

Nomad

SERVICE BULLETIN

Reference No 277

**TRANSMITTAL LETTER
FOR
SERVICE BULLETIN NMD-57-10 Rev 2**

**WING STRUT BOLT REPLACEMENT
(MOD N654A AND MOD N654B)**

1. Reason

Revision 3 to IRM introduces a series of inspections in fatigue critical areas. One of these inspections is for the wing strut upper fitting and calls for the replacement of the six attachment bolts which are peened over. This service bulletin is issued to enable operators to accomplish this task.

2. Reason for Revision 1

To include correct reamer part numbers and to revise reamer manufacturing details shown in Figure 1 to comply with the latest engineering drawing.

3. Reason for Revision 2

In order to improve the performance of the reamer the flute design has been changed. Figure 1 has been revised to incorporate these changes.

4. Instructions

- A. Remove Service Bulletin NMD-57-10 Rev 1 and Transmittal letter dated 1 February 1995 from the Service Bulletin publication.
- B. Insert Service Bulletin NMD-57-10 Rev 2 and Transmittal letter dated 6 June 1995 into the Service Bulletin publication and annotate the index accordingly.

Revision Status

Original	23 January 95
Revision 1	1 February 95
Revision 2	6 June 1995

C. Mulhauser

C MULHAUSER
TECHNICAL SERVICES MANAGER

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WING STRUT BOLT REPLACEMENT (MOD N654A AND MOD N654B)

1. PLANNING INFORMATION

A. Effectivity

(1) Aircraft Affected

Mod N654A — All pre-Mod N260 N22 Series and N24 Series aircraft.

Mod N654B — All post Mod N260 N22 Series and N24 Series aircraft.

(2) Spares Affected

None.

B. Reason

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Reason for Revision 1

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Reason for Revision 2

In order to improve the performance of the reamer the flute design has been changed. Figure 1 has been revised to incorporate these changes.

C. Description

The bolts are to be removed one at a time, the holes inspected and, should the holes be undamaged, longer bolts of the same diameter are to be fitted. Should a hole be damaged, the hole is reamed and fitted with the appropriate oversize bolt. The new bolts are fitted with castellated nuts and split pins.

D. Compliance

(1) Compliance with this Service Bulletin is mandatory.

(2) To be carried out at the next wing strut upper fitting fatigue critical inspection.

E. Approval

The requirement detailed herein has been approved by a person authorised under Civil Aviation Regulation 35 and conforms with the type certificate requirements.

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F. Manpower

12 man-hours.

G. Materials — Price and Availability

Contact ASTA Defence (Logistics) for price and availability of parts.

H. Tooling — Price and Availability

Special line reamers PN 1/N-88-267 and PN 2/N-88-267 are available on lease or purchase from ASTA Defence (Logistics). Cost available on application.

Alternatively, the special line reamer may be locally manufactured according to Figure 1.

I. Weight and Balance

Not applicable.

J. References

Inspection Requirements Manual Part 4.

K. Publications Affected

Illustrated Parts Catalogue	Chap 57-40-01
Maintenance Manual	Chap 57-40-00
Inspection Requirements Manual	Part 4

2. ACCOMPLISHMENT INSTRUCTIONS



TO AVOID DISPLACING THE SHIMS FITTED BETWEEN THE END FITTING AND THE STRUT REMOVE ONLY ONE BOLT AT A TIME AND REPLACE IT BEFORE REMOVING THE NEXT BOLT.

- A. During the fatigue critical inspection (Ref IRM Part 4), remove the existing bolts, nuts and washers one at a time, and replace with new bolts, washers, nuts and split pins according to IRM Part 4.

NOTE

During subsequent inspections the post mod N654 bolts need only be replaced if bolt and/or hole condition warrants bolt replacement.

- B. The hole diameters for the replacement bolts are:

Basic	0.3125/0.3134 (H8)
1st Oversize	0.3281/0.3290 (H8)
2nd Oversize	0.3437/0.3446 (H8)

NOTE

No further oversize is permitted.

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- C. If necessary, carefully ream the bolt holes, using a suitable lubricant, with special reamer PN 1/N-88-267 for 1st oversize bolts and special reamer PN 2/N-88-267 for 2nd over size bolts (Ref Fig 1).

NOTE

- Use of suitable lubricant is essential and the reamer must be removed every 4 to 6 turns to remove the cuttings from the reamer flutes and to reapply lubricant.
 - Difficulty may be experienced in inserting the special reamer (1/N-88-267 or 2/N-88-267) into the entrance of the far side hole due to hole misalignment. Such hole misalignment should be corrected by means of a normal hand reamer of the same nominal size as that of the existing hole.
- D. When the inspection is complete and the new bolts are installed, remove the existing identification plate and install new identification plate PN SD340 then re-identify the Wing Strut Assembly with the appropriate Part Number as follows:

1/N-20-1027 (Pre Mod N260)
1/N-20-1028 (Post Mod N260)

3. MATERIALS INFORMATION

A. Parts Required per Aircraft

The following parts are required for each aircraft and are available from ASTA Defence (Logistics).

