

# Installation Instructions CAST ALUMINUM DIFFERENTIAL COVER

Sterling 10.25-10.5 Fits: Most 1985-2016 Ford-F250 / F-350 Trucks Catalog # 41299

**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.

**CAUTION:** To avoid any possibility of bodily injury or damage to vehicle, do not attempt installation until you are confident that the vehicle is safely secured and will not move.

## 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. MAKE SURE VEHICLE IS FIRMLY SUPPORTED -DO NOT WORK UNDER A VEHICLE IF IT IS SUPPORTED BY ONLY A JACK!

## **INSTALLATION**

1. Clean 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 housing fill level plug with a 3/8" square ratchet and extension (See Figure 1).



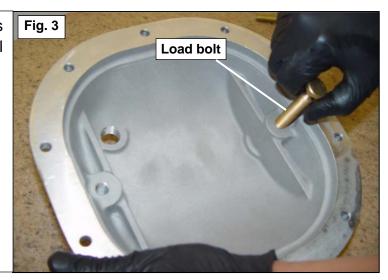
- 4. Remove all the bolts except one at the top. Loosen the remaining bolt but do not remove.
- 5. Carefully pry the cover loose with a flat head screw driver, being careful not to damage the surface, and allow the oil to drain.
- 6. Remove the last bolt and the cover once completely drained.
- 7. Using a dry lint free rag, clean the accessible areas of the axle housing and check internal components for visible excessive wear or other problems.



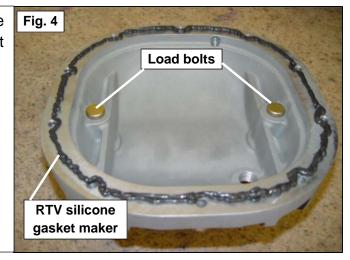
- 8. Clean all gasket material from the axle housing surface (See Figure 2).
- 9. We recommend running a tap through each threaded cover hole on the axle housing to ensure an accurate torque on all bolts.



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).



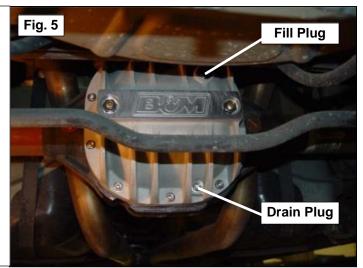
11. Apply a bead of RTV silicone gasket maker to the B&M Differential Cover. Run the bead inside the bolt holes (See Figure 4).



- 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 Figure5).
- 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 **axle housing fill level hole**. (Not the Fill Hole on 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
- (12) 5/16-18X1 Bolt
- (12) 5/16" Washers

## IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

## **Technical Service**

A highly trained technical service department is maintained by Hurst Performance to answer your technical questions, provide additional product information and offer various recommendations.

Technical service calls, correspondence, and warranty questions should be directed to:



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