



KEITH PRODUCTS, INC.

**SERVICE BULLETIN: SB174
BELT GUARD REPLACEMENT INSTALLATION
ASSEMBLY MODIFICATION FOR**

**LEARJET MODEL 31
LEARJET MODEL 55
AND
LEAR JET MODEL 60**

PREPARED BY: M.M. LONG
CHECKED BY: *M. Malone*
APPROVED BY: *[Signature]*

INITIAL ISSUE: August 4, 2000
REVISION: NC
DATE: _____

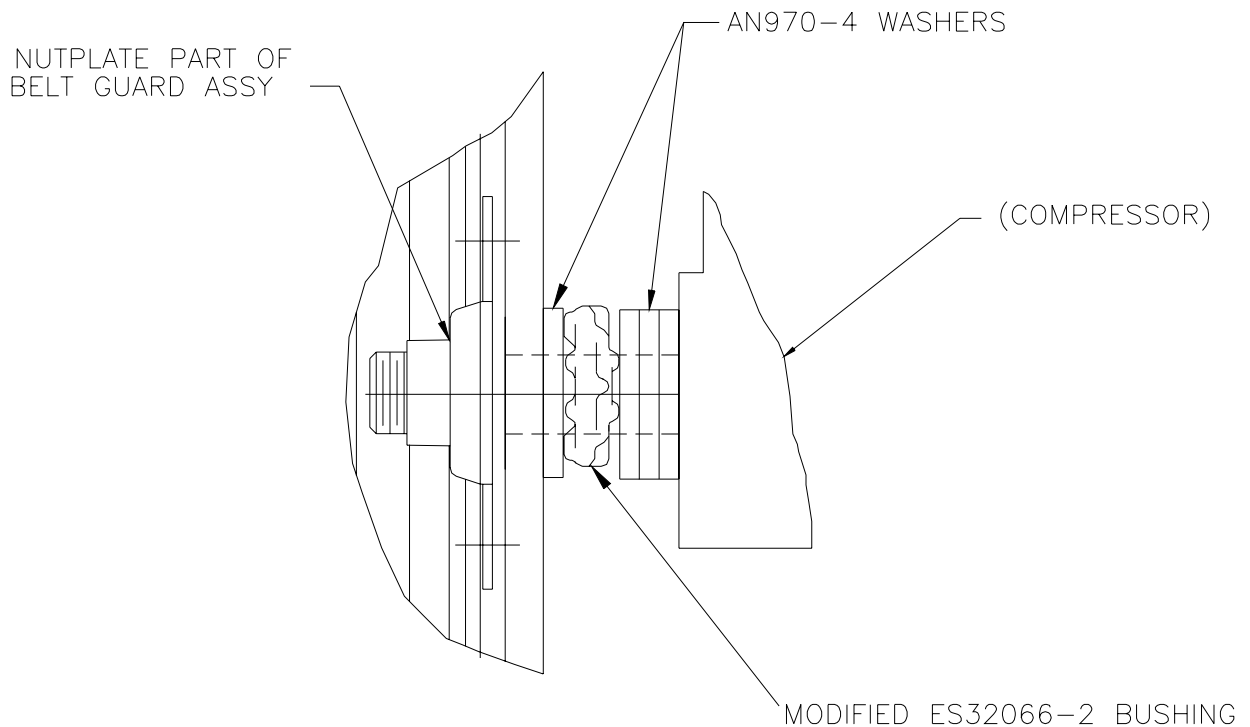
LIST OF REVISIONS

REV	DATE	DESCRIPTION	BY	APPV'D
Orig.	8/4/00	Initial Release	MML	

- 1.0 SUBJECT:** Component replacement to create a stronger and more vibration resistant belt guard.
- 2.0 EFFECTIVITY:** Keith Products' Air Conditioning System Installation Learjet 31, Learjet 55, and Learjet 60 aircraft
- 3.0 REASON:** To create a stronger and more vibration resistant belt guard
- 4.0 DESCRIPTION:** This Service Bulletin contains instructions and component(s) necessary to convert existing installations to the new installation.
- 5.0 COMPLIANCE:** As requested by the customer, spares, or replacement.
- 6.0 APPROVAL:** Minor
- 7.0 ELECTRICAL LOAD DATA:** N/A
- 8.0 WEIGHT AND BALANCE:** Negligible
- 9.0 ACCOMPLISHMENT TIME:** It is estimated to take 1 mechanic 2 hours to accomplish this service bulletin for Learjet model 31 and 4 hours for Learjet models 55 and 60
- 10.0 PARTS SUPPLIED WITH THIS SB:**
- | P/N | DESCRIPTION | QUANTITY |
|--------------|--------------------|----------|
| AN364-832 | NUT | 1 |
| AN525-832R10 | SCREW | 1 |
| AN960-8 | WASHER | 5 |
| ES38130-1 | RUBBER
WASHER | 4 |
| ES32066-2 | BUSHING | 2 |
| AN970-4 | WASHER | 8 |
| 31-0550-5 | BELT GUARD
ASSY | 1 |

11.0 ACCOMPLISHMENT INSTRUCTIONS:

1. Disconnect aircraft power and gain access to the compressor/motor beam assembly.
2. Remove plastic belt guard and discard. From each bolt, remove the NAS42DD8-32 spacer and the two AN960-416 washers.
3. With the bolts still extruding out of the compressor, place three AN970-4 washers on each of the bolts (See Figure 1).

**FIGURE 1**

4. Locate the supplied ES32066-2 bushings; modify the bushings by removing the extruding part of the bushing with a razorblade. Place the bushings on each bolt.
5. Sandwich the bushings between the AN970-4 washers (See Figure 1).
6. Install 31-0550-5 belt guard assembly. Tighten bolts to attach the belt guard. Make certain the pulley wheel and belt are able to rotated without coming into contact with the belt guard.
7. From the fan blade side, drill .170 diameter (#18) hole through upper right side off an shroud assembly and belt guard (See Figure 2). Before drilling holes, make certain an interference does not exist between the fan shroud assembly, fan blade, belt, pulley wheel, or the belt guard assembly.

