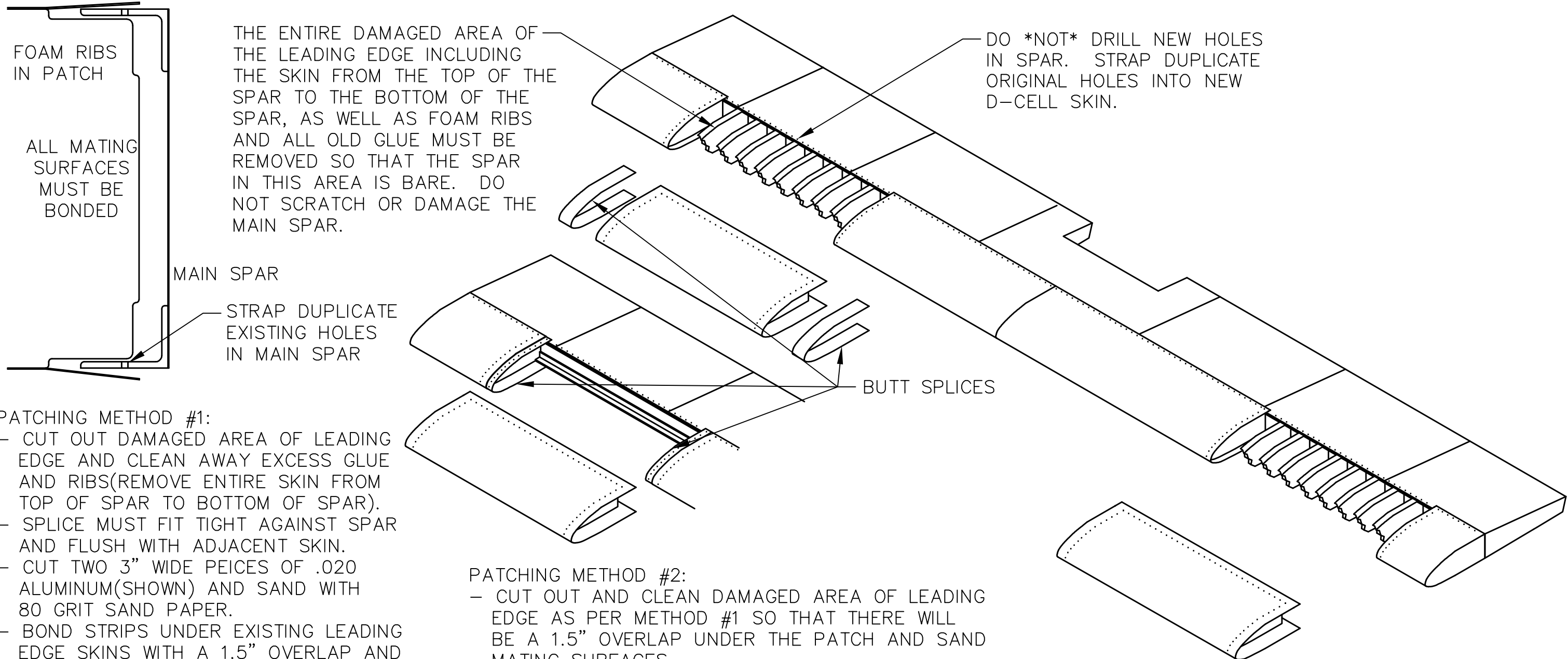


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THE ENTIRE DAMAGED AREA OF THE LEADING EDGE INCLUDING THE SKIN FROM THE TOP OF THE SPAR, AS WELL AS FOAM RIBS AND ALL OLD GLUE MUST BE REMOVED SO THAT THE SPAR IN THIS AREA IS BARE. DO NOT SCRATCH OR DAMAGE THE MAIN SPAR.


DO \*NOT\* DRILL NEW HOLES IN SPAR. STRAP DUPLICATE ORIGINAL HOLES INTO NEW D-CELL SKIN.

**PATCHING METHOD #1:**

- CUT OUT DAMAGED AREA OF LEADING EDGE AND CLEAN AWAY EXCESS GLUE AND RIBS(REMOVE ENTIRE SKIN FROM TOP OF SPAR TO BOTTOM OF SPAR).
- SPLICE MUST FIT TIGHT AGAINST SPAR AND FLUSH WITH ADJACENT SKIN.
- CUT TWO 3" WIDE PEICES OF .020 ALUMINUM(SHOWN) AND SAND WITH 80 GRIT SAND PAPER.
- BOND STRIPS UNDER EXISTING LEADING EDGE SKINS WITH A 1.5" OVERLAP AND RIVET WITH COUNTER SUNK RIVETS.
- SAND INSIDE EDGES OF PATCH WERE IT WILL SIT ON THE .020 BUTT SPLICES.
- SECURING PATCH WERE IT WILL BE BONDED, STRAP DUPLICATE THE #30(.1285 DIA.) HOLES IN THE SPAR TO THE PATCH SKIN AND CLECO IN PLACE.
- DRILL #30(.1285 DIA.) HOLES ON 1.5" CENTERS FROM TOP SPAR RIVET LINE TO BOTTOM SPAR RIVET LINE(WITHOUT DRILLING INTO THE SPAR).
- REMOVE CLECOS, DEBURR MATING DRILLED SURFACES AND PERMANENTLY ATTACH USING 5776 A & B URLANE ADHESIVE, SD48BS RIVETS IN THE SPAR AND COUNTER SUNK RIVETS IN THE SKIN.

**PATCHING METHOD #2:**

- CUT OUT AND CLEAN DAMAGED AREA OF LEADING EDGE AS PER METHOD #1 SO THAT THERE WILL BE A 1.5" OVERLAP UNDER THE PATCH AND SAND MATING SURFACES.
- PATCH MUST FIT TIGHT AGAINST SPAR AND SNUGLY ON LEADING EDGE SKIN.
- DRILL THE OVERLAP FROM TOP OF SPAR TO BOTTOM @1.5" O.C. WITH #30(.1285 DIA.) BIT AND STRAP DUPLICATE THE HOLES IN THE SPAR(SAME DRILL BIT)
- BOND ALL MATING SURFACES AND RIVET SKINS WITH SD42BS RIVETS AND SPAR WITH SD48BS RIVETS.
- BOTH METHODS ARE EQUALLY STRONG. METHOD #1 WILL RETAIN THE ORIGINAL APPEARANCE OF THE WING, METHOD #2 IS FOR EASE OF INSTALLATION.

		<b>TITAN AIRCRAFT SUPPLY</b> 1419 STATE ROUTE 45 SOUTH AUSTINBURG, OHIO 44010	
DETAIL NAME		LEADING EDGE REPAIR PROCEDURE	
SCALE	N/A	PART NO.	
ASSEMBLY NAME		ALL TORNADO WINGS	
PART NO.		DRAWING NO.	
DRAWING NO.		<i>B 97-INS-0892-A</i>	

DRAWN	K. BOHRER	DATE	8/12/97
CHECKED		DATE	
APPROVED		DATE	