



SERVICE BULLETIN

No. 754

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

Modification FAA Approved

February 14, 1983 M

Subject: Airconditioning Condenser Fan Impeller Replacement.

Models Affected: Serial Numbers Affected:

PA-31T Cheyenne/Cheyenne II 31T-7400002 through 31T-8120050,
31T-8120052 through 31T-8120060,
31T-8120063, 31T-8120064, 31T-8120068,
31T-8120070

PA-31T1 Cheyenne I 31T-7804001 through 31T-8104064,
31T-8104066 through 31T-8104068,
31T-8104070 through 31T-8104073

Compliance Time: Within the next 100 hours of operation or at the next scheduled inspection event, whichever occurs first.

Purpose:

Field reports indicate that there have been a number of failures of the Condenser Fan Impeller, Piper Part Number 55299-02. Failure of this impeller may cause damage to the condenser and other installations in the vicinity of the fan.

This Service Release announces the availability of a new Condenser Fan Impeller, Piper Part Number 460 102 (29E57-1), to replace the existing impeller, Piper Part Number 55299-02.

Instructions:

1. Remove the top section of cowling from the right engine.
2. Remove the condenser discharge/access panel from the top of the right nacelle.
3. Disconnect the electrical leads from the fan motor (Part Number 51349-00) and loosen the set screw on the impeller (Part Number 55299-02).
4. Remove the firewall motor cover (Part Number 51128-00).
5. Make a slip mark on the motor and clamp at the forward end of the clamp.
6. Loosen the motor clamp, slide the motor forward, and remove the tinnerman nut from the end of the shaft.
7. Replace the old impeller with the new Part Number 460 102 (29E57-1) impeller, making sure the fan shaft boss is toward the condenser. Remove any rust as necessary to facilitate installation.
8. Align the impeller on the motor shaft so that one of the set screws will center on the flat of the shaft. Lightly tighten the set screws so as to allow movement fore and aft on the motor shaft.
9. Position the motor in its clamp at its previously marked location, and lightly tighten the clamp.

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10. Position the impeller on the motor shaft so that aft "face" of the impeller is not less than 1 7/8 inches from the condenser. (See sketch). Make a slip mark on the motor shaft at the impeller's location.
11. Loosen the motor clamp and again slide the motor forward to gain easier access to the impeller set screws, making sure the impeller doesn't slide on the motor shaft.
12. Tighten the set screws in the fan boss and install a new Part Number 506 501 tinnerman nut (C9635-012-1) on the end of the motor shaft.
13. Reposition the motor in its clamp to its originally marked position and tighten the clamp. Make sure the face of the impeller is 1 7/8 inches from the condenser, reposition the motor in its clamp as necessary. Refer to sketch for dimensional reference.
14. Reinstall firewall motor cover and reconnect the motor wires. Make sure wires are connected as shown in the appropriate wiring diagram in the Service Manual.
15. Make appropriate logbook entry stating compliance with this release.

Material Required:

One (1) each per aircraft, Condenser Fan Impeller, Piper Part Number 460 102 (29E57-1).

One (1) each per aircraft, C9635-012-1 Tinnerman Nut, Piper Part Number 506 501.

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 arrange compliance with this Service Release in accordance with the Compliance Time, above.

