



SERVICE BULLETIN

FUJI HEAVY INDUSTRIES LTD.

HEAD OFFICE

: SUBARU BLDG,

SHINJUKU, TOKYO, JAPAN

NO : FAS - 075

DATE : February 5, 1975

1. SUBJECT : PART I - Inspection and Rework of Spinner Bulkhead.
PART II - Additional Installation of Forward Spinner Bulkhead.
2. AIRCRAFT AFFECTED : PART I and PART II - FA-200-160 and FA-200-180AO Aircraft S/N 41, 102, 214, 244 thru 265.
3. PRIORITY : Essential.
4. REASON : PART I - Field reports of several cracked spinner bulkheads make the following inspection and rework of the bulkhead necessary for safety of flight. The crack originated in the edge of the bulkhead cutout area.
PART II - To install forward spinner bulkhead.
5. DESCRIPTION : PART I - Remove the propeller spinner and bulkhead, strip paint, and visually inspect bulkhead for evidence of cracks. With particular attention, dye penetrant inspect the cutout area of the bulkhead.
 - (1) If any crack is found, replace with a new serviceable part. Prior to installation, ensure that the edges of cutouts are reworked as shown in figure 1.
 - (2) If no cracks or damage is noted, rework the bulkhead as illustrated in figure 1, and then install it in place.

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(3) Special Periodic Inspection :
 Until the forward spinner bulkhead
 is installed in accordance with
 PART II of this bulletin, accomplish
 the special inspections as follows :

Daily Inspection : Visually inspect
 the bulkhead, particularly cutout
 areas, for signs of crack.

10 Flight Hour Inspection : Dye
 penetrant inspect cutout areas of
 the bulkhead.

PART II - Install the forward spinner bulkhead.

6. ACCOMPLISHMENT : PART I - Immediately upon receipt of this
 bulletin.

PART II - No later than February 28, 1975.

7. APPROVAL : JCAB Approval (No-Tokyo-100) January 27, 1975.

8. PARTS REQUIRED : The following parts are required to comply with
 this bulletin :

PART I

<u>NO</u>	<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>USABLE ON</u>
*1	203-960203-051	BULKHEAD ASSY	1	FA-200-180AO
*2	203-960203-101	BULKHEAD ASSY	1	FA-200-160

* Required only if bulkhead replacement is necessary.

PART II

<u>NO</u>	<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>USABLE ON</u>
1	200-960014-001	BULKHEAD ASSY	1	FA-200-180AO
2	200-960014-101	BULKHEAD ASSY	1	FA-200-160
3	203-960204-007	SPACER	4	FA-200-160 and FA-200-180AO
4	203-960202-009	SPACER	6	FA-200-160
5	MS27039-1-10	SCREW	6	Both Models
6	AN960-10L	WASHER	6	"

<u>NO</u>	<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>USABLE ON</u>
7	CEMEDINE 1560 or EQUIVALENT	ADHESIVE	AR	Both Models
8	MS21075L3	NUTPLATE	6	"
9	MS20426AD3	RIVET	12	"

9. SPECIAL TOOL : Dye Check Solution
10. WEIGHT AND BALANCE : Negligible.
11. REFERENCE : N/A
12. MANHOUR REQUIRED : PART I - 4 manhours required.
PART II - 3 manhours required.
13. DETAILED INSTRUCTIONS :

PART I - Dye Penetrant Inspection, Cutout Refinishing and Special Inspection of Propeller Spinner Bulkhead.

- (1) Remove upper and lower cowlings.
- (2) Remove ten screws attaching spinner and remove spinner.
- (3) Remove six bolts attaching propeller and remove propeller.
- (4) Remove twelve bolts attaching spinner bulkhead and remove spinner bulkhead.
- (5) After stripping paint from bulkhead with paint remover, clean surfaces with naphtha or equivalent solvent.
- (6) Visually inspect bulkhead for evidence of crack.
- (7) Dye penetrant inspect bulkhead cutout area for cracks. (Reference figure 1, areas A.)
- (8) If no cracks or damage is found, accomplish the following rework :
 - (a) Using a suitable file and sandpaper No. 240 or finer, refinish cutout areas as illustrated in figure 1, detail C. Use extreme care to remove material minimum required and form round edges. Sharp edge as shown in figure 1, detail B, is not permissible.
 - (b) Apply zinc chromate primer to refinished surfaces.
- (9) In the event that any damage or dye penetrant indication is found, replace bulkhead with a new serviceable part. Prior to installation, ensure that cutout edges are finished as shown in figure 1, detail C.

