FLA COE
FLB COE
FLD Conventional
Business Class
FLC 112 Conventional
Century Class Conventional
Argosy COE
Cargo
Columbia
122SD and Coronado
> Business Class M2
Cascadia
> 108SD/114SD

Freightliner Service Bulletin

Premature belt wear (fraying or shredding) on ISC or ISL CM2250 or CM2350 engines may occur in Freightliner Business Class M2 and 108SD models equipped with front engine power take off (FEPTO) installations. If all other troubleshooting has been exhausted, the belt wear may be related to the long belt span created by the high-mount fan pulley. Installing an idler pulley between the fan pulley and the crankshaft pulley will reduce belt vibration, resolving the complaint. A new and longer fan belt is required, as the addition of the idler pulley increases the belt length.

Idler Pulley Installation and Belt Replacement

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Disconnect the FEPTO drive shaft from the engine pulley. Refer to the manufacturer's documentation for the procedure.
3. Remove the serpentine drive belt.
   - 3.1 Using a 1/2-inch breaker bar, move the belt tensioner clockwise.
   - 3.2 Remove the belt from the various engine and component pulleys.
4. Install the idler pulley and bracket.
   - 4.1 Clean the unused holes in the front of the engine that will be used when installing the harness P-clamp and the new idler pulley bracket. See **Fig. 1**.
   - 4.2 Remove the factory-installed P-clamp securing the harness, and position it in the unused hole toward the center of the engine. See **Fig. 2**.
   - 4.3 Install the new idler pulley bracket. Tighten the capscrews 32 lbf·ft (43 N·m).
   - 4.4 Install the new idler pulley on the bracket. Tighten the capscrew 32 lbf·ft (43 N·m).
5. Install the new serpentine drive belt. See **Fig. 3**.
6. Connect the FEPTO drive shaft to the engine pulley.

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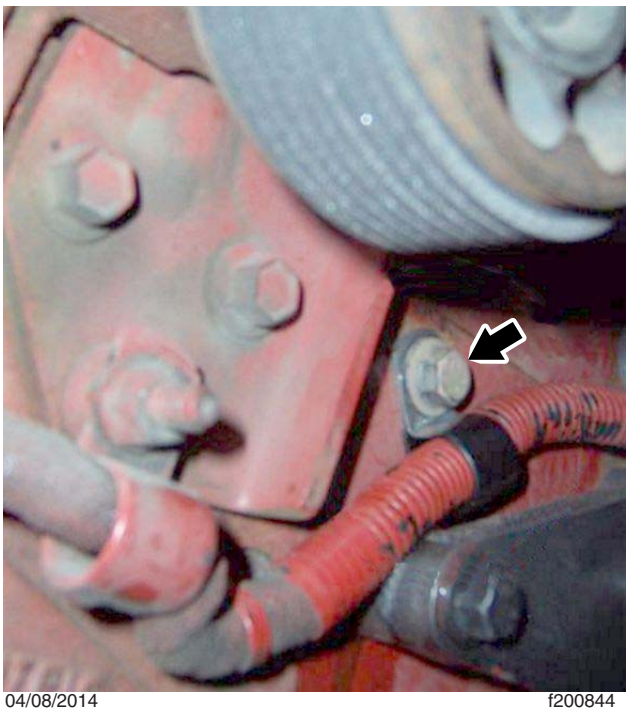
04/08/2014 f200843

Clean this hole.

Fig. 1, P-Clamp Mounting Hole



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Locate the P-clamp here.

Fig. 2, Moving the P-Clamp

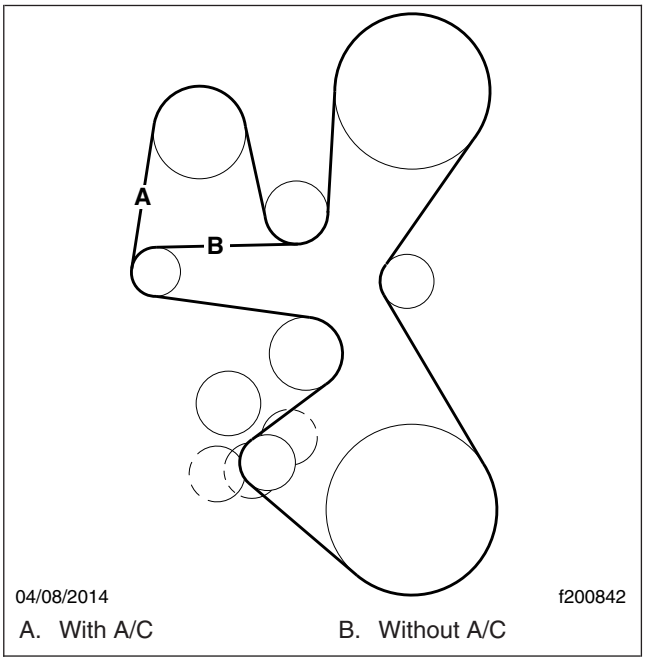

Fig. 3, Belt Installation

Parts

The idler pulley kit is available through Cummins distributors. Belts are available through the PDCs. **Table 1** lists the required parts for this procedure.

Idler Pulley Installation Parts			
Part #	**Description**	**Quantity**	**Order Trough**
5335096	Mounting Kit	1	Cummins
01-32241-643	2660 mm Belt (with A/C)	1	Freightliner
01-32241-312	2310 mm Belt (without A/C)	1	

Table 1, Idler Pulley Installation Parts

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Warranty

This procedure is warrantable only if the described condition exists and the repair is performed within the applicable base warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

Normal warranty applies. See **Table 2** for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the *Service Bulletin #* field.

OWL VMRS Codes and Labor Allowance					
Primary Failed Part	**Component Code**	**Cause Code**	**SRT Code**	**Description**	**Time: Hours**
CUM 3970945	042-003-008	12	273-5010A	M2,106V/108SD,CUMMINS, IDLER PULLEY	1.4

Table 2, OWL VMRS Codes and Labor Allowance