

***advanced FLOW engineering***

**Instruction Manual P/N: 46-71060A / 46-71060B**

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**AAM 11.5 – 14 Bolt Rear Differential Cover**

Make: **GM**    Model: **2500** Year: **2001-2018**    Engine: **V8 6.6L**

Make: **GM**    Model: **3500** Year: **2001-2018**    Engine: **V8 6.6L**

Make: **GM**    Model: **3500** Year: **2001-2007**    Engine: **V8 8.1L**

Make: **GM**    Model: **3500** Year: **2007-2018**    Engine: **V8 6.0L**



- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7100.
- Ensure you have all necessary tools before proceeding.
- Ensure that your vehicle is cooled off before proceeding.
- Retain factory parts for future use.

| Label | Qty. | Description   | Part Number |
|-------|------|---|-------------|
| A1    | 1    | Differential Cover – Raw, Machined Fins (46-71060A)               | 05-60812A   |
| A2    | 1    | Differential Cover – Black, Machined Fins (46-71060B)             | 05-60812B   |
| B     | 1    | RTV Silicone, Black Instant Gasket                                | 05-60096    |
| C     | 14   | Screws, Socket Head M8x1.25x30                                    | 03-50225    |
| D     | 2    | Screws, Socket Head M8x1.25x40                                    | 03-50245    |
| E     | 18   | Washer, Flat  | 03-50228    |
| F     | 1    | Plug, Magnetic M12 x 1.25   | 03-50385    |
| G     | 1    | Crush Washer  | 03-50384    |
| H     | 2    | Spacer  | 03-50529    |
| I     | 1    | Plug, 1/8" NPT  | 03-50029    |
| J     | 1    | Plug, 3/4" NPT<br>(Included in 46-71060A)                         | 03-50391    |
| K     | 1    | Plug, Magnetic 3/4" NPT, 6" Deep Reach<br>(Included in 46-71060B) | 03-50223    |
| L     | 1    | Plug, 1" NPT<br>(Included in 46-71060A)                           | 03-50390    |
| M     | 1    | Porthole View Gauge (Pre-Installed)<br>(Included in 46-71060B)    | 03-50224    |



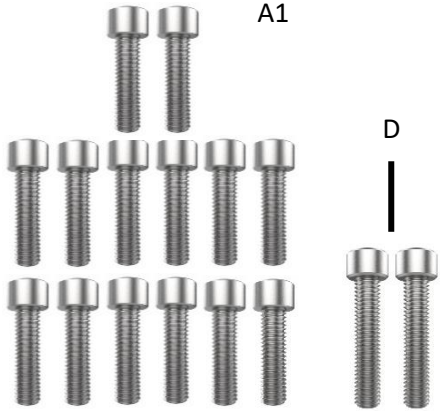
A1



A2



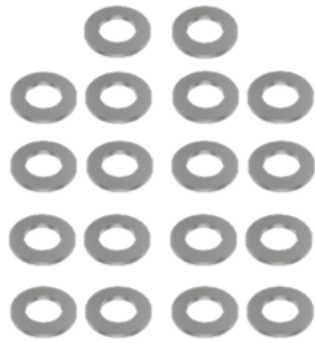
B



C



D



E



F



G



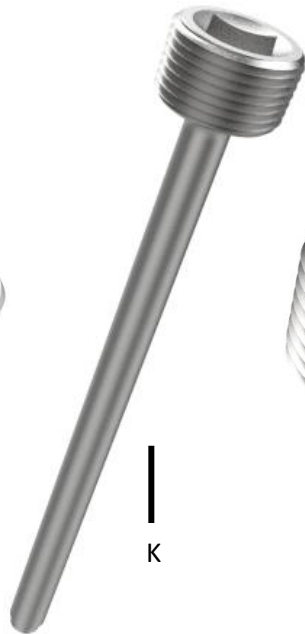
I



H



J



K



L



M



1. Park your vehicle on a flat, dry surface. You will need to block the tires to prevent the vehicle from rolling.
2. Place a drain pan under the differential cover.
3. Remove the **bottom** 13 bolts from the differential cover, leaving only the top bolt. Keep note of the position of any brackets removed during this step.
4. Loosen, but do not remove the top bolt. Break the seal on the cover and the gear oil will begin to drain.



