

AIR CLEANER LIGHT BARS Peterbilt 589

INSTALLATION INSTRUCTIONS:

NOTE: These instructions cover the installation of both front and rear light bars. If only installing one side (front or rear) then skip any steps mentioning the side not being installed.

1. Install the supplied rubber bumpers onto the light bars and mounting brackets as shown in Figure 1. The small rubber bumpers are 1/32" thick, the medium rubber bumpers are 5/64" thick, and the large rubber bumpers are 1/8" thick.
 - a. For the front light bars, install 6 small rubber bumpers into each light bar.
 - b. For the rear light bars, install 5 small rubber bumpers, and one large rubber bumper into each light bar.
 - c. For all brackets, install 4 medium rubber bumpers.
2. Peel the protective plastic from around the bolt holes on the light bars, and from the rear flanges. If installing rear light bars, peel the protective plastic from the inner side flange as well, as shown in Figure 1.

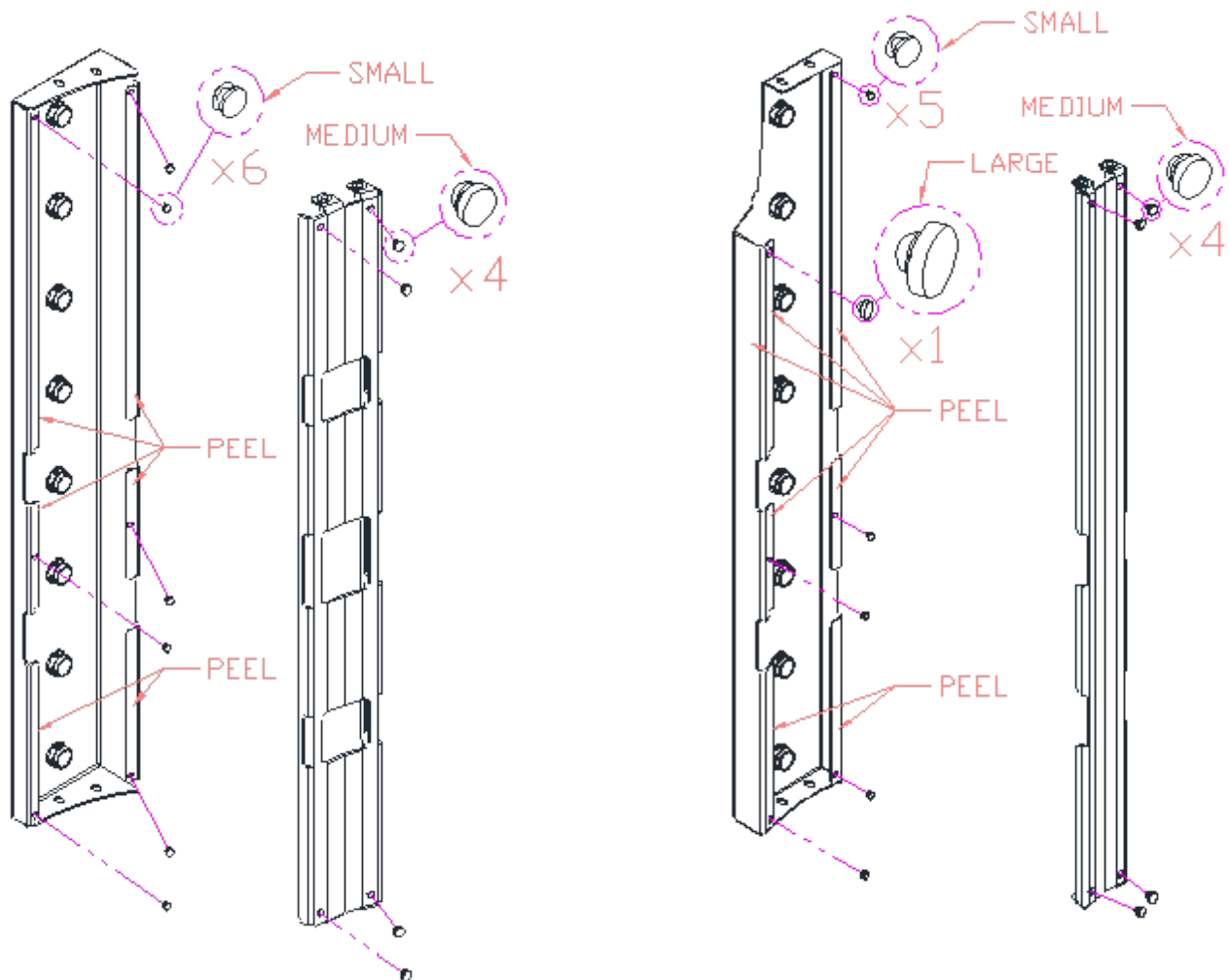


Figure 1: Where to Install Rubber Bumpers & Where to Peel (Driver Front [Left] & Rear [Right] Shown)

3. Remove the air cleaner from the truck and set it on a table or workbench.
 - a. Loosen the hose clamp securing the rubber boot to the air cleaner.
