

## Section 23

### Final Body Installation and Skid Shorts

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**Procedures covered in this section:**

Final install body panels; install engine belly pan; mount fuel drain cock bracket to tub; cut holes for fuel tank filler caps; fit and install skid shorts; install seats.

**Cards used in this section:**

E25 CARD 1T (fuel)      E32 CARD 1T (body, seat, floorpan)      E45 CARD 1T (skid shorts)  
E25 CARD 2T (fuel)      E32 CARD 3T (body, seat, floorpan)

**Prints used in this section:**

E32-2000 (body)

**Templates used in this section:**

E25-1 (fuel drain bracket)

**Tools required for this section:**

Air or electric drill	Cleco pliers	Scissors
Band saw or hacksaw	Grinder	Screwdrivers
Cleco	Pop rivet gun	Tape measure

Drill bits of the following sizes: 1/8", 3/16", 1/2", 7/8", #40, #19, Uni-bit or step drill

Ratchet with sockets of the following sizes: 5/16", 3/8", 7/16"

Wrenches of the following sizes: 5/16", 3/8", 7/16", 1/2"

**Notes:**

1. Allow 1/4" clearance between the top of the shorts and the body to enable the landing gear to flex and for easy removal of lower rear panels.



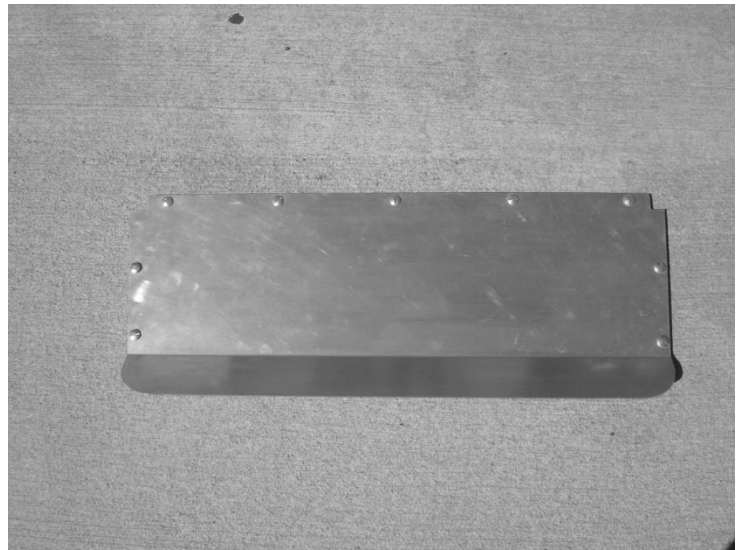
## **ENGINE BELLY PAN**

### **Photo #1**

Final installation of all body and interior panels should be completed at this time.

Trim and fit the engine belly pan. E24-3171  
Engine belly pan packed in engine crate.

E32 CARD 1T.



### **Photo #2**

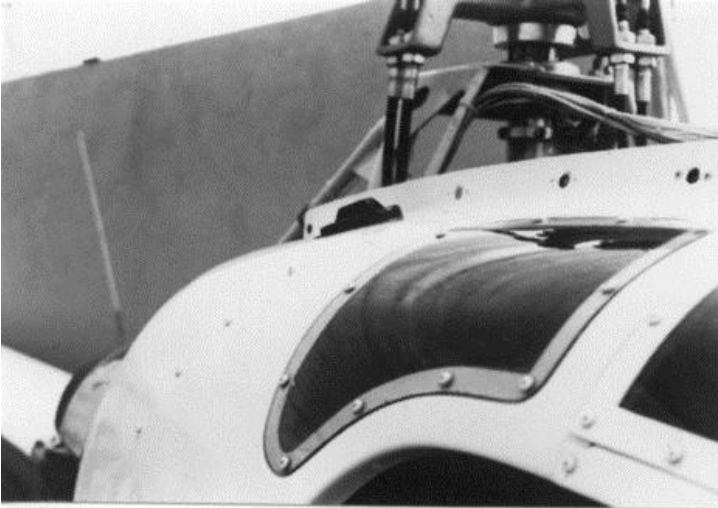
Mount the belly pan to the bottom of the tub with Dzus fasteners. The short 45 degree bend faces down and to the rear.



