

# 20-22 SUPER DUTY XB HYBRID LED HEADLIGHTS INSTALL GUIDE

WARNING: By reading this document, you agree it is only to be used as an educational guide. Morimoto Lighting nor its dealers make guarantees on any finished results, nor are they to be held responsible for any damage, misuse, or personal injuries. If you are unable to clearly understand and adapt the information below, professional installation is recommended.

#### PACKAGE CONTENTS



2X HEADLIGHT ASSEMBLIES



1 X FUSE TAP / DRL HARNESS

IMPORTANT: If your vehicle is equipped with anything but Morimoto or OEM tail lights, side markers or other OEM exterior lighting; you may experience a hyper flash and/or problem with the sequential signal setting on these headlights. This is not a defect in the headlight, and caused by un-matched impedance with your original vehicle settings.

### 20-22 SUPER DUTY



## TABLE OF CONTENTS

- VERTICAL HEADLIGHT AIMING PROCEDURE ..... PAGE 3

- INSTALLATION PROCESS ----- PAGE 4

## REQUIRED TOOLS

- RATCHET - FLAT HEAD SCREWDRIVER OR TRIM REMOVAL TOOL

- 10MM SOCKET - PHILIPS HEAD SCREWDRIVER

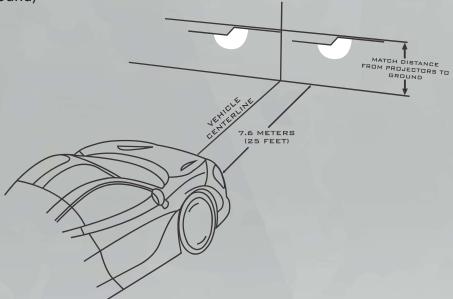
- 13MM SOCKET - NEEDLE NOSE PLIERS

- PICK TOOL - TAPE MEASURE

#### VERTICAL HEADLIGHT AIMING PROCEDURE

- To properly aim your Morimoto headlights, first park your truck on a level surface 25 feet from a wall.
- -Then with a tape measure, measure the distance between the ground and your headlight beam (picture below).
- -Write down this distance.

- -Once you install your Morimoto headlights, park the same way as you did with your pervious headlights
  -Aim your Morimoto headlights to shine as high as your previous headlight (measure ment you too above).
  -The general rule is to then drive the truck around and look at surrounding vehicles to make sure your headlight beam isn't directly in their eyes, if it is then lower your headlights. (this mat vary depending on how high your truck is from the ground)



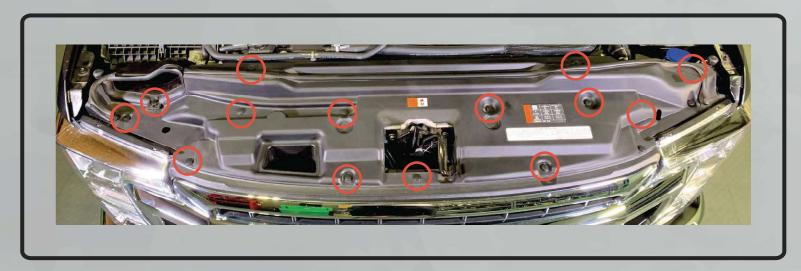
- To adjust the low beam, slide a philips head screwdriver into this slot and turn the screwdriver counter clockwise to move the beam up and turn clockwise to move the beam down.



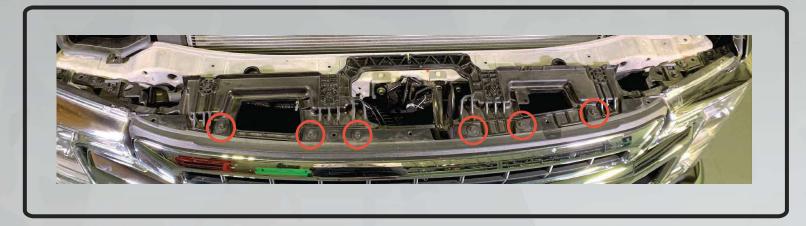
AFTER COMPLETEING THE FIRST FEW STEPS IN THE AIMING PROCEDURE YOU MAY PROCEED TO INSTALLING YOUR MORIMOTO HEADLIGHTAS FOLLOWS.

