

Part Number: TPV-312 / TPV-812



**Kit Contents**

Item #	Quantity Reqd.	Description
1	2	Fog Lamps
2	2	Bezels
3	1	Switch Assembly
4	1	Fog Light Operation guide
5	1	Harness Bag

**Hardware Bag Contents**

Item #	Quantity Reqd.	Description
1	1	Wire harness
2	1	Switch harness
3	2	Relays
4	25	8" Wire ties
5	4	Phillip head screws
6	2	Black T-Taps
7	2	LED Connectors (for TPV-812)

**Conflicts**

- Factory Installed Fog Lights
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**General Applicability**






Models:
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**Recommended Tools**

<b>Safety Tools</b>	
Safety Glasses	
Electrical Tape	
<b>Installation Tools</b>	
10mm Wrench	
Phillips Screw Driver	
Pliers	
Side Cutters	
<b>Special Chemicals</b>	
3M Silicon Sealant	

Mandatory

Legend

	<b>STOP:</b> Damage to the vehicle may occur. Do not proceed until process has been complied with.
	<b>OPERATOR SAFETY:</b> Use caution to avoid risk of injury
	<b>CRITICAL PROCESS:</b> Proceed with caution to ensure a quality installation.
	<b>TOOLS &amp; EQUIPMENT:</b> This calls out the specific tools and equipment required for this process
	<b>REVISION MARK:</b> This mark highlights a change in installation with respect to previous issue.

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure quality installation.

## Preparation



Remove negative battery cable

1. Remove rear deck board (picture 1)



Picture 1

2. Remove floor tray (picture 2)



Picture 2

3. Remove small tray rear passenger-side covering battery (picture 3)



Picture 3

4. Disconnect negative battery cable using a 10mm wrench (no not touch positive terminal with any tool when removing cable)



10mm wrench



Picture 4

5. Locate the ECU mounting bracket on the top left corner of the fuse block, right of the brake fluid reservoir (picture 5)



Picture 5

6. Attach the ring terminal with 2 black wires to the 10mm bolt off the ECU bracket (see picture 6)

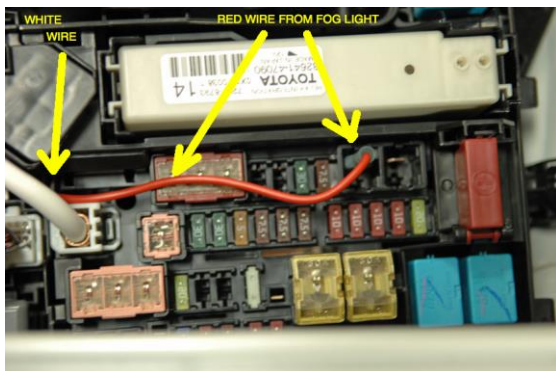


Picture 6

7. In the hood area, locate the red 12v wire from fog light harness to inside the fuse block. Follow the path of the big white wire.



The 12v red wire will be connected at the end of the installation (picture 7)



Picture 7

8. Wire tie relay and fuse holder to harness (picture 8)



Picture 8

9. Route wire along factory harness and secure with wire ties (picture 9)



Picture 9

10. Locate the large vehicle harness grommet on the left side. If accessible, cut the auxiliary wiring access nipple off the grommet or cut 1/4" slit in grommet and push the orange/black and green/black wires through firewall.



Note: Extra caution should be taken not to damage the factory harness and connectors. Seal with 3M Silicone sealant.

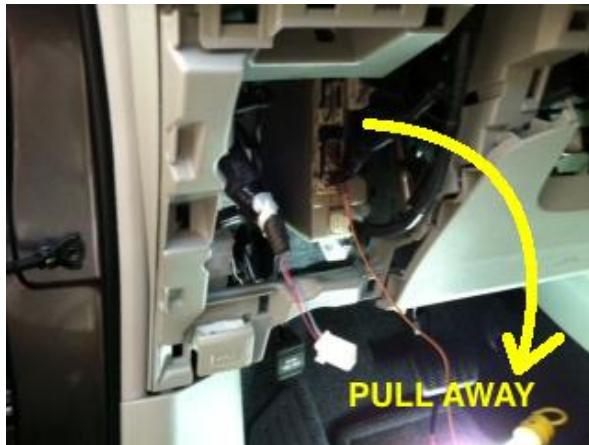


**Vehicle disassembly**

11. Pull the left top side of the panel away from dashboard and unplug connectors.



Avoid damaging the connectors by gently pulling on them (picture 10)



