# MANDATORY SERVICE BULLETIN



Model DA 40 D

# MANDATORY SERVICE BULLETIN NO. MSB D4-045 REV. 10

SUPERSEDES MSB D4-045 REV. 9

### I TECHNICAL DETAILS

### I.1 Category

Mandatory

### **1.2** Airplanes Affected

Type: DA 40 D

S/N: 40.080, 40.084, D4.001 and subsequent, 40.DS001 and subsequent equipped with

the TAE 125-01 or TAE 125-02-99 engine, provided that OÄM 40-193 (G1000 IFR), OÄM 40-224 (G1000 VFR), OÄM 40-268 (G1000 VFR without autopilot), or OÄM

40-278 (G1000 IFR without autopilot) is carried out

#### I.3 Time of Compliance

At next maintenance action.

**NOTE:** Prior compliance with MSB D4-045 Rev. 0 through MSB D4-045 Rev. 9 does not preclude compliance with the MSB.

### I.4 Subject

Software for Garmin G1000, approved systems, manifests, and configurations.

#### I.5 Reason

Summary of approved software systems, manifests, and configurations for the Garmin G1000.

#### **I.6** Concurrent Documents

None.

#### I.7 Approval

The technical information and instructions contained in this document relate to Design Change Advisories No. MÄM 40-319/b, MÄM 40-497, MÄM 40-570, and MÄM 40-862.

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

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#### I.8 Accomplishment/Instructions

#### | I.8.1 Applicable to Airplanes with the TAE 125-01 Engine

Compare the installed software system and related manifests with the approved ones stated in this service bulletin.

If the installed software system and related manifests are not approved, perform an update to the latest approved software version according to the instructions given in the latest effective revision of the G1000 Line Maintenance and Configuration Manual, or other related Garmin documents.

An update to a later approved software system with the related manifest may be carried out on every aircraft. Perform the update according to the instructions given in the latest effective revision of the G1000 Line Maintenance and Configuration Manual, or other related Garmin documents.

**NOTE:** Changing the software system requires a new configuration of the system. Refer to the Garmin documentation for software configuration.

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# **MANDATORY SERVICE BULLETIN**



Software Part Number	Approved Version	Function	Remarks
System			
010-00370-13	V1.00		
Manifest			
006-B0093-XX	V3.03	GPS1, GPS2	
006-B0172-XX	V4.03	GTX1-GIA1, GTX1-GIA2	
006-B0190-22	V3.02	GIA1, GIA2	
006-B0193-04	V2.06	GEA1-GIA1, GEA1-GIA2	
006-B0203-08	V2.09	GMA1-GIA1, GMA1-GIA2	
006-B0223-05	V2.06	GRS1-GIA1, GRS1-GIA2	
006-B0224-00	V2.01	GMU1	
006-B0319-32	V5.02	PFD1, MFD1	
006-B0328-05	V4.03		
006-B0329-01	V3.03		
006-C0048-00	V2.00	GMU1 FPGA	
006-C0049-00	V02.00	GRS1 FPGA	
006-C0055-00	V01.05	GDC1 FPGA	
-	-	GRS1 MV DB (see below)	
006-D0202-13	V2.10		
006-D0261-03	V2.05	GDC1-GIA1	

# **MANDATORY SERVICE BULLETIN**



Software Part Number	Approved Version	Function	Remarks
System			
010-00370-14	V1.00		
Manifest			
006-B0093-XX	V3.03	GPS1, GPS2	
006-B0172-XX	V4.03	GTX1-GIA1, GTX1-GIA2	
006-B0190-22	V3.02	GIA1, GIA2	
006-B0193-04	V2.06	GEA1-GIA1, GEA1-GIA2	
006-B0203-08	V2.09	GMA1-GIA1, GMA1-GIA2	
006-B0223-05	V2.06	GRS1-GIA1, GRS1-GIA2	
006-B0224-00	V2.01	GMU1	
006-B0319-32	V5.02	PFD1, MFD1	
006-B0328-05	V4.03		
006-B0329-01	V3.03		
006-C0048-00	V2.00	GMU1 FPGA	
006-C0049-00	V02.00	GRS1 FPGA	
006-C0055-00	V01.05	GDC1 FPGA	
-	-	GRS1 MV DB (see below)	
006-D0202-14	V2.11		
006-B0261-03	V2.05	GDC1-GIA1	

