



CAMERA RELOCATION

FOR AEV RAM FRONT BUMPER

PLEASE READ ENTIRELY BEFORE YOU START

To guarantee a quality installation, we recommend reading these instructions thoroughly before beginning any work. These instructions assume a certain amount of mechanical ability and are not written nor intended for someone not familiar with auto repair.

NOTE: It is strongly recommended to install this snorkel system before the AEV front bumper. If you already have the AEV Front bumper installed, it will require unbolting the bumper from the truck to allow for disassembly.

INCLUDED PARTS

Camera Relocation Bracket

Camera Relocation Spacer

AEV Front Bumper Badge - Camera Option

MY2025+ Camera Harness Extension

Hardware Pack

Please Note – MY2025+ Models have a different camera than previous years and require an extended adapter harness to relocate that is not needed on 2019-2024 Models

AEV30459AD

Last Updated: 7/25/25



I. DISASSEMBLY

1. Remove the radiator cover by removing the 14 push clips (fig. 1).

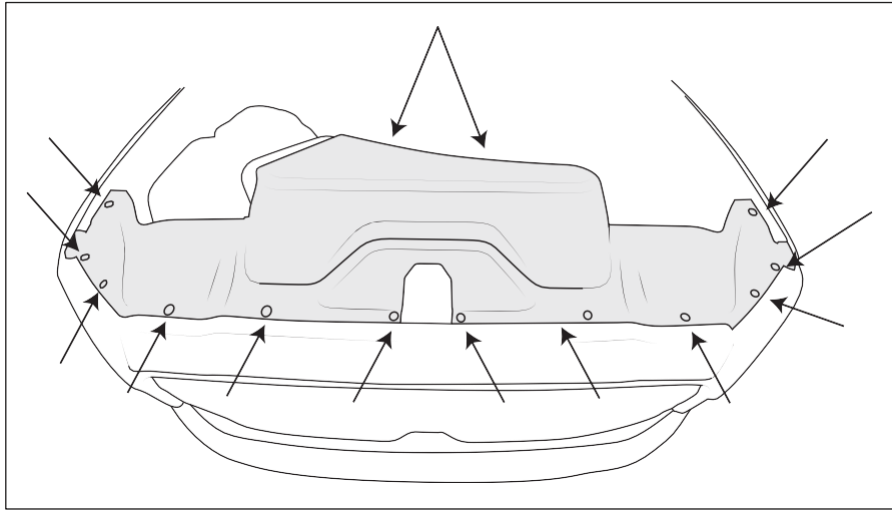


Figure 1

2. Remove the upper grille trim by removing the 10 bolts (fig. 2).

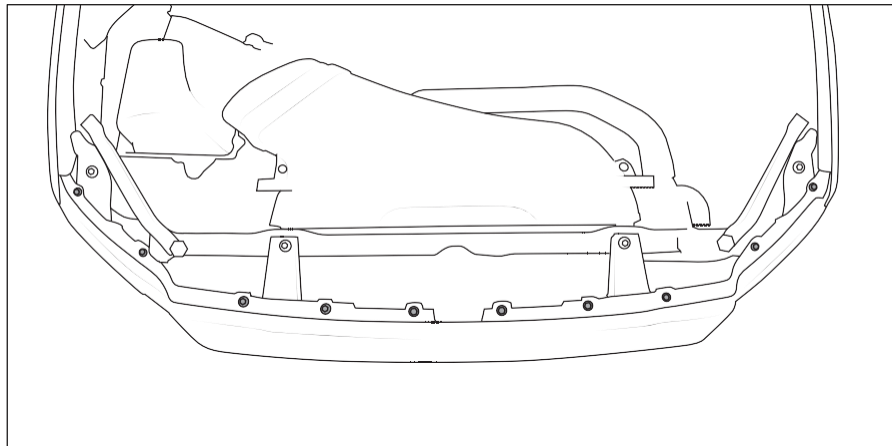


Figure 2-



3. Remove lower grille trim.

A. The trim pieces beneath the headlamps are removed using a pry tool, being careful not to damage paint.

- MY2025+ Trim piece surrounds headlight and is held in place by retaining clips. These clips are very fragile and easily damaged.

