

09/23/2020
CAL FTL 20-003 (revised)

Subject: Fan Hub Fastener Inspection in Business Class M2 Vehicles with DD5 Engines

Models Affected: Freightliner Business Class M2 Vehicles built from 10/01/2018 to 9/16/2020

Our records indicate that you are the owner of certain vehicles, and therefore DTNA is contacting you.

DTNA has determined that some GHG17 Detroit™ DD5™ engines will need to have the fan hub bolts inspected for correct torque.

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Work Instructions

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Parts Table

Part Number	Quantity	Description
DDE N910105010007	4	SCR-HEXFLGH,PC 10.9,M10X35

Table 1, Parts Table

Inspection Procedure

1. Park the vehicle on a level surface and set the parking brake. Shut down the engine. Chock the rear tires.
2. Disconnect the battery power.
3. Open the hood.
4. Remove the shroud and fan. See the *Business Class M2 Workshop Manual* Group 20 for instructions for the specific fan clutch on the vehicle.
5. Loosen the six fan hub pulley mounting bolts (see [Fig. 1](#), Ref 1), but do not remove them completely.

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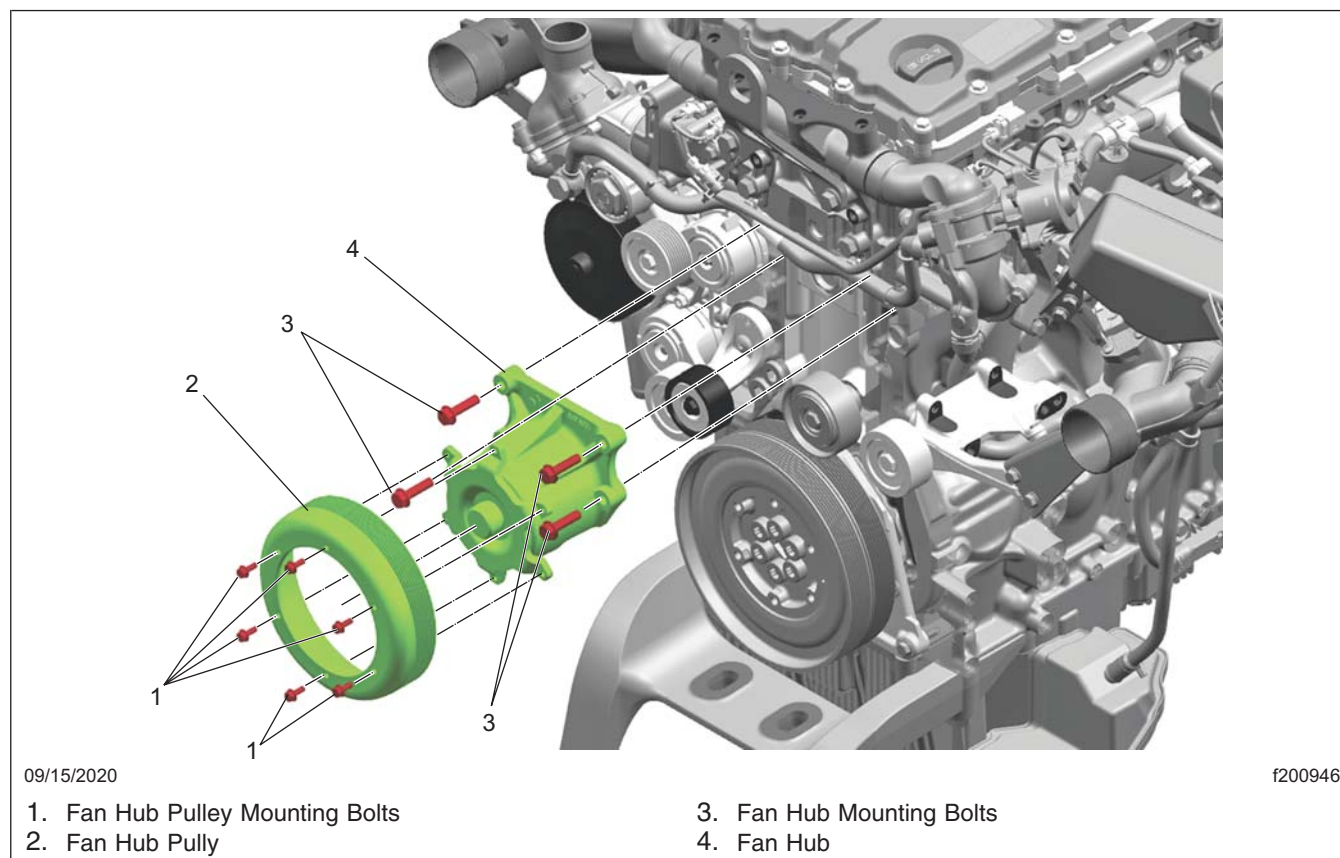


