

PREVOST

Instruction Sheet

IS-17909A

550057 FAN CLUTCH FIRST INSTALLATION SHORT FAN DRIVE

X Series from 4-8165 up to 8-9339

Revision: A Belt was 5060073, is 5002112
Dec 17, 2018

DESCRIPTION

A mounting bracket modification is required on the first installation of fan clutch 550057 *with locking tabs* on **short fan drive** for piggyback (sandwich) radiator and CAC configurations. This fan clutch is a substitute for 550839 and 550966.

For additional information on the locking method of this fan clutch, refer to [MI16-08](#)

MATERIAL

FOR PIGGYBACK RADIATOR & CAC SHORT FAN DRIVE
Order kit IS-17909

Part No.	Description	Qty
550057	Fan clutch	1
5002112	BELT / 12 RIB 62.28" (1582mm)	2
502692	NUT HEXF STO M8-1.25 Z050	3
502891	SCREW CRG M8-1.25x40 G8.8 Z050	3
500874	WASHER FL 8.4x17.0x1.6 Z050	3
502644	WASHER FL 10.5x30.0x2.5 Z050	4
5001758	NUT HEX STO M10-1.5 N500	4
5001654	WASHER FL 6.4x17.0x3.0 SS	6
502843	SCREW CAP HEX M6-1.0x45 G8.8 N500	1
502621	NUT HEX STO M6-1.0 Z050	1
IS-17909	Instruction sheet	
FI-17909	Feuille d'instructions	

NOTE

Material can be obtained through regular channels.

PROCEDURE



DANGER

Park vehicle safely, apply parking brake, stop engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.

1. BRACKET MODIFICATION SHORT FAN DRIVE

1.1. Remove the fan.

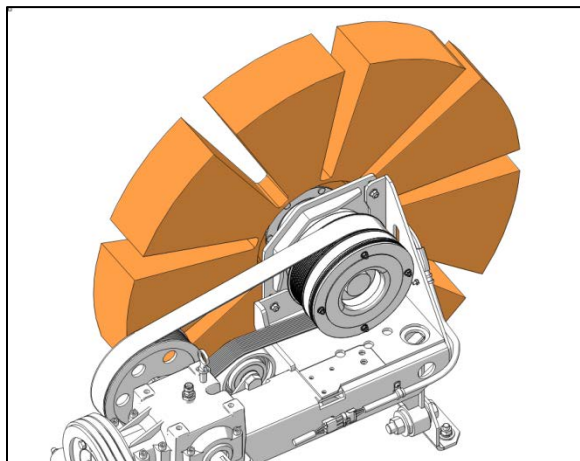


FIGURE 1

1.2. Remove the belt and fan clutch support from vehicle. Remove the former clutch from the support.

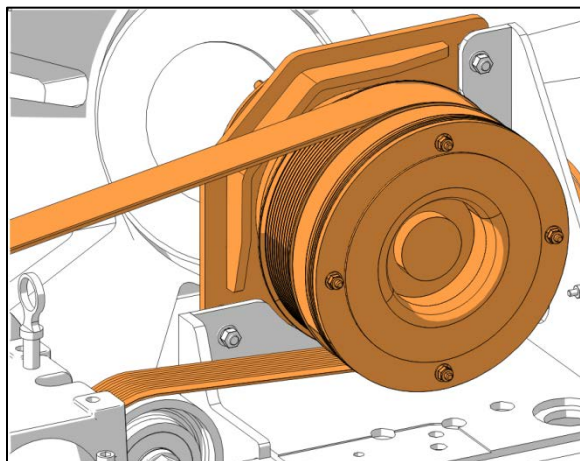


FIGURE 2

- 1.3. Drill a 6mm hole on the frame. 19mm (3/4") from the edge in this location. This will be used to secure the locking tabs of the fan clutch.