5. Allow all of the gear oil to drain from the differential.
6. Remove the one (1) remaining bolt from the top of the differential cover.
7. Remove the OEM cover and gasket from the housing.



8. Use a clean, lint free rag to wipe down the remaining gear oil from the housing.
9. Clean off the sealing surface with a gasket scraper. Be careful not to gouge the surface while cleaning.
10. Check the surface of the housing for any irregularities. If there are any, carefully remove high spots using a smooth flat file.

**Note: DO NOT "ROUND OFF" THE FLAT GASKET SURFACE**

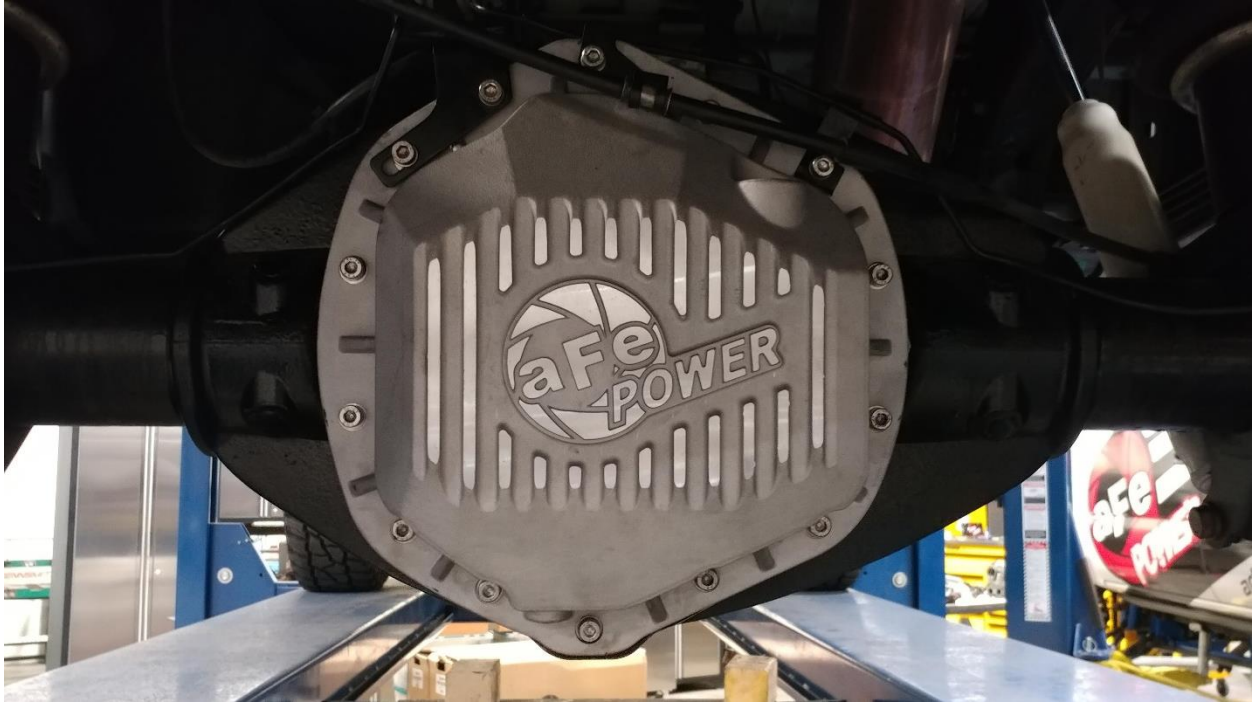


11. Hold the supplied aFe differential cover up to the gasket surface to make sure you will be able to maneuver it into place easily.

**Note: If applicable, you can re-use the OEM gasket in place of silicone.**

12. Spread the supplied RTV silicone across the gasket surface. Be generous when spreading the silicone across the surface, ensuring to follow along the inside of all the bolt holes.

