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# **SERVICE INFORMATION NO. SI-42-122**

**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 sent along with a new SI.

# **I. TECHNICAL DETAILS**

#### 1.1 Airplanes affected:

All DA 42 and DA 42 M

#### 1.2 Subject:

GARMIN Service Bulletin No. 0823 Revision C ATA-Code: 34-00

#### 1.3 Reason:

GARMIN has identified an issue, whereby the large (outer) BARO knob and the small (inner) CRS knob may interfere with each other. The Service Bulletin No. 0823 Rev. C contains instructions on how to test for knob interference and replace the CRS/BARO knobs, if required.

#### 1.4 Information:

For detailed technical information refer to GARMIN Service Bulletin No. 0823 Rev. C, which is applicable without any further additions or restrictions.

# II. OTHERS

GARMIN Service Bulletin No. 0823 Revision C is attached to this SI.

In case of doubt contact GARMIN.



# \*\* MANDATORY \*\* SERVICE BULLETIN

## NO.: 0823 Rev C

**TO:** All Garmin Aviation Service Centers

DATE: 20 November 2009

SUBJECT:GDU 104X CRS/BARO Knob InterferenceREVISION C:Added note regarding Service Alert 0824 in the Description section

#### **PURPOSE**

Garmin has identified an issue, whereby the large (outer) BARO knob and the small (inner) CRS knob may interfere with each other.





#### **DESCRIPTION**

This service bulletin contains instructions on how to test for knob interference and remove/replace the CRS/BARO knobs, as required.



Compliance with this service bulletin resolves the knob interference issue described in Service Alert 0824 Revision C.

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### AFMS AND PILOT'S GUIDE CONSIDERATIONS

There are no changes to AFMS documents that are relative to this Service Bulletin. There are no Pilot's Guide changes relative to this Service Bulletin.

## PRODUCT AFFECTED

All G1000/G900X/G950 installations with the following 10-inch GDU 104X displays are affected:

Unit	Garmin Part Number	Affected Serial Number Range
GDU 1040	011-00972-00	86500310 - 86503767
	011-00972-02	87005059 - 87005312
	011-00972-03	88900023 - 88904925
		106000265 - 106001037
GDU 1042	011-01080-00	86850318 - 86851005
GDU 1043	011-01079-00	86900317 - 86900748
GDU 1044	011-01078-01	86960200 - 86960376
GDU 1044B	011-01274-00	51200156 - 51201502

NOTE

GDU 104X installations with GDU software version 3.02 and later can view unit serial numbers on the AUX – SYSTEM STATUS page. Refer to Figure 2 for an example.

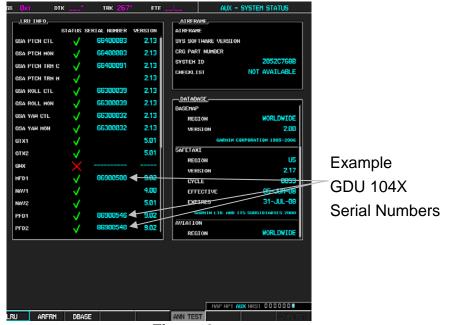


Figure 2

NOTE	

If the GDU 104X serial number on the AUX – SYSTEM STAUS page displays "0" or if the GDU software version does not display the unit serial numbers, remove the GDU and verify the serial number on the serial number tag.

The following G1000-equipped aircraft may include one or more of the affected GDU 104X displays listed above.

Cessna 172R/172S/182T/T182T/206H/T206H Cessna 350/400 Columbia 350/400 Diamond DA40/40F/40D/DA42 Mooney M20M/M20R/M20TN Piper PA 32 Saratoga Quest Kodiak 100 Hawker Beechcraft G36 Bonanza Hawker Beechcraft G58 Baron Tiger AG-5B

All G900X/G950 aircraft installations may also include one or more of the affected GDU 104X displays listed above.

#### COMPLIANCE

Compliance with this service bulletin is **MANDATORY**.

#### MANPOWER

30 minutes labor including testing, per aircraft.

#### WARRANTY INFORMATION

This modification is warranty reimbursable for the manpower listed above when knob interference is confirmed and knobs have been replaced.

## **TESTING PROCEDURE**

PFD and MFD CRS/BARO Knob Interference Test

- 1. Apply power to the G1000/G900X/G950.
- 2. Press the CDI softkey on the Primary Flight Display(s) (PFD) to enter VOR mode on the HSI.
- 3. Rotate the large (outer) BARO knob (refer to Figure 1) a minimum of three complete revolutions in each direction while monitoring the Horizontal Situation Indicator/Digital Course Indicator (refer to Figure 3) on the PFD. If a change in the Horizontal Situation Indicator/Digital Course Indicator is produced while turning the BARO knob proceed to the Modification Instructions.

# NOTE

In some installations the Digital Course Indicator does not display unless the field is actively being edited. In these instances, if the Digital Course Indicator does not appear while turning the BARO knob, no interference is present.

- 4. Rotate the small (inner) CRS knob (refer to Figure 1) a minimum of three complete revolutions in each direction while monitoring the Barometric Altimeter Setting (refer to Figure 3) on the PFD. If a change in the Barometric Altimeter Setting is produced while turning the CRS knob proceed to the Modification Instructions.
- 5. Repeat Steps 3 and 4 for each affected GDU.

NOTE

When testing the Multi Function Display (MFD), the indications must be monitored on the PFD.

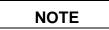
6. If no interference is confirmed, proceed to Step 12 of the MODIFICATION INSTRUCTIONS.



### **MODIFICATION INSTRUCTIONS**

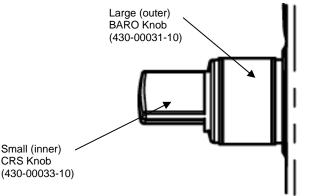
If CRS/BARO Knob interference is confirmed, perform the steps below to replace the CRS/BARO Knob. New knobs can be obtained through a Garmin Service Center or Aircraft OEM under Garmin part number K00-00446-00.

- 1. Grasp the small (inner) CRS knob and firmly pull the knob off the shaft.
- 2. Discard knob.
- 3. Grasp the large (outer) BARO knob and firmly pull the knob off the shaft.
- 4. Discard knob.



Once both knobs have been discarded, new knobs can be installed.

- 5. Grasp the large (outer) BARO knob (insuring proper orientation) and place it over the shaft.
- 6. Align the flat side of the knob insert with the flat side of the shaft.
- 7. Press down firmly to ensure knob is completely seated, refer to Figure 4.
- 8. Grasp the small (inner) CRS knob (insuring proper orientation) and place it over the shaft.
- 9. Align the flat side of the knob insert with the flat side of the shaft.
- 10. Press down firmly to ensure knob is completely seated, refer to Figure 4.
- 11. Perform the CRS/BARO Knob Interference Test (contained in the TESTING PROCEDURE section) again to confirm there is no interference.
- 12. Accomplish aircraft logbook entry to return aircraft to service in compliance with this service bulletin.





#### MATERIAL INFORMATION

QTY	Part Number	Description
1 per affected GDU	K00-00446-00	GDU CRS/BARO Knob Replacement