Fig. 1, Fan Hub and Fan Hub Pulley

6. Remove the fan drive belt.
 - 6.1 Using the guide pulley mounting bolt on the fan drive belt tensioner (see [Fig. 2](#), Ref 6), rotate the assembly counterclockwise and hold to relieve tension.

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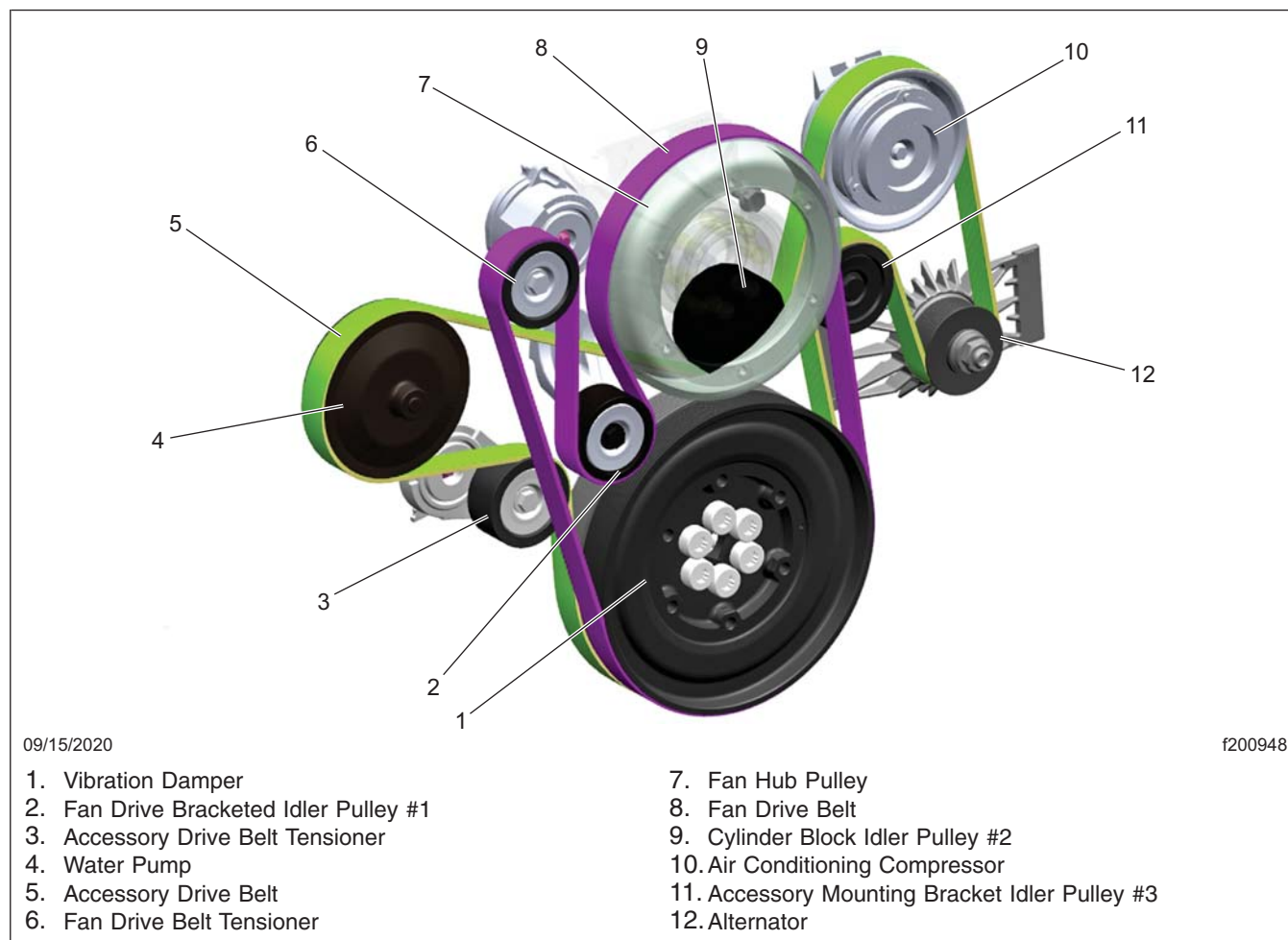


