

300 AMP STARTER/GENERATOR COOLING AIR DUCT - MAINTENANCE PRACTICES

1. General

- A. This section supplies the maintenance procedures for the removal and installation procedures for the 300 amp starter/generator cooling air duct and the cooling duct attach brackets.

2. Description and Operation

- A. The 300 amp starter/generator incorporates a cooling air duct assembly to provide in-flight cooling. The duct is mounted to the upper right side induction air plenum assembly located right of the engine. The duct is supported by brackets and clamps directly to the plenum and starter/generator cooling fan/brush cover.

NOTE: If you are replacing the engine, the air duct brackets must be removed before the old engine is sent for service. Keep the brackets so you can install them on the new engine.

3. Cooling Air Duct Removal/Installation

- A. Remove the Cooling Air Duct. (Refer to Figure 201).
- (1) Open the upper right cowling door to get access to the starter/generator cooling air duct.
 - (2) Loosen the clamps that attach the duct to the starter/generator inlet and air plenum.
 - (3) Remove the nuts that attach the clamps to forward and aft brackets.
 - (4) Remove the cooling air duct from the starter/generator inlet and air plenum. Remove the duct from airplane.
- B. Install the Cooling Air Duct (Refer to Figure 201).
- (1) Position the cooling air duct in its correct position between starter/generator inlet and air plenum.
 - (2) Put the forward and aft clamps in their correct position on the cooling duct at the attach brackets.
 - (a) Install the bolts and washers that attach the clamps to the attach brackets.
 - (3) Tighten the clamps at the attachment locations of the duct to the starter/generator inlet and air plenum.
 - (4) Close the upper right cowling door.

4. Cooling Air Duct Attach Brackets - Removal/Installation

- A. Remove the Cooling Air Duct Attach Brackets (Refer to Figure 201).
- (1) On the forward and aft cooling duct attach brackets remove the bolts and washers that attach the brackets to the engine flange.
 - (2) Remove the attach brackets from the engine.
 - (a) Keep the brackets, bolts and washers for installation on the engine to be installed on the airplane.
- B. Install the Cooling Air Duct Attach Brackets (Refer to Figure 201).
- (1) Put the forward attach bracket in its correct position on the forward engine flange nutplates.
 - (a) Install the bolts and washers that attach the bracket to the engine flange.
 - (2) Put the aft attach bracket in its correct position on the forward engine flange nutplates.
 - (a) Install the bolts and washers that attach the bracket to the engine flange.

