



Muncie[®]
Power
Products

CMKF00-5400-P8(W)-AC

1999-2003 Ford Truck 250-550

5.4 Triton Super Duty

W-WO/AC

INSTALLATION NOTES

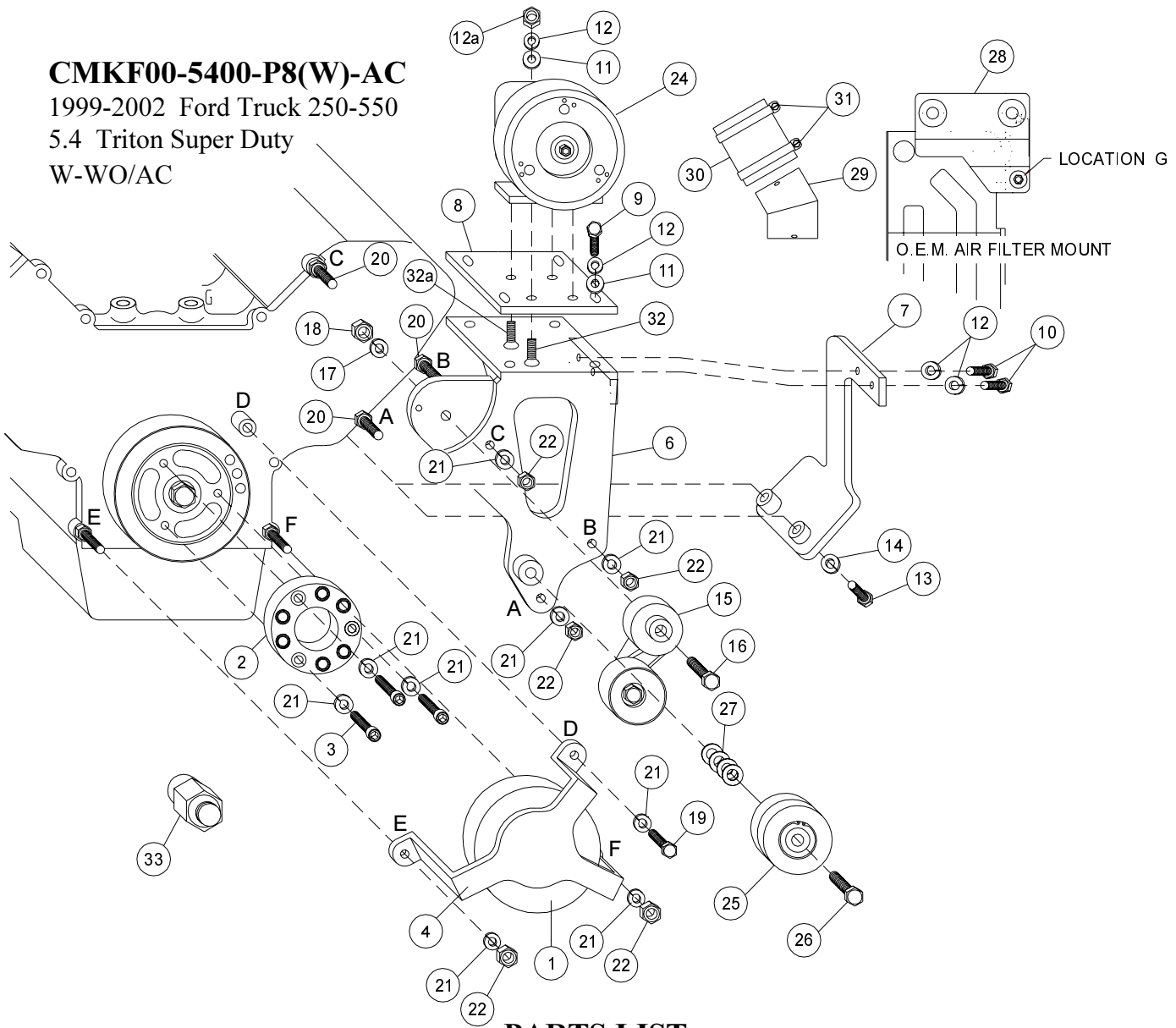
1. Disconnect negative battery terminal. Remove the fan and fan shroud. Threads on the fan are right handed. Drain antifreeze and remove the upper radiator hose.
2. Install crankshaft adapter (2) onto the front of the balancer with bolts (3) and lockwashers (21). Apply Loctite to the threads and then torque them to 40 ft. lbs.. Install the belt onto the drive pulley with the belt on the inside of legs at holes "E & F" and over the leg at hole "D". Slide the pulley assembly onto the front of the engine at O.E.M. studs "E & F" and hole "D". Make sure the six pins in the pulley slide into the six holes with the nylon bushings. If there are any straps, clips, etc. on the studs at "E & F", put them on the outside of the pulley bracket. Tighten nuts (22) and bolt (19) evenly, then torque them to 30-35 ft lbs.. If the pulley is lined up properly, a very slight amount of backlash should be felt in the pulley.
3. One at a time remove O.E.M. studs at locations "A,B & C" and replace with studs (20). Torque them to 35 ft/lbs.. Install bracket (6) over studs (20), tighten securely with nuts (22) and lockwashers (21). Install brace (7) with bolts (10) and lockwashers (12) at the top and bolts (13) and lockwashers (14) at the bottom. Tighten all bolts.
4. Disconnect the air cleaner assembly. Remove the front half from the vehicle by pulling the two feet from the rubber grommets and sliding it backwards out from the radiator support. Remove the rubber grommets and the bolt at location "G". Install the grommets into bracket (28) and bolt in place with the O.E.M. bolt at location "G". (*Do not tighten*). Connect the intake adapter (29,30,31) with the rubber end on the throttle body and the steel end pointed out towards the drivers side fender. Replace the air cleaner assembly, once it is all connected and aligned, tighten the bolt at location "G".
5. Install grooved idler (25) onto the boss at the bottom of the bracket with bolt (26). Use spacers(27) to align the Idler pulley with the drive pulley. Install tensioner assembly (15) onto the bracket with bolt (16), lockwasher (17), and nut (18). Mount pump onto pump plate with taperhead allen bolts (32), flatwashers (11), lockwashers (12), and nuts (12a) in the front holes, and bolts (32a) in the rear holes. With bolts (9), lockwashers (12) and flatwashers (11), install the pump and plate assembly onto the main bracket (6). Align it with the drive pulley and idlers and then tighten securely. Place the belt over the pump and grooved idler, load the tensioner using a 5/8 socket or wrench, slide the belt into place and release the tensioner.
6. Replace the fan and fan shroud. Install the upper radiator hose with the longer straight end on the engine (*backwards from its original position*). Connect battery terminal.
7. **CAUTION:** Check all engine compartment hoses and wiring to insure they are not kinked, touching any high temperature item, or do not interfere with any linkage components.
NOTE: Due to O.E.M. assembly tolerances, visually make certain that there is adequate clearance between fan and drive pulley.

