



# Service Bulletin

TAT SB08-02

Issued:

Model SR22 w/ Turbonormalizer

## COMPLIANCE

**OPTIONAL:** Tornado Alley Turbo considers this Service Bulletin to be OPTIONAL.

## EFFECTIVITY

All Cirrus Design SR22 equipped with a Tornado Alley Turbo Inc. Turbonormalizing System.

## APPROVAL

Engine Technologies, Inc., the Turbonormalizing System STC holder, has approved all technical data in this Service Bulletin that affects the type design.

## PURPOSE

The purpose of this Service Bulletin is to inform affected owners and operators of the possibility for contact between the underside of the PRV/Y tube and the engine backbone resulting in metal erosion on the PRV/Y tube. This is primarily a problem that results from improper alignment of the PRV/Y tube during installation.

## DESCRIPTION

This Service Bulletin contains procedures to gain access, inspect, add an anti-wear pad, and re-install, or if necessary, to replace the PRV/Y tube, part number ETI-SR22-200-M2-1.

## WARRANTY INFORMATION

Due to the origin of this issue being improper alignment at installation, labor costs for this Service Bulletin will not be covered by the STC holder. Tornado Alley Turbo Inc. will provide the anti-wear pad for the repair. If the PRV/Y tube has an erosion hole in the metal, Tornado Alley Turbo Inc. will replace the tube only. Be sure to remove the PRV valve before returning it to Cirrus. Approval for the required maintenance must be obtained in advance. Only Authorized Cirrus Service Centers are eligible for warranty consideration.

## MANPOWER REQUIREMENTS

Gain access, Removal, Inspection, Attach anti-wear pad, and Replacement: 1 man hour.

## OTHER PUBLICATION AFFECTED

N/A

## WEIGHT AND BALANCE

Weight change: None.

## MATERIAL INFORMATION

PRV/Y Induction Tube	ETI-SR22-200-M2-1	1 ea
Anti-Wear Pad	22-6100025	1 ea
Red RTV Silicone	Not Provided	
Cotton Swabs	Not Provided	

## ACCOMPLISHMENT INSTRUCTIONS

- Gain access by removing the upper portion of cowl.
- Loosen clamps on induction couplings in five areas:
  1. Clamp closest to PRV/Y tube on coupling between PRV/Y tube and throttle body.
  2. Clamp closest to PRV/Y tube on coupling between L/H induction tube and PRV/Y tube.
  3. Clamp closest to PRV/Y tube on coupling between R/H induction tube and PRV/Y tube.
  4. Clamp closest to L/H induction tube on coupling between L/H induction tube and L/H intercooler.
  5. Clamp closest to R/H induction tube on coupling between R/H induction tube and R/H intercooler.
- With the clamps loose, carefully remove the PRV/Y tube from the three couplings connecting it with the throttle body and both induction tubes.
- Leave the loose clamps on the couplings as they will be used again upon re-installation.
- Examine the underside of the PRV/Y induction tube for abnormal wear.
- If there is wear, determine if the metal erosion has worn entirely through the material creating a hole in the tube.
- If so, then remove the PRV valve from the tube and send the tube ONLY back to Cirrus Design for replacement.
- If there is no area where a hole has been worn through, then application of the anti-wear pad is appropriate.
- The anti-wear pad is cut from curved stock so as to conform to the contour of the tube. It has a flat base and the upper corners clipped from the top.
- To apply the anti-wear pad, the induction tube should be placed on a flat workspace with the underside facing upwards.
- The tube must then be thoroughly cleaned to ensure good adhesion of the silicone.
- Apply Red RTV Silicone to the underside of the pad. Spread the glue evenly over the entire surface.
- Set the pad on the clean surface of the tube with the flat base of the pad up against, but not on top of the weld bead for the PRV flange.
- Apply pressure to the entire surface of the pad to ensure complete adhesion of the pad to the tube.
- There will be extra glue that squeezes from under the pad and collects at the sides of the pad. Use a cotton swab to clean up the extra glue.
- Set the tube somewhere where it can sit undisturbed for the next 12-24 hours to allow the silicone to fully cure.
- After the RTV silicone has fully cured, inspect the pad once more to ensure all edges of the pad are fully secured to the tube. If so, then the tube is ready to be re-installed on the engine.
- To re-install PRV/Y tube, slip tube back into the throttle body coupling and two induction tube couplings.
- Re-align PRV/Y tube and tighten the five clamps that were loosened during the removal process.
- Replace upper portion of cowl. Pay particular attention to ensure that the re-installed PRV/Y tube maintains appropriate clearance and does not make contact with the cowl.
- Make appropriate log book entry noting repair



Figure 1 shows five clamps to be loosened to remove PRV/Y tube



Figure 2 shows all material needed to attach the Anti-Wear Pad to the PRV/Y tube



Figure 3 shows the Anti-Wear pad properly attached to the underside of the PRV/Y tube.