REV A

SH 1

DWG. NO. 150-042358

APPLICATION

REVISIONS

PRODUCT LINE	REV	DESCRIPTION	DATE	APPROVED	APPROVED
VN-411B	A	Initial Release per DCN W5838	02/07/07	JJ BL	V. Wallace

APPROVALS		DATE
DRAWN	L. Evans	01/26/07
CHECKED	J. Jensen	01/26/07
PRODUCT MANAGER	B. Evans	01/29/07
ENGINEER	B. Louttit	01/29/07
ISSUED	V. Wallace	02/07/07

Typed signatures indicate approval. Handwritten signature approval of this document is on file at Wulfsberg Electronics, Prescott, Arizona.

Wulfsberg Electronics
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TITLE:

SERVICE INSTRUCTION WSI VN-411B-29
IMPROVE GS AND LOC SENSITIVITY BY GROUNDING R3165

SIZE	CAGE CODE	DWG NO.	REV
A	1B7G3	150-042358	A

SCALE: NONE

DO NOT SCALE DRAWING

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SERVICE INSTRUCTION

EQUIPMENT: VN-411B **DATE:** 02/07/07

SERVICE INSTRUCTION NUMBER: WSI VN-411B-29 Revision A

EFFECTIVITY

Affects units that contain the early production Nav Converter Board P/N 200-07536-0000/0001 identified by:

PN-066-1101-01, -10, -20, and -40 units

PN 066-1101-00 units without Mod 23

PN 066-1101-31 / -50 units without Mod 22

PN 066-1101-60 units without Mod 01

REASON

Improve glideslope and localizer sensitivity and deviation stability by completing the ground connections to resistor network R3165.

DESCRIPTION

Install conductors to connect the pins 2, 3, 6, & 7 of R3165 to ground.

COMPLIANCE

As required upon next scheduled maintenance.

WARRANTY INFORMATION

This modification is an enhancement and is not covered under warranty.

APPROVAL

This modification does not affect the original approval.

MANPOWER

Not applicable.

REFERENCES

VN-411B Maintenance Manual, P/N 150-040973 or 006-05908-0006.

MATERIAL INFORMATION

The parts required to modify this unit in accordance with this procedure are available from Wulfsberg Electronics at (928) 708-1518.

PARTS REQUIRED

ITEM	QTY	U/M	PART NUMBER	DESCRIPTION	REF
1	A/R	A/R	16031-1	WIRE, 28AWG WIRE WRAP w/ TEFLON	N/A
2	1	EA	015-00113-0009	RES 8PIN IND 3300 OHMS	R3165

MODIFICATION PROCEDURE

CAUTION

ANY DISASSEMBLY/ASSEMBLY OF THIS UNIT MUST BE DONE AT A STATIC SAFE WORKSTATION. REMOVED MODULES SHOULD BE PLACED IN ANTISTATIC BAGS WHEN NOT INSTALLED IN THE UNIT.

1. Determine the need for compliance:
    a. External Test: With an RF Generator output of -50dBm, use an Audio Analyzer to measure the glideslope video amplitude. If the measured amplitude is low (490-510 mVAC) proceed to step 1.b.
    b. Internal Test: Open the VN-411B and gain access to the Nav Converter Module (PN 200-07536-0000/-0001) per the Maintenance Manual and use an ohmmeter to measure continuity to ground on pins 2, 3, 6, and 7 of R3165. If there is an open connection proceed to step 2.

Note: Unless otherwise noted, the sequence of rework can be adjusted to facilitate the process.

2. Daisy-chain Item 1 from R3165 pins 2, 3, 6, 7 to the ground side of R3124 (Ref. Figures 1 and 2).

   Note: If the leads are too short on R3165 to facilitate robust connections, then R3165 should be replaced (Item 2).

3. Apply MIL-I-46058C compliant conformal coating to newly installed part(s).
4. Identify the unit with the procedure as described and reassemble the unit in reverse order of disassembly.

IDENTIFICATION PROCEDURE

Mark WSI-29 on the Nav Converter Board.

TESTING PROCEDURE

Perform a complete functional test of the unit in accordance with the appropriate Maintenance Manual Return to Service procedure.

