

SERVICE BULLETIN

VHF 8 WATT AMP OUTPUT POWER ALARMS OPERATION

BULLETIN NUMBER: SB-0007
REVISION: A
DATE: OCT 2003

PRODUCT DESCRIPTION: VHF 8 WATT AMPLIFIER INCLUDED IN THE MT-3 VHF TRANSMITTER

DE REFERENCE / ECO: ECO# 778

PRODUCTS EFFECTED:	Model Number	Board Versions
	VT-3/140-XXXXXX	50105-06 Manufactured May 2002 to Sept 2003
	VT-3/160-XXXXXX	50105-06 Manufactured May 2002 to Sept 2003

SYMPTOMS: Output Power alarms failed to operate when power was reduced to 4 Watts and below.

CAUSE: Incorrect resistor values for 2 to 4 Watts power range.

SOLUTION: Changed resistors, R20 and R35, to enable power alarms to function at all specified output power levels

PARTS REQUIRED:	Qty	UOM	Description	Part Number	Designators
	1	Each	RES, SM, 1K00 0805, 1%,100ppm	1150-3A1001FP	R20
	1	Each	RES, SM, 1K00 1206, 1%,100ppm	1150-3B1001FP	R35

PROCEDURE: Follow the instructions listed below and reference drawings in Additional Information on page 2 and 3

- 1) Using proper Electrostatic Discharge procedures, remove both R20 and R35 from the Transmitter Amplifier PCB.
- 2) Solder in replacement components R20 (1K00, 1150-3A1001FP) and R35 (1K00, 1150-3B1001FP).

RETURN REQUESTS: To have affected product returned to Daniels Electronics for servicing (or replacement, etc...), please contact the service department to obtain and RMA number and return shipping instructions at 1-800-664-4066

REVISION HISTORY:	Rev Date	Description
	A 10/02/03	First Release

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ADDITIONAL INFORMATION

COMPONENT LOCATION TABLE		DESIGNATION		TEST POINT		DESIGNATION		TEST POINT	
LOC	DESIGNATION	LOC	DESIGNATION	LOC	DESIGNATION	LOC	DESIGNATION	LOC	DESIGNATION
C2	C2	Q3	D2	R19	E6	R41	E4	U1	E5
C4	B2	Q4	E4	R20	E6	R42	E5	U2	E5
C6	B3	Q5	E5	R21	E6	R43	E5	U3	E5
C7	B3	Q6	F2	R22	E6	R44	B3	U4	C2
C8	B3	Q7	F2	R23	E6	R45	B3	U5	C2
C9	B3	R1	C1	R24	E6	R46	B3		
C10	B3	R2	C1	R25	E6	R47	B3		
C11	D2	R3	C1	R26	E6	R48	D7		
C12	E1	R4	C1	R27	E6	R49	D7		
C13	E1	R5	C1	R28	E6	R50	D7		
C14	E1	R6	E1	R29	E6	R51	D1		
C15	D3	R7	E1	R30	E2	R52	D1		
C16	C4	R8	E1	R31	E2	R53	D1		
C17	C4	R9	E1	R32	D3	R54	D1		
C18	D5	R10	E1	R33	D3	R55	D1		
C19	B5	R11	D2	R34	D3	R56	D3		
C20	B5	R12	D3	R35	E5	R57	D3		
C21	A8	R13	A1	R36	E5	R58	C1		
C22	A8	R14	D7	R37	E5	R59	C1		
C23	A7	R15	E5	R38	G2	R60	D3		
C24	A7	R16	E5	R39	E4	R61	D3		
C25	C7	R17	E5	R40	E4	R62	D3		
C26	D7	R18	E7	R41	E4	R63	D3		
		R19	E7	R42	E4	R64	D3		
		R20	E7	R43	E4	R65	D3		
		R21	E7	R44	E4	R66	D3		
		R22	E7	R45	E4	R67	D3		
		R23	E7	R46	E4	R68	D3		
		R24	E7	R47	E4	R69	D3		
		R25	E7	R48	E4	R70	D3		
		R26	E7	R49	E4	R71	D3		
		R27	E7	R50	E4	R72	D3		
		R28	E7	R51	E4	R73	D3		
		R29	E7	R52	E4	R74	D3		
		R30	E7	R53	E4	R75	D3		
		R31	E7	R54	E4	R76	D3		
		R32	E7	R55	E4	R77	D3		
		R33	E7	R56	E4	R78	D3		
		R34	E7	R57	E4	R79	D3		
		R35	E7	R58	E4	R80	D3		
		R36	E7	R59	E4	R81	D3		
		R37	E7	R60	E4	R82	D3		
		R38	E7	R61	E4	R83	D3		
		R39	E7	R62	E4	R84	D3		
		R40	E7	R63	E4	R85	D3		
		R41	E7	R64	E4	R86	D3		
		R42	E7	R65	E4	R87	D3		
		R43	E7	R66	E4	R88	D3		
		R44	E7	R67	E4	R89	D3		
		R45	E7	R68	E4	R90	D3		
		R46	E7	R69	E4	R91	D3		
		R47	E7	R70	E4	R92	D3		
		R48	E7	R71	E4	R93	D3		
		R49	E7	R72	E4	R94	D3		
		R50	E7	R73	E4	R95	D3		
		R51	E7	R74	E4	R96	D3		
		R52	E7	R75	E4	R97	D3		
		R53	E7	R76	E4	R98	D3		
		R54	E7	R77	E4	R99	D3		
		R55	E7	R78	E4	R100	D3		

