



## Installation Instructions CAST ALUMINUM DIFFERENTIAL COVER

Fits: Vehicles w/Dana 35 rear differential  
See Application Guide for Specific Dimensions

Catalog # 10311

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**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.

This B&M Cast Aluminum Rear End Cover has been designed to work on most vehicles equipped with a Dana 35 axle. The B&M Cast Aluminum Rear End Cover provides several advantages over stock factory covers. The extra capacity provides increased oil volume and added cooling, while the thick aluminum construction increases case rigidity. The reinforced center bar, along with the load bolts, prevents bearing cap deflection under severe loads. The magnetic drain plug feature allows regular gear oil changes without the usual mess, and limits ferrous debris from circulating in the axle.

### INTRODUCTION

This 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. Also, have a small box to put bolts in and a drain pan to catch oil.

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

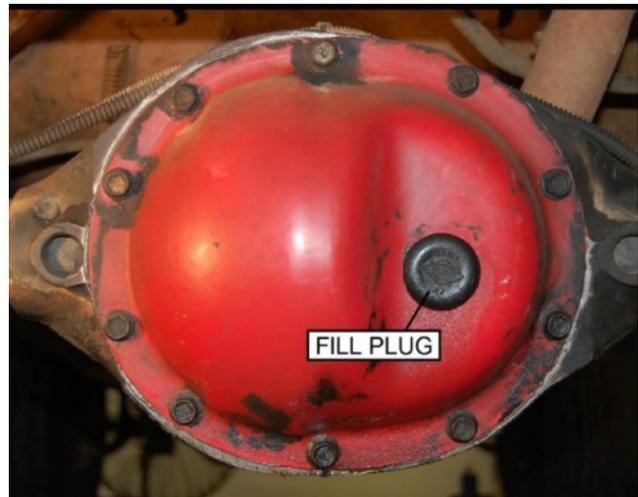
### INSTALLATION

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

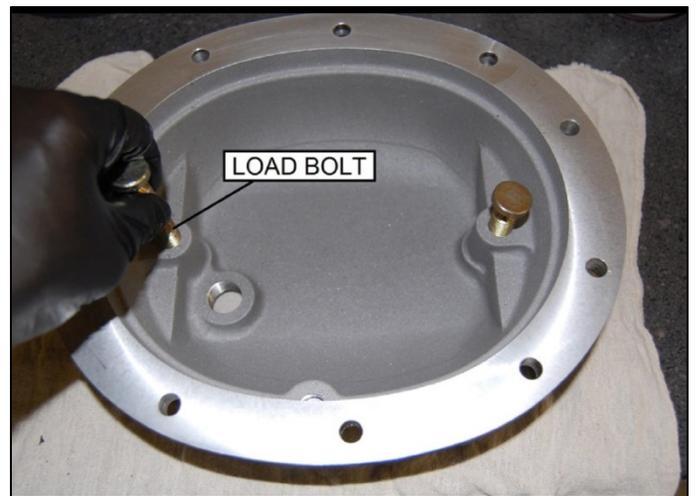
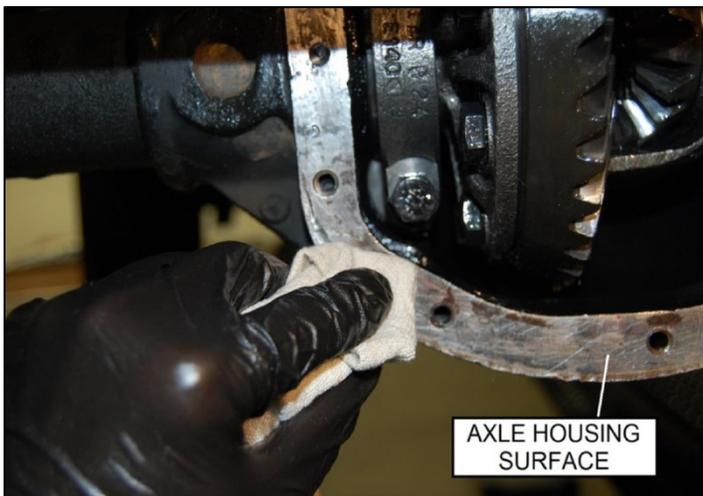
**NOTE:** On some vehicles it might be necessary to remove some parts (e.g. sway bar, panhard rod) to make the installation of the cover easier.

