Speaker®
Engineered Lighting Solutions

Model 6146
4" Round LED Ford F-150 Fog Lights

Installation Instructions for 2005-2010 Ford F-150 Trucks

TOOLS NEEDED:

- Quarter-Inch Flat Blade Screwdriver
- Short (<1.5 inches long) #2 Phillips Screwdriver
  OR #2 Phillips Drill Bit and Socket Wrench

Estimated Installation Time: 1 HOUR

BEFORE BEGINNING INSTALLATION:

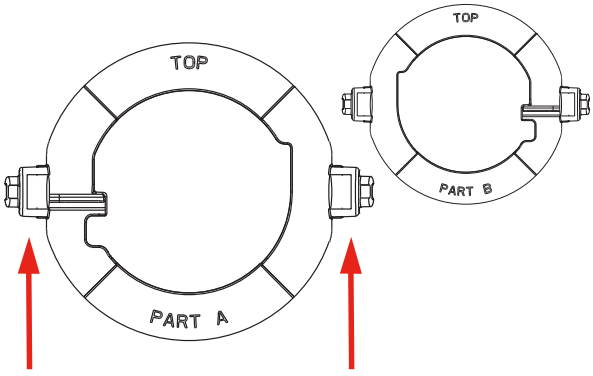
Locate and unpack the plastic bag of parts in the Model 6146 packaging. This bag should include:

- ☐ **2 Adjustment Screws**
- ☐ **2 Mounting Buckets (One Labeled Part A, One Labeled Part B)**
- ☐ **2 Springs**
- ☐ **2 Plastic Nuts**
- ☐ **2 Fog Lights**

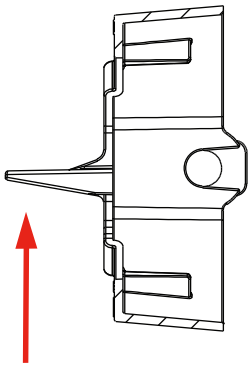
If any part is missing, do not proceed with the installation. Please contact the J.W. Speaker distributor that you purchased the product from.

GLOSSARY:

Mounting Buckets (2): Included in the kit, and used to fit the Model 6146 into the Ford F-150 *(below)*.

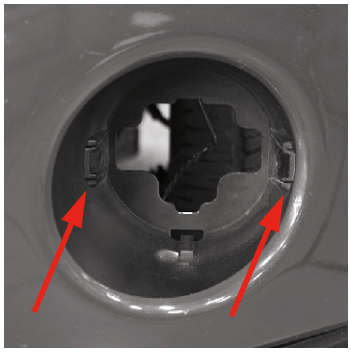


Post: The circular extremities on the mounting bucket that snap into the shroud.



Adjustment Arm: The plastic appendage on the back of the mounting buckets and shroud that holds the adjustment springs and screws.

Shroud: The plastic "bucket" inside the bumper which holds the fog light assembly *(below)*.



Mounting Tabs: The tabs located on either side of the shroud where the posts snap into place.

Plastic Nuts (2): Included in the kit, and used to secure the mounting bucket to the shroud.

Springs (2): Included in the kit, and used to secure the mounting bucket to the shroud and aim the light.

Adjustment Screws (2): Included in the kit, and used to secure the mounting bucket to the shroud and aim the light.

CAUTION: *CHECK THE BACK OF EXISTING LIGHTS BEFORE BEGINNING INSTALLATION. ANY EXCESSIVE RESISTANCE IN REMOVING LIGHTS MAY BE CAUSED BY DIRT, SALT OR OTHER WEAR FROM DRIVING.*

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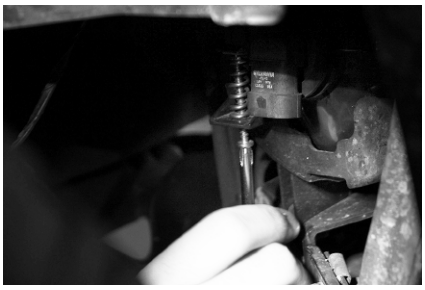
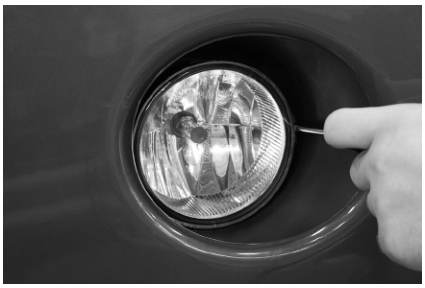
REMOVING EXISTING LIGHTS

AS A SAFETY PRECAUTION, DISCONNECT THE VEHICLE BATTERY BEFORE ATTEMPTING TO REMOVE THE EXISTING LIGHTS.