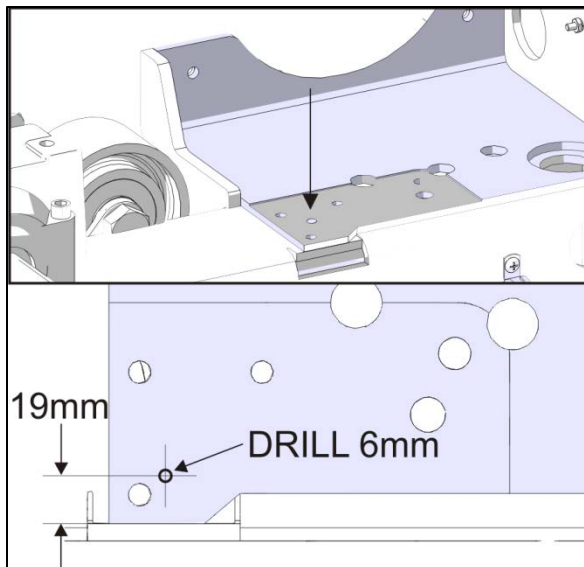


FIGURE 3

- 1.4. Remove and reserve the locking tabs. (Figure 3)

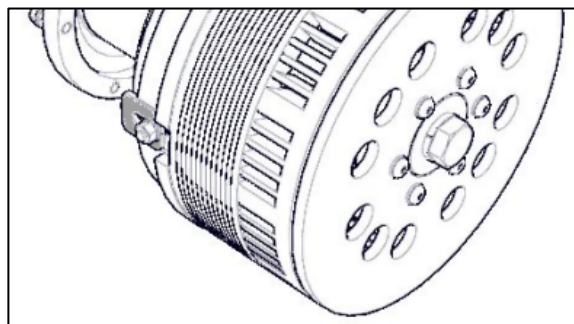


FIGURE 4: 550966 WITH LOCKING TABS

- 1.5. Add 5001654 6mm washer and re-tighten the studs to **10 lb-ft (13.5 Nm)**.



FIGURE 5 STUDS ON 550966

- 1.6. Secure the locking tabs on the fan drive frame using the 6mm hole.

502843 M6 screw-45mm
5001654 6mm SS washer
502621 M6 stover nut

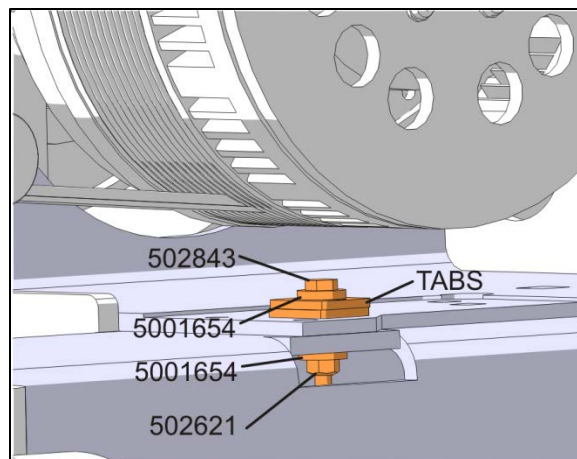


FIGURE 6

- 1.7. Cut the mounting support rib width by 3/8". The rib interferes with fan clutch 550057. Wear appropriate personal protection equipment.

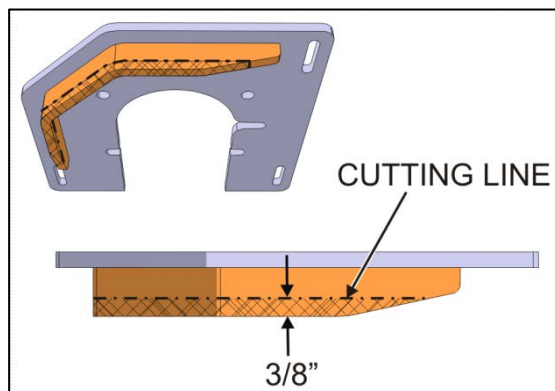


FIGURE 7

- 1.8. Mount the fan clutch on the support plate

Use:

