

BZ5MXD30U

Application for FCC Certification Regenerative Digital Television Translator

Parts List and Tune-up Procedure:

The following is the procedure for changing the channel of the MXD30U translator. Since the amplifier is broadband, channel change involves retuning of the output filter and recalibration of the output meter.

The amplifier meter was calibrated to read 100% (top scale) at full power and at the channel specified when the transmitter was tested at the factory. If the amplifier is to operate at a channel other than that of the factory test channel, the metering is going to require re-calibration. The power meter setting is a channel dependent calibration.

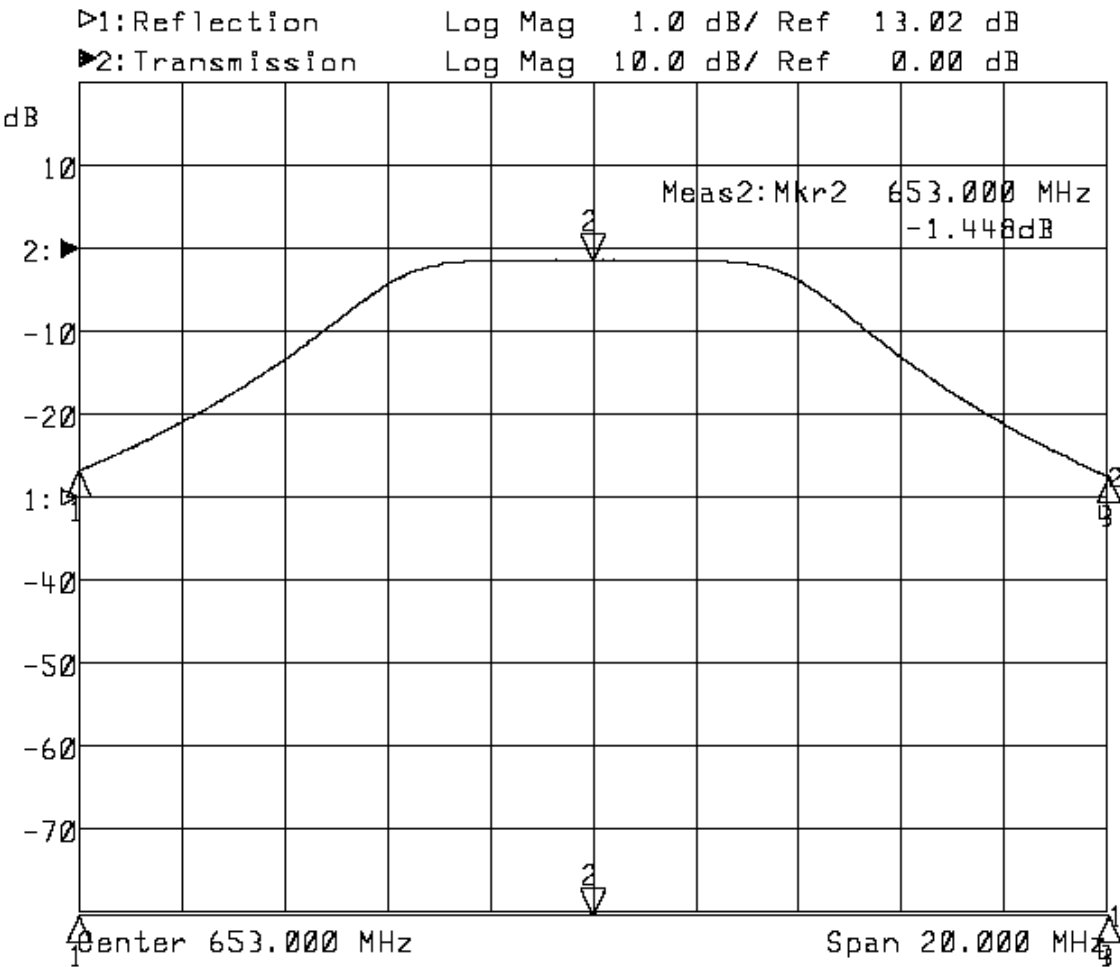
1. Connect the transmitter output to a 50 ohm dummy load or the antenna. The transmitter uses a 50 Ω type N connector for its output. An inline wattmeter with a selection of detector elements should be used for measurements.
2. Connect the 115VAC mains input. This AC circuit should be rated for 15 amperes, and should be supplied through a slow-tripping breaker or time delay fuse. Generally, a breaker that is rated for across-the-line motor starting will be found to be satisfactory. Also, connect the power cable that connects the power supply to the amplifier. This is the nine-wire cable supplied with the amplifier.
3. Switch 'ON' the power supply circuit breaker. Depress the power supply 'ON' push button switch. The two LEDs marked INTRLK and TEMP should be lighted, and the amplifier should be operating and the cooling fans on both the power supply and the amplifier should be running.
4. The amplifier is equipped with AGC and VSWR protections which have been factory set. To set the correct level out of the channel processor or exciter, switch OFF the amplifier AGC (switch down) then adjust the Transcoder level control so that the output of the amplifier is 110%. Switch ON the AGC and front panel meter should read 100%. If not, adjust the front panel pot labeled AGC LEVEL for 100% indication.

The output filter must be retuned as per the frequency response sweeps attached (note: two different tunings depending on the type of filter used):

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Simple Mask Filter:
Bandpass Response

