

GARMIN GMA 1347 AUDIO SYSTEM - ADJUSTMENT/TEST

1. General

- A. This section gives the adjustment and test procedures for the GMA 1347 Audio system. For a general overview of the GMA 1347 Audio system refer to Garmin GMA 1347 Audio System - Description and Operation.

2. Garmin GMA 1347 Audio System Operational Check

- 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
 - Aviation Headsets (2-4).
- (2) Special Consumables
 - None.
- (3) Reference Material
 - Garmin GMA 1347 Audio System - Description and Operation
 - Chapter 34, Garmin G1000 Integrated Avionics System - Adjustment/Test.

- B. Prepare the Airplane

- (1) Make sure that the switches that follow are in the OFF position:
 - (a) BATTERY switch.
 - (b) EXTERNAL POWER switch.
 - (c) AVIONICS 1 and 2 switches.
- (2) Connect external electrical power to the airplane.
 - (a) Adjust the ground power unit (GPU) to 28Vdc, +0.5 or -0.5 Vdc.
- (3) Make sure that all the circuit breakers on the Avionics circuit breaker panel are engaged.
- (4) Put the switches that follow in the positions given:
 - (a) External POWER switch to the BUS position.
 - (b) BATTERY switch to the ON position.
 - (c) Avionics 1 and 2 switches to the ON position.
- (5) After the Garmin G1000 system is fully initiated refer to Chapter 34, Garmin G1000 Integrated Avionics System - Adjustment/Test and do the steps that follow:
 - (a) Do the Architecture Verification check and make sure all systems are serviceable.
 - (b) Make sure that the correct software and configuration have been installed.
- (6) Plug the headsets in the pilots, copilots and two passengers headset jacks.

- C. Headset Microphone and Isolation Operational Test.

NOTE: If the intercom option is not installed then ignore references to passengers headsets in this test.

- (1) Speak into the pilots headset microphone and make sure that the pilots voice is reproduced in the copilots and both passenger's headsets.
- (2) Speak into the copilots headset microphone and make sure that the pilots voice is reproduced in the copilots and both passenger's headsets.
- (3) Speak into one of the passengers headset microphone and make sure that the pilots voice is reproduced in the copilots and both passenger's headsets.
- (4) Speak into the other passengers headset microphone and make sure that the pilots voice is reproduced in the copilots and both passenger's headsets.
- (5) On the audio panel, push the PILOT ICS isolation button and make sure that the pilot cannot hear the copilots or either passenger's voice in his headset.
- (6) On the Audio Panel, push the PILOT and COPILOT ICS isolation buttons, to deselect the pilot isolation and isolate the copilot only.

- (a) Make sure that the copilot cannot hear the pilots or either passenger's voice in his headset.
- (7) On the Audio Panel, push the PILOT ICS isolation button again to isolate the flight crew and make sure that:
 - (a) The pilot and the copilot each cannot hear the passenger's voice in their headsets.
 - (b) The pilot and copilot can hear each other.
 - (c) The passenger's can hear each other.
- (8) On the audio panel, push both the PILOT and COPILOT ICS isolation buttons to return the system to its original setting.
- (9) Use the passenger headset jacks not used before and do the above steps again.
- D. Audio Panel Fail-Safe Mode Operational Test.
 - (1) Tune COM 1 to a known good local receive frequency.
 - (a) Make sure that the COM 1 frequency is heard in all headsets.
 - (2) Disengage the AUDIO circuit breaker on the Avionics circuit breaker panel and make sure that the audio panel shuts down.
 - (a) Make sure that the selected COM 1 frequency is still heard on the pilots headset.
 - (3) Engage the AUDIO circuit breaker on the Avionics circuit breaker panel and make sure that the audio panel returns to normal operation.
- E. Passenger Address System Operation Test.
 - (1) Push the PA button on the Audio panel.
 - (2) Push the PTT switch on either Control Wheel and speak through the Pilot's headset Microphone.
 - (a) Make sure that the Pilot's voice is heard through the PA speakers in the cabin.
 - (3) Push the PA button on the Audio panel to deselect the PA system.
- F. Put the Airplane Back to its Initial Condition.
 - (1) Put the switches that follow to the OFF position:
 - (a) BATTERY switch.
 - (b) EXTERNAL POWER switch.
 - (c) AVIONICS 1 and 2 switches.
 - (2) Disconnect external electrical power from the airplane.