**Note: Before moving on, make sure that the silicone will completely seal with the gasket surface.**



13. Hold the aFe differential cover into position, aligning the screw holes. Install four (4) of the supplied M8x1.25x30 socket head screws and flat washers into separate sides of the cover to hold it in place.

**Note: Be careful not to move the cover around once it touches the gasket surface.**

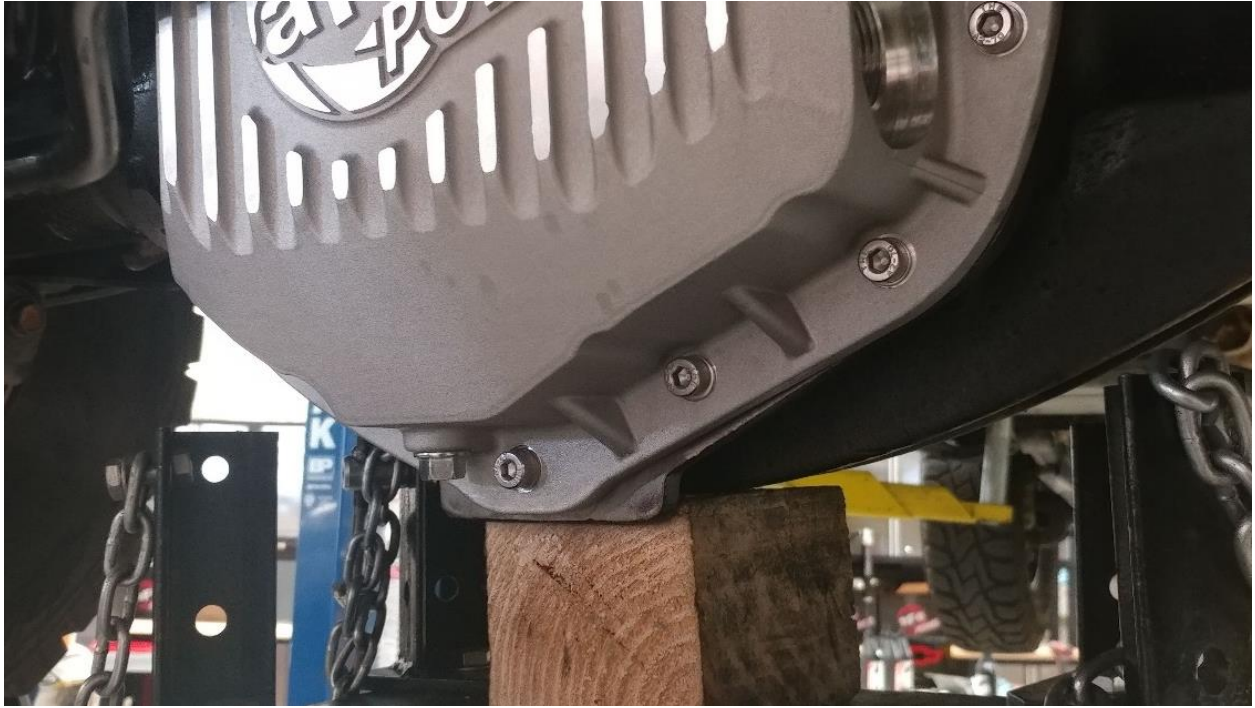
14. If applicable, reinstall the top left brake line bracket using two (2) supplied M8x1.25x40 socket head screws, two (2) spacers, and four (4) flat washers.