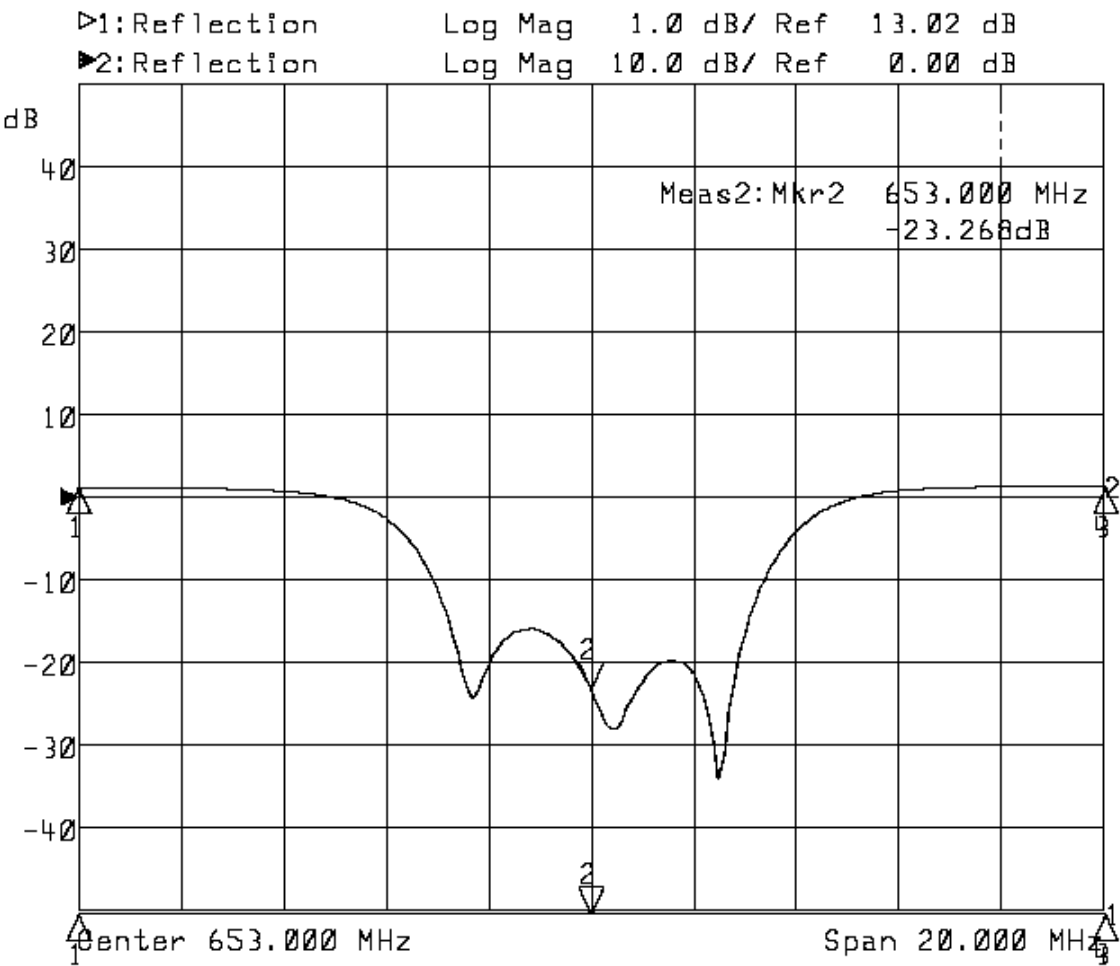


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Parts List and Tune-up Procedure

Simple Mask Filter:

Return loss

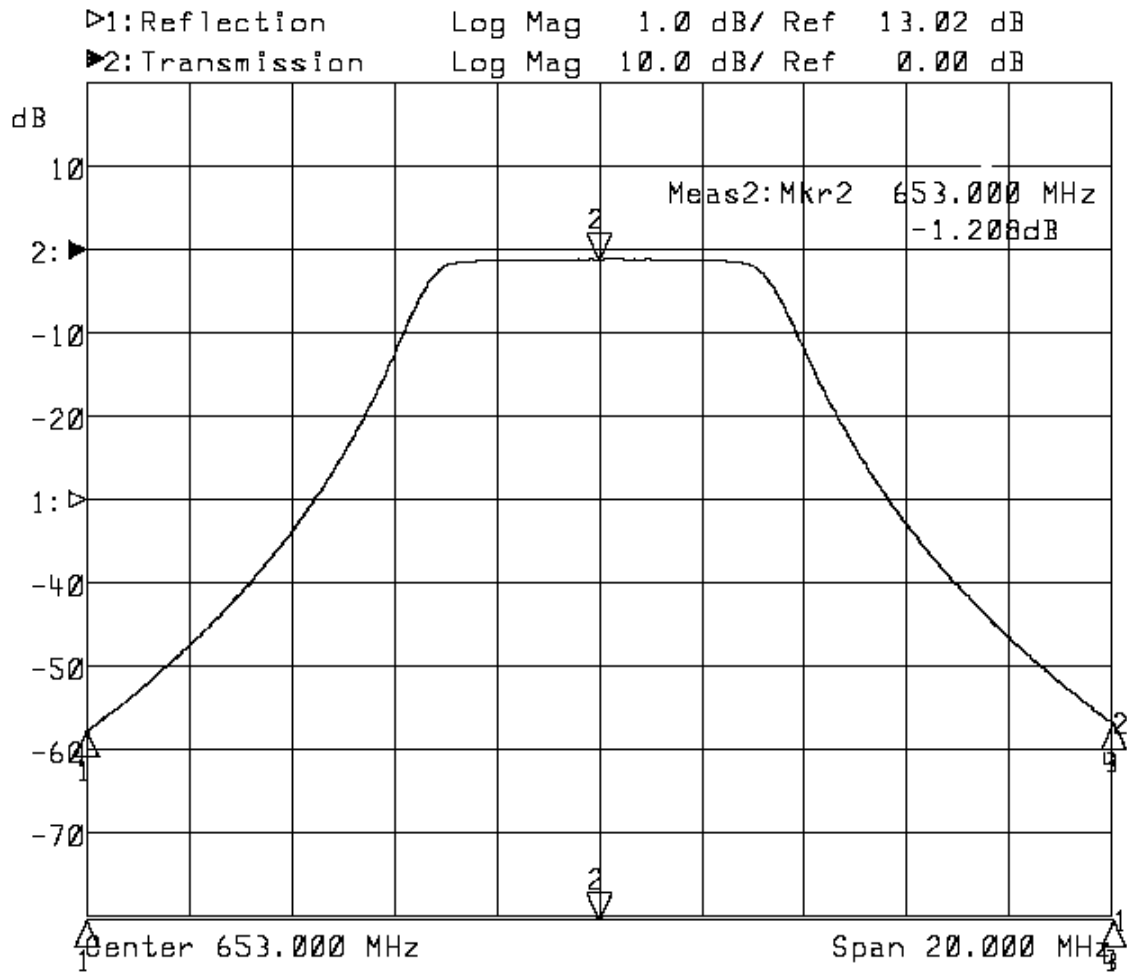


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Parts List and Tune-up Procedure