1: From beneath the vehicle, disconnect the wire harness from the rear of each light.



2: Using the #2 Phillips screwdriver or socket wrench, carefully remove the adjustment screw. Pull out and discard the springs and screws (you will use the new screws and springs provided in the kit).



3: DRIVER SIDE: Facing the **front** of the vehicle, locate the ***mounting tab*** on the **RIGHT** side of the stock fog light. Use the flat blade screwdriver to depress the ***mounting tab*** until the ***post*** is released from the ***mounting tab***.

4: Using one hand at the front and one at the back of the light, wiggle the stock fog light free from the ***shroud***.

Caution: *If you depress the LEFT side first, the light will get stuck. Avoid applying excessive force as it may break off the mounting tab inside the shroud.*

5: PASSENGER SIDE: Facing the **front** of the vehicle, locate the ***mounting tab*** on the **LEFT** side of the stock fog light. Use the flat blade screwdriver to depress the ***mounting tab*** until the ***post*** is released from the ***mounting tab***.

6: Using one hand at the front and one at the back of the light, wiggle the stock fog light free from the ***shroud***.

Caution: *If you depress the RIGHT side first, the light will get stuck. Avoid applying excessive force as it may break off the mounting tab inside the shroud.*

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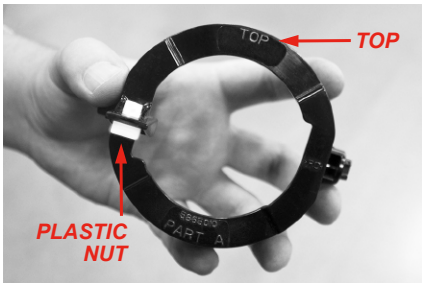
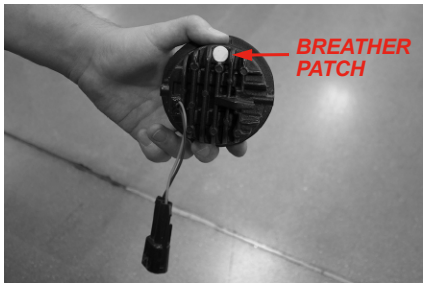
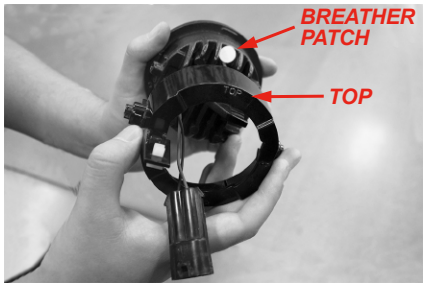
INSTALLING THE J.W. SPEAKER FOG LIGHTS



7: Orient the back of the ***mounting bucket*** so the word “TOP” is at the top. Insert the ***plastic nut*** into the square hole of the tab from the **BOTTOM**. It will snap into place.



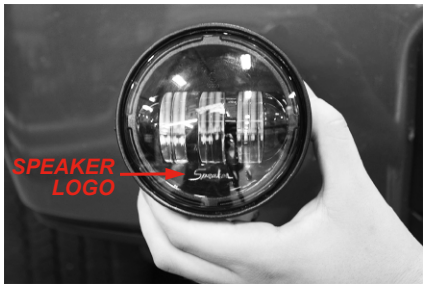
8: Holding the J.W. Speaker lights face-down, orient them so that the breather patch is at the **TOP** and the wiring is on the **LEFT**.



9: Feed the wire on the **BACK** of the light through the ***mounting bucket*** and orient the plastic **mounting bucket** with the "TOP" text at the **TOP** of the light.

