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**FMK 37 -8 Belts**  
1999-2004 Ford Truck 250-550  
5.4 Triton  
W-WO/AC

**NOTE: MUST USE SIDE PORTED PUMP.**

## INSTALLATION NOTES

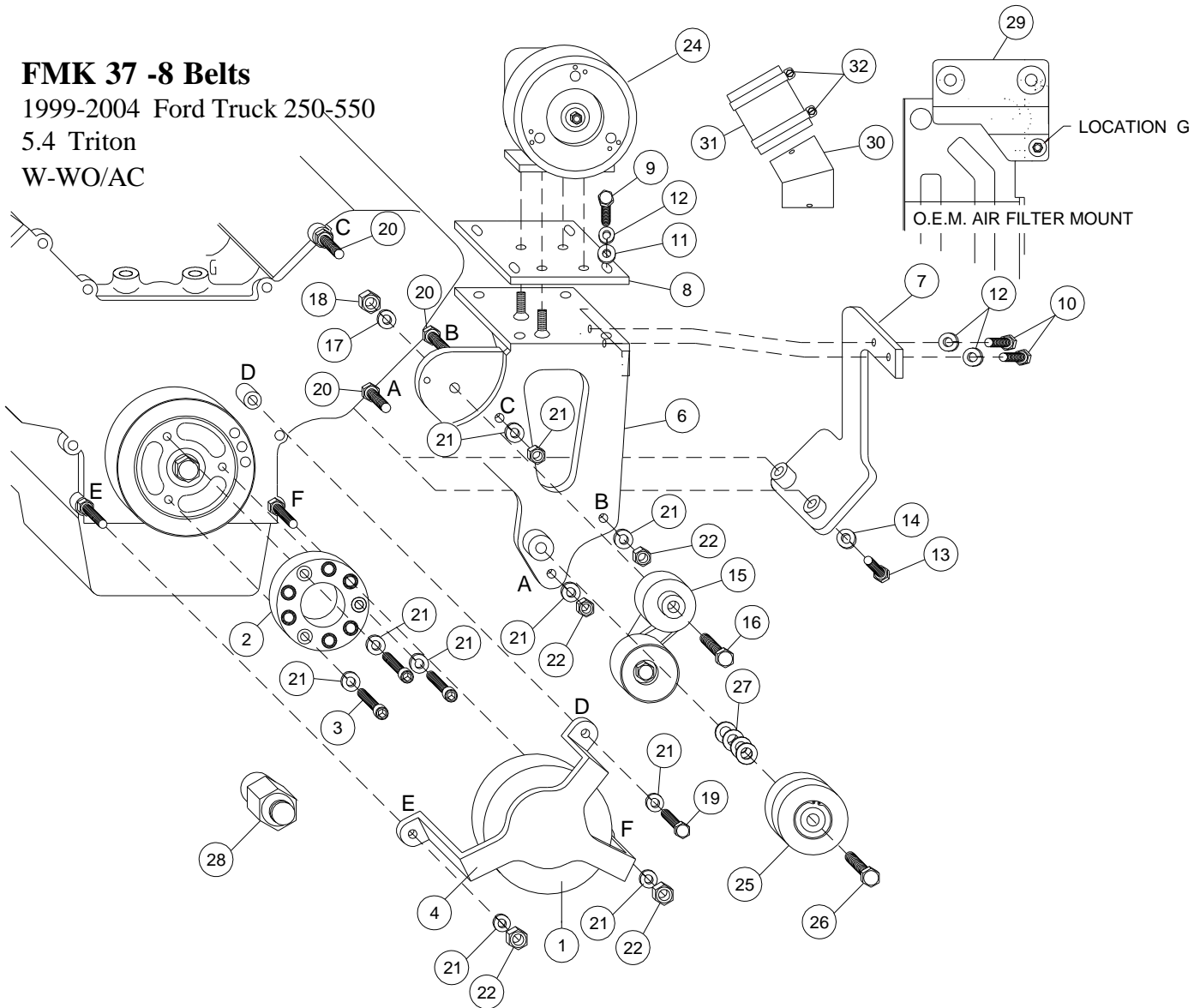
1. Disconnect negative battery terminal. Drain antifreeze and remove the upper radiator hose. Remove the fan and fan shroud. Threads on the fan are right handed.
2. Install crankshaft adapter (2) onto the front of the balancer with bolts (3) and lockwashers (21). Apply Loctite to the threads and then 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 (29) and bolt in place with the O.E.M. bolt at location "G". (*Do not tighten*). Connect 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".
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). Mount pump onto pump plate with taperhead allen bolts. 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. If fan to pulley clearance is not adequate, 1/8" or more, install fan spacer nut between the water pump and fan clutch. 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.

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## 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 (3)   | 22. 10mm 1.5 Nut (5)                         |
| 4. FPS 37 (1)                          | 23. Belt w/5-1/2" Clutch (Not Shown) (1)     |
| 6. FMB 440 (1)                         | Dayco 5080680                                |
| 7. FMB 441 (1)                         | #2 5080670 , #4 5080663                      |
| 8. FMP 37(0-4) (1)                     | 24. Clutch Pump Assembly                     |
| 9. 3/8 x 1 1/4 NC (4)                  | (Sold Separately)                            |
| 10. 3/8 x 1 NC (2)                     | <u>GPCD 448 Idler Assembly (items 25-27)</u> |
| 11. 3/8 FW (4)                         | 25. GPCD 8 Idler (1)                         |
| 12. 3/8 LW (6)                         | 26. 5/8 x 2 1/2 NC (1)                       |
| 13. 14mm x 50mm 2.0 (2)                | 27. IPW 14 Shim (4)                          |
| 14. 14mm LW (2)                        | 28. FSK 37-R (use only if                    |
| <u>IPKD 448 Assembly (items 15-18)</u> | there is not adequate fan clearance).        |
| 15. Dayco #8920236 Tensioner (1)       | 29. Air cleaner bracket (1)                  |
| 16. 12mm x 90mm 1.75 (1)               | 30. 30° 3" tube (1)                          |
| 17. 12mm LW (1)                        | 31. 3" x 2.5 rubber tube(1)                  |
| 18. 12mm 1.75 Nut (1)                  | 32. 3" Hose clamps (2)                       |
| 19. 10mm x 30mm 1.5 (1)                |  |

Note: Belts w/6" Clutch--#2 5080680, #4 5080670