

## CARGO POD - APPROVED REPAIRS

### 1. General

- A. The following procedures are to be used for repairing delamination of outer or inner wall skin or both and the repairing of the bushing assembly and washer. The bonding action of the replacement core (Syntactic foam) will repair the delamination of the opposite wall skin.

### 2. Tools, Equipment and Materials

- A. Refer to Equipment/Furnishings - General for a list of required tools, equipment and materials.

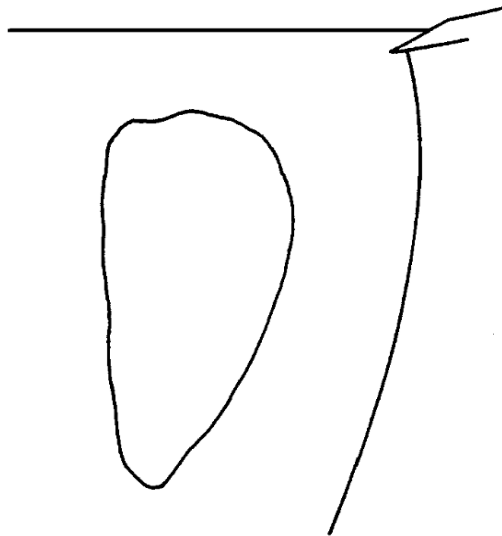
### 3. Repair Procedures

**CAUTION: You must wear a mask, gloves and eye protection when cutting, grinding, drilling or sanding composite materials. Repair should be made in an open area, away from other workers.**

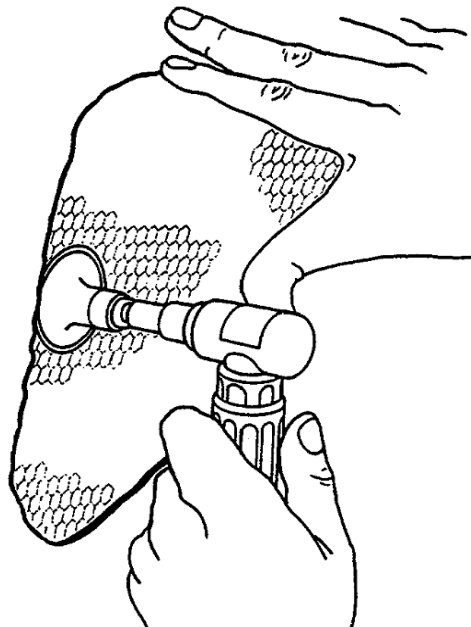
- A. Refer to Figure 801 for illustrated repair steps.
- B. Repair the Bushing Assembly and Washer (Refer to Figure 802).
  - (1) Remove the latch assembly. Refer to Chapter 25 Cargo Pod - Maintenance Practices.
  - (2) Remove the bushing assembly and washer.
  - (3) Clean surfaces to which sealant is to be applied with solvent. Refer to Chapter 20 General Solvents/Cleaners - Maintenance Practices.
  - (4) Bond Bushing assembly and washer with Type I, Class B adhesive. Refer to Chapter 20 Adhesive and Solvent Bonding – Maintenance Practices.
  - (5) The position of cam block stops in the bushing assembly must be typical to figure 802. Refer to Figure 802.
  - (6) Install the latch assembly. Refer to Chapter 25, Cargo Pod - Maintenance Practices.

Figure 801 : Sheet 1 : Cargo Pod Repair

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- (a) LOCATE DELAMINATED AREA BY USING FINGER PRESSURE AGAINST CARGO POD SKIN AND/OR TAPPING SKIN WITH A COIN AND LISTENING FOR HOLLOW SOUND, THEN MARK PERIMETER OF DELAMINATED AREA. AREAS WITH A GOOD BOND WILL EXHIBIT A SHARP, CRISP SOUND.

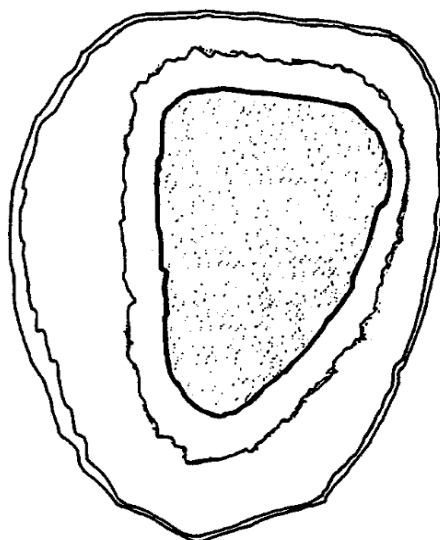


- (b) USING A ROUTER, CUT OUT DELAMINATED SKIN.