#### INSTALLATION PROCESS

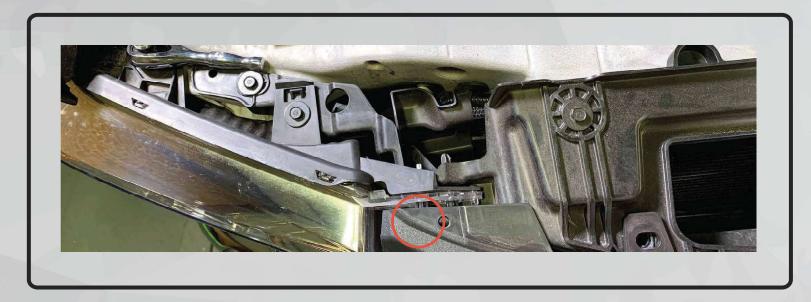
1. Remove the foureen (14) plastic clips holding on the grille cover. Then remove the cover off the truck.



2. Remove the six (6) 10mm bolts holding the top of the grille.



3. Remove one (1) 10mm nut holding the grille to the headlight. Repeat on the other side of the grille.



4. To remove the bottom chrome trim piece on the grille, grab a pick and pry down on these locking tabs. While releasing the locking tabs slowly start prying out on the trim piece so it doesn't lock back into place. Repeat on the other side of the grille.

(IF YOU DO NOT HAVE THIS KIND OF GRILLE SKIP TO PAGE 6 FOR FURTHER INSTRUCTION)





5. With a plastic pry tool carefully pry the chrome trim away from the grille to release all of the clips.



- Here is a top view picture of the chrome trim piece off of the truck, so you can reference all of the clips.



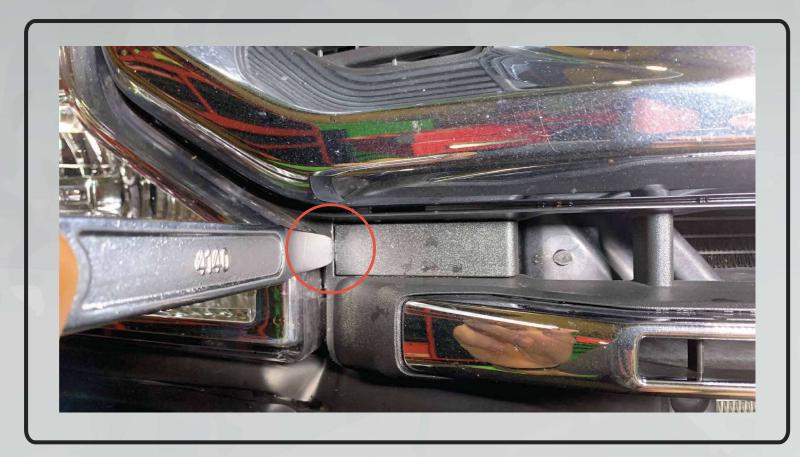
6. Remove these two (2) 10mm bolts that secure the bottom of the grille.



If you have this style of grille, complete the following steps. If not then skip to step #9.



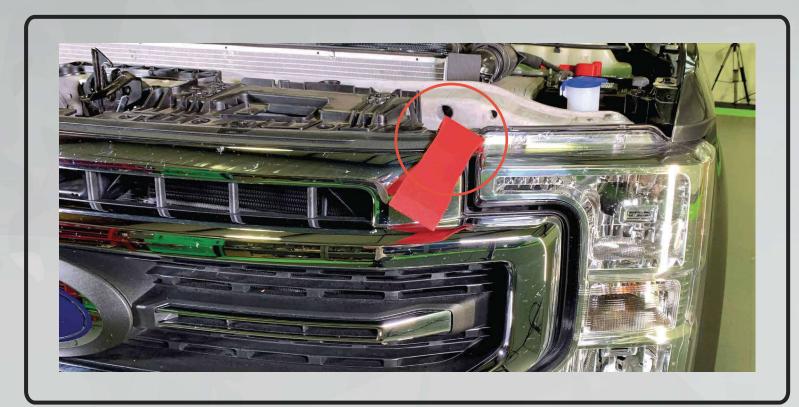
7. Take a pry tool, and pry this flap towards the middle of the grille. Repeat this on the other side of the grille.