B. The center section has 7 bolts securing it to the grille (these will need to be loosened from below the vehicle but not fully removed) from underneath the vehicle, and 2 bolts below each headlamp (these need to be fully removed)(fig. 3).

- MY2025+ does not have fasteners, retaining clips hold the trim in place, be very careful during disassembly not to damage these clips.

NOTE: If you already have an AEV Bumper installed, it will be required to unbolt the bumper assembly and slide it forward to allow for this trim piece to be removed.

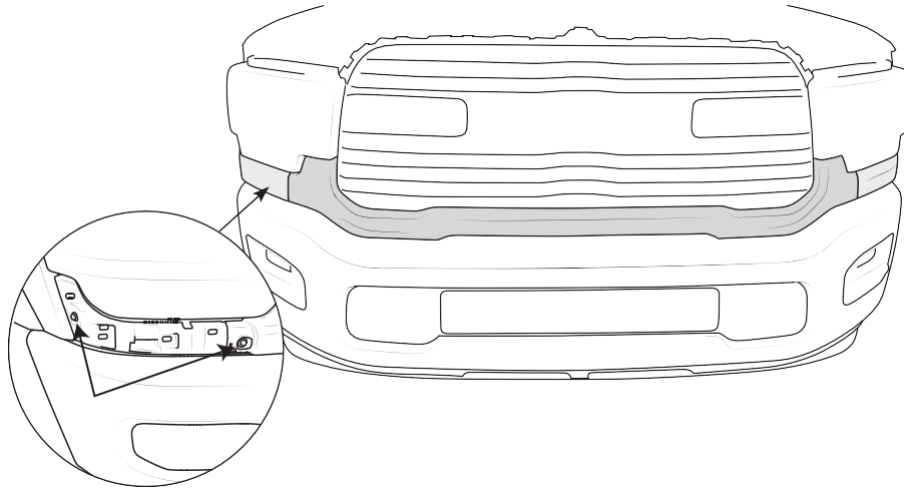


Figure 3



4. Unplug the camera harness and the hood latch harness. Remove Christmas tree securing the camera harness to the grill (fig. 4)

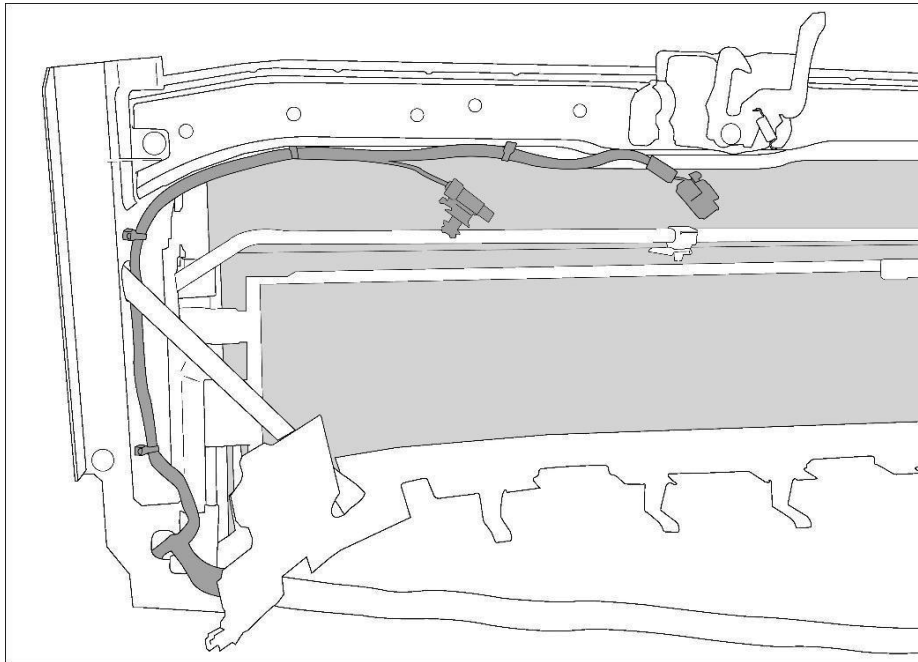


Figure 4 – Shown with Grille Removed

5. Remove the grill making note that the longest screws belong with the inner most lower holes.
6. Remove the factory harness from the back side of the grill by removing the christmas trees and the two T-8/10 screws holding the camera mount to the grill. Save harness and camera for eventual reassembly. (fig. 5)

