

LED Ambient Lighting Kit Installation Guide



(DT) Ram 1500 Laramie Quad Cab Trucks

!DISCLAIMER NOTICE!

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!WARNING!

Be sure to carefully read and follow the provided instructions when installing this product. Failure to do so could result in damage to your vehicle and/or injury to yourself. After installing/reinstalling components or hardware, always verify that the product is properly installed and is working properly.

Ambient Lighting Kit Features

(This product is specifically designed for use in DT RAM 1500 Laramie Quad Cab Trucks Only.)

-Paragoptics patent-pending ambient lighting kits are designed to upgrade the stock ambient lighting system in your vehicle to a brighter more brilliant color while retaining a clean factory appearance.

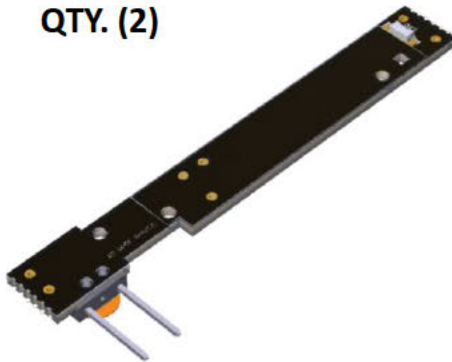
-This product is designed to work with the factory equipment in your vehicle and can be controlled using the factory dimming controls.



Kit Contents

LED Replacement Boards (LED Housings Are Not Included)

(DT) Door Handle LED
QTY. (2)



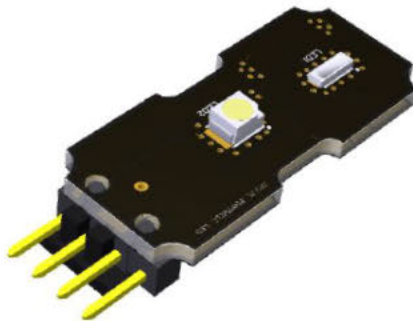
(DT) Dash LED
QTY. (2)



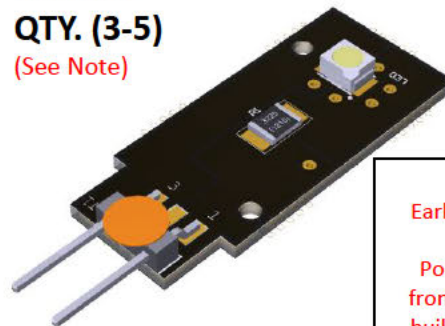
(DT) Middle Pocket LED
QTY. (2)



(DT) Footwell LED
QTY. (2)



(DT) Map Pocket/Upper Glove
Box LED
QTY. (3-5)
(See Note)



Note:
Early build 2019 Ram Laramie Quad cab models will use 2 Map Pocket/Upper Glove Box LEDs per front door panel (5 LEDs Total). Late build 2019 and 2020 Ram Quad Cab models will only use 1 LED per door panel (3 LEDs Total).

!WARNING!

Take extensive care when handling all LED boards as they contain components that are sensitive to excessive shock, applied force, and direct contact with fluids. Failure to take precaution in handling LED boards during installation may result in part damage and/or failure.

Tools Required

- 1. Mopar Door Trim Tool Part# C-4829B (Or Equivalent)**
- 2. Plastic Trim Tool**
- 3. 10MM Deep Socket**
- 4. Electric Impact**
- 5. T20 Torx Screwdriver**
- 6. 2 Pocket Flathead Screwdrivers**
- 7. Philips Head Screwdriver**

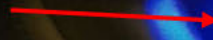


Door Panel/Footwell LED Housing Service Procedures



Door Handle LED Boards (2PCS)

(Removal And Installation Instructions pages 10-11)



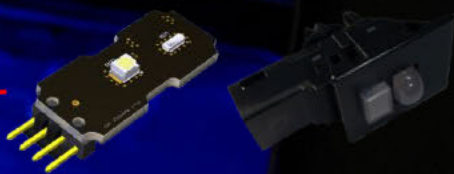
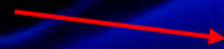
Middle Pocket LED Boards (2 PCS)

(Removal And Installation Instructions pages 12-14)



Map Pocket LED Boards (2 PCS)

(Removal And Installation Instructions pages 15-17)



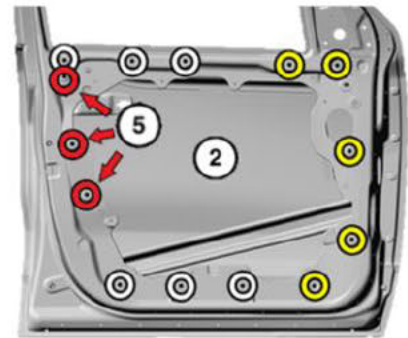
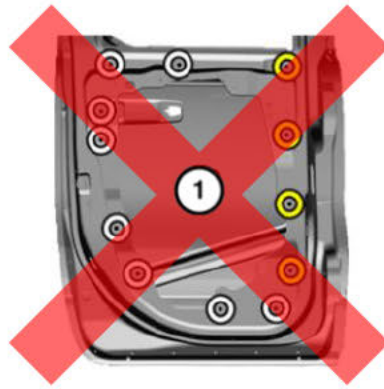
Footwell LED Boards (2 PCS)

(Removal And Installation Instructions pages 18-20)



Door Panel LED Boards

Door Panel Removal And Installation



- 1 – Rear Door Quad Cab (Not Serviced!)
- 2 – Front Door Locations
- 3 – Thin Metal Receiver (White)
- 4 – Thick Metal Receiver (Yellow)
- 5 – *Refer to Tech Tip



Important Tech Tip

When working with each door panel it is important to separate the indicated push pin fasteners LAST in sequence to avoid breaking the bonded seam on the door panel. Refrain from pulling on the door panel near the bonded seam at all costs. You always want to start separating the Yellow push pin fasteners first. Then work your way to the back of the door panel separating the white clips in sequence, and then release the final 3 push pin fasteners indicated.