15. Reinstall the remaining brackets using M8x1.25x30 socket head screws and flat washers.

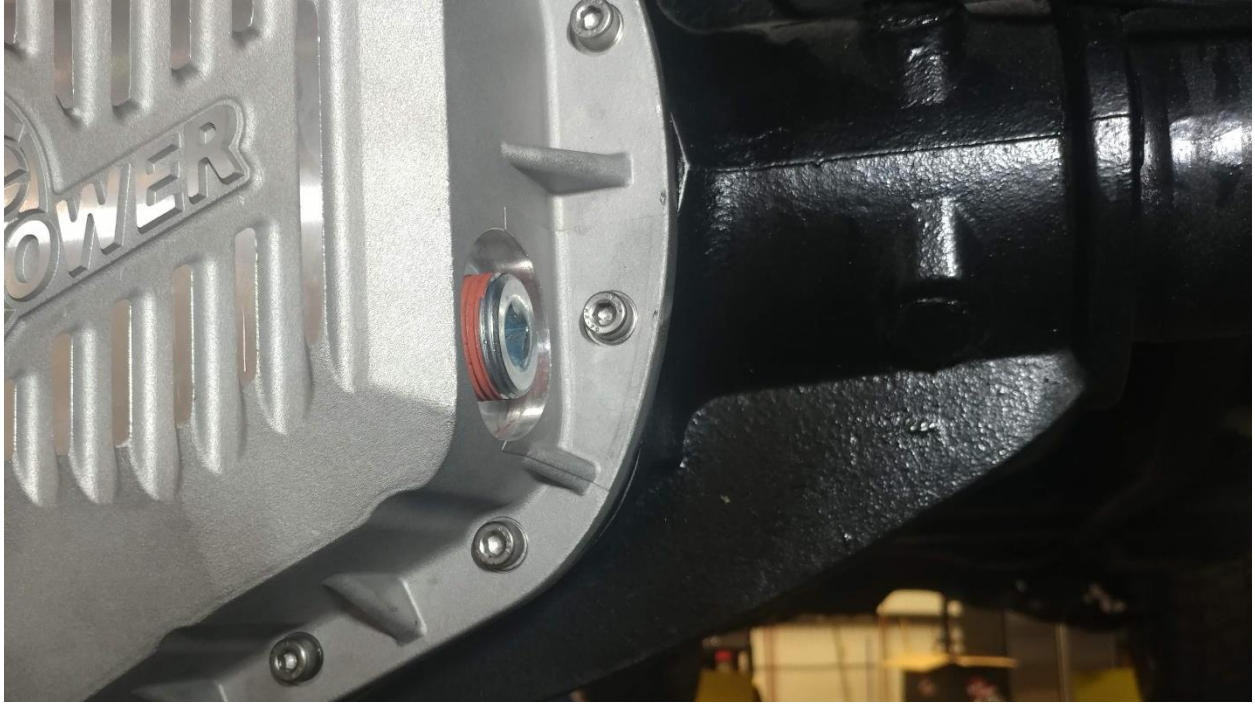
16. Continue installing the remaining M8x1.25x30 socket head screws and flat washers finger tight.

