

Southeast Toyota Dist., Inc.

Kit Part No. 00016-60008

TOYOTA FJ CRUISER PIAA DRIVING LIGHT KIT INSTALLATION INSTRUCTIONS

Kit Contents

00016-60008-01	2 ea. driving lamps
00016-60008-02	1 ea. wiring harness assembly
00016-60008-03	1 ea. switch assembly
00016-60008-04	2 ea. lamp brace

00016-60008-05 —
hardware and
accessory pack

1 ea. sheet metal screw
2 ea. 6mm x 20mm bolt
2 ea. 6mm fender washer
1 ea. wire loom
1 ea. dielectric grease pack
10 ea. wire ties
1 ea. T-tap quick disconnect
1 ea. terminal male disconnect

Recommended Tools

17mm wrench
10mm wrench
Medium Phillips screw driver
Small pliers
drill
11mm drill bit
1" drill bit

PREPARATION

1. Disconnect battery negative terminal.

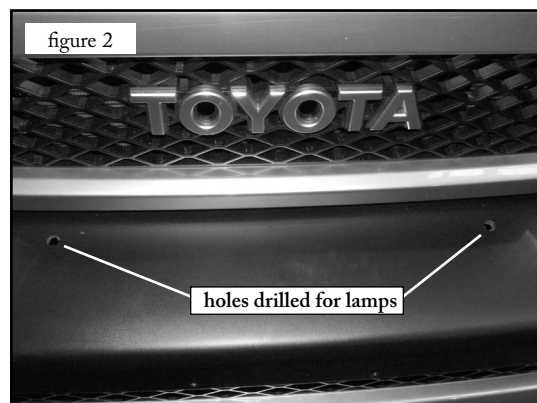
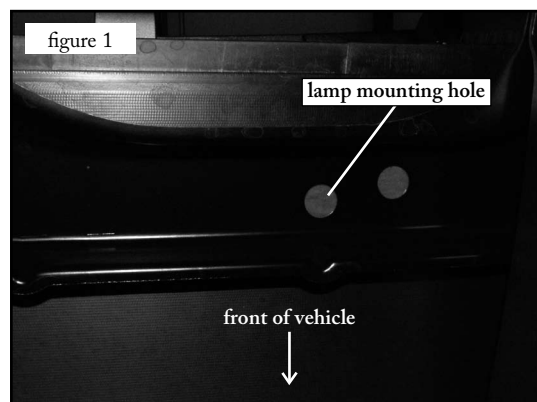
DRIVING LIGHT MOUNTING

The driving lights mount to the top of the bumper through holes that are drilled.

- 1.) Location of driving light mounting holes. From underneath the bumper you will see a metal frame just under the top of the bumper skin. This metal frame has four symmetrical placed holes, two on each side. You will use the inboard pair of holes that are also closer to the front. (See figure 1)

- 2.) Using a drill and a 11mm drill bit, drill up through the center of the holes located in step one. If needed a smaller drill bit can be used as a pilot hole from underneath then use the 11mm drill bit from the top for final sizing. (See figures 1 and 2)

- 3.) Sometimes you will need to trim a rubber strip from the center of the hole because the drill bit does not cut it cleanly.



