

MANDATORY SERVICE BULLETIN NO. MSB 62-027 REV. 1 **SUPERSEDES MSB 62-027 REV. 0**

I TECHNICAL DETAILS

I.1 Category

Mandatory.

I.2 Airplanes Affected

Type: DA 62

S/N: 62.007 through 62.131

62.C001 through 62.C019

with OÄM 62-037, and/or OSB 62-008, and/or OSB 62-009 equipped

I.3 Date of Effectivity

05-December-2019

I.4 Time of Compliance

At next major inspection where the interior of the aircraft will be removed (e.g. annual inspection), or at an unscheduled inspection following a flight where erratic instrument readings were experienced.

I.5 Subject

Modification to the installation of the static ports.

ATA code: 34-10

I.6 Reason

It has been found that during certain adverse weather conditions, in combinations with certain flight conditions, that water can enter the DA 62's static ports, causing erratic instrument readings. Furthermore, use of the aircraft's anti-icing system in combination with certain flight conditions has resulted in anti-icing fluid entering the static ports, causing erratic instrument readings. This service bulletin describes a modification to the installation of the static ports to better allow fluids to drain out of the port.

I.7 Concurrent Documents

None.

I.8 Approval

The technical content of this document is approved as part of the type design.

Diamond Aircraft Industries
MANDATORY SERVICE BULLETIN
Model DA 62



I.9 Accomplishment/Instructions

See WI-MSB 62-027, latest effective issue.

I.10 Mass (Weight) and CG

The change in mass and CG is negligible.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-MSB 62-027, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approximately 1 hour per person will be required to accomplish this service bulletin. This service bulletin requires two persons.

II.4 Credit

Parts and labour for all affected aircraft.

II.5 Reference Documents

DA 62 series Airplane Maintenance Manual, Doc. No. 7.02.25, latest effective issue.

Diamond Aircraft Industries
MANDATORY SERVICE BULLETIN
Model DA 62



III REMARKS

1. All work must be done by a certified aircraft service station, or a certified aircraft maintenance mechanic.
2. All work, in particular that which is not especially described in this service bulletin, must be done in accordance with the referenced Maintenance Manual.
3. Completion of all work must be recorded in the logbook.
4. In case of doubt, contact Diamond Aircraft Industries.

To obtain satisfactory results, procedures specified in this service bulletin must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft 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 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 at the address below.

Diamond Aircraft Industries Inc. 1560 Crumlin Sideroad, London, Ontario, Canada N5V 1S2

Customer Support: Phone: (519) 457-4041 Fax: (519) 457-4045 E-mail: custsupp@diamondair.com
Technical Publications: E-mail: Techpubs@diamondair.com

**EXECUTION REPORT TO
SERVICE BULLETIN
MSB 62-027 REV. 1**

AIRPLANE DATA

Airplane Serial Number

Airplane Registration

Airplane Operator

Hours of Operation Airplane (TSN)

Typical operation of airplane

private, club, training, other:

MAINTENANCE DATA:

Date of inspection

Inspection carried out by

Date

Name

Signature

Please e-mail the completed form to Techpubs@diamondair.com

WORK INSTRUCTION WI-MSB 62-027 REV. 0

I GENERAL INFORMATION

I.1 Subject

Modification to the installation of the static ports.

I.2 Reference Documents

DA 62 series Airplane Maintenance Manual, Doc. No. 7.02.25, latest effective issue.

I.3 Remarks

1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. All work, in particular if not described in this work instruction, must be done in accordance with the referenced maintenance manual.
3. For conversion factors between SI units and US/Imperial units, refer to AMM Chapter 02.
4. In case of doubt, contact Diamond Aircraft Industries Inc.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

Pitot-static tester

Chanel lock pliers

1/2 inch wrench

Scotch-Brite

II.3 Material

Item	Qty	Part Number	Description
1	100 cm (x2)	EXPANDO TSA 5-0/8	Expando sleeves
2	100 cm (x2)	299T01/005	PVC static hoses, red
3	As required	7-11 Nycote Blue	Nycote
4	As required	N/A	Easy Gasket

III INSTRUCTIONS

III.1 Preparation

1. Turn off the ELECT. MASTER switch located on the left side of the instrument panel.
2. Open the STATIC HT/PEDALS circuit breaker on the right side of the instrument panel.
3. Check that the hose barb fittings on the static ports are pointing downwards as shown in Figure 1. If the hose barb fittings are pointing upwards as in Figure 2, this service bulletin has already been incorporated.

