
MANDATORY SERVICE BULLETIN NO. MSB 40NG-077 REV. 0

I TECHNICAL DETAILS

I.1 Category

Mandatory.

I.2 Airplanes Affected

Model: DA 40 NG

S/N: 40.N481, 40.N493, 40.N495, 40.N498 to 40.N514, 40.N517 to 40.N520, 40.N522 to 40.N526, 40.N528 to 40.N530

I.3 Date of Effectivity

25 August 2022

I.4 Time of Compliance

At next scheduled maintenance. No later than 3 months from the date of effectivity.

I.5 Subject

Inspection of gearbox oil.

I.6 Reason

It has come to Diamond's attention that some DA 40 NGs are equipped with incorrect gearbox oil placards. This service bulletin describes the inspection of the suspect aircraft, and provides instructions for inspecting the affected aircraft and replacing the placard if necessary.

I.7 Concurrent Documents

None.

I.8 Approval

The technical information and instructions contained in this document are approved as part of the type design.

I.9 Accomplishment/Instructions

Comply with WI-MSB 40NG-077, 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 40NG-077, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approximately 30 minutes will be required for inspection and replacement of the placard.

Approximately 1 hour will be required if the airplane has been serviced with the incorrect gearbox oil.

This estimate is for direct labour performed by a technician, and it does not include setup, planning, familiarization, cure time, part fabrication, or tool acquisition.

II.4 Credit

Parts and labour for the affected aircraft.

II.5 Reference Documents

DA 40 NG series Airplane Maintenance Manual, Doc. No. 6.02.15, latest effective issue.

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 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 Inc.

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: support-canada@diamondaircraft.com

Technical Publications:
E-mail: Techpubs@diamondaircraft.com



**EXECUTION REPORT TO
SERVICE BULLETIN
MSB 40NG-077 REV. 0**

AIRPLANE DATA

Airplane serial number _____

Airplane registration _____

Airplane operator _____

Hours of operation of airplane (TSN) _____

Typical operation of airplane private, club, training, other: _____

MAINTENANCE DATA

Date of maintenance _____

Maintenance carried out by _____

During scheduled inspection? Yes No

Aircraft serviced with incorrect oil? Yes No

Name _____ Signature _____ Date _____

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

WORK INSTRUCTION WI-MSB 40NG-077 REV. 0

I GENERAL INFORMATION

I.1 Subject

Inspection of gearbox oil.

I.2 Reference Documents

DA 40 NG series Airplane Maintenance Manual, Doc. No. 6.02.15, latest effective revision.

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 which is not especially described in this work instruction, must be done in accordance with the referenced maintenance manual.
3. In case of doubt, contact Diamond Aircraft Industries Inc.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

None.

II.3 Material

Item	Part No.	Qty	Description
1	D64-1126-20-27	1	Placard, gearbox oil

III INSTRUCTIONS

1. Ensure the engine is safe.
2. Remove the engine cowlings. Refer to AMM Section 71-10.
3. Inspect the placard located near the gearbox oil fill plug. Refer to Figure 1.