FREQUENCY SELECT PARTS	
C18	132-150 MHz
C19	150-174 MHz
C20	30PF
C21	30PF
C22	30PF
C23	30PF
C24	100PF
C25	62PF
C26	4.7PF
C27	NI
C28	NI
C29	NI
C30	NI
C31	NI
C32	NI
C33	NI
C34	NI
C35	NI
C36	NI
C37	NI
C38	NI
C39	NI
C40	NI
C41	NI
C42	NI
C43	NI
C44	NI
C45	NI
C46	NI
C47	NI
C48	NI
C49	NI
C50	NI
C51	NI
C52	NI
C53	NI
C54	NI
C55	NI
C56	NI
C57	NI
C58	NI
C59	NI
C60	NI
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C69	NI
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C74	NI
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C77	NI
C78	NI
C79	NI
C80	NI
C81	NI
C82	NI
C83	NI
C84	NI
C85	NI
C86	NI
C87	NI
C88	NI
C89	NI
C90	NI
C91	NI
C92	NI
C93	NI
C94	NI
C95	NI
C96	NI
C97	NI
C98	NI
C99	NI
C100	NI

POWER SELECT PARTS	
JUR	2 WATT POWER
JUR	8 WATT POWER
JUR	'A' INSTALLED
JUR	'B' INSTALLED
JUR	'A' INSTALLED
JUR	'B' INSTALLED
JUR	NOT INSTALLED
JUR	NOT INSTALLED