8. Once the flap is off, remove the 10mm bolt. Repeat this on the other side of the grille.



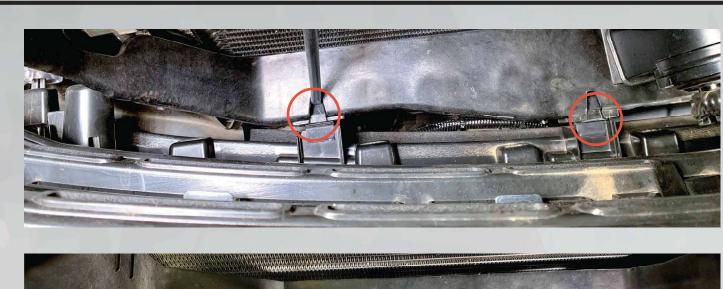
9. Pry the grille forward in this spot to release the clips.



10. Pry the grille forward in this spot to release the clips.



- 11. Repeat step #9-10 on the other side of the grille.
- 12. With the grille angled forward, take a flat screwdriver and press these four (4) metal clips down to release the bottom of the grille. Now you can remove the grille off of the truck.

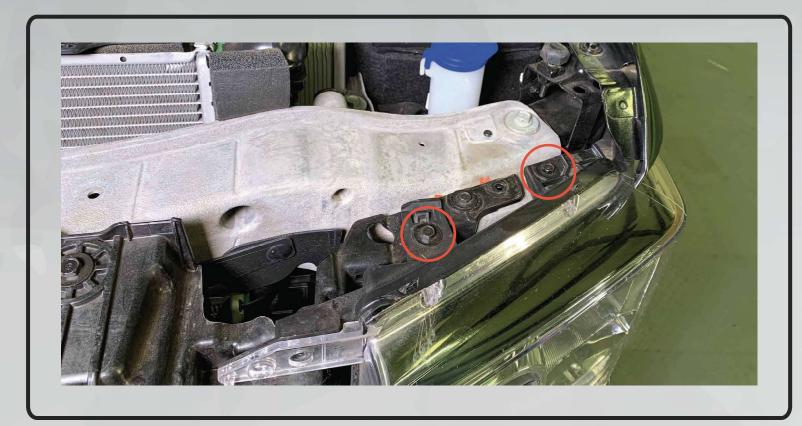




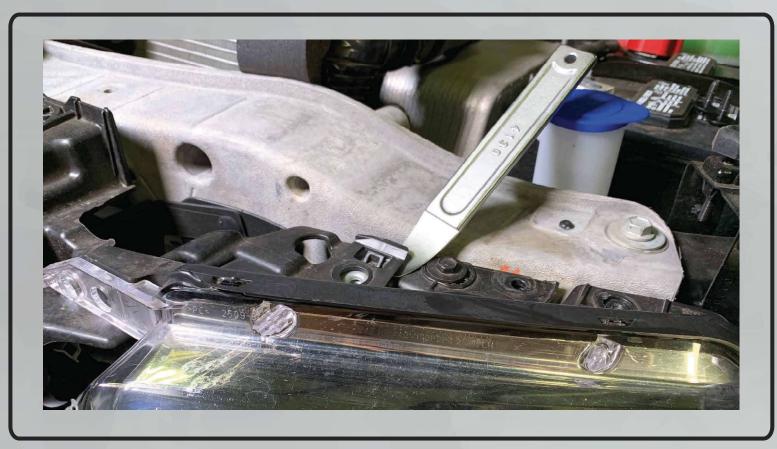
13. Remove one (1) 13mm bolt holding the bottom tab of the headlight to the fender.



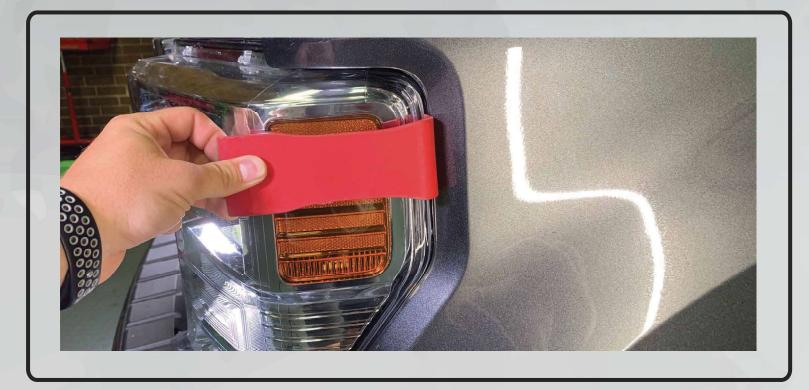
14. Remove two (2) 10mm bolts holding the top of the headlight.