Stringent Mask Filter:

In band Response

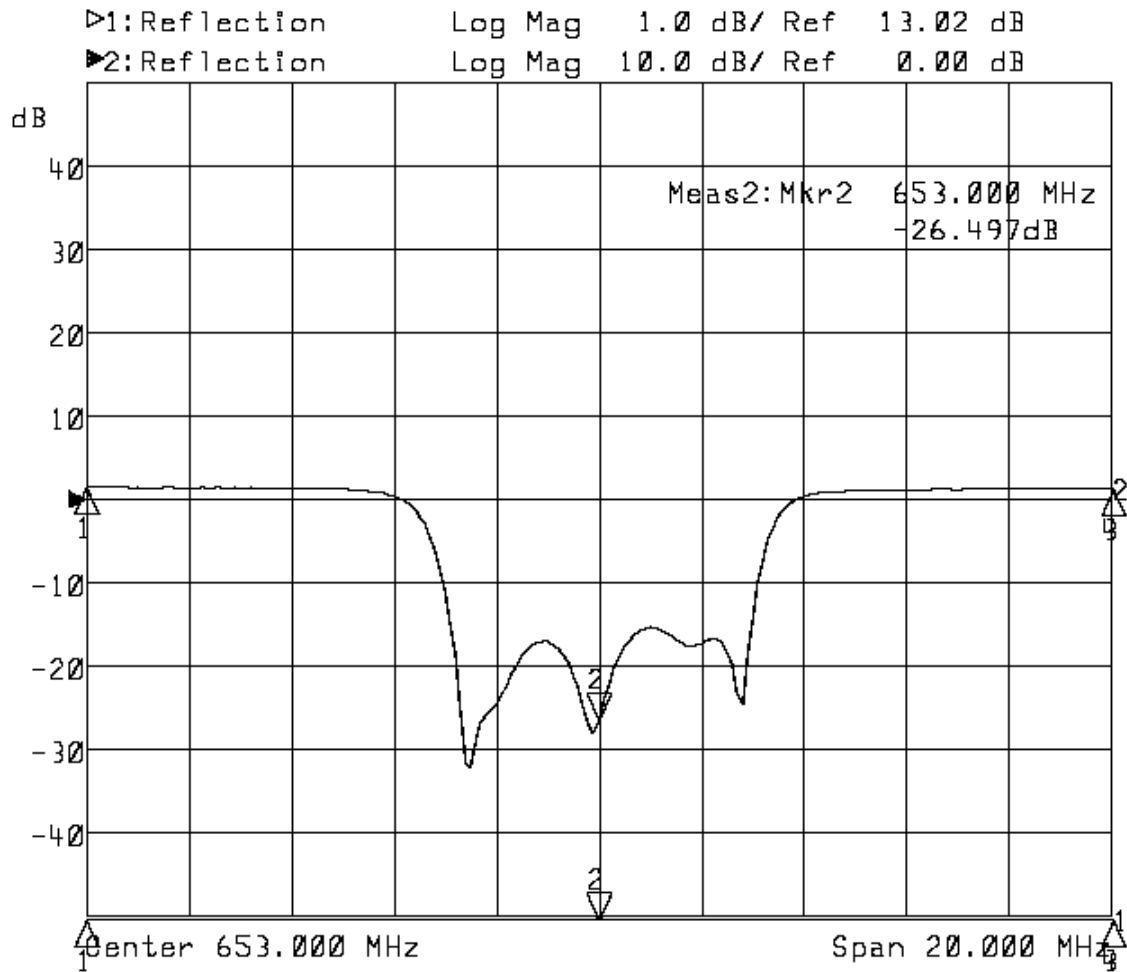


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Parts List and Tune-up Procedure

Stringent Mask Filter:

Return loss



Level						Line	Tp	Component	Description	ID	Qty	UM	Total
1						1	9	40D2206A1	ASSEMBLY DRAWING R-3		0	EA	0
1						10	5	41D1452P1	FRONT PANEL R-4		1	EA	1
1						12	5	41D1483P1	FRAME (CHASSIS) R-4		1	EA	1
1						14	5	41D1444P1	REAR PANEL R-2		1	EA	1
1						15	5	41D1504P1	TOP COVER R-0		1	EA	1
1						20	1	40D2208G1	HEATSINK ASSY 100W AMP UHF R-7		1	EA	1
	2					1	9	40D2208	ASSEMBLY DRAWING R-4		0	EA	0
	2					10	5	41D1475P1	HEATSINK R-2		1	EA	1
	2					11	1	21B2230G2	AMP RF UHF NO CONN. R-2		2	EA	2
		3				1	9	21B1389S	SCHEMATIC 0.1		0	EA	0
		3				2	9	21B2230A1	Assembly Drawing R-2		0	EA	0
		3				3	5	21B1411P1	SPACER PLATE R-1		0	EA	0
		3				4	5	21B2230P1	PCB AMP RF R-2		1	EA	2
		3				7	5	12062R104K9B	CAP 100nF 10% 50V	C1	1	EA	2
		3				8	5	12062R102K9B	CAP 1n 50V PHILIPS	C2	1	EA	2
		3				9	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C3	1	EA	2
		3				10	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C4	1	EA	2
		3				11	5	12062R104K9B	CAP 100nF 10% 50V	C5	1	EA	2
		3				12	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C6	1	EA	2
		3				13	5	NACZ151M35V8x10.8	CAP 150U 35V 20%	C7	1	EA	2
		3				14	5	100B-8R2-JP500X	CAP 8p2 500V CHIP	C101	1	EA	2
		3				15	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C102	1	EA	2
		3				16	5	100B-180-JP500X	CAP 18p 500V CHIP	C103	1	EA	2
		3				17	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C104	1	EA	2
		3				18	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C105	1	EA	2
		3				19	5	12062R104K9B	CAP 100nF 10% 50V	C106	1	EA	2
		3				20	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C107	1	EA	2
		3				21	5	100B-8R2-JP500X	CAP 8p2 500V CHIP	C111	1	EA	2
		3				22	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C112	1	EA	2
		3				23	5	100B-180-JP500X	CAP 18p 500V CHIP	C113	1	EA	2
		3				24	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C114	1	EA	2
		3				25	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C115	1	EA	2
		3				26	5	12062R104K9B	CAP 100nF 10% 50V	C116	1	EA	2
		3				27	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C117	1	EA	2
		3				28	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR100	1	EA	2
		3				29	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR110	1	EA	2
		3				30	5	1F1304-3	S/M COUPLER	HY1	1	EA	2
		3				31	5	1F1304-3	S/M COUPLER	HY2	1	EA	2
		3				34	5	MRF 184	TRANSISTOR MOTOROLA	Q1	1	EA	2
		3				35	5	MRF 184	TRANSISTOR MOTOROLA	Q2	1	EA	2
		3				36	5	9C12063A2200JL	RESISTOR 220R 1/4W 5% CHIP	R1	1	EA	2
		3				37	5	9C12063A1000JL	RESISTOR 100 OHMS 1/4W 5%	R2	1	EA	2
		3				38	5	9C12063A3301JL	RESISTOR: 3K3 1/4W 5%	R101	1	EA	2
		3				39	5	9C12063A0000JL	RES JUMPER	R102	1	EA	2
		3				40	5	9C12063A3301JL	RESISTOR: 3K3 1/4W 5%	R110	1	EA	2
		3				41	5	9C12063A0000JL	RES JUMPER	R112	1	EA	2
		3				42	5	RFP-10-50TV	RES 10W 5% 50	R201	1	EA	2
		3				43	5	RFP-10-50TV	RES 10W 5% 50	R202	1	EA	2

