

USER INSTRUCTIONS

X GRILLE RANGER PX2.

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Light FORCE®



SCAN CODE Follow along with our
YouTube instruction video.

TOOLS REQUIRED

- Multi tool with flat cutting blade
- Torx T25 screwdriver
- Small blade screwdriver
- Ratchet
- 10mm socket
- Extension bar (300mm)
- Flash light
- Masking tape
- Marker pen
- Ruler
- Trim tool
- 4mm Hex key

It is recommended these instructions are to be used in conjunction with the installation video.

GENERAL CARE AND SAFETY TIPS

Read complete instructions before installation starts

Ensure the vehicle is parked in a safe and level position with the handbrake correctly applied

STEP 1: REMOVING THE GRILLE ASSEMBLY FROM THE VEHICLE

1. Open the bonnet
2. Remove the 5 plastic retaining clips (Figure 1.) from the protective cover located over the radiator
3. Before the trim can be completely removed there are 6 retaining clips (3 per side) located in the front section of the trim that will need to be released



Figure 1.

4. The outer clips (Figure 2.) can be reached by slightly lifting the end of the trim and placing your hand under them to release
5. The remaining clips can be reached from the front of the grille



Figure 2.

6. Once all clips have been dislodged, remove the trim and place it to one side. Remove the 4 x M10 bolts two are located on the top, with two located on the inside of the grille further down
7. Lift the top mounting tabs up so it clears the retaining clip (Figure 3.) (once the top 2 x M10 bolts have been removed)



Figure 3.

8. There are 6 vertical retaining clips located each side of the headlight assembly, 3 per side (Figure 4.) that will need to be dislodged. Mask the area with masking tape or duct tape and work the clips free using a trim tool (Figure 5.)



Figure 4.



Figure 5.

NOTE: The 3 clips on each side need to be pushed inwards towards the centre of the grille (Figure 6.)



Figure 6.



Figure 7.

In addition, there are 6 horizontal retaining clips located below the grille that will need to be unclipped. (Figure 7.) Access to these can be obtained from below and pushing up on each clip (locations shown with arrows in Figure 8.)

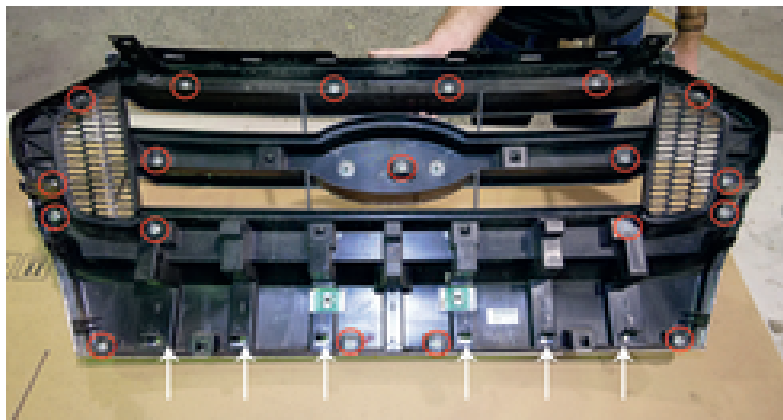


Figure 8.

Once the front grille assembly is completely free, remove it and place it on a table (it is recommended this is undertaken by 2 people).

STEP 2: SEPARATING THE OUTER & INNER TRIM

1. Remove all the Torx screws (Figure 8.) with the exception of the 2 Torx screws next to the Ford badge these are not required to be removed
2. Remove the upper metal support bar
3. Remove both the metal support brackets located on the side of the grille

NOTE: The side metal support brackets are indexed to fit in one orientation (left-hand & right-hand sides)

4. Remove the remaining Torx screws
5. Once all Torx screws have been removed, separate the two parts (inner trim and outer trim)
6. Place the outer trim to one side. (Figure 9.)



Figure 9.

NOTE: Step 3 is not required and proceed to Step 4 when purchasing the optional 'pre-cut inner grille' from Lightforce Australia (Part Number: XGRILLECUTOUT). For more information regarding this optional accessory please visit lightforce.com/aus/xgrille-ford-ranger.

