Automatic Fire Suppression System LANCAIR, COLUMBIA, & CESSNA CORVALIS & TTx Models

PROTENG AEROSPACE INC SEPTEMBER 2021

Lancair, Columbia, Cessna **Corvalis/TTx Models and Engines**

- LC41-550FG CESSNA 400 / COLUMBIA 400 / COL4
 - TSIO-550-C Continental
- LC42-550FG CESSNA 350 / COLUMBIA 350
 - IO-550-N25 Continental
- LC40-550FG CESSNA 300 / COLUMBIA 300
 - IO-550-N15 Continental
- CESSNA TTx T240
 - TSIO-550-C20 Continental

PRODUCT SPECS THIA HD-COL4 ENGINE

- POLYAMIDE TUBING
 - LENGTH: 101cm
 - DIAMETER: 18mm
- EXTINGUISHER AGENT
 - FM-200 NET WEIGHT 180 grams
- TOTAL WEIGHT: 410 grams
- VARIATION +/- 2% TOTAL WEIGHT





INSTALLATION PARTS

- 3/4 inch P-CLAMPS 5
- 1 inch P-CLAMPS 2
- Aluminum bracket
 - 97.5cm x 1.5cm x 0.3cm
 - 110 grams
- Rubber insulators
 - 3/4 inch diameter
 - 15mm 3
 - 45mm -1
- Screws
 - 316 SS Ultra-Low-Profile Socket Head Screw
 - 20 mm long, M10 x 1.5 mm thread
- Locknuts
 - Class 10 High-Strength Steel Nylon-Insert Zinc Plated
 - 10 mm High, M10 x 1.5 mm Thread





INSTALLATION ASSEMPLY TUBE AND COMPONENTS

 Total weight of complete assembly 670 grams

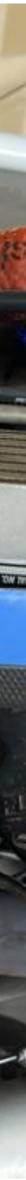




Pre-Installation

- Open cowling
- Side view RIGHT
- Visual assessment





Pre-Installation

- Side view LEFT
- Visual assessment
- Installation procedure begins from the left side

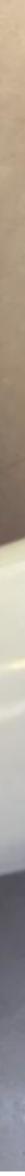




Step 1

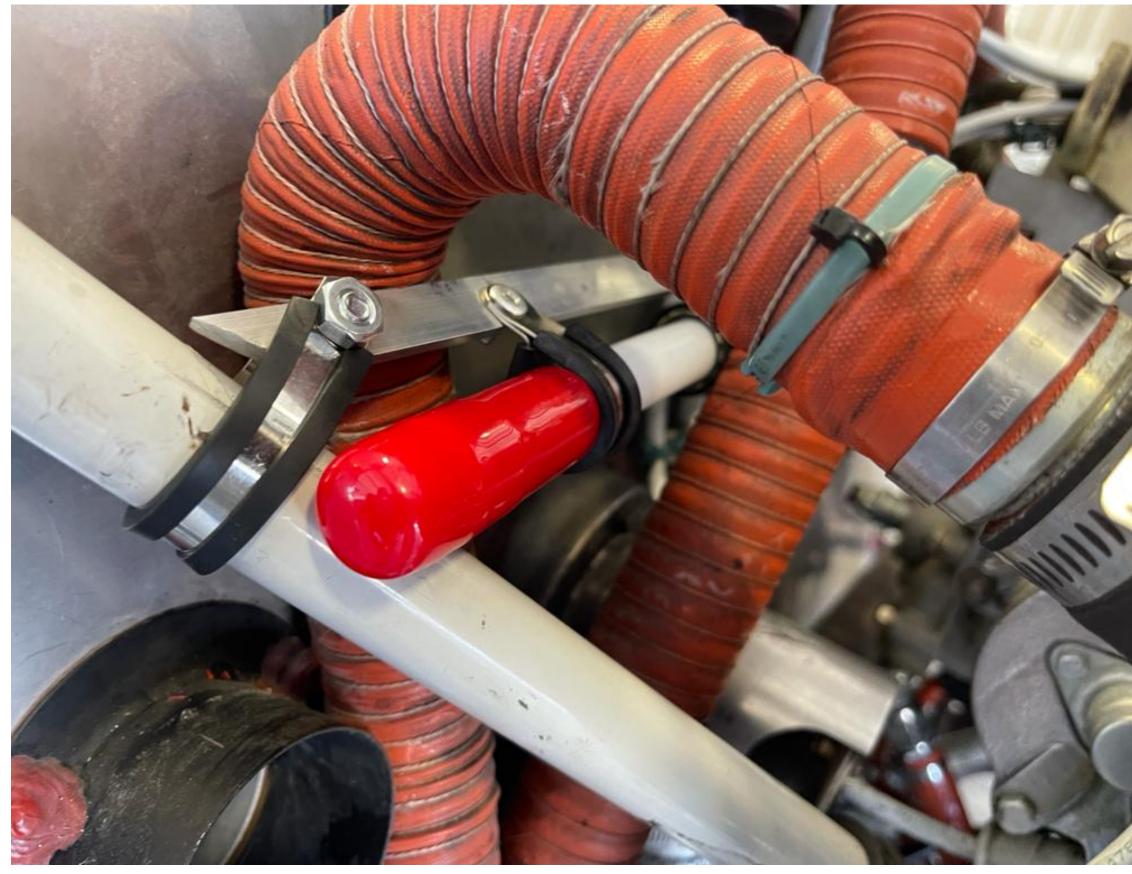
- Place one end of THIA Assembly/ Bracket with the fixed/attached/already connected, 3/4 inch P-Clamp with left upper arm in position (see picture)
- Connect loose P-Clamp that is attached to the Bracket to engine mount (part # LA71203000) and fasten with Screw and Locknut





Step 2

- Begin Step 2 with the same process of Step 1 on the right side for the Bracket
- Connect loose P-Clamp of the Bracket and fasten to engine mount (part # LA 71203000) with Screw and Locknut





Maintenance **Inspection Recommendations**

- removed.
- the THIA tube itself) with every oil change.
- components as deemed fit by the A & P Mechanic.
- After 200 hours the System needs to be replaced or overhauled by the Manufacturer
- returned to the Manufacturer for proper disposal.

• THIA is maintenance free, however a visual assessment for the integrity of the installation and entire assembly (including the THIA tube itself) is recommended each time the engine cowl is

• A good rule of thumb is to perform a thorough inspection of the entire assembly (including

• For Annual, the entire assembly is to be removed and weighed. The process of re-installing will require the replacement of the assembly, THIA tube, and/or any components with new

All systems are recyclable and require proper handling and disposal. The THIA tube must be