If not, rework bulkhead per instructions as stated in the above steps (8) - (a) and (b).

- (10) Reverse the preceding steps (1) through (4) to install removed parts.
- (11) Special Periodic Inspection : After completion of the above inspection and rework, accomplish periodic inspections as specified below :
 - (a) Preflight Check : Visually inspect bulkhead, particularly cutout areas, for cracks or other damage. Removal of spinner is not required.
 - (b) 10 Flight Hour Inspection : Remove propeller spinner and dye penetrant inspect cutout area for evidence of crack.

PART II - Additional Installation of Forward Spinner Bulkhead

- (1) Perform the steps (1) through (9) of PART I.
- (2) Repaint propeller spinner bulkhead (aft).
- (3) Assemble propeller spinner and bulkhead (aft) removed in the previous steps (2) and (4) of PART I. Place the assembled unit on a suitable flat plate (preferably surface plate) and scribe reference line for bulkhead (fwd) installation as shown in figure 3.
- (4) Remove attaching screws and separate spinner from bulkhead. Starting at center of spinner top, draw a straight line down through the bulkhead attaching hole, and mark intersection with the reference line drawn in the above step (3). (Reference figure 4, point "A".)
- (5) Measure and mark a point 60 mm above the point A. (Reference figure 4, point "B".)
- (6) Using point "B" as reference point, mark six (6) hole locations equally spaced on the line drawn in the previous step (3).
- (7) Drill three (3) No.50 pilot holes in every other location.
- (8) Install propeller spinner bulkhead (aft).
- (9) Position propeller on mating flange of engine. Also position forward propeller spinner bulkhead, P/N 200-960014-001 for FA-200-180AO, or P/N 200-960014-101 for FA-200-160, and temporarily secure with six (6) propeller attaching bolts as shown in figure 6.
- (10) Temporarily install propeller spinner, and check to ensure that the three pilot holes align with the marked line on forward spinner bulkhead.

- (11) With spinner and forward bulkhead positioned properly (as checked above), drill six (6) 1/4 inch diameter holes through spinner and forward bulkhead in the locations (three No. 50 holes already drilled) marked in the previous step (6).
- (12) Remove propeller spinner, propeller, and forward spinner bulkhead.
- (13) Using twelve (12) rivets MS20426AD3, install six (6) nutplates MS21075L3 on inside of forward spinner bulkhead.
- (14) Bond spacers to propeller spinner as illustrated in figure 5.

NOTE

Spacers should be selectively used as follows :

P/N 203-960202-007 4ea required
for FA-200-180AO.

P/N 203-960202-007 4ea and P/N 203-
960202-009 6ea required for FA-200-160.

- (15) Install forward spinner bulkhead together with propeller as follows :

Position propeller on mating flange of engine. Position forward spinner bulkhead, P/N 200-960014-001 for FA-200-180AO or P/N 960014-101 for FA-200-160, and secure with six (6) propeller attaching bolts as shown in figure 6.
- (16) Install propeller spinner as illustrated in figure 6.
- (17) Install engine cowlings.