Level						Line	Tp	Component	Description	ID	Qty	UM	Total
		3				44	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV1	1	EA	2
		3				45	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV100	1	EA	2
		3				46	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV110	1	EA	2
		3				47	5	1280A	TURRET PIN	TP1	1	EA	2
		3				48	5	LM317T	IC VOLT REG	U1	1	EA	2
		3				49	5	4672	MICA INSULATOR-KEYSTONE		1	EA	2
		3				50	5	FMPI125W50220	Insulator for Screw		1	EA	2
2						13	1	21B1895G3	2 WAY SPLITTER UHF 1 CONN R-3		2	EA	2
		3				10	5	21B1895P1	PCB 2 WAY SPLITTER R-0		1	EA	2
		3				12	9	21B1959A3	ASSEMBLY DRAWING R-0		0	EA	0
		3				13	5	RFP-50-50TCG	RF TERMINATION	R1	1	EA	2
		3				15	5	JCB2-2.72	COUPLER, SAGE WIRELINE COMBINE	HY1	1	EA	2
		3				17	5	142-0701-235	CONNECTOR		1	EA	2
		3				19	5	21B1902P1	SPACER PLATE R-2		1	EA	2
2						14	1	21B2230G1	AMP RF UHF SMA CONN'R R-2		1	EA	1
		3				1	9	21B1389S	SCHEMATIC 0.1		0	EA	0
		3				2	9	21B2230A1	Assembly Drawing R-2		0	EA	0
		3				3	5	21B1411P1	SPACER PLATE R-1		0	EA	0
		3				4	5	21B2230P1	PCB AMP RF R-2		1	EA	1
		3				7	5	12062R104K9B	CAP 100nF 10% 50V	C1	1	EA	1
		3				8	5	12062R102K9B	CAP 1n 50V PHILIPS	C2	1	EA	1
		3				9	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C3	1	EA	1
		3				10	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C4	1	EA	1
		3				11	5	12062R104K9B	CAP 100nF 10% 50V	C5	1	EA	1
		3				12	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C6	1	EA	1
		3				13	5	NACZ151M35V8x10.8	CAP 150U 35V 20%	C7	1	EA	1
		3				14	5	100B-8R2-JP500X	CAP 8p2 500V CHIP	C101	1	EA	1
		3				15	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C102	1	EA	1
		3				16	5	100B-180-JP500X	CAP 18p 500V CHIP	C103	1	EA	1
		3				17	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C104	1	EA	1
		3				18	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C105	1	EA	1
		3				19	5	12062R104K9B	CAP 100nF 10% 50V	C106	1	EA	1
		3				20	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C107	1	EA	1
		3				21	5	100B-8R2-JP500X	CAP 8p2 500V CHIP	C111	1	EA	1
		3				22	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C112	1	EA	1
		3				23	5	100B-180-JP500X	CAP 18p 500V CHIP	C113	1	EA	1
		3				24	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C114	1	EA	1
		3				25	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C115	1	EA	1
		3				26	5	12062R104K9B	CAP 100nF 10% 50V	C116	1	EA	1
		3				27	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C117	1	EA	1
		3				28	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR100	1	EA	1
		3				29	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR110	1	EA	1
		3				30	5	1F1304-3	S/M COUPLER	HY1	1	EA	1
		3				31	5	1F1304-3	S/M COUPLER	HY2	1	EA	1
		3				32	5	142-0701-235	CONNECTOR	J1	1	EA	1
		3				33	5	142-0701-235	CONNECTOR	J2	1	EA	1
		3				34	5	MRF 184	TRANSISTOR MOTOROLA	Q1	1	EA	1