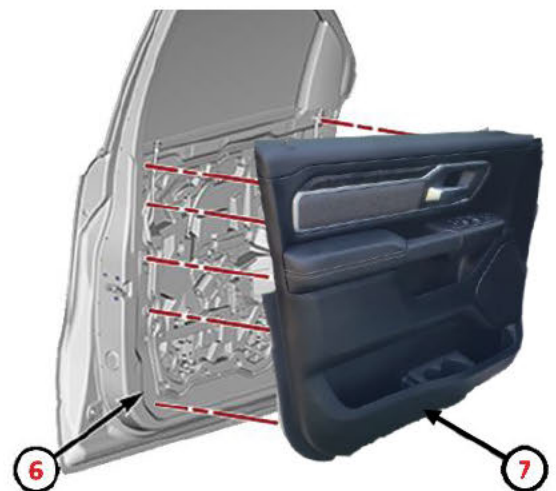
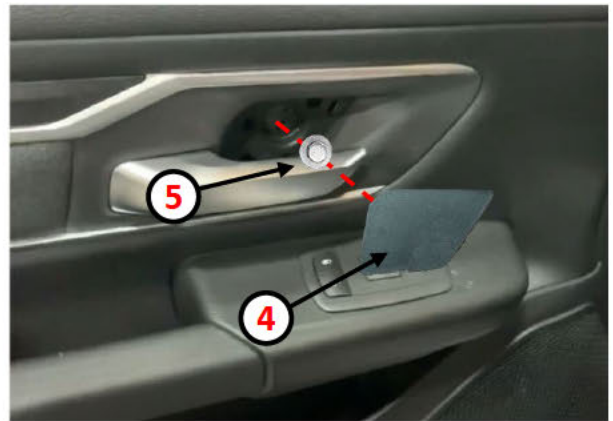


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FRONT DOOR PANEL REMOVAL/INSTALLATION

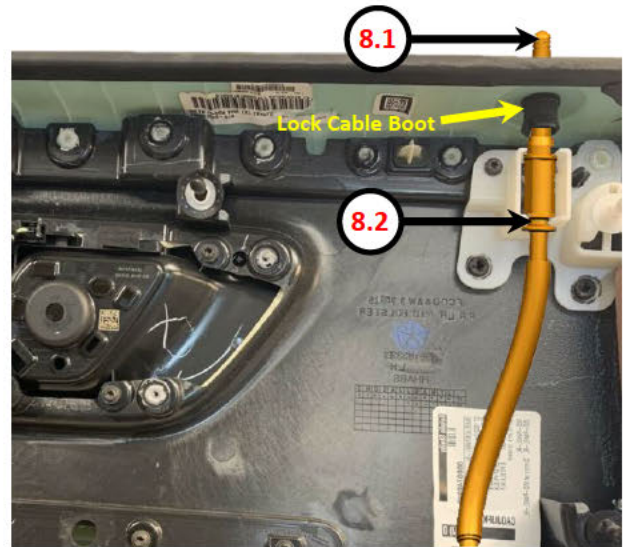
Tools Needed: 10mm socket, Mopar door trim tool, pocket screwdriver, electric impact

1. Remove the window switch assembly
2. Using a pocket screwdriver or equivalent, remove the door trim cover.
3. Remove the 10MM bolts with electric impact.
4. Using a pocket screwdriver or equivalent, remove the door handle trim cover.
5. Remove the 10MM bolt with electric impact.
6. After reading the Tech Tip on previous page, use special trim tool C-4829B to release the push pin fasteners.
7. Carefully separate the trim panel assembly from the door.



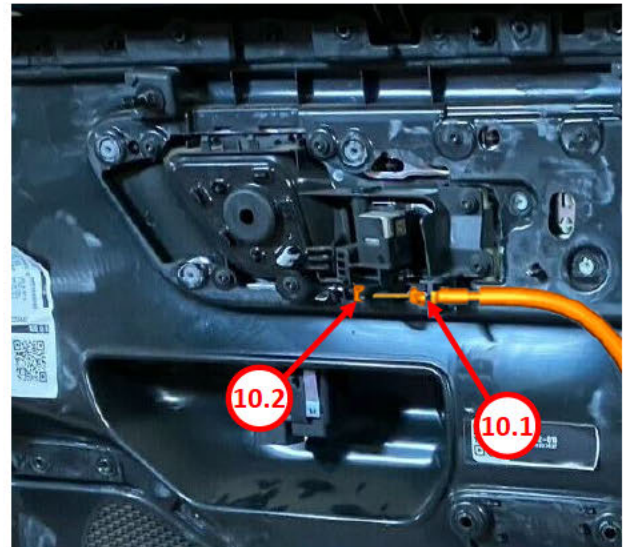
FRONT DOOR PANEL REMOVAL/INSTALLATION CONT.

8. Remove the lock knob cable (8.2) by lifting on the door panel and carefully separating the cable and sliding the lock knob (8.1) from the door trim. **(Removing the lock cable boot makes this easier.)**



9. Disconnect the door trim panel wire harness connectors.

10. Disconnect the interior handle cables (10.1)(10.2) and remove the trim panel assembly.



11. Remove the door panel from the vehicle and lay it face down on a clean padded surface. **Tech Tip:** Lower the tailgate of your truck, place a large towel or blanket down, and then place the door panel on top of it.

12. Refer to Door Handle LED Board removal and installation procedures. **(Pages 10-11)**

14. Refer to Map Pocket And Upper Glove Box LED Board Removal And Installation procedures. **(Pages 15-17)**

13. Refer to Middle Pocket LED Board removal and installation procedures. **(Pages 12-14)**

15. Re-install each door panel following Steps 1-11 in reverse order.

Door Handle LED Housing/Board Removal And Installation

Tools Needed: Pocket Screwdriver (or pick tool)

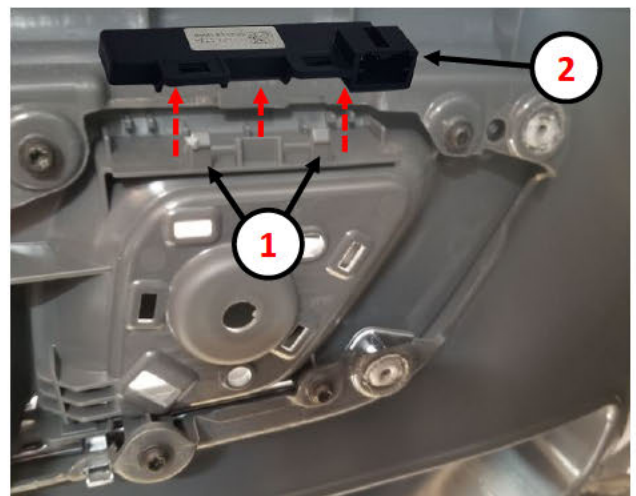


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Door Handle LED Housing

* Refer to service procedures for “Front Door Panel Removal/Installation” before proceeding. (Pages 8-9)

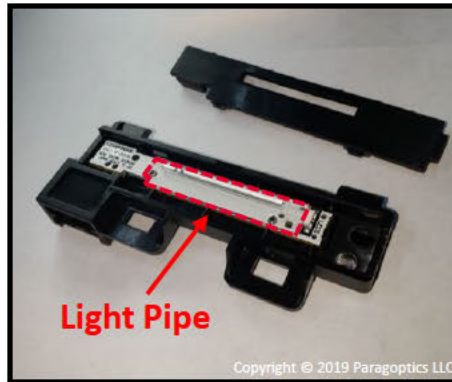
1. Press the locking tabs (1) away from the lamp assembly (2) to release the lamp housing from the door handle unit.



