

Installation Instructions CAST ALUMINUM DIFFERENTIAL COVER for AAM 10.5"

Fits most 2003-10 Ram 1500/2500 & 2003-04 Ram 3500. For specific vehicles see "Applications" tab on this product's webpage.

Part No. 11316

Rev. 1/8/2020

INTRODUCTION

This rear end cover can be installed in about an hour by carefully following the instructions. It is suggested that the vehicle be allowed to cool off for a few hours to avoid burns from hot oil and parts. The vehicle should be off the ground for ease of installation -jack stands, wheel ramps or a hoist will work fine. **CAUTION: MAKE SURE VEHICLE IS FIRMLY SUPPORTED -DO NOT WORK UNDER A VEHICLE IF IT IS SUPPORTED BY ONLY A JACK!**

WORK SAFELY! For maximum safety, perform this installation on a clean, level surface and with the engine turned off. Place blocks or wedges in front of and behind both rear wheels to prevent movement in either direction.

IMPORTANT!

Visually confirm that you have the proper cover for your specific application before you begin. The AAM 10.5" axle, also known as the Chrysler 10.5" and GM 10.5" is found in 1500/2500 and 3500 3rd Generation Hemi V8 Ram trucks as well as some earlier diesel and V10 Ram trucks. The '05 and newer Ram Power Wagon also comes with this axle equipped with a locking differential. The AAM 10.5" looks very similar to the popular GM / Corporate 14 Bolt axle, however, it does not have a removable pinion support which is the easiest way to identify it. Refer to the figure for visual identification of the AAM 10.5" rear differential.



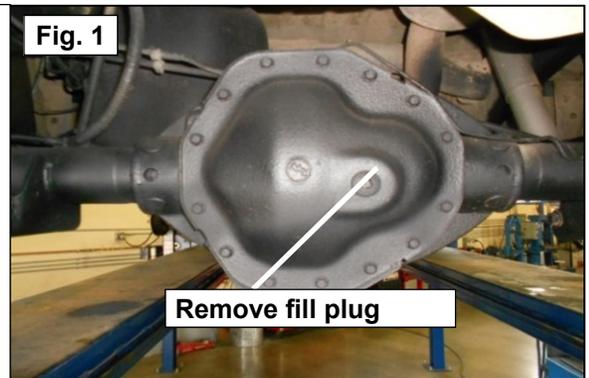
INSTALLATION

1. Clean the axle housing cover area from dirt and other debris.

NOTE: On some vehicles it might be necessary to remove some parts (e.g. sway bar, pan hard rod) to make the installation of the cover easier.

2. Place a drain pan underneath the axle housing.

3. Remove the axle cover fill plug with a 3/8" square ratchet and extension (See Figure 1).



4. Remove all the bolts except one at the top. Loosen the remaining bolt but do not remove.

5. Carefully pry the cover loose with a flat head screw driver, being careful not to damage the surface, and allow any remaining oil to drain.

6. Remove the last bolt and the cover once completely drained.



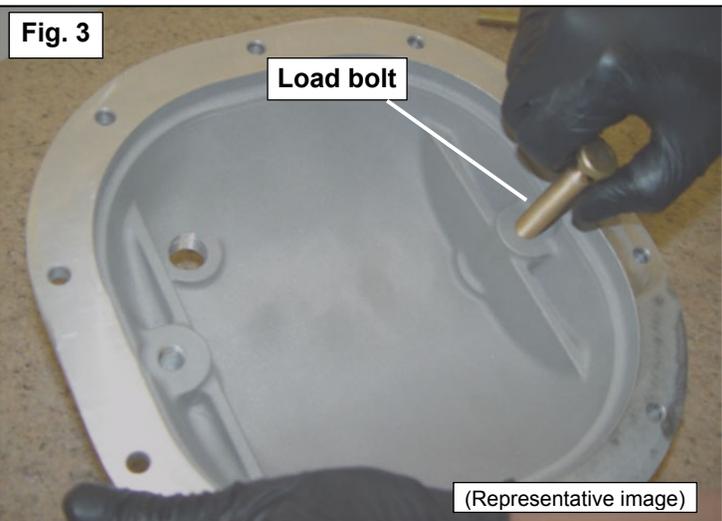
7. Using a dry lint free rag, clean the accessible areas of the axle housing and check internal components for visible excessive wear or other problems.