STEP 3: MODIFICATION TO THE OEM GRILLE

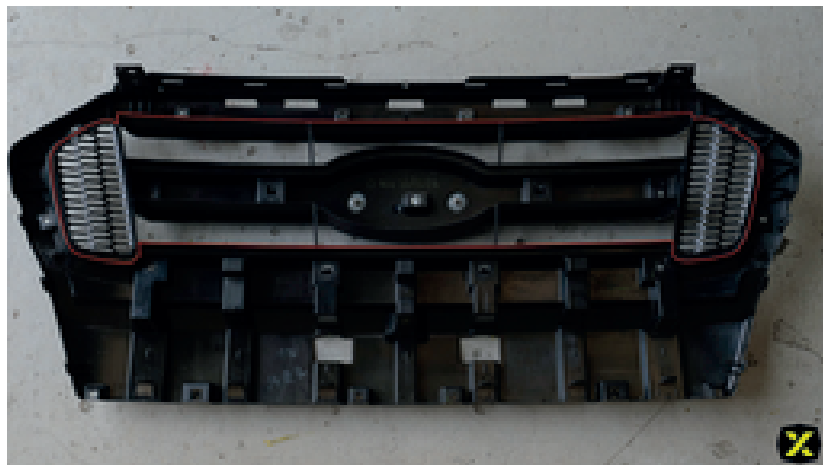


Figure 10.

The inner trim will require slight modification prior to the X Grille being fitted

1. First mark all sections to be cut as shown (Figure 10.)
2. Cut the 4 inner supports first (Figure 11.)

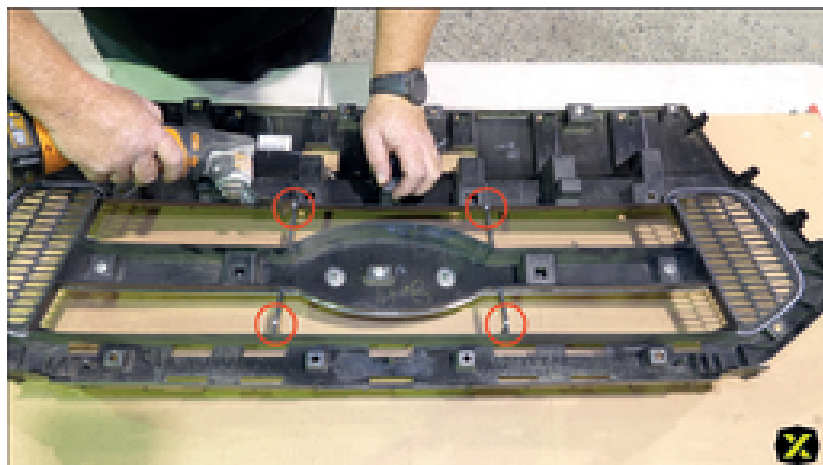


Figure 11.

3. Start the first horizontal cut as shown (Figure 12.)



Figure 12.

4. Cutting the outer grille section, work your way around with the multi tool cutting just below the lip (Figure 12.)
5. Repeat the process for the other side
6. Completely remove the inner grille with Ford badge, this section is no longer required.

The upper and lower sections of the grille will now need 15mm of material removed

1. Starting with the upper section, replace the upper metal supporting bracket and use it as a template to mark the section to be cut (Figure 13.)



Figure 13.

2. Remove upper metal supporting bracket

3. Using a ruler extend the mark to the ends on both sides (Figure 14.)

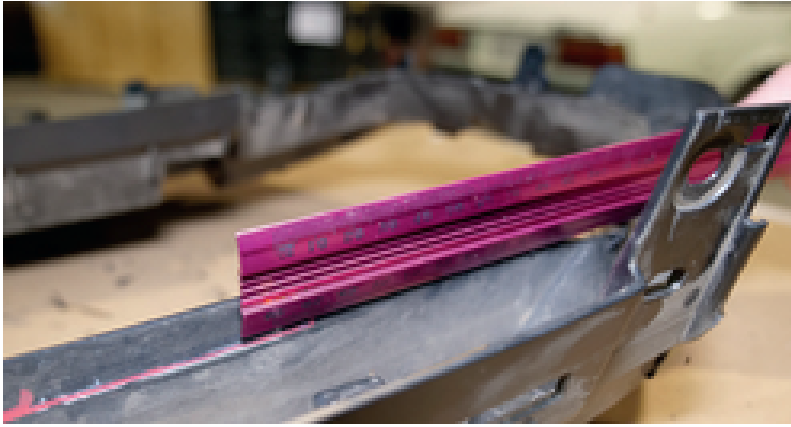


Figure 14.

