# PIAA

Dodge Ram 540 Driving Light Kit (1500/2002-2008 and 2500, 3500/2003-2008) Except for Sport Models

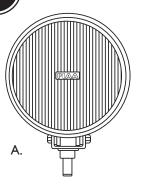
Thank you for purchasing PIAA product.
Please read this entire manual carefully before installation.
Keep this manual for reference after installation.



### **CONTENTS**

- A. 540 Driving Lamps (2)
- B. Lamp Mounting Bracket Left (1)
- C. Lamp Mounting Bracket Right (1)
- D. Lamp Bezel Left (I)
- E. Lamp Bezel Right (I)

Wiring Harness With Relay and Fuse (1) Surface Mount Push Button Switch (I)









### **HARDWARE**

- I. 10M Hex Bolt (4)
- 2. IOM Flat Washer (8)
- 3. IOM Lock Washer (4)
- 4. I0M Hex Nut (4)
- 5. "U" Steel Spring Nut (2)
- 6. Screws (2)
- 7. 6M Hex Bolt (I)
- 8. 6M Hex Nut (I)
- 9. One-Touch Connector
- 10. Switch Hook and Loop
- 11. 5" Wire Ties (5)
- 12. 9" Wire Ties (5)



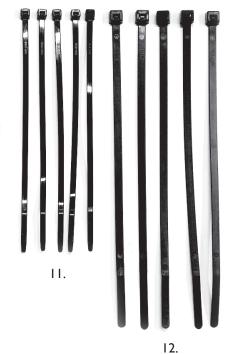








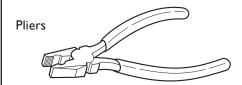


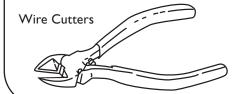


### **REQUIRED TOOLS**

### Prepare the following tools:

Ratchet with 17mm & 10mm Socket





Electrical Tape



Medium Philips Screw Driver



Wrenches (17mm and 10mm)



Other tools may be necessary for your installation.

### LAMP INSTALLATION

- I. Remove OEM fog lights and plastic trim bezels. If not equipped with factory fog lights only remove the plastic trim bezels.
- 2. Locate the PIAA lamp bracket mounting location. Notice there are two existing holes on the inboard bumper brace. The PIAA bracket will use the lower one. (see pictures below)
- 3. Install brackets:
  - Bracket No. 30321 for left/driver's side Bracket No. 30322 for right/passenger side Lamp tab is bottom of bracket.
- 4. Tighten the PIAA lamp pivot bolts (10mm wrench) before installing on bracket. Make sure the 10mm mounting bolt is pointing straight down so the lamp will sit upright on the bracket.
- 5. Bolt PIAA 540 Driving Lamp to bracket. Sometimes it is easier to do this with the inboard bracket bolt removed so the bracket can swing up giving more room to fasten the lamp.
- 6. After the lamp is fastened down securely you will still be able to move it with some force. At this time point the lamp straight forward.
- 7. It is best to complete the wiring at this time because it will be easier to aim the lamps prior to installing the trim bezels. (See Page 7)
- 8. Clean the bumper openings for the trim bezels. Make sure the bumper openings are dirt, dust & oil free.
- 9. Install the U-Nut onto the bumper per the picture.
- 10. Test fit the bezel to make sure every thing lines up. Make sure the lamp is aimed so the trim bezel fits. Make sure the screw hole in the bezel lines up with the U-Nut.
- II. The bezels are left/right specific. Bezel No. 30323 for left/driver's side Bezel No. 30324 for right/passenger side
- 12. Peel the backing off the double sided tape and stick it to the bumper making sure the screw hole lines up with the U-Nut. NOTE: Bumper surface must be above 70°F for adhesive to adhere properly.
- 13. Wile holding down the out board side of the bezel to help the tape stay in tack screw the inboard side of the bezel using the supplied screw.
- 14. Make sure all fasteners are tight and that all wires are tied out of the way.











