# SERVICE BULLETIN



Service Bulletin No.: DA C1-52-01 Rev. 0 Date Issued: January 7, 1999

Title: Canopy, Seal Replacement Page: 1 of 4

1. ATA Code: 5200

2. Effectivity: DA20-C1 aircraft S/N C0001 to C0055

3. General: This service bulletin addresses air leaks between the canopy and

fuselage resulting from slight flexing of the canopy in flight. The existing canopy seal is replaced by a thicker seal, the canopy latching forces are adjusted and the ball bearing in the latch strike is replaced by a solid

bearing assembly.

**4. Compliance:** Compliance with this service bulletin is optional.

5. Approval: Engineering data referenced or contained in this service bulletin is

approved as part of the type design.

6. Labour: Approximately 1.5 hours will be required to accomplish this service

bulletin.

This estimate is for direct labor performed by a technician and it does not include setup,

planning, familiarization, cure time, part fabrication or tool acquisition.

7. Material: Part Number Description Qty
1085H2-SP Self-adhesive D-Seal 15 feet

22-5600-00-15 Shim, Strike, Canopy 2 22-5600-63-00 Bearing Ass'y, Solid, Canopy 2 The material listed above is available as a kit by ordering

Part Number: DA C1-52-01AMK0

Materials required by not supplied: procure locally

N/A	Acetone	A/R
N/A	Clean Rags or Shop Towels	A/R
N/A	Clean Rags or Shop Towels	A/R
N/A	Masking Tape (1/2" or 3/4")	A/R
N/A	Sandpaper 60-80 grit	A/R
Loctite 222	Thread Locker	A/R

8. Special Tools: 25 lb. spring scale or equivalent.

9. References: DA20-C1 Maintenance Manual, Document number DA201-C1.

## 10. Accomplishment Instructions:

10.1 Apply masking tape to canopy frame along inboard edge of existing

seal. This will act as a guide when installing the new seal.

# **SERVICE BULLETIN**



Service Bulletin No.: DA C1-52-01 Rev. 0 Date Issued: January 7, 1999

Title: Canopy, Seal Replacement Page: 2 of 4

Peel-off existing seal. Start at end of seal located near aft centerline of canopy.

10.3 Remove any remaining bits of seal and adhesive with acetone and a clean rag. Do not remove any cured epoxy that may have been used as a shim under seal. Dry frame using a clean rag.

Starting at aft centerline, apply replacement seal (1085H2-SP). Use masking tape as a guide to location. It is recommended to peel carrier film off seal approximately 6" at a time, while continuing to press seal in place. Ensure that seal is centered over any cured epoxy shim (see 10.3).

Replace canopy strike ball bearing: (see figure 1)

- Remove canopy strikes by removing two MS24693C52 screws on each strike. Retain any composite shims between strike assembly and fuselage.
- Remove retaining ring and pin from each strike.
- Remove and discard ball bearing, but retain nylon washers.
- Install washers, solid bearing (22-5600-63-00), pin, and retaining ring on each strike.
- Reinstall canopy strike using MS24693C52 screws. Ensure that any shims are reinstalled in correct orientation.

Loosen friction adjust screw on each canopy latch.

Close and latch canopy and measure force required to open each latch. Pull directly aft on latch grip using spring scale. The required force is 45 - 90 N (10 - 20 lbs.).

10.8 If required, adjust latching forces using the shims. Remove strike assembly (as in 10.5 above). To reduce force, remove material from shims by sanding. To increase force, add a shim, or replace shim with thicker one. It may be necessary to taper shims slightly to ensure that the strike is parallel to the latch hook when the canopy is closed. When force is within acceptable limits, install MS24693C52 screws with Loctite 222.

### **10.9** Adjust latch friction:

- Tighten friction adjust screw.
- Hold canopy open and place latch in closed position. Measure force required to move handle, pulling directly aft with spring scale.
- Tighten or loosen friction adjust screw to achieve required force of 11 22 N (2.5 5 lbs.).

## **SERVICE BULLETIN**



Service Bulletin No.: DA C1-52-01 Rev. 0 Date Issued: January 7, 1999

Title: Canopy, Seal Replacement Page: 3 of 4

10.10 Check to ensure that canopy lock (if installed) functions correctly. If required, a small amount of material can be filed off of inside of lock hook to clear strike plate.

10.11 Check to ensure that canopy warning lights function correctly. Refer to Maintenance Manual, Document number DA201-C1, Chapter 52-10.

## 11. Weight and Balance:

The weight and balance is not affected by this Service Bulletin

## 12. Availability:

A full parts and 1.5 hour labor credit will be issued upon receipt of a completed warranty claim form and the return of the affected part(s) when received within 90 days from the issue date of this service bulletin.

To obtain satisfactory results, procedures specified in this service bulletin must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft Industries Inc. cannot be responsible for the quality of work performed in accomplishing the requirements of this service bulletin. Diamond Aircraft reserves the right to void continued warranty coverage in the area affected by this Service Bulletin if it is not is incorporated. If you no longer own the aircraft to which this service bulletin applies, please forward it to the current owner and send the

name of the current owner to Diamond Aircraft Industries, Inc., at the address below



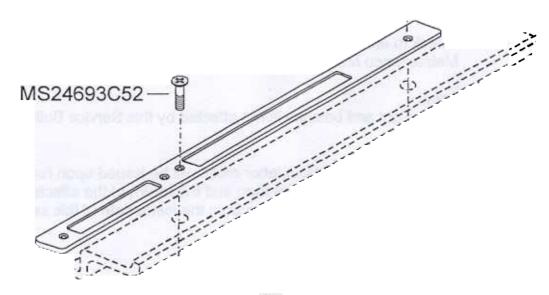
DAC 5 D R 0

Date Issued: January 7

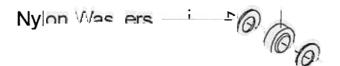
Tit Ca οy, Repl cem

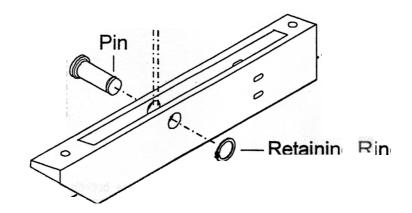
4 )f





Re rin





Fi L/H strike and strike block