

## advanced FLOW engineering

**Instruction Manual P/N: 46-71220A / 46-71220B** 

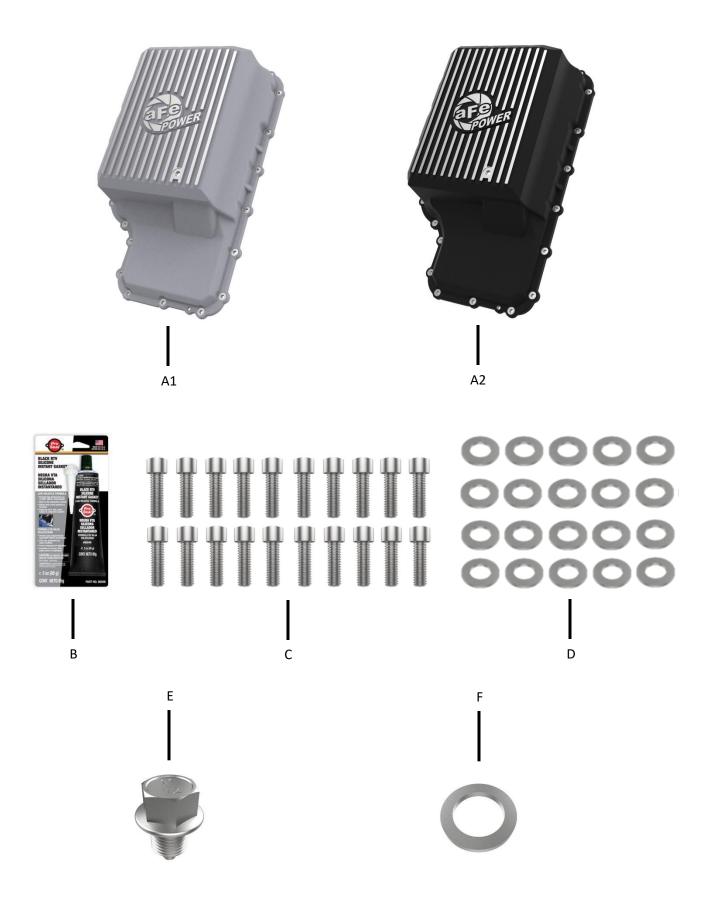
#### 10R140 Transmission Pan

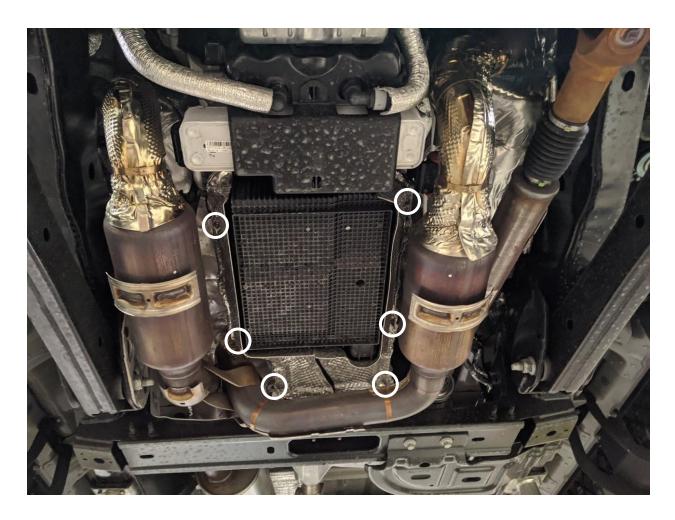
Make: Ford Model: F250 Year: 2020-2021 Engine: V8-6.7L (td)
Make: Ford Model: F250 Year: 2020-2021 Engine: V8-7.3L
Make: Ford Model: F350 Year: 2020-2021 Engine: V8-6.2L
Make: Ford Model: F350 Year: 2020-2021 Engine: V8-6.7L (td)
Make: Ford Model: F350 Year: 2020-2021 Engine: V8-7.3L
Make: Ford Model: F450 Year: 2020-2021 Engine: V8-6.7L (td)



- Please read the entire instruction manual before proceeding.
  Ensure all components listed are present.
  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	Transmission Pan – Raw, Machined Fins	05-61107A
		(46-71220A)	03-01107A
A2	1	Transmission Pan – Black, Machined Fins	05-61107B
		(46-71220B)	
В	1	RTV Silicone	05-60096
С	20	Screw, Socket Head M6x1.0x20	03-50241
D	20	Washer, M6	03-50177
E	1	Drain Plug, Magnetic M12x1.25	03-50385
F	1	Washer, Crush M12	03-50384





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.

