

KIT 760 835

## HI-SHEAR RIVET REPLACEMENT (MATERIAL FOR ONE FITTING)

PA-24-180, PA-24-250, PA-24-260, PA-24-400, PA-30 and PA-39

<u>PART NO.</u>	<u>QUANTITY</u>	<u>NOMENCLATURE</u>
	1	Kit List
	1	Instructions (R830325)
	1	Sketch "A" (R900618)
	1	Sketch "B" (R900618)
407 562	10	Washer - AN960-6
523-120	4	Rivet - NAS1768D-4-1
523-121	12	Rivet - NAS1768D-4-2
522 883	16	Rivet - NAS1738B4-3
758 294	5	Bolt - AN21-15A
752 561	5	Nut - AN363-640

1. Refer to the appropriate service manual and remove the left and right stabilator from the aircraft. Also remove the access panel from the right side of the aft fuselage.

Before proceeding with installation of kit, inspect each stabilator torque tube bearing fitting for relative movement as described in Service Bulletin No. 411. If relative movement is not present at any of the four fittings, do not attempt to remove the hi-shear rivets; remove the hi-shear rivets only from a fitting where relative movement is present.

- Locate and mark the skin cutout(s) using the dimensions on Sketch "A".
- Refer to Sketch "A" and drill out all existing rivets indicated with an "X".
- Make cutout(s) in skin. Additional adjacent rivets maybe removed as required in order

3. Refer to Sketch "B". Position cover plate (P/N 28216-02) over cutout with top of plate underneath top skin .875 inches and rear of plate aligned with existing skin at station 258.75. Use existing rivet holes in the skin as a guide. Drill

4. Drill 144 holes thru top of plate using existing rivet holes in the skin as a guide. Drill

4. Drill .144 holes thru top of plate using casting drill bit. Drill each hole to a depth of .30. Temporarily fasten plate in position. Drill 1/8" holes thru bottom and rear of

5. Locate and drill balance of .144 holes thru bottom and rear of plate using existing rivet holes as a guide. Drill each hole to a depth of .30.

6. Locate and drill four new .144 holes at forward end of plate as shown on Sketch "B".

Remove cover plate(s).

7. Using the following steps, remove the existing hi-shear rivets, as shown on Sketch "A", that attach the stabilator torque tube bearing fittings to the side stringers. See Caution note below.

a. Carefully drill or chisel off the collar of the hi-shear rivet (center punch collar before drilling).

b. Tap out rivet from fitting using hammer and punch.