 - b. Remove the 5 bolts and bracket as shown in Figure 2.
 - c. Remove the remaining 2 bolts as shown in Figure 3. The lower bolt will be visible once the bracket has been removed.
 - d. Separate the air cleaner from the rubber boot.
 - e. Lift the air cleaner upwards (there is a mounting hook at the top) and pull away from the truck.



Figure 2: First 5 Bolts to Remove (Driver Side Shown)

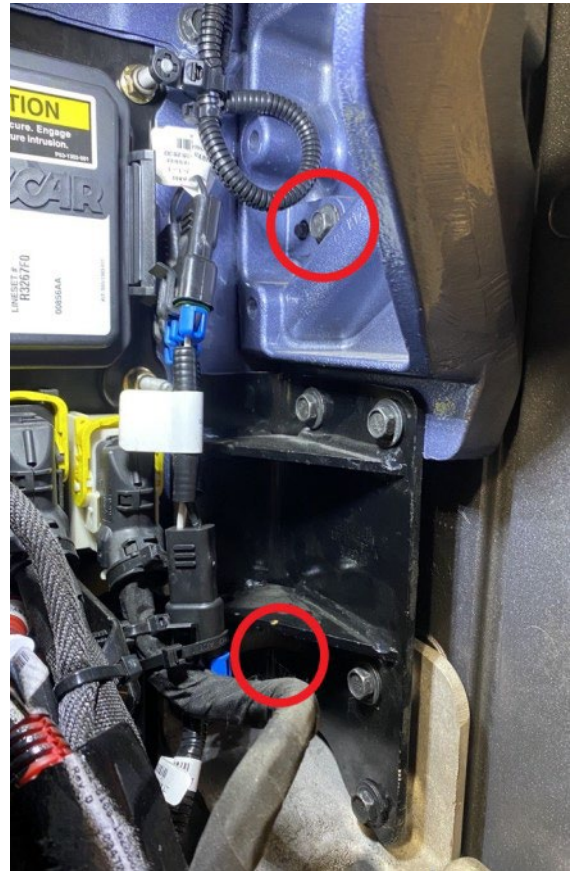


Figure 3: Last 2 Bolts to Remove (Driver Side Shown)

4. Remove the front bolt for each strap with a 4mm hex bit.
5. Install the mounting bracket(s) onto the straps.
 - a. **TIP** - Use some of the packaging foam to hold the straps away from the air cleaner for this step.
 - b. Slide the rear mounting bracket (PNL10742935BD/BP) onto the straps and slide it around towards the back of the air cleaner. This bracket is side specific and can only be installed one way, as shown in Figure 4. Install the BD bracket on the driver side, and the BP bracket on the passenger side.
 - c. Slide the front mounting bracket (PNL10742931B) onto the straps. This bracket must be installed with the taller side flange closer to the flat surface of the air cleaner as shown in Figure 5.