LAMP BRACE

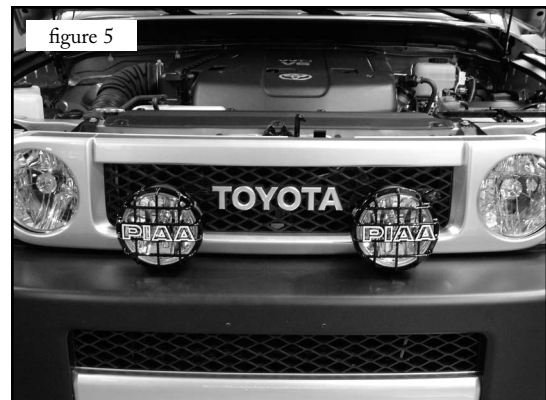
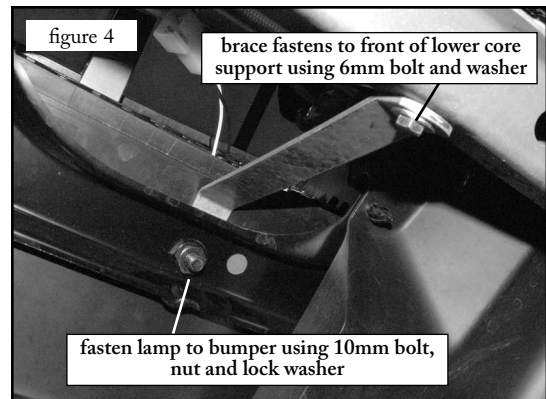
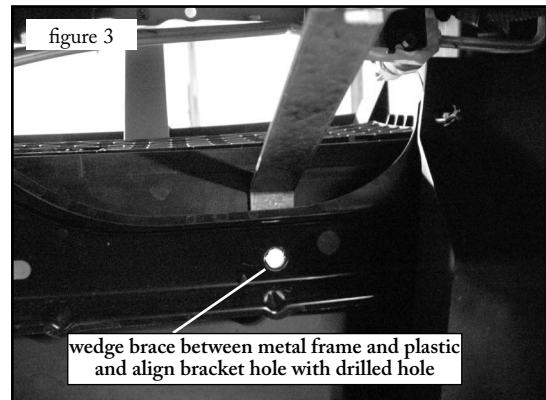
4.) From underneath, wedge the long end of the bracket brace between the bumper skin and the metal frame and align the hole in the brace with the newly drilled hole. The other end of the lamp brace will drop down to the threaded hole in the front of the lower core support. The hole in the short end of the brace should line up with the threaded hole. Use the 6mm bolt and 6mm fender washer to secure the brace to the core support.

5.) Fasten the driving lamp to the top of the bumper using the 10mm bolt through the top and secure it with the 10mm nut and lock washer from the bottom. The 10mm lamp mounting bolt should pass through the lamp bracket, bumper skin, lamp brace and metal frame.

6.) Tighten the 10mm lamp mounting bolt to 38ft/lbs and the 6mm bolt to 14ft/lbs.

LAMP CONNECTORS

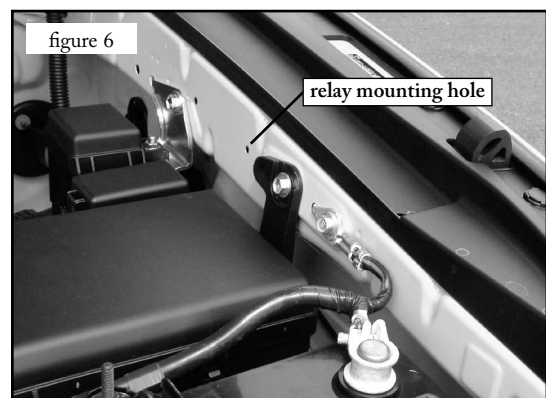
7.) Push the white lamp connectors through the gap between the top of the bumper skin and the bottom of the grill, right behind the lamps. It will be easier to push through if you push down on the top of the plastic bumper skin.



WIRING HARNESS ASSEMBLY

8.) Locate the relay mounting position. In the engine compartment on the battery side locate the mounting hole. It is just rearward from the battery grounding point and the relay box mounting point. (See figure 6)

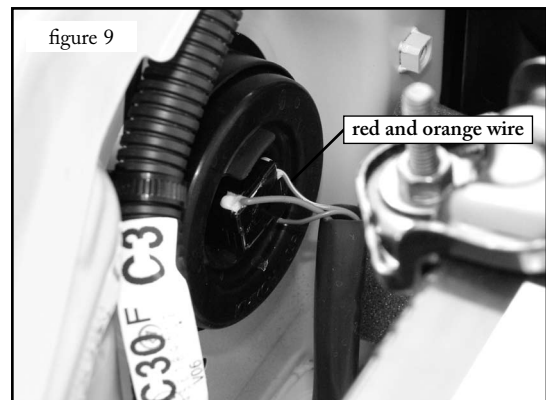
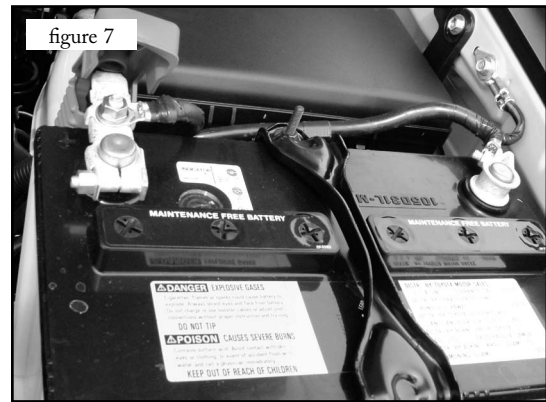
9.) Using the sheet metal screw fasten the relay.



