PLEASE READ 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.

INCLUDED PARTS | QTY | REQUIRED TOOLS
---|---|---
Differential Cover | 1 | Common Hand Tools
Fill Plug | 1 | Torque Wrench
O-Ring | 1 | Thread Tape
Fill Level Plugs | 2 | Allen Wrenchs
Socket Head Cap Screws | 10 | 
Alcohol Swab | 1 | 
AEV Badge | 1 | 

**CAUTION**

The adhesive properties of the AEV Bison badge is very strong. Once the protective cover is removed from the back side of the badge and it is placed on an object, it will not come off without permanently damaging it and/or the surface it comes in contact with.

**CAUTION**

The AEV logo badge is resistant to most petroleum based oils, greases and aliphatic solvents and resistant to mild acids, alkalis and salt solutions. However, AEV recommends cleaning the AEV logo badge and surrounding area after any contact with the above mentioned materials immediately. To clean, use warm soapy water and a non-abrasive sponge, rinse with low pressure water. Use of a high pressure sprayer is not recommended in this area closer than 5 feet.

This product is covered under the AEV Parts Limited Warranty, a copy of which can be found at aev-conversions.com/warranty.
1. Preparation of AEV differential cover and AEV badge installation (read all cautions and installation steps prior to starting).
   a. Differential cover ambient temperature should be around 70°F (±5°F) for 24 hrs prior to this process.
   b. Clean the badge pocket area thoroughly with the provided alcohol swab and let air dry.
   c. Remove AEV badge from bag and remove backing cover from the back side of the badge.
   d. Align the AEV badge into the desired position and press on. (Caution: this is a one-time only action).
   e. Once the badge is in place apply 30lbs of pressure for 30 seconds.
2. Drain oil from differential housing per the vehicle’s operator’s manual and recycle the used oil.
3. Reinstall drain plug and tighten per owner’s manual.
4. Remove OEM differential cover per owner’s manual and discard.
5. Clean off all old sealant material from the differential housing with brake cleaner and dry off prior to installation of the new RTV sealant and differential cover.
6. Ensure the differential cover is completely dry and free from any contaminants prior to applying RTV sealant. Apply the RTV sealant liberally onto your new AEV differential cover.

**NOTE**

AEV recommends that the surface area on the axle housing is completely dry and free from any contaminants prior to installing the differential cover.
7. Place the new differential cover in the correct orientation and install all ten socket head cap screws finger tight and then tighten in a crisscross fashion to 18–22 ft. lbs.

8. Let the RTV sealant cure per manufacturer’s recommendations prior to the next step.

9. Fill the differential through upper fill hole until oil comes out of the appropriate fill level hole.

CAUTION

Each AEV differential cover can be used in either the front or rear axle locations and has two oil fill level holes labeled “F” for Front and “R” for Rear to aid in servicing. Depending on what axle you are servicing, use the appropriate hole as a quick reference when adding oil. All oil quantities should match the operator’s manual recommended amounts and weights. Always service differentials on flat level ground with wheels chocked.

10. Insert the AEV provided fill level plugs with thread tape into the new differential cover and secure.

11. Lubricate and install the AEV provided O-Ring onto the AEV fill plug and install into the differential cover and secure by torqueing to 25 ft. lbs.

12. Preform leak checks and fluid levels at regular intervals.

NOTE

AEV recommends using a RUST-OLEUM type automotive Scratch & Chip Repair paint (Universal Flat Black & Silver Satin) to preform minor repairs on chips and scratches that occur during off-road driving. Remove existing rust and apply paint as recommended by the manufacturer in the affected area to prevent any additional corrosion or chipping.