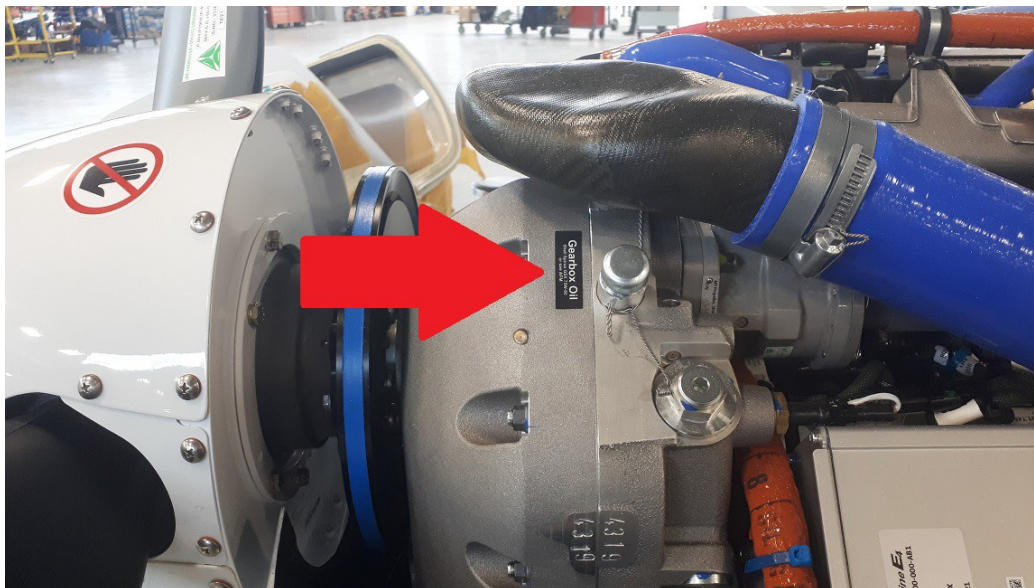


Figure 1. Location of the placard.

4. If the placard on the gearbox matches the placard in Figure 2, proceed to step 7.

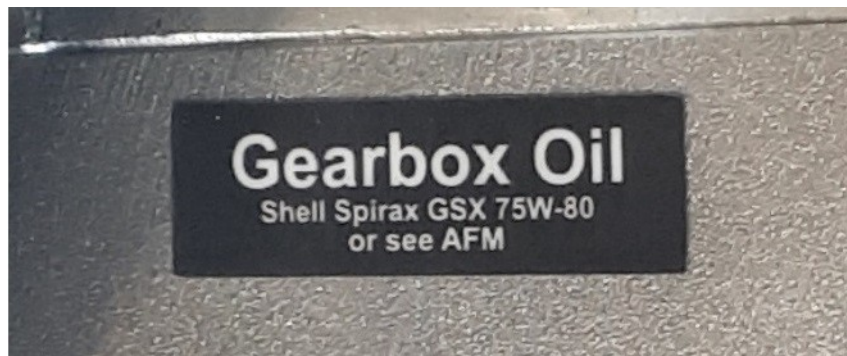


Figure 2. Correct gearbox oil placard.

5. If the placard currently installed on the gearbox does not match the placard shown in Figure 2, replace the placard with placard P/N D64-1126-20-27:
 - A. Remove the currently installed placard.
 - B. Thoroughly clean the area where the placard was installed. The surface must be free from contamination.
 - C. Apply the new placard. Take care when positioning the placard. Attempting to reposition the placard may damage the placard.
6. Review the aircraft logbooks and determine the gearbox oil used during each service. If the gearbox was serviced with oil not listed in the DA 40 NG AFM Doc. No. 6.01.15-E, or if there is doubt regarding the gearbox oil being used, proceed as follows:
 - A. Collect a sample of gearbox oil in a clean container:
 - I. If the oil has been in use for less than 100 hr, provide a sample of oil from the gearbox for testing. Refer to the Austro Engine Maintenance Manual.
 - II. If the oil has been in use for 100 hr or more, provide a fresh sample of the oil used to service the gearbox for testing.
 - B. Send the oil sample to OELCHECK GmbH for a Brugger-test.
 - C. If the result of the test is $39 \text{ N/mm}^2 \pm 10\%$, proceed to item D. Otherwise, contact Austro Engine GmbH.
 - D. Fill the gearbox with an appropriate oil. Refer to the DA 40 NG AFM and the Austro Engine Maintenance Manual.
7. Install the engine cowlings. Refer to AMM Section 71-10.
8. Make a logbook entry indicating that this service bulletin has been performed.
9. Submit the execution report to Techpubs@diamondaircraft.com.

Diamond Aircraft Industries
WORK INSTRUCTION
Model DA 40 NG



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