Level					Line	Tp	Component	Description	ID	Qty	UM	Total
		3			35	5	MRF 184	TRANSISTOR MOTOROLA	Q2	1	EA	1
		3			36	5	9C12063A2200JL	RESISTOR 220R 1/4W 5% CHIP	R1	1	EA	1
		3			37	5	9C12063A1000JL	RESISTOR 100 OHMS 1/4W 5%	R2	1	EA	1
		3			38	5	9C12063A3301JL	RESISTOR: 3K3 1/4W 5%	R101	1	EA	1
		3			39	5	9C12063A0000JL	RES JUMPER	R102	1	EA	1
		3			40	5	9C12063A3301JL	RESISTOR: 3K3 1/4W 5%	R110	1	EA	1
		3			41	5	9C12063A0000JL	RES JUMPER	R112	1	EA	1
		3			42	5	RFP-10-50TV	RES 10W 5% 50	R201	1	EA	1
		3			43	5	RFP-10-50TV	RES 10W 5% 50	R202	1	EA	1
		3			44	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV1	1	EA	1
		3			45	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV100	1	EA	1
		3			46	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV110	1	EA	1
		3			47	5	1280A	TURRET PIN	TP1	1	EA	1
		3			48	5	LM317T	IC VOLT REG	U1	1	EA	1
		3			49	5	4672	MICA INSULATOR-KEYSTONE		1	EA	1
		3			50	5	FMPI125W50220	Insulator for Screw		1	EA	1
2					16	1	21B1324G5	IPA ASSY UHF 1KW PA MOD R11		1	EA	1
	3				9	9	21B1334S	SCHEMATIC R-1		0	EA	0
	3				10	1	21B1334G1	IPA PCB ASSY R-4		1	EA	1
		4			1	9	21B1334A1	ASSEMBLY DRAWING R0.1		0	EA	0
		4			10	4	21B1334P1	PCB IPA R-0		1	EA	1
			5		1	5	250-GX-030011	0.0300" +/- 0.002" 36 X 48		13	IN	13
		4			11	9	21B1334S	SCHEMATIC R-1		0	EA	0
		4			13	5	1280A-1	TURRET PIN		1	EA	1
		4			15	5	MC1723CD	VOLTAGE REGULATOR	U1	1	EA	1
		4			17	5	1F1304-3	S/M COUPLER	HY1	1	EA	1
		4			18	5	1F1304-3	S/M COUPLER	HY2	1	EA	1
		4			22	5	MMBT2907ALT1	TRANSISTOR PNP MOTOROLA 2FE	Q3	1	EA	1
		4			23	5	12062R102K9B	CAP 1n 50V PHILIPS	C1	1	EA	1
		4			24	5	12062R104K9B	CAP 100nF 10% 50V	C2	1	EA	1
		4			25	5	NACZ151M35V8X10.8	CAP 150U 35V 20%	C3	1	EA	1
		4			26	5	100B-110-JP500X	CAP 11p 500V CHIP	C100	1	EA	1
		4			27	5	2320-1	CAP TRIM 1-5pf JOHANSON	C101	1	EA	1
		4			28	5	12062R104K9B	CAP 100nF 10% 50V	C102	1	EA	1
		4			29	5	2320-1	CAP TRIM 1-5pf JOHANSON	C103	1	EA	1
		4			30	5	100B-6R8-JP500X	CAP 6p8 500V CHIP	C104	1	EA	1
		4			31	5	12062R102K9B	CAP 1n 50V PHILIPS	C105	1	EA	1
		4			32	5	12062R104K9B	CAP 100nF 10% 50V	C106	1	EA	1
		4			33	5	PCT10/35DK	CAP 10uf 35V 10% TANT	C107	1	EA	1
		4			35	5	100B-110-JP500X	CAP 11p 500V CHIP	C110	1	EA	1
		4			36	5	2320-1	CAP TRIM 1-5pf JOHANSON	C111	1	EA	1
		4			37	5	12062R104K9B	CAP 100nF 10% 50V	C112	1	EA	1
		4			38	5	2320-1	CAP TRIM 1-5pf JOHANSON	C113	1	EA	1
		4			39	5	100B-6R8-JP500X	CAP 6p8 500V CHIP	C114	1	EA	1
		4			40	5	12062R102K9B	CAP 1n 50V PHILIPS	C115	1	EA	1
		4			41	5	12062R104K9B	CAP 100nF 10% 50V	C116	1	EA	1
		4			42	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C117	1	EA	1

Level				Line	Tp	Component	Description	ID	Qty	UM	Total
		4		44	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C4	1	EA	1
		4		45	5	9C12063A2202JL	RESISTOR 22K 1/4W 5% CHIP	R1	1	EA	1
		4		46	5	9C12063A5601JL	RESISTOR 5K6 1/4W 5% CHIP	R2	1	EA	1
		4		47	5	9C12063A3300JL	RESISTOR 330R 1/4W 5% CHIP	R3	1	EA	1
		4		48	5	9C12063A1002JL	RESISTOR 10K 1/4W 5% CHIP	R4	1	EA	1
		4		49	5	9C12063A2201JL	RESISTOR 2K2 1/4W 5% CHIP	R5	1	EA	1
		4		50	5	9C12063A1002JL	RESISTOR 10K 1/4W 5% CHIP	R6	1	EA	1
		4		51	5	WSC-1-1R-1%	RES 1 OHM 1W 1% DALE	R7	1	EA	1
		4		52	5	WSC-1-1R-1%	RES 1 OHM 1W 1% DALE	R8	1	EA	1
		4		53	5	9C12063A1001JL	RESISTOR 1K 1/4W 5% CHIP	R100	1	EA	1
		4		54	5	CRCW2512510J	RES 51 OHM 1W DALE	R101	1	EA	1
		4		55	5	CRCW2512510J	RES 51 OHM 1W DALE	R102	1	EA	1
		4		57	5	9C12063A1001JL	RESISTOR 1K 1/4W 5% CHIP	R110	1	EA	1
		4		59	5	9C12063A0000J	RES 0 OHM JUMPER	R9	1	EA	1
		4		60	5	ST-4B103	RES 10K POT	RV3	1	EA	1
		4		61	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV100	1	EA	1
		4		62	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV110	1	EA	1
		4		63	5	WSC-1-1R-1%	RES 1 OHM 1W 1% DALE	R10	1	EA	1
		4		64	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR100	1	EA	1
		4		65	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR110	1	EA	1
		4		66	5	MUR120	DIODE, ULTRAFAST REC. MOTOROLA	CR1	1	EA	1
	3			11	5	21B1365P1	SHIELD FRAME, WOLF MANU R-2		1	EA	1
	3			12	5	21B1366P1	SHIELD FRAME COVER R-2		1	EA	1
	3			14	5	2499003X5S0152M	CAP FEEDTHRU 1500u		1	EA	1
	3			18	5	11A1219P1	GASKET BERQUIST SIL-PAD R-0		2	EA	2
	3			19	5	11A1183P1	MTG PLATE R-3		1	EA	1
	3			20	5	11A1184P1	PRESSURE BAR R-0		2	EA	2
	3			21	5	MRF-181S	RF POWER FET 4W SEE XRF181S	Q1	1	EA	1
	3			22	5	MRF-181S	RF POWER FET 4W SEE XRF181S	Q2	1	EA	1
	3			26	1	11A1511G3	COAX CABLE FOR MX100V R-3		1	EA	1
	4			3	9	11A1511	CABLE ASSY R-3		0	EA	0
	4			13	5	RG316/U	COAX CABLE - BELDEN		0	FT	0
	4			14	5	5831-5003-10	CONN MCX STRT		1	EA	1
	3			27	1	11A1511G4	COAX CABLE R-3		1	EA	1
	4			4	9	11A1511	CABLE ASSY R-3		0	EA	0
	4			12	5	2037-5008-00	CONNECTOR RT ANGLE SMA RG188		1	EA	1
	4			13	5	RG316/U	COAX CABLE - BELDEN		0	FT	0
	3			33	9	21B2311	STICK ON LABEL		0	EA	0
2				18	1	21B1473G1	FRONT END (FOR DTV DRIVER) R-8		1	EA	1
	3			1	9	21B1473A1	ASSEMBLY DRAWING R-5.1		0	EA	0
	3			9	9	11A1354	SCHEMATIC R-2.1		0	EA	0
	3			10	4	21B1473P1	PCB FRONT END DRIVER R-3		1	EA	1

