

# MANDATORY SERVICE BULLETIN

## MSB 42NG-003/31

### SUPERSEDES MSB 42NG-003/30

#### I TECHNICAL DETAILS

##### I.1 Category

Mandatory.

##### I.2 Airplanes affected

Type: DA 42 NG, DA 42 M-NG

Serial Numbers: 42.009, 42.339, 42.379, 42.N001 and subsequent  
42.MN001 and subsequent  
42.NC001 and subsequent  
42.NW002 and subsequent  
All DA 42 NG converted via OSB 42-068  
All DA 42 M-NG converted via OSB 42-081

##### I.3 Time of Compliance

At next scheduled maintenance action.

**NOTE** Prior compliance with MSB 42NG-003 through MSB 42NG-003/30 does not constitute compliance with this MSB.

##### I.4 Subject

Software for Garmin G1000 and G1000 NXi; approved software systems, manifests and configurations.

##### I.5 Reason

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

##### I.6 Concurrent Documents

Garmin G1000 System Maintenance Manual, P/N 190-00907-00, latest effective issue.  
Garmin G1000 NXi Line Maintenance Manual, 190-02631-00, latest effective issue.

## **I.7 Approval**

The technical information or instructions contained in this document relate to the Design Change Advisories No. VÄM 42-004, MÄM 42-497, MÄM 42-600, MÄM 42-678, MÄM 42-729, MÄM 42-758, MÄM 42-828, MÄM 42-897, MÄM 42-972, MÄM 42-978, MÄM 42-985/a, MÄM 42-1000, MÄM 42-1012, MÄM 42-1066, MÄM 42-1072, MÄM 42-1164, MÄM 42-1170, MÄM 42-1187, OÄM 42-209, OÄM 42-273, OÄM 42-251 and OÄM 42-337 which have been approved under the authority of DOA ref. EASA.21J.052 or by EASA.

The technical content of this document has been approved under the authority of DOA ref. EASA.21J.052.

## **I.8 Accomplishment/Instructions**

### **I.8.1 Applicable to Garmin G1000**

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

If 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 G1000 System Maintenance Manual, latest effective issue, other related Garmin documents, or WI-MSB 42NG-003, latest effective issue.

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 G1000 System Maintenance Manual, latest effective issue, other related Garmin documents, or WI-MSB 42NG-003, latest effective issue.

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

Software Part Number	Approved Version	Function	Remarks	
<b>System</b>			<ul style="list-style-type: none"> <li>for airplanes with MÄM 42-600, Performance Enhancement installed, the AFM Doc. No. 7.01.16-E, latest effective issue must be used.</li> <li>for airplanes with MÄM 42-600 <b>NOT</b> installed or for airplanes converted via OSB 42-068 or via OSB 42-081, the AFM Doc. No. 7.01.15-E, latest effective issue must be used.</li> </ul>	
010-00670-10	V1.00			
<b>Manifest</b>				
006-B0172-XX	V6.11	GTX1		
006-B0193-05	V2.07	GEA1		
006-B0203-44	V4.04	GMA1		
006-B0223-22	V3.02	GRS1		
006-B0224-01	V2.05	GMU1		
006-B0319-A8	V12.05	PFD1, MFD1		
006-B0328-13	V6.11			
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-B0261-18	V3.08	GDC1		
006-D0425-08	V2.13	GIA1 Audio, GIA2 Audio		
006-B0398-32	V2.30	GSA 8X		
006-D0744-03	V2.00	GFC700 Cert Gains		
006-B0339-0A	V3.2	GPS1, GPS2 (WAAS)		
006-B0544-3C	V6.42	GIA1, GIA2 (WAAS)		
006-C0036-04	V1.04	GDU 1XXX FPGA		
006-B0093-XX	V3.03	GPS1, GPS2 (non-WAAS)		
006-B0190-51	V6.20	GIA1, GIA2 (non-WAAS)		
006-D0425-05	V2.05	GIA1, GIA2 Audio (non-WAAS)		
006-B0266-10	V2.11	GWX1		
006-C0042-06	V3.01	GWX1 FPGA		
<p><b>The mandatory secondary configuration card, as shown below, must be used in conjunction with system software version P/N 010-00670-10.</b></p>				

