



8301 Imperial Dr.
Waco, Texas 76712

SERVICE BULLETIN

NO. A3312-71-2

POWER PLANT - FAN COWL - HOLD OPEN ROD
REPLACE DAMPER GUIDE ROD

I PLANNING INFORMATION

A. Effectivity

(1) Component Affected

This Service Bulletin affects hold open rods Norco P/N A3312-2, Rohr P/N 277D1250-503, with the following serial numbers:

S/N 0001-0084

These rods are installed in CF6-80E1 engine nacelles on Airbus A330 aircraft.

B. Reason

The incorporation of this Service Bulletin will prevent bending of the damper guide rod which has resulted in difficulty to fully retract the hold open rod.

C. Description

This Service Bulletin provides detailed instructions required for all users to incorporate improved guide rod assembly in Norco P/N A3312-2, Rohr P/N 277D1250-503. This procedure consists of removing the four (4) rivets in the rear end of the outer tube and replacing the damper guide rod and end cap with new end cap assembly, AM3312-2-50. The reworked rod will be reidentified as Norco P/N A3312-3, and Rohr P/N 277D1250-505.

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D. Approval

The repair and modifications herein comply with the applicable Federal Aviation Regulations (FAR).

E. Manpower

Required to remove rod from aircraft	.25 Hrs.
Replace end cap assembly	.75 Hrs.
Replace strut in aircraft	<u>.25 Hrs.</u>
TOTAL	1.25 Hrs.

F. Material Cost and Availability

OPTION 1 - REWORK AT NORCO

Norco offers to accomplish the modification at no cost, if rods are returned to MarathonNorco Aerospace, Waco, TX , freight and any other charges prepaid.

Norco will ship rods back to sender, FOB, Waco, Texas , within 30 days.

MarathonNorco Aerospace, Inc,
 Ship to: 8301 Imperial Dr.
 Waco, Texas 76712
 254-776-0650 Main Line
 254-776-6558 Fax

OPTION 2 - REWORK AT OPERATOR

The parts identified in Section III, A. may be obtained from NORCO, INC. as follows:

<u>Part No.</u>	<u>Description</u>	<u>Availability</u>	<u>Price</u>
RW3312-2	Rework Kit, Hold Open Rod	7-15 Days	No Charge

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The purchase order should specify this Service Bulletin number A3312-71-2.

Direct Purchase Order to: MarathonNorco Aerospace, Inc,
8301 Imperial Dr.
Waco, Texas 76712
254-776-0650 Main Line
254-776-6558 Fax

For Option 1, Norco will issue a credit of \$70.00 for each rod returned to Norco for modification to reimburse reasonable freight charges. For Option 2 this \$70.00 credit will be issued when airline requests kit to accomplish modification themselves and this credit will reimburse labor costs.

G. Tooling - Cost and Availability

Not applicable.

H. Weight

The effect of this Service Bulletin on weight and balance is negligible.

I. Other Publications Affected

Component Maintenance Manual No. 71-10-49 (Rev. B 10/15/94) has been revised to reflect this design improvement.

II. ACCOMPLISHMENT INSTRUCTIONS

- A. Inspect serial number of hold open rods. For S/N's 0002, 0005, 0008, 0011, 0013, 0016, 0023, 0024, 0025, 0044, 0045, and 0072, reidentify per Paragraph L. Proceed to Paragraph B for all other serial numbers from S/N 0001 through 0084. If serial number is missing, return hold open rod to Norco to confirm latest configuration is incorporated and reapply S/N.
- B. Remove hold open rod from aircraft.

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- C. Drill out four (4) rivets in outer tube, shown in Figure 1, using a No. 19 drill, .166 inch (4.216 mm) diameter. Center drill point in center of rivet. Drill only deep enough until rivet head separates from stem. Tap remaining rivet into outer tube.
- D. Remove end cap assembly from end of outer tube. Remove hex nut, damper, and spring from guide rod and save for use in new end cap assembly.
- E. Remove spherical bearing, MS14102-5, from end cap assembly by pressing out. Press bearing into new end cap assembly, AM3312-2-50, and stake at 8 points equally spaced around both sides of the bearing housing. The staking tool should have a spherical radius of .093 - .108 inches (2.362 - 2.743 mm) and produce a .010 - .015 inch (.254 - .381 mm) indentation located .050 - .060 inches (1.270 - 1.524 mm) from the O.D. of the bearing.
- F. Insert end cap assembly into end of outer tube and align rivet holes with pilot holes in end cap assembly. Drill out holes in end cap assembly using a No. 19 drill .166 inch (4.216 mm) diameter and holes in outer tube as pilot holes.
- G. Place mark on outer tube and end cap to indicate alignment of four (4) holes. Remove end cap assembly from outer tube.
- H. Remove all metal chips from end cap assembly and inside of outer tube.
- I. Place spring and damper on guide rod of end cap assembly. Apply Loctite No. 640, or equivalent, to threads of guide rod and screw on hex nut. Torque to 10 in. lbs.
- J. Place end cap assembly back into end of outer tube and align rivet holes using marks placed on outer tube and end cap assembly.
- K. Apply primer TT-P-1757 and install four (4) MS21141-0503 rivets using a double action tool as indicated in Military Standard MS21141.

