

FLA COE
FLB COE
> FLD Conventional
> Business Class

FLC 112 Conventional
> Century Class Conventional
Argosy COE
Cargo

> Columbia
Condor
> Coronado
Business Class M2

**Freightliner
Service Bulletin**

General Information

New drive belts for the fan drive, the coolant pump, and the alternator on MBE4000 engines were put into production on February 14, 2003. The part numbers for these belts are 01-27086-004 and 01-27198-002.

The new drive belts were constructed of aramid cord, and the material has not lasted. This has caused the belts to break or come off the drive pulleys. The original belts, constructed of polyester cord material, were put back into production on August 4, 2003.

If you are experiencing drive belts breaking or coming off the drive pulleys, replace the Kevlar cord belts with those made of polyester cord. Use the procedure below.

Parts

Parts are available from the PDCs. See [Table 1](#) for the parts required.

Part Number	Description	Qty.
01-27198-001	Belt, 9-Rib, Orion-Poly, 1548 mm	1
01-27086-003	Belt, 8-Rib, Orion-Poly, 1705 mm	1

Table 1, Parts Required

Procedure

1. Park the vehicle on a level surface, apply the parking brakes, shut down the engine, and chock the tires.
2. Tilt the hood.
3. Check the alternator and coolant pump (main) drive belt and the fan belt for wear or slipping. See [Fig. 1](#) and [Fig. 2](#).

Replace a belt if there are signs of slipping or wear. See [Table 1](#) under "Parts" for the correct belt and part number, and use the applicable instructions below.

Replacing the Alternator and Coolant Pump (Main) Drive Belt

1. Disconnect the batteries at the negative terminal.
2. Release the tension on the main drive belt.
 - 2.1 Place a 1/2-inch-drive (square) wrench on the tensioner pulley bolt.
 - 2.2 Pull the 1/2-inch-drive wrench (swivel the tensioner pulley counterclockwise) to remove tension from the belt.
 - 2.3 Hold the tensioner pulley in this position for the next step.
3. Remove the main drive belt from the alternator, coolant pump, and the idler pulleys. See [Fig. 1](#). Discard the old belt.
4. Release the tensioner pulley.
5. Fit the new belt onto the pulleys. Be careful not to kink, stretch, or otherwise damage the belt. For correct routing, see [Fig. 3](#). Do not fit the belt onto the tensioner pulley yet.
6. Using the 1/2-inch-drive wrench, rotate the tensioner pulley to release the tension on the main drive belt.

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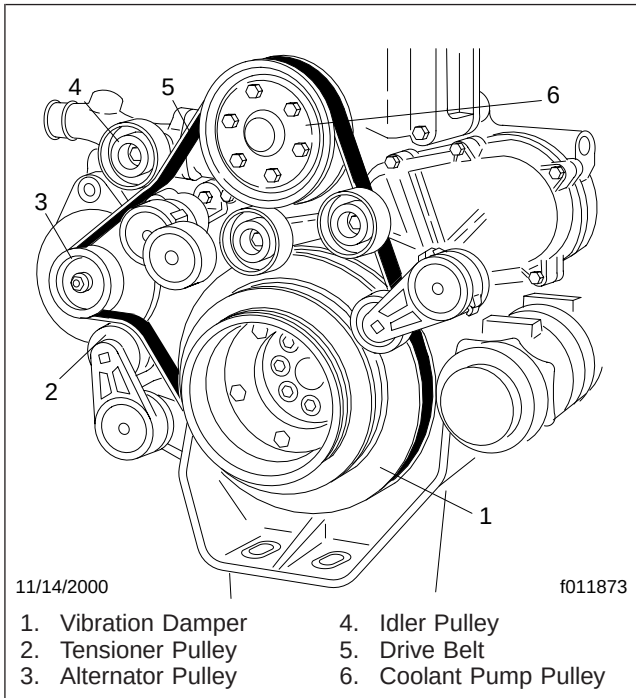


Fig. 1, Main Drive Belt

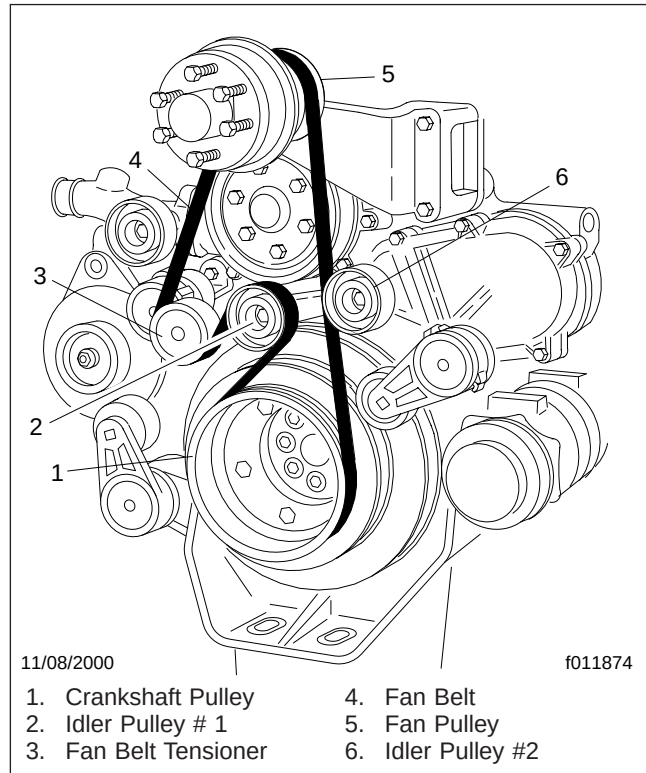


Fig. 2, Fan Belt

7. Making sure the belt is correctly positioned for the tensioner pulley, restore tension on the belt.
 - 7.1 Lower the 1/2-inch-drive wrench to return the tensioner pulley to its original position.
 - 7.2 Remove the 1/2-inch-drive wrench from the tensioner pulley bolt.
8. Check the main drive belt to make sure it is in the correct position and correctly aligned on the pulleys.
9. If replacing just this drive belt, connect the batteries, lower the hood and remove the chocks from the tires.
If replacing both drive belts, go to "Replacing the Fan Drive Belt."