Figure 4: Rear Bracket Orientation (Driver Side Shown)



Figure 5: Front Bracket Orientation (Driver Side Shown)

6. Re-install the bolt for each strap but only tighten each bolt a few threads so that the brackets can be adjusted.
7. Position the mounting brackets by measuring from the large flat surface on the back of the air cleaner, which is shown in Figure 6.
 - a. Position the rear mounting bracket so that the inner edge of the bracket is 1 1/8" away from the large flat surface on the back of the air cleaner. It's better for this measurement to be slightly larger instead of smaller to ensure that there will be no interference between the light bar and the mirror arm cover. The bottom of the bracket should be roughly 1/16" above the bottom edge of the air cleaner. See Figure 7 for a visual reference.
 - b. Position the front mounting bracket so that the inner edge of the bracket is 1 7/8" away from the large flat surface on the back of the air cleaner. It's better for this measurement to be slightly larger instead of smaller to ensure there will be no interference between the light bar and the hood. The bottom of the bracket should be roughly 1/16" above the bottom edge of the air cleaner. See Figure 8 for a visual representation.



Figure 6: Surface to Measure from when Positioning Brackets (Driver Air Cleaner Shown)



Figure 7: Measuring Rear Bracket Position (Driver Side)



Figure 8: Measuring Front Bracket Position (Driver Side)

8. Fully tighten the strap bolts, ensuring that the mounting brackets do not move when doing so. Taping the brackets in place can help prevent any movement.
9. Double check the measurements from Step 7 to ensure the brackets are still positioned correctly.
10. While the air cleaner is removed, drill a 1 1/8" hole in the plastic panel that sits behind the air cleaner as shown in Figure 9. This will be used to bring the wiring harness into the engine bay.

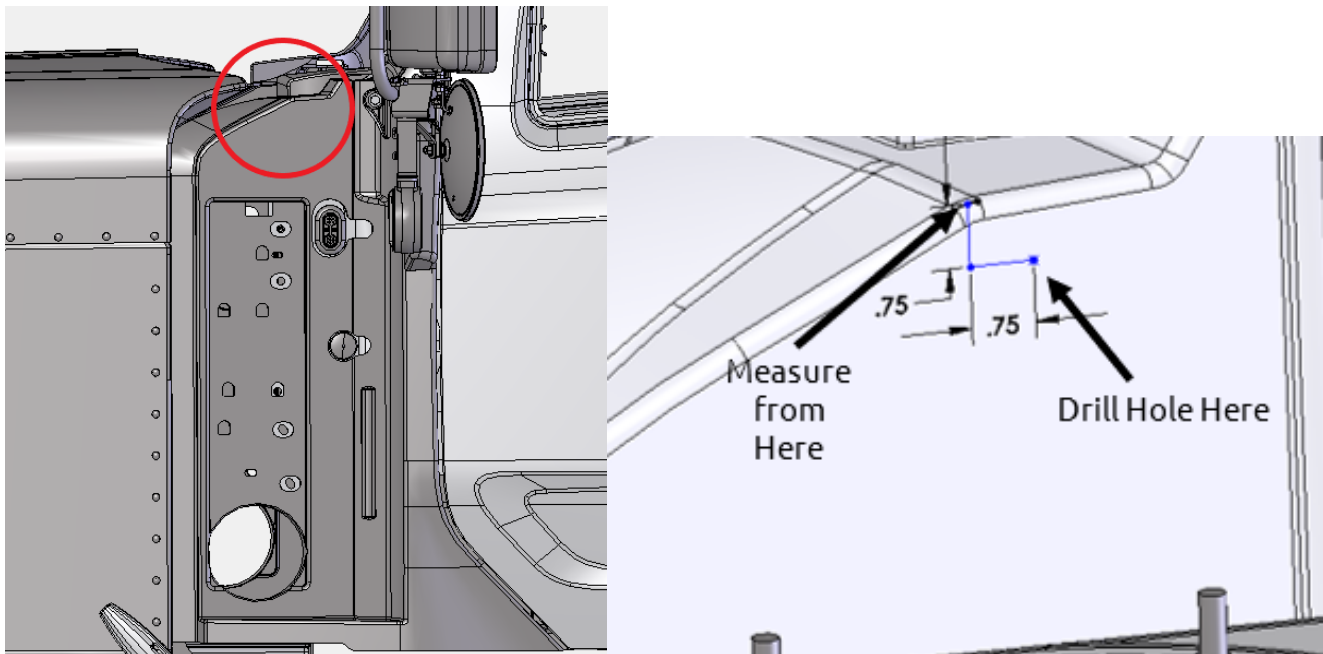


Figure 9: Where to Drill for Wiring Harness to be Run (Driver Side Shown)