10.) Route the lamp leads of the harness down to the driving lamps. Follow the inner left fender to the back of the headlamp. Route wires down to lamps through left headlamp location. Notice one of the lamp leads is longer than the other, the longer lead goes to the right lamp and the shorter lead to the left lamp. Plug lamp leads to lamps and tie the loose wires.

11.) Route the switch wires from the relay up to the left side of the fire wall. Locate the large vehicle harness grommet on the left side. Cut the auxiliary wiring access nipple off the grommet and push the black switch plug through.

12.) From inside the cabin locate the switch wires that were pushed through in step 11 above. It will be the grommet above the clutch pedal or above and to the left of the brake pedal.



SWITCH

- 1.) To mount the switch the left air duct panel must be removed. Panel snaps off. Remove panel.
- 2.) The switch mounts in the left air duct panel that was just removed. To mount the switch a 3/4" hole will need to be drilled. To locate the drill location measure 1" from the right edge of the panel and 1" up from the inside mold ribbing. This will locate the switch just left of the out side mirror controls.
- 3.) Mount the switch to the panel using the switch nut.
- 4.) Route the switch wires from the fire wall grommet to the switch and connect the black 3 wire switch connector to the black 3-wire harness connector.
- 5.) Snap air duct panel back in place.
- 6.) Tie the switch wires up under the dash away from moving parts and vehicle control devices.



CHECK SYSTEM FOR OPERATION

- 1.) Reconnect battery negative terminal.
 - 2.) Turn on headlamp low beams then press driving light rocker switch to the up position. Driving lamps should be working. Driving lamps will only work when the low beam of the headlamps is on.
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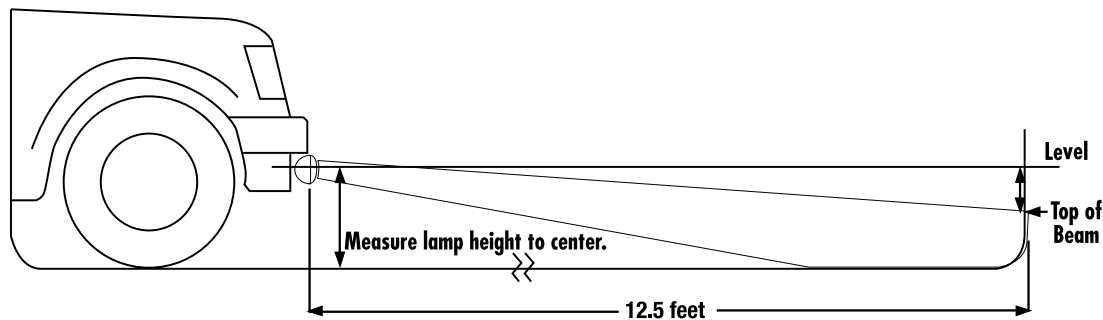
DRIVING LAMP AIMING

Traditional driving lights are usually mounted under the front bumper about 10-24 inches from the ground. There are two important issues to address when installing driving lights, the first is to minimize the amount of return glare into the drivers eyes, and the other is to minimize glare into oncoming eyes. Both of those issues must be accomplished while putting as much light as possible on the road.

These fog/foul weather light aiming instructions are suggestions taken from common practice and the S.A.E. standard J583. Some modifications to these instructions may be necessary to minimize glare.

Visual aim is made with the top of the beam 2 inches below the lamp center at 12.5 feet with the lamp facing straight forward. See figure 13.

figure 13



FINAL ASSEMBLY AND CHECKS

- 1.) After aiming the lamps tighten the lamp bolts with a Philips screw driver until the lamps do not move.
- 2.) Position the lower splash shields back in place and replace the fasteners that were removed.
- 3.) Perform one final check that all fasteners are tightened and that all vehicle functions work.