2. Place a drain pan underneath the axle housing.

3. Remove the 10 bolts around the cover.



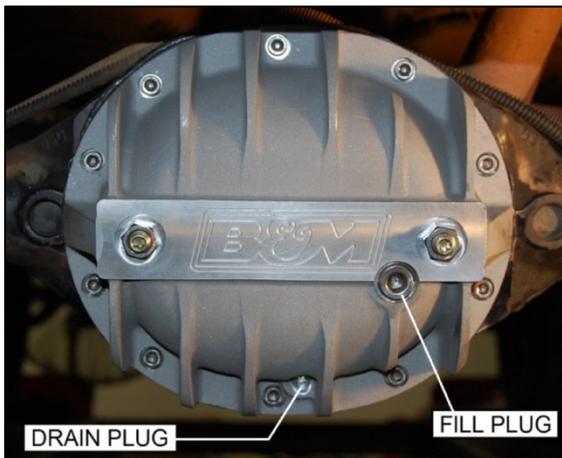
4. Carefully pry the cover loose with a flat head screw driver, being careful not to damage the surface, and allow the oil to drain.
5. Using a dry lint free rag, clean the accessible areas of the axle housing and check internal components for visible excessive wear or other problems.
6. Clean all gasket material from the axle housing surface.
7. We recommend running a 5/16"-18 tap through each threaded cover hole on the axle housing to ensure an accurate torque on all bolts.
8. Install the supplied load bolts in each boss from the inside of the B&M Cast Aluminum Rear End Cover until they bottom out.
9. Apply a bead of RTV silicone gasket maker to the B&M Cast Aluminum Rear End Cover. Run the bead inside the bolt holes.
10. Install the B&M Cast Aluminum Rear End 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.



11. Install the rest of the supplied bolts and washers and torque to 15 ft/lb. in a crisscross pattern.
  12. Screw in the two load bolts by hand until they touch the bearing caps. Torque the load bolts to 5 ft/lb. 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.
13. Apply a very small amount of RTV on the threads of the load bolts, and then install the two supplied jam nuts onto the load bolts. Torque the jam nuts to 5 ft/lb.
  14. Install the supplied magnetic 1/4" NPTF drain plug on the B&M Cast Aluminum Rear End Cover and tighten.
  15. Fill with factory recommended gear oil using the B&M Cast Aluminum Rear End Cover fill plug hole. Add gear oil until oil runs out of the fill hole.

16. Install the supplied 1/2" NPT fill plug on the B&M Cast Aluminum Rear End Cover and tighten.

17. Install and tighten any other parts (e.g., sway bar, panhard rod) if removed.



### Tools List

Jack & Jack Stands  
Drain Pan  
Rags  
RTV Silicone Gasket Maker  
Gear Oil  
Gear Oil Pump  
Torque Wrench  
3/8" Ratchet & 3" Extension  
1/4" Allen  
3/8" Allen  
1/2" Socket  
3/4" Socket  
Flat Blade Screwdriver

### Parts List

1 Cast Aluminum Cover  
2 Load Bolts  
2 Jam Nuts  
1 1/4" NPTF Drain Plug  
2 1/2" NPT Filler Plug  
10 5/16"-18 Bolts  
10 5/16" Washers

**IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE**

### Technical Support

A highly trained technical support department is maintained by B&M Performance to answer your technical questions, provide additional product information and offer various recommendations.

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



**B&M Performance & Off-Road**

(866) 464-6553

[www.bmracing.com](http://www.bmracing.com)