

ENGINE EQUIPMENT ATTACH BRACKETS - MAINTENANCE PRACTICES (PT6A-140)

1. General

- A. This section gives the removal and installation procedures for the PT6A-140 engine equipment attach brackets.

2. Power Control Cable Bracket Removal/Installation

- A. Remove the Power Control Cable Bracket (Refer to Figure 201).
- (1) Open or remove the upper right cowling door. Refer to Engine Cowling And Nose Cap - Maintenance Practices.
 - (2) Remove the cotter pin, nut, washer, spacer and lever arm bolt that attach the power control cable rod end to the power lever.
 - (a) Remove the power control cable rod end from the power lever.
 - (b) Discard the cotter pin.
 - (3) At the power control cable bracket, remove the jam nuts, washers and rod ends from the power control cable.
 - (a) Remove the power control cable from the power cable bracket.
 - (4) Remove the screw that attaches the emergency power cable clamp to the power cable bracket.
 - (a) Remove the emergency cable clamp and cable from the power cable bracket.
 - (5) Remove the screws that attach the power control cable bracket to the wiring convolute.
 - (a) Remove the power control cable bracket from the engine.
- B. Install the Power Control Cable Bracket (Refer to Figure 201).
- (1) Put the power control cable bracket in its correct position on the wiring convolute.
 - (a) Install the screws that attach the power control cable bracket to the wiring convolute.
 - (b) Torque the screws to 27 to 30 inch-pounds.
 - (2) Install the power control cable through the hole in power control cable bracket.
 - (a) Install the jam nuts and washers that attach the power control cable to the power control cable bracket.
 - (3) Install the power control cable on the power lever as follows:
 - (a) Put the power control cable rod end in its correct position on the power lever.
 - (b) Install the bolt through the lever, spacer, and rod end.
 - (c) Install the nut on the bolt.
 - (d) Install a new cotter on the nut.
 - (4) Put the emergency power cable and clamp in its correct position on the power control bracket.
 - (a) Install the screw that attaches the emergency power cable and clamp to the power control bracket.
 - (5) Rig power control cable. Refer to Chapter 76, PT6A-140 Engine Power Control Rigging - Adjustment/Test.

3. Fuel Condition Control Cable Bracket Removal/Installation

- A. Remove Fuel Condition Control Cable Bracket (Refer to Figure 201).
- (1) Open or remove the upper right cowling door. Refer to Engine Cowling And Nose Cap - Maintenance Practices.
 - (2) Remove the screw that attaches the retaining fuel condition cable clamp to the fuel condition cable bracket.
 - (a) Remove the fuel condition cable clamp and cable from the fuel condition cable bracket.
 - (3) Remove the engine hardware that attach the fuel condition control cable bracket to the engine.
- B. Install Fuel Condition Control Cable Bracket (Refer to Figure 201).
- (1) Put the fuel condition cable bracket on its correct position on the engine.
 - (a) Install the engine hardware that attach the fuel condition control cable bracket to the engine.
 - (b) Torque the engine hardware to 27 to 30 inch-pounds.
 - (2) Put the fuel condition cable clamp and cable in its correct position on the fuel condition cable bracket.
 - (a) Install the screw that attaches the fuel condition cable clamp and cable to the fuel condition cable bracket.
 - (3) Rig fuel condition cable. Refer to Chapter 76, PT6A-140 Engine Power Control Rigging - Adjustment/Test.

4. Propeller Control Cable Bracket Removal/Installation

- A. Remove the Propeller Control Cable Bracket (Refer to Figure 201).
 - (1) Open or remove the upper right cowling door. Refer to Engine Cowling And Nose Cap - Maintenance Practices.
 - (2) Remove the cotter pin, nut, washer, spacer and lever arm bolt that attach the cable end to the propeller governor arm.
 - (a) Remove the propeller cable end from the propeller lever.
 - (b) Discard the cotter pin.
 - (3) At the propeller control cable bracket, remove the jam nuts, washers and rod ends from the propeller control cable.
 - (a) Remove the propeller control cable from the power cable bracket.
 - (4) Remove the bolts that attach the propeller control cable bracket to the engine.
 - (a) Remove the propeller control cable bracket from the engine.
- B. Install Propeller Control Cable Bracket (Refer to Figure 201).
 - (1) Put the propeller control cable bracket in its correct position on the engine.
 - (a) Install the bolts that attach the propeller control cable bracket to engine.
 - (b) Torque the bolts to 36 to 40 inch-pounds.
 - (2) Install the propeller control cable on the propeller lever as follows:
 - (a) Put the propeller control cable rod end in its correct position on the propeller governor arm.
 - (b) Install the bolt through the lever, spacer, and rod end.
 - (c) Install the nut on the bolt.
 - (d) Install a new cotter on the nut.
 - (3) Insert propeller control cable through the propeller control cable bracket.
 - (a) Install the jam nuts, washer, and rod ends.
 - (4) Rig propeller control cable. Refer to PT6A-140 Engine Power Control Rigging - Adjustment/Test.