CMKF00-5400-P8(W)-AC

1999-2002 Ford Truck 250-550

5.4 Triton Super Duty

W-WO/AC



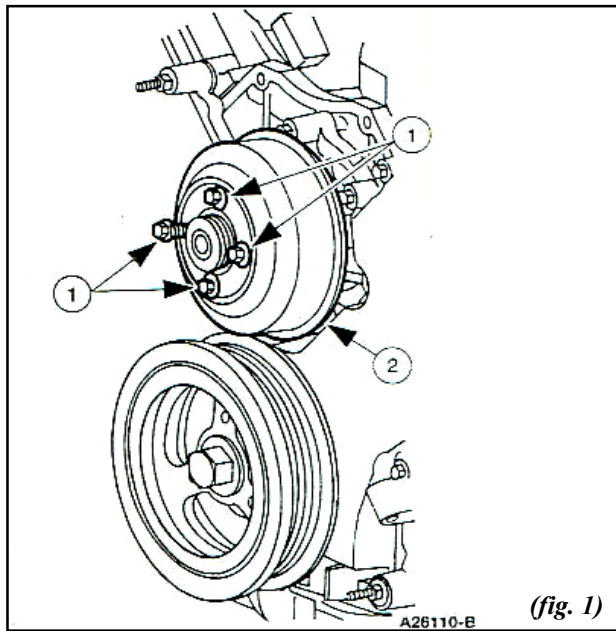
PARTS LIST

- | | |
|---------------------------------------|---|
| 1. FPC 378 (1) | 20. 10107 1.5 ST (3) |
| 2. FPA 37 (1) | 21. 10mm LW (9) |
| 3. 10 x 20mm 1.5 SHCS w/Locktite | 22. 10mm 1.5 Nut (5) |
| 4. FPS 37 (1) | 23. Belt (Not Shown) (1)
Dayco 5080680 |
| 6. FMB 440 (1) | 24. Clutch Pump Assembly
(Sold Separately) |
| 7. FMB 441 (1) | <u>GPKD-448M Idler Assembly (item 25-27)</u> |
| 8. FMP 371 (1) | 25. GPCD 8 Idler (1) |
| 9. 3/8 x 1 1/4 NC (4) | 26. 17mm x 2 1/2 NC (1) |
| 10. 3/8 x 1 NC (2) | 27. IPW 14 Shim (4) |
| 11. 3/8 FW (4) | 28. Air cleaner bracket (1) |
| 12. 3/8 LW (6) | 29. 30° 3" tube (1) |
| 12a. 3/8 NC Nut (2) | 30. 3" x 2.5 rubber tube (1) |
| 13. 14mm x 50mm 2.0 (2) | 31. 3" Hose clamps (2) |
| 14. 14mm LW (2) | 32. 3/8 x 1 3/4 FHCS (2) |
| <u>IPKD-448 Assembly (item 15-18)</u> | 32a. 3/8 x 1 FHCS (2) |
| 15. Dayco #89202-236 Assembly (1) | 33. FSK 5468 (1) |
| 16. 12mm x 90mm 1.75 (1) | 34. Water Pump #49T38089 (Not Shown) (1) |
| 17. 12mm LW (1) | |
| 18. 12mm 1.75 Nut (1) | |