Software Part Number	Approved Version	Function	Remarks	
<b>System</b>			<ul style="list-style-type: none"> <li>for airplanes with MÄM 42-600, Performance Enhancement installed, the AFM Doc. No. 7.01.16-E, latest effective issue must be used.</li> <li>for airplanes with MÄM 42-600 <b>NOT</b> installed or for airplanes converted via OSB 42-068 or via OSB 42-081, the AFM Doc. No. 7.01.15-E latest effective must be used.</li> </ul>	
010-00670-11	V1.00			
<b>Manifest</b>				
006-B0172-XX	V6.11	GTX1		
006-B0193-05	V2.07	GEA1		
006-B0203-44	V4.04	GMA1		
006-B0223-22	V3.02	GRS1		
006-B0224-01	V2.05	GMU1		
006-B0319-A8	V12.05	PFD1, MFD1		
006-B0328-13	V6.11			
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-B0261-18	V3.08	GDC1		
006-D0425-08	V2.13	GIA1 Audio, GIA2 Audio		
006-B0398-32	V2.30	GSA 8X		
006-D0744-03	V2.00	GFC700 Cert Gains		
006-B0398-35	V3.11	GSA 8X (ESP/USP)		
006-D0744-04	V2.01	GFC700 Cert Gains		
006-B0339-0A	V3.2	GPS1, GPS2		
006-B0544-3C	V6.42	GIA1, GIA2		
006-C0036-04	V1.04	GDU 1XXX FPGA		
006-B0093-XX	V3.03	GPS1, GPS2 (non-WAAS)		
006-B0190-51	V6.20	GIA1, GIA2 (non-WAAS)		
006-D0425-05	V2.05	GIA1, GIA2 Audio (non-WAAS)		
006-B0266-10	V2.11	GWX1		
006-C0042-06	V3.01	GWX1 FPGA		
<p><b>The mandatory secondary configuration card, as shown below, must be used in conjunction with system software version P/N 010-00670-11.</b></p>				

<u>Mandatory</u> Secondary Configuration P/N	Function	Remarks
010-12074-02	Additional ALTN FAIL Triggers	

<u>Optional</u> Secondary Configuration P/N	Function	Remarks
010-12074-03	Fuel Temperature Indicator for Diesel Operation	<ul style="list-style-type: none"> <li>for airplanes with MÄM 42-600 <b>NOT</b> installed or for airplanes converted via OSB 42-068 or via OSB 42-081, the Supplement O05 must be incorporated into the AFM Doc. No. 7.01.15-E.</li> <li>for airplanes with MÄM 42-600 installed, the Supplement O05 must be incorporated into the AFM Doc. No. 7.01.16-E.</li> </ul>

Software Part Number	Approved Version	Function	Remarks
<b>System</b>			<ul style="list-style-type: none"> <li>for airplanes with MÄM 42-600, Performance Enhancement installed, the AFM-TR-MÄM 42-760 &amp; MÄM 42-828 must be incorporated into the AFM Doc. No. 7.01.16-E or the AFM Revision in which this TR has been incorporated to must be used.</li> <li>for airplanes with MÄM 42-600 <b>NOT</b> installed or for airplanes converted via OSB 42-068 or via OSB 42-081, the AFM-TR-MÄM 42-760 &amp;</li> </ul>
010-00670-12	V1.00		
<b>Manifest</b>			
006-B0172-XX	V7.04	GTX1	
006-B0193-05	V2.07	GEA1	
006-B0203-44	V4.04	GMA1	
006-B0223-24	V3.04	GRS1	
006-B0224-01	V2.05	GMU1	
006-B0319-C2	V14.02	PFD1, MFD1	
006-C0048-00	V2.00	GMU1 FPGA	
006-C0049-00	V02.00	GRS1 FPGA	
006-C0055-00	V01.05	GDC1 FPGA	
006-B0261-19	V3.09	GDC1	
006-D0425-08	V2.13	GIA1 Audio, GIA2 Audio	
006-B0398-32	V2.30	GSA 8X	
006-D0744-04	V2.01	GFC700 Cert Gains	
006-B0398-35	V3.11	GSA 8X (ESP/USP)	

Software Part Number	Approved Version	Function	Remarks
006-D0744-04	V2.01	GFC700 Cert Gains	MÄM 42-828 must be incorporated into the AFM Doc. No. 7.01.15-E or the AFM Revision in which this TR has been incorporated to must be used.
006-D0744-05	V2.02	GFC700 Cert Gains (Increased AFCS Availability)	
006-B0339-20	V5.0	GPS1, GPS2	
006-B0544-4G	V7.60	GIA1, GIA2	
006-C0036-04	V1.04	GDU 1XXX FPGA	
006-B0266-11	V2.12	GWX1 (GWX 68)	
006-C0042-06	V3.01	GWX1 FPGA (GWX 68)	
006-B0756-13	V2.20	GWX1 (GWX 70)	
006-C0119-01	V1.1	GWX1 FPGA (GWX 70)	