Factory installed default jumpers

Components installed on bottom of board

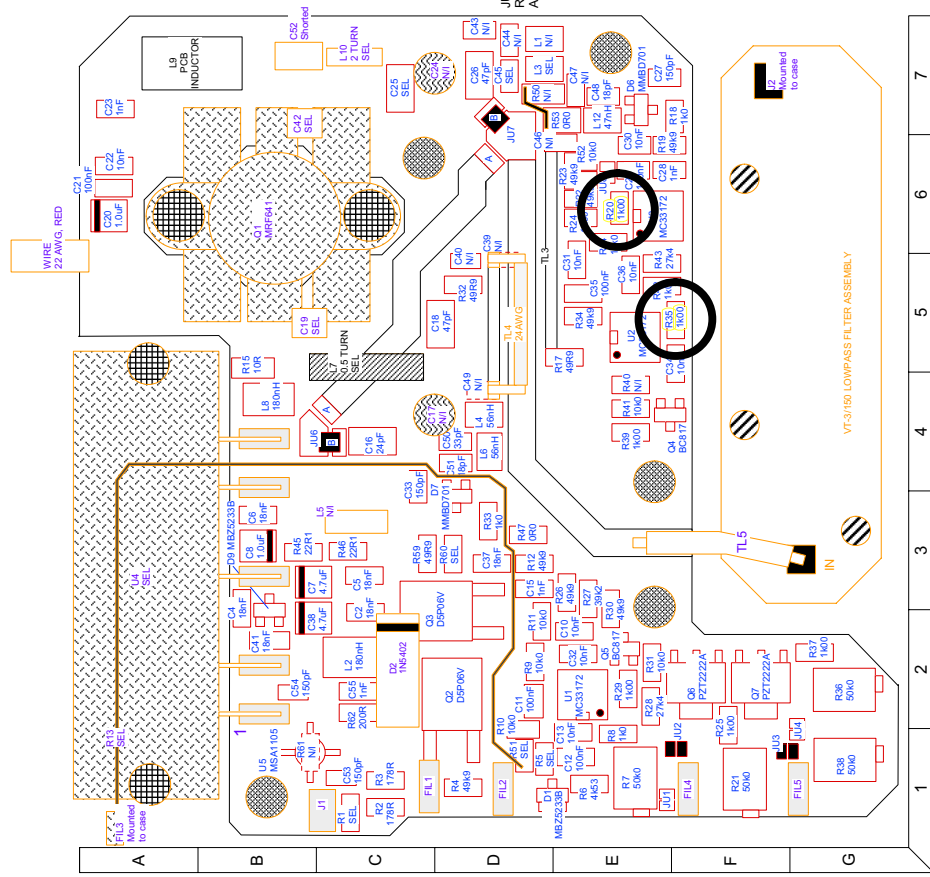
Components mounted on case

M3 x 8 Screws

M2.5 x 6 Screws

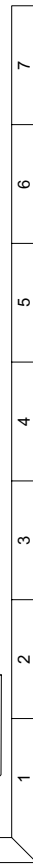
M3 x 6 - M2.5 Cap Screw

01 - INSTALLED ON CASE
 02 - INSTALLED ON CASE
 03 - INSTALLED ON CASE



DANIELS™
 ELECTRONICS LTD.

