

Installation Instructions
NODULAR IRON DIFFERENTIAL COVER
for DANA 44

For specific vehicles, see "Applications" tab on this product's webpage.

Part No. 12312

Rev. 1/8/2020

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 B&M Cast Nodular Iron Differential Cover has been designed to work on most vehicles equipped with a Dana 44 10 bolt truck style axle. The cover provides several advantages over stock factory covers. The thick nodular cast iron construction increases case rigidity. The magnetic drain plug feature allows regular gear oil changes without the usual mess, and limits ferrous debris from circulating in the axle. This diff cover also features our built in dipstick so you can maintain and check your fluid anytime.

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!** Try to raise the vehicle 1-2 feet so 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

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

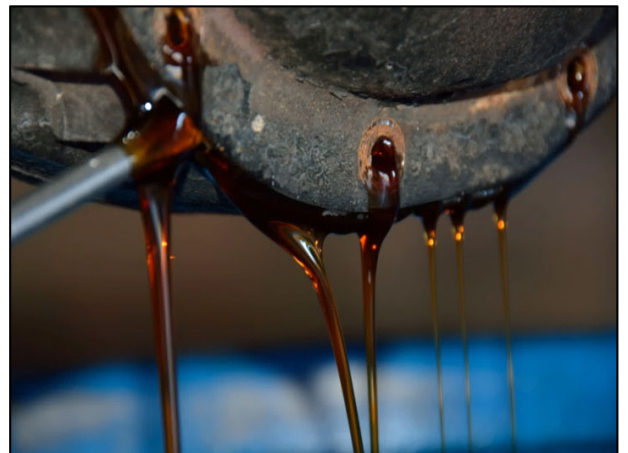
NOTE: On some vehicles it might be necessary to remove some parts (e.g. sway bar, panhard bar) to make the installation of the cover easier.

2. Place a drain pan underneath the axle housing.

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

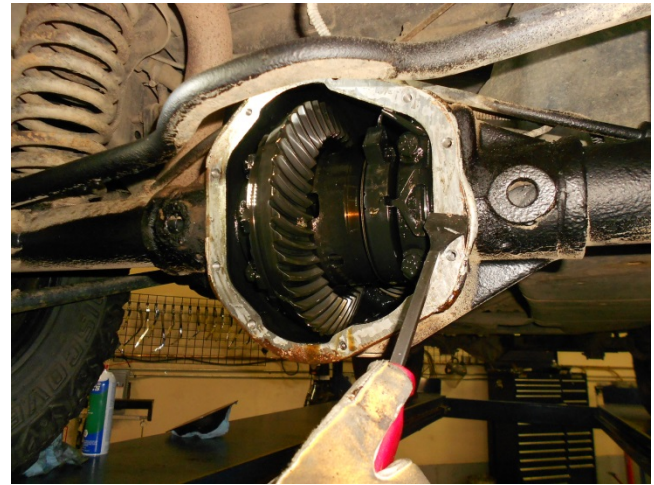
4. Carefully pry the cover loose with flat head screw driver, being careful not to damage the surface, and allow the oil to drain.

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



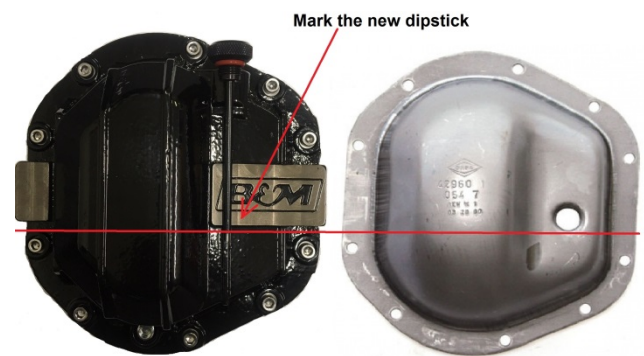
6. Using a dry lint free rag, clean the accessible area of the axle housing and check the internal components for visible excessive wear or other problems.

7. Clean all gasket material from the axle housing surface and wipe clean.



8. Determining your oil level. First place your B&M dip stick on the outside of the cover in the position as if it was completely screwed in. On a standard driveline angle put the two covers side by side and use something to make a straight edge from the bottom of the factory cover fill hole to the B&M dip stick. Then mark the dip stick as your new full mark.

NOTE: On custom driveline angles other than stock the full mark may be in a different location on the dip stick.



9. Apply a bead of RTV silicone gasket maker to the B&M Cast Iron Diff Cover. Run the bead inside the bolt holes. If your vehicle has a reusable gasket it may be reused but check the condition of it.