View from backside of door handle bezel

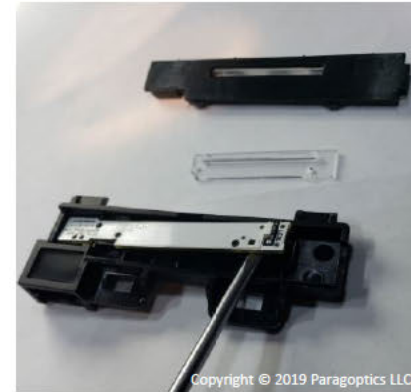


2. Using a pocket screwdriver gently insert the end of the screwdriver into the indicated cavities to release the tabs holding the lid of the Door Handle LED Housing. Remove housing lid.

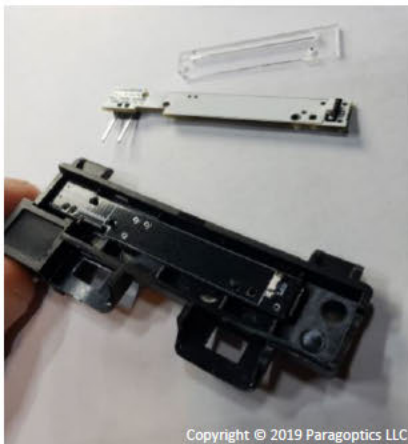


3. Carefully remove optical Light pipe and place it on a clean surface.

Tech Tip: Be careful, do not damage or loose the light pipe during removal and installation. It is an integral part of the Door Handle LED housing and can only be replaced via purchasing another housing.



4. Using a pocket screwdriver gently lift on the factory LED board and remove it.



5. Replace the factory LED board with the supplied Door Handle LED Board. Line up the LED board with the alignment pins in the Door Handle LED housing.



6. Gently place the optical light pipe on top of the supplied LED board in the housing. The alignment pins in the housing will retain the light pipe.

Reconnect housing to wire harness connector and verify LED operation prior to re-installing each door panel!



7. Align the two tabs on the housing lid with the corresponding cavities on the back of the housing as shown. With the two tabs of the lid held firmly in place slowly “fold” the lid over until the remaining tabs snap in place.

Tech Tip: This procedure can be challenging as the light pipe tends to move out of alignment when snapping the lid in place. Follow this step to help minimize this issue.

Middle Pocket LED Housing/Board Removal And Installation

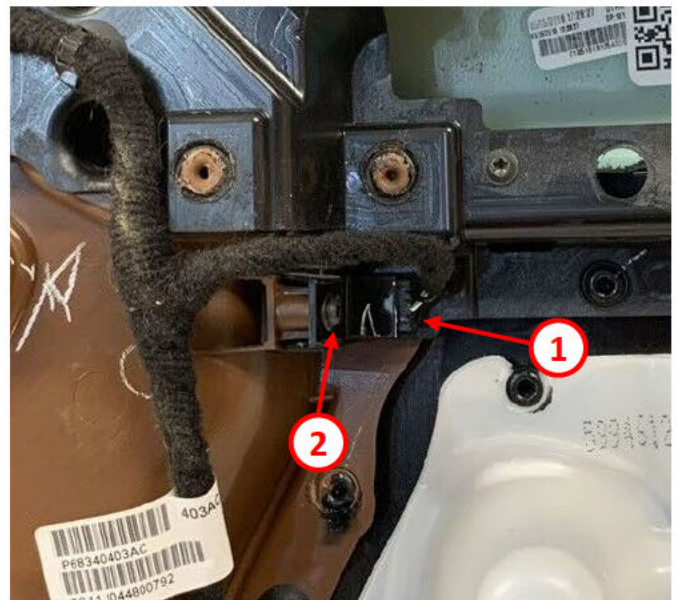
Tools Needed: Pocket Screwdriver, T20 Torx Screwdriver



*Middle Pocket
LED Housing*

**Refer to service procedures for “Front Door Panel Removal/Installation” before proceeding. (Pages 8-9)*

1. Disconnect the connector from the middle pocket LED housing.
2. Using a T20 Torx bit remove the screw holding the middle pocket LED housing in place.
3. Remove the Middle Pocket LED housing from the door panel.



4. Using a pocket screwdriver gently push the flat end of the screwdriver into the indicated cavities to release the tabs holding the lid of the Middle Pocket LED Housing. Open housing lid.



5. Carefully remove LED Lens and place it on a clean surface.

Tech Tip: Be careful and do not damage or loose the LED Lens during removal and installation. It is an integral part of the Middle Pocket LED housing and can only be replaced via purchasing a new housing.



6. Remove the stock LED board.



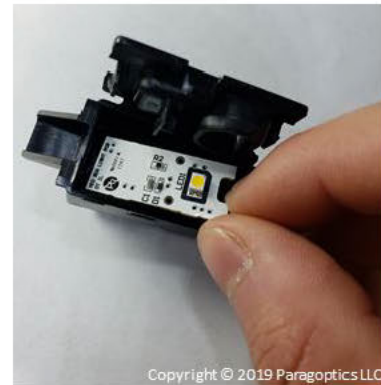
8. Line up the pins of the new LED board with cavities 1-3 on the middle pocket housing prior to installing the new LED board.

9. After verifying that the pins are lined up with cavities 1-3 place the new LED board in the housing.

10. Place the light pipe on top of the new LED board in the middle pocket housing and close the lid of the housing until the tabs snap back into place.

11. Re-install the middle pocket LED assembly on the door panel.

Tech Tip: When re-installing the middle pocket LED assembly make sure the tab on the middle pocket housing is firmly seated in the door panel before tightening down the torx screw that holds the housing in place.



Reconnect housing to wire harness connector and verify LED operation prior to re-installing each door panel!

Map Pocket Housing Removal



Map Pocket
LED Housing

Tools Needed:

T20 Torx Screwdriver.