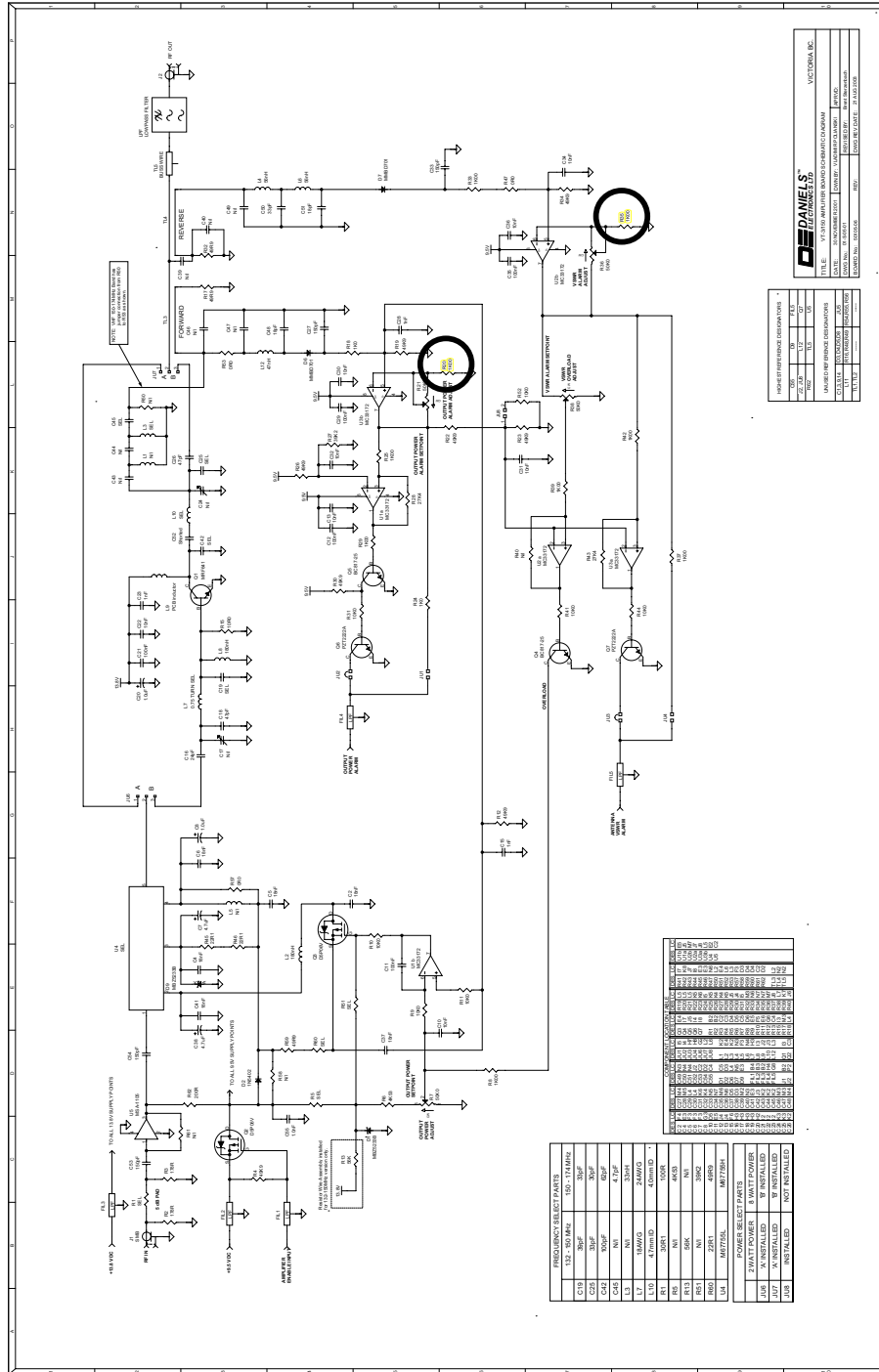
TITLE: VHF TX AMPLIFIER BOARD
 DATE: 10 MAY 2002
 BOARD NO: 50105-06
 DWG No: 01-T-05-04
 REV DATE: 8 OCT 2003



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ADDITIONAL INFORMATION



DANIELS ELECTRONICS LTD.
 10000 VICTORIA RD.
 WILLOWDALE, ONTARIO M2H 3L7
 TEL: (416) 491-1111 FAX: (416) 491-1112
 WWW.DANIELSELECTRONICS.COM

DATE	BY	REVISION
01/10/00	WJ	1.0
01/10/00	WJ	1.1
01/10/00	WJ	1.2
01/10/00	WJ	1.3
01/10/00	WJ	1.4
01/10/00	WJ	1.5
01/10/00	WJ	1.6
01/10/00	WJ	1.7
01/10/00	WJ	1.8
01/10/00	WJ	1.9
01/10/00	WJ	2.0

FREQUENCY SELECT PARTS	
C119	300PF
C205	300PF
C206	300PF
C405	100PF
C406	100PF
C407	100PF
C408	100PF
C409	100PF
C410	100PF
C411	100PF
C412	100PF
C413	100PF
C414	100PF
C415	100PF
C416	100PF
C417	100PF
C418	100PF
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C789	100PF
C790	100PF
C791	100PF
C792	100PF
C793	100PF
C794	100PF
C795	100PF
C796	100PF
C797	100PF
C798	100PF
C799	100PF
C800	100PF

POWER SELECT PARTS	
R101	100K
R102	100K
R103	100K
R104	100K
R105	100K
R106	100K
R107	100K
R108	100K
R109	100K
R110	100K
R111	100K
R112	100K
R113	100K
R114	100K
R115	100K
R116	100K
R117	100K
R118	100K
R119	100K
R120	100K
R121	100K
R122	100K
R123	100K
R124	100K
R125	100K
R126	100K
R127	100K
R128	100K
R129	100K
R130	100K
R131	100K
R132	100K
R133	100K
R134	100K
R135	10