



## SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. 0017

REVISION C

Page 1 of 5

DATE: January 3, 1983

SUBJECT: Revised Transmission Overhaul Life

MODEL: F-28A/280 Reference AD-74-05-03 and SDB 0017B

EFFECTIVITY: As noted in this revision

COMPLIANCE: Within 25 flight hours or 30 calendar days from receipt of this bulletin

An inspection must be performed on all main rotor gearboxes identified in Airworthiness Directive 74-05-03 and SDB 0017B, copies attached, to establish if such gearboxes are still equipped with thin-walled ring gear carriers. A tool (PN T-0125) is provided with this bulletin to conduct the inspection per the procedure identified on page 2. Ring gear carriers found without holes in the bottom web are satisfactory for continued Use. Ring gear carriers with holes in the bottom web and bottom web thickness such that the checking tool will not slide on are acceptable for service through the normal overhaul cycle. Ring gear carriers found with undersize web thickness such that the checking tool will slide on must be retired from service.

Compliance with the inspection is mandatory within 25 flight hours or 30 days from the receipt of this bulletin, whichever is less.

If replacement of the ring gear carrier is required, a new carrier can be obtained from Enstrom Helicopter Service, but must be installed by either Enstrom Helicopter Service or an Enstrom authorized transmission overhaul center.

### RING GEAR CARRIER INSPECTION PROCEDURE

The inspection of the carrier as noted can be accomplished through the main rotor transmission oil filler port.

NOTE: The oil must be drained and the filler cap assembly must be removed for this inspection.

A “go - no go” gauge (P/N T-0125) is provided with this bulletin to aid maintenance personnel in conducting this inspection. By looking through the oil filler port and rotating the main rotor shaft until the core hole in the webbed outer surface of the carrier is in alignment with the filler port, the inspector can observe the lower inside surface of the ring gear carrier visually. (Ref. Figure 1.) Inspection for the following conditions must be made:

- (A) If no hole is observed on the lower inside web of the carrier in line with the core hole, the carrier is airworthy and can go the full established overhaul limit.
- (B) If a .50 inch diameter hole is observed in line with the core hole, the lower web thickness of the carrier must be checked with the go - no go gauge as indicated in Figure 1. If the gauge will not go on the lower web, it is airworthy and can go the full established overhaul limit.
- (C) If a .50 inch diameter hole is observed in line with the core hole, and the gauge slips over the lower web, the carrier is unairworthy and must be retired from service.

- NOTES:
- 1. The carriers must be checked through all three core holes. If the checking tool slips over the web in any location, the carrier is unairworthy.
  - 2. In order to provide sufficient lead time to procure replacement parts, please notify Enstrom Helicopter Service via the attached prepaid postcard.