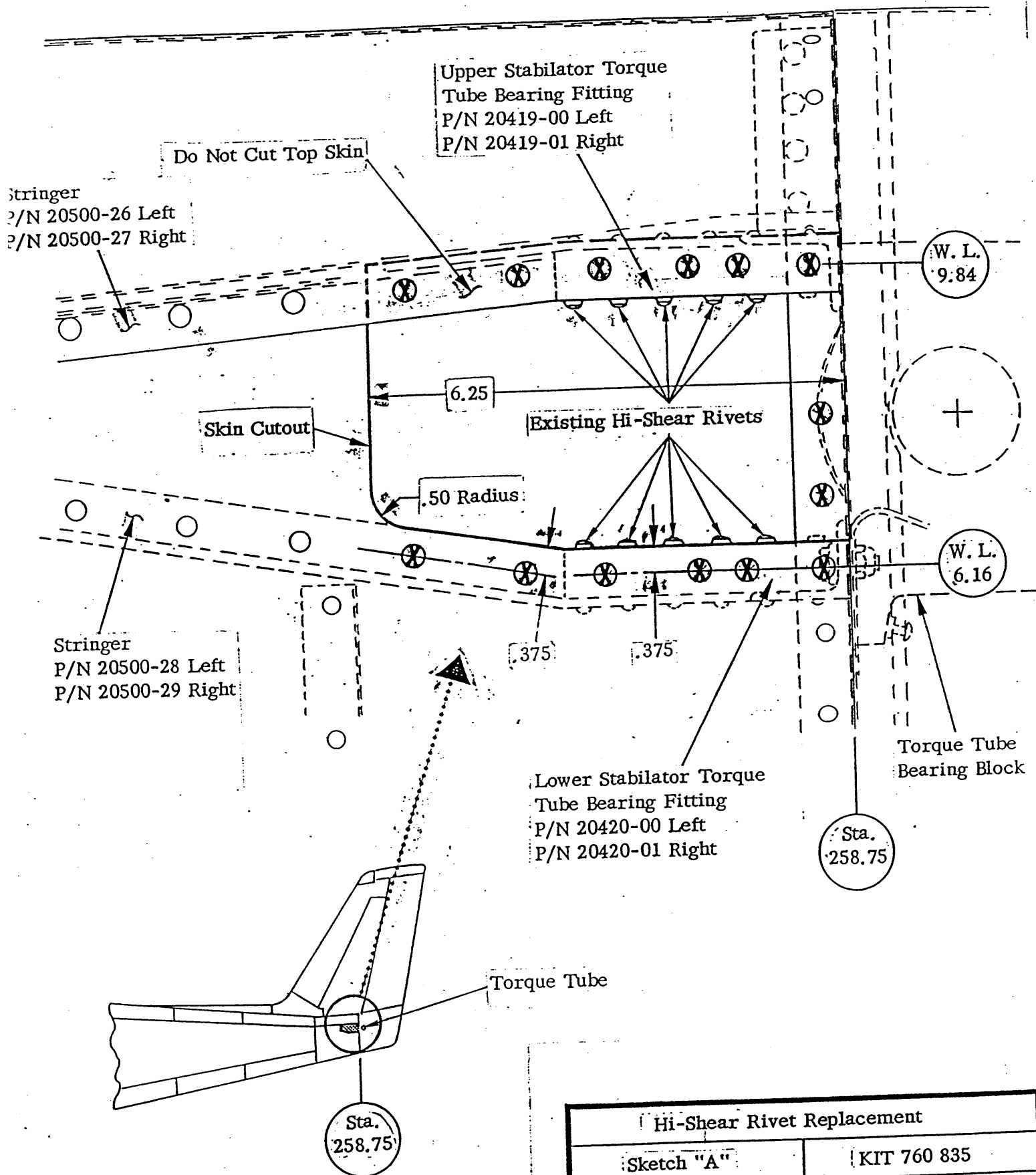
c. Enlarge hole in fitting and stringer to  $.136 + .002$ . If holes exceed .138 diameter, new part must be installed.

d. Install AN21-15A clevis bolt, two AN960-6 washers and AN363-640 nut as shown on Sketch "B". Torque nut dry to a desired torque of 8-10 inch lbs. See "TORQUE NOTE" on Page 2 to determine final torque.

Remove only one rivet at a time, enlarge hole and install clevis bolt, washers and nut.

8. Attach predrilled cover plate(s) using new rivets as shown on Sketch "B". Also install new rivets in skin where they were previously removed.
9. Clean and paint plate(s) to match airplane.
10. Reinstall stabilators and access panel.
11. Make proper Logbook entry of kit installation.

TORQUE NOTE: FINAL TORQUE equals DESIRED TORQUE plus FRICTION DRAG TORQUE. To obtain FRICTION DRAG TORQUE, run nut down to near contact with the washer and record the FRICTION DRAG TORQUE required to turn the nut with a torque wrench. ADD the FRICTION DRAG TORQUE to the DESIRED TORQUE to obtain the FINAL TORQUE which should register on the torque wrench. (Ref. FAA Manual AC 43.13-1 Chapter 5)