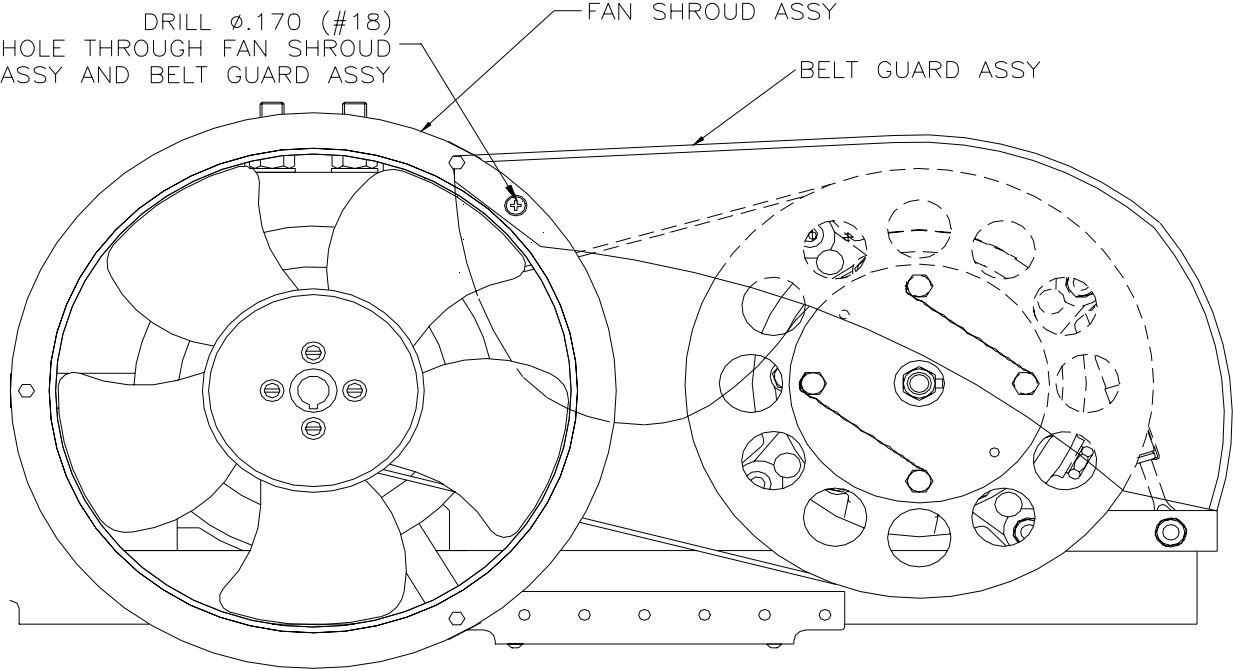
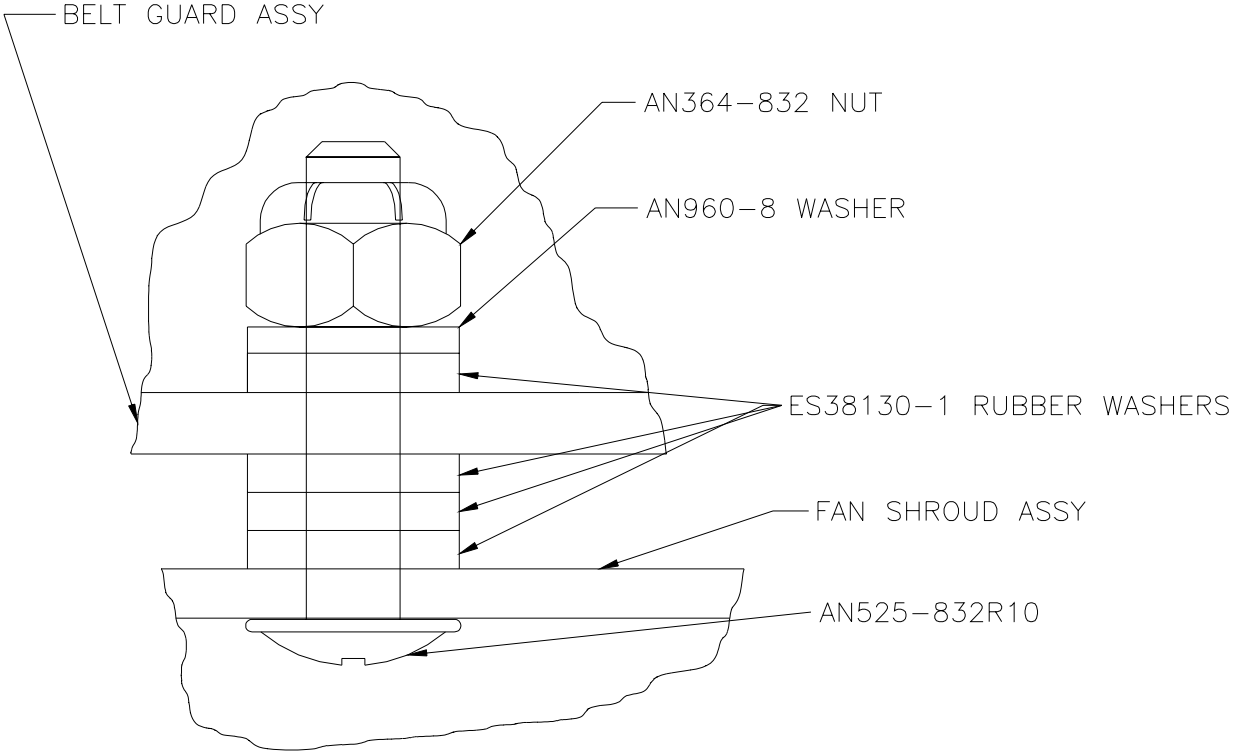


FIGURE 2

- 8. Install hardware between fan shroud assembly and belt guard assembly as shown in Figure 3. It may be necessary to add AN960-8 washers between the rubber washers, to achieve the correct spacing between the belt guard and fan shroud assembly.



LOOKING DOWN FROM ABOVE

FIGURE 3

- 9. Inspect assembly form any interferences.
- 10. Reconnect aircraft power.
- 11. Test belt guard assembly for proper operation.