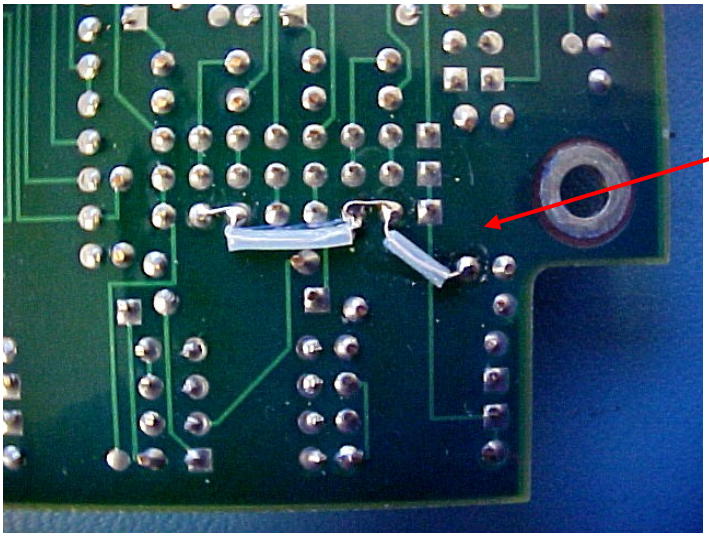

Figure 1

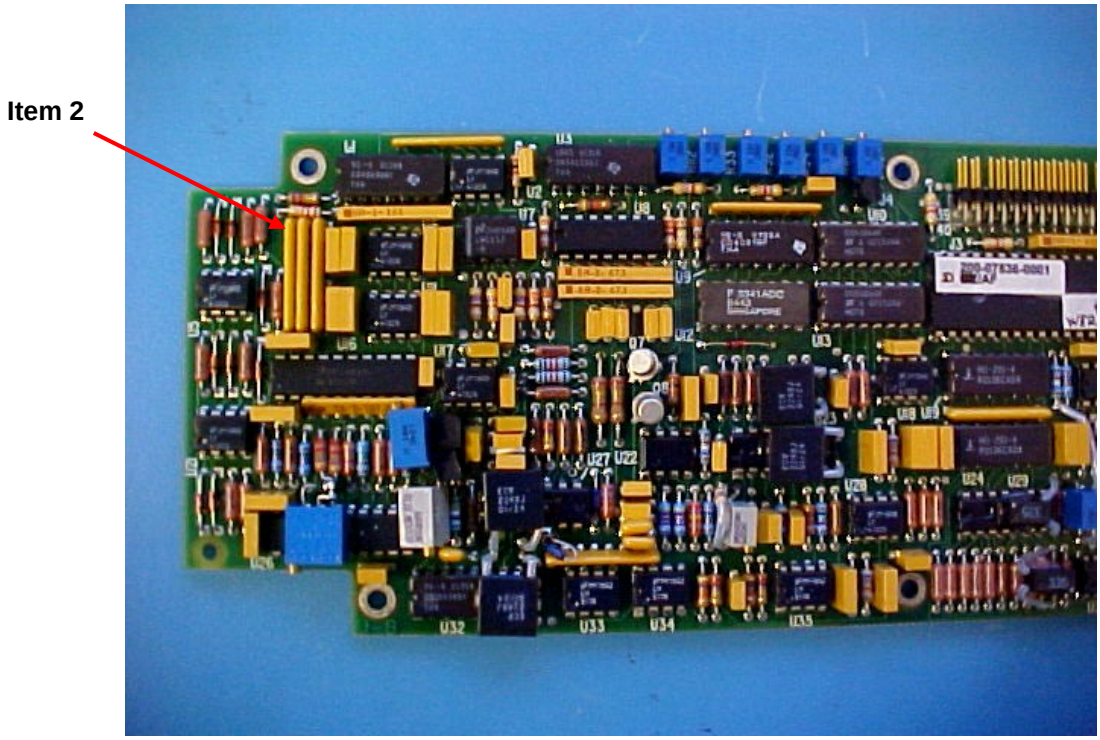

Figure 2