



**Muncie®
Power
Products**

**CMKF00-5400-A(W)-AC
CMKF00-5400-A(W)H-AC**

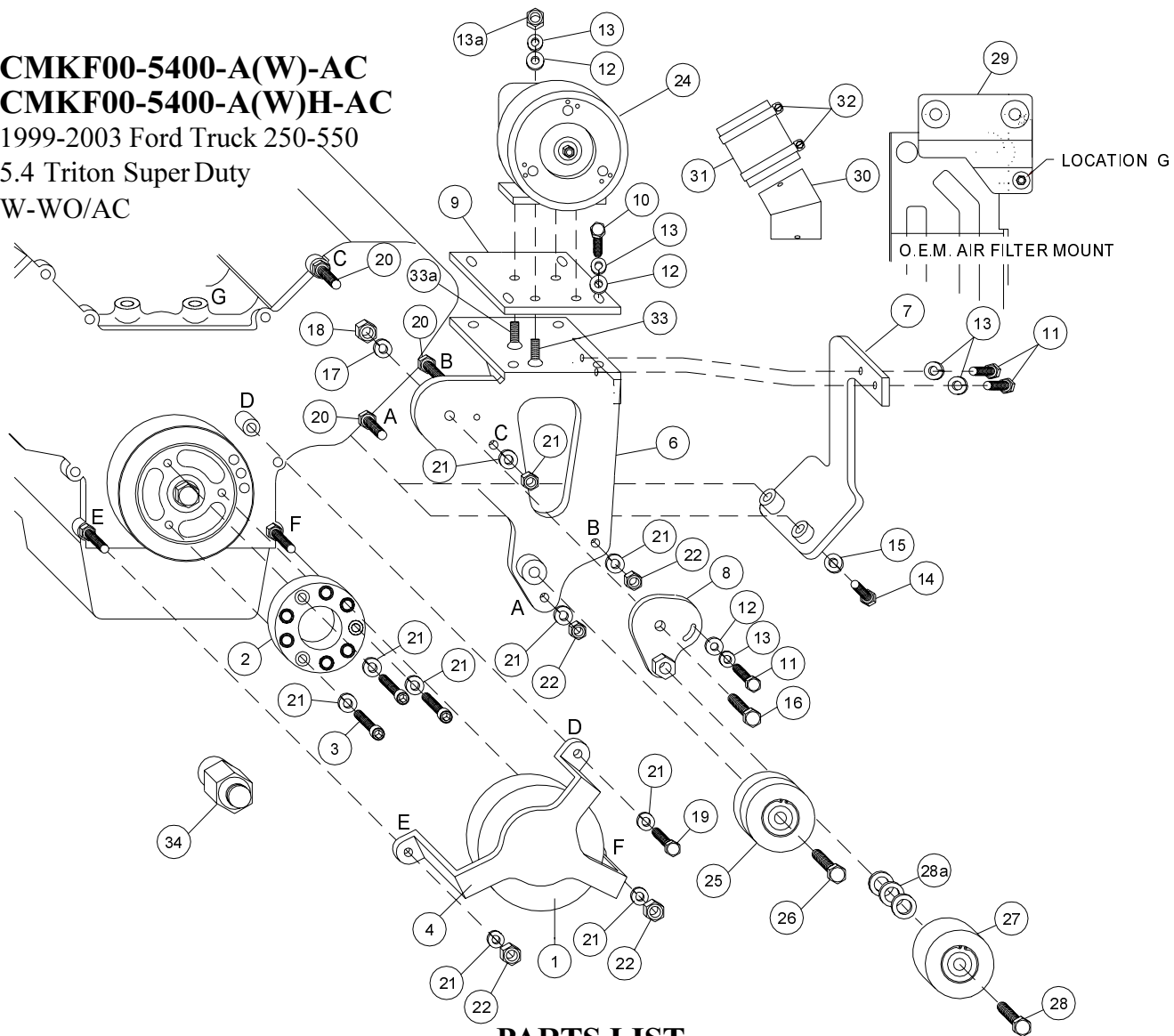
1999-2003 Ford Truck 250-550

**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. Replace the aluminum water pump with the new cast iron pump as per instructions.
3. Install crankshaft adapter (2) onto the front of the balancer with bolts (3) and lockwashers (21). Apply Loctite to the threads and torque them to 40 ft. lbs.. Install the belts onto the drive pulley with the belts 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 aligned up properly, a very slight amount of backlash should be felt in the pulley.
4. Remove O.E.M. studs one at a time 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 (11) and lockwashers (13) at the top and bolts (14) and lockwashers (15) at the bottom. Tighten all bolts.
5. 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 (29) and bolt in place with the O.E.M. bolt at location "G". (*Do not tighten*). Disconnect the intake adapter (30,31,32) 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".
6. Install grooved idler (25) onto the boss at the bottom of the bracket with bolt (26). Install flat idler onto the tensioner arm with bolt (28). Install tensioner assembly onto the bracket with bolt (16), nut (18) and lockwasher (17). Mount pump onto pump plate with taperhead allen bolts (33), flatwashers (12), lockwashers (13) and nuts (13a) in the front holes, and bolts (33a) in the rear holes. With bolts (10), lockwashers (13) and flatwashers (12), 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 belts over the pump and idlers and tension the belts. Use bolt (11), lockwasher (13) and flatwasher (12) to lock the tensioner in place after the belts are tight.
7. Install fan spacer nut (34). 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.
8. **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.