11. Reinstall the air cleaner.
12. Remove the air cleaner lid and screen.
13. Install the rear light bar onto the rear mounting bracket with the supplied 10-32x1/2" truss head screws and external tooth washers. Ensure the wiring harness is routed through the mirror arm cutout on the light bar, below the mounting tabs on the bracket, and behind the mirror arm cover. Push the light bar firmly against the air cleaner when tightening the fasteners.
14. Install the front light bar onto the front mounting bracket with the supplied 10-32x1/2" truss head screws and external tooth washers. Ensure the wiring harness is routed through the cutout at the top of the inner side flange on the panel. Push the light bar firmly against the air cleaner when tightening the fasteners.
15. It is recommended to open/close the hood at this point to ensure there is no interference between the front light bar and the hood. If necessary, remove the front light bar and adjust the position of the front mounting bracket to gain more clearance between the light bar and the hood.
16. Route the wiring harness through the hole drilled in Step 10 and into the engine bay. Tuck the harness outside the engine bay between the air cleaner and the plastic panel behind it, as shown in Figure 10.



Figure 10: Wiring Harness Tucked Between Air Cleaner and Plastic Panel (Driver Side Shown)

17. Reinstall the air cleaner lid and screen.

18. If equipped, connect the light bar harness(es) to the factory wiring harness. See Figure 11 for where to look for the factory harness. These are a suggestion only as the configuration of the truck may change the location of the factory harness.

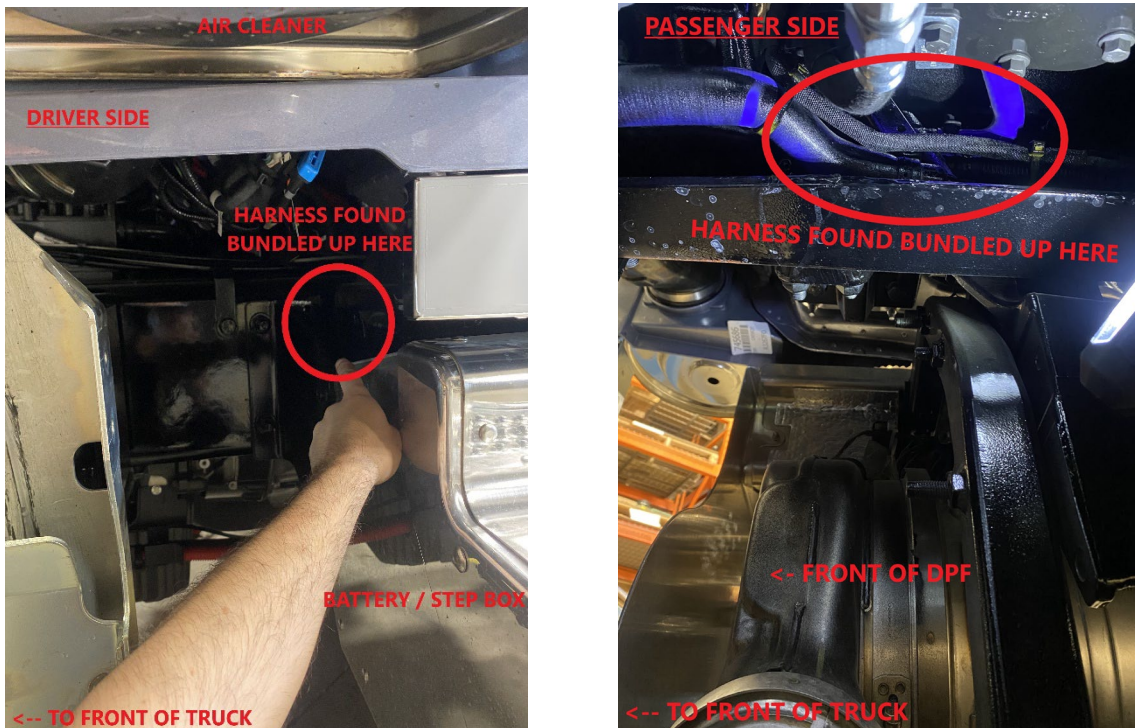


Figure 11: Possible Location of OEM Wiring Harness

19. Peel the remaining protective plastic and clean with glass cleaner and a soft cloth as needed.