Picture 10

12. Remove 2 screws and push back on tabs to release lower panel (picture 11)



Picture 11

13. Unplug wire harness and remove panel by pulling it towards the seat (picture 12)



Picture 12

14. Remove plastic cap from switch knockout of dash
15. Install switch in empty knockout of dash (picture 13)



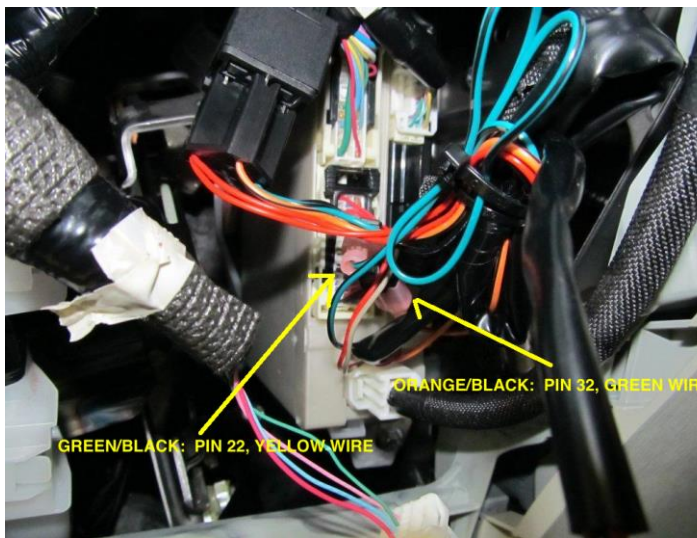
Picture 13

16. From inside the cabin, locate the wires that were pushed through in step 6 and plug them to the switch wire harness. It will be the grommet above the gas pedal (pic. 14)

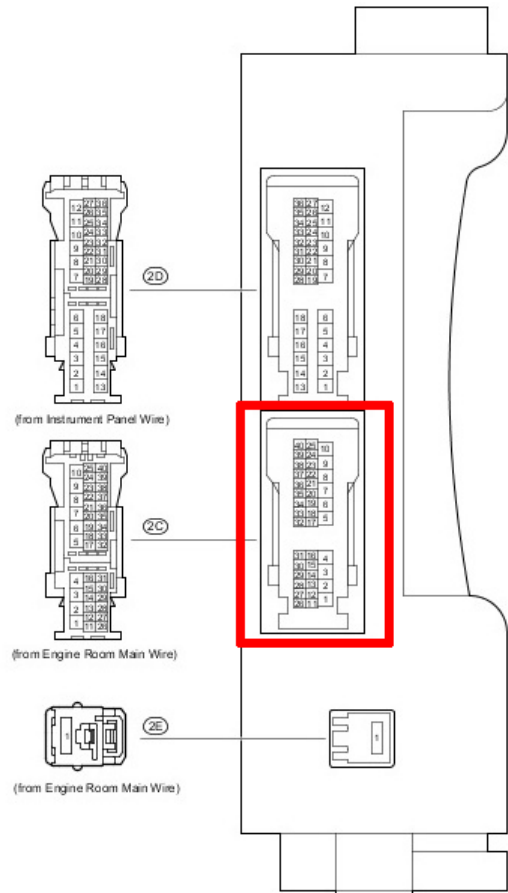


Picture 14

17. T-tap orange/black wire from fog light harness to connector 2C pin 32 green wire. Pin 32 is on the left side of the connector 7<sup>th</sup> pin up from bottom of the connector. Connector 2C located left of the steering column above big white wire (pictures 15, 16 & 17)
18. T-Tap green/black wire from fog light harness to connector 2C pin 22, yellow wire (pictures 15, 16 & 17)

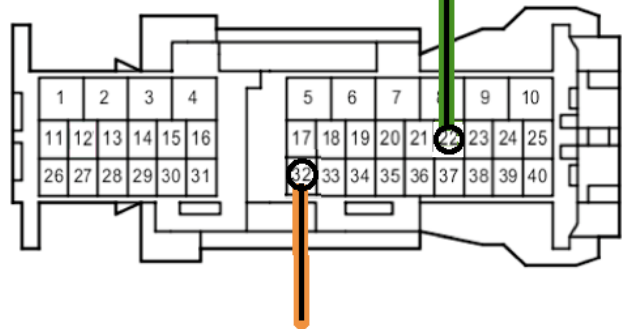


Picture 15



Picture 16

Green-Black to Pin 22 (yellow wire)



