

A192 AND A194 YOKE INSPECTION

Materials Required:

1. Portable dye penetrant inspection kit similar or equivalent to Uresco Model TT-101 spray can system. Penetrant method must be of the Post-Emulsified type per MIL-I-6866B (ASG), Type II visible dye, Method B.
2. Epoxy paint remover similar or equivalent to Tal Strip #2813.
3. Ten-power magnifying glass.
4. Zinc chromate primer.

Inspection Procedure:

1. Disconnect the A193-2 flex plate from the A197-1 tail rotor drive shaft by removing the two pal nuts and NAS679A4 nuts.
Note: Using a magic marker, place an "X" on one ear of the flex plate and the adjacent ear of the tail rotor drive shaft. Be extremely careful on re-installation to install the bolts and washers exactly as removed, to prevent any shim change of the tail rotor drive line.
2. Disconnect the A193-1 flex plate from the A192 and A194 yokes. Remove the four pal nuts, NAS679A5 nuts, A559 washers and NAS1305-4 bolts. Rest the clutch shaft on the horizontal fire-wall.
3. Remove the cotter pin, castellated nut, and washer that attach the A194 yoke to the main rotor gearbox pinion shaft and remove the yoke.
4. Using the epoxy paint stripper, per the manufacturer's instruction, to remove the paint from the A194 and A192 coupling around the welded areas on both sides of the couplings. The paint should be stripped back at least one-half inch from the weld on the flange side of the joint.

5. Using the dye penetrant kit, per the manufacturer's instructions, inspect both sides of the A194 and A192 yokes. Pay close attention to the flange area adjacent to the welds.
6. Clean and visually inspect the yokes in the areas described in Step 5 with a ten-power magnifying glass.
7. If no cracks are found, reinstall the yokes, using the reverse procedure in Steps 1 through 3.

NOTE 1: Prime with zinc chromate and apply grey enamel prior to reinstallation (areas inspected in Step 6). If any cracks are found, the helicopter must not be flown until the defective yoke is replaced.

NOTE 2: Magnaflux inspection may be substituted for dye penetrant.

NOTIFY ROBINSON HELICOPTER COMPANY IMMEDIATELY.