Level					Line	Tp	Component	Description	ID	Qty	UM	Total
		3			11	5	21B1366P1	SHIELD FRAME COVER R-2		1	EA	1
		3			12	5	21B1516P1	SHIELD FRAME R-2		1	EA	1
		3			13	5	21B1481P1	MOUNTING PLATE R-2		1	EA	1
		3			14	5	21B1480P1	SPACER PLATE R-3		1	EA	1
		3			15	5	1206C220J1GAC	CAP, 22.0 PF 50V CHIP	C1	1	EA	1
		3			16	5	1206C220J1GAC	CAP, 22.0 PF 50V CHIP	C2	1	EA	1
		3			17	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C3	1	EA	1
		3			18	5	12062R102K9B	CAP 1n 50V PHILIPS	C4	1	EA	1
		3			19	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C5	1	EA	1
		3			20	5	12062R104K9B	CAP 100nF 10% 50V	C6	1	EA	1
		3			21	5	12062R104K9B	CAP 100nF 10% 50V	C7	1	EA	1
		3			22	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C8	1	EA	1
		3			23	5	12062R102K9B	CAP 1n 50V PHILIPS	C9	1	EA	1
		3			24	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C10	1	EA	1
		3			25	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C11	1	EA	1
		3			26	5	12062R102K9B	CAP 1n 50V PHILIPS	C12	1	EA	1
		3			27	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C13	1	EA	1
		3			28	5	12062R104K9B	CAP 100nF 10% 50V	C14	1	EA	1
		3			29	5	12062R104K9B	CAP 100nF 10% 50V	C15	1	EA	1
		3			30	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C16	1	EA	1
		3			31	5	12062R104K9B	CAP 100nF 10% 50V	C17	1	EA	1
		3			32	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C18	1	EA	1
		3			33	5	12062R104K9B	CAP 100nF 10% 50V	C19	1	EA	1
		3			34	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C20	1	EA	1
		3			35	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C21	1	EA	1
		3			36	5	12062R102K9B	CAP 1n 50V PHILIPS	C22	1	EA	1
		3			37	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C23	1	EA	1
		3			38	5	12062R104K9B	CAP 100nF 10% 50V	C24	1	EA	1
		3			39	5	PCT10/35DK	CAP 10uF 35V 10% TANT	C25	1	EA	1
		3			40	5	NACZ151M35V8X10.8	CAP 150U 35V 20%	C26	1	EA	1
		3			41	5	PCT47/10DM	CAP 47uF 10V 20% TANT	C27	1	EA	1
		3			45	5	9C12063A3901JL	RESISTOR 3K9 1/4W 5% CHIP	R1	1	EA	1
		3			46	5	9C12063A3901JL	RESISTOR 3K9 1/4W 5% CHIP	R2	1	EA	1
		3			47	5	9C12063A1000JL	RESISTOR 100 OHMS 1/4W 5%	R3	1	EA	1
		3			48	5	9C12063A1001JL	RESISTOR 1K 1/4W 5% CHIP	R4	1	EA	1
		3			49	5	9C12063A2001JL	RESISTOR 2K 1/4W 5% CHIP	R5	1	EA	1
		3			50	5	RFP-10-100TVC	RES 100 OHM 20WRF LOAD 5%	R6	1	EA	1
		3			51	5	9C12063A51R0JL	RESISTOR 51R 1/4W 5% CHIP	R7	1	EA	1
		3			52	5	9C12063A51R0JL	RESISTOR 51R 1/4W 5% CHIP	R8	1	EA	1
		3			53	5	9C12063A5101JL	RESISTOR 5K1 1/4W 5% CHIP	R9	1	EA	1
		3			54	5	9C12063A5101JL	RESISTOR 5K1 1/4W 5% CHIP	R10	1	EA	1
		3			55	5	9C12063A2702JL	RESISTOR: 27K CHIP	R11	1	EA	1
		3			56	5	9C12063A5101JL	RESISTOR 5K1 1/4W 5% CHIP	R12	1	EA	1
		3			58	5	9C12063A5101JL	RESISTOR 5K1 1/4W 5% CHIP	R14	1	EA	1
		3			59	5	3224J1-103E	RESISTOR 10K POT	RV1	1	EA	1
		3			60	5	3224J1-102E	RESISTOR 1K POT	RV2	1	EA	1
		3			61	5	9C12063A10R0JL	RESISTOR 10R 1/4W 5% CHIP	R10	1	EA	1

