# BENDIX/KING KN 63 DME SYSTEM - TROUBLESHOOTING

## 1. General

A. This section give the troubleshooting procedures for the Bendix/King KN 63 DME System. For a general overview of the KN 63 system refer to Bendix/King KN 63 DME System - Description and Operation.

## 2. Bendix/King KN 63 DME System Troubleshooting

A. Tools and Equipment

**NOTE: For the supplier publication part number and manufacturer data, refer to the Introduction - Supplier Publication List.**

(1) Tools and Equipment

- Multimeter.

(2) Special Consumables

- None.

(3) Reference Material

- Chapter 23, Garmin GMA 1347/1360D Audio System - Troubleshooting
- Bendix/King KN 63 DME System - Description and Operation
- Bendix/King KN 63 DME System - Adjustment/Test
- Bendix/King KN 63 DME Receiver - Removal/Installation
- Comant DME Antenna - Removal/Installation
- Garmin G1000 Integrated Avionics System - Troubleshooting
- Garmin G1000 Integrated Avionics System - Adjustment/Test
- Model 208 Wiring Diagram Manual.

B. Do the Bendix/King KN 63 DME System Troubleshooting.

(1) Refer to Garmin G1000 Integrated Avionics System - Adjustment/Test and do the steps that follow:

(a) Make sure that the correct software and configuration has been installed.

(b) Do the Architecture Verification check and make sure all systems are serviceable.

**NOTE: The KN 63 DME is not listed on the status page.**

(2) Make sure the GIA2 has check mark (green) and serial number next to its nomenclature on the list.

(a) This indicates the LRU is serviceable.

**NOTE: Serial number is not reported for the following equipment: COM1, COM2, GS1, GS2, GTX1, GTX 2 (OPT), NAV1, NAV2, AND WX500.**

(b) If the GIA2 shows a red X, troubleshoot the GIA. Refer to Garmin G1000 Integrated Avionics System - Troubleshooting.

(3) Check the primary flight display crew alert system (CAS) window for messages to aid in troubleshooting the anomaly.

(4) For CAS messages related to other Garmin LRU's, refer to the applicable LRU section for CAS message troubleshooting.

(5) Push the rightmost softkey on the PFD and make sure that no messages show in the Alerts window.

(6) Carefully examine the electrical wiring and components as follows:

(a) Do a visual check of the KN 63 DME receiver electrical connectors and coaxial connector for broken, bent pins and pushed back pins. Refer to the Model 208 Wiring Diagram Manual.

1 If necessary, repair the damage.

(b) If a red X shows on the PFD DME window, make sure that electrical power and ground signals are present at the DME KN 63 receiver.

1 At the KN 63 DME receiver electrical connector (PF800) pins 2 and 3 do a check for 28Vdc electrical power.

2 At the KN 63 DME receiver electrical connector (PF800) pins A and 1 do a check for airplane ground.

3 If necessary, repair or replace the wiring bundles. Refer to the Model 208 Wiring Diagram Manual.

(c) Make sure that data bus lines are correctly terminated and secure.

**CAUTION: Do not touch bus wiring to each other or to shield grounds. Damage to equipment or circuits can result.**

(d) Remove electrical power from the airplane.

(e) Use a multimeter to do a continuity check of the data bus wires between the KN 63 DME receiver electrical connector (PF800) pins 6, F, and D, and the GIA 63W/64W No.2 electrical connector (PI512) pins 59, 60 and 62, respectively.

1 Make sure that there is continuity only from each wires related pin end to end and to no other wires, airplanes grounds, or shields.

(f) Do a visual check of the wiring components and make sure that all applicable strapping is correct and any necessary G1000 system strapping is correct.

(g) Do a visual check of the wiring bundles for damage.

1 If necessary, repair or replace the wiring bundles. Refer to the Model 208 Wiring Diagram Manual.

(h) Do a visual check of the coaxial cable connections to the Comant DME antenna.

1 Tighten loose coaxial cable connectors as necessary.

2 Repair or replace unserviceable coaxial cable as necessary.

(7) If the KN 63 DME system wiring is serviceable replace the components that follow:

(a) Replace the KN 63 DME receiver. Refer to Bendix/King KN 63 DME Receiver - Removal/Installation.

1 Do an operational check of the KN 63 DME system again. Refer to Bendix/King KN 63 DME System - Adjustment/Test.

(b) Replace the DME antenna. Refer to Comant DME Antenna - Removal/Installation.

1 Do an operational check of the KN 63 DME system again. Refer to Bendix/King KN 63 DME System - Adjustment/Test.

(8) If the there is a DME audio problem, do a continuity check between the KN 63 DME receiver electrical connector (PF800) pins 10 and H and GMA audio panel electrical connector (PI501) pins C and N, respectively.

(9) If necessary, repair or replace the wiring bundles. Refer to the Model 208 Wiring Diagram Manual.

(10) If the DME system wiring is serviceable, troubleshoot the GMA 1347/1360D audio system. Refer to Chapter 23, Garmin GMA 1347/1360D Audio System - Troubleshooting.

C. Put the Airplane Back to its Initial Condition.

(1) None.