Software Part Number	Approved Version	Function	Remarks
<b>System</b>			<ul style="list-style-type: none"> <li>for airplanes with MÄM 42-600, Performance Enhancement installed, the AFM-TR-MÄM 42-760 &amp; MÄM 42-828 must be incorporated into the AFM Doc. No. 7.01.16-E or the AFM Revision in which this TR has been incorporated to must be used.</li> <li>for airplanes with MÄM 42-600 <b>NOT</b> installed or for airplanes converted via OSB 42-068 or via OSB 42-081, the AFM-TR-MÄM 42-760 &amp; MÄM 42-828</li> </ul>
010-00670-13	V1.00		
<b>Manifest</b>			
006-B0172-XX	V8.02	GTX1	
006-B0193-05	V2.07	GEA1	
006-B0203-44	V4.04	GMA1	
006-B0223-24	V3.04	GRS1	
006-B0224-01	V2.05	GMU1	
006-B0319-D6	V15.11	PFD1, MFD1	
006-C0048-00	V2.00	GMU1 FPGA	
006-C0049-00	V02.00	GRS1 FPGA	
006-C0055-00	V01.05	GDC1 FPGA	
006-B0261-19	V3.09	GDC1	
006-D4432-00	V2.00	GIA1 Audio, GIA2 Audio	
006-B0398-32	V2.30	GSA 8X	
006-D0744-04	V2.01	GFC700 Cert Gains	
006-B0398-35	V3.11	GSA 8X (ESP/USP)	
006-D0744-04	V2.01	GFC700 Cert Gains	

Software Part Number	Approved Version	Function	Remarks
006-D0744-05	V2.02	GFC700 Cert Gains (Increased AFCS Availability)	<p>must be incorporated into the AFM Doc. No. 7.01.15-E or the AFM Revision in which this TR has been incorporated to must be used.</p> <ul style="list-style-type: none"> <li>do not install the GWX 70 Option with this system software version. This would cause a manifest error.</li> <li>4.9 arc-second databases (Garmin P/N 010-00330-45) are required with this system software version.</li> </ul>
006-B0339-21	V5.1	GPS1, GPS2	
006-B0544-4S	V7.80	GIA1, GIA2	
006-C0036-04	V1.04	GDU 1XXX FPGA	
006-B0266-12	V2.20	GWX1 (GWX 68)	
006-C0042-06	V3.01	GWX1 FPGA (GWX 68)	
<del>006-B0756-13</del>	<del>V2.20</del>	<del>GWX1 (GWX 70)</del>	
<del>006-C0119-01</del>	<del>V1.1</del>	<del>GWX1 FPGA (GWX 70)</del>	

Software Part Number	Approved Version	Function	Remarks
<b>System</b>			<ul style="list-style-type: none"> <li>for airplanes with MÄM 42-600, Performance Enhancement installed, the AFM-TR-MÄM 42-760 &amp; MÄM 42-828 must be incorporated into the AFM Doc. No. 7.01.16-E or the AFM Revision in which this TR has been incorporated to must be used.</li> </ul>
010-00670-14	V1.00		
<b>Manifest</b>			
006-B0172-XX	V8.02	GTX1	
006-B0193-05	V2.07	GEA1	
006-B0203-44	V4.04	GMA1	
006-B0223-24	V3.04	GRS1	
006-B0224-01	V2.05	GMU1	
006-B0319-D6	V15.11	PFD1, MFD1	
006-C0048-00	V2.00	GMU1 FPGA	
006-C0049-00	V02.00	GRS1 FPGA	
006-C0055-00	V01.05	GDC1 FPGA	





Software Part Number	Approved Version	Function	Remarks
<b>System</b>			<ul style="list-style-type: none"> <li>for airplanes with MÄM 42-600, Performance Enhancement installed, the AFM-TR-MÄM 42-760 &amp; MÄM 42-828 must be incorporated into the AFM Doc. No. 7.01.16-E or the AFM Revision in which this TR has been incorporated to must be used.</li> <li>for airplanes with MÄM 42-600 <b>NOT</b> installed or for airplanes converted via OSB 42-068 or via OSB 42-081, the AFM-TR-MÄM 42-760 &amp; MÄM 42-828 must be incorporated into the AFM Doc. No. 7.01.15-E or the AFM Revision in which this TR has been incorporated to must be used.</li> <li>4.9 arc-second databases (Garmin P/N 010-00330-45) are required with this system software version.</li> </ul>
010-00670-15	V1.00		
<b>Manifest</b>			
006-B0172-XX	V8.02	GTX1	
006-B0193-05	V2.07	GEA1	
006-B0203-44	V4.04	GMA1	
006-B0223-24	V3.04	GRS1	
006-B0224-01	V2.05	GMU1	
006-B0319-D6	V15.11	PFD1, MFD1	
006-C0048-00	V2.00	GMU1 FPGA	
006-C0049-00	V02.00	GRS1 FPGA	
006-C0055-00	V01.05	GDC1 FPGA	
006-B0261-19	V3.09	GDC1	
006-D4432-00	V2.00	GIA1 Audio, GIA2 Audio	
006-B0398-32	V2.30	GSA 8X	
006-D0744-04	V2.01	GFC700 Cert Gains	
006-B0398-35	V3.11	GSA 8X (ESP/USP)	
006-D0744-04	V2.01	GFC700 Cert Gains	
006-D0744-05	V2.02	GFC700 Cert Gains (Increased AFCS Availability)	
006-B0339-21	V5.1	GPS1, GPS2	
006-B0544-4S	V7.80	GIA1, GIA2	
006-C0036-04	V1.04	GDU 1XXX FPGA	
006-B0266-12	V2.20	GWX1 (GWX 68)	
006-C0042-06	V3.01	GWX1 FPGA (GWX 68)	
006-B0756-17	V2.55	GWX1 (GWX 70)	
006-C0119-02	V1.2	GWX1 FPGA (GWX 70)	

