

advanced FLOW engineering

Instruction Manual P/N: 46-71290A / 46-71290B

Dana M220 – 12 Bolt Rear Differential Cover

Make: **Ford** Model: **Bronco** Year: **21-22** Engine: **L4-2.3L (t)**

Make: **Ford** Model: **Bronco** Year: **21-22** Engine: **V6-2.7L (tt)**



- 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 (46-71290A)	05-60882A
A2	1	Differential Cover – Black, Machined Fins (46-71290B)	05-60882B
B	3	Hex Nut, M8 x 1.25	03-50403
C	1	Threaded Stud, M8 x 1.25 x 80	03-50754
D	10	Screw, Socket Head M8 x 1.25 x 25	03-50231
E	10	Washer, Flat	03-50228
F	1	Plug, Magnetic M12 x 1.25	03-50385
G	1	Crush Washer	03-50384
H	1	Plug, 1/8" NPT	03-50029
I	1	Plug, 3/4" NPT (46-71290A)	03-50391
J	1	Plug, Magnetic 3/4" NPT, 6" Deep Reach (46-71290B)	03-50223
K	1	Plug, 1" NPT (46-71290A)	03-50390
L	1	Porthole View Gauge (Pre-Installed) (46-71290B)	03-50224

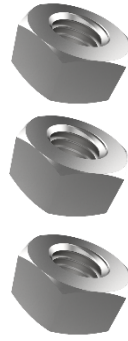
Warranty Information available at <https://afepower.com/contact#warranty>



A1



A2



B



C



D



E



F



G



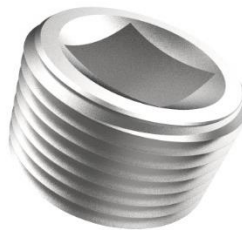
H



I



J



K



L



Note: Your vehicle must be completely cooled off before proceeding with the installation.

1. Park your vehicle on a flat, dry surface. You will need to block the tires to prevent the vehicle from rolling.

Note: You will need to get under the truck to do this installation. Please use every precaution when lifting the vehicle.

2. Place a drain pan under the differential cover.
3. Remove the brake line brackets by pulling them off of the cover bolts. Next remove the two (2) bolts supporting the brackets (circled above).
4. Remove the **bottom** six (6) bolts from the differential cover.
5. Loosen, but do not remove, the top four (4) bolts. Break the seal on the cover, allowing the gear oil to drain.



6. Remove the four (4) remaining bolts from the top of the differential cover.

Note: Be careful when removing the OEM gasket, it will be reused later during the installation.

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: Be careful when removing the OEM gasket, it will be reused later during the installation.



11. With the vehicle resting on the ground, remove the passenger side bolt connecting the Panhard bar.
12. Lift the bar out of its bracket and then allow it to rest below the housing as shown.