Level					Line	Tp	Component	Description	ID	Qty	UM	Total
		3			63	5	1F1304-3	S/M COUPLER	HY1	1	EA	1
		3			64	5	1F1304-3	S/M COUPLER	HY2	1	EA	1
		3			67	5	PI-810	PIN DIODE AT. KDI PI-810-2		1	EA	1
		3			69	5	MMBT2222ALT1	TRANSISTOR, MOTOROLA "1P"	Q1	1	EA	1
		3			72	5	MHL-8118	IC MOTOROLA SPR 05-004 MHW9182	U1	1	EA	1
		3			73	5	LM358D	IC DUAL OP AMP SOIC 8 MOT	U2	1	EA	1
		3			74	5	MC78M12CDT	IC SEE 78M12CDT	U3	1	EA	1
		3			75	5	MC78L05ACD	IC REGULATOR 100mA SOIC-8	U4	1	EA	1
		3			79	5	BB811	DIODE VARACTOR	CR1	1	EA	1
		3			80	5	BB811	DIODE VARACTOR	CR2	1	EA	1
		3			81	5	HSMS-2850	DIODE HEWLETT PACKARD	CR3	1	EA	1
		3			83	5	1280A-1	TURRET PIN	TP1	1	EA	1
		3			84	5	1280A-1	TURRET PIN	TP2	1	EA	1
		3			85	5	1280A-1	TURRET PIN	TP3	1	EA	1
		3			87	5	24MCX501-10/111	STRT BKHEAD CONNCTR 50^ SHUNER		2	EA	2
		3			88	5	2499003X5S0152M	CAP FEEDTHRU 1500u		3	EA	3
		3			89	9	21B2313	LABEL - TOP COVER		0	EA	0
	2				20	1	20B1810G2	VOLTAGE REG +28V (MX100U) R- 12		1	EA	1
		3			2	9	20B1810	ASSY DRAWING/SCHEMATIC R-4		0	EA	0
		3			10	5	20B1810P1	PCB VOLTAGE REGULATOR R-3		1	EA	1
		3			14	5	B1570-B-5/16-05	SPACER TIN PLATED		4	EA	4
		3			15	5	B1530-B-1/4-05	SPACER TIN PLATED		7	EA	7
		3			17	5	MLSS100-11	LOCKING HEADER		1	EA	1
		3			18	5	1280B	TURRET		12	EA	12
		3			19	5	514-AG11D	IC SOCKET 14 PIN		2	EA	2
		3			20	9	20B2512	SCHEMATIC R-1		0	EA	0
		3			23	5	344-21104	CAP u1 100V FILM 344-25104	C1	1	EA	1
		3			25	5	344-21104	CAP u1 100V FILM 344-25104	C3	1	EA	1
		3			27	5	630-09472	CAP 4700p 100V CERAMIC	C5	1	EA	1
		3			28	5	030-38108	CAP 1u 63V ELECT	C6	1	EA	1
		3			29	5	030-38108	CAP 1u 63V ELECT	C7	1	EA	1
		3			30	5	681-10101	CAP 100p 100V CERAMIC	C2	1	EA	1
		3			32	5	1N5347A	DIODE: 10V 5W	CR2	1	EA	1
		3			35	5	1N5347A	DIODE: 10V 5W	CR5	1	EA	1
		3			37	5	681-10101	CAP 100p 100V CERAMIC	C4	1	EA	1
		3			38	5	2N3501	TRANSISTOR	Q1	1	EA	1
		3			39	5	2N3501	TRANSISTOR	Q2	1	EA	1
		3			40	5	TIP122	TRANSISTOR	Q3	1	EA	1
		3			41	5	2N4402	TRANSISTOR	Q4	1	EA	1
		3			42	5	TIP122	TRANSISTOR	Q5	1	EA	1
		3			43	5	2N4402	TRANSISTOR	Q6	1	EA	1
		3			45	5	MC1723CP	VOLTAGE REGULATOR	U1	1	EA	1
		3			46	5	2SA1302	TRANS MUST ISSUE QTY 1 TP0010	U2	1	EA	1
		3			47	5	MC1723CP	VOLTAGE REGULATOR	U3	1	EA	1
		3			48	5	2SA1302	TRANS MUST ISSUE QTY 1 TP0010	U4	1	EA	1

Level					Line	Tp	Component	Description	ID	Qty	UM	Total
		3			50	5	3R152P103J	RES 1/4W 5% 10K	R1	1	EA	1
		3			51	5	3R152P271J	RES 1/4W 5% 270	R2	1	EA	1
		3			53	5	3R152P102J	RES 1/4W 5% 1K	R4	1	EA	1
		3			59	5	RS-5 0.5R 1%	RESISTOR 0.50 5W DALE	R10	1	EA	1
		3			67	5	3R152P103J	RES 1/4W 5% 10K	R18	1	EA	1
		3			68	5	3R152P271J	RES 1/4W 5% 270	R19	1	EA	1
		3			70	5	3R152P102J	RES 1/4W 5% 1K	R21	1	EA	1
		3			76	5	RS-5 0.5R 1%	RESISTOR 0.50 5W DALE	R27	1	EA	1
		3			80	5	3R152P681J	RES 1/4W 5% 680	R31	1	EA	1
		3			81	5	3R152P683J	RES 1/4W 5% 68K	R32	1	EA	1
		3			82	5	3R152P512J	RES 1/4W 5% 5K1	R33	1	EA	1
		3			83	5	3329H-1-204	POT 200K	R34	1	EA	1
		3			84	5	3R152P683J	RES 1/4W 5% 68K	R35	1	EA	1
		3			85	5	3R152P472J	RES 1/4W 5% 4K7	R36	1	EA	1
		3			86	5	3329H-1-204	POT 200K	R37	1	EA	1
		3			88	5	3R152P101J	RES 1/4W 5% 100	R39	1	EA	1
		3			90	5	3R152P101J	RES 1/4W 5% 100	R41	1	EA	1
		3			91	5	3R152P511J	RES 1/4W 5% 510	R42	1	EA	1
		3			92	5	3R152P511J	RES 1/4W 5% 510	R43	1	EA	1
		3			95	5	1N4750A	DIODE, 27.0V 5% 1.0W ZENER	CR3	1	EA	1
		3			96	5	1N4750A	DIODE, 27.0V 5% 1.0W ZENER	CR6	1	EA	1
		3			97	5	3R78P331J	RESISTOR: 1W 5% 330 OHM	R8	1	EA	1
		3			98	5	3R78P331J	RESISTOR: 1W 5% 330 OHM	R25	1	EA	1
		3			99	5	3R78P120J	RES: 1W 5% 12	R3	1	EA	1
		3			100	5	3R78P120J	RES: 1W 5% 12	R20	1	EA	1
		3			101	5	CW-2B 180 OHM	RESISTOR: 180 OHM 3W DALE	R38	1	EA	1
		3			102	5	CW-2B 180 OHM	RESISTOR: 180 OHM 3W DALE	R40	1	EA	1
		3			103	5	3R152P201J	RES 1/4W 5% 200	R5	1	EA	1
		3			104	5	3R152P201J	RES 1/4W 5% 200	R22	1	EA	1
		3			105	5	3R152P183J	RES 1/4W 5% 18K	R11	1	EA	1
		3			106	5	3R152P183J	RES 1/4W 5% 18K	R28	1	EA	1
		3			107	5	3329H-1-103	POT 10K	R7	1	EA	1
		3			108	5	3329H-1-103	POT 10K	R24	1	EA	1
		3			109	5	3R152P622J	RES 1/4W 5% 6K2	R9	1	EA	1
		3			110	5	3R152P622J	RES 1/4W 5% 6K2	R26	1	EA	1
		3			111	5	RS10-0.1 OHM	RES 10W 1% 0R1	R6	1	EA	1
		3			112	5	RS10-0.1 OHM	RES 10W 1% 0R1	R23	1	EA	1
		3			113	5	PR37J 300 OHMS	RES 1.6W 5% 300 SPR 05-064	R15	1	EA	1
		3			115	5	3R152P752J	RES 1/4W 5% 7K5	R12	1	EA	1
		3			116	5	3R152P912J	RES 1/4W 5% 9.1K	R14	1	EA	1
		3			117	5	3R152P752J	RES 1/4W 5% 7K5	R29	1	EA	1
		3			118	5	3R152P912J	RES 1/4W 5% 9.1K	R30	1	EA	1
2					22	5	20B1500P1	TYPE 3156 THERMOSTAT R-7		1	EA	1
2					24	5	21B1411P1	SPACER PLATE R-1		3	EA	3
2					26	5	31C1450P1	SIDE SUPPORT R-1		1	EA	1
2					28	5	530714B0	HEATSINK		2	EA	2
2					30	5	572-4858-01-16	WINCHESTER POST		3	EA	3
1					21	1	40D2207G1	POWER SUPPLY ASSY R10		1	EA	1
2					1	9	40D2207A1	ASSEMBLY DRAWING R-2		0	EA	0
2					10	5	41D1492P1	PWR SUPPLY FRT PANEL R-3		1	EA	1

