



SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. 0051

Page 1 of 3

Date: August 7, 1980

Subject: Main Rotor Transmission Mounting Hardware

Models: All

Effectivity: As Noted Below

A review of the main rotor transmission mounting configuration from a crashworthiness viewpoint has resulted in the recommendation that the ultimate strength of the attachment hardware be upgraded. In the event of a sudden rotor stoppage caused by main rotor blades striking an immovable object, the increased strength hardware will aid in maintaining the transmission to pylon attachment. Because of the potential improvements in crashworthiness afforded by this change, all owners and operators shall incorporate the improved strength hardware at the next 100 hour inspection.

The change replaces "AN" hex head hardware with either "NAS" internal hex head bolt or "MS" 12 point hardware. The configuration of mounting hardware will vary depending on whether the transmission lugs have been spot faced. It is recommended that owners and operators determine the hardware configuration in use in time to order required parts from Enstrom Customer Service in accordance with the following:

1. Main rotor transmission S/N 42-006-76PS and below, which have not been previously machine spot faced on the upper side of the mounting pad, as shown in fig. 2, have previously been retrofitted with bolts and hardware installed as called for in Service Information Letter No. 0057. The Service Information Letter No. 0057 configuration is to be modified by removing the cotter pin and nut (P/N AN 310-6) from each mounting bolt and replacing with either nut P/N 37 FL 624 or FN-22M-624. Refer to figure 1.
2. Main rotor transmission S/N 42-007-76PS through S/N 46-182-79C, have spot faced mounting pads. These transmissions may require a variety of washers as the dimension of the mounting pad thickness may vary. Acceptable bolt installation and spacing is shown in figure 2, parts A, B, and C. Because of the potential interference of a pylon tube, the left aft mounting bolt may require shimming under the bolt head and chamfered washer.

NOTE: Care must be taken that only a chamfered washer be placed under the head of the bolt and required shims of “AN” washers to complete spacing be placed between the chamfered washer and the transmission lug. The part number for these washers are also called out in figure A and B.

3. Main rotor transmissions S/N 46-182-79C and up, have spot faced mounting pads of a controlled dimension and mounting bolts have been installed per figure 3. No change is required. This configuration of bolt and nut is satisfactory for all prior transmission serial numbers provided that the self aligning washer configuration of Service Information Letter 0057 is used with non-spot faced transmission mount as shown in figure 1 and the proper spacing of figure 2 is maintained with spot faced transmission mounts.

NOTE: The 12 point 7/16” wrench may have to be ground slightly thinner to accommodate wrench removal from the aft left mount after installation.

4. It is recommended that the transmission mount pad holes be hand reamed with a .375 inch reamer and the upper surface pylon mounting pad holes be chamfered 45° by .032 inch to preclude possible scoring of the bolts during installation. For reference, transmission mounting bolt torque is 190-200 inch lbs.. Torque seal should be applied to the installed hardware for slippage indication.

NOTE: NEW hardware should ALWAYS be used when reinstalling a main rotor gear box assembly as the self-locking feature of the recommended nuts preclude reuse.

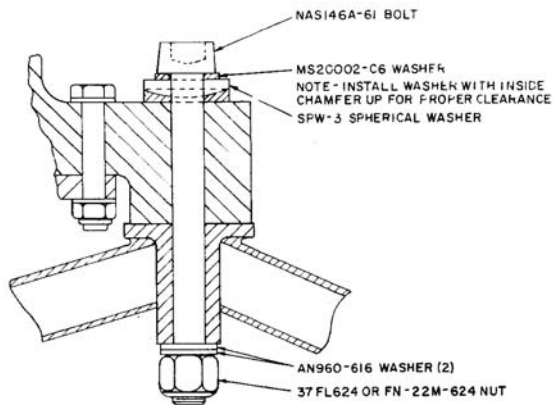


FIGURE 1

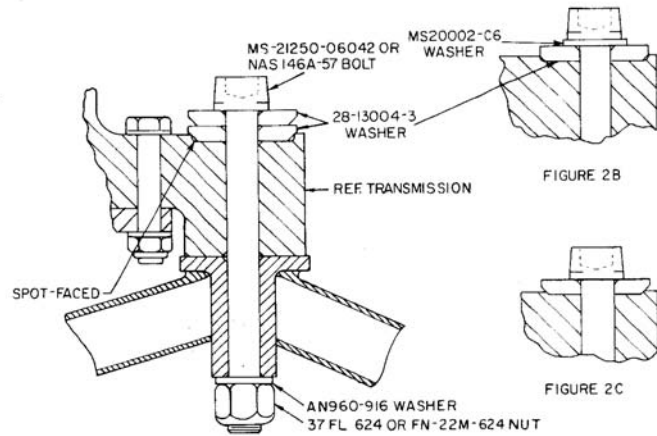
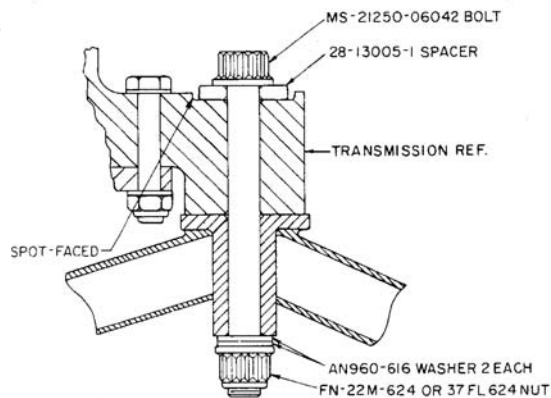


FIGURE 2A

RETENTION BOLT INSTALLATION SHOWING
ACCEPTABLE WASHER CONFIGURATIONS

FIGURE 2



TYPICAL GEAR BOX TO PYLON ATTACHMENT

FIGURE 3