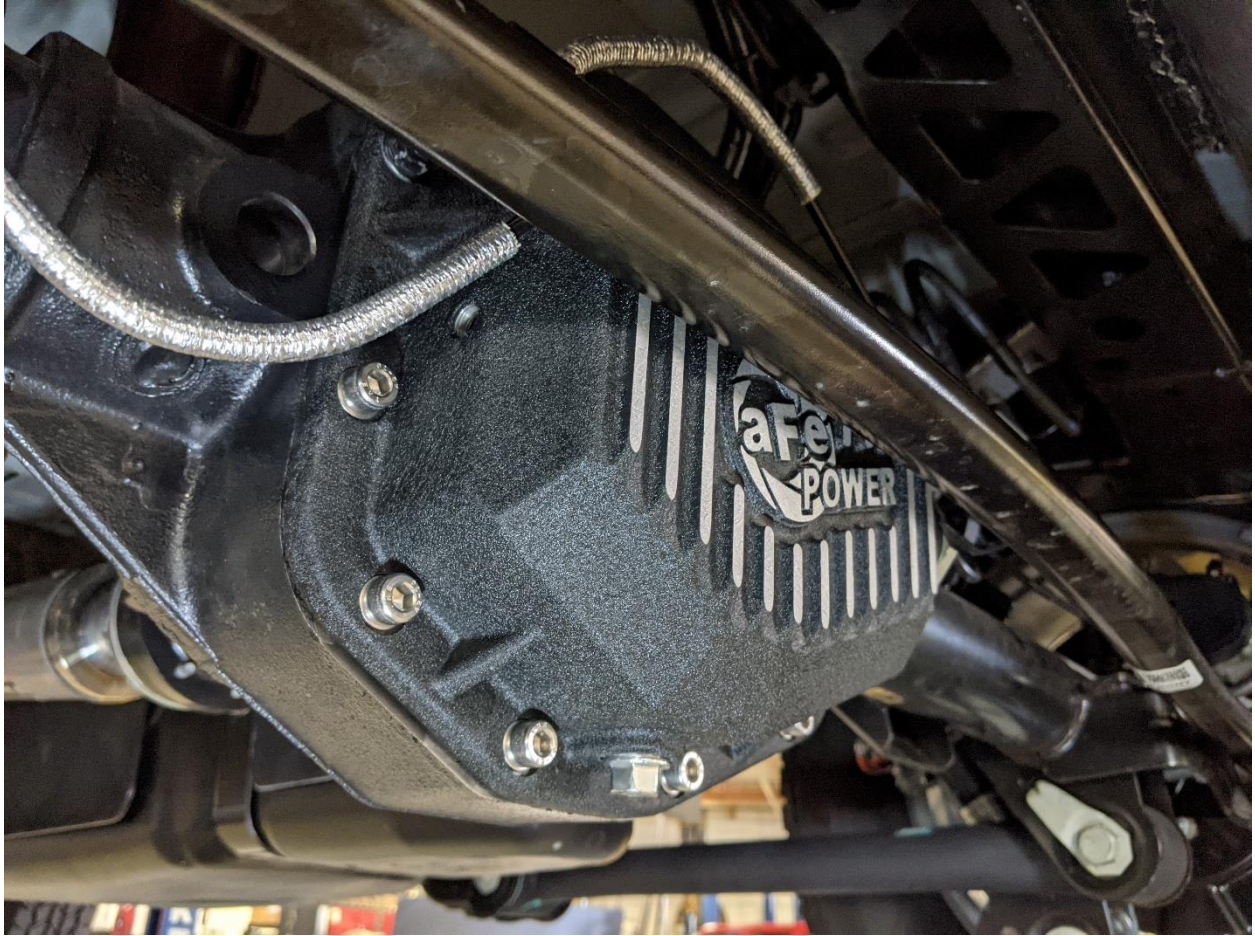


14. Hold the OEM gasket and supplied aFe differential cover into position, aligning the screw holes. Install one (1) of the supplied M8x1.25x25 socket head screws and flat washers at the top of the cover to hold it in place.
15. Reinstall the passenger side bolt removed during Step 3 in its original position.
16. Continue installing the nine (9) remaining M8x1.25x25 socket head screws and flat washers finger tight, leaving empty the position of the driver side bolt removed in Step 3.
17. With the vehicle resting on the ground, reinstall the Panhard bar with the bolt removed in Step 11.



18. In the last empty position, install the supplied M8x1.25 threaded stud and one (1) of the supplied M8x1.25 hex nuts.
19. Torque all of the M8x1.25 socket head mounting bolts to 12-16 ft.-lbs. in a crisscross pattern and then the M8x1.25 nut to 8 ft.-lbs.
20. Install the remaining two (2) M8x 1.25 nuts by tightening them together about 1" from the from the end of the threaded stud as shown.
21. Reinstall the brake line brackets removed during Step 3.

Note: Verify that the brake line will not be in contact with the cover or Panhard bar during suspension travel. Adjust the position of the hex nuts and/or brake line if needed.