Figure 201 : Sheet 1 : Cooling Air Duct Installation

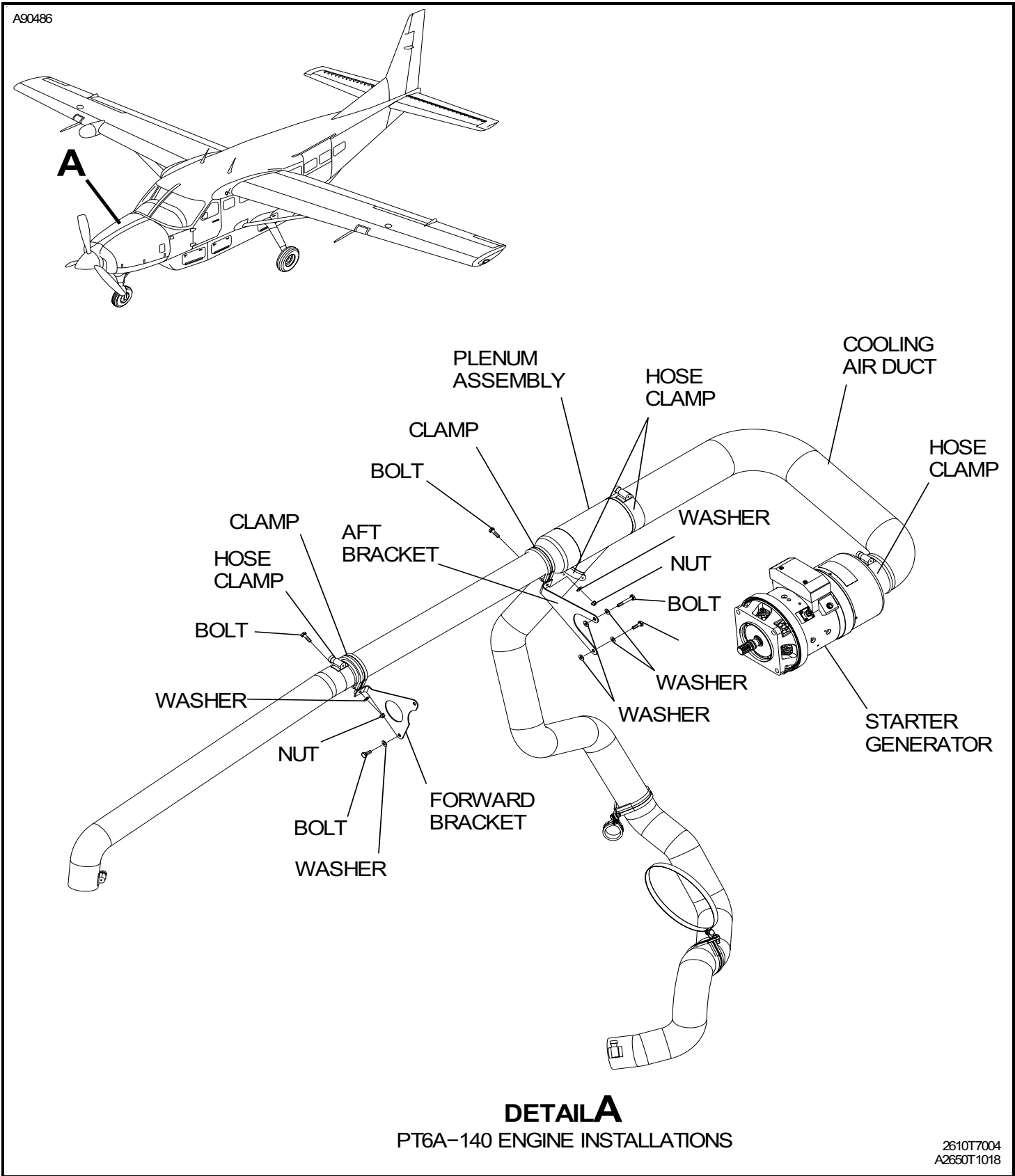
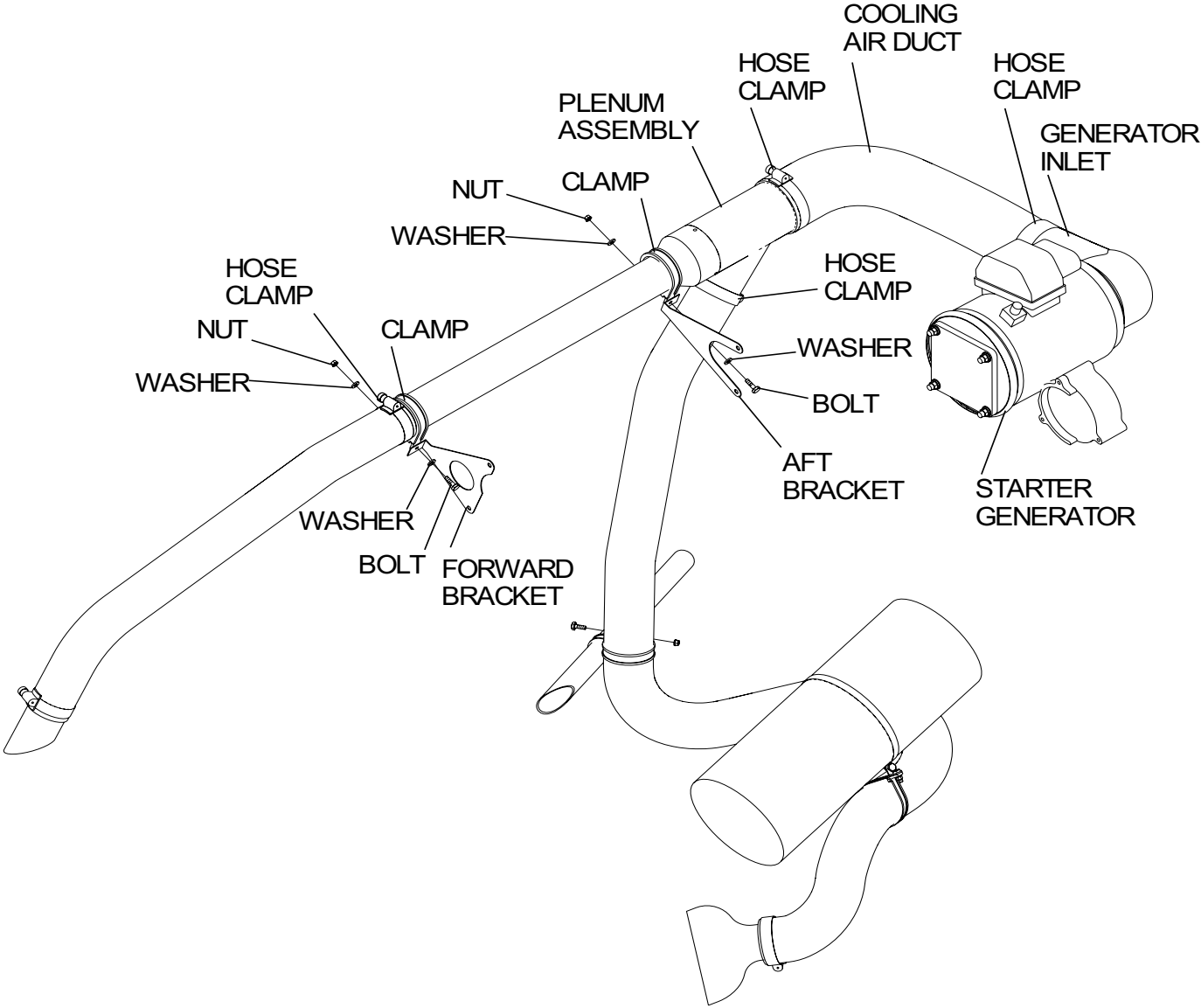


Figure 201 : Sheet 2 : Cooling Air Duct Installation

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DETAIL A

PT6A-114/PT6A-114A
ENGINE INSTALLATIONS

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