5. Standby Alternator Adjuster Arm Assembly Removal/Installation

- A. Remove the Standby Alternator Adjuster Arm Assembly (Refer to Refer to Figure 202).
 - (1) Remove the alternator. Refer to Chapter 24, Standby Electrical System Maintenance Practices.
 - (2) Remove the bolt, washer and nut that attach the ground strap to the adjuster arm assembly.
 - (a) Remove the ground strap from the adjuster arm assembly.
 - (3) Cut and remove the safety wire from the drive housing bolts.
 - (4) Remove the nuts and washers that attach the drive housing to the engine.
 - (a) Discard the gasket.
 - (5) Remove the adjuster arm assembly from the engine.
 - (a) Discard the gasket.
- B. Install the Standby Alternator Adjuster Arm Assembly (Refer to Refer to Figure 202).
 - (1) Install a new gasket on the adjuster arm assembly mounting bolts. Refer to the Model 208 Illustrated Parts Catalog for gasket part numbers.
 - (2) Put the adjuster arm assembly in its correct position on the scavenge pump bolts.
 - (3) On the aft surface of the adjuster arm assembly, install a new gasket mounting bolts.
 - (4) Put the drive housing on the studs.
 - NOTE:** Install the drive housing with chamfered edge of housing adjacent to adjuster arm assembly.
 - (a) Make sure that the drive splines are engaged correctly.
 - (5) Install the washers and nuts on the studs that attach the drive housing and the adjuster arm assembly to the engine.
 - (a) Safety the drive housing with wire. Refer to Chapter 20, Safetying - Maintenance Practices.
 - (6) Put the ground strap on the correct position on the adjuster arm assembly.
 - (a) Install the bolt, washer and nut that attach the ground strap to the adjuster arm assembly.
 - (7) Install the alternator. Refer to Chapter 24, Standby Electrical System - Maintenance Practices.

6. Standby Alternator Mounting Bracket Assembly Removal/Installation

- A. Remove the Standby Alternator Mounting Bracket Assembly (Refer to Refer to Figure 202).
 - (1) Remove the alternator. Refer to Chapter 24, Standby Electrical System - Maintenance Practices.
 - (2) At the bottom of the mounting bracket assembly, cut remove the safety wire from the three bolts.
 - (3) Remove the three bolts, washers and nuts that attach the mounting bracket assembly to the engine.
 - (4) Remove the mounting bracket assembly from the engine.
- B. Install Standby Alternator Mounting Bracket Assembly (Refer to Refer to Figure 202).
 - (1) Put the mounting bracket assembly in its correct position on the engine.
 - (a) Make sure that at bottom of the mounting bracket assembly the three holes align with the holes at base of engine.
 - (2) Install the nut, three bolts and washers that attach the mounting bracket assembly to the base of the engine.
 - (a) Safety the bolts with wire. Refer to Chapter 20, Safelying - Maintenance Practices.
 - (3) Install the alternator. Refer to Chapter 24, Standby Electrical System - Maintenance Practices.

7. Left Nose Cap Bracket Removal/Installation

- A. Remove the Left Nose Cap Bracket (Refer to Refer to Figure 203).
 - (1) Remove the left nose cap. Refer to Engine Cowling and Nose Cap - Maintenance Practices.
 - (2) Remove the bolts that attach the nose cap bracket to the engine flange.
 - (a) Remove the nose cap bracket from the engine.
- B. Install the Left Nose Cap Bracket (Refer to Refer to Figure 203).
 - (1) Put the nose cap bracket in its correct position on the engine.
 - (a) Install the bolts that attach the bracket to engine flange.
 - (b) Torque the bolts to 36 to 40 inch-pounds.
 - (2) If necessary, install the left nose cap. Refer to Engine Cowling and Nose Cap - Maintenance Practices.