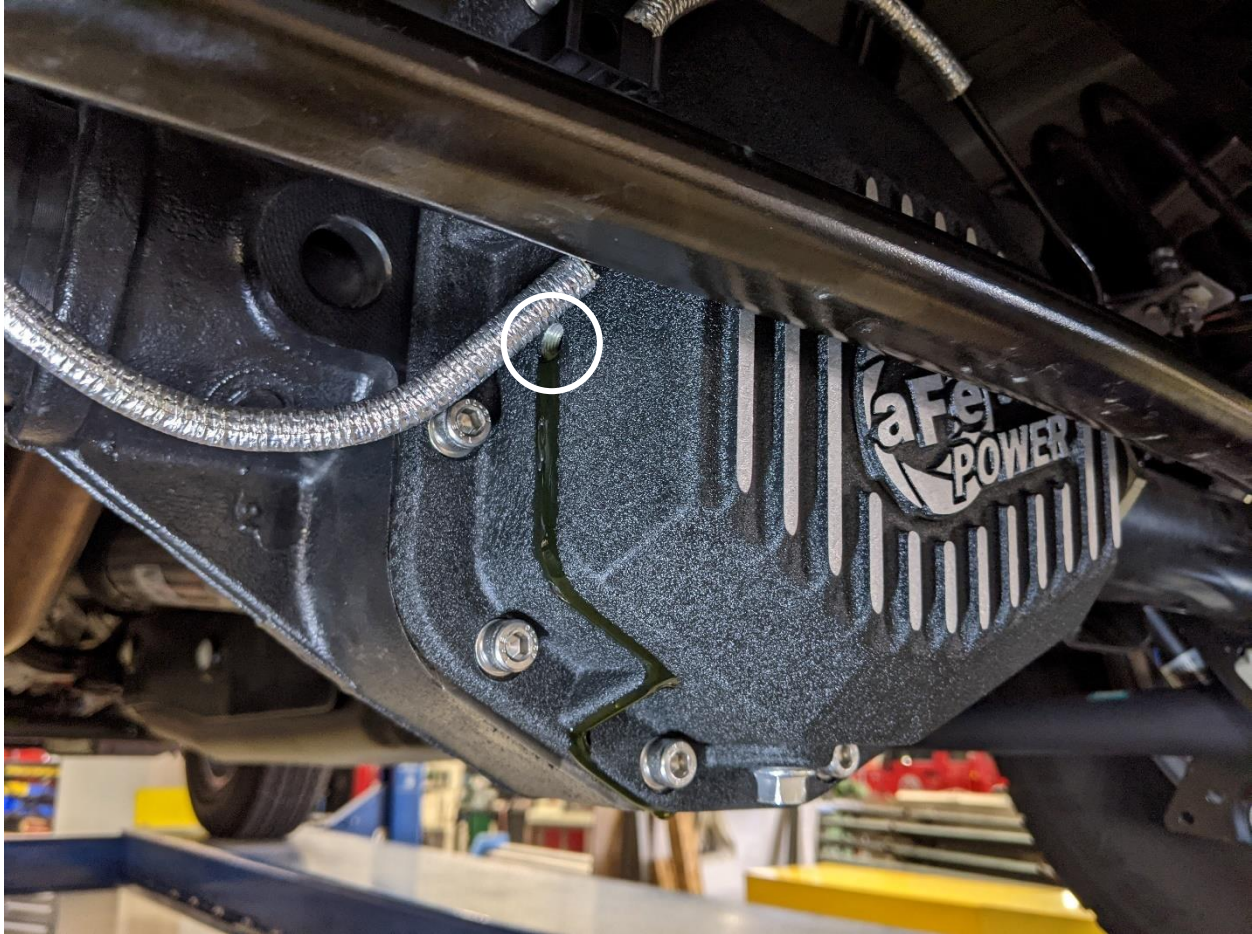


22. Install the supplied M12x1.25 drain plug and crush washer into the bottom of the cover.



If installing kit number 46-71290A:

