

SERVICE INFORMATION NO. SI 40-038

NOTE: SI's are used **only**:
1) To distribute information from DAI to our customers.
2) To distribute applicable information / documents from our suppliers to our customers with additional information.
Typically there is no revision service for SI's. Each new information or change of that will be send along with a new SI.

I. TECHNICAL DETAILS

1.1 Airplanes affected:

All DA 40 aircraft with GDL 69/69A installed
All DA 40 F aircraft with GDL 69/69A installed

1.2 Subject:

Garmin GDL 69/69A XM Satellite Datalink Storm Cell Tracking Limitation
ATA-Code: 34-00

1.3 Reason:

Garmin has issued a new Service Advisory, which addresses a condition in software version 3.02 and earlier, in which the GDL 69/69A stops sending data to the host display.

1.4 Information:

For detailed technical information see Garmin Service Advisory which is applicable without any further additions or restrictions.

II. OTHERS

The Service Advisory 0613 from Garmin is attached to this SI.

In case of doubt contact Garmin or Diamond Aircraft Industries.



SERVICE ADVISORY

NO.: 0613

TO: All Garmin Aviation Service Centers

DATE: June 14, 2006

SUBJECT: GDL 69/69A XM[®] Satellite Datalink Storm Cell Tracking Limitation

PURPOSE

Garmin has discovered a condition in software version 3.02 or earlier, whereby, tracking greater than 400 storm cells may cause the GDL 69/69A to stop sending data to the host display.

DESCRIPTION

A problem has been identified in the GDL 69/69A which will manifest itself when periods of heavy convective storm cell activity occur. The GDL 69/69A can handle up to 400 storm cells. During periods of unusually heavy activity the total number of storm cells may exceed 400.

If the GDL 69/69A receives a data packet with more than 400 storm cells it will throw away the storm cell data and not pass the data to the display product. The customer may report that they are no longer getting storm cell data or that the age of the storm cell data is getting older.

This is a software limitation that will require a software update to the GDL 69/69A to correct.

A GDL 69/69A used in a G1000 installation will stop sending storm cell information when the storm cell count exceeds 400 total for the US. The GDL 69/69A will resume sending data when the storm count drops under the 400 cell maximum. In some cases when the storm count is near the 400 count limit, the GDU 10XX Display may send repeated messages to the GDL 69/69A which will cause the unit to stop sending XM[®] weather updates. The user may notice that XM[®] weather products will not be updated. If this occurs, the GDL 69/69A will need to be reset by removing and re-applying power to the GDL 69/69A.

In all cases, the GDL 69A audio products and the on-board radar routed through the GDL 69/69A are not affected and will continue to function.

There is an additional limitation when the GDL 69/69A is being used together with the MX20 Multi-function Display. The MX20 is limited to displaying a total of 255 storm cells. When this number is exceeded, a limitation in the MX20 will cause the unit to enter a safety monitor shutdown mode. Further trouble can be averted by going to the FIS page, selecting the Menu/Enter key and de-selecting "Cell Movement."

A GDL 69/69A used with a GNS 400 or GNS 500 series product is not affected. The GNS 400 and GNS 500 series does not support the service class that provides cell movement data.

AFMS AND PILOT'S GUIDE CONSIDERATIONS

AFMS and Pilot's Guide procedures for these products are unaffected.

PRODUCT AFFECTED

All GDL69 and /GDL69A units with software version 3.02 or earlier installed with the MX20 Multi-function Display or installed as part of a G1000 Integrated Avionics System

ADDITIONAL INFORMATION

NOTE

XM[®] is a registered trademark of XM Satellite Radio, Incorporated.