502644 WASHER 10mm (4X)
5001758 STOVER NUT M10 (4X)

Tighten to **35 lb-ft**

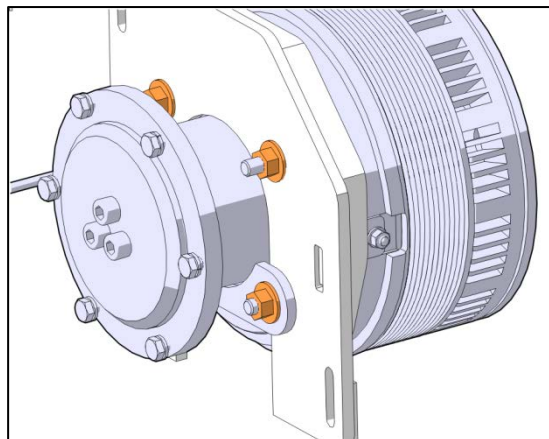


FIGURE 8

- 1.9. Loosely mount the support on the vehicle.
Use:
502692 STOVER NUT M8 (3X)
502891 CARRIAGE SCREW M8x40 (3X)
500874 WASHER (3X)
Tighten to **17 lb-ft**

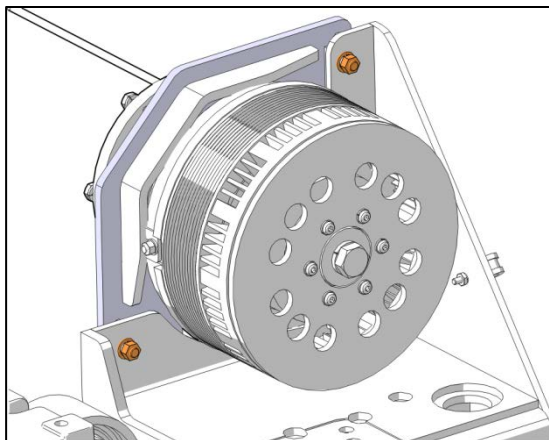


FIGURE 9: INSTALL, DO NOT TIGHTEN

- 1.10. Install the fan on the fan clutch.
Screws come with the fan clutch.
Tighten the screws to **16-20 lb-ft**.

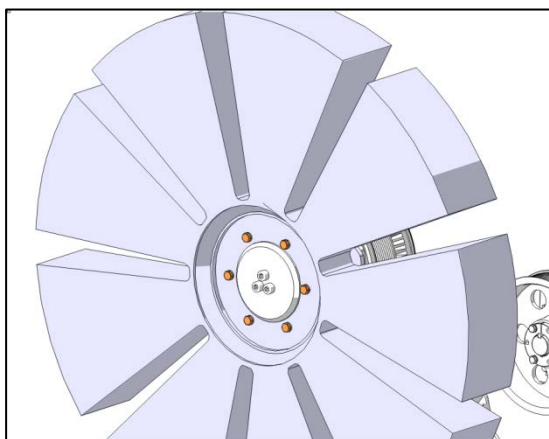


FIGURE 10

- 1.11. Center the fan in the radiator shroud.
Tighten the clutch support screws to **17lb-ft**