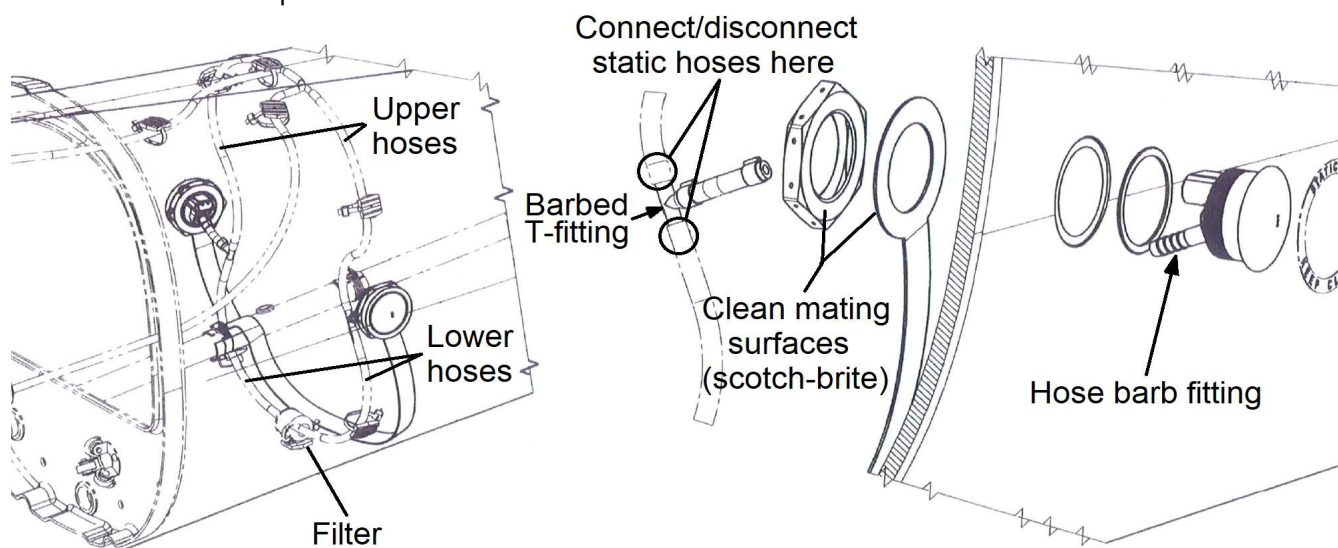


Figure 1. Left: original static port installation. Right: exploded view of original static port installation.

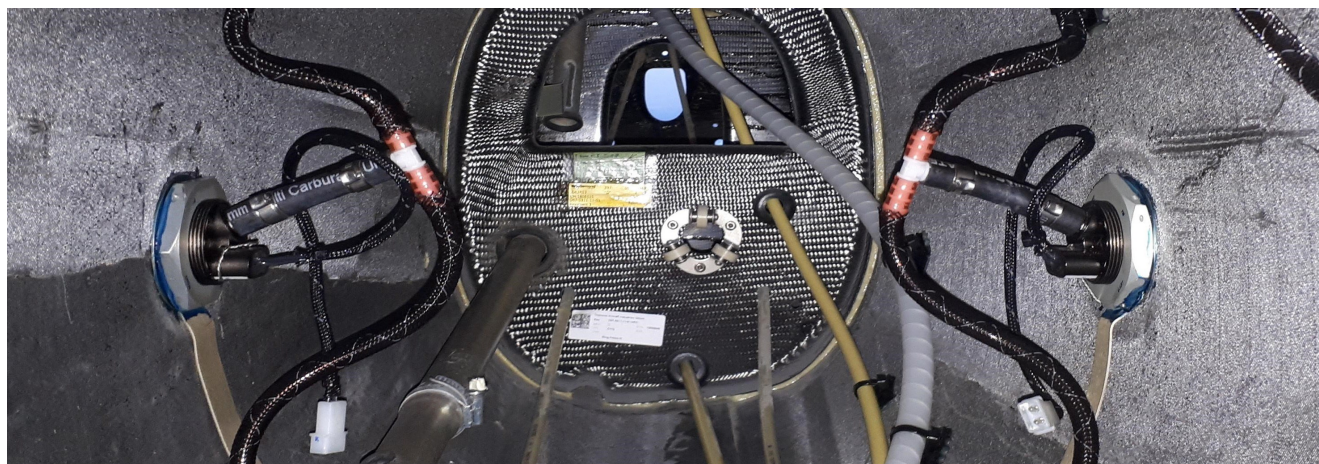


Figure 2. New installation of the static ports with the hose barb fittings pointing upwards.