### WIRING

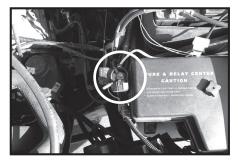


### When connecting the wires on the harness, follow the wiring diagram and the sequence below.

- 1. Before connecting any wires, the negative (-) battery terminal should be disconnected.
- 2. When connecting the wires on the harness, follow the wiring diagram and connect them as in the diagram.
- 3. For proper lamp operation it is recommended that you connect the positive (+) and negative (-) power supply wires directly to the corresponding battery terminals. Do not take power directly from the alternator.
- 4. Find a power source to connect the switch power wire to. For legal operation of driving lights in most regions of North America this power source must be one that is only powered (+) when the high beam of the headlamps is on. To make this connection use the supplied connector or any connector that is suitable for this application. The easiest place to get the high beam switch power is directly off the back side of the driver's side headlight. The headlight bulb connector has 3 wires. The positive high-beam wire is the white/green wire.
- 5. Do not connect lights to turn signals or to lights that flash with an automotive alarm.
- 6. When running the wires through the engine compartment be sure to keep them securely away from moving parts such as the fan and the throttle cable and away from hot parts such as the exhaust manifold.
- 7. When the wiring is complete, test the system for operation. Do this by turning on the system. If the system works, securely fasten the relay box or tie it out of the way with wire ties. If the system does not come on, please contact your PIAA dealer.



Firewall gromet location.

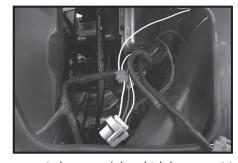


There is a power accessory bolt next to the fuse box.

Connect main power here.



Drill a 1/4" hole to mount relay with supplied 6M bolt and nut.



Connect switch power (+) to high beam positive (+). High beam positive is the white/green wire.



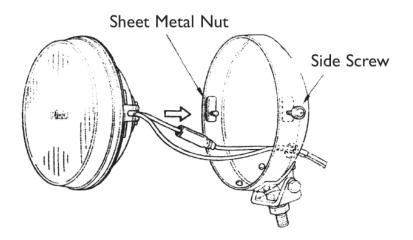
Suggested switch location. A round file should be used to allow the wire to go through plastic without pinching.



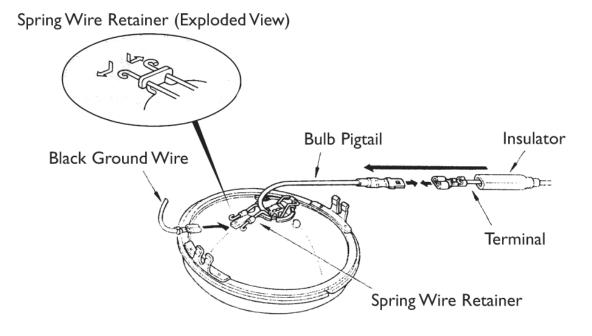
Run passenger side lamp lead on the underside of this beam.

### **WIRING DIAGRAM** Battery (3) Main Power (+) Ground (-) Not Supplied By PIAA White Switch LED **Dames** red=on / green=off 6 White With Red Dots Wires from fuse box and relay must be pointing down + Switch Power PIAA Supplied Connector PIAA PIAA

### LAMP ASSEMBLY/DISASSEMBLY DIAGRAM

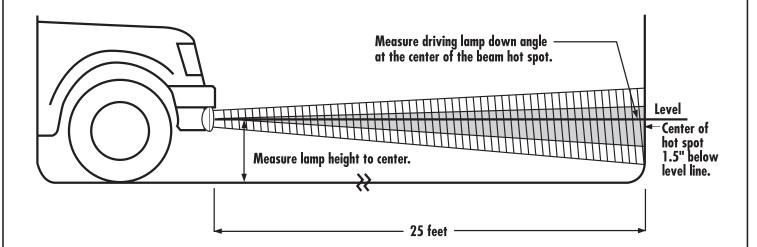


## WARNING Slide insulator over connector.



### DRIVING LIGHT AIMING

Visual aim is made with the center of the beam hot spot 1.5 inches below the lamp center at 25 feet with the lamp facing straight forward. (see below.)





Do not use driving lights into oncoming traffic.

Driving lights should never be the only foreword light source.

Driving lights should only be used with the headlamp high beams.

### PIAA LIMITED WARRANTY

With the exception of bulbs, PIAA Corporation, USA ("PIAA") warrants its products to be free from defects in workmanship and materials under normal use for as long as the original purchaser owns them.

#### **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 its products without any obligation to modify any previous product. This warranty gives you specific legal rights. You may also have other rights that vary from state to state.

### 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. 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, and will be warranted to be free from defects in workmanship and materials under normal use for as long as the original purchaser owns it. Removal, installation, or reinstallation costs are not covered by this Limited Warranty.

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