AeroVee 2.1 Turbo

MANUAL REVISION LOG

Rev. L 6/30/23

Removed references to third-party hardware kits.

Removed tech support email address.

Added B-Model Cowl Side Vent details to Appendix A

Rev. K 12/20/22

Added Turbo Coolant System instructions, which were previously a free-standing document.

Rev. J 03/24/22

Changed Sonex Aircraft LLC to Sonex LLC.

Updated Secondary Ignition Instructions and schematics for ACV-A01-23 triggers that require user-installed ground wire.

Rev. I 12/21/21

Rocker Shaft Assembly. Added note check for free rotation of rocker arms after installing the rocker shafts.

Rev. H 04/26/21

Page 9, Made up-drilling the oil supply hole in bearing #1 optional. Preassembled cranks are not up-drilled.

Page 45, Corrected Parts List Errors: (None of these changes altered the assembly or the contents of the kit):

- -ACV-T05-43 Shroud Clip WAS Waste Gate Mount Nuts.
- -ACV-T05-50 Waste Gate Mount Nuts WAS Actuator Mount Nuts.
- -Deleted ACV-T05-72 Turbo Shroud Group Part number and replaced with individual part numbers: ACV-T05-42, Turbo Shroud; ACV-Z01-89, Spring; ACV-T05-43, Shroud Clip.

Page 47, Added Part Numbers to caption for Turbo Shroud installation.

Rev. G 04/06/21

Page 45, Added Turbo Clocking instructions.

Rev. F 03/20/18

Corrected prop drive lug diameter from 9/16" nominal to .590 +/-.001".

Rev. E 06/30/17

Part number call-out corrected.

Page 56, "Oil Line Installation - Oil Filter to Turbo Body," step 2, part number SUM-220447 changed to 592047ERL.

Rev. D 03/10/17

Updated connecting rod installation procedure. Removed "Starred Bolt" connecting rod option, redefined installation orientation.

Rev. C 12/21/16

Revised manual to include changes to reduce coking of the turbo. Specific changes include:

3 minute turbo cool-down at idle RPM added.

Added note that turbo drain must be parallel to the ground when the aircraft is resting on its tires.

Turbo blanket replaced with turbo shroud.

Added Turbo Drain Sump.

Added remote oil filter.

Added Turbo Operation notes to page 66.

Removed Valvoline VR-1, 20W50 non-synthetic as a recommended oil.

Other changes

Timing specification for secondary ignition changed to 18 BTDC (was 10). Removed synthetic oils as oil options.

Moved oil return line from valve cover to engine case by oil filler.

Rev. B 08/05/15

Added cowl opening guidance for Sonex aircraft.

Bolts used to attach oil cooler were lengthened +1. Shorter bolts previously used are still acceptable.

Rev. A 01/06/15

Changed the step sequence for installing the actuator's retaining ring and turbo blanket.

Rev. NC 11/24/14

Original Publication of AeroVee 2.1 Turbo Assembly Manual