### **Photo #3**

Cut a hole in the bottom of the tub (just in front of the belly pan) to access the fuel drain. Attach the drain cock mounting bracket to the tub with four screws and nut plates. E25 CARD 1T and E25 CARD 2T.

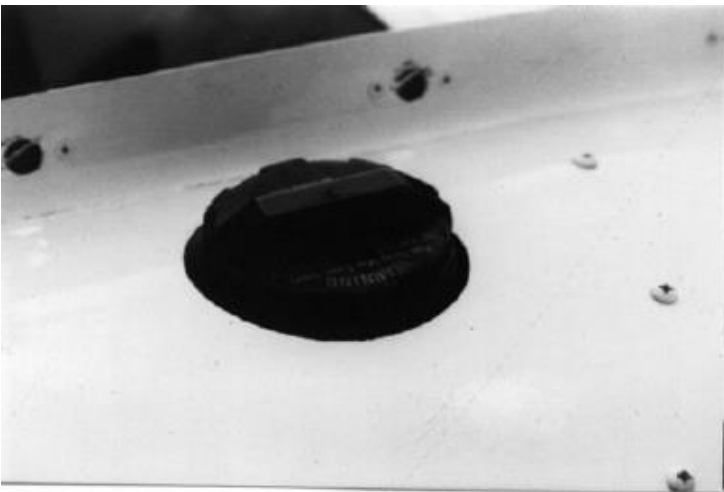




## **FUEL TANK FILLER HOLES**

### **Photo #4**

Do not cut the hole for the fuel filler caps in the body panels until the fuel tanks are final installed and bolted in place on the airframe. The hole should be about 3/4" larger in diameter than the fuel cap. The top of the fuel cap should extend approximately 1/4" above the surface. (Flush with the surface is also acceptable.)



### **Photo #5**

Remove the cap from the fuel tank and cover the hole with tape to prevent any debris from falling in. Tape off the approximate area to be cut out to prevent damage to the paint. In the location of the fuel tank hole, drill a 1/2" hole through the fuselage. Enlarge this hole until the fuel tank cap can be installed in the tank.



## **SKID SHORTS**

### **Photo #6**

Photo showing skid shorts on a RotorWay A600 Helicopter.

**Photo #7**

Parts as received from RotorWay for the Skid Shorts. Hardware found on E45 Card 2T.



**Photo #8**

Fit each set together, cleco three places using a 1/8" Drill bit.



**Photo #9**

Cleco together and check the fit to the body. Trim as necessary, leaving 1/4" gap between the body and the skid shorts. This will allow for easy removal of the rear lower panels.





**Photo #10**

Once the fiberglass is trimmed to fit the body, the 1/4" channel can be cut and fit to shorts.



**Photo #11**

Too tight of a fit to the body will make removal of lower rear panels difficult. Trimming 3/8" away from the body on the rear half will correct this problem.



**Photo #12**

The skid shorts should fit tight around the landing gear. If a tighter fit is desired on one or all the shorts, a single layer of fiberglass can be layed up on the inside lower end of the skid shorts. The fiberglass cloth #E09-6260 can be found on E09 CARD 3T.

**Photo #13**

The seat cushion studs will prevent the bottom of the cushions from sliding forward, which could limit movement of the cyclic control. When installed, the cushions must not extend in front of the seam where the fiberglass seat bottom meets the cyclic inspection covers.

Only one stud is required per seat. Place the seat in position to locate the hole in the fiberglass. Use an 8-32 nut plate to fasten the stud. E32 CARD 3T.



**Photo #14**

After the seat is installed, mark the seat back for installation of the head rest fasteners. Drill 1/8" holes and use 1/8" x 1/2" pop rivets to hold the buttons. Use a 1/8" aluminum washer behind each rivet, on the other side of bulkhead for extra support. E32 CARD 3T.



**Photo #15**

Overall view of installed seats and head rest in ship.





**Photo #16**

View of seat cushion.



**Photo #17**

Additional foam can be used to change the height of the seat E32-1120. Foam 3/4 x 12 x 6" can be found in the bottom of crate #3 (body box).



**Photo #18**

Install ID and Warning Plate. Parts and hardware found in documentation box. The serial number is chosen by the builder. You can use the airframe number for the serial number.