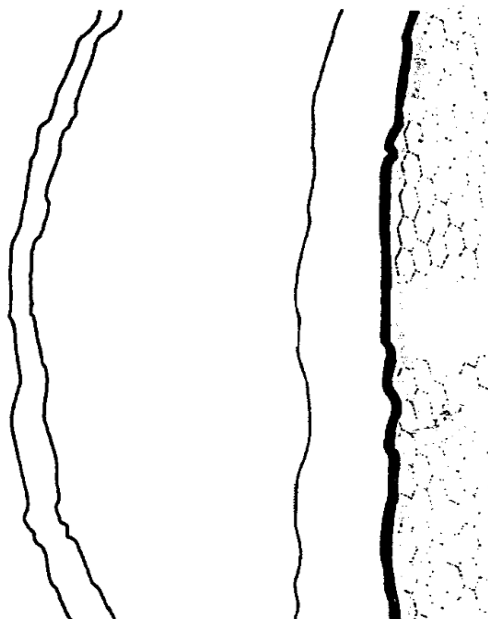
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Figure 801 : Sheet 2 : Cargo Pod Repair

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- (c) REMOVE CORE IN DELAMINATED AREA AND BACK TRIM THE CORE 0.50 TO 0.75 INCH UNDER THE TRIMMED SKIN USING A ROUTER AND SANDER. BE CAREFUL NOT TO DAMAGE OPPOSITE SKIN.

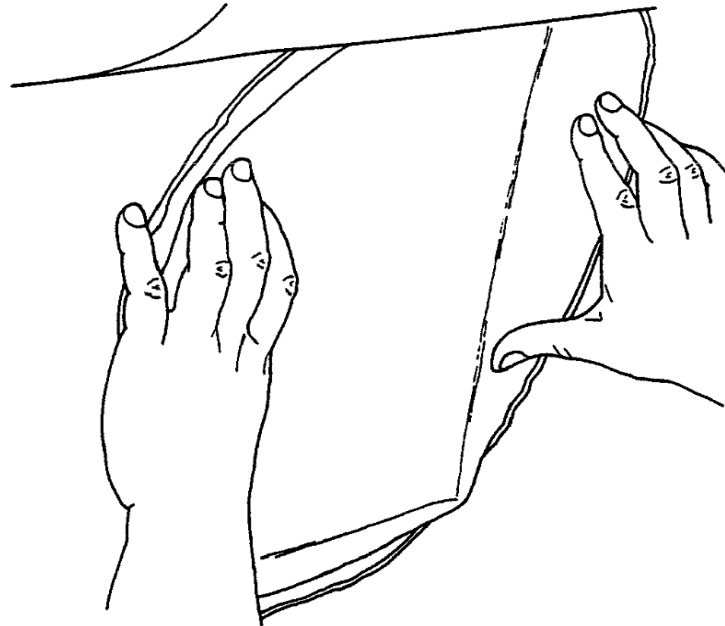


- (d) FEATHER SAND EACH LAYER OF THE SKIN AT LEAST 0.50 INCH BACK PER LAYER. BLOW AWAY DUST WITH VERY LOW PRESSURE AIR AND CLEAN WITH MEK.

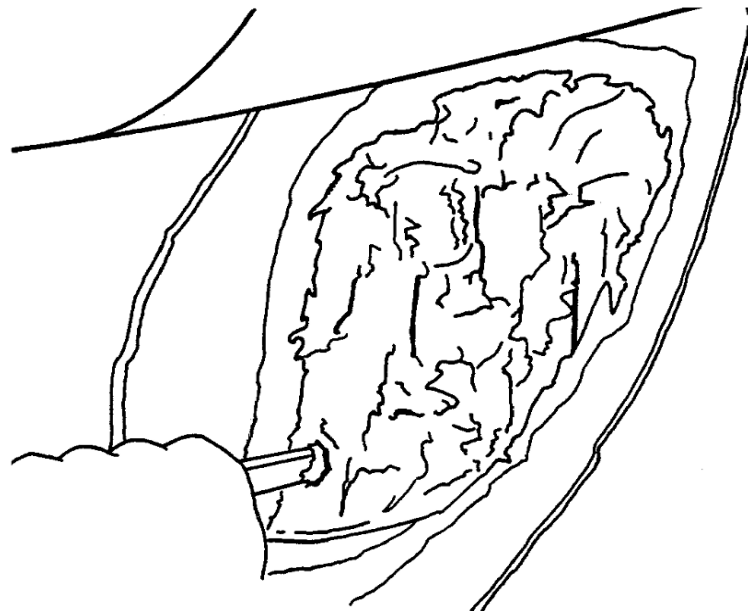
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Figure 801 : Sheet 3 : Cargo Pod Repair

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- (e) CUT THREE PAPER PATTERNS. CUT EACH PATTERN TO MATCH EACH SUCCESSIVE PLY OF SKIN. USE THESE PATTERNS TO CUT THE 181 FIBERGLASS PATCH MATERIALS.



