



**SERVICE BULLETIN
NO.: 0411**

TO: Authorized Distributors, Owners, and Operators of the CNX80 GPS/WAAS/Nav/Com
DATE: July 23, 2004
SUBJECT: Required hardware/software modification to prevent potential overheating and display failure

PURPOSE

This Service Bulletin identifies required hardware/software modification in the CNX80 to prevent potential overheating and display failure. This Service Bulletin includes corrective action which the pilot must take in response to a failed unit during flight and also action that must be taken to modify functional CNX80 units to prevent the potential overheating and display failure.

DESCRIPTION

Garmin AT has analyzed a CNX80 which was returned from the field after a display failure which may have resulted in smoke from an overheated display component. In the event of a display failure, evidenced by the display going dark, the pilot should immediately switch off the CNX80 unit. This can be done by either pulling out the Power/Volume knob on the bezel of the CNX80 or by pulling the CNX80 "NAV/GPS" circuit breaker. If the unit is not turned off within a few minutes, there is a possibility that the unit may overheat with the potential to generate smoke in the cockpit.

Some CNX80s are interfaced to the SL70R Remote Mode A/C Transponder. When power is removed from the CNX80 the SL70R will continue to transmit the current squawk code. When power is cycled on the SL70R it will revert to transmitting the default VFR squawk code.

Garmin AT has developed a modification to prevent overheating of the display component and reduce the possibility of a display failure. All products affected (see below) must be returned to the factory in order to incorporate this design change. Returns should be initiated by contacting the installing dealer or other authorized Garmin distributor. The distributor will then contact the Garmin AT factory and request a Return Merchandise Authorization (RMA) number. Upon distributor request the factory will also provide packaging for return of the unit, if needed. Removal and reinstallation of the unit should be performed following the guidelines of Paragraph 2.6.3 and Paragraph 2.6.4 of the CNX80 Installation Manual.

All units returned to the factory will be upgraded with the latest FAA approved software.

APPROVAL

TSO-C34e, C36e, C37d, C38d, C40c, C113, C128, C146a

AFMS AND PILOT'S GUIDE CONSIDERATIONS

The AFMS and Pilot's Guide are unaffected.

PRODUCTS AFFECTED

CNX80, P/N 430-6100-800-001 units which have *not* been marked with Hardware Mod Level E.

COMPLIANCE

Mandatory for all affected units. This service bulletin addresses a potential safety issue and it is required that the unit be returned to the factory to comply with the service bulletin.

REFERENCES

560-0982-00 Rev F CNX80 Installation Manual

MANPOWER

This modification is a factory-only modification. The estimated time for removal and reinstallation of the unit is 0.5 hours.

WARRANTY INFORMATION

This factory modification will be performed on all affected units. Components and modification labor are at no cost to the customer. The dealer shall be reimbursed for warranty labor as indicated above. The customer shall be responsible for transportation costs to the Garmin AT factory.

TESTING PROCEDURE

This modification is a factory-only modification.

MATERIAL INFORMATION

This modification is a factory-only modification.

ADDITIONAL INFORMATION

Units returned to the factory for modification after the release of software version 2.0 will receive this software upgrade while the unit is at the factory. Software version 2.0 provides guidance for LNAV/VNAV (Gamma 2) and LPV (Gamma 3) approaches. Additional configuration of the system may be required when reinstalling the unit in the aircraft, and an updated AFMS will accompany all version 2.0 upgrades.