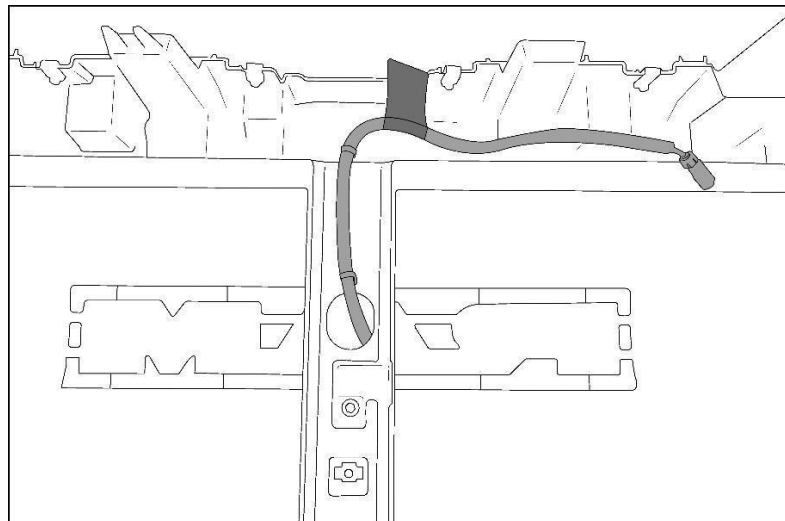


Figure 5.



7. Remove the camera from the camera housing and save for reinstallation. Camera housing can be discarded (fig. 6)

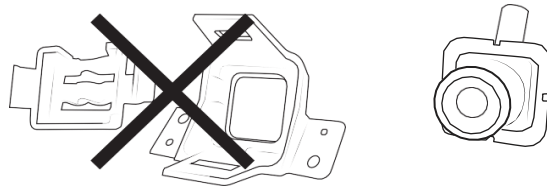


Figure 6.

8. Remove the shutter assembly. It can be left loosely hanging by the lower harness.
9. MY2019-2024 and MY2025+ Remove the body-side camera harness and hood latch harness from the radiator support structure (fig. 7)

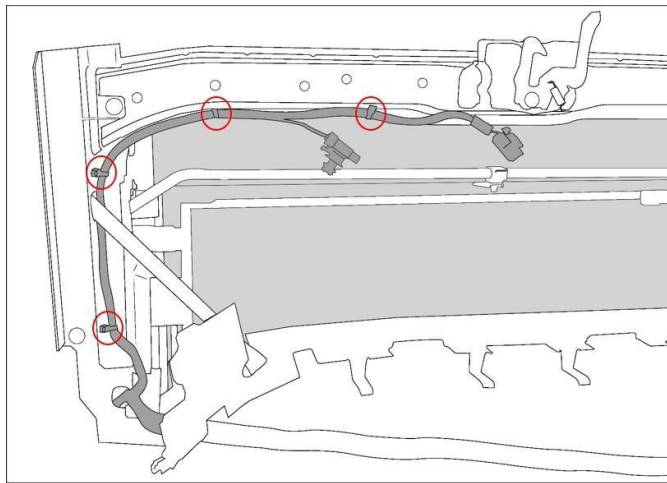


Figure 7.