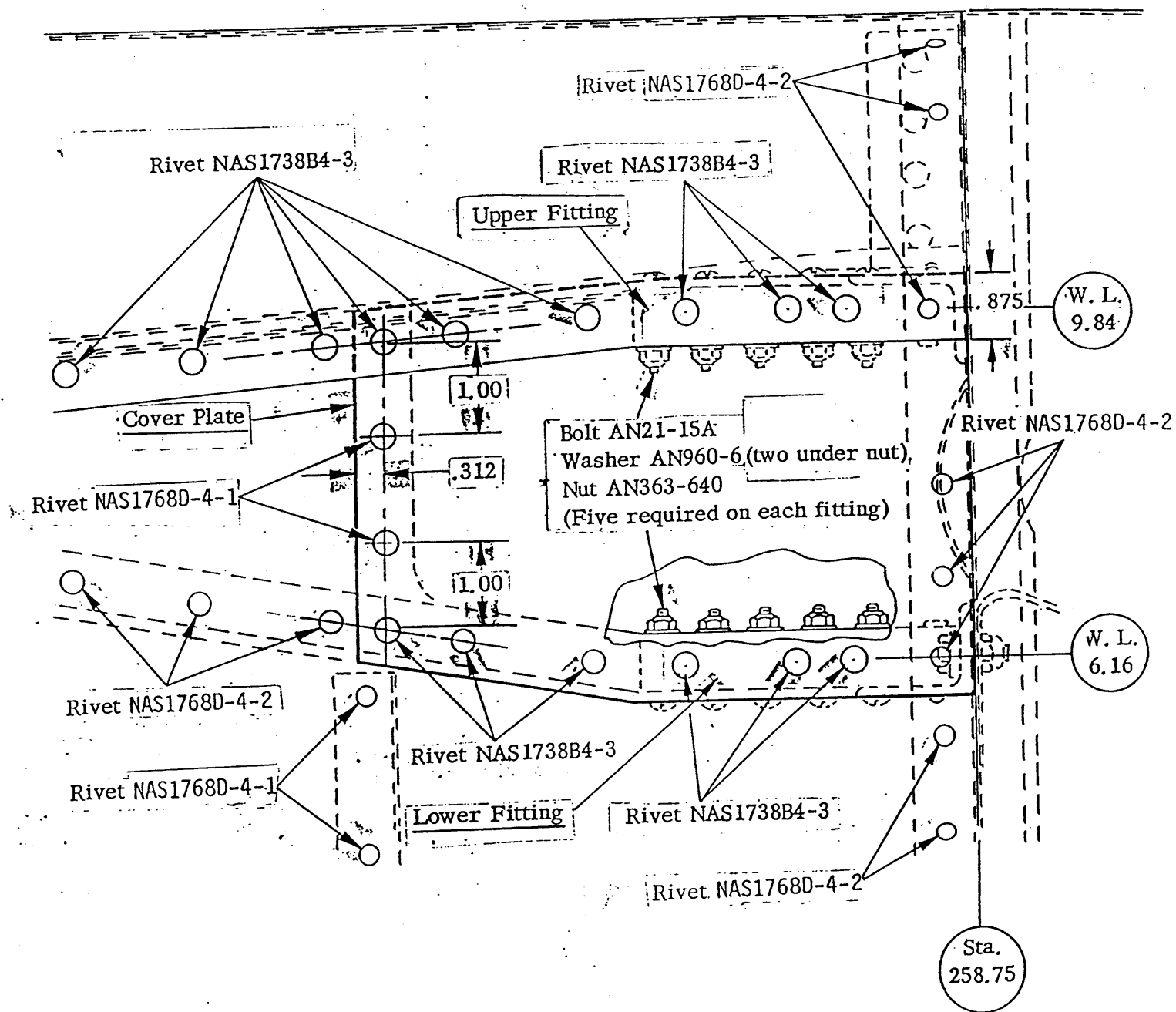


LEFT SIDE SHOWN - RIGHT SIDE OPPOSITE

Hi-Shear Rivet Replacement	
Sketch "A"	KIT 760 835
PIPER AIRCRAFT CORPORATION	
VERO BEACH, FLORIDA	

(R900618)

← FWD



LEFT SIDE SHOWN - RIGHT SIDE OPPOSITE

Hi-Shear Rivet Replacement	
Sketch "B"	KIT 760 835
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VERO BEACH, FLORIDA	

(R900618)