



FIELD SERVICE BULLETIN

Page 1 of 2

Document No.

FSB-290-100

Title:

Backward Curved Fan Wheel Tightening

Effective Date:

5/31/09

Revision:

N/C

1.0 PURPOSE

There have been reports of impeller fans loosening after use. This procedure will serve as a guide to properly secure backward curved impeller type fans. While Applied Companies has made an attempt to ensure completeness, unforeseen or unspecified application, details, and variations may preclude covering every possible contingency.

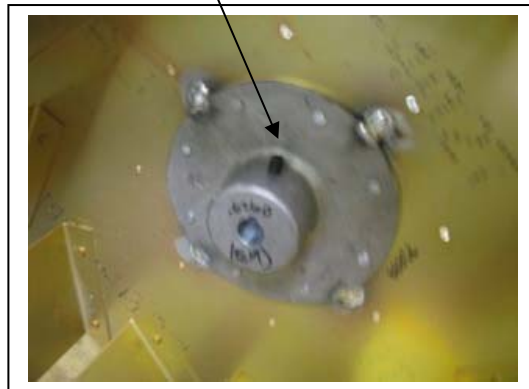
CAUTION: TO PREVENT THE POSSIBILITY OF SERIOUS BODILY INJURY, DO NOT USE OR OPERATE ANY EQUIPMENT OR COMPONENT WITH ANY PARTS REMOVED OR ANY PARTS NOT APPROVED BY APPLIED COMPANIES.

2.0 INSTRUCTIONS

WARNING: This procedure applies only to backward curved impeller fans of the type pictured below. DO NOT utilize this procedure on any other type of fan supplied on Applied Companies equipment.




Keyway Setscrew



- 2.1 Verify the position of the fan on the motor shaft. There should be $\frac{1}{4}$ to $\frac{3}{8}$ inch overlap of the fan wheel to the inlet ring (cone). There are two set screws installed in the fan hub. One tightens against the motor shaft keyway; the second tightens into a recess in the

Warning

Copy is non-controlled
Copy is obsolete 7 days after date of printing
It is the responsibility of the user to verify current revision

	FIELD SERVICE BULLETIN	Page 2 of 2	Document No. FSB-290-100
Title: Backward Curved Fan Wheel Tightening		Effective Date: 5/31/09	Revision: N/C

motor shaft. The setscrew on the keyway can be distinguished from the shaft set screw, as it protrudes approximately ¼” above the hub OD (see photo above).

- 2.2 Place a liberal amount of Loctite No. 243, or equivalent, on both setscrews. Tighten the setscrew over the keyway to 80 inch pounds to insure key is firmly seated in the keyway. Lightly spin the fan wheel to ensure proper engagement and that the fan does not rub the inlet ring. Loosen the setscrew approximately ½ turn.
- 2.3 Torque the adjacent setscrew (the one that contacts the motor shaft directly) to 80 inch pounds, then torque the keyway setscrew to 80 inch pounds.
- 2.4 Re-torque the first (shaft) setscrew to 150 inch pounds and then re-torque the second (keyway) setscrew to 150 inch pounds.

Note: Steps 2.2 through 2.4 need to be completed in 5 minutes before the Loctite hardens.

Caution: Failure to sufficiently tighten the setscrews may allow the fan wheel to further loosen during operation of the ECU, while excessive tightening may damage the setscrew or hub as well as impair their effectiveness.

- 2.5 Before starting the fan wheel, it should be rotated by hand to insure there is nothing to prevent its free turning.

Warning
Copy is non-controlled
Copy is obsolete 7 days after date of printing
It is the responsibility of the user to verify current revision