



SERVICE BULLETIN

SUBJECT: Norco, Inc. Thrust Reverser Hold Open Rod - Check Inner Rod Retaining Screw

1. PLANNING INFORMATION

A. Effectivity

RB211-535C and RB211-535E4 Thrust Reversers containing, Norco P/N A2972-1 & A2972-2, for the following serial numbers:

- 1) A2972-1 - S/N's 0001, 0003, 0006-0008, 0020
0029, 0031, 0032, 0034, 0036-0039,
0041, 0042, 0043, 0075-0150, 0152-0164.
- 2) A2972-2 - S/N's 0002, 0003, 0005, 0006, 0008-0043,
0049-0074.

B. Reason

The above serial numbers may be upgraded with larger retaining screw and helicoil insert to prevent the inner rod retaining screw from working free due to vibration or excess force, letting the inner rod be pulled from the assembly.

This service bulletin is issued in order to correct the remaining few units in the field for which this condition exists.

C. Description

This service bulletin identifies the suspect units and provides a detailed description for incorporating this design improvement.

D. Manpower

Required to remove rod assembly from Aircraft	.6 hrs.
Required to disassemble, rework inner rod, and reassembly	1.2 hrs.
Required to replace rod assembly in Aircraft	<u>.6 hrs.</u>
TOTAL	2.4 hrs.

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E. Material Cost and Availability

The larger retaining screw, MS16998-43, and related components to accomplish this service bulletin are available from the manufacturer at no charge to the operator.

Operators are to submit a no charge purchase order for the reworked kits required. The purchase order must specify this service bulletin number, part number, and serial number of the units to be reworked. Delivery schedule will be furnished upon receipt of their written request. Any other costs related to the incorporation of this bulletin should be absorbed by the airline.

Direct purchase order to: Norco, Inc.
 P.O. Box 405
 Georgetown, CT 06829
 Attention: Shirley Crisi

F. Weight

Incorporation of this service bulletin will not change the weight of the hold open rod assembly.

G. Publications Affected

<u>Norco Publication</u>	<u>Chapter and/or Section</u>
Component Maintenance Manual Strut Assembly	78-31-03

2. ACCOMPLISHMENT INSTRUCTIONS

A. Disassembly Instructions

Refer to Fig. 1 for item Identification.

- 1) Remove the two rivets (3) from the outer tube assembly (22).
- 2) Remove the clevis end plug (6 or 6A), with clevis fitting (5) and rivet (4) attached, from the outer tube assembly (22).

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- 3) Push inner rod assembly (13) fully to the rear of outer tube assembly (22).
- 4) While holding end fitting (12) in a soft jawed vice, insert a 5/32 hex wrench into the rear of tube assembly (22). Unscrew and remove socket head cap screw (7) from flat washer (9), spacer (10) and discard these components.
- 5) Remove inner rod assembly (13) by pulling it forward through the front of tube assembly (22).

B. Rework Instructions - (See Fig. 2)

- 1) Install inner rod in a lathe so that access to the existing 10/32 threaded hole is available.
- 2) Drill .261 dia. x .750 deep.
- 3) Countersink 120 \pm 5 x .28/.31 dia.
- 4) Tap with helicoil STI Tap #4FPA-H3 x .625 min. full thread.
- 5) Install helicoil screw lock insert P/N MS21209-F4-20 with helicoil tool No. 7552-4.
- 6) Break off driving tang with helicoil tang break off tool #3695-4.

C. Assembly Instructions

- 1) Reinstall inner rod (13) through forward end of outer tube (22). Locking lever (15) will have to be depressed in order to obtain access to bore.
- 2) Lock the lock rod assembly (13) retracted. Check that the lock (15) is engaged with the front locking groove of item (13).
- 3) Place the spacer (10) against the rear end of the lock rod assembly (13) in the outer tube assembly (22).

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- 4) Insert the flat washer (9) into the compression spring (8), wedging it between the first and second turns at one end of the wire coil.
- 5) Insert the assembled washer (9) and spring (8) -- washer end first -- into the outer tube assembly (22). Press the washer end of the spring (8) against the rear end of the lock rod assembly (13).
- 6) Attach the spring (8), flat washer (9), and spacer (10) to the lock rod assembly (13) by passing the socket head cap screw (7) through items (8), (9), and (10) and threading item (7) into the helicoil insert in the rear end of item.
- 7) Grasp forward portion of inner rod (13) in a soft jawed vice and torque socket head cap screw (7) to 50 in. lbs.
- 8) Fully extend and lock the rod assembly (13). Insert the plug body of the clevis end plug (6 or 6A) into the rear end of the outer tube assembly (22). Align the four rivet holes in the plug body with the four holes for two rivets (3) near the rear end of item (22).
- 9) Respectively insert two rivets (3) through the two sets of four rivet holes in the outer tube assembly (22) and clevis end plug (6 or 6A). If a rivet (3) is a maximum-tolerance diameter, the holes may be enlarged by drilling to no more than 0.162-inch (4.1168-mm) diameters to receive the rivet.
- 10) Spin heads on the unfinished ends of the rivets (3) close to the surface of the outer tube assembly (22).