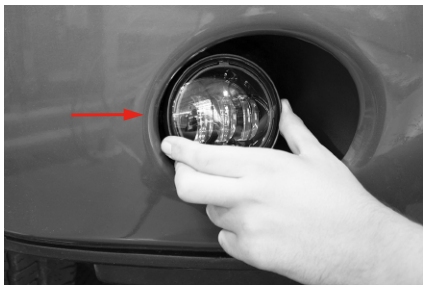
10: Insert the ***mounting bucket*** onto the light, **starting side with the *adjustment arm***. Squeeze the top and bottom of the ***mounting bucket*** so that it widens slightly at the sides. There will be an audible snap when it is properly seated.

Caution: *Starting from the other side will not allow the **mounting bucket** to attach to the fog light.*



11: PASSENGER SIDE: Take the light with the “TOP” text on top (when looking at the light from the back), and feed the wires through the hole in the ***shroud***. Ensure that the “SPEAKER” logo is right-side up across the bottom of the front of the light.

Caution: *If installed incorrectly, the light pattern will be upside-down and will NOT be street legal.*



12: Guide the **LEFT *post*** on the ***mounting bucket*** into the ***mounting tab*** on the ***shroud***. Once inserted, push the **RIGHT *post*** into place. The light should pivot freely up and down (about 10 degrees).

DRIVER SIDE: Repeat the same instructions as above, but the ***adjustment arm*** should be on the **LEFT** side when inserting the lamp into the shroud.

Caution: *If the light does not pivot freely up and down, the installation was not done properly. Remove the light and start over from step 8 and verify that the mounting bucket has been properly attached.*

If installed incorrectly, use the flathead screwdriver to pry the mounting bucket from between the post and fog light housing.

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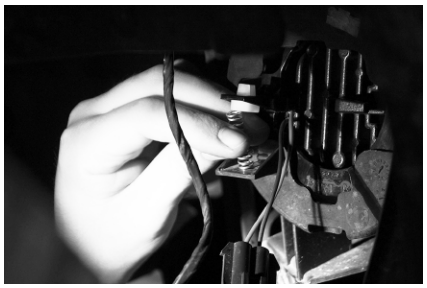
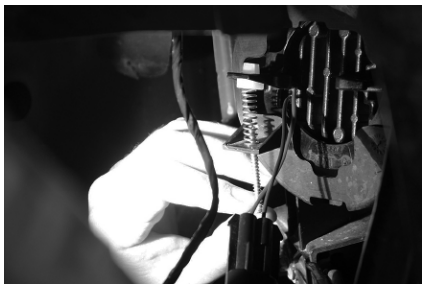
INSTALLING THE J.W. SPEAKER FOG LIGHTS (CONTINUED)

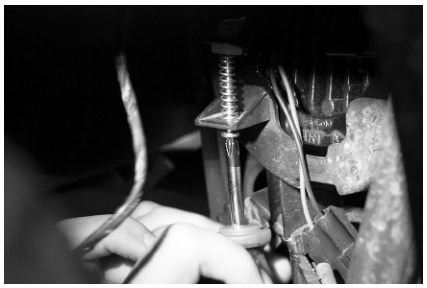


13: From underneath the vehicle, verify that the ***adjustment arm*** on the back of the ***mounting bucket*** and the ***shroud*** are on the same side.

Insert the ***spring*** between the aligned ***adjustment arms***.



14: Insert the ***adjustment screw*** from the bottom of the aligned ***adjustment arms***, through the ***spring***, into the ***plastic nut***. Turn the ***adjustment screw*** until it engages the ***plastic nut***.



15: Using the #2 Phillips screwdriver or socket wrench, rotate the ***adjustment screw*** clockwise to raise the light, and counter-clockwise will lower the light. This will determine the angling of the light on the road*.

16: Reconnect the wire harness.

Optional: The wire harness may be secured behind the mounting bucket with a zip tie (not included) to prevent accidental disconnection of the light.

Repeat steps 12-16 to install the light into the shroud for the driver side.

DRIVER SIDE: The ***adjustment arms*** should be on the **LEFT** side of the lamp when inserting it into the shroud.

17: Reconnect the vehicle's battery. Turn on the lights to ensure that they are correctly installed and functioning. If they do not turn on, please check your electrical connections.

***AIMING THE MODEL 6146 FOG LIGHTS:**

The fog light must be securely mounted and properly aimed such that the beam pattern "cut off line" complies with all applicable regulations. If you are not familiar with the legal requirements for aiming your fog light, please see a professional service provider.