Approved Configurations (Software)	Remarks
NOTE: Even though more options may be included in the software loader card, only those shown below are currently approved for installation.	
DA42NG Option - ADF	Install if an ADF is installed on the airplane
DA42NG Option - Aux Fuel Tanks	Install if OÄM 42-056 is installed on the airplane
DA42NG Option - Deicing	Install if OÄM 42-053 or OÄM 42-160 are installed on the airplane
DA42NG Option – Diesel Temperature	Install if OÄM 42-251 is installed on the airplane. (System Software 010-00670-12, or later)
DA42NG Option - DME	Install if a DME is installed on the airplane
DA42NG Option - GFC700	Install if GFC 700 A/P System is installed on the airplane
DA42NG Option - GFC700 with ESP and USP	Install if OÄM 42-209 is installed on the airplane; NOTE: an additional unlock card is required.
DA42NG Option – GFC700 Increased Availability	Install if OÄM 42-209 is installed on the airplane; NOTE: an additional unlock card is required. (System Software 010-00670-12, or later)
DA42NG Option - GSR56	Install if OÄM 42-213 is installed on the airplane
DA42NG Option – GSR56 Voice/Text Only	Optional to “DA42NG Option – GSR56” above: Install if OÄM 42-213 is installed on the airplane
DA42NG Option – GWX68	Install if OÄM 42-119 is installed on the airplane. (System Software 010-00670-12 or later)
DA42NG Option – GWX70	Install if OÄM 42-273 is installed on the airplane. (System Software 010-00670-12, 010-00670-15 or later)
DA42NG Option – Max Takeoff Weight Increase (Standard Only)	Install if MÄM 42-678 is and MÄM 42-600 is NOT installed on the airplane; AFM Doc. No. 7.01.15-E, Rev. 6 or higher must but used.
DA42NG Option – Max Takeoff Weight Increase (V1 Only)	Install if MÄM 42-600 and MÄM 42-678 are installed on the airplane; AFM Doc. No. 7.01.16-E, Rev. 3 or higher must but used.
DA42NG Option - Stormscope	Install if a Stormscope is installed on the airplane.
DA42NG Option - TAS600 Series Installation	Install if OÄM 42-094 is installed on the airplane.
DA42NG Option - Weather Radar	Install if OÄM 42-119 is installed on the airplane. (System Software Versions prior to 010-00670-12)

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.8.2 Applicable to Garmin G1000 NXi

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

If 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 G1000NXi Line Maintenance Manual, latest effective issue 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 G1000 NXi Line Maintenance Manual, latest effective issue or other related Garmin documents.

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

Software Part Number	Software Version	Software Name	Remarks
<b>System</b>			
006-B2926-01	1916.01		
<b>Manifest</b>			
006-B0081-42	V11.30	COM System	
006-B0082-12	V6.02	NAV System	
006-B0193-05	V2.07	GEA System	
006-B0203-44	V4.04	GMA System	
006-B0224-01	V2.05	GMU System	
006-B0339-22	V5.2	GPS/WAAS System	
006-B0398-32	V2.30	GSA 8X System	
006-B0398-35	V3.11	GSA 8X System (ESP/USP)	
006-B0544-6A	V8.05.4	GIA System	
006-B0756-17	V2.55	GWX 70 System	
006-B1177-56	V20.05	GDU System	
006-B1607-05	V2.05	GTX 3X5 System	
006-B1838-03	V2.03	GRS 79 System	
006-B1838-52	V2.02	GDC 72 System	
006-C0048-00	V2.00	GMU FPGA	
006-C0119-02	V1.2	GWX 70 FPGA	
006-C0124-00	V1.00	NAV FPGA	
006-C0153-22	V2.20	GTX 3X5 FPGA	
006-D1307-02	V2.00	GWX 70 Region List	
006-D5080-00	V2.00	GRS 79 Region List	
006-D5080-50	V2.00	GDC 72 Region List	
006-D0744-04	V2.01	GFC Cert Gains (GFC700 & ESP/USP)	
006-D0744-05	V2.02	GFC Cert Gains (Increased AFCS Availability)	