D. Reidentify

After incorporation of this E.O., a -1 should be added to the existing part number to indicate the incorporation of this service bulletin.

a. Example: Part Number After Reidentification

A2972-1-1
A2972-2-1

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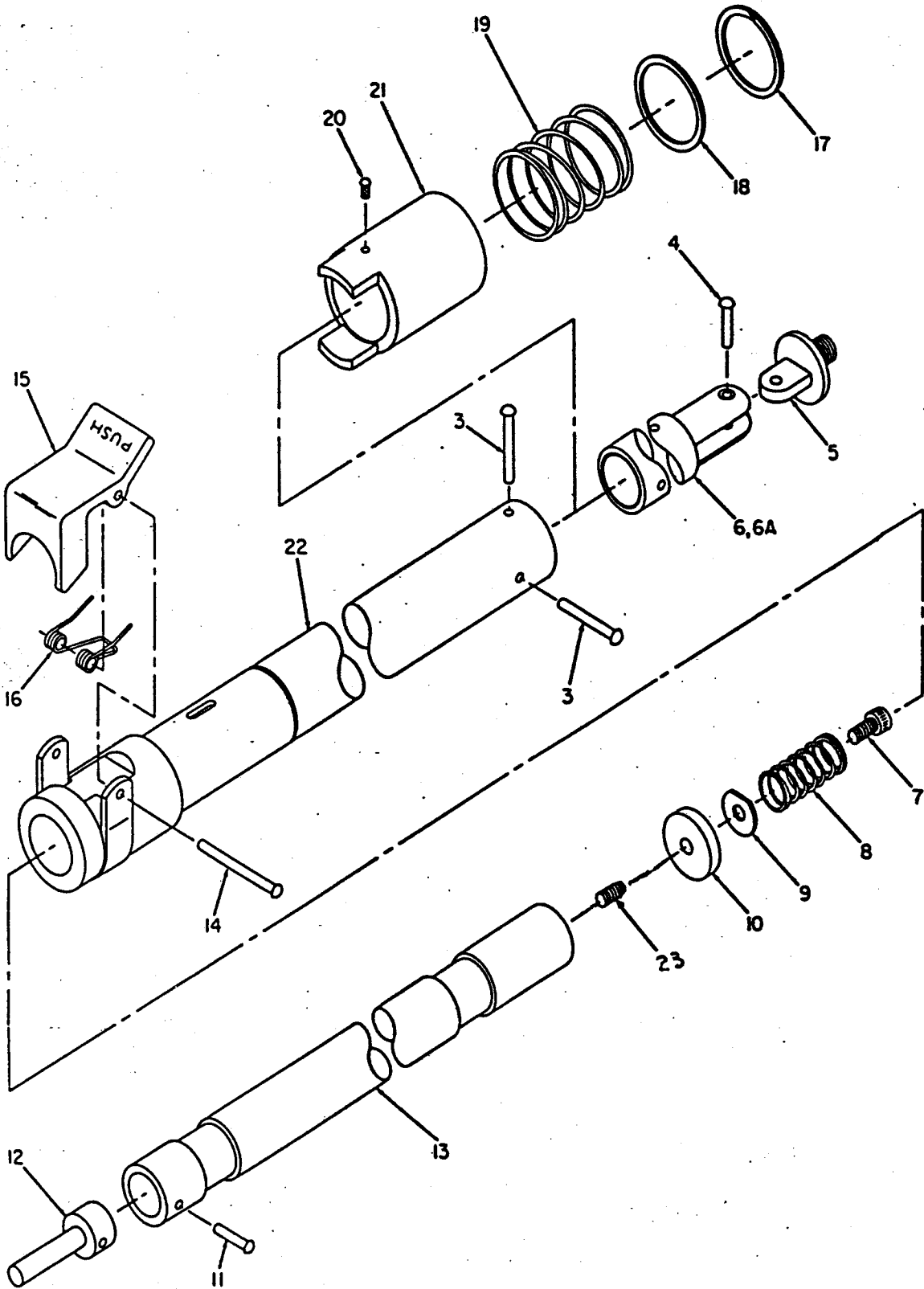
Material Information

A rework kit is available under part number RW2972-1 which contains all parts required to accommodate this service bulletin.

