

## Instructions

# Ford 8.8 Cast Aluminum Rear End Cover

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**Part Number 40297**

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This **B&M Cast Aluminum Rear End Cover** has been designed to work on all Ford vehicles equipped with an 8.8 solid rear 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 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!** Try to raise the vehicle 1-2 feet so

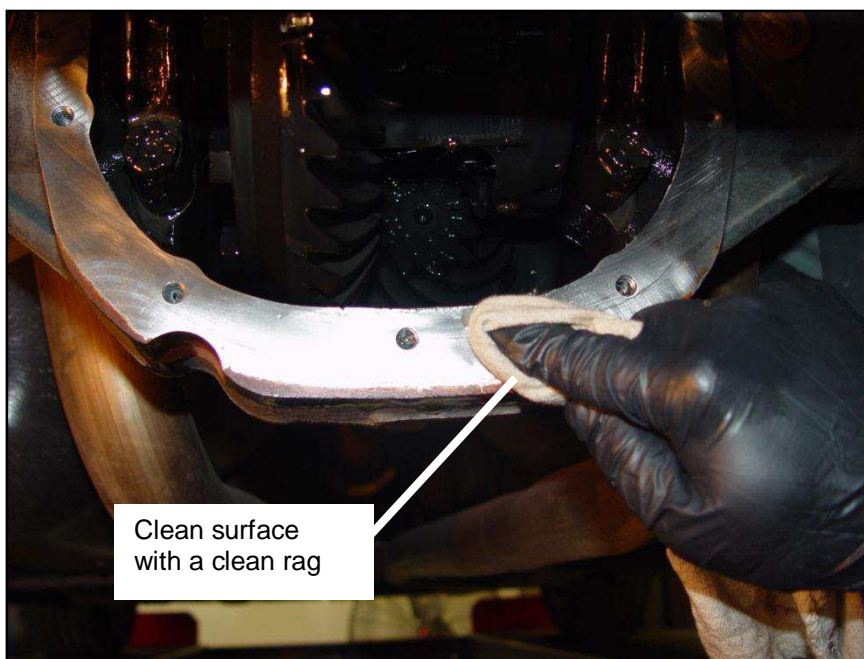


Figure 1

you will have plenty of room to work. Also, have a small box to put bolts in and a drain pan to catch oil.

### INSTALLATION

**STEP 1.** Clean all dirt from area of differential housing cover.

**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.**

**STEP 2.** Place a drain pan underneath axle and remove all the bolts except the three at the top. Loosen the remaining three bolts but do not remove.

**STEP 3.** Carefully pry the cover loose with a flat head screw driver, being careful not to damage the

surface, and allow the oil to drain.

**STEP 4.** Remove the last three bolts and the cover once completely drained.

**STEP 5.** Using a dry lint free rag, clean the accessible areas of the differential housing and check internal components for visible excessive wear or other problems.

**STEP 6.** Clean all gasket material from the differential housing surface (See Figure 1).

**STEP 7.** We recommend running a 5/16-18 tap through each threaded hole to ensure an accurate torque on all bolts.

**STEP 8.** Screw in the load bolts in each boss from the inside of the cover until they bottom out (See Figure 2 & 3).

**STEP 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 (See Figure 3).

**STEP 10.** Place the **B&M Cast Aluminum Rear End Cover** on the differential housing using a supplied bolt and washer at the top hole on the cover so it can be used as a guide.

**STEP 11.** Install the rest of the supplied bolts and washers and torque to 25 ft/lb in a crisscross pattern.

**STEP 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.**

**STEP 13.** Apply a very small amount of RTV onto the threads of the load bolts and screw on the two supplied jam nuts onto the load bolts. Torque the jam nuts to 5 ft/lb.

**STEP 14.** Screw in the magnetic 1/4\_NPTF drain plug and tighten.

**NOTE: No Teflon is needed as this plug has a Dryseal thread.**

**STEP 15.** Remove the factory fill plug with a 3/8\_square ratchet and extension (See Figure 4).

**STEP 16.** Fill with factory recommended gear oil using the **B&M Cast Aluminum Rear End**



Figure 2



Figure 3

**Cover fill plug hole (See Figure 5).** Add gear oil until oil runs out of the factory fill hole.

**STEP 17.** Install factory fill plug and torque to 18 ft/lb.

**STEP 18.** Screw in the 1/2\_NPT fill plug and tighten.

**STEP 19.** Reinstall and tighten any other parts (e.g., sway bar, panhard rod) if removed.

#### Parts List

- |      |                     |
|------|---------------------|
| (1)  | Cast Aluminum Cover |
| (2)  | Load Bolts          |
| (2)  | Jam Nuts            |
| (1)  | 1/4_NPTF Drain Plug |
| (1)  | 1/2_NPT Filler Plug |
| (10) | 5/16-18 Bolts       |
| (10) | 5/16_Washers        |

### Tools List

Drain Pan  
Rags  
RTV Silicone Gasket Maker  
Torque Wrenches  
3/8\_Ratchet & 3\_Extension  
1/4\_Allen Socket  
3/8\_Allen Wrench  
3/4\_Socket  
Flat Blade Screwdriver  
Gear Oil  
Gear Oil Pump  
Jack & Jack Stands



Figure 4

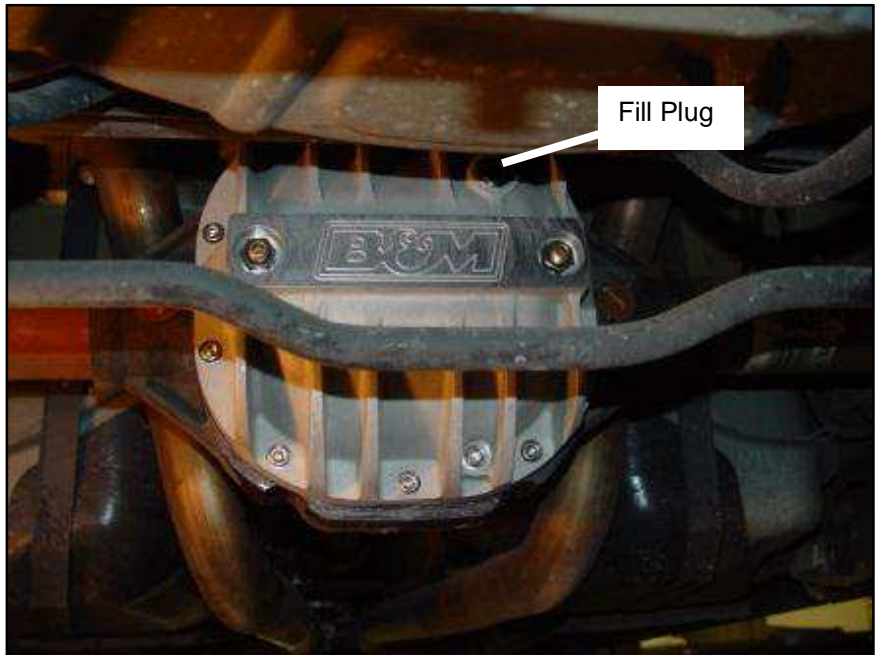


Figure 5