Fig. 2, Fan Drive Belt

- 6.2 While tension is relieved, insert a 7mm (1/4 in.) pin into the locking hole of the belt tensioner (accessory drive) housing.
- 6.3 Slide the fan drive belt off and remove it from the engine.
7. Remove the fan hub pulley mounting bolts and remove the fan hub pulley from the engine.
8. Are any mounting bolts missing?
- Yes: Replace all four bolts with the 35mm bolts (part number DDE N910105010007) listed in [Table 1](#) of this customer advisory letter. Tighten to 35 lbf-ft. Go to step 11.
- No: Go to step 9.
9. Are any fasteners broken off in the block?
- Yes: Go to step 9.1.
- No: Go to step 10.
- 9.1 Remove the hood. See the *Business Class M2 Workshop Manual* Group 88 for instructions.
- 9.2 Remove the radiator and charge air cooler assembly. See the *Business Class M2 Workshop Manual* Group 20 and Group 9 for instructions.

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- 9.3 Remove the fan hub. See the *Business Class M2 Workshop Manual* Group 20 for instructions.
- 9.4 Use an acceptable method of bolt removal such as drilling out and extracting the broken bolt piece in the block. Use extra care not to damage the block during extraction.
- 9.5 Install the fan hub. Replace all fasteners with the 35mm bolts (part number DDE N910105010007) listed in [Table 1](#) of this customer advisory letter. Tighten to 35 lbf-ft.
- 9.6 Inspect the fan belt and crank pulley for damage from the missing bolt.
- 9.7 Torque the Fan Drive Bracketed Idler Pulley #1 (see [Fig. 2](#), item #2) to 37 lbf-ft (50 N·m).
- 9.8 Torque the fan drive belt tensioner (see [Fig. 2](#), item #6) mounting bolt to the cylinder block to 37 lbf-ft (50 N·m). Torque the mounting bolt to the cylinder block, and not the pulley mounting bolt.
- 9.9 Install the radiator and charge air cooler assembly. See the *Business Class M2 Workshop Manual* Group 20 and Group 9 for instructions.
- 9.10 Install the hood. See the *Business Class M2 Workshop Manual* Group 88 for instructions.
10. Set a torque wrench to 35 lbf-ft and check all four fan hub mounting bolts. Tighten to 35 lbf-ft if needed. See [Fig. 1](#) and [Fig. 3](#).

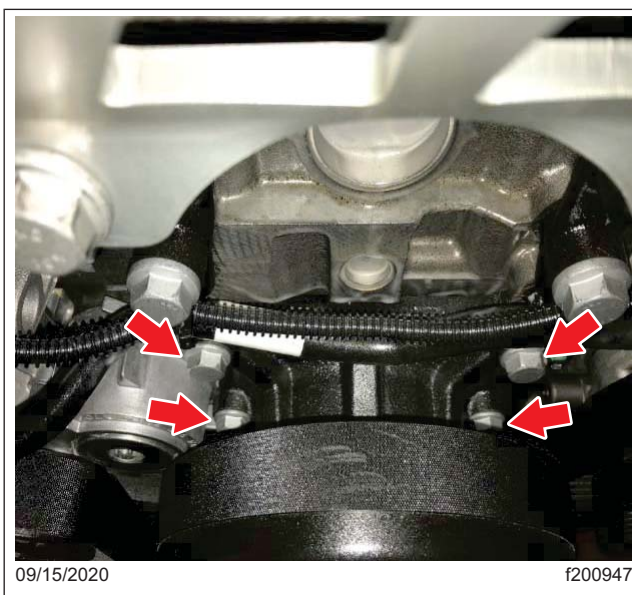


Fig. 3, Fan Hub Mounting Bolts

11. Install the fan drive belt.
12. Install the fan hub pulley.
13. Install the shroud and fan.