



06/15/11

## MH-AAGC

### AA 14-11.5 Gear Cover with Sight Glass

Please read entirely before installing this new differential cover.

#### TOOLS REQUIRED:

- 1/2 socket wrench and driver (for removing the old cover)
- 6 MM allen bit with a 3/8 ratchet drive (6 MM allen key is furnished)
- 3/16 allen bit with a 3/8 ratchet drive
- 3/8 drive torque wrench
- Gasket scraper
- Smooth flat file (8 to 12 in. long)
- Oil drain pan (minimum 8 Qt. capacity)
- New gear lube (approximately 5 to 7 quarts) The Mopar part number is 0512232AA. The specification in your Owner's Manual calls for "GL-5 SAE 75W90 synthetic. American Axle rear axles do not require a limited-slip additive."

#### PARTS CONTENT:

<u>Number</u>	<u>Quantity</u>	<u>Item</u>
1.	1	MH-AAGC Differential cover with <b>O-ring ARP 568-278</b> (installed)
2.	13	8 MM x 30 MM stainless allen cap screws ( <b>Torque 12-16 ft. lbs</b> )
3.	14	5/16 stainless AN washers
4.	1	Drain plug assembly with magnet and <b>O-ring ARP 568-910</b> (installed)
5.	1	Oil level reference plug with <b>O-ring ARP 586-904</b> (installed)
6.	1	1/8 pipe plug (for optional temperature sender not included)

**THE TOP AND BOTTOM BOLTS HAVE BEEN ELIMINATED FOR SENDING UNIT AND DRAIN PLUG.**

#### **A word of caution to the installer / vehicle owner:**

The MH-AAGC cover is designed to fit the factory Dodge axles supplied as original equipment. However, in some applications, or because of the use of certain factory options and/or after market equipment, there may be clearance problems between the cover and other vehicle systems (specifically the spare tire or some rear sway bars). It may be necessary to install spacers or shims to lower the sway bar. It may be necessary to loosen the spare tire and push it toward the rear of the truck. It is the responsibility of the vehicle owner/cover installer to ensure that no other vehicle component comes in contact with the cover. **Contact with any vehicle component, or the making of any modification to the cover, automatically voids the warranty. We assume no liability, expressed or implied, for damage or injury to persons or property.**

## MH-AAGC

### INSTALLATION:

Note: For some installations, removing the spare tire may provide better access to the work area. However, it is not necessary in every case. The installer should determine if there is adequate work space prior to starting the installation.

1. **Park your vehicle on level ground and apply the parking brake.**
2. Position a drain pan under the differential to catch the old gear lube.
3. Remove the 14 existing bolts, starting at the bottom.
4. Using a gasket scraper, start at the bottom of the cover and carefully (so as not to gouge the housing metal) insert between the existing cover and gear housing and pry the old cover off.
5. Allow all of the old gear lube to drain.
6. Using a gasket scraper, carefully remove all of the old gasket material (dried silicone) from the housing.
7. Use clean lint free rags to wipe down the remaining oil from inside the housing and to clean the housing gasket surface. The surface must be clean and flat for the O-ring to seal.
8. Before installing the new cover, check the gasket matting surface on the differential housing for dents, irregularities, or gouges. Should any exist, carefully remove the high spots using a smooth flat file. **BE CAREFUL NOT TO "ROUND OFF" THE FLAT GASKET SURFACE.**
9. Using gear lube, apply a thin layer of oil to the cover O-ring.
10. Position the cover by aligning the bolt holes and start one of the new stainless steel allen cap screws and stainless steel washers at the top bolt hole and continue around the bolt pattern until all 12 bolts and washers are installed "finger tight."
11. Using a 6 MM hex bit and 3/8 drive torque wrench, torque the stainless allen cap screws to **(12-16 ft. lbs.)** in a "cross tight" pattern.
12. **Check** the drain plug, oil reference plug, and 1/8 pipe plug for tightness. If you are going to install a temperature sender, do so at this time. Remove the 1/8 pipe plug and install the sender in its place. **Be Sure To Use All Purpose Anti-Seize or equal On The Sender's Pipe Threads. "TIGHTEN" all three: DRAIN PLUG, OIL REFERENCE PLUG and 1/8 PIPE PLUG (Tighten with two fingers using the short side of allen wrench) DO NOT OVER TIGHTEN.**
13. Remove the fill plug and add the new gear lube until it settles 1/2 to 3/4 of the way up on the sight glass. Add lubricant as needed after a short test drive.

## MH-AAGC

### MAINTENANCE:

The cover is constructed of high-quality aircraft aluminum and has a powder-coated finish. The bolts and washers are stainless steel. These components require no maintenance.

We suggest you follow the manufacturer's recommendations for the gear lube drain intervals. You may change your gear lube without removing the cover. Park your vehicle on level ground with the parking brake applied. Position a drain pan under the drain plug, located at the bottom of the pan, and remove the drain plug assembly. You may notice "fuzzy" metallic particles on the magnetic drain plug. This is normal wear. If you notice any larger chips of metal, further inspection should be performed. We suggest that this inspection be performed by a professional mechanic who specializes in drive train components. Remember to clean the drain plug assembly prior to reinstallation. Apply a thin layer of oil to the drain plug O-ring and reinstall.

**(Tighten with two fingers using the short side of allen wrench) DO NOT OVER TIGHTEN.**  
Follow the procedure for filling the differential.

Should it become necessary to remove your cover for any reason, the cover O-ring may be reused. **DO NOT USE ANYTHING TO "PRY" THE COVER FROM THE DIFFERENTIAL HOUSING. THIS WILL DAMAGE THE O-RING.** If you have damaged the O-ring, you may obtain a replacement by calling 770-886-2500.

If you need to reinstall the cover and no O-ring is available, you may run a bead of RTV silicone or use a gasket on the cover's mating surface face and reinstall the cover in the conventional manner.

During your vehicle's use, you may come in contact with water above the axle seals or above the axle breather. You should inspect your gear lubricant at the earliest opportunity. Do so by following the oil level check procedure. If water is detected, follow the drain procedure and refill the differential following the fill procedure.

GENO'S GARAGE  
1150 Samples Industrial Drive  
Cumming, GA 30041  
770.886.2500