17. Torque the mounting screws to 12-16 ft. -lbs. in a crisscross pattern.





18. Install the supplied M12x1.25 drain plug and crush washer into the bottom of the cover.



**When installing kit number 46-71060A only:**

19. Install the supplied 1" NPT plug into the side of the cover.

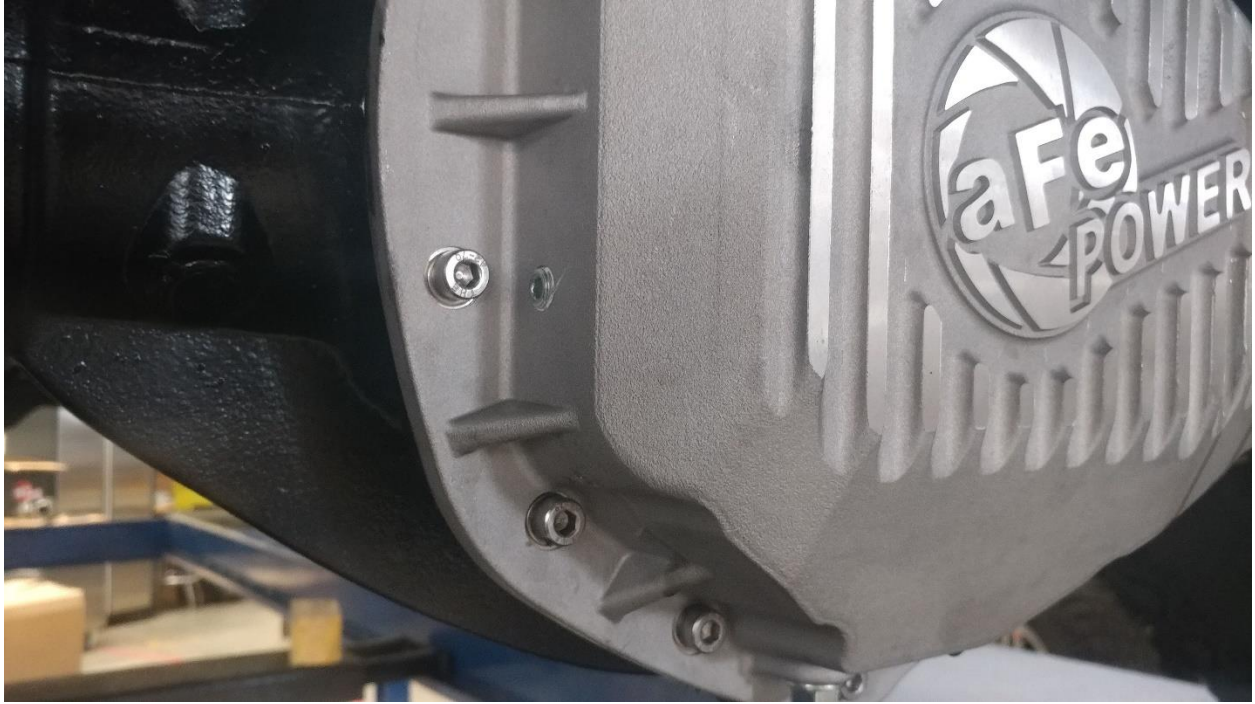


20. Fill the aFe differential cover using new gear oil. Fill until gear oil runs out of the 1/8" NPT port on the side of the cover (about 4 quarts).

**Note: If your vehicle is lifted and your axle has been rotated, you will have to verify you have the correct oil level for your vehicle.**