New Part No	Qty	Description	Old Part No	Remarks
Pre-Mod N260 Aircraft				
NAS6205-44D	A/R	BOLT, Close Tolerance, Standard	NAS1105-44	Scrap
NAS6205-44DX	A/R	BOLT, Close Tolerance, 1st O/size		
NAS6205-44DY	A/R	BOLT, Close Tolerance, 2nd O/size		
Post Mod N260 Aircraft				
NAS6205-46D	A/R	BOLT, Close Tolerance, Standard	NAS1105-46	Scrap
NAS6205-46DX	A/R	BOLT, Close Tolerance, 1st O/size		
NAS6205-46DY	A/R	BOLT, Close Tolerance, 2nd O/size		
Common Parts				
MS20002C5	12	WASHER, CSK		
AN960KD516	A/R	WASHER, Flat	AN960-516	Scrap
AN960KD516L	A/R	WASHER, Flat, Thin	AN960-516L	Scrap
MS17826-5	12	NUT, Self-locking, Castellated		
MS24665-136	12	PIN, Cotter (Split)		
SD340	2	Identification Plate	SD340	

NOTE

Post Mod N260 bolts (Mod N654B) may be used in place of Pre Mod N260 bolts (Mod N654A) on Pre Mod N260 struts provided adequate extra shim/washers (approx. 1/8 in thickness required) placed under the nut are used to take up extra bolt shank length.

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4. SPECIAL TOOLS AND EQUIPMENT

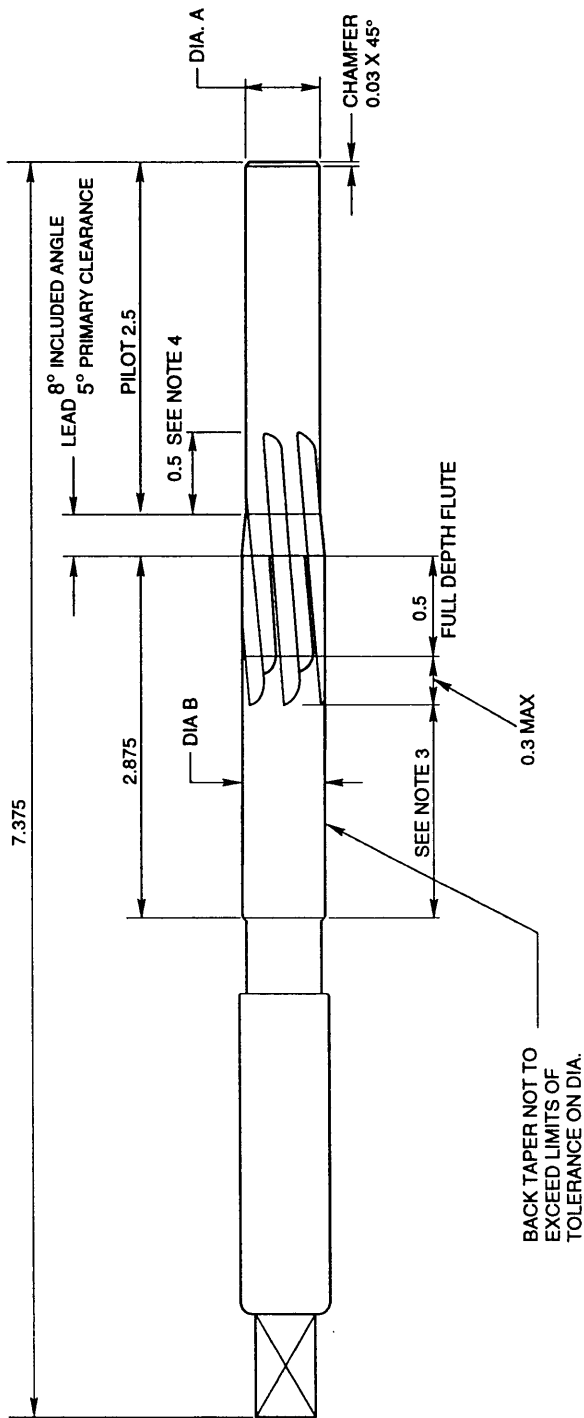
Special Line Reamer — PN 1/N-88-267 (Ref Fig 1)

Special Line Reamer — PN 2/N-88-267 (Ref Fig 1)

5. RECORDING ACTION

Record compliance with Service Bulletin NMD-57-10 Rev 2 (Mod N654A or Mod N654B) in the Airframe Log Book.

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- NOTES:
1. EXCEPT AS SHOWN, REAMER IS A HELICAL FLUTED (6 FLUTES) HAND REAMER MADE FROM HIGH SPEED STEEL - COMMERCIAL TO ANSI B 94.2-1964
 2. FOLLOWING GRINDING, A TRIAL HOLE IN QQ-A-225/6 T851 MATERIAL (PREVIOUSLY PILOT REAMED—REFER TABLE) IS TO BE REAMED USING SUITABLE LUBRICANT. FINISHED HOLE DIAMETER IS TO BE AS PER TABLE AND AT LEAST THREE FLUTES MUST BE SHARING THE CUTTING. REAMER TO BE RE GROUND OR STONED UNTIL THESE CONDITIONS ARE MET
 3. FLUTES NOT REQUIRED OVER THIS LENGTH
 4. NO CUTTING EDGES OVER THIS LENGTH

	PART NO.	DIA. A	DIA. B	PILOT HOLE DIA	FINISHED HOLE DIA
FIRST OVERSIZE	1/N-88-267	0.3125/0.3123	0.3281/0.3284	$\frac{5}{16}$ H8 ★	0.3281/0.3290 H8 ★
SECOND OVERSIZE	2/N-88-267	0.3281/0.3279	0.3437/0.3440	$\frac{21}{64}$ H8 ★	0.3437/0.3446 H8 ★

★ SEE NOTE 2

Figure 1 Special Line Reamers - Upper Strut Fittings