

LANDING AIDS - ADJUSTMENT/TEST**1. General**

- A. This section gives the adjustment and test procedures for the Garmin Integrated Avionics System landing aids systems. The systems procedures are given for include the marker beacon and glideslope system. For a general overview of the Garmin G1000 landing aids systems refer to Landing Aids - Description and Operation.
- B. For maintenance and adjustment/test procedures other landing aids systems that can be installed on the airplane, refer to the Introduction Supplier Publication List.

2. Tools and Equipment

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

- (1) Tools and Equipment
 - IFR-4000 (or equivalent).
- (2) Special Consumables
 - None.
- (3) Reference Material
 - Garmin G1000 Integrated Avionics System - Adjustment/Test
 - Aeroflex IFR 4000 NAV/COMM Test Set Operation Manual.

B. Prepare the Airplane

- (1) Connect external electrical power to the airplane.
 - (a) Adjust the ground power unit (GPU) to 28Vdc, +0.5 or -0.5 Vdc.
- (2) Make sure that all the circuit breakers on the avionics circuit breaker panel are engaged.
- (3) Make sure that the switches are selected as follows:
 - (a) EXTERNAL POWER switch/light to BUS position.
 - (b) BATTERY switch to the ON position.
 - (c) AVIONICS #1 AND AVIONICS #2 switches to the ON position.
- (4) If the Garmin GMA 1347 was replaced, make sure that the software configuration and installation is correct. Refer to G1000 Baseline Software/Configuration Load Refer to the Garmin G1000 Integrated Avionics - Adjustment/Test.

C. Do the Glideslope Receiver/Antenna Operational Check. Refer to Garmin G1000 VHF Navigation System - Adjustment/Test, Glideslope 1 Antenna Operational Check.

D. Do the Marker Beacon Antenna and Audio Operational Check.

- (1) If necessary, use the Aeroflex IFR 4000 NAV/COMM Test Set Operation Manual for instructions. Refer to Introduction - Supplier Publication List.
- (2) On the GMA 1347 audio panel make sure that:
 - (a) The MKR MUTE annunciator is light is on.
 - (b) The SPKR switch is in the on position.
- (3) On the Aeroflex IFR 4000 NAV/COMM test set, push the MODE key until the MARKER BEACON mode screen is shown.
 - (a) Select the frequency 75.000 MHz.
 - (b) Set the TONE to 400Hz.
 - (c) Make sure that the outer marker annunciator (a flashing blue "O") is shown next to the altitude strip on the PFD's.
 - (d) Make sure that a 400 Hz tone is heard on the speakers.
 - (e) Set the TONE to 1300Hz.
 - (f) Make sure that the middle marker annunciator (a flashing amber "M") is shown next to the altitude strip on the PFD's.
 - (g) Make sure that a 1300 Hz tone is heard on the speakers.

- (4) Set the TONE to 3000Hz.
 - (5) Make sure that the inner marker annunciator (a flashing white "I") is shown next to the altitude strip on the PFD's.
 - (6) Make sure that a 3000 Hz tone is heard on the speakers.
- E. Put the Airplane Back to its Initial Condition.
- (1) Put the switches in the positions that follow:
 - (a) EXT POWER switch/light to the OFF position.
 - (b) L AVN switch/light is to the OFF position.
 - (c) R AVN switch/light is to the OFF position.
 - (d) BUS TIE switch/light to the OPEN position.
 - (e) ELEC switch/lights to the NORM position.
 - (2) Disconnect external electrical power from the airplane.