15. Pry up on this tab to release the top of the headlight.



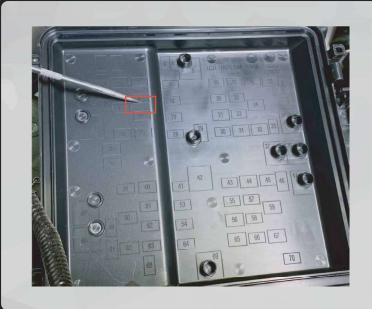
16. With a plastic pry tool, pry the side of the head away from the fender to release it.



17. Slide the headlight forward. Unplug the four (4) connectors, to do so press the release tab and pull the connector off.



- 18. Repeat steps #13-17 on the other headlight.
- 19. Locate the under hood fuse box located by the firewall on the passenger side of the truck and remove the cover. Locate and remove fuse #16.

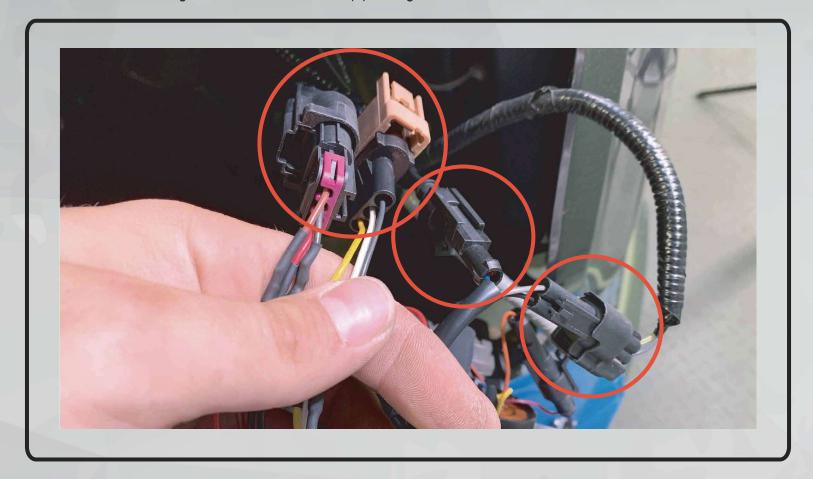




20. Locate the included DRL harness, plug in the fuse side of the harness into fuse slot #16. Run the short side of the harness to the passenger headlight area and run the long side to the driver headlight area.

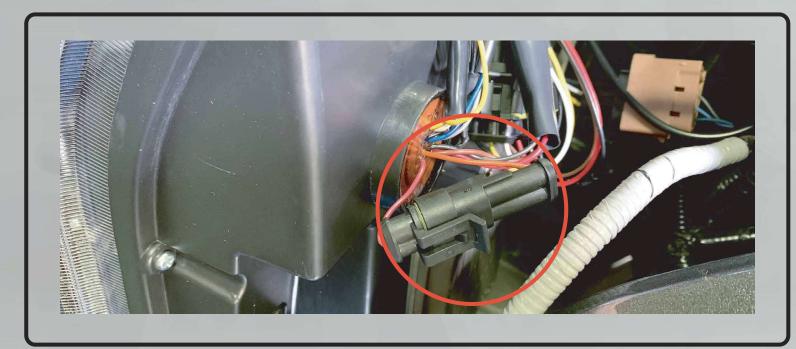


21. Grab one XB headlight and make these four (4) wiring connections.





22. Toggle between standard and sequential turn signal with this connector. Leave the connectors plugged in for a sequential turn signal. Leave the connectors unplugged for a standard turn signal.



- 23. Place the headlight in it's place on the truck and thread in the bolts.
- 24. Repeat step# 22-24 on the other side of the truck.
- 25. Turn the truck on and test all of the functions to make sure everything works.
- 26. Reassemble the truck in the reverse order that you took it apart.

PROCEED TO PAGE 3 FOR AIMING INSTRUCTIONS