Replacing the Fan Drive Belt

1. If not already done, disconnect the batteries at the negative terminal.
2. Release the tension on the drive belt.
 - 2.1 Place a 1/2-inch-drive (square) wrench on the tensioner pulley bolt.
 - 2.2 Pull the 1/2-inch-drive wrench (swivel the tensioner pulley counterclockwise) to remove tension from the belt.
 - 2.3 Hold the tensioner pulley in this position for the next step.
3. Remove the drive belt from the fan and the idler pulleys. See [Fig. 2](#). Discard the old belt.
4. Release the tensioner pulley.

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5. Fit the new belt onto the belt pulleys. Be careful not to kink, stretch, or otherwise damage the belt. For correct routing, see [Fig. 4](#). Do not fit the belt onto the tensioner pulley yet.

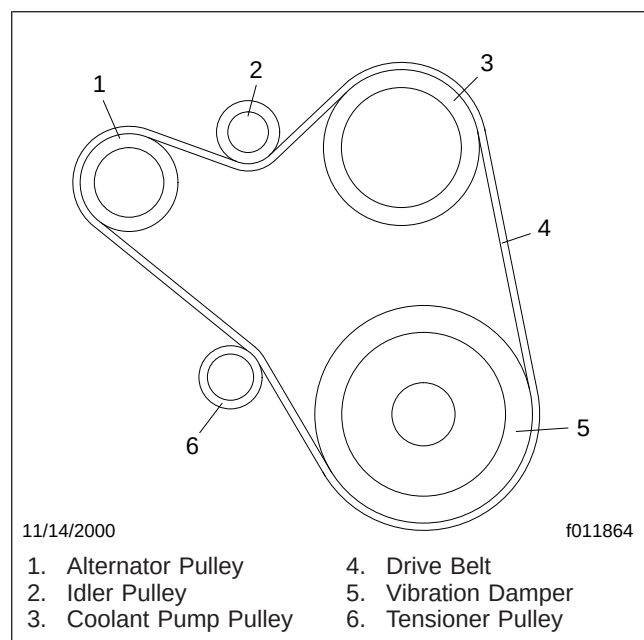


Fig. 3, Main Drive Belt Routing

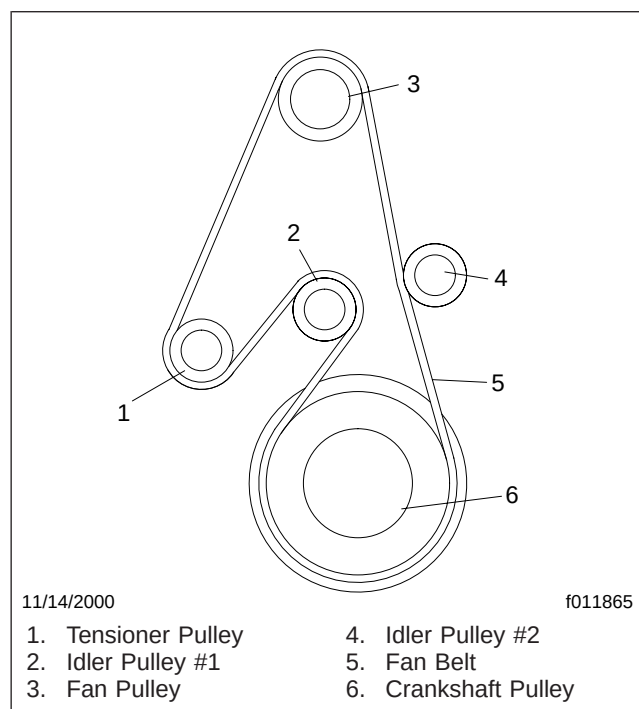


Fig. 4, Fan Belt Routing

6. Using the 1/2-inch-drive wrench, rotate the tensioner pulley to release the tension on the fan belt.
7. Making sure the fan belt is correctly positioned for the tensioner pulley, restore tension on the belt.
 - 7.1 Lower the 1/2-inch-drive wrench to return the tensioner pulley to its original position.
 - 7.2 Remove the 1/2-inch-drive wrench from the tensioner pulley bolt.
8. Check the drive belt to make sure it is in the correct position and correctly aligned on the pulleys.
9. Connect the batteries.
10. Lower the hood.
11. Remove the chocks from the tires.

Warranty

Normal warranty applies. When submitting claims, reference this service bulletin by number in the story of the claim. Use the damage code and time guide information in [Table 2](#).

01-75

Replacing Drive Belts on MBE4000 Engines

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Use the part number on the belt replaced as the failed part number.

Time Guide Information			
Damage Code	Operation Number	Description	Time (hours)
101-000058982	101-5013A	Drive Belts R & R, MBE4000	0.4

Table 2, Time Guide Information