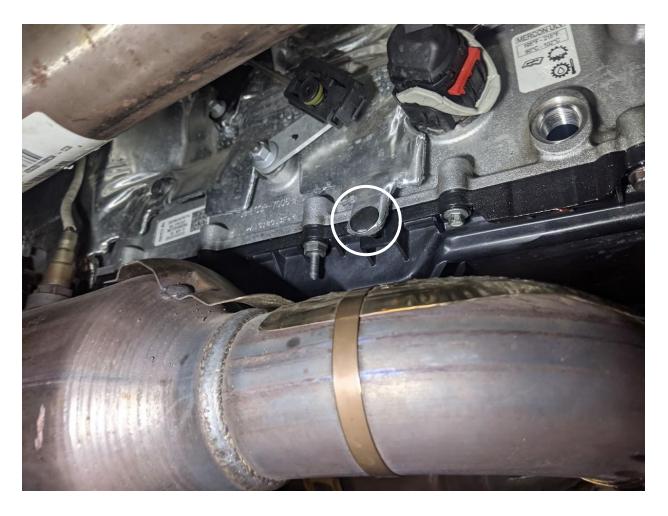
### <u>Note: You will need to get under the truck to do this installation. Please use every precaution</u> <u>when lifting the vehicle.</u>

- 2. Remove the six (6) nuts holding on the lower transmission pan heat shields.
- 3. Remove the two (2) lower heat shields.

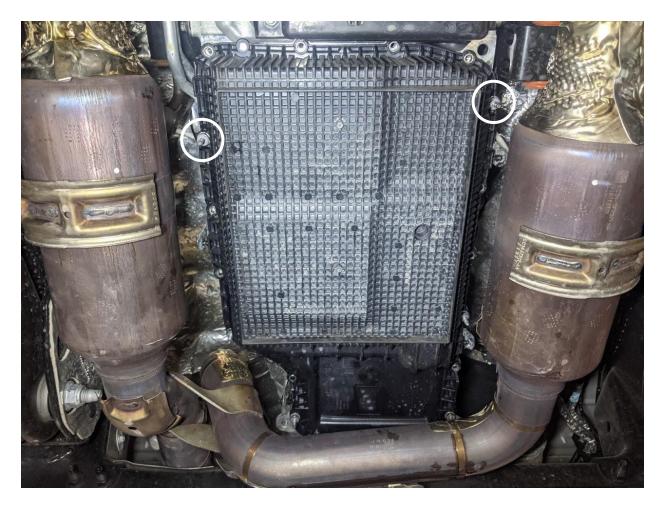


- 4. Position a large catch pan under the transmission pan.
- 5. Remove the plug from the fluid level port on the driver side of the transmission casing.

Note: Some fluid may drain when this plug is removed.



- 6. Using a pump, evacuate the remaining transmission fluid from the level port.
- 7. Unclip five (5) points where the upper heat shield connects to the transmission pan.



- 8. Once the fluid is pumped from the transmission, remove 18 screws from the pan, excluding the two (2) indicated near the front of the vehicle.
- 9. Loosen, but do not remove the two (2) remaining screws.
- 10. Break the seal between the transmission pan and the flange surface. Some remaining fluid may begin to drain.

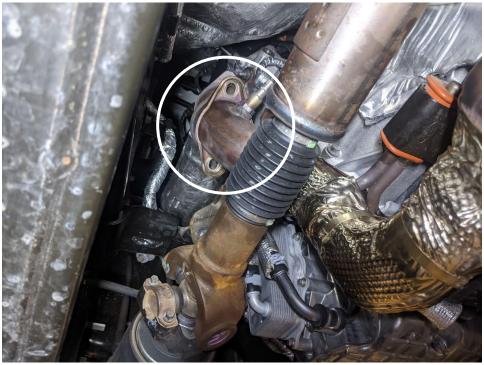
### Note: There will still be fluid left in the bottom of the transmission pan. Be careful not to spill this remaining fluid.

