



REV B	APPLICATION			REVISIONS		
	PRODUCT LINE	REV	DESCRIPTION	DATE	APPROVED	APPROVED
SH 1	DM-441B	A	Initial Release per DCA W7853	1/20/09	Jay Jensen	L. Andujo
		B	Revised per DCA W7930	02/19/09	Jay Jensen	L. Andujo
DWG. NO. 150-042374-21						

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		 Wulfsberg Electronics A Cobham plc Group Company  <i>Avionics & Surveillance</i>					
APPROVALS		DATE		TITLE: SERVICE INSTRUCTION WSI DM-441B-21 Install SWID 34			
DRAWN	Linda Bastedeaux	1/16/09					
CHECKED	Jay Jensen	1/20/09					
PRODUCT MANAGER	John Markham	1/20/09					
ENGINEER	R. Campbell	1/20/09					
ISSUED	L. Andujo	1/20/09		SIZE A	CAGE CODE 1B7G3	DWG NO. 150-042374-21	REV B
Typed signatures indicate approval. Handwritten signature approval of this document is on file at Wulfsberg Electronics, Prescott, Arizona.				SCALE: NONE		DO NOT SCALE DRAWING	



SERVICE INSTRUCTION

EQUIPMENT: DM-441B

DATE: 02/19/09

SERVICE INSTRUCTION NUMBER: WSI DM-441B-21

Revision B

EFFECTIVITY

Affects PN 066-1107-01, -11, -12 and -21 identified with SWID 32 - 33.

REASON

Update software to SWID 34 to reduce fluctuations in ground speed display output.

DESCRIPTION

Fluctuations in the displayed groundspeed (+/- 30 knots at 500 knots) were reported, and observed in a test setup. Older versions (-31 and older) did not exhibit this behavior.

In version -32, the groundspeed calculation was modified so that it would respond more rapidly to changes in the groundspeed, but it was also more susceptible to noise in the distance calculations, causing the groundspeed fluctuations.

This change, -34, changes the groundspeed calculations so that it takes a longer time (9 seconds as opposed to 1.8 seconds) to respond to ground speed changes, but it is much less susceptible to noise in the distance calculations. This has the effect of greatly reducing the noise induced groundspeed fluctuations.

COMPLIANCE

Upon next scheduled maintenance.

WARRANTY INFORMATION

Units still in the warranty period may be returned for installation of this modification under the terms of the warranty agreement. Units should be sent to:

Wulfsberg Electronics
Attn: Repair and Overhaul Department
6400 Wilkinson Drive
Prescott, Arizona 86301

APPROVAL

This modification does not affect the original approval.

REFERENCES

DMS 44A Maintenance Manual, P/N 150-040970.

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

<u>ITEM</u>	<u>QTY</u>	<u>U/M</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>REF</u>
1	1	EA	122-01577-0034	PARTS LIST, MASTER PROCESSOR, DM-441B	U36
2	1	EA	057-03284-0034	UNIT SOFTWARE LABEL -34	N/A

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.

Open the DM-441B and gain access to the CPU Module (200-08974) per the Maintenance Manual. Perform the following modification:

Note: 1. Unless otherwise noted, the sequence of rework can be adjusted to facilitate the process.
2. WSB DM-441B-9 (SWID33) is a prerequisite for upgrading SWID32 to SWID34 units.

1. Loosen the four binding head and two flat head screws that secure the dust cover to each side of the transceiver. Note that the dust cover has slotted mounting holes.
2. Slide the dust cover up and away from the transceiver.
3. Place the DM-441B unit on its left side. The component side of the CPU board is exposed on the right side of the unit.
4. Use a PLCC chip removal tool to remove the Master Processor U36 from its socket (see Figure 1).
5. Install item 1 DM-441B Master Processor, P/N 122-01577-0034. This chip contains the -34 version software.
6. Replace the dust cover on the unit and tighten the screws that secure it.
7. Identify the unit with the procedure as described and reassemble the unit in reverse order of disassembly.

IDENTIFICATION PROCEDURE

Apply item 2 (SWID label) in place of existing SWID label.

TESTING PROCEDURE

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

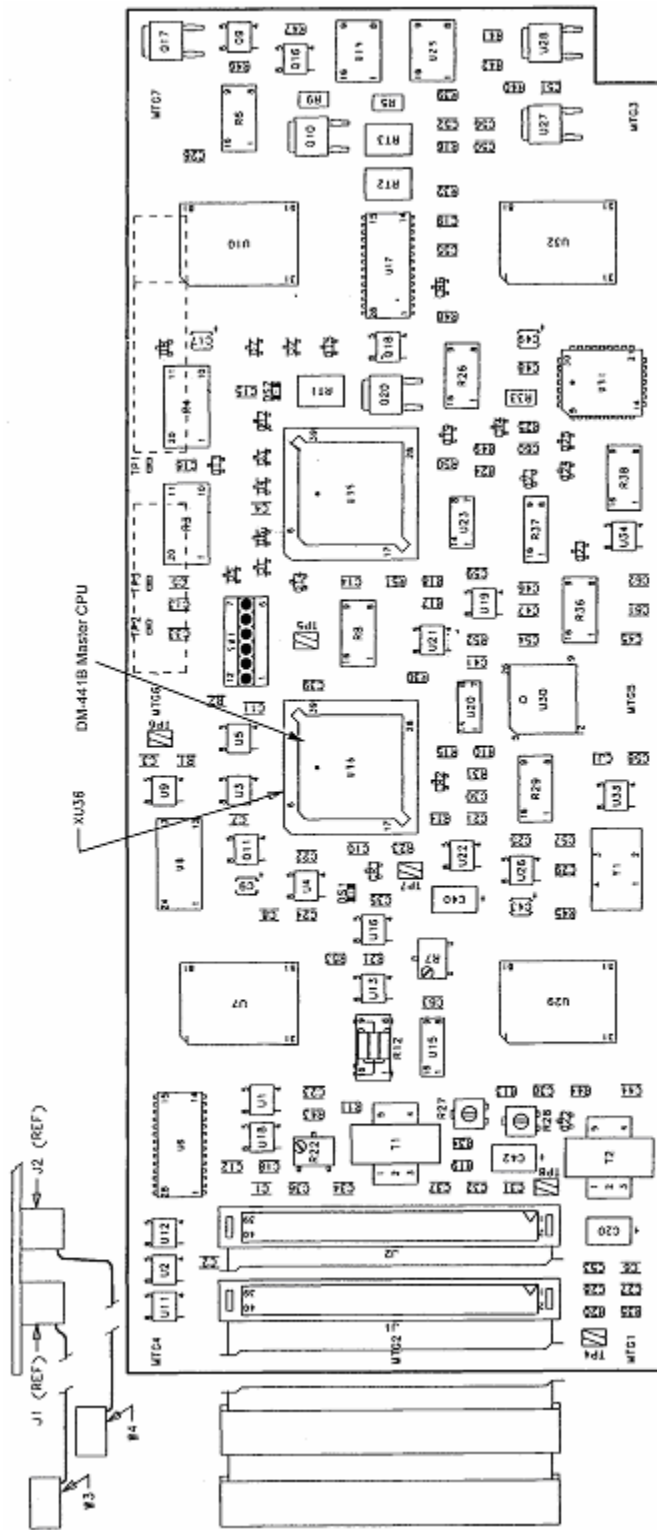


Figure 1. DM-411B CPU Board Parts Locator