1. Refer to service procedures for “Front Door Panel Removal/ Installation” before proceeding. **(Pages 8-9)**

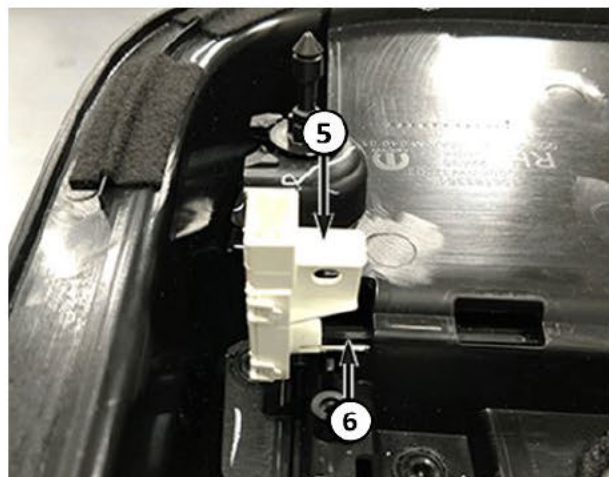
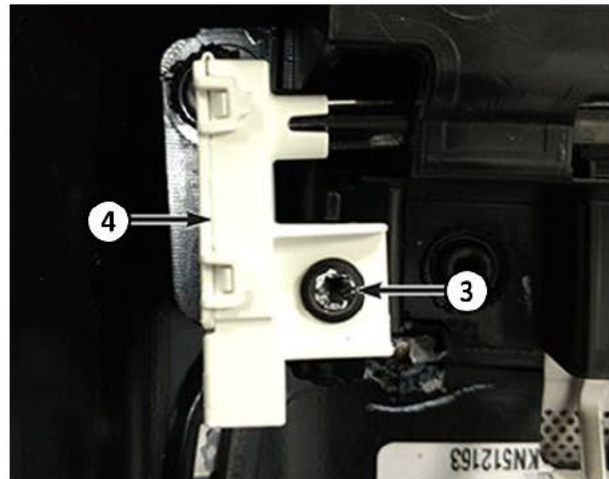
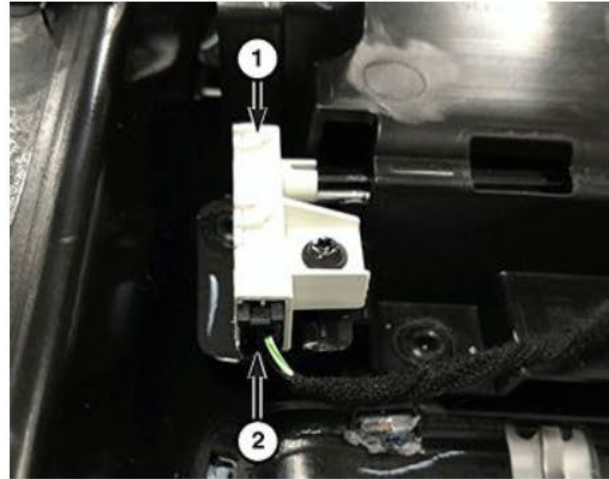
2. Disconnect the wire harness connector (2) from the door map pocket lamp (1).

3. Use a T20 torx screwdriver to remove the fastener (3) securing the map pocket lamp (4) to the panel.

4. Rotate the map pocket lamp (5) 90 degrees then remove the map pocket lamp from the light pipe (6).

5. Refer to “Map Pocket/Upper Glove Box LED Board Removal And Installation” to install the supplied LED boards. **(Page 17)**

6. Re-install Map Pocket housing.



Map Pocket And Upper Glove Box LED Board Removal And Installation



*Map Pocket LED Housing
(Primary)*



Upper Glove Box LED Housing



*Map Pocket LED
Housing (Secondary)*

Note: Only early build 2019 DT Rams are equipped with secondary (white) map pocket LED housings. 2020+ DT Rams use only one primary (black) map pocket LED housing per door panel.

The service procedures for replacing both the Primary, Secondary Map Pocket and Upper Glove Box LED boards are the same.

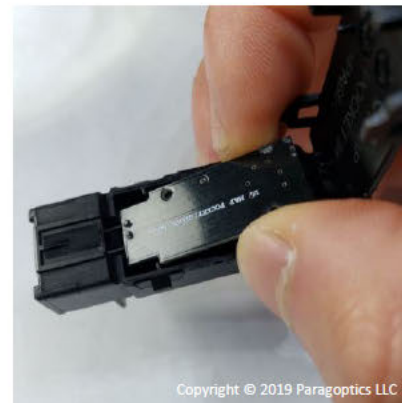
Map Pocket And Upper Glove Box LED Board Removal And Installation

Tools Needed: Pocket Screwdriver

1. Using a pocket screwdriver gently release the 4 tabs on the map pocket housing to open the lid.



2. Remove the stock map pocket LED board from the housing.



3. Place the new map pocket led board in the map pocket housing.



4. Close the lid of the map pocket housing.

Reconnect housing to wire harness connector and verify LED operation prior to re-installing each door panel or radio bezel!



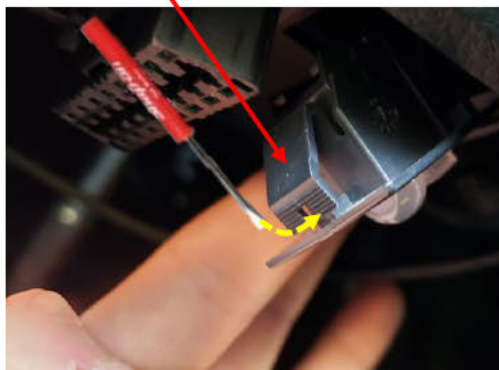
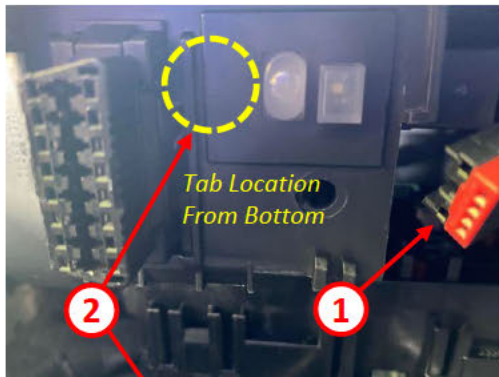
Front
Footwell LED
Housing

Footwell LED Housing Removal

Tools Needed:

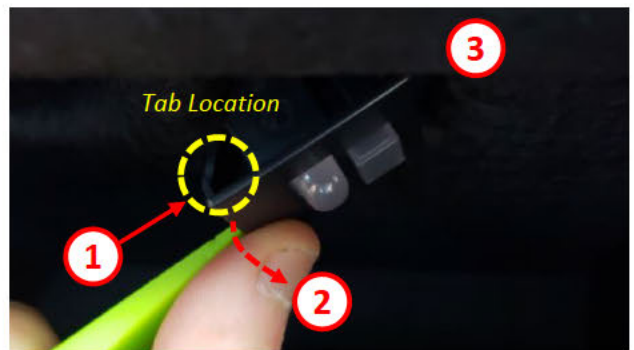
Plastic Trim Tool, Pocket screwdriver

Driver Front Footwell LED Housing Removal



1. Disconnect the wire harness connector from the footwell housing.
2. Using a pocket screwdriver depress the tab from the top side of the footwell LED housing, then remove the housing from the kick panel.