4. Insert the PVC hoses (item 2) into the Expando sleeves (item 1).

III.2 Remove the Static Port

5. Disconnect the electrical cable from the static port.
6. Disconnect the static hose connections at the circled locations in Figure 1 (pull off the upper and lower hoses from the T-fitting). **DO NOT REMOVE THE OETICKER CLAMPS.**
7. Note the orientation of the holes in the static port (vertical) as shown in Figure 3.



Figure 3. Left: static port from exterior. Right: orientation of the holes must be $\pm 2^\circ$ from vertical.

8. Have one person outside the fuselage hold the static port, and have another person inside the fuselage remove the locking wire and the M40 nut from the back of the port. The static port should come out.

NOTE: if the port doesn't come out, have the person inside the fuselage gently push out the port. If this fails, gently twist the port from the inside using channel lock pliers. Do not apply excessive pressure, or use excessive force on the port.

9. Remove the gasket material and shim ring (if installed) around the static port. If required, use a plastic scraper to remove any excess gasket material. Take care not to damage the static port or the paint on the fuselage.
10. Clean the surface of the M40 nut that was in contact with the lightning protection strap using scotch-brite. See Figure 1.
11. Clean the surface of the lightning protection strap that was in contact with the M40 nut using scotch-brite. See Figure 1.

III.3 Install the Static Port

12. Replace the lower static hoses with the new hoses prepared in step 4.
13. Insert the static port into its hole at the rear of the fuselage. Ensure none of the holes in the static port are blocked. Pay attention to the new orientation:
 - A. The three small static pressure port holes on the static port cap are vertical, as shown in Figure 3. The three holes must form a line which lies $\pm 2^\circ$ from vertical.
 - B. The hose barb fitting is now pointing upwards inside the fuselage (as shown in Figure 2), i.e. turned 180° from when the static port was removed.
14. Cut the new lower static hoses to an appropriate length. They must cover all the barbs of the T-fitting at its new location, but not be too long such that the hoses are pinched.

NOTE: if you removed the M40 nut and the lightning protection strap away from the barbed T-fitting, feed the lightning protection strap and the M40 nut back over the T-fitting.

15. Push the lower hoses onto the barbed T-fitting.
16. Cut the upper static hoses to an appropriate length. They must cover all the barbs of the T-fitting at its new location, but not be too long such that the hoses are pinched.
17. Push the upper hoses onto the barbed T-fitting.
18. Using EASY GASKET (item 4), seal the static port and the shim ring (if installed) into the fuselage from the outside.

NOTE: use EASY GASKET (item 4) to ensure a smooth junction between the static port and shim ring (if installed).

19. Tighten the M40 nut with the channel locks. Hold the static port as shown in Figure 4 with a 1/2 inch wrench to keep the port from turning as you tighten the nut. The M40 nut should be snug, but not overly tight. Ensure the static port holes remain vertical (see Figure 3).



Figure 4. Hold the static port at the location shown when tightening the M40 nut.

20. Secure the M40 nut with a locking wire.
21. Apply Nycote (item 3) around the M40 nut and the lightning protection strap.
22. Connect the electrical cable to the static port.
23. Test the Pitot tube/static port heating system:
 - A. Set the ELECT. Master switch to ON.
 - B. Reset the STATIC HT/PEDALS circuit breaker.
 - C. Set the PITOT HEAT switch to ON.
 - D. Check if the static port gets warm.
 - E. Set the PITOT HEAT switch to OFF.
 - F. Check if the static port cools down.
 - G. Set the ELECT. MASTER switch to OFF.
24. Repeat steps 5 through 23 for the static port on the opposite side of the fuselage.
25. Do a Pitot leak test in accordance with AMM Section 34-10-00.
26. Clean working areas, and check for foreign objects.
27. Make all necessary entries in the airplane logs.
28. Fill in the execution report, and submit it to Techpubs@diamondair.com.