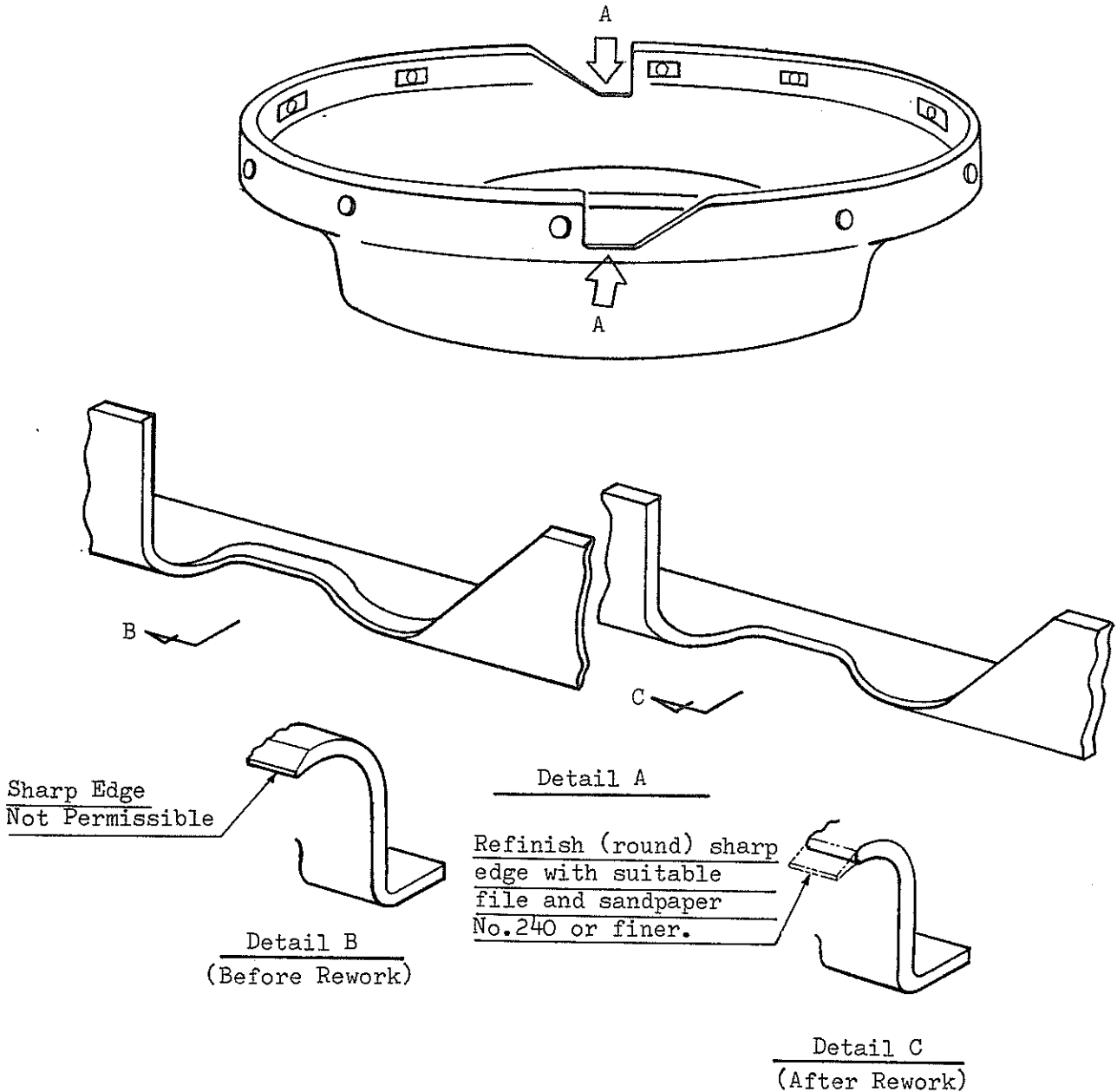


Figure 1. Details for Bulkhead Rework

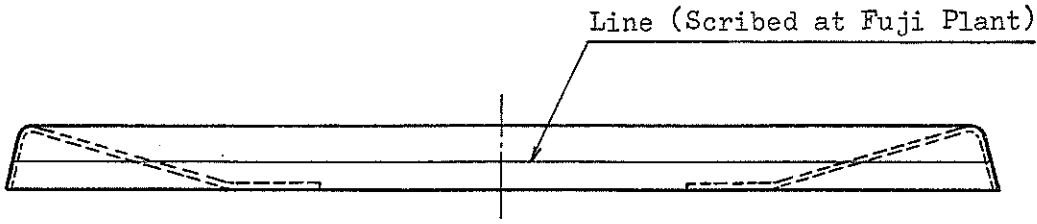


Figure 2. Scribed Line on Forward Spinner Bulkhead

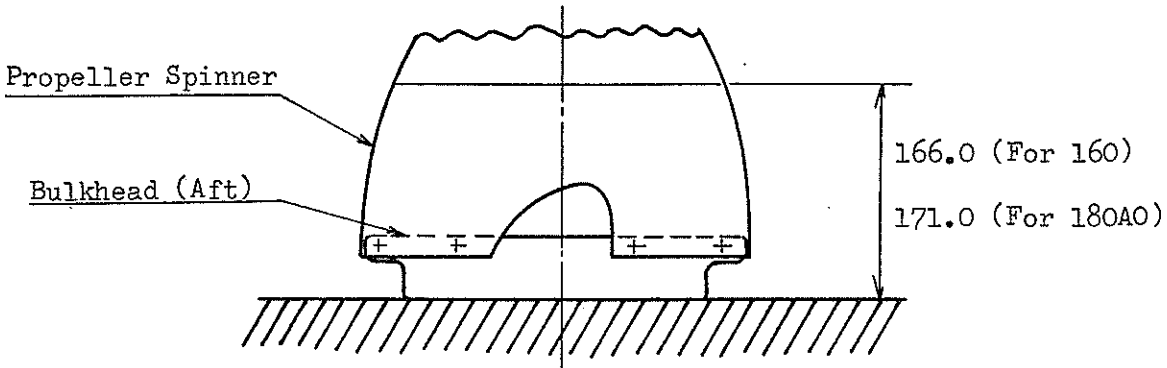