- 11. Once the fluid stops draining, hold up the pan and remove the final two (2) screws.
- 12. Slowly lower the pan while keeping it level and pour out the remaining transmission fluid.



- 13. Clean the sealing surface with a gasket scraper. Be careful not to gouge the surface while cleaning.
- 14. If replacing the transmission filter, remove the old filter now.
- 15. Allow the remaining fluid to drain out until there are periodic drips.
- 16. If applicable, reinstall the new transmission filter.





17. Hold the supplied aFe transmission pan up to the gasket surface to make sure you will be able to maneuver it into place.

Note: To install your new aFe transmission pan, it may be required to unbolt an exhaust hanger and/or the exhaust flange as indicated (driver side).



- 18. Once you have a clear path to lift the aFe transmission pan into place, prepare the 20 supplied M6x1.0x20 socket head screws and M6 washers.
- 19. Spread the supplied RTV silicone across the gasket surface of the transmission pan. Be generous when spreading the silicone across the surface, ensuring the inside of each bolt hole is covered.

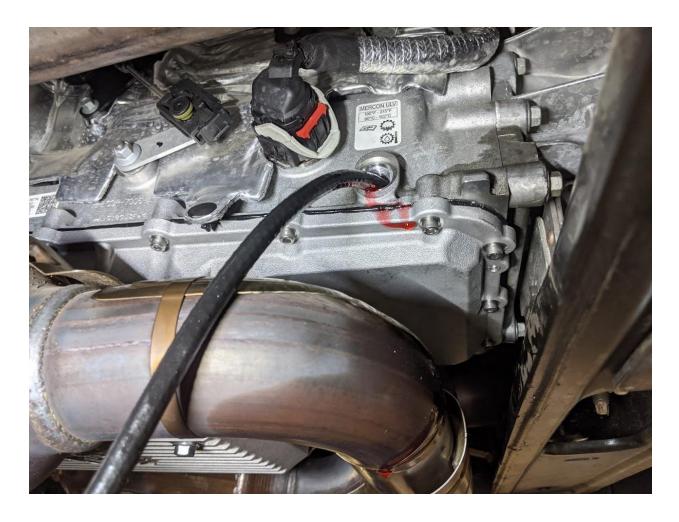


20. Hold the transmission pan up into position, aligning the bolt holes. Install one (1) M6x1.0x20 socket head screw and M6 washer into each of the four (4) corners to hold the pan into place.

#### Note: Be careful not to move the pan once it comes in contact with the gasket surface.

- 21. Continue installing the 16 remaining M6x1.0x20 socket head screws and M6 washers finger tight.
- 22. Torque the mounting screws to 8 ft. -lbs in a crisscross pattern.
- 23. Install the supplied M12x1.25 magnetic drain plug and crush washer.

# Note: If you unbolted an exhaust hanger and/or exhaust flange during Step 17, reinstall them <u>now.</u>



- 24. Using a pump, transfer new fluid to the transmission though the fluid level port.
- 25. Continue adding fluid until a steady stream begins to exit the level port.
- 26. Start the truck and cycle through each gear position, staying in each one for approximately 3 seconds each. Then allow the vehicle to idle in park.

# Note: Some components of the exhaust and transmission fluid will be hot once the vehicle has been running. Take precautions not to burn yourself while performing the following steps.

- 27. With the vehicle running in park, check the fluid level. If necessary, add more until it is even with the bottom of the level port.
- 28. Reinstall the level plug. Test drive the vehicle and monitor the transmission fluid temperature. Continue until the fluid temperature is 195-215°F.



29. Once again with the vehicle running in park, remove the fluid level plug. Either allow the excess fluid to drain or add fluid until it is even with the bottom of the level port.

Note: Total fluid capacity is about 14 quarts (4 quarts over stock).

- 30. Reinstall the fluid level plug.
- 31. Your installation is complete.