Software Part Number	Software Version	Software Name	Remarks
<b>System</b>			This software version supports <ul style="list-style-type: none"> <li>the Garmin GTX 345R transponder,</li> <li>ADS-B In / Out functionality</li> </ul>
006-B2926-02	1916.02		
<b>Manifest</b>			
006-B0081-42	V11.30	COM System	
006-B0082-12	V6.02	NAV System	
006-B0193-05	V2.07	GEA System	
006-B0203-44	V4.04	GMA System	
006-B0224-01	V2.05	GMU System	
006-B0339-22	V5.2	GPS/WAAS System	
006-B0398-32	V2.30	GSA 8X System	
006-B0398-35	V3.11	GSA 8X System (ESP/USP)	
006-B0544-6A	V8.05.4	GIA System	
006-B0756-17	V2.55	GWX 70 System	
006-B1177-57	V20.06	GDU System	
006-B1607-09	V2.12	GTX 3X5 System	
006-B1797-04	V2.10	GTX 3X5 / ADS-B	
006-B1838-03	V2.03	GRS 79 System	
006-B1838-52	V2.02	GDC 72 System	
006-C0048-00	V2.00	GMU FPGA	
006-C0119-02	V1.2	GWX 70 FPGA	
006-C0124-00	V1.00	NAV FPGA	
006-C0153-22	V2.20	GTX 3X5 FPGA	
006-C0157-21	V2.10	GTX 3X5 / ADS-B FPGA	
006-D1307-02	V2.00	GWX 70 Region List	
006-D5080-00	V2.00	GRS 79 Region List	
006-D5080-50	V2.00	GDC 72 Region List	
006-D0744-04	V2.01	GFC Cert Gains (GFC700 & ESP/USP)	
006-D0744-05	V2.02	GFC Cert Gains (Increased AFCS Availability)	

Software Part Number	Software Version	Software Name	Remarks	
<b>System</b>			This software version supports <ul style="list-style-type: none"> <li>the Garmin GTX 345R transponder,</li> <li>ADS-B In / Out functionality</li> <li>120 seconds debounce for low De-Ice fluid pressure</li> <li>Alternator Fail Output</li> </ul>	
006-B2926-03	1916.03			
<b>Manifest</b>				
006-B0081-42	V11.30	COM System		
006-B0082-12	V6.02	NAV System		
006-B0193-05	V2.07	GEA System		
006-B0203-44	V4.04	GMA System		
006-B0224-01	V2.05	GMU System		
006-B0339-22	V5.2	GPS/WAAS System		
006-B0398-32	V2.30	GSA 8X System		
006-B0398-35	V3.11	GSA 8X System (ESP/USP)		
006-B0544-6A	V8.05.4	GIA System		
006-B0756-17	V2.55	GWX 70 System		
006-B1177-57	V20.06	GDU System		
006-B1607-09	V2.12	GTX 3X5 System		
006-B1797-04	V2.10	GTX 3X5 / ADS-B		
006-B1838-03	V2.03	GRS 79 System		
006-B1838-52	V2.02	GDC 72 System		
006-C0048-00	V2.00	GMU FPGA		
006-C0119-02	V1.2	GWX 70 FPGA		
006-C0124-00	V1.00	NAV FPGA		
006-C0153-22	V2.20	GTX 3X5 FPGA		
006-C0157-21	V2.10	GTX 3X5 / ADS-B FPGA		
006-D1307-02	V2.00	GWX 70 Region List		
006-D5080-00	V2.00	GRS 79 Region List		
006-D5080-50	V2.00	GDC 72 Region List		
006-D0744-04	V2.01	GFC Cert Gains (GFC700 & ESP/USP)		
006-D0744-05	V2.02	GFC Cert Gains (Increased AFCS Availability)		
<b>This software version is mandatory for the DA 42 M-NG (VÄM 42-005, VÄM 42-006).</b>				