- (f) MIX THE PROPER AMOUNT OF EC3524 SYNTATIC FOAM AND FILL PATCH AREA, STARTING AROUND THE EDGES AND WORKING FOAM INTO THE UNDERCUT AREA, TAKING CARE NOT TO TRAP AIR.

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Figure 801 : Sheet 4 : Cargo Pod Repair

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- (g) COVER THE AREA WITH PLASTIC AND WORK IN BY HAND OR USE A PLASTIC SQUEEGEE. BE CAREFUL NOT TO LEAVE ANY LOW AREAS. REMOVE PLASTIC AND ALLOW FOAM TO CURE FOR 12 HOURS. A HEAT SOURCE MAY BE USED TO ACCELERATE CURE TIME. USE LOW HEAT, 100° F MAXIMUM AND DO NOT ALLOW AIR TO BLOW DIRECTLY ON FOAM.



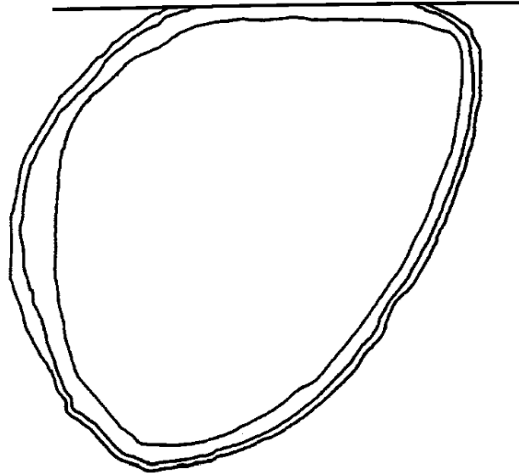
- (h) SAND FOAM DOWN FLUSH WITH INNER KEVLAR LAYER.

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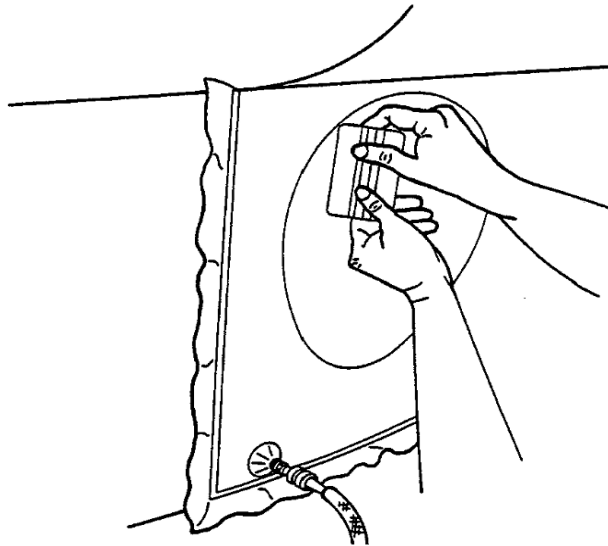
Figure 801 : Sheet 5 : Cargo Pod Repair

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- (i) OUTLINE PATCH AREA WITH PEAL PLY RELEASE FILM TACKY TAPE, LEAVING AMPLE SPACE AROUND PATCH AREA. CUT A SECTION OF PLASTIC SHEET TO FORM VACUUM BAG. HAVE VACUUM PUMP READY TO CONNECT.



- (j) INSTALL HEXCELL 181 FIBERGLASS CLOTH PATCHES USING EA956 ADHESIVE, MAKING SURE EACH PATCH IS SATURATED AND NO AIR POCKETS ARE LEFT.



- (k) INSTALL VACUUM BAG AND CONNECT VACUUM PUMP, DRAWING A MINIMUM OF 20 INCHES OF VACUUM.
- (l) USING THE PLASTIC SQUEEGEE, WORK OUT ANY TRAPPED AIR AND EXCESS RESIN.
- (m) WITH VACUUM STILL CONNECTED, ALLOW A CURE TIME OF 24 HOURS. CURE TIME MAY BE ACCELERATED BY USE OF A HEAT LAMP.
- (n) REMOVE VACUUM BAG AND SAND SURFACE, TAKING CARE NOT TO SAND INTO FIBERGLASS CLOTH.

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Figure 802 : Sheet 1 : Repair the Bushing Assembly and Washer