Figure 3. Details for Scribing - Propeller Spinner

Straight Line Connecting Center of Spinner Top and Bulkhead Attaching Hole

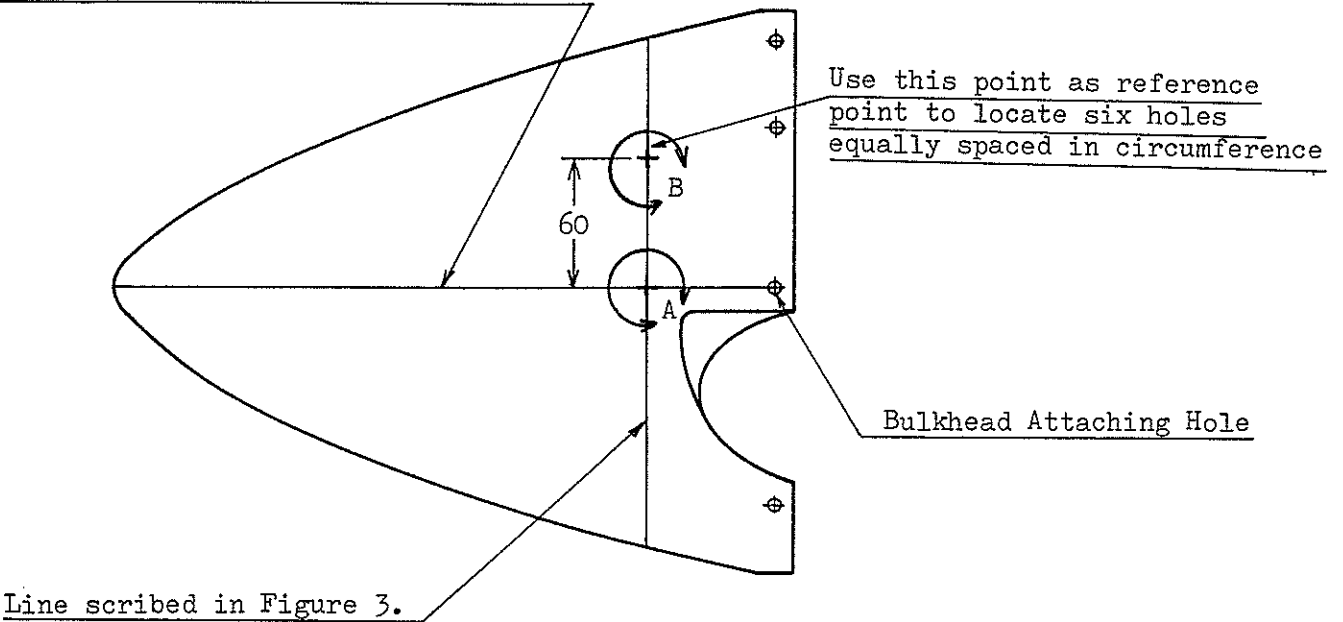
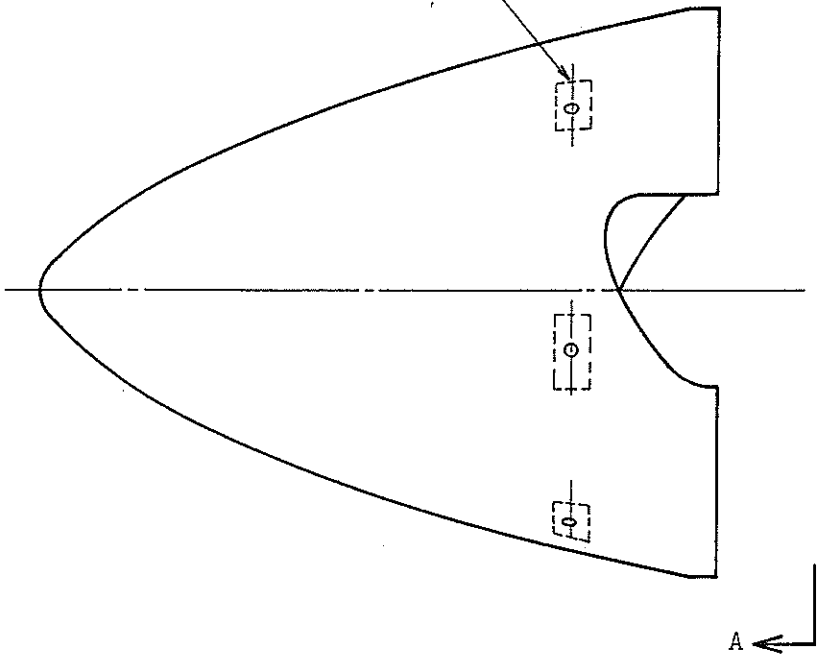