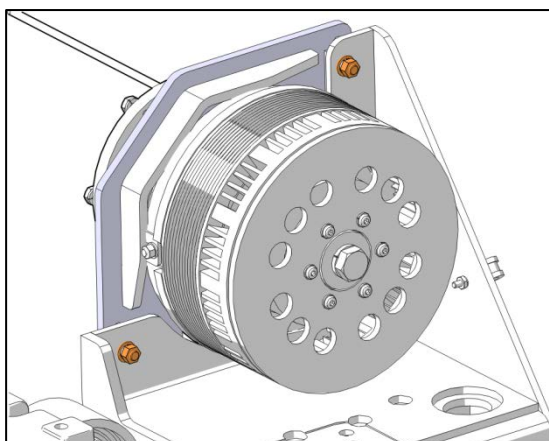
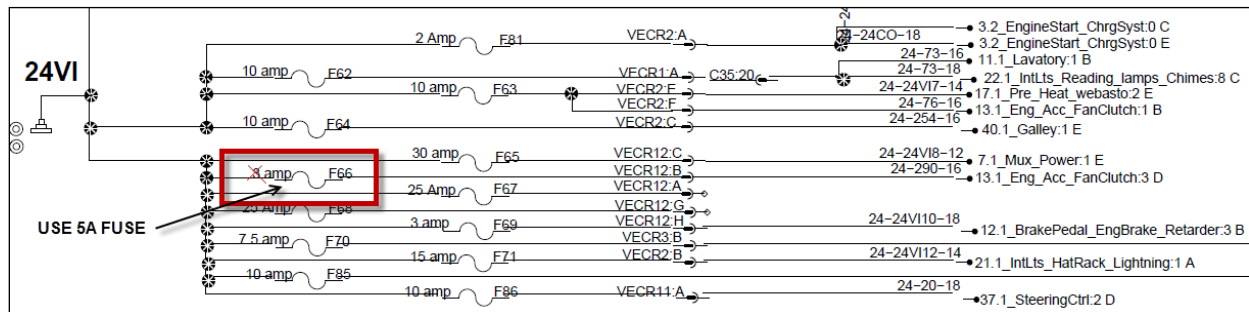
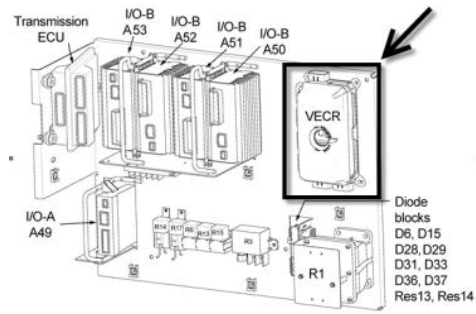


FIGURE 11

- 1.12. Install belt #**5002112**. An extra belt is provided, keep it in the vehicle.
1.13. Connect clutch. Test fan clutch operation.

2. 5 AMP FUSE (MUX VEHICLES only)

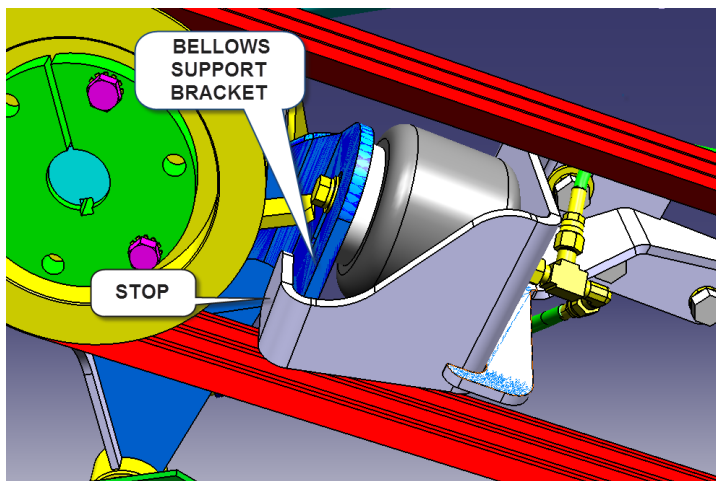
Inside main power compartment (rear of coach, right side), locate fuse box VECR. Inside VECR, replace F66 RADIATOR FAN CLUTCH (3 Amp) fuse with an automotive *mini fuse ATM 5 A*. (Prevost p/n 563280).