4. Using the multi tool, cut across the entire line you have just made.

Cutting the lower section

1. Run the multi tool along the lip from side to side resting the multi tool on the plastic insert for support
2. Clean off any loose plastic from all the sections that have been cut so no burs or raised edges are left.

STEP 4: FITTING THE X GRILLE TO INNER/OUTER TRIM

1. Place the outer trim on a flat raised surface
2. Place the inner trim onto the outer trim ensuring they both locate together correctly
3. Place the X Grille into the inner trim ensuring it locates into the 2 locating points (Figure 15.)



Figure 15.

4. Refit the upper metal supporting bracket ensuring it locates into the guides and affix the Torx screws
5. Refit the side brackets by inserting the locating lug under the X Grille and then onto the support. Affix the Torx screws (Figure 16.) and repeat this process to the other side



Figure 16.

6. Refit all the remaining Torx screws ensuring they are tight.

STEP 5: FITTING X GRILLE TO THE VEHICLE

NOTE: It is recommended that 2 people refit the front grille assembly to the front of the vehicle

1. Locate the complete grille assembly to the vehicle ensuring all the retaining clips are aligned with their respective mounting points and push it back into place
2. Ensure the top clips that the 2 x M10 bolts mount through, are correctly located and clipped into place
3. Refit the 2 top M10 bolts (short length)
4. Refit the 2 bottom M10 Bolts (long length).

STEP 6: WIRING HARNESS INSTALLATION

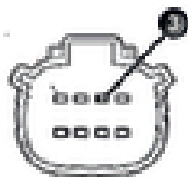
1. Remove the main ground wire from the negative battery terminal. **WARNING:** This may result in loss of radio security code and clock settings. Please consult your owner's manual before disconnecting
2. Mount the relay in a suitable place within the engine bay, using the screw supplied and a drill with a Phillips head driver bit. Ensuring that the red (positive) ring terminal reaches the battery terminal and the black (negative) ring terminal reaches the negative connection point on the body (**DO NOT CONNECT DIRECTLY TO THE NEGATIVE BATTERY TERMINAL**).

DO NOT CONNECT POSITIVE TERMINAL TO THE BATTERY AT THIS STAGE

3. Route the insulated sleeved wires that run from the relay to the driving light connectors to each of the installed Driving Lights and connect the driving light connectors to the back of each light, ensuring that they click into place. Ensure that cables do not touch the radiator or come in contact with any sharp edges
4. Secure all excess wires to the vehicle with the supplied cable ties.

FITTING THE PATCH HARNESS:

1. For ease of access remove the large relay for the glow plugs (diesel models only) that is located in front of the battery and place to one side
2. Remove the factory headlight connector (located at the base of the headlight assembly) on the passenger side headlight by depressing the tab down and pulling directly back away from the headlight assembly
3. Connect the high beam patch harness into the headlight and refit the connector ensuring it locks back into place
4. Fit the red and green bullet connectors of the wiring harness and patch harness together red to red and green to green (high beam pickup). If using the supplied mouse switch the yellow wire (switch illumination) is not required and should be secured with a cable tie to one side
5. If fitting a Lightforce switch with illumination connect a blue T Tap connector supplied over the cable on pin 3 of the patch harness. Then fit the yellow cable with a spade terminal to the T-Tap connector.



NOTE: Using the yellow wire for the switch illumination will mean the switch illumination will not be able to be adjusted from the headlight dimmer switch

If you have removed the large relay for the glow plugs during installation of the patch harness refit back into place.

INSTALL THE DASH SWITCH

1. Route the small round multi pin connector through the vehicles firewall, by first cutting the small grommet located on the passenger's side within the engine bay. Be careful to avoid crushing the cable, ensuring the wire is kept away from any heat sources
2. From inside the vehicle on the passenger side route the cable to a suitable position on the dash.

CONNECT THE DASHBOARD SWITCH LOOM

1. Connect the round multi pin connector to the mouse switch by aligning the notches on the connectors then pushing into place. Remove the adhesive protective cover on the back of the mouse switch and apply pressure to affix in the desired location
2. Note that this standard switch illuminates only when turned on
3. If you are using a different switch with dash illumination (not included), connect the dash illumination cable (on the switch loom) to your switch, as directed by the user instructions for the switch.

CONNECT TO THE BATTERY

1. Connect the ring terminal on the red wired battery connector to the positive battery terminal using a spanner
2. Connect the ring terminal on the black cable marked Battery Negative directly to the vehicles body (Figure 17.).