# **MANDATORY SERVICE BULLETIN**



Model DA 40 D

Software Part Number	Approved Version	Function	Remarks
System			
010-00370-17	V1.00		
Manifest			
006-B0093-XX	V3.03	GPS1, GPS2	
006-B0172-XX	V4.03	GTX1-GIA1, GTX1-GIA2	
006-B0190-22	V3.02	GIA1, GIA2	
006-B0193-04	V2.06	GEA1-GIA1, GEA1-GIA2	
006-B0203-10	V2.11	GMA1-GIA1, GMA1-GIA2	
006-B0223-07	V2.09	GRS1-GIA1, GRS1-GIA2	
006-B0224-00	V2.01	GMU1	
006-B0319-32	V5.02	PFD1, MFD1	
006-B0328-05	V4.03		
006-B0329-01	V3.03		
006-C0048-00	V2.00	GMU1 FPGA	
006-C0049-00	V02.00	GRS1 FPGA	
006-C0055-00	V01.05	GDC1 FPGA	
-	-	GRS1 MV DB (see below)	
006-D0202-15	V2.12		
006-B0261-03	V2.05	GDC1-GIA1	

Approved Configurations (Software)	Remarks
DA40D Factory Base Configuration	
DA42/DA40D DME Option	
DA42/DA40D ADF Option	Only in conjunction with System 010-00370-13 or higher
DA42/DA40D Stormscope Option	
DA40D 1.7 Liter Engine Option	Only in conjunction with System 010-00370-17 or higher

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# **MANDATORY SERVICE BULLETIN**



Model DA 40 D

Approved Magnetic Field Charts (GRS1 MV DB)			
Software Part Number   Approved Version   Remarks			
006-D0159-02	V2010.00	Valid until 31 Dec 2016.	
006-D0159-03	V2015.00	Valid until 31 Dec 2021.	
006-D0159-04	V2020.00		

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#### | 1.8.2 Applicable to Airplanes with the TAE 125-02-99 Engine

Compare the installed software system and related manifests with the approved ones stated in this service bulletin.

If the installed software system and related manifests are not approved, perform an update to the latest approved software version according to the instructions given in the latest effective revision of the G1000 Line Maintenance and Configuration Manual, or other related Garmin documents.

An update to a later approved software system with the related manifest may be carried out on every aircraft. Perform the update according to the instructions given in the latest effective revision of the G1000 Line Maintenance and Configuration Manual, or other related Garmin documents.

NOTE: Changing the software system requires a new configuration of the system. Refer to the Garmin documentation for software configuration.

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# **MANDATORY SERVICE BULLETIN**



Software Part Number	Software Version	Software Name	Remarks
System			
010-00370-15	V1.00		
Manifest			
006-B0093-XX	V3.03	GPS1, GPS2	
006-B0172-XX	V4.03	GTX1-GIA1, GTX1-GIA2	
006-B0190-22	V3.02	GIA1, GIA2	
006-B0193-04	V2.06	GEA1-GIA1, GEA1-GIA2	
006-B0203-08	V2.09	GMA1-GIA1, GMA1-GIA2	
006-B0223-07	V2.09	GRS1-GIA1, GRS1-GIA2	
006-B0224-00	V2.01	GMU1	
006-B0319-32	V5.02	PFD1, MFD1	
006-B0328-05	V4.03		
006-B0329-01	V3.03		
006-C0048-00	V2.00	GMU1 FPGA	
006-C0049-00	V02.00	GRS1 FPGA	
006-C0055-00	V01.05	GDC1 FPGA	
-	-	GRS1 MV DB (see below)	
006-D0202-15	V2.12		
006-B0261-03	V2.05	GDC1-GIA1	

# **MANDATORY SERVICE BULLETIN**



Software Part Number	Software Version	Software Name	Remarks
System			
010-00370-17	V1.00		
Manifest			
006-B0093-XX	V3.03	GPS1, GPS2	
006-B0172-XX	V4.03	GTX1-GIA1, GTX1-GIA2	
006-B0190-22	V3.02	GIA1, GIA2	
006-B0193-04	V2.06	GEA1-GIA1, GEA1-GIA2	
006-B0203-10	V2.11	GMA1-GIA1, GMA1-GIA2	
006-B0223-07	V2.09	GRS1-GIA1, GRS1-GIA2	
006-B0224-00	V2.01	GMU1	
006-B0319-32	V5.02	PFD1, MFD1	
006-B0328-05	V4.03		
006-B0329-01	V3.03		
006-C0048-00	V2.00	GMU1 FPGA	
006-C0049-00	V02.00	GRS1 FPGA	
006-C0055-00	V01.05	GDC1 FPGA	
-	-	GRS1 MV DB (see below)	
006-D0202-15	V2.12		
006-B0261-03	V2.05	GDC1-GIA1	