3. CHECKING THE GAP BETWEEN THE FAN CLUTCH AND THE RADIATOR

3.1. Tilt the fan driving mechanism support toward the radiator until the bellows support bracket leans against the stop.

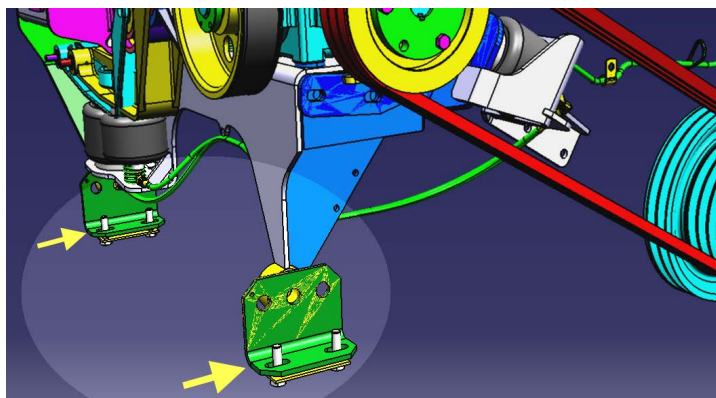
3.2. Make sure that a gap remains between the fan/clutch and the radiator core (or reinforcement rods if present). This gap will prevent damages to the radiator and fan clutch in case of breaking of the drive belts. Moreover, the fan produces a rapid increase of thrust when 2nd speed engages. This force tends to bring the fan clutch closer to the radiator.



3.3. If no gap remains or if the gap is too short, you must perform the following corrective measures:

3.4. MOVING THE FAN DRIVING MECHANISM SUPPORT

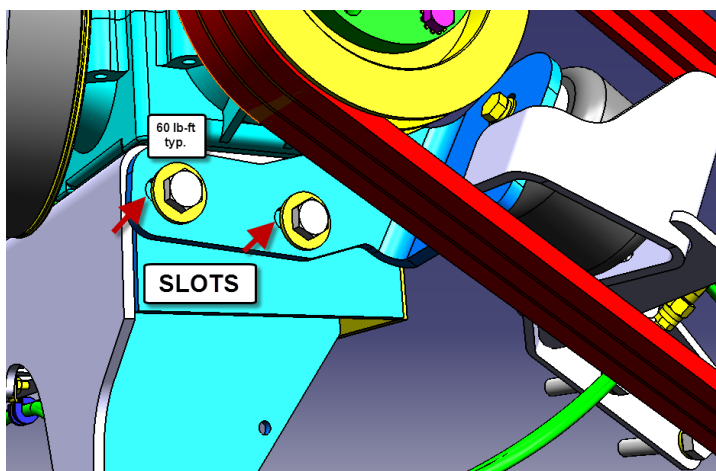
- a) Move the fan driving mechanism support toward the engine, using the slots in the anchoring angle support. Now that the distance between the gearbox pulley and the engine crankshaft pulley is shorter, you must install shorter drive belts (for example, use **BX73** instead of **BX74**).



MAKE SURE THAT THE FAN DRIVING MECHANISM DOESN'T COME INTO INTERFERENCE WITH PIPING OR OTHER COMPONENTS.

- b) Using the slots, move the bellows support bracket to the left in order to reduce the gap between the support bracket and the stop. Leave a gap of $\frac{1}{4}$ " for normal belt lengthening with use. When properly adjusted, the bellows support bracket will lean against the stop, preventing the fan clutch from striking the radiator in case of belts breaking.

TORQUE: 60 lb-ft



- c) If no adjustment is possible with the bellows support bracket slots, lengthen slots or install a bolt with two nuts or any other device that will act as a stop.

WITH THE ENGINE RUNNING, MAKE SURE THAT THE BELTS DO NOT RUB AGAINST THE BELLOWS OR THE BELLOWS ATTACHMENT BRACKETS.



PARTS / WASTE DISPOSAL

Discard waste according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)