10. Very carefully remove the loom from both ends of the above-mentioned harness back to the main section of the harness running along the bottom of the shutter assembly. You will be separating the camera harness from the loom and re-routing it. (fig 8)

A. **NOTE:** Take extra care not to damage either of the harnesses as repairs will be very difficult.

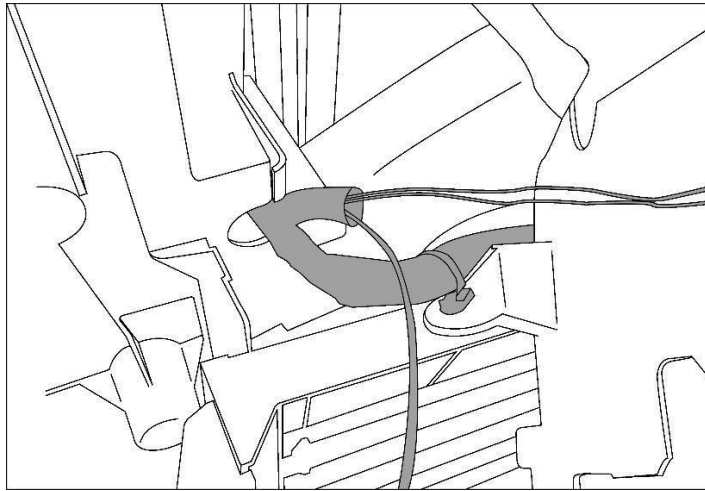


Figure 8 – Camera Coax cable shown routed down, hood latch sensor routed right.

11. Once both harnesses are out of their looms, apply new loom to them separately. Retape the joints and ends as shown. (Fig. 9)

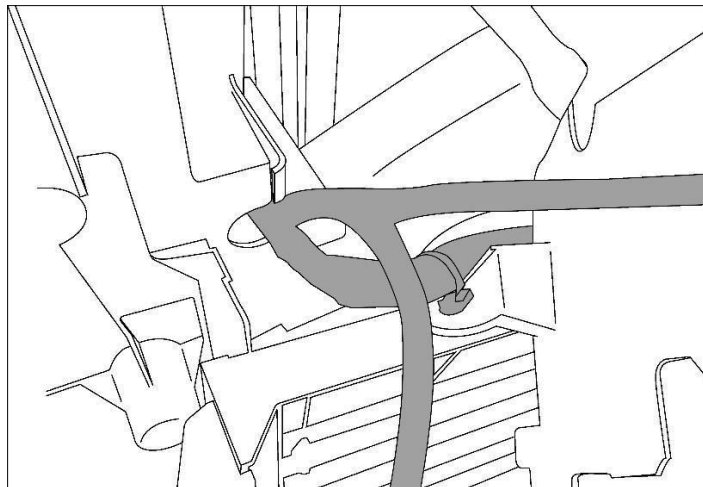


Figure 9

12. Route the camera harness back through the radiator shroud and let it hang beneath the truck for eventual connection to the bumper-side harness (Fig. 10).

12a. Route the hood latch end of the harness back up along the radiator support and secure with provided Christmas tree style zip ties (Fig 10).

