



SERVICE BULLETIN

No. 675

Piper Aircraft Corporation
FAA/DOA SO-1 Approved

Lock Haven, Pennsylvania, U.S.A.
February 19, 1980 S

This Service Release supersedes and voids Special Advisory Telex SA 32RT-300T/32R-301T-1 dated February 8, 1980.

<u>Subject:</u>	Throttle Operation Pre-and Post-Flight Check
<u>Models Affected:</u>	<u>Serial Numbers Affected:</u>
PA-32RT-300T Turbo Lance II PA-32R-301T Turbo Saratoga SP	32R-7787001, 32R-7887002 through 32R-7987126 32R-8029001 through 32R-8029055
<u>Compliance Time:</u>	Prior to each flight, during the pre-flight check, and after each flight unless/until <u>Instruction 6</u> has been accomplished.

Purpose:

Reports have been received of binding or sticking of the Wastegate Transition Valve on AVCO-Lycoming TIO-540-S1AD engines used on Turbo Lance II and Turbo Saratoga SP aircraft.

If this condition exists and is left uncorrected, wastegate seizure and loss of throttle operation will occur.

This Service Release contains instructions to be carried out during the pre- and post-flight inspections of the aircraft until the wastegate is replaced. (Reference Instruction 6.)

Instructions:

1. Prior to starting engine and after engine shutdown, release friction lock and proceed with Instructions 2 through 4.
2. Move throttle from the full closed to the full open position and back. Note smoothness of operation.
 - a. If sticking, binding or catching action is noted, cause must be determined prior to next flight. Proceed to Instruction 4.
3. If smooth throttle operation is noted, no further action is needed until the post-flight and again at the next pre-flight.

(over)

Instructions: (continued)

4. If sticking, binding or catching action is noted, corrective action must be accomplished by an appropriately rated mechanic prior to further flight.
 - a. Probable cause: Turbocharger wastegate. Remove servo-to-wastegate interconnect cable at wastegate arm and check valve for freedom of movement throughout full range. Throttle cable and servo-to-wastegate interconnect cables should also be checked independently for freedom of movement. Replace any sticking, binding or catching component.
5. Excessive cooling, particularly during letdowns, must be avoided. Operation of EGT must be in accordance with P.O.H. Section 4.29.
6. AVCO-Lycoming Service Bulletin No. 448 covering Transition and Wastegate Assembly Replacement is forthcoming and is expected to be released approximately March 28, 1980. Inspection and replacement requirements of Piper Service Bulletin No. 675 will be relieved by compliance with Lycoming Service Bulletin No. 448.

Material Required:

If replacement is required, one (1) each Throttle Cable, Piper Part Number 67639-013V.

Availability of Parts:

Your Piper Field Service Facility.

Effectivity Date:

This Service Release is effective upon receipt.

Summary:

Please contact your Piper Field Service Facility to make arrangements for compliance with this Service Release in accordance with the Compliance Time indicated. If replacement of servo-to-wastegate interconnect cable or the wastegate is required, applicable labor and material allowances are to be claimed through your AVCO-Lycoming Distributor.

AVCO LYCOMING

Airworthiness Directive

Volume I

80-17-10 AVCO LYCOMING: Amendment 39-3880. Applies to Lycoming Model TIO-540-S1AD engine with serial numbers thru S/N L-6991-61A except:

S/Ns	L-5253-61A	L-6669-61A
	L-5616-61A	L-6671-61A
	L-5641-61A	L-6775-61A
	L-5691-61A	L-6840-61A
	L-5808-61A	L-6860-61A
	L-5823-61A	L-6861-61A
	L-5878-61A	L-6886-61A
	L-5909-61A	L-6887-61A
	L-5967-61A	L-6888-61A
	L-5970-61A	L-6900-61A Thru L-6905-61A
	L-6160-61A	L-6915-61A Thru L-6921-61A
	L-6183-61A	L-6930-61A Thru L-6940-61A
	L-6451-61A	L-6979-61A Thru L-6988-61A and L-6990-61A

PIPER SB 675

installed in Piper PA-32RT-300T and PA-32R-301T aircraft.

Compliance is required prior to each flight after receipt of this directive until a new transition wastegate assembly P/N LW16858 is installed.

To prevent loss of engine power control due to seized throttle movement, accomplish the following:

1. Prior to each flight check the throttle movement for stiffness or binding as follows:

a. Release the throttle friction lock in the cockpit.
b. Move the throttle from idle to full open and back to idle.

c. If the throttle movement is stiff or binds, replace any wastegate valve or cable assembly with a new assembly in accordance with Lycoming S/B 448.

2. An alternate method of compliance may be approved by the Chief, Engineering and Manufacturing Branch, Federal Aviation Administration, Eastern Region.

The checks in this AD may be accomplished by the pilot. Any corrective action required by this AD must be accomplished by a person authorized by FAR 43.3.

Piper special advisory Telex SA-32RT-300T/32R-301-1 dated February 8, 1980, and Lycoming Service Bulletin No. 448 pertain to this subject.

This AD is effective on August 18, 1980, and was effective upon receipt for all recipients of the letter dated March 17, 1980, which concerned this subject.

FOR FURTHER INFORMATION CONTACT:

I. Mankuta, Propulsion Section, AEA-214, Engineering and Manufacturing Branch, Federal Building, J.F.K. International Airport, Jamaica, New York 11430; Tel. 212-995-2894.