

***advanced FLOW engineering***

**Instruction Manual** P/N: 46-70300 / 46-70302

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AAM – 14 Bolt Rear Differential Cover

Make: **GM** Model: **Colorado/Canyon** Year: **2015-2019** Engine: **I4-2.8L, V6 3.6L, I4 2.5L**



- 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 (46-70300)	05-60712A
A2	1	Differential Cover – Black, Machined Fins (46-70302)	05-60712B
B	1	Plug, Hex Head Socket; 1/8" NPT	05-60029
C	1	Plug, 3/4" NPT, 6" Deep Reach (46-70302)	03-50223
D	1	Sight Glass, 1" NPT (46-70302)	03-50224
E	1	Plug, 1" NPT (46-70300)	03-50390
F	1	Plug, 3/4" NPT (46-70300)	03-50391
G	14	Washer, Flat	03-50228
H	10	Screw, Socket Head Cap: M8x1.25x25 S/S	03-50231
I	2	Screw, Socket Head Cap: M8x1.25x30 S/S	03-50379
J	1	Washer, Aluminum, M12	03-50384
K	1	Plug, M12x1.25	03-50385
L	2	Spacer, Aluminum	03-50529

### **Pre-Installation Tips and Best Practices:**

- Park your truck on level ground and apply the parking brake before starting any work.
- 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.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use

## Installation Procedure:

### OE Differential Cover Removal

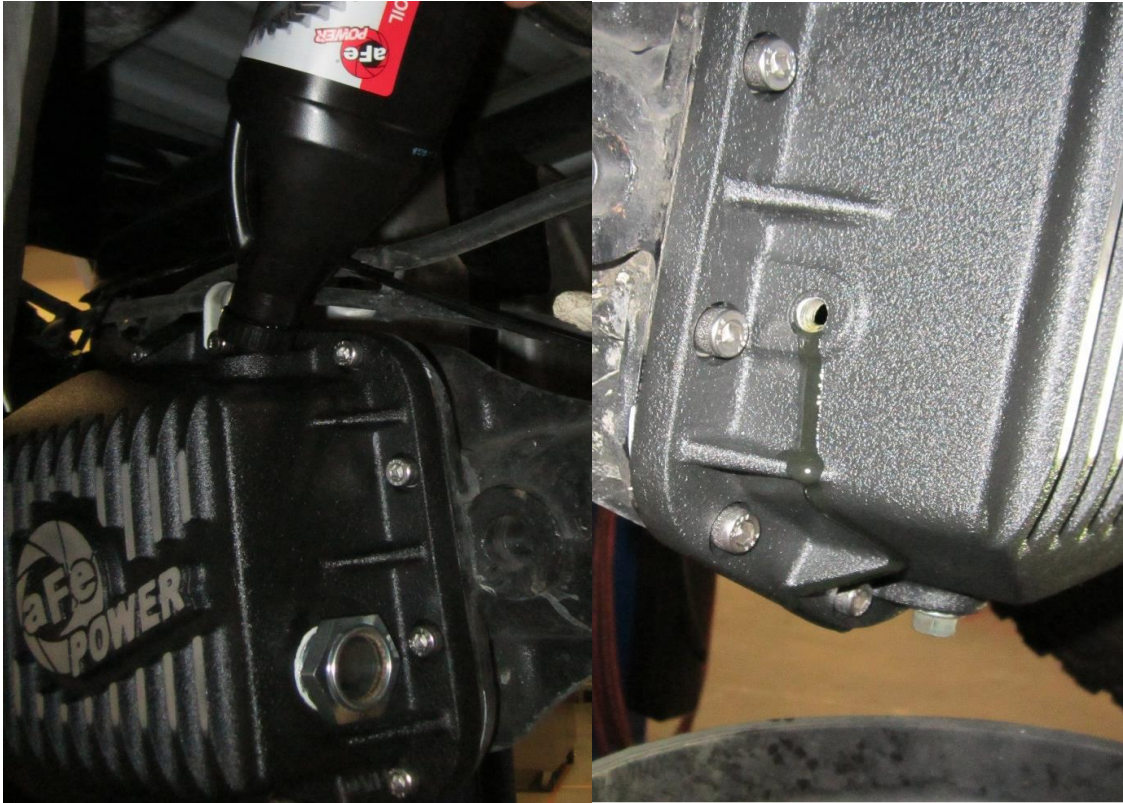


1. Place a drain pan under the rear differential cover.
2. Using a 13mm socket, remove the two nuts holding the emergency brake cable and the brake line to the diff cover.
3. Using a 13mm socket, remove all but two bolts holding on the differential cover. Loosen, but do not remove the last two bolts.
4. If necessary, use a gasket scraper to pry the cover loose from the differential. Be careful not to damage the factory gasket.
5. Remove the last two bolts from differential and remove the factory cover and gasket. Retain the gasket for later use.
6. Allow all the oil to drain.
7. Using a gasket scraper, carefully remove any dirt or debris from the sealing surface. Do not gouge the differential sealing surface.
8. Using a lint free rag, wipe all remaining oil and old gasket from differential housing.

## aFe Differential Cover Installation



1. Position the cover and factory gasket by aligning the bolt holes. Using the 25mm long socket head cap screws and washers, loosely install all 10 screws. Skip the two holes that the emergency brake bracket and brake line bracket secure to.
2. Install a washer and spacer into the last two holes, then using a 30mm long socket head cap screw and a washer, secure the brake line bracket and emergency brake bracket.
3. Using an 8mm Allen socket, torque all socket head cap screws to 12-16 ft. lbs. in a cross tightening pattern.
4. Using a 14mm socket, install the drain plug and crush washer into the aFe differential cover.



5. Apply Teflon (PTFE) pipe sealant tape on the threads of the NPT plug components before installing.
  6. Install the 1" NPT plug or sight glass in the passenger side of the aFe differential cover.
  7. Fill the aFe differential cover with new gear oil. Gear oil will run out of the 1/8 NPT hole on the driver's side of the aFe differential cover when it is filled. Install the provided 1/8 NPT plug in the oil level hole and tighten.
- When installing kit number 46-70302 only:**
8. Install the supplied 6" deep reach magnet in the top fill hole and tighten using 1/2" ratchet torque wrench. DO NOT OVER TIGHTEN.
- When installing kit number 46-70300 only:**
9. Install the supplied 3/4" NPT plug in the top fill plug hole and tighten using 1/2" ratchet torque wrench. DO NOT OVER TIGHTEN.
- NOTE:** If your vehicle has been modified or "lifted" and the axle has been rotated, you will need to establish the correct oil level for your vehicle.
- NOTE:** If fluid is overfilled, it can be drained to the proper level through the side oil level port.
10. Your installation is now complete. Drive at least 25 miles and check oil level using aFe sight glass and fill if necessary.

# 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](mailto: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.

<b>Product Category</b>	<b>P/N Prefix</b>	<b>Warranty Duration</b>
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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