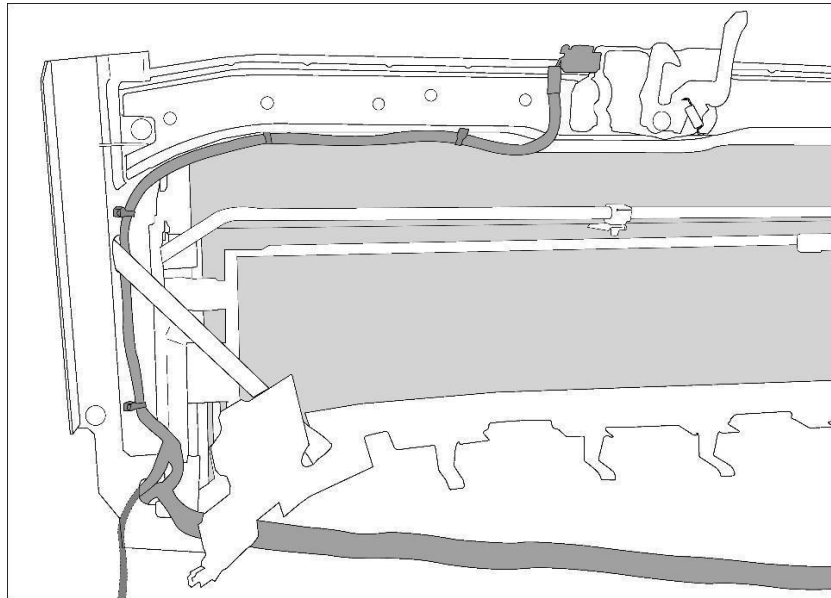


Figure 10 – Camera harness shown routed below, hood latch harness reattached to radiator support.

13. Reinstall the shutter assembly and ensure the radiator shroud is correctly in place.

II. INSTALL INTO AEV FRONT BUMPER

1. MY2019-2024 Install the camera onto the metal bracket with the spacer over the camera as shown (fig. 11.1)
2. MY2025+ Install the camera into the metal bracket with the spacer over the camera as shown (fig. 11.2)

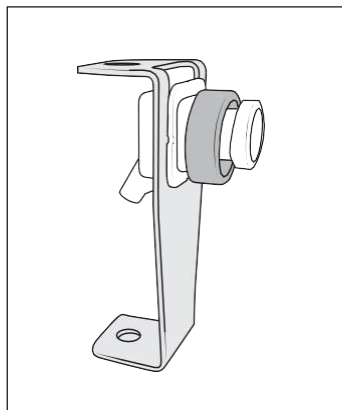


Figure 11.1



Figure 11.2

3. MY2019-2024 Holding the camera and spacer onto the bracket, secure the bracket and camera into the front bumper using supplied M6 bolts, washers, and nuts (fig. 12.1).

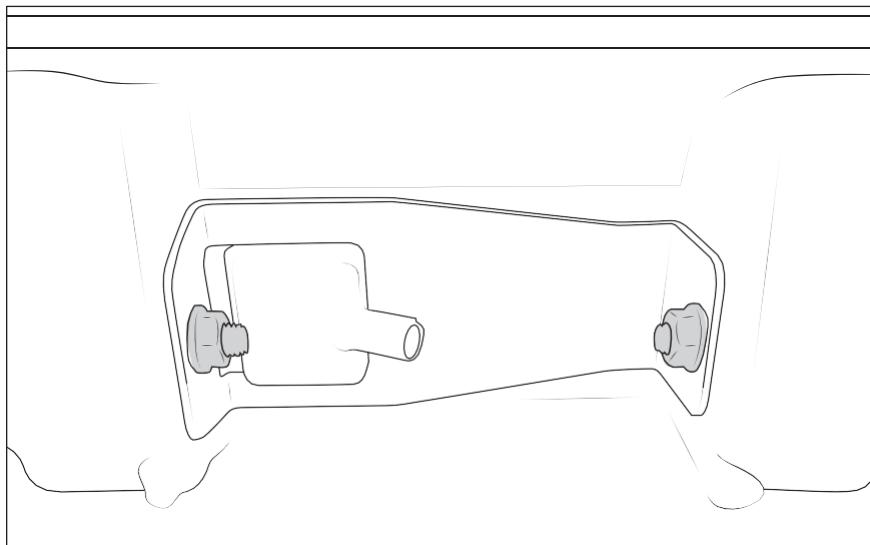


Figure 12.1



4. MY2025 Holding the camera and spacer onto the bracket, secure the bracket and camera into the front bumper using supplied M6 bolts, washers, and nuts. Some MY2025 Customers may need to drill 2 – 7.5mm holes to mount camera bracket to center section of bumper. (fig. 12.2)