REPLACE WATER PUMP 5.4 TRITON

Removal

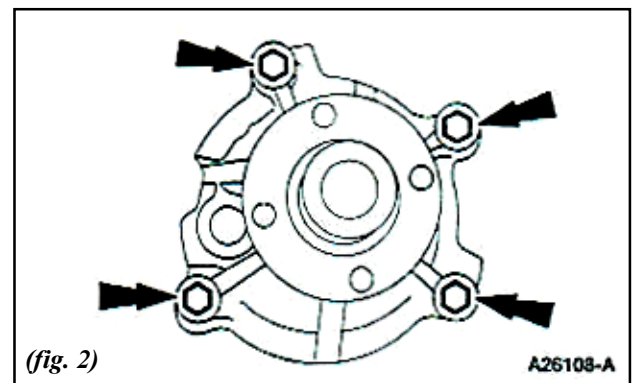
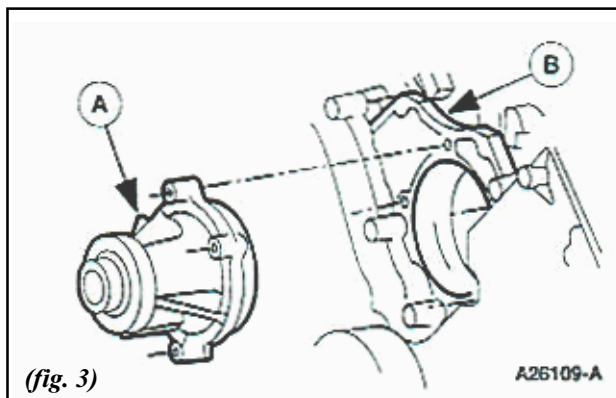
CAUTION! Do not mix Standard (green) Coolant with Extended Life Coolant (orange). If this contamination occurs the service change interval on Extended life Coolant will be reduced from 6 year/150,000 miles to 3 years / 30,000 miles.



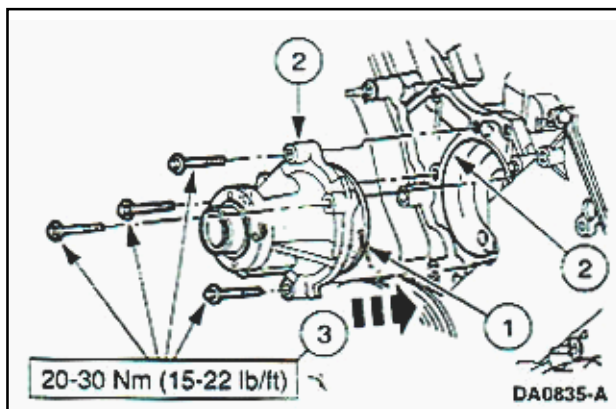
1. Drain the cooling system.
2. Remove water pump pulley (*fig. 1*).
 1. Remove the bolts.
 2. Remove the water pump pulley.

3. Remove the four water pump bolts (*fig. 2*).
4. Remove the water pump (A) from the cylinder block (B).

-Clean and inspect the mating surfaces (*fig. 3*)



CAUTION! Do not rotate the water pump housing once installed on the engine. Damage to the O-ring can occur, causing the water pump to leak.



5. Lubricate the new O-ring seal. Ford recommends using PremiumCooling System Fluid E2FZ-19549-AA in Oregon/F5FZ-19549-CC; in Canada CXC-8-B or equivalent meeting Ford specification ESE-M97B44-A or Ford Extended Life Engine Coolant F6AZ-19544-AA; Dex-Cool or equivalent meeting Ford specification ESE-M97B44-D, and install the O-ring seal onto the water pump.

6. Position the water pump into the engine block.
7. Install the Bolts. Torque in staggered sequence to 15-22 lb/ft.
8. Install water pump pulley.