Figure 201 : Sheet 1 : Engine Equipment Attach Brackets

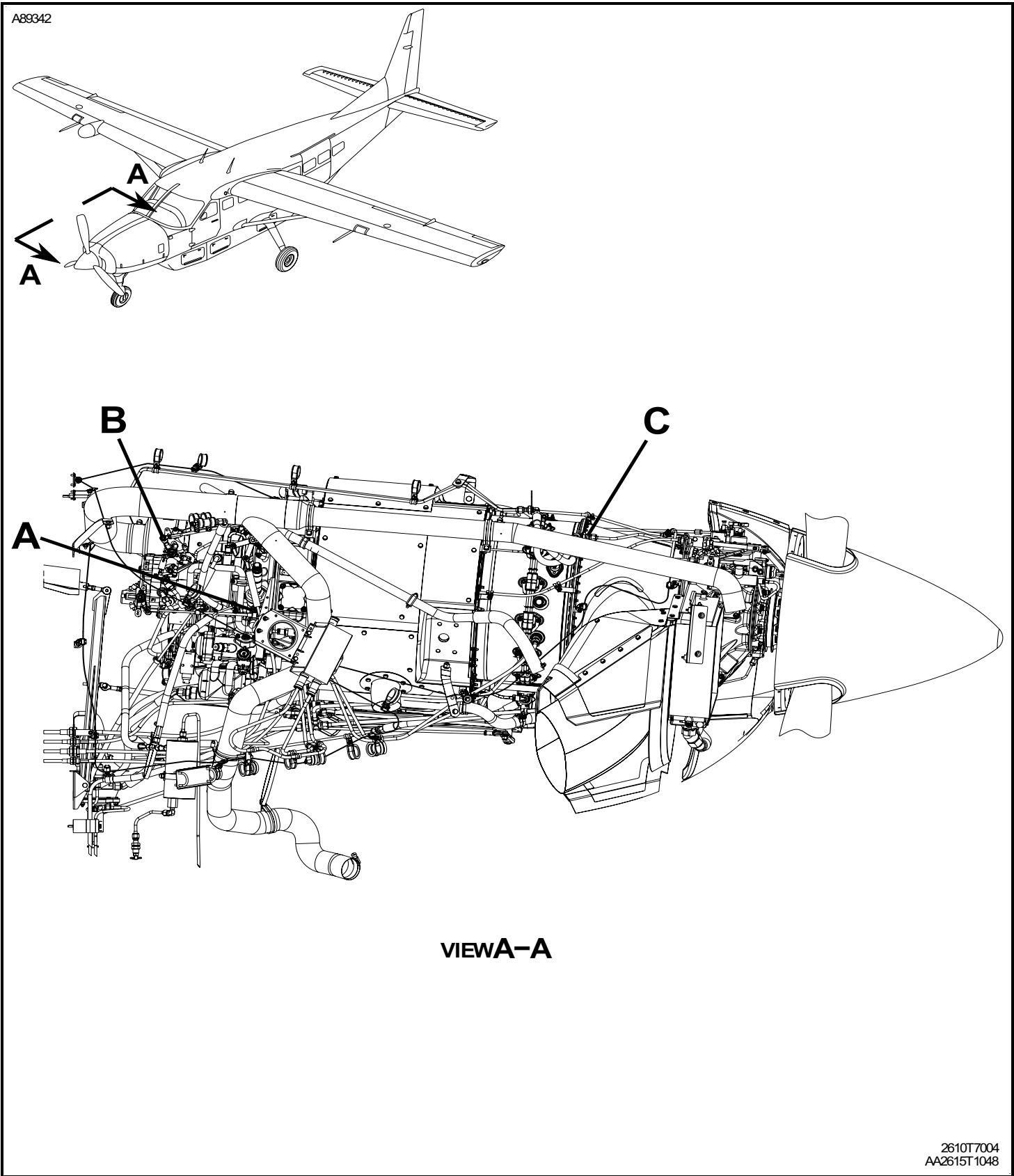