Approved Configurations (Software)	Remarks
DA40D Factory Base Configuration	
DA42/DA40D DME Option	
DA42/DA40D ADF Option	Only in conjunction with System 010-00370-15 or higher.
DA42/DA40D Stormscope Option	1.1.3

# **MANDATORY SERVICE BULLETIN**



Model DA 40 D

Approved Magnetic Field Charts (GRS1 MV DB)			
Software Part Number			
006-D0159-02	V2010.00	Valid until 31 Dec 2016.	
006-D0159-03	V2015.00	Valid until 31 Dec 2021.	
006-D0159-04	V2020.00		

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# MANDATORY SERVICE BULLETIN



Model DA 40 D

#### 1.8.3 Applicable to S/N 40.DS079 and Subsequent

Compare the installed software system and related manifests with the approved ones stated in this service bulletin.

If the installed software system and related manifests are not approved, perform an update to the latest approved software version according to the instructions given in the latest effective revision of the G1000 Line Maintenance and Configuration Manual, or other related Garmin documents.

An update to a later approved software system with the related manifest may be carried out on every aircraft. Perform the update according to the instructions given in the latest effective revision of the G1000 Line Maintenance and Configuration Manual, or other related Garmin documents.

**NOTE:** Changing the software system requires a new configuration of the system. Refer to the Garmin documentation for software configuration.

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# **MANDATORY SERVICE BULLETIN**



Software Part Number	Software Version	Software Name	Remarks
System			The Garmin G1000
010-00628-00	V1.00		Pilot's Guide P/N 190-00705-01 Rev.
Manifest			A or later approved revision, and the
006-B0081-XX	V10.00	COM1, COM2	Garmin G1000
006-B0082-11	V6.01	NAV1, NAV2	Cockpit Reference Guide P/N 190-
006-B0172-XX	V6.11	GTX1	00706-01 Rev A or later approved
006-B0193-05	V2.07	GEA1	revision must be
006-B0203-44	V4.04	GMA1	used.
006-B0223-22	V3.02	GRS1	AFM Supplement     A32 Rev.4 or later
006-B0224-01	V2.05	GMU1	approved revision must be used.
006-B0319-A3	V12.03	PFD1, MFD1	
006-B0328-13	V6.11		• SBAS (WASS, EGNOS, MSAS)
006-C0048-00	V2.00	GMU1 FPGA	must be disabled.
006-C0049-00	V02.00	GRS1 FPGA	<ul> <li>ChartView,</li> <li>FliteCharts®, and</li> </ul>
-	-	GRS1 MV DB (see below)	SafeTaxi® are not
006-B0261-18	V3.08	GDC1	approved.
006-D0425-08	V2.13	GIA1 Audio, GIA2 Audio	
006-B0339-0A	V3.2	GPS1, GPS2	
006-B0544-38	V6.40	GIA1, GIA2	
006-C0036-04	V1.04	PFD1 FPGA, MFD1 FPGA	
006-C0124-00	V1.0	NAV1 FPGA, NAV2 FPGA	

# **MANDATORY SERVICE BULLETIN**



Model DA 40 D

Approved Configurations (Software)	Remarks
DA40D Option - ADF	
DA40D Option - Aux Fuel Tanks	
DA40D Option - DME	
DA40D Option - Stormscope	

Approved Magnetic Field Charts (GRS1 MV DB)			
Software Part Number   Approved Version   Remarks			
006-D0159-02	V2010.00	Valid until 31 Dec 2016.	
006-D0159-03	V2015.00	Valid until 31 Dec 2021.	
006-D0159-04	V2020.00		

# I.9 Mass (Weight) and CG

The change in mass and CG is negligible.

# **II PLANNING INFORMATION**

# II.1 Material and Availability

Software and concurrent documents can be obtained through your Garmin distributor.

### II.2 Special Tools

None.

#### II.3 Labour Effort

Approximately 30 minutes will be required to accomplish this service bulletin.

### II.4 Credit

None.

# II.5 Reference Documents

Garmin G1000 Line Maintenance and Configuration Manual, P/N 190-00303-04, latest effective issue.

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### **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

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# EXECUTION REPORT TO SERVICE BULLETIN MSB D4-045 REV. 10

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