8. Using a razor blade or gasket scraper, clean all gasket material from the axle housing surface (See Figure 2).

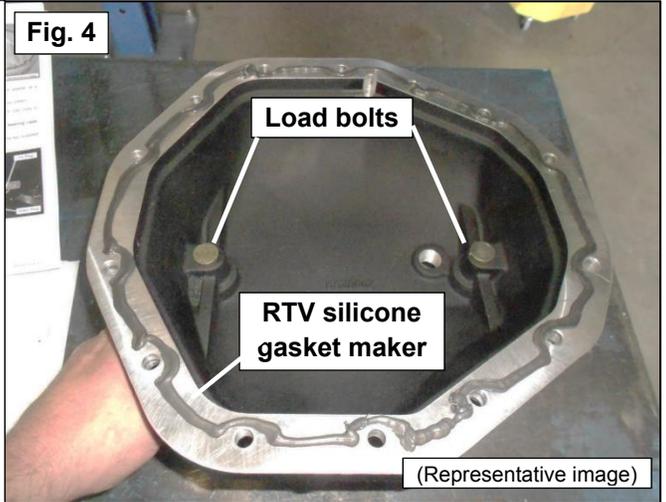
9. We recommend running a tap through each threaded cover hole on the axle housing to ensure an accurate torque on all bolts.



10. Install the supplied load bolts in each boss from the inside of the B&M Differential Cover until they bottom out (See Figure 3 & 4).



11. Apply a bead of RTV silicone gasket maker to the B&M Differential Cover. Run the bead inside the bolt holes (See Figure 4).



12. Install the B&M Differential Cover on the axle housing using a supplied bolt and washer at a bottom hole on the cover so it can be used as a guide.

13. Install the rest of the supplied bolts and washers and torque to 15ft/lbs. in a crisscross pattern.

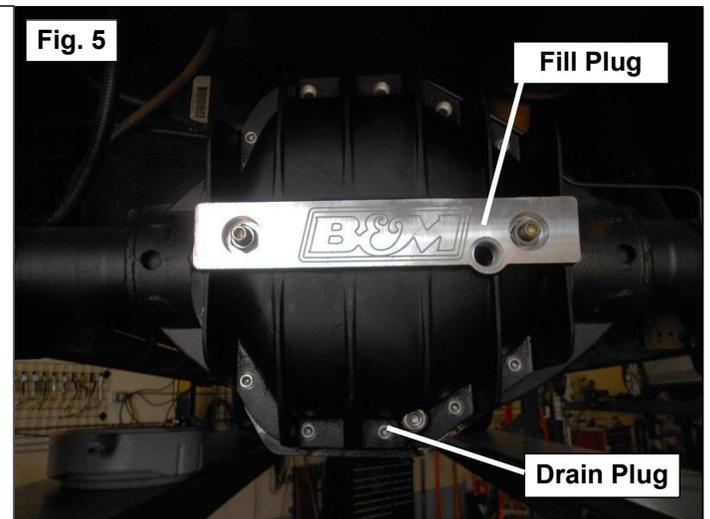
14. Screw in the two load bolts by hand until they touch the bearing caps. Torque the load bolts to 5ft.lbs. max.

NOTE: Do not over torque the load bolts as you run the risk of distorting the bearing caps, creating abnormal wear and premature failure.

15. Apply a very small amount of RTV on the threads of the load bolts and install on the two supplied jam nuts on the load bolts. Torque the jam nuts to 5ft/lbs.

16. Install the supplied magnetic 1/4" NPTF drain plug on the B&M Differential Cover and tighten (See Figure 5).

17. Fill with factory recommended gear oil using the B&M Differential Cover fill plug hole. Add gear oil until oil runs out of the **fill level hole in the cover.**



18. Install the axle housing fill plug and torque to 20ft/lbs.

19. Install the supplied 1/2"NPT fill plug on the B&M Differential Cover and tighten.

20. Install and tighten any other parts (e.g., sway bar, pan hard rod) if removed.

Tools List

Jack & Jack Stands
Drain Pan
Rags
RTV Silicone Gasket Maker
Gear Oil
Gear Oil Pump
Torque Wrenches
3/8" Ratchet & 3" Extension
1/4" Allen
3/8" Allen
3/4" Socket
Flat Blade Screwdriver

Parts List

(1) Cast Aluminum Cover
(2) Load Bolts
(2) Jam Nuts
(1) 1/4" NPTF Drain Plug
(1) 1/2" NPT Filler Plug
(14) M8-1.25 x 25MM Bolt
(14) 5/16" Washers

IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