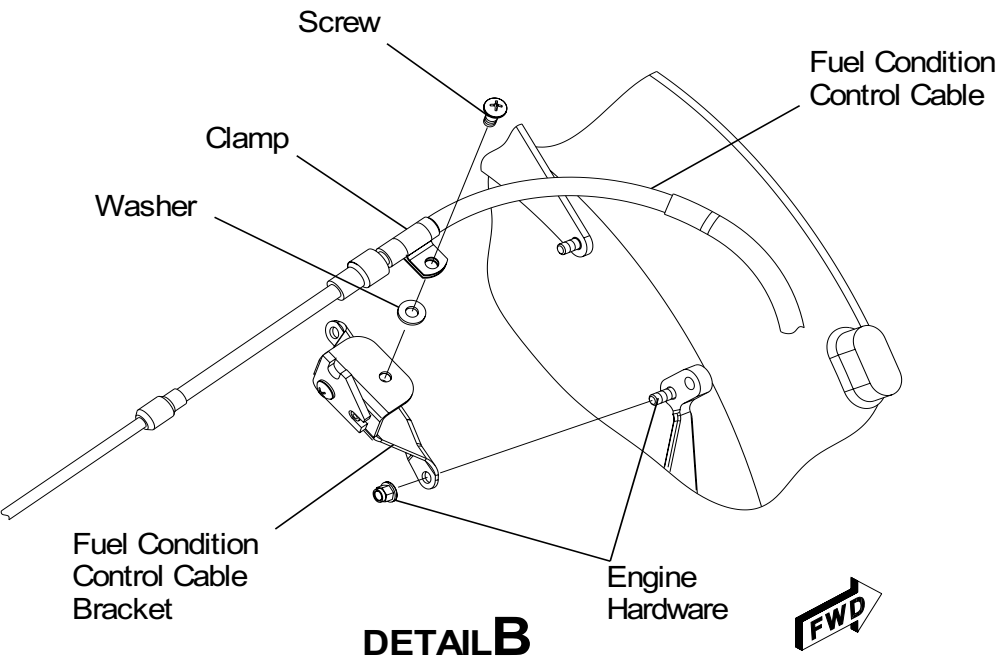
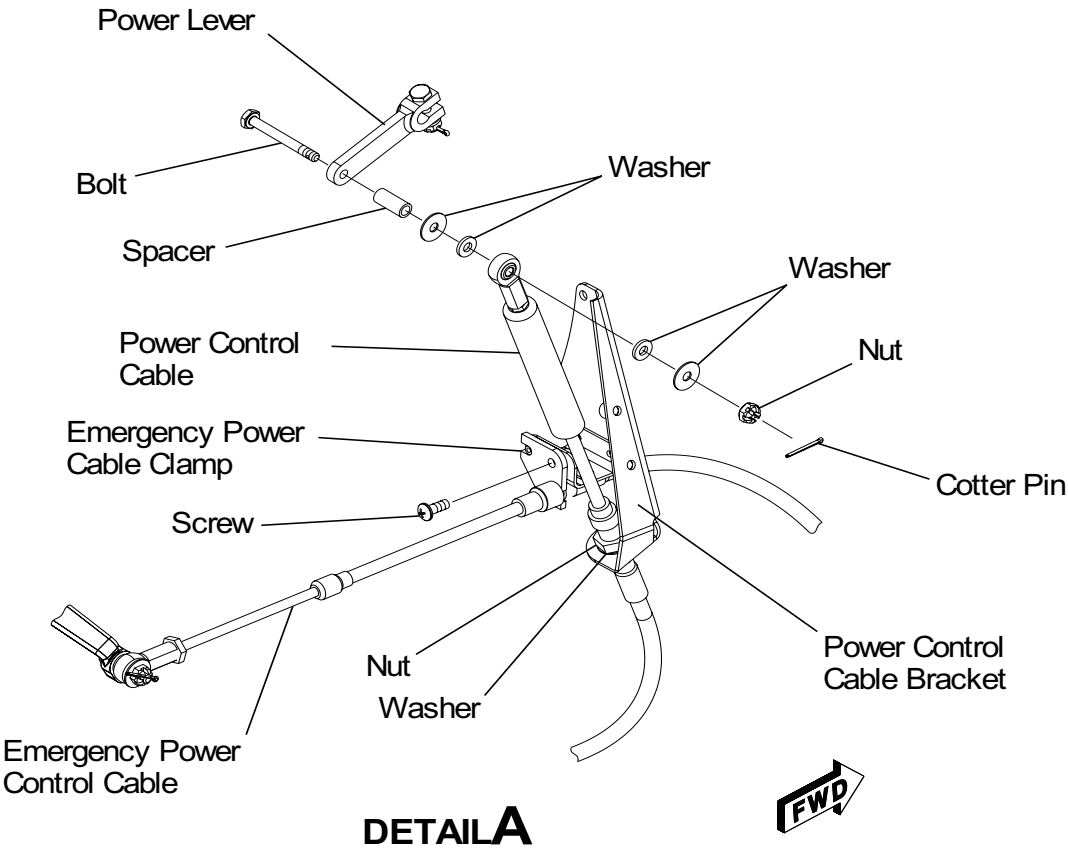