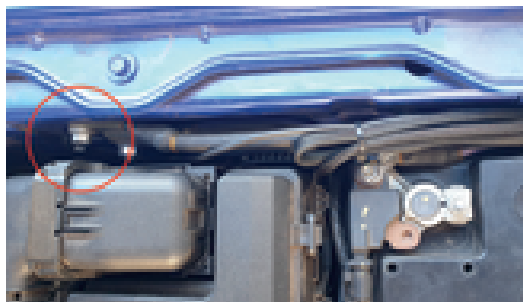


Figure 17.

SECURE CABLES

1. Use the supplied cable ties to secure all loose cables and remove excess using wire cutters.

TEST

1. Turn on the ignition and test correct light operation by switching on your high beam. Ensure the lights only activate when switched to high beam
2. Refit the protective cover in position so the front 6 retaining clips click back into place and then reinsert the 5 top retaining clips.

FILTER REMOVAL

Before the filter can be removed you will first need to remove the chrome bezel. Each bezel is held in place by 4 clips. Only moderate force is required to separate the chrome bezel from the grille assembly by pulling forward on either side.

Once the bezel has been removed, remove the filter by lifting the tab located at the bottom of the light and pulling the filter away from the housing.

FILTER REFITTING

1. Insert the filter at the top position (Figure 18.)
2. Push filter onto bezel using lower filter tab until all 4 side clips are fully engaged ensuring filter is correctly aligned within the housing.

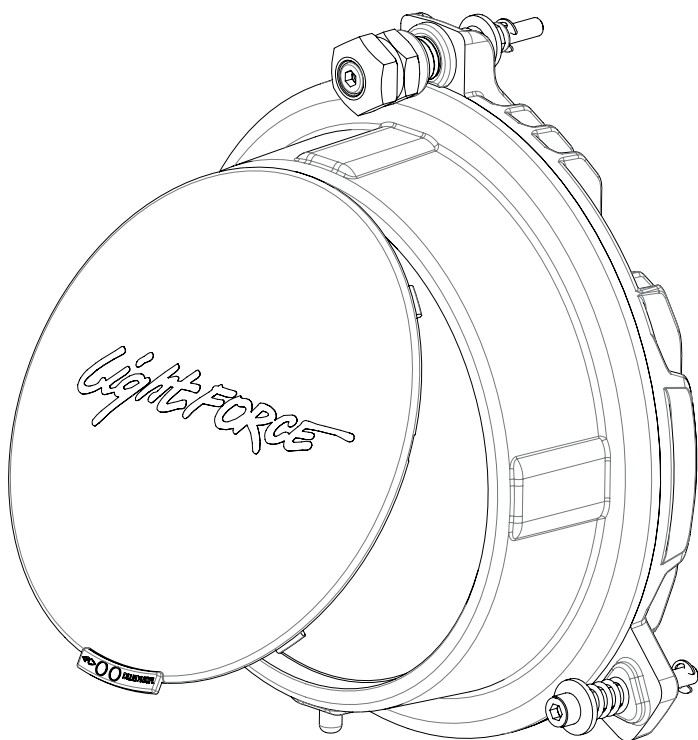


Figure 18.

CHROME BEZEL FITMENT

Note: There is a left and a right-hand side chrome bezel, each bezel has an arrow marked on the top. Align this arrow with the top locating lug on the X-Grille and push firmly into place until all 4 clips locate.

BEAM ADJUSTMENT

The Venom Flush Mount light fitted within the X-Grille can be adjusted, both vertically and horizontally by movement of the 2 hex bolts near the base of each light.

- Adjusting both hex bolts equally raises or lowers the light beam.
- Adjusting either hex bolt moves the light beam left or right.

4mm hex key required (not included)

DRIVING LIGHT FILTERS

Durable polycarbonate covers should remain fitted to driving lights at all times. They are capable of absorbing road grime and bombardment for many years. These replaceable covers should be renewed from time to time to protect your investment and maintain maximum beam output. Your Venom insert LED light comes standard with a spot filter. Clear combo filters are used to change the beam pattern.

- **F150CB** Venom 150mm – crystal blue
- **F150CCB** Venom 150mm – crystal blue combo
- **F150CC** Venom 150mm – clear combo
- **F150BC** Venom 150mm – Black Protective Cover



For warranty information and to register your product for warranty purposes, visit lightforce.com/warranty

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