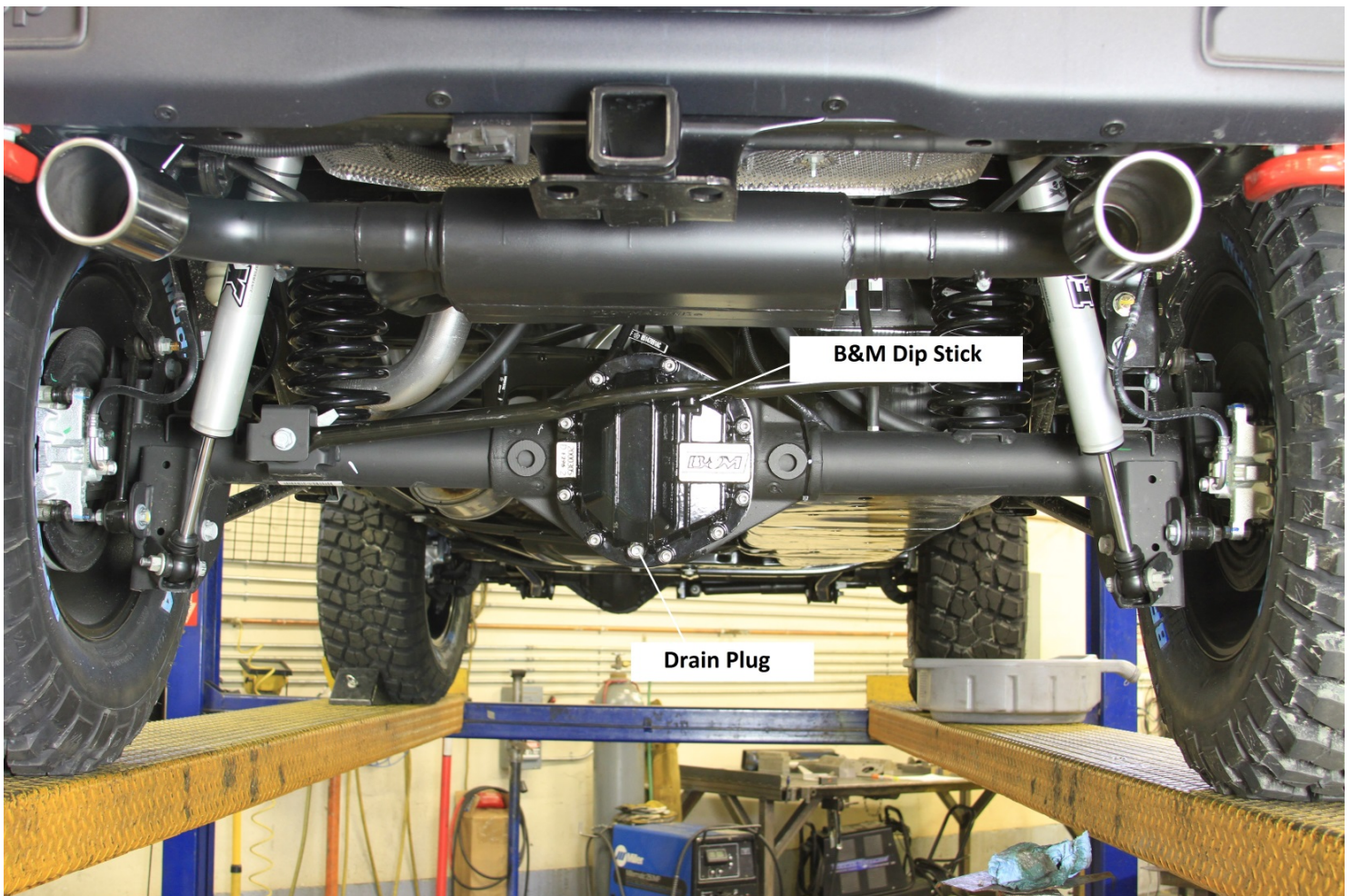


10. Install the B&M Cast Iron Rear Diff Cover on the axle housing using the 10 supplied 5/16" bolts and washers.



11. Install the supplied magnetic 1/4" NPTF drain plug on the B&M Cast Iron Diff Cover and tighten.

12. Fill with factory recommended gear oil through the B&M differential dipstick hole and use the dipstick to ensure fluid is at the proper full level.



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

Owner's Manual/Maintenance Booklet recommends replacing axle lubricant anytime axle is submerged in water. (Refer to Owner's Manual/Maintenance Booklet for details).

PARTS LIST

(1) Cast Iron Dana 44 Diff Cover
(1) 1/4" NPTF Drain Plug – 1/4" Allen
(10) 5/16-18 x 1" Bolts – 1/4" Allen
(10) 5/16 AN Washers
(1) B&M diff cover dip stick

TOOLS LIST

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

IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