Figure 201 : Sheet 2 : Engine Equipment Attach Brackets

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Figure 201 : Sheet 3 : Engine Equipment Attach Brackets

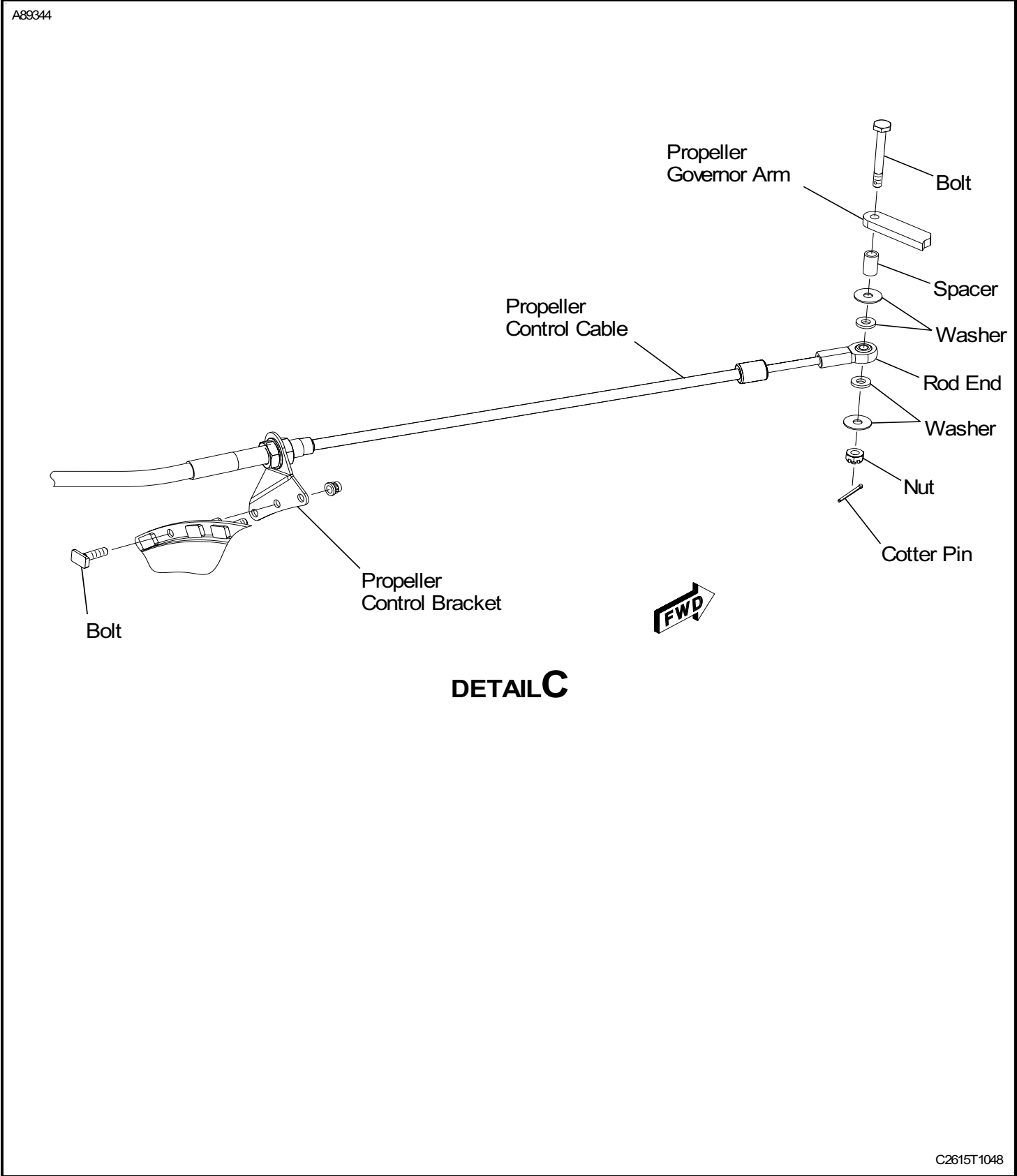


Figure 202 : Sheet 1 : Standby Alternator Brackets Installation

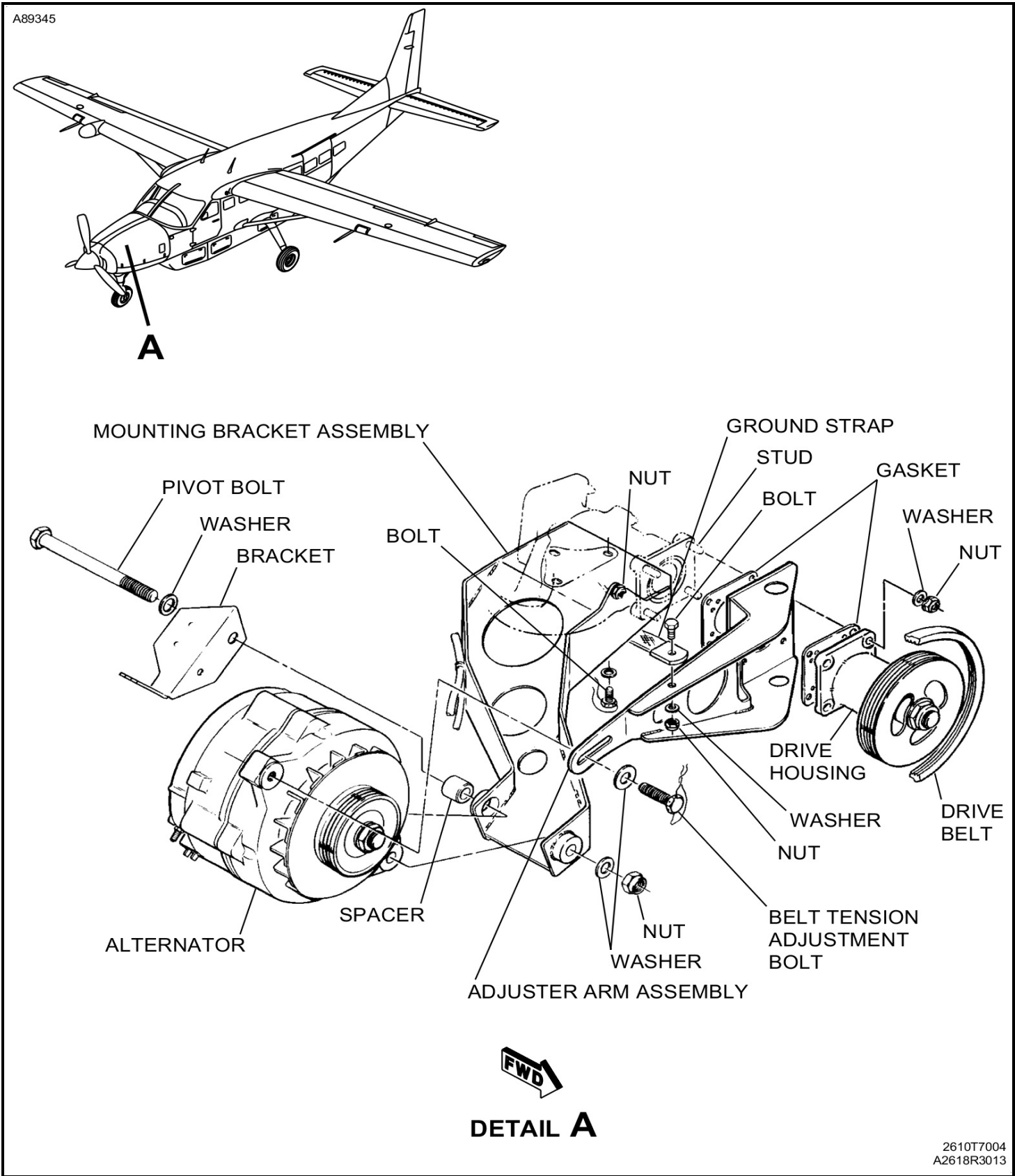


Figure 203 : Sheet 1 : Left Nose Cap Bracket