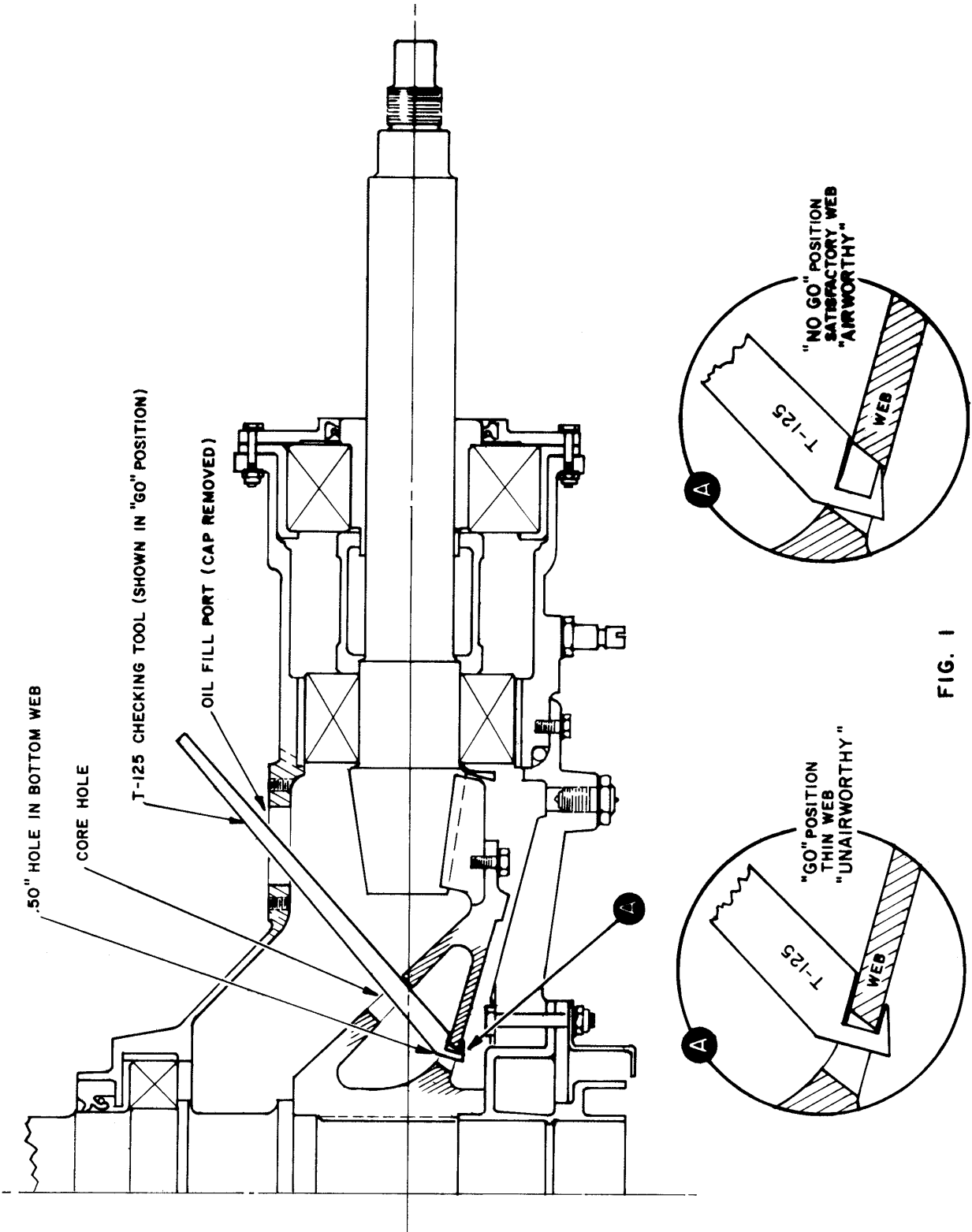


FIG. 1



DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

AERONAUTICAL CENTER

P. O. BOX 25082

OKLAHOMA CITY, OKLAHOMA 73125

August 9, 1974

Airworthiness Directive

Revision

The following Airworthiness Directive Revision issued by the Federal Aviation Administration in accordance with the provisions of Federal Aviation Regulation, Part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety. They are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (FAR 39.3).

74-05-03 **ENSTROM:** Amendment 39-1794 as amended by Amendment 39-1850 is further amended by Amendment 39-1922. Applies to Model F-28A Helicopter Main Rotor Gear Box Serial Numbers:

2A, 3A, 6, 8, 9, 10, 12, 13, 14, 15, 20, 21, 25, 26, 28, 29, 30, 31, 32, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49, 51, 53, 56, 70, 72, 73, 74, 75, 76, 77, 78, 86, 95, 100, 07, 012, 016, 017, 019, 020, 027, 032, 037, 050, 057, 060, 063, 067, 081, 082, 084, 085, 087, 088, 089, 093, 094, 097, 098, 099, 01-001-71, 01-073-69, 02-001-71, 02-02-71, 02-13-70, 03-001-72, 03-002-72, 04-001-72, 05-001-72, 05-003-72, 06-001-72, 06-002-72, 07-001-72, 07-002-72, 07-004-72, 07-005-72, 07-006-72, 08-001-72, 08-002-72, 09-001-72, 09-001-73, 09-002-72, 09-01-69, 09-02-69, 09-04-69, 09-06-69, 09-07-69, 10-001-72, 10-002-72, 11-001-72, 11-002-72, 12-001-72, 13-002-72, 13-003-72, 13-004-73, 14-001-72, 14-002-72, 14-005-72, 14-006-72, 15001-72, 15-002-72, 16-001-72, 16-002-72, 17-001-72, 20-001-72, 21-001-72, 21-002-72, 21-003-72, 22-001-73, 23-001-73, 23-003-73, 25-002-73, 26-001-73, 27-001-73, 27-002-73, 27-003-73, 27-004-73, 28-001-73, 28-003-73, 30-001-73, 31-001-73, 31-002-73, 32-001-73, 32-002-73, 32-004-73, 32-005-73, 32-006-73, 32-007-73, 33-001-73, 33-002-73, 33-003-73, 33-006-73, 33-007-73, 34-001-73, 34-002-73, 35-001-73, 35-002-73, 35-003-73, 35-004-73, 36-001-73, 36-002-73, 36-003-73, 37-001-73, 37-003-73, 37-005-73, 38-001-73, 39-001-73, 39-002-73, 40-001-73, 43-001-73, 43-002-73

Compliance: Required as indicated unless already accomplished. All Main Rotor Gear Boxes that have been overhauled in compliance with this airworthiness directive can be identified by an "F" after the serial number.

(a) Main rotor gear boxes (P/N 28-13101) with 975 hours or more time in service since new or last factory overhaul must be overhauled at the Enstrom factory or a factory approved facility, to retire all ring gear carriers (P/N 28-13106) manufactured in accordance with Enstrom Drawing No. 28-13106, Revision E or earlier, within the next 25 hours time in service after the effective date hereof.

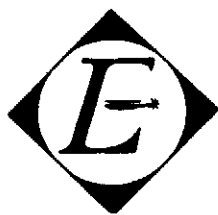
(b) Main rotor gear boxes (P/N 28-13101) with less than 975 hours time in service since new or last factory overhaul, as of the effective date hereof, must be overhauled at the Enstrom factory or a factory approved facility to retire all ring gear carriers (P/N 28-13106) manufactured in accordance with Enstrom Drawing No. 28-13106 Revision E or earlier, prior to the accumulation of 1,000 hours time in service since new or last factory overhaul.

(c) Main rotor gear boxes (P/N 28-13101) whose hours in service since new or last factory overhaul are unknown will be considered to have a total time of 975 hours minimum since new or last factory overhaul and thus must be overhauled in accordance with paragraph (a), within the next 25 hours time in service after the effective date hereof.

Amendment 39-1794 became effective March 7, 1974.

Amendment 39-1850 became effective May 21, 1974.

This Amendment 39-1922 becomes effective August 20, 1974.



**R. J. Enstrom Corporation**  
**SERVICE NOTE**



SERVICE NOTE NO. 0017B.....

Supplement to 0017

DATE: July 17, 1974  
SUBJECT: Added Limitations on Main Rotor Gearbox Overhaul Life  
MODEL: F-28A  
EFFECTIVITY: As Noted in Service Note 0017  
COMPLIANCE: As Noted Below

Since the possibility exists that some of the old style carriers may have been reinstalled in remanufactured main rotor gearboxes at the time of overhaul, helicopters carrying serial numbers prior to 176 should be checked to see if the gearbox serial number is included in the following:

03A, 016, 025, 041, 050, 063, 073, 082, 09-02-69, 08-001-72, 20-001-72

Main rotor gearboxes still in service with these serial numbers, and having a total time of 100 or more hours since reinstallation, should be overhauled within the next five hours.

Main rotor gearboxes listed that do not have a total time of 100 hours since reinstallation should be overhauled at the earliest convenience of the operator or before the next 100-hour inspection.