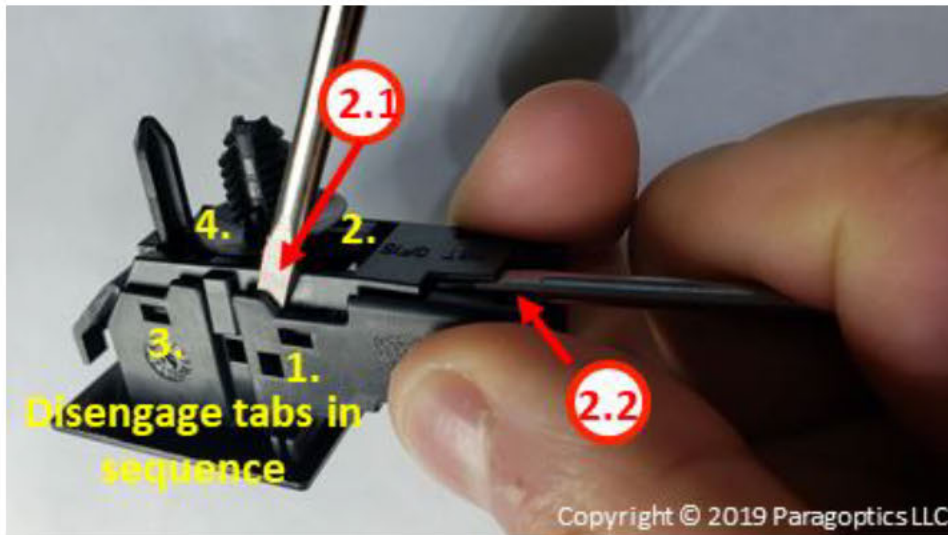
Passenger Front Footwell LED Housing Removal



1. Slide the end of your plastic trim tool between the closeout panel and the footwell LED housing
2. Depress the indicated tab, then pull down on the Footwell LED housing to remove it from the closeout panel.
3. Disconnect wire harness connector

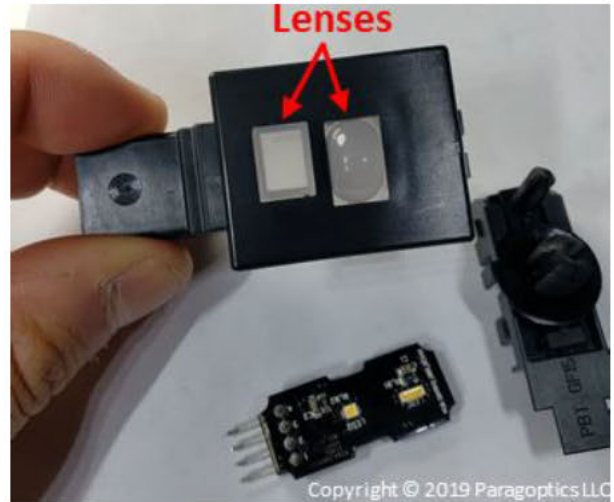
Footwell LED Board Removal And Installation

Tools Needed: 2 pocket screwdrivers.

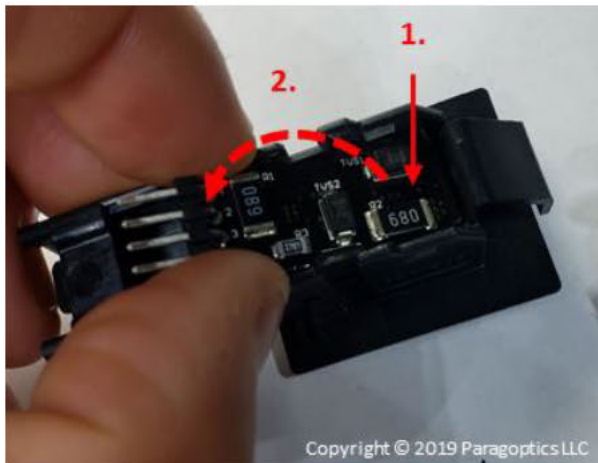


2.1 Using one pocket screwdriver CAREFULLY slide the end of the screwdriver between the lid and the housing to disengage tab (1.) shown above. **(Do not pry on the housing excessively as the corners of each tab are easy to break.)**

2.2 Once tab (1.) has been released gently lift on the lid of the housing using a second pocket screwdriver (as shown). Continue to hold steady pressure with the second screwdriver while you disengage the remaining tabs in sequence with the first pocket screwdriver. **(following this step will prevent the tabs from locking back in place while you disengage the rest of the tabs in sequence.)**



3. With your pocket screwdriver gently lift on the back of the LED board to loosen it. Remove the stock footwell LED board from the housing. **(Be careful not to loose the lenses when removing the LED board. If the lenses fall out of the housing don't worry, they can easily be re-installed)**



4. Place the front of the LED board in the housing **(1.)** then press down on the back of the LED board until it bottoms out in the housing **(2.)**

5. Place the lid on top of the housing and firmly push down on the lid until all 4 tabs lock in place.

Reconnect housing to wire harness connector and verify LED operation prior to re-installing each Footwell LED housing!

Service Procedures For Dashboard LED Housings



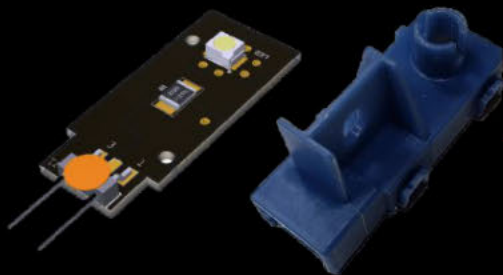
Left Side Dash LED
(Left Side Dash LED Housing Removal
Procedures Pages 27-29.)

Right Side Dash LED
(Right Side Dash LED Housing
Removal Procedures Page 25.)



Dash LED Boards (2 PCS)

(Removal And Installation Instructions page 30)



(Upper Glove Box LED Housing
Removal Procedures Page 24.)



