switch harness with the vehicle's original wires inside the engine compartment.

3

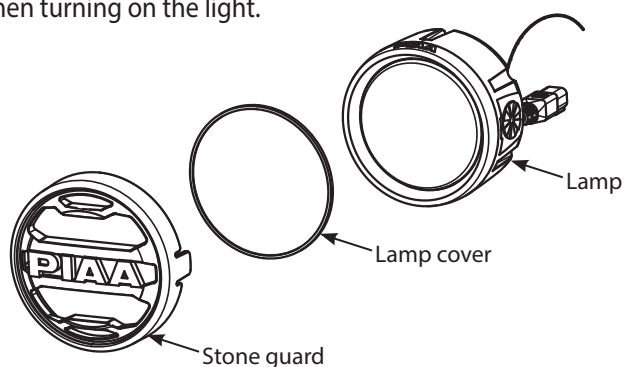
When fixing the switch to the Handle bar



When fixing the switch with double-sided tape



Please remove the lamp cover when turning on the light.

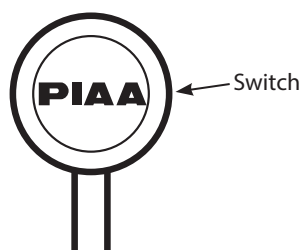


【4】 Lighting pattern

White/Yellow dual beam color lamp

Color selection switch

White → Yellow → White+Yellow



The lamp starts from a white beam. The beam color will change if the switch is turned OFF and then ON again (press the switch 2 times) within 3 seconds.

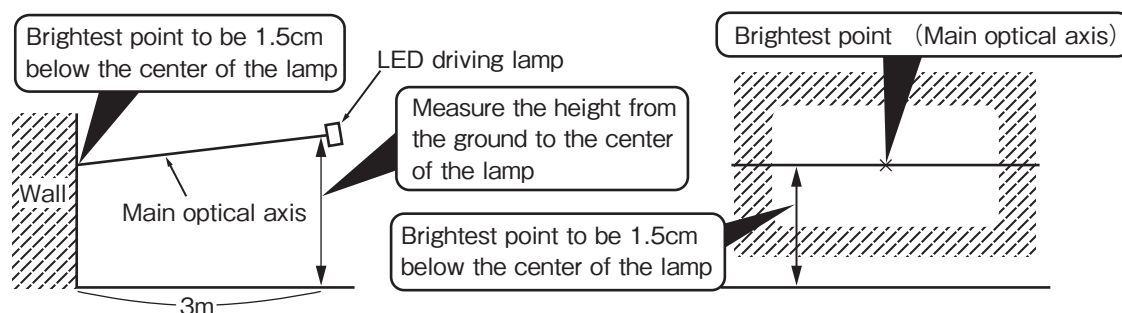
If the switch is turned OFF and then ON again (press the switch 2 times) longer than 3 seconds apart, it will reset and the light will turn to a white beam.

*If the switch is pressed OFF and then ON again too fast (2 times within 1 second or shorter) situations may occur where the beam color doesn't change.

*If the beam color between the lamps is different (eg: 1 lamp has a white beam and 1 lamp has a yellow beam) please turn the switch OFF and then ON again (press the switch 2 times) longer than 3 seconds apart. This will reset the lamp and both lights will turn to a white beam.

【5】 Driving Light Aiming

How to adjust the optical axis



** Do not use driving lights into oncoming traffic. Driving lights should never be the only forward light source. Driving lights should only be used with the headlamp high beams.

Troubleshooting.....Verify each section according to the following.

- 1 After installation, if the lamp does not activate
 - Check the wiring and make sure there are no faulty or incorrect connections .

- 2 If the LED suddenly fails to light up ...
 - Check the fuse located on the vehicle's wiring system. If the fuse is burned out, read below [3] Before replacing the fuse, then replace with an equal ampere fuse
 - Check the fuse for the switch harness. If the fuse is burned out, read below [3] Before replacing the fuse, then replace with an equal ampere fuse.
 - There may be cases where each terminal related to specific sections may be incorrectly connected. Check for any loose wires and also for dirt or grime.
 - Check if the switch unit operates normally. If not, replace the switch unit.

- 3 Before replacing the fuse
 - A short circuit may have occurred. Check the wiring system. If any type of damage is found, replace the wiring system. Non replacement may pose potential danger. Short circuits are mainly caused when wires are incorrectly connected or when there is a gap in the sleeve connected to the lamp harness.

- 4 The beam color between the lamps becomes different (eg: 1 lamp has a white beam and 1 lamp has a yellow beam)
 - Please turn the switch OFF and then ON again (press the switch 2 times) longer than 3 seconds apart.
 - This will reset the lamp and both lights will turn to a white beam.

PIAA LIMITED WARRANTY**REPAIR AND REPLACEMENT**

If a PIAA product is suspected of being defective, it must be submitted freight prepaid, to either an authorized dealer or distributor for warranty inspection within the 2 year warranty period. The receipt or other proof of purchase and a description of the problem must be included. The returned product will be inspected. If the product is found to be defective and covered by this Limited Warranty, the sole remedy is repair or replacement, at PIAA's option. A repaired or replacement product will be shipped back at no charge. Removal, installation, or reinstallation costs are not covered by this 2 year Limited Warranty.

EXCLUSIONS

This Limited Warranty specifically excludes defects resulting from misuse, abuse, neglect, alteration, modification, improper installation, unauthorized repairs, submersion, theft, vehicle crash, or by any other type of impact. Except for the Limited Warranty stated above, there are no warranties of PIAA products or any part thereof, whether express or implied. Any implied warranty of merchantability or any warranty of fitness for a particular purpose is expressly disclaimed. Some states do not permit the disclaimer of implied warranties.

LENS CRACKS

Crash or impact damage is not covered. This can be determined by a chip or scrape on the lens or the housing. Stress cracks sometimes occur when the lens is subjected to sudden and extreme temperature changes. A stress crack has no chip or other sign of impact. Stress cracks are covered under warranty.

EXCLUSION OF DAMAGES

In no event shall PIAA be liable for any damages whatsoever (including, without limitation, consequential damages, incidental damages, or damages for loss of use, loss of business profits, business interruption, loss of business information, loss of time, inconvenience, or other losses) arising out of the use, misuse, or inability to use a PIAA product. PIAA reserves the right to change the design of its products without any obligation to modify any previous product.

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