<u>Item #</u>	<u>P/N's Provided</u>	<u>Quantity Assembly</u>	<u>Unit Price</u>	<u>Keyword</u>
3	MS20613-5C20	2	N/C	Rivet
10	AM2972-1-8	1	N/C	Spacer
9	20C0625-02	1	N/C	Washer, Flat
8	S348-1	1	N/C	Spring Compression
7	MS16998-43	1	N/C	Screw
23	MS21209-F4-20	1	N/C	Helicoil Insert

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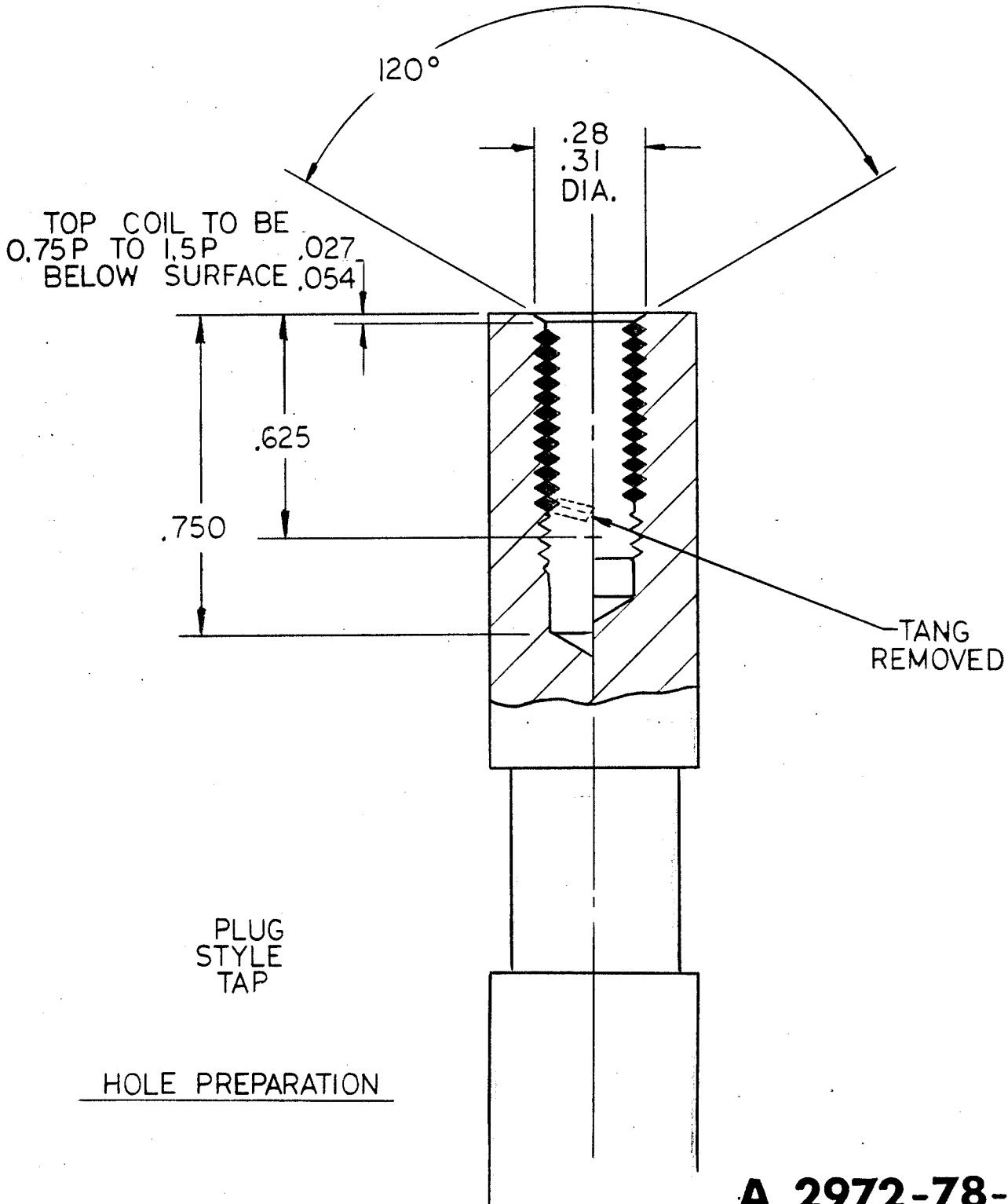
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Figure 1

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FIG. 2

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