OPTIONAL SERVICE BULLETIN



Model DA 40

OPTIONAL SERVICE BULLETIN NO. OSB 40-027 REV. 1 SUPERSEDES OSB 40-027 REV. 0

I TECHNICAL DETAILS

I.1 Category

Optional.

1.2 Airplanes Affected

Type: DA 40

S/N: 40.006 through 40.079, 40.081 through 40.083, and 40.201 and subsequent if the

LASAR Ignition System is installed

I.3 Date of Effectivity

15 January 2021

I.4 Time of Compliance

At owner's discretion.

I.5 Subject

Installation of the Slick Start Ignition System.

I.6 Reason

The Slick Start Ignition System has been approved as an optional replacement of the LASAR system. This service bulletin describes the installation of the Slick Start Ignition System.

I.7 Concurrent Documents

None.

I.8 Approval

The technical information and instructions contained in this document relate to Design Change Advisory No. OÄM 40-073, which has been approved as part of the type design.

I.9 Accomplishment/Instructions

See WI-OSB 40-027, latest effective issue.

I.10 Mass (Weight) and CG

The change in mass and CG is negligible.

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II PLANNING INFORMATION

II.1 Material and Availability

See WI-OSB 40-027, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approximately 14 hours will be required to accomplish this service bulletin.

II.4 Credit

None.

II.5 Reference Documents

DA 40 Series Airplane Maintenance Manual, Doc. No. 6.02.01, latest effective issue.

III REMARKS

- 1. All work must be done by a certified aircraft service station or a certified aircraft maintenance
- 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.

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EXECUTION REPORT TO SERVICE BULLETIN OSB 40-027 REV. 1

AIRPLANE INFORMATION		
Airplane Serial Number		
Airplane Registration		
Airplane Operator		
Hours of Operation of Airplane		
No. of Landings		
Hours of Operation of Engine		
Typical Operation of Airplane	(private, club, training, other)	
Date, Name, Signature		
Please e-mail the completed form to Techpubs@diamondaircraft.com.		

WORK INSTRUCTION

Model DA 40



WORK INSTRUCTION WI-OSB 40-027 REV. 2 SUPERSEDES WI-OSB 40-027 REV. 1

I GENERAL INFORMATION

I.1 Subject

The optional replacement of the LASAR system with the Slick Start Ignition System.

I.2 Reference Documents

DA 40 Series Airplane Maintenance Manual, Doc. No. 6.02.01, 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 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.

WORK INSTRUCTION





II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

DA4-9274-00-02, latest effective revision

DA4-9274-00-03, latest effective revision

DA4-9274-00-04, latest effective revision

D41-7406-00-00_02, latest effective revision

II.2 Special Tools

None.

II.3 Material

NOTE: When purchasing parts at Diamond Aircraft in Wiener Neustadt, order parts by the numbers given in parenthesis, if specified.

NOTE: Items 5, 6, and 7 are manufactured from 20 ft of M22759-16-22-9 cable.

Item	Part No.	Qty	Description
1	4370 (451030)	1	RH magneto
2	4347 (451020)	1	LH Magneto
3	68C19622 (L-68C19622)	1	Gear wheel
4	31C-12 (L-31C-12)	1	Stud
5	74101C22	1	Cable
6	74104A22	1	Cable
7	74105A22	1	Cable
8	2-520184-2	4	Faston
9	36160	2	Ring terminal
10	36154	4	Ring terminal
11	D02-08-RC54453	4	Solder sleeve

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III INSTRUCTIONS

- 1. Check if the ignition key works properly before the installation of the Slick Start System.
- 2. Remove the engine cowlings. Refer to AMM Section 71-10.
- 3. Disconnect the main battery. Refer to AMM Section 24-31.
- 4. Remove the instrument panel cover. Refer to AMM Section 25-10.
- 5. Remove the ignition cables from the spark plugs and magnetos.
- 6. Remove the magnetos.
- 7. Remove the engine speed sensor from the RH magneto.
- 8. Remove the LASAR box.
- 9. Disconnect LASAR cables SP2, SP3, SP4, SP5, and SP6. Refer to Drawing DA4-9274-00-02.
- 10. Remove the gear wheel from the old RH magneto and install it on the new RH magneto (item 1) and secure it with a pin.
- 11. Install the new gear wheel (item 3) on the new LH magneto (item 2) and secure it with a pin.
- 12. Remove the connection flange and the stud from the LH magneto, and install the new stud (item 4).
- 13. Install the engine speed sensor in the RH magneto.
- 14. Install the magnetos, and adjust the timing.
- 15. Install the Slick Start unit. Refer to Drawing D41-7406-00-00 02.
- 16. Remove the T-piece from the MAP line, and install a straight piece.
- 17. Remove the IGNITION circuit breaker, and install a blind plug.
- 18. Remove cables 74102A16, 74102B16, 31001A22, and 31001B22. Refer to Drawing DA4-9274-00-02.
- 19. Install new cables (items 5 through 7). Refer to Drawing DA4-9274-00-03 or Drawing DA4-9274-00-04 (G1000 equipped aircraft).
- 20. Ensure a tight fit of all parts.
- 21. Remove the DPU.
- 22. Remove the lower cover of the DPU, and set the Jumper JP2 to position "A."
- 23. Reinstall the cover, and reinstall the DPU.
- 24. Remove the ignition switch. Refer to AMM Section 74-00.

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25. Confirm the presence of a jumper (bus bar) between the GRD and R terminals on the ignition switch as shown in Figure 1, below.

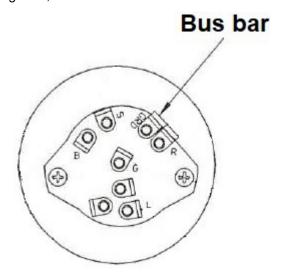


Figure 1. Required jumper (bus bar) on the reverse side of the ignition switch.

- 26. If there is no jumper (bus bar) as indicated in Figure 1, install a jumper wire between the upper tow adjacent terminals (GRD and R).
- 27. Install the instrument panel cover. Refer to AMM Section 25-10.
- 28. Connect the main battery. Refer to AMM Section 24-31.
- 29. Install the engine cowlings. Refer to AMM Section 71-10.
- 30. Perform an engine ground run, and verify the proper operation of the ignition system and the RPM indicator.
- 31. Clean working areas, and check for foreign objects.
- 32. Make a logbook entry indicating that this service bulletin has been installed.
- 33. Submit the execution report to Techpubs@diamondaircraft.com.

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WORK INSTRUCTION





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

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