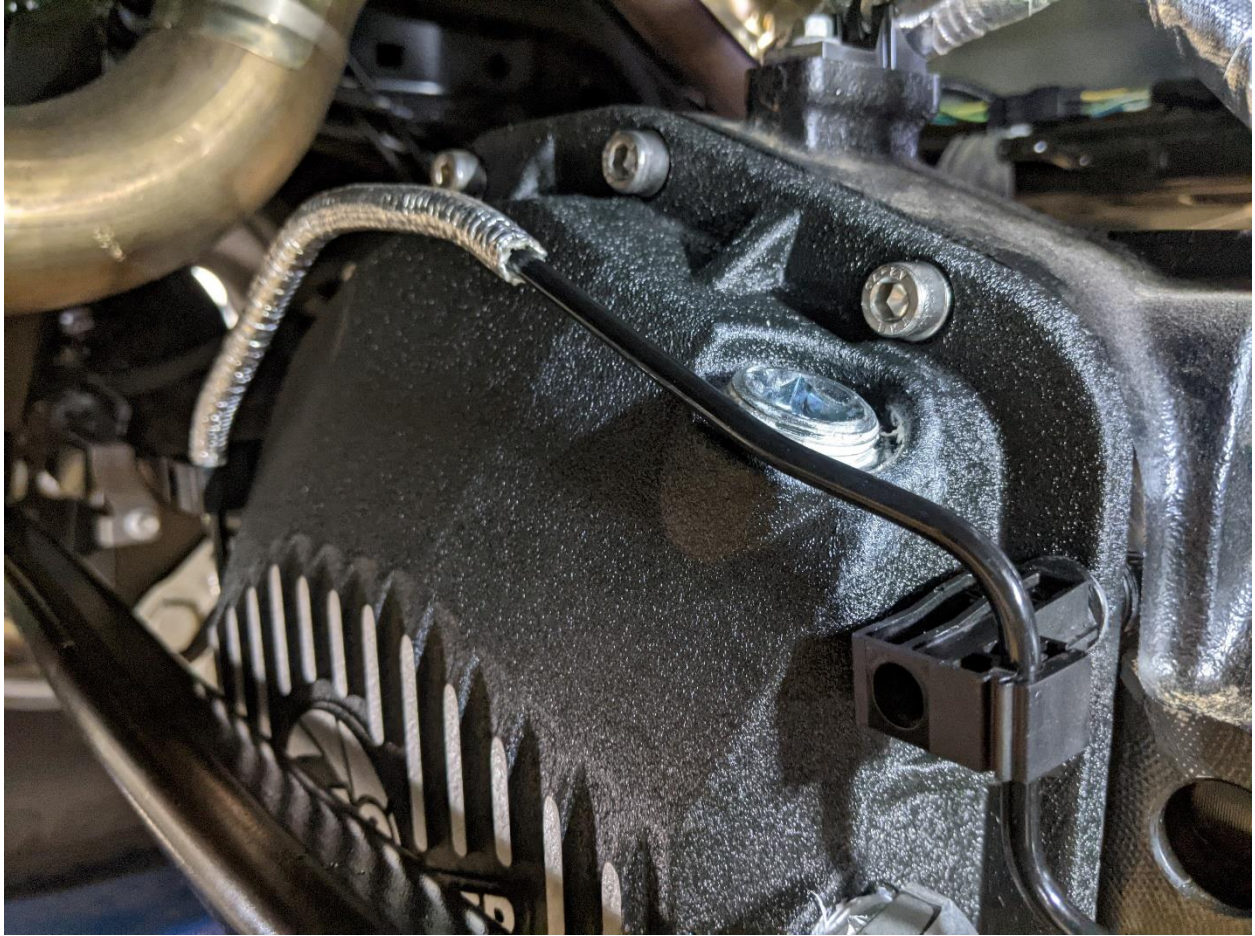
23. Install the supplied 1" NPT plug into the side of the cover.



24. Using the top fill port, fill the aFe differential cover with new gear oil. Fill until gear oil runs out of the 1/8" NPT port on the side of the cover (about 2 ½ 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.