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PARTS LIST

FPC 372 Assembly (items 1-4)

1. FPC 372 (1)
2. FPA 37 (1)
3. 10mm x 20mm 1.5 SHCS w/Locktite
4. FPS 37 (1)
6. FMB 440 (1)
7. FMB 441 (1)
8. FMB 442 (1)
9. FMP 441 (1)
10. 3/8 x 1 1/4 NC (4)
11. 3/8 x 1 NC (2)
12. 3/8 FW (4)
13. 3/8 LW (6)
- 13a. 3/8 NC Nut (2)
14. 14mm x 50mm 2.0 (2)
15. 14mm LW (2)
16. 12mm x 35mm 1.75 (1)
17. 12mm LW (1)
18. 12mm Nut 1.75 (1)
19. 10mm x 30mm 1.5 (1)
20. 10107 1.5 ST (3)
21. 10mm LW (9)

22. 10mm Nut 1.5 (5)
23. Belts (Not Shown) (2)
Goodyear 84690 (A67F)
H.D.: Goodyear 84710 (A69F)
24. Clutch Pump Assembly
(Sold Separately)

GPKD-44M Idler Assembly (items 25-26)

25. GPCD Idler (1)
26. 17mm x 2 1/2 NC (#19M63160) (1)

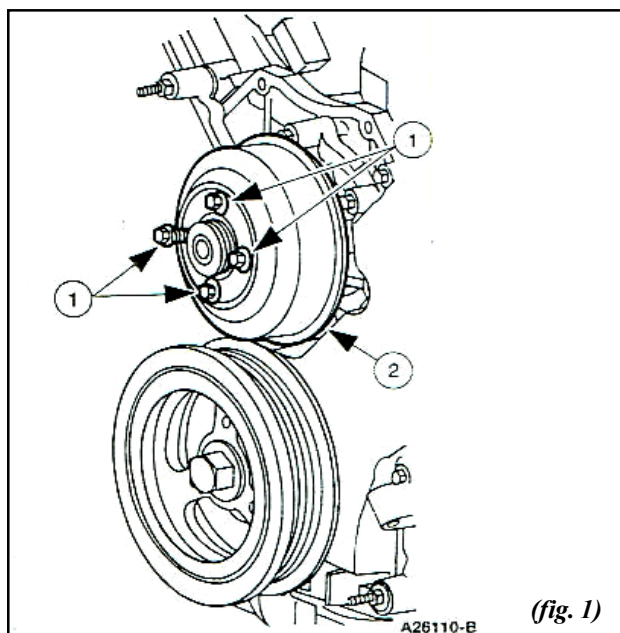
IPKD-44L Idler Assembly (items 27-28a)

27. IPCD Idler (1)
28. 17mm x 1 3/4 Left hand thread (1)
- 28a. IPW14 Shim (2)
29. Air cleaner bracket (1)
30. 30° 3" tube (1)
31. 3" x 2.5 rubber tube (1)
32. 3" Hose clamps (2)
33. 3/8 x 1 3/4 FHCS (2)
- 33a. 3/8 x 1 FHCS (2)
34. FSK 5468 (1)
35. Water Pump #49T38089 (Not Shown) (1)

REPLACE WATER PUMP 5.4 TRITON

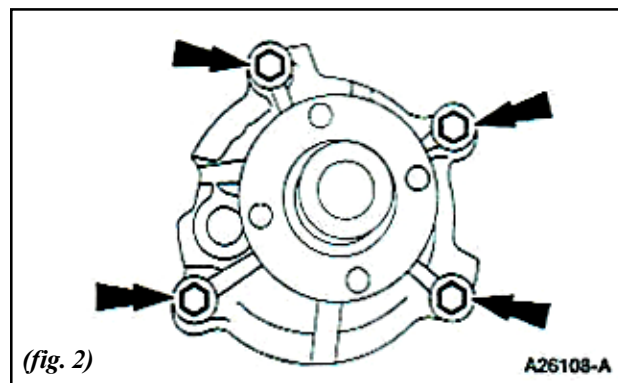
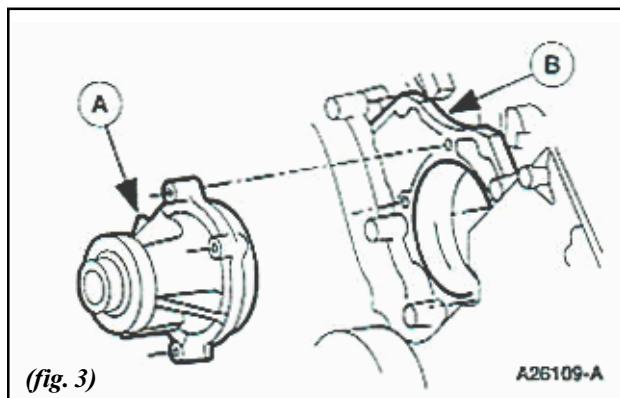
Removal

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.

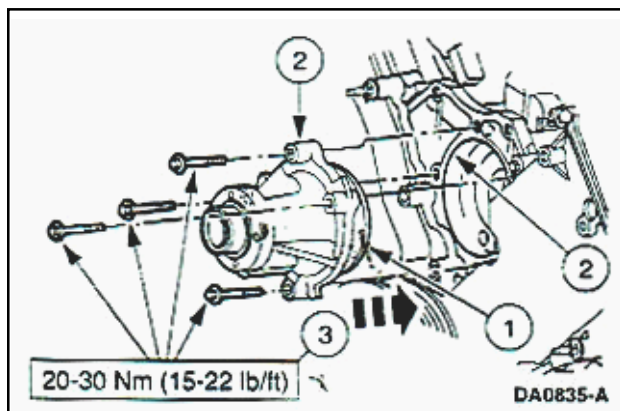


3. Remove the four water pump bolts (fig. 2).
4. Remove the water pump (A) from the cylinder block (B).

-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.