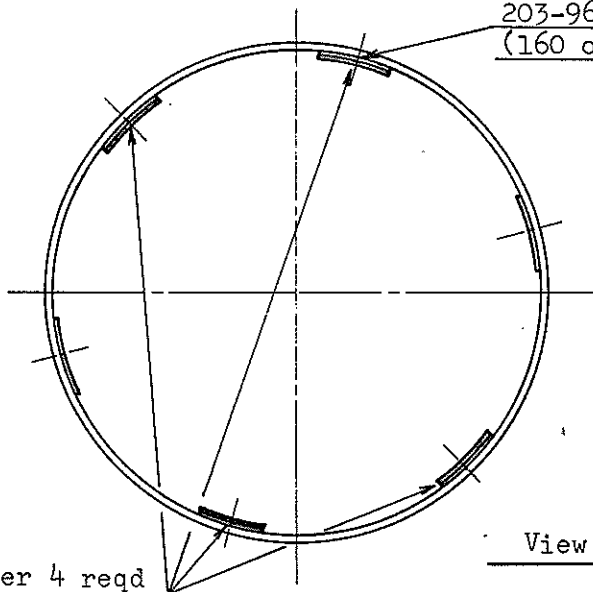


Figure 4. Details for Marking - Propeller Spinner

Bond with Cemedine 1560 or equivalent



203-960202-009 Spacer 6 reqd
(160 only)



View A-A

203-960202-007 Spacer 4 reqd
(160 and 180AO)