Upper Glove Box LED Board (1 PC)

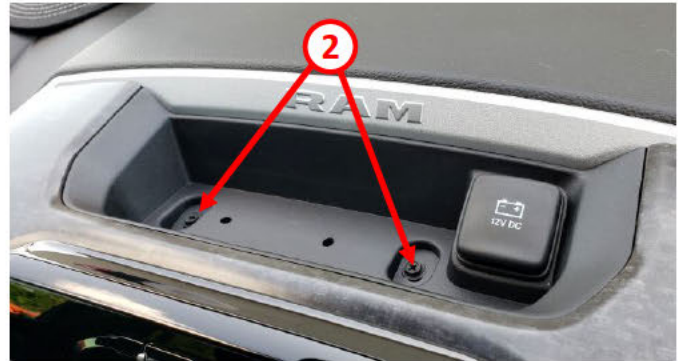
(Removal And Installation Instructions page 17)

Upper Glove Box/Right Side Dash LED Housing Removal/Installation

Radio Bezel Removal

Tools Needed: Philips Screwdriver

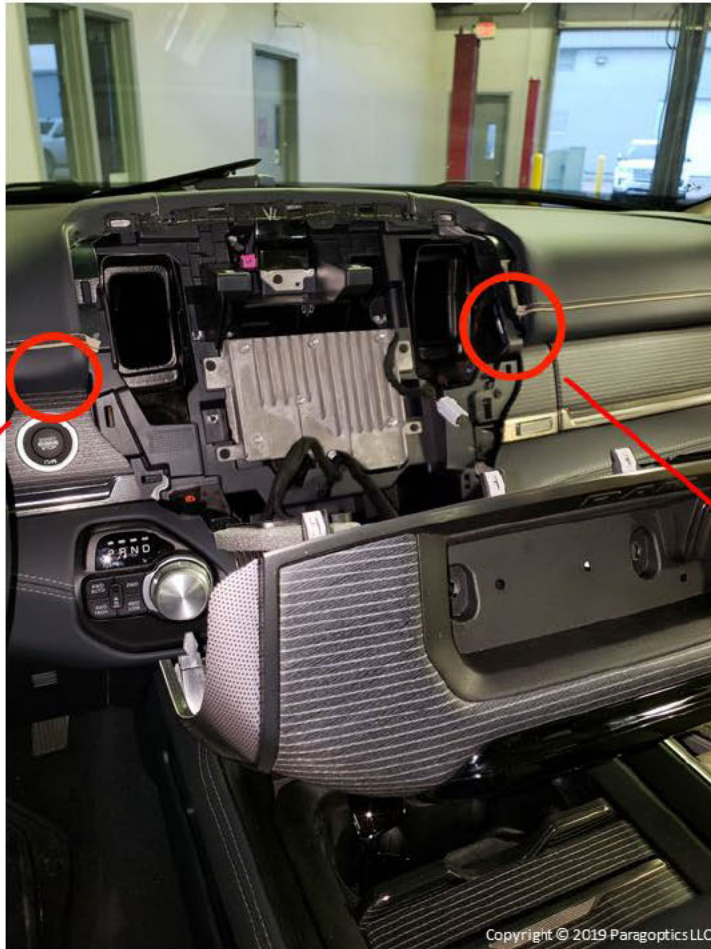
1. Remove the upper center bezel rubber tray liner.
2. Remove the two Philips fasteners securing the upper tray.
3. Firmly grab the sides/top of radio bezel (orange), disengage the retainer clips that secure the instrument panel center bezel to the instrument panel.
4. Disconnect the wire harness connectors.



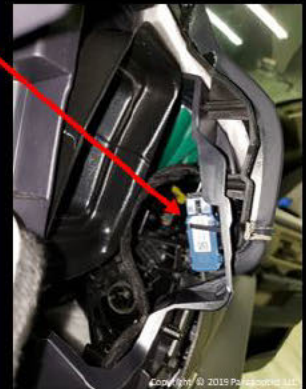
NOTE: Procedure shows 8.4-inch display screen, 12-inch screen procedure similar.

Upper Glove Box/Right Side Dash LED Housing Removal/Installation

Right Side Dash LED



Upper Glove Box LED



(Picture showing radio bezel removed)

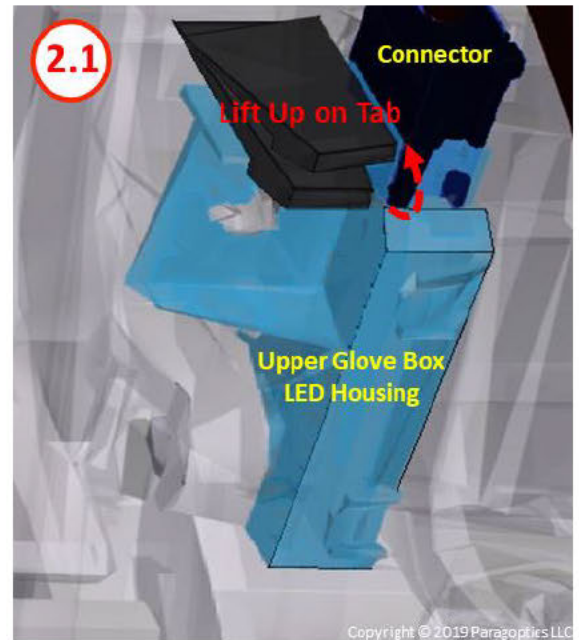
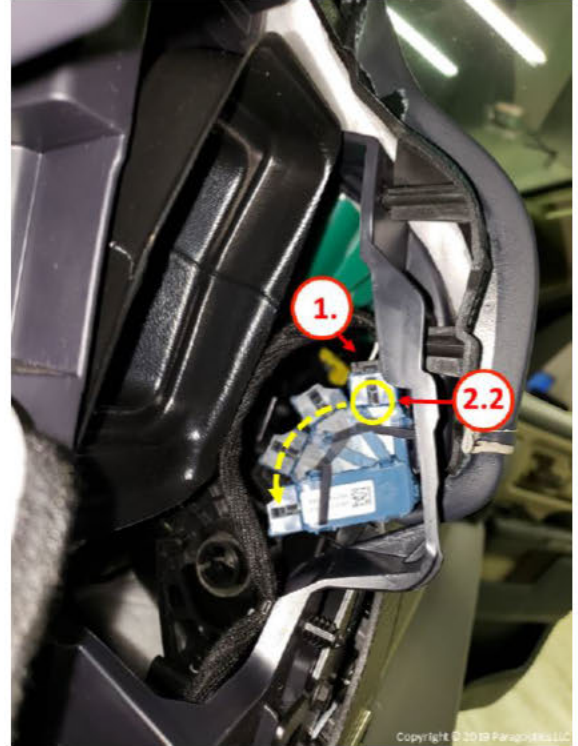
Upper Glove Box LED Housing Removal



*Upper Glove Box
LED Housing*

Refer to service procedures for
"Radio Bezel Removal" before
proceeding. (Page. 22)

1. Disconnect the wire harness connector from the upper glove box LED housing.
2. Disengage the tab securing the upper glove box LED housing to the instrument panel (2.1), rotate the housing 90° and remove the housing (2.2).
3. Refer to "Map Pocket/Upper Glove Box LED Board Removal And Installation" to install the supplied LED Board. (Page. 17)
4. Install Upper Glove Box LED housing.