Software Part Number	Software Version	Software Name	Remarks
<b>System</b>			This software version supports <ul style="list-style-type: none"> <li>the GIA64W Integrated Avionics Unit</li> <li>the GEA71B Engine/Airframe Unit</li> <li>the GMA1360 Audio Panel</li> <li>Flight Stream 510</li> </ul> This software version is not backward compatible with other hardware.
006-B2926-10	1916.10		
<b>Manifest</b>			
006-B2371-02	V2.02	COM System	
006-B2253-00	V2.00	NAV System	
006-B2139-03	V2.11	GEA System	
006-B2212-04	V5.15D	GMA System	
006-B2210-04	V5.15D	GMA AUX System	
006-B0224-01	V2.05	GMU System	
006-B1827-10	V7.0	GPS/WAAS System	
006-B0398-32	V2.30	GSA 8x System	
006-B0398-39	V3.41	GSA 8x System (ESP/USP)	
006-B2548-05	V2.02	GIA System	
006-B0756-17	V2.55	GWX 70 System	
006-B1177-66	V20.81	GDU System	
006-B1607-09	V2.12	GTX 3X5 System	
006-B1797-04	V2.10	GTX 3X5 / ADS-B	
006-B1838-04	V2.04	GRS 79 System	
006-B1838-54	V2.04	GDC 72 System	
006-C0048-00	V2.00	GMU FPGA	
006-C0119-02	V1.2	GWX 70 FPGA	
006-C0153-22	V2.20	GTX 3X5 FPGA	
006-C0157-21	V2.10	GTX 3X5 / ADS-B FPGA	
006-C0164-01	V1.10	GIA FPGA	
006-C0175-06	V1.38	GMA FPGA	
006-D0744-04	V2.01	GFC Cert Gains (GFC700 & ESP/USP)	
006-D0744-05	V2.02	GFC Cert Gains (Increased AFCS Availability)	
006-D1307-02	V2.00	GWX 70 Region List	
006-D3034-B1	V5.00D	GMA AUX Region List	
006-D3034-B3	V5.00D	GMA AUX Audio Database	
006-D3035-B1	V5.00D	GMA Region List	
006-D3035-DB	V5.16D	GMA Audio Config	
006-D5080-00	V2.00	GRS 79 Region List	

Software Part Number	Software Version	Software Name	Remarks
006-D5080-50	V2.00	GDC 72 Region List	
006-D5761-00	V2.00	NAV Region List	
006-D6318-01	V2.01	GIA Region List	
006-D6358-00	V2.00	GEA Region List	
006-D6512-00	V2.00	COM Region List	

Software Part Number	Software Version	Software Name	Remarks
<b>System</b>			This software version supports <ul style="list-style-type: none"> <li>the GIA64W Integrated Avionics Unit</li> <li>the GEA71B Engine/Airframe Unit</li> <li>the GMA1360 Audio Panel</li> <li>Flight Stream 510</li> <li>120 seconds debounce for low De-Ice fluid pressure</li> </ul> This software version is not backward compatible with other hardware.
006-B2926-11	1916.11		
<b>Manifest</b>			
006-B2371-02	V2.02	COM System	
006-B2253-00	V2.00	NAV System	
006-B2139-03	V2.11	GEA System	
006-B2212-04	V5.15D	GMA System	
006-B2210-04	V5.15D	GMA AUX System	
006-B0224-01	V2.05	GMU System	
006-B1827-10	V7.0	GPS/WAAS System	
006-B0398-32	V2.30	GSA 8x System	
006-B0398-39	V3.41	GSA 8x System (ESP/USP)	
006-B2548-05	V2.02	GIA System	
006-B0756-17	V2.55	GWX 70 System	
006-B1177-66	V20.81	GDU System	
006-B1607-09	V2.12	GTX 3X5 System	
006-B1797-04	V2.10	GTX 3X5 / ADS-B	
006-B1838-04	V2.04	GRS 79 System	
006-B1838-54	V2.04	GDC 72 System	
006-C0048-00	V2.00	GMU FPGA	
006-C0119-02	V1.2	GWX 70 FPGA	
006-C0153-22	V2.20	GTX 3X5 FPGA	
006-C0157-21	V2.10	GTX 3X5 / ADS-B FPGA	
006-C0164-01	V1.10	GIA FPGA	



Software Part Number	Software Version	Software Name	Remarks
006-C0175-06	V1.38	GMA FPGA	
006-D0744-04	V2.01	GFC Cert Gains (GFC700 & ESP/USP)	
006-D0744-05	V2.02	GFC Cert Gains (Increased AFCS Availability)	
006-D1307-02	V2.00	GWX 70 Region List	
006-D3034-B1	V5.00D	GMA AUX Region List	
006-D3034-B3	V5.00D	GMA AUX Audio Database	
006-D3035-B1	V5.00D	GMA Region List	
006-D3035-DB	V5.16D	GMA Audio Config	
006-D5080-00	V2.00	GRS 79 Region List	
006-D5080-50	V2.00	GDC 72 Region List	
006-D5761-00	V2.00	NAV Region List	
006-D6318-01	V2.01	GIA Region List	
006-D6358-00	V2.00	GEA Region List	
006-D6512-00	V2.00	COM Region List	