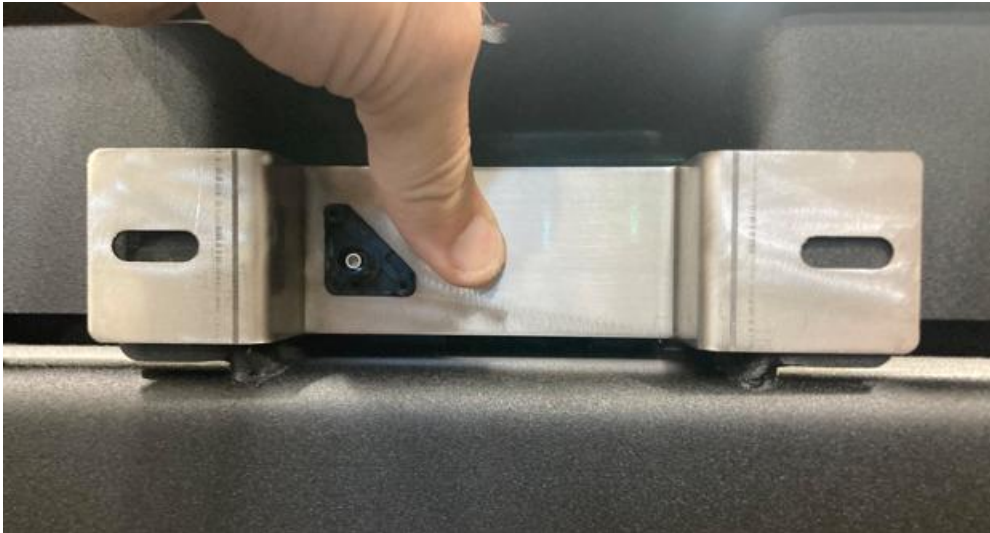


Figure 12.2

5. Reinstall Grill and Trim components onto the vehicle.
6. Continue with the Front Bumper installation. Just before mounting the center section to the vehicle, route the camera harness through the front bumper as shown (fig. 9) and plug into the camera.
 - A. MY2025 Customers will use the supplied Harness extension in place of the factory camera harness, this harness is designed to eliminate connector interference with your winch cable/rope and allow for safe/secure routing of the camera harness.

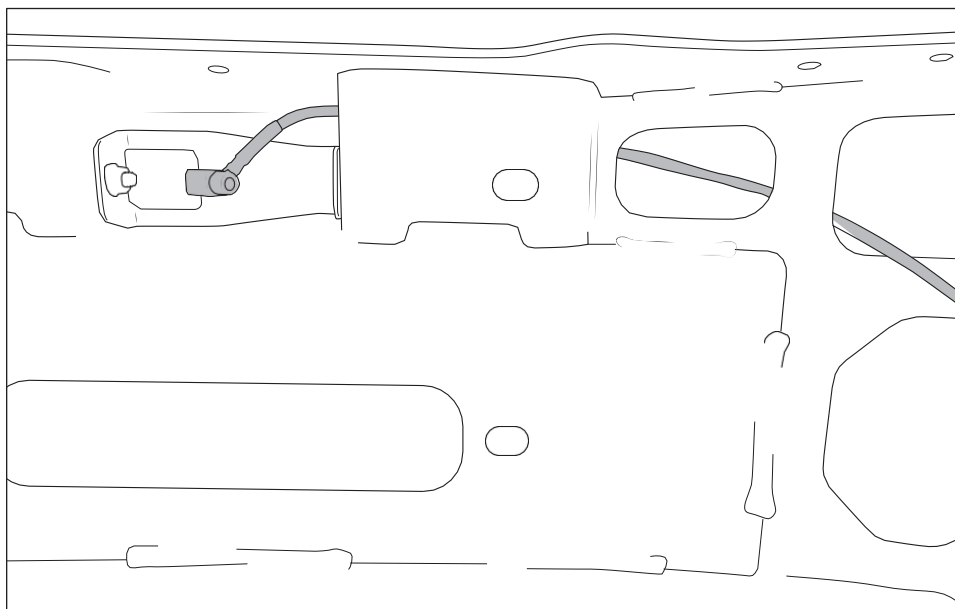


Figure 9



7. When installing the Front Bumper, make the connection between the camera connectors between the relocated harnesses.