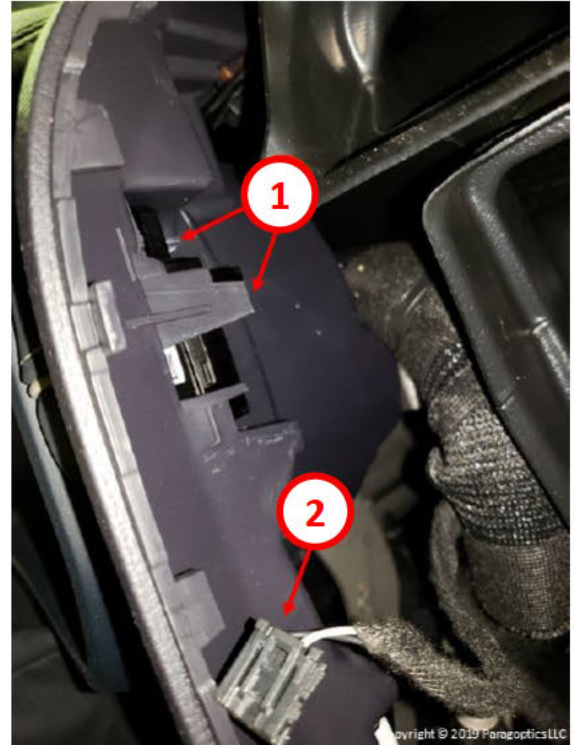


Right Side Dash LED Housing Removal And Installation



Right/Left side Dash LED housing

Refer to service procedures for “Radio Bezel Removal” before proceeding. (Page 22)



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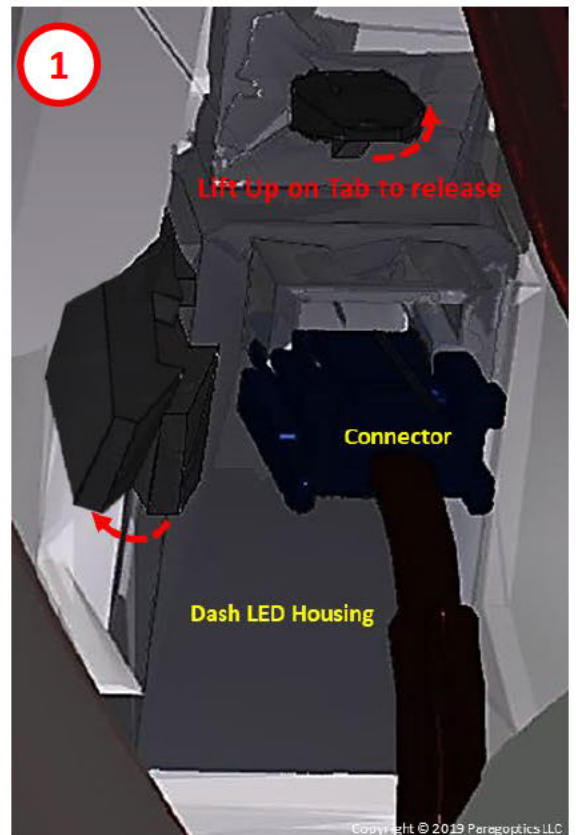
1. Disengage the two tabs securing the Right-Side Dash LED housing to the instrument panel (1) , remove the Dash LED Housing. (To prevent the Dash LED housing from falling behind the dash during this step, leave the housing connected to the wire harness.)

2. **CAREFULLY** disconnect the wire harness connector (2) from the Right-Side Dash LED housing without dropping it behind the instrument panel. (This has happened to us before and it is not a fun time trying to retrieve it.)

3. Refer to “Dash LED Board Installation and Removal” to install the supplied LED Board. (Page 30)

4. Install right side dash LED housing.

5. Refer to Radio Bezel Installation. (Page 26)



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Radio Bezel Installation

Tools Needed: Philips Screwdriver

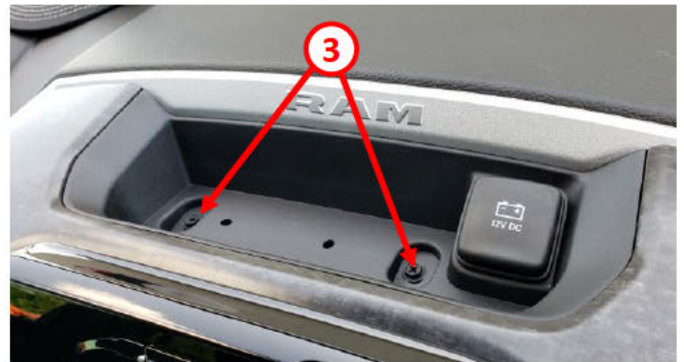
1. Position the instrument panel center bezel near the instrument panel and connect the wire harness connectors.

2. Install the instrument panel center bezel to the instrument panel and fully engage the retainer clips.

Tech Tip: take note of all the retainer clip locations on the radio bezel. With the palms of your hands apply pressure to these areas to ensure that every retainer clip is fully engaged.

3. Install and securely tighten the two fasteners to the upper tray.

4. Install the upper center bezel tray liner.



NOTE: Procedure shows 8.4-inch display screen, 12-inch screen procedure similar.