21. Apply Teflon pipe sealant to the threads of the supplied 1/8" NPT plug.

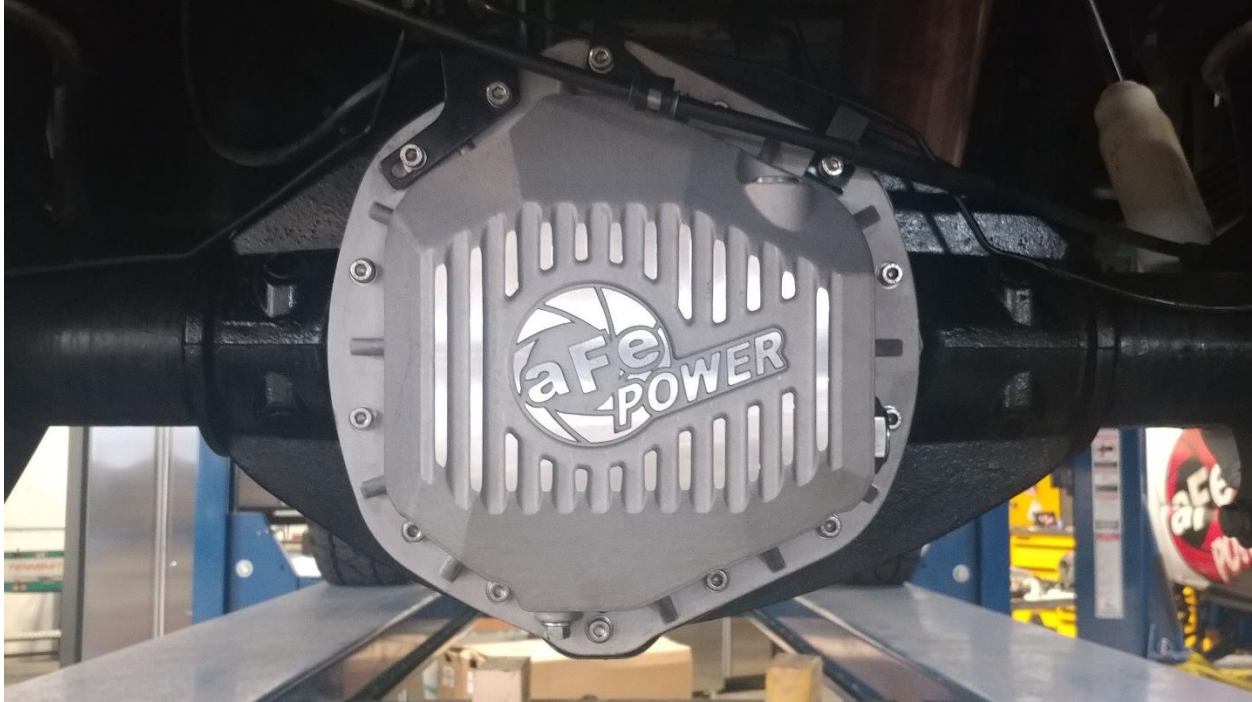


22. Install the 1/8" NPT plug into the side of the cover.



**When installing kit number 46-71060B only:**

23. Apply Teflon pipe sealant to the threads of the supplied 3/4" NPT magnetic 6" deep reach plug.



**If installing kit number 46-71060A:**

24a. Install the supplied 3/4" NPT plug into the top of the cover.

**If installing kit number 46-71060B:**

24b. Install the 3/4" NPT magnetic 6" deep reach plug into the top of the cover.



25. Your installation is complete.



# Warranty

## General Terms:

- aFe warrants their products to be free from manufacturer’s defects due to workmanship and material.
- This warranty applies only to the original purchaser of the product and is non-transferrable.
- Proof of purchase of the aFe product is required for all warranty claims.
- Warranty is valid provided aFe instructions for installation and/or cleaning were properly followed.
- Proper maintenance with regular inspections of product is required to insure warranty coverage.
- Damage due to improper installation, abuse, unauthorized repair or alteration is not warranted.
- Incidental or consequential damages or cost, including installation and removal of part, incurred due to failure of aFe product is not covered under this warranty.
- All warranty is limited to the repair and/or replacement of the aFe part. To request Return Goods Authorization (“RGA”), email RGA@afepower.com or call (951)493-7100. Upon receipt of the RGA, you must return the product to the address provided in the RGA, freight prepaid and accompanied with a dated proof of purchase and the RGA. Upon receipt of the defective product and upon verification of proof of purchase, aFe will either repair or replace the defective product within a reasonable time, not to exceed thirty days.

| Product Category                    | P/N Prefix        | Warranty Duration   |
|-------------------------------------|-------------------|---------------------|
| Direct OE Replacement Filters       | 10,11,30,31,71,73 | Life of the vehicle |
| Racing Filters                      | 18                | 1 year              |
| Universal                           | 21,24,72          | 2 years             |
| Air Intake Systems                  | 50,51,54,55,75    | 2 years             |
| Exhaust Systems                     | 49                | 2 years             |
| Intercoolers & Intercooler Tubes    | 46-2              | 2 years             |
| Intake Manifolds                    | 46-1              | 2 years             |
| Differential Cover/Transmission Pan | 46-7              | Life of the vehicle |
| Exhaust Manifolds                   | 46                | 2 years             |
| Throttle Body Spacers               | 46-3              | 2 years             |
| Fluid Filters                       | 44                | 90 days             |
| Pre-Filters                         | 28                | 2 years             |
| Heavy Duty OE Replacement           | 70                | 2 years             |
| PowerSports OE Replacement          | 81,87             | 2 years             |
| PowerSports Intake Systems          | 85                | 2 years             |

No other warranty expressed or implied applies nor is any person or advanced FLOW engineering authorized to assume any other warranty. Some States do not allow the exclusion or limitation of incidental or consequential damages or do not allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

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