Software Part Number	Software Version	Software Name	Remarks
<b>System</b>			This software version supports <ul style="list-style-type: none"> <li>the same hardware as the previous software version</li> <li>the wire aware feature</li> <li>QFE Baro setting/Altitude feature</li> <li>split screen mode feature</li> </ul> This software version is not backward compatible with other hardware as the previous software.
006-B2926-12	1916.12		
<b>Manifest</b>			
006-B2371-02	V2.02	COM System	
006-B2253-00	V2.00	NAV System	
006-B2139-08	V2.50	GEA System	
006-B2212-0A	V5.27D	GMA System	
006-B2210-09	V5.27D	GMA AUX System	
006-B0224-01	V2.05	GMU System	
006-B1827-10	V7.0	GPS/WAAS System	
006-B0398-32	V2.30	GSA 8x System	
006-B0398-45	V3.55	GSA 8x System (ESP/USP)	
006-B2548-0T	V2.09	GIA System	
006-B0756-18	V2.60	GWX 70 System	
006-B1177-6K	V20.92	GDU System	

Software Part Number	Software Version	Software Name	Remarks
006-B1607-0H	V2.54	GTX 3X5 System	This software version requires the checklist file with *.zip as file name
006-B1797-14	V3.13	GTX 3X5 / ADS-B	
006-B1838-09	V2.09	GRS 79 System	
006-B1838-57	V2.07	GDC 72 System	
006-C0048-00	V2.00	GMU FPGA	
006-C0119-02	V1.2	GWX 70 FPGA	
006-C0153-22	V2.20	GTX 3X5 FPGA	
006-C0157-21	V2.10	GTX 3X5 / ADS-B FPGA	
006-C0164-01	V1.10	GIA FPGA	
006-C0175-09	V1.46	GMA FPGA	
006-D0744-04	V2.01	GFC Cert Gains (GFC700 & ESP/USP)	
006-D0744-05	V2.02	GFC Cert Gains (Increased AFCS Availability)	
006-D1307-02	V2.00	GWX 70 Region List	
006-D3034-B1	V5.00D	GMA AUX Region List	
006-D3034-C2	V5.21	GMA AUX Audio Database	
006-D3035-CU	V5.15D	GMA Region List	
006-D3035-EH	V5.27De	GMA XHTML Pages	
006-D5080-00	V2.00	GRS 79 Region List	
006-D5080-50	V2.00	GDC 72 Region List	
006-D5761-00	V2.00	NAV Region List	
006-D6318-01	V2.01	GIA Region List	
006-D6358-01	V2.30	GEA Region List	
006-D6512-00	V2.00	COM Region List	

Approved Configurations (Software)	Remarks
NOTE: Even though more options may be included in the software loader card, only those shown below are currently approved for installation.	
DA42NG Option – ADF	Install if an ADF is installed on the airplane
DA42NG Option – Aux Fuel Tanks	Install if OÄM 42-056 is installed on the airplane
DA42NG Option – Deicing	Install if OÄM 42-053 or OÄM 42-160 are installed on the airplane

Approved Configurations (Software)	Remarks
DA42NG Option – Diesel Temperature	Install if OÄM 42-251 is installed on the airplane.
DA42NG Option – DME	Install if a DME is installed on the airplane
DA42NG Option – Flightstream 510 Enable	Install if FS 510 is installed on the airplane. AFM Supplement S13 must be in the AFM.
DA42NG Option – GFC700	Install if GFC 700 A/P System is installed on the airplane
DA42NG Option – GFC700 with ESP and USP	Install if OÄM 42-209 is installed on the airplane; NOTE: an additional unlock card is required.
DA42NG Option – GFC700 Increased Availability	Install if OÄM 42-209 is installed on the airplane; NOTE: an additional unlock card is required.
DA42NG Option – GSR56	Install if OÄM 42-213 is installed on the airplane
DA42NG Option – GSR56 Voice/Text Only	Optional to “DA42NG Option – GSR56” above: Install if OÄM 42-213 is installed on the airplane
DA42NG Option – GTX 345 Option	Install if transponder GTX 345R is installed.
DA42NG Option – GTX 345 and TAS600	Install if transponder GTX 345R and TAS600 (OÄM 42-094) is installed.
DA42NG Option – GWX70	Install if OÄM 42-273 is installed on the airplane.
DA42NG Option – Max Takeoff Weight Increase (Standard Only)	Install if MÄM 42-678 is and MÄM 42-600 is NOT installed on the airplane; AFM Doc. No. 7.01.15-E, Rev. 6 or higher must but used.
DA42NG Option – Max Takeoff Weight Increase (V1 Only)	Install if MÄM 42-600 and MÄM 42-678 are installed on the airplane; AFM Doc. No. 7.01.16-E, Rev. 3 or higher must but used.
DA42NG Option – TAS600 Series Installation	Install if OÄM 42-094 is installed on the airplane.
DA42NG Option – Stormscope	Install if a Stormscope is installed on the airplane.

