

# **Service Instructions**

TAT SI08-01, Rev. A

Issued: 04-27-2009

Model SR22 w/ Turbonormalizer

#### **COMPLIANCE**

**RECOMMENDED:** Tornado Alley Turbo considers these Service Instructions to be **RECOMMENDED**. It is recommended that these instructions are accomplished during the next scheduled oil change or within 50 hours, whichever comes first. This is a re-occurring service that should be accomplished every 50 hours thereafter.

### **EFFECTIVITY**

All Cirrus Design SR22 equipped with a Tornado Alley Turbo Inc. Turbonormalizing System built after July 2007. This will also include any previously manufactured aircraft that have undergone any exhaust system upgrades.

#### APPROVAL

Engine Technologies, Inc., the Turbonormalizing System STC holder, has approved all technical data in these Service Instructions that affect the type design.

#### **PURPOSE**

The purpose of these Service Instructions is to inform affected owners and operators of the possibility of a restriction in the Crankcase Breather Discharge Tube. In some cases, small amounts of oil can pool in the lower end of the Discharge Tube. This oil, when subjected to the high operating temperature of the tailpipe, can "cook" and solidify at the junction of the Discharge Tube and Tailpipe. This material can build up over time and restrict the tube. The following instructions explain how to remove this buildup and restore unrestricted flow through the Discharge Tube.

## DESCRIPTION

These Service Instructions contain procedures to gain access, and clean out the Crankcase Breather Discharge Tube.

## WARRANTY INFORMATION

Due to the fact that this condition is independent of the Turbo System and can occur during normal operation, this service will not be covered under warranty

## MANPOWER REQUIREMENTS

Gain access, Removal of Oil Air Breather Hose, Inspection, Cleaning of the Discharge tube, and Replacement: 1 man hour.

#### WEIGHT AND BALANCE

Weight change: None.

### MATERIAL INFORMATION

Tooling

3/4 " Nylon Loop Brush	7221T13 (NOT PROVIDED)	1 ea
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The 3/4 "Nylon Loop Brush (p/n 7221T13) can be ordered from Tornado Alley Turbo Inc., for \$9.99

## ACCOMPLISHMENT INSTRUCTIONS

Compliance with this Service Instruction does not require removal of any of the exhaust system.

- Gain access to the left hand tailpipe by removing the upper and lower portions of cowl.
- Loosen clamp on Crankcase Oil Breather Hose where it connects to the left hand tailpipe (see Figure 1).
- With the clamp loose, carefully remove the Crankcase Oil Breather Hose from the Discharge Tube.
- Take the <sup>3</sup>/<sub>4</sub>" Nylon Loop Brush and insert it into Crankcase Oil Discharge Tube. You may find that bending the top section of the bristle portion of the brush to match the contour of the Discharge Tube aids greatly with insertion and removal of the brush (see Figure 3).
- With the brush inserted, vigorously scrub the bottom end of the Discharge Tube until no resistance can be felt.
- Remove the brush from the tube and reinstall Oil Breather Hose to the Discharge Tube and tighten clamp.
- Replace upper and lower portion of cowl.
- Make appropriate maintenance record entry noting compliance with this Service Instruction.



Figure 1 shows the Left Side SR22 tailpipe with the Crankcase Breather Discharge Tube.



Figure 2 shows a close up of the contour of the Discharge Tube.



Figure 3 shows the 3/4" Nylon Loop Brush with the bend made to fit the contour of the Discharge Tube.