Left Side Dash LED Housing Removal And Installation

Tools Needed: Plastic Trim Tool



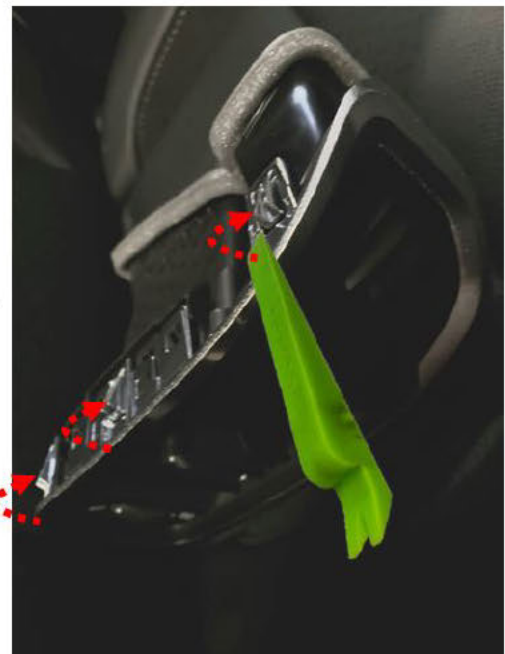
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*Rendering of left side Dash LED housing in the approximate location
behind the dash near the driver side instrument cluster*

Air Outlet Vent Removal

Tools Needed: Plastic Trim Tool

1. Using a plastic trim stick or equivalent, depress each of the indicated tabs and remove the outer air outlet (1).

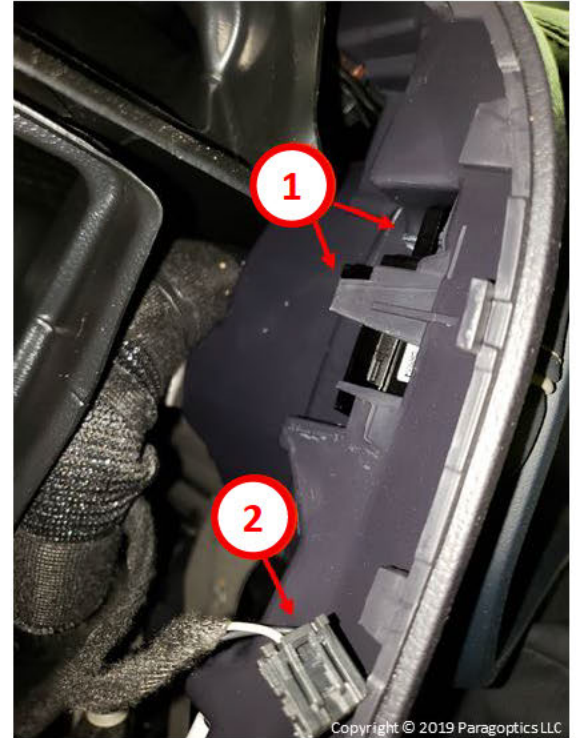


Left Side Dash LED Housing Removal And Installation



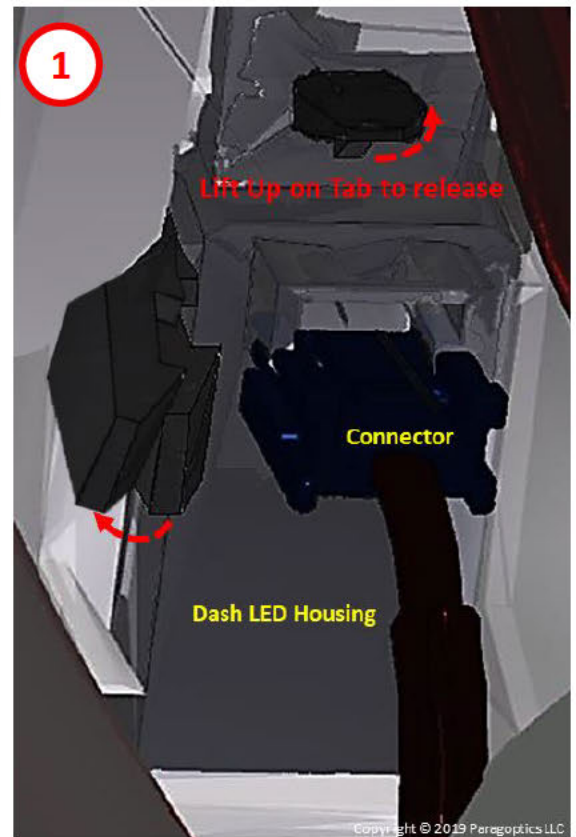
Right/Left side Dash LED housing

1. Disengage the two tabs securing the Left-Side Dash LED housing to the instrument panel (1), remove the Dash LED Housing. (To prevent the Dash LED housing from falling behind the dash during this step, leave the housing connected to the wire harness.)



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2. CAREFULLY disconnect the wire harness connector (2) from the Left-Side Dash LED housing without dropping it behind the instrument panel. (This has happened to us before and it is not a fun time trying to retrieve it.)



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3. Refer to "Dash LED Board Installation and Removal" to install the supplied LED Board. (Page 30)

4. Re-install left side dash LED housing.

Dash LED Board Removal And Installation

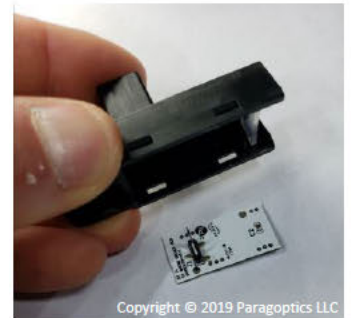
Tools Needed: Pocket Screwdriver.



1. Follow the removal procedures for both the Right And Left Side Dash LED Housings before proceeding to step 2.



2. Using a pocket screwdriver gently push the tip of the screwdriver into the indicated cavities to release the tabs holding the lid of the Dash LED Housing. Remove housing lid.



3. Remove the factory LED board.

4.1



4.1 Line up the pins on the new LED board with cavities 1-3 on the Dash LED housing prior to installing the new LED board.

4.2



4.2 After verifying that the pins are lined up with the cavities shown in picture 4.1. Place the new LED board in the housing.



5. Close the lid of the Dash LED housing.

(Refer to Page 31 on how to operate your ambient lighting system.)

Reconnect housing to wire harness connector and verify LED operation prior to re-installing radio bezel or driver side ac vent!

Factory Dimming Controls

The dimmer controls are inboard and adjacent to the headlight switch located on the left side of the instrument panel. The ambient lights will turn on each time you open the doors, unlock the vehicle, or turn the parking lights/ headlights on.



Dimmer Controls

1 — Ambient Light Control

2 — Instrument Panel Dimmer Control

With the parking lights or headlights on, rotating the right dimmer control (2) upward will increase the brightness of the instrument panel lights. Rotating the left dimmer control (1) will adjust the interior and ambient light levels.

Note:

The ambient lights will NOT come on if the Instrument Panel Dimmer(2) is set at the maximum upward setting. Rotate Instrument Panel Dimmer(2) downward 1 position before the maximum setting to turn on the ambient lighting.