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- L. Reidentify with new P/N, Norco P/N A3312-3, and Rohr P/N 277D1250-505, using vibroscriber or rubber stamping. Cross out the Norco -2 and the Rohr -503 and add the Norco -3 and the Rohr -505 above the old dash number. Overcoat rubber stamping with Bostik 683-2-2 or 683-3-9 or equivalent.
- M. Reinstall hold open rod.

III. MATERIAL INFORMATION

A. Parts Required Per Hold Open Rod

A rework kit is available, part number RW3312-2, which contains the following parts to rework each hold open rod A3312-2.

<u>Item No.</u>	<u>P/N's Provided</u>	<u>Quantity</u>	<u>Keyword</u>
1	MS21141-0503	4	Rivet
2	AM3312-2-50	1	End Cap

B. Parts Required to Modify Spares

(If Applicable) Same parts as items III.A. above.

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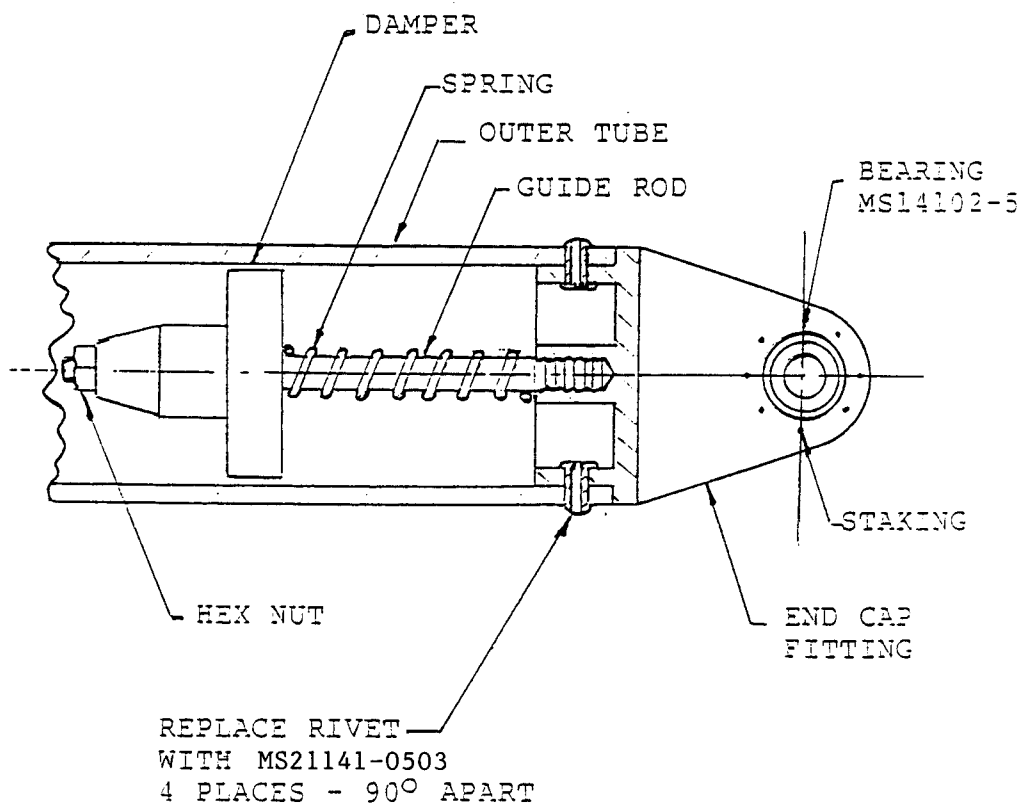


FIGURE 1 - END CAP ASSEMBLY AND DAMPER

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