Approved Magnetic Field Charts (GRS1 MV DB)		
Software Part Number	Approved Version	Remarks
006-D0159-03	V2015.00	valid until 31-Dec-2021
006-D2658-02	V2020.00	

### I.9 Mass (Weight) and CG

n. a.

## II PLANNING INFORMATION

### II.1 Material & Availability

#### II.1.1 Applicable to Garmin G1000

Quantity	Part Number	Description
1	010-00670-10, or 010-00670-11, or 010-00670-12, or 010-00670-13, or 010-00670-14, or 010-00670-15	G1000 Software Loader Card (Diamond DA42NG)
1 *1)	010-12074-02	Secondary Loader Card for Additional ALTN FAIL Triggers
1 *2)	010-12074-03	Secondary Loader Card for Diesel Operation

\*1) Mandatory for Loader Cards P/N 010-00670-10 and P/N 010-00670-11

\*2) Optional for Loader Cards P/N 010-00670-10 and P/N 010-00670-11

The required Garmin G1000 Cockpit Reference Guide (CRG) and Pilot's Guide (PG) are referenced to the System Software Version number. The System Software Version number is displayed at the top right side of the MFD Power-up page.

System Software Version	Cockpit Reference Guide	Pilot's Guide
0670.10	P/N 190-00963-02, Rev. B or later appropriate revision	P/N 190-00962-02, Rev. A or later appropriate revision
0670.11	P/N 190-00963-02, Rev. C or later appropriate revision	P/N 190-00962-02, Rev. B or later appropriate revision
0670.12	P/N 190-00963-03, Rev. A or later appropriate revision	P/N 190-00962-03, Rev. A or later appropriate revision
0670.13	P/N 190-00963-04, Rev. A or later appropriate revision	P/N 190-00962-04, Rev. A or later appropriate revision
0670.14	P/N 190-00963-04, Rev. A or later appropriate revision	P/N 190-00962-04, Rev. A or later appropriate revision
0670.15	P/N 190-00963-04, Rev. A or later appropriate revision	P/N 190-00962-04, Rev. A or later appropriate revision

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

### II.1.2 Applicable to Garmin G1000 NXi

Quantity	Part Number	Description
1	010-01916-01, or 010-01916-02, or 010-01916-03, or 010-01916-10, or 010-01916-11 010-01916-12	G1000 NXi Software Loader Card (Diamond DA42NG)
1	010-00474-50	GIFD Supplemental Data Card (for G1000 NXi)

The required Garmin G1000 NXi Cockpit Reference Guide (CRG) and Pilot's Guide (PG) are referenced to the System Software Version number. The System Software Version number is displayed at the top right side of the MFD Power-up page.

System Software Version	Cockpit Reference Guide	Pilot's Guide
1916.01	P/N 190-02238-00, Rev. A or later appropriate revision	P/N 190-02237-00, Rev. A or later appropriate revision
1916.02	P/N 190-02238-00, Rev. A or later appropriate revision	P/N 190-02237-00, Rev. A or later appropriate revision
1916.03	P/N 190-02238-00, Rev. A or later appropriate revision	P/N 190-02237-00, Rev. A or later appropriate revision
1916.10	P/N 190-02527-00, Rev. A or later appropriate revision	P/N 190-02526-00, Rev. A or later appropriate revision
1916.11	P/N 190-02527-00, Rev. A or later appropriate revision	P/N 190-02526-00, Rev. A or later appropriate revision
1916.12	P/N 190-02527-01, Rev. A or later appropriate revision	P/N 190-02526-01, Rev. A or later appropriate revision

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

### II.2 Special Tools

n. a.

### II.3 Labor effort

Appr. 1 hour

### II.4 Credit

None

### II.5 Reference Documents

None

### **III REMARKS**

1. All measures must be carried out by a certified aircraft maintenance station or a certified aircraft maintenance mechanic
2. Accomplishment of the measures must be confirmed in the log book.
3. In case of any doubt, contact Diamond Aircraft Industries.