25. Apply Teflon tape/pipe sealant and install the supplied 1/8" NPT plug into the side of the cover.



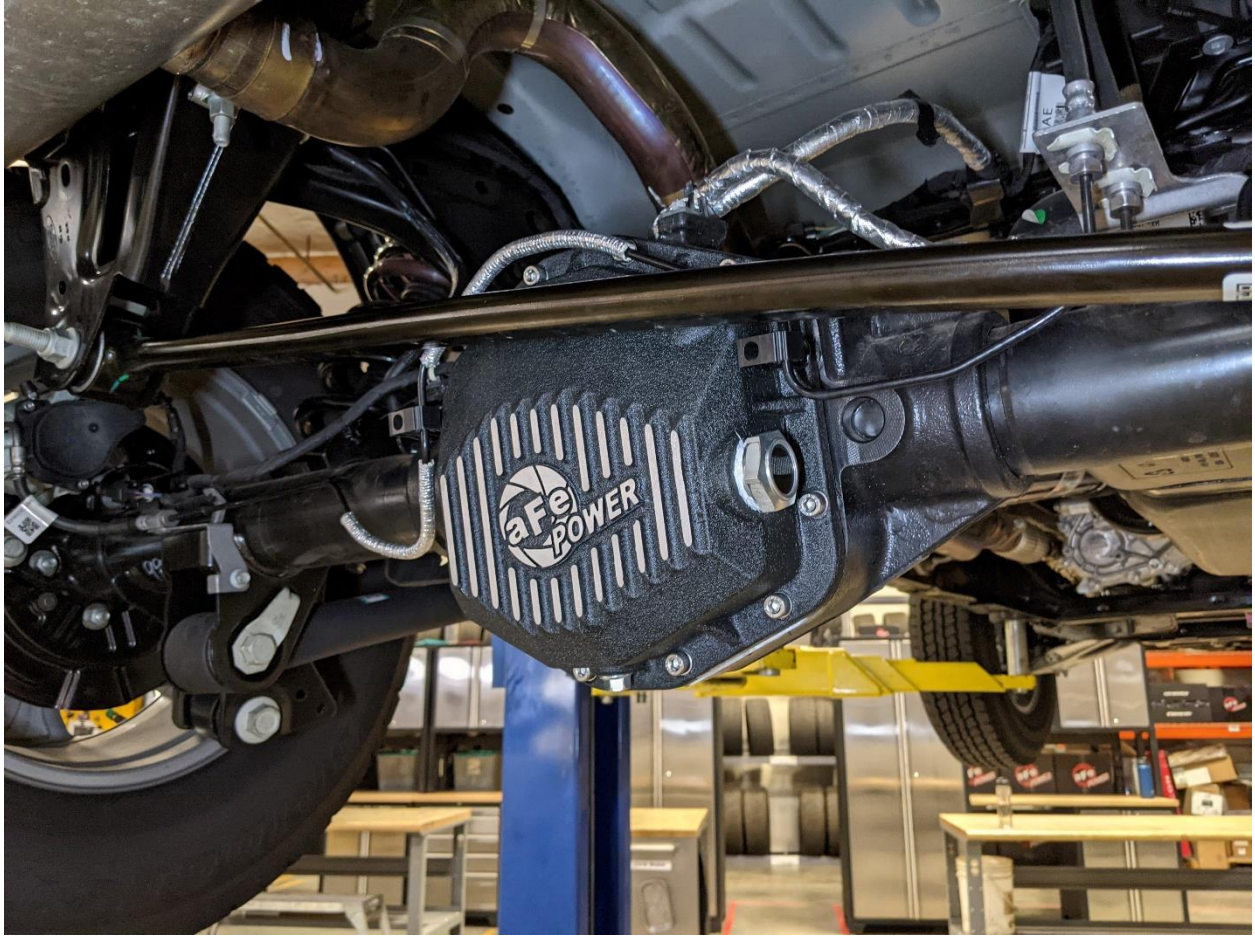
If installing kit number 46-71290A:

26. Apply Teflon tape/pipe sealant and install the supplied 3/4" NPT plug into the top of the cover.

If installing kit number 46-71290B:

27. Apply Teflon tape/pipe sealant and install the supplied 3/4" NPT magnetic 6" deep reach plug into the top of the cover.

Note: Verify that the brake line will not be in contact with the fill plug.



28. Your installation is complete.

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