Orange-Black to Pin 32 (green wire)

Picture 17: Pin side view

19. Install switch harness into switch
20. Secure fog light wire harness and relay with wire ties (picture 18)



Picture 18

21. Reinstall all removed panels

### ENGINE COMPARTMENT

22. Remove splash shield from the front of the car (picture 19)



Picture 19

23. On the driver side, route the fog light wire under car
24. Remove fog lamp covers
25. Insert one side of the fog light into the plastic sleeve and secure other side with supplied Phillip screws (picture 21). Repeat this step for left and right fog lamps

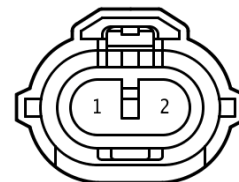


Picture 21

26. Note: For Halogen installations, proceed to step 27. For LED installations; The LED fog light wires may not be pushed into their connectors. If not, push the negative wire (black or black-white) into Pin 2 of the connector. Then, push the positive wire (red or red-white) into Pin 1 of the connector. See Picture 22 below.



**LED Lights will NOT work if the polarity is reversed. Be sure the red positive wire of the harness matches the red positive wire of the light housing, and the black negative wire of the harness matches the black negative wire of the light housing.**



Picture 22

27. Plug in left side fog light into harness plug and secure with wire ties
28. Run right side of wire harness under skid plate and secure with wire ties (picture 23A, 23B and 23C)





Picture 23A



Picture 23B



Picture 23C

- 29. Plug in right fog light into harness plug and secure with wire ties to factory wire harness
- 30. Snap on both fog light bezels (picture 24)



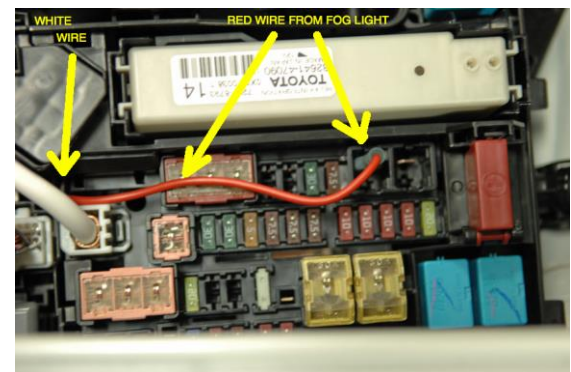
Picture 24

- 31. On the driver side, secure excess wire harness with a wire tie (picture 25)



Picture 25

- 32. Reattach the lower splash shields
- 33. Attach fog light 12v red wire to open spade inside the fuse block. Open spade is located right above white wire (picture 26)



Picture 26

- 34. Reconnect negative battery cable. Torque to 48 in-lb.

**Checklist** – these points MUST be checked to ensure quality installation

### Check System for Operation

1. Reconnect battery negative terminal
2. Turn on headlamp low beams, then press fog light switch to “ON” position. Fog lights should be working. Fog lights will only work when the low beam headlamps are “ON”. Fog lights will NOT work when the high beam headlamps are “ON”

### Fog Light Aiming

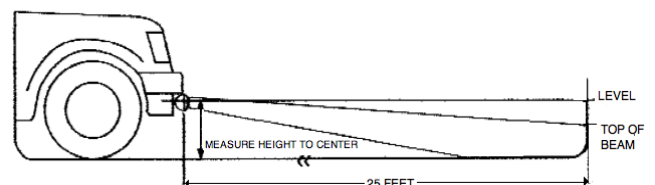


**NOTE:** Use only hand tools to adjust the fog light aiming screw. DO NOT use power assisted tools, as they will damage the fog light.

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

These fog 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 4 inches below the lamp center at 25 feet with the lamp facing straight forward (see picture 32)



Picture 32



**Check**

Accessory Functions Checks

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- Fog Lights function .....
- All Panels snapped into place.....
- Battery Terminal.....

Vehicle Function checks

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- Check all vehicle functions

**Look For:**

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- Inoperable fog light function
- Loose panels and switches
- Re-torque battery terminals to 48 in-lb