Figure 5. Details for Attaching Spacers to Propeller Spinner

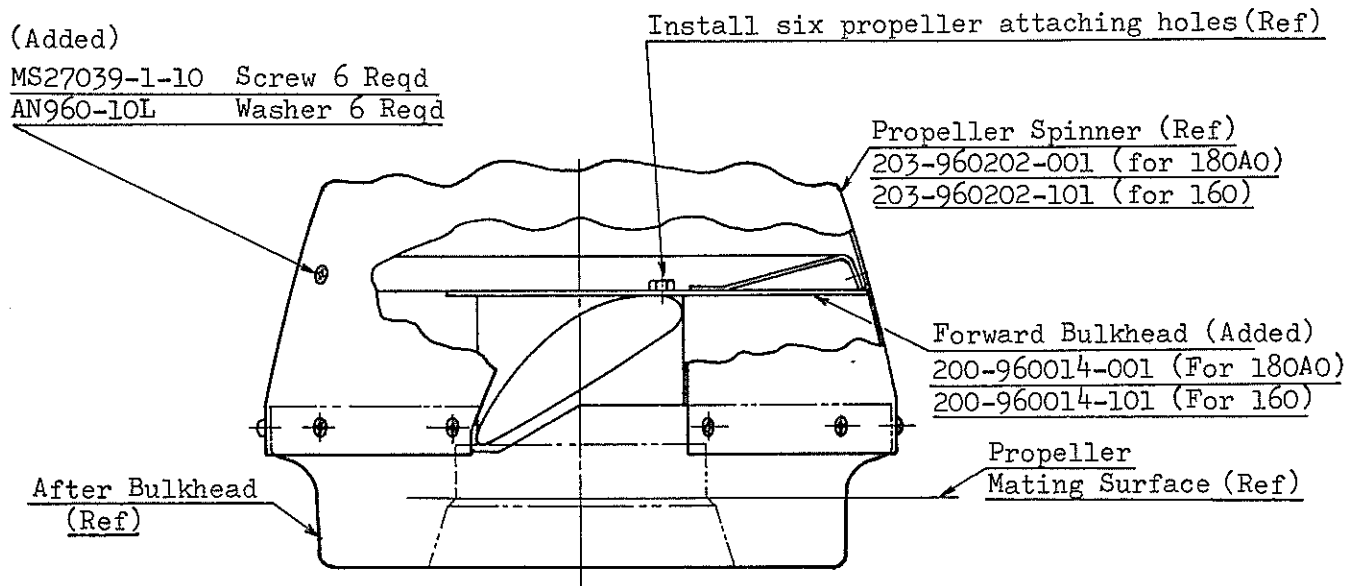
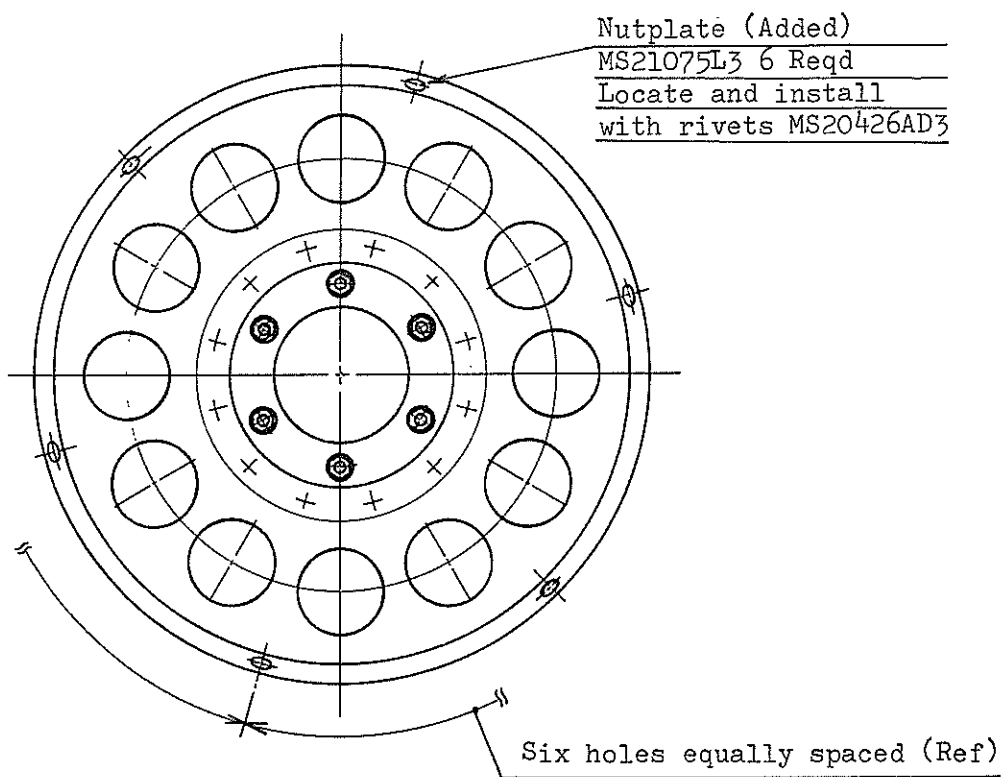


Figure 6. Details for Forward Bulkhead Installation