Level						Line	Tp	Component	Description	ID	Qty	UM	Total
2						11	1	10A1240G7	AIR SWITCH KIT FOR MX100 R13		1	EA	1
	3					23	5	20B1500P2	TYPE 3156 THERMOSTAT R-7	-	1	EA	1
	3					26	5	RH25-3K5-1%	RESISTOR		1	EA	1
	3					27	5	8696	SPACER PHENOLIC		2	EA	2
2						12	5	41D1483P2	FRAME R-6		1	EA	1
2						13	5	8835	SPACER		4	EA	4
2						14	5	41D1499P1	REAR PANEL R-3		1	EA	1
2						15	5	41D1504P1	TOP COVER R-0		1	EA	1
2						19	5	103	INSUL WASHER		4	EA	4
2						20	4	10A181P2	HEATSINK DRILLING R-1		1	EA	1
	3					1	5	423K	HEATSINK		1	EA	1
2						22	1	30C1829G3	CTRL PCB ASSY (MX100) R-9		1	EA	1
	3					3	9	30C1829A3	ASSEMBLY DRAWING R1.2		0	EA	0
	3					9	5	30C1829P1	PCB CONTROL R-1		1	EA	1
	3					10	9	30C1829 SH3-4	PC PATTERN R-1.2		0	EA	0
	3					11	9	30C1829 SH6	SOLDER MASK R-1.2		0	EA	0
	3					12	9	30C1829 SH5	SILKSCREEN R-1.2		0	EA	0
	3					15	9	20B2515	SCHEMATIC R-0		0	EA	0
	3					21	5	514-AG11D	IC SOCKET 14 PIN		1	EA	1
	3					22	5	516-AG11D	IC SOCKET 16 PIN		3	EA	3
	3					23	5	14538	CMOS MONOSTABLE	U1	1	EA	1
	3					25	5	1LQ1	IC OPTO ISOLATOR	U3	1	EA	1
	3					26	5	14538	CMOS MONOSTABLE	U4	1	EA	1
	3					27	5	4081	IC AND GATE	U5	1	EA	1
	3					28	5	DS1E-SL2-DC12V	RELAY	K1	1	EA	1
	3					29	5	RXE090	PROTECTOR RAYCHEM	F1	1	EA	1
	3					31	5	1N4148	DIODE SWITCHING	CR1	1	EA	1
	3					32	5	1N4148	DIODE SWITCHING	CR2	1	EA	1
	3					43	5	561-2201-080	LED DIALIGHT GREEN	DS4	1	EA	1
	3					44	5	561-2201-080	LED DIALIGHT GREEN	DS5	1	EA	1
	3					45	5	3R152P102J	RES 1/4W 5% 1K	R21	1	EA	1
	3					46	5	3329H-1-204	POT 200K	R22	1	EA	1
	3					47	5	3R152P394J	RES 1/4W 5% 390K	R23	1	EA	1
	3					48	5	3R152P104J	RES 1/4W 5% 100K	R24	1	EA	1
	3					49	5	3R152P102J	RES 1/4W 5% 1K	R25	1	EA	1
	3					50	5	3R152P102J	RES 1/4W 5% 1K	R26	1	EA	1
	3					54	5	3R152P102J	RES 1/4W 5% 1K	R2	1	EA	1
	3					55	5	3329H-1-104	POT 100K	R3	1	EA	1
	3					56	5	3R152P104J	RES 1/4W 5% 100K	R4	1	EA	1
	3					57	5	3R152P104J	RES 1/4W 5% 100K	R5	1	EA	1
	3					58	5	3R152P152J	RES 1/4W 5% 1K5	R6	1	EA	1
	3					59	5	3R152P102J	RES 1/4W 5% 1K	R7	1	EA	1
	3					60	5	3R152P102J	RES 1/4W 5% 1K	R8	1	EA	1
	3					69	5	3R152P152J	RES 1/4W 5% 1K5	R17	1	EA	1
	3					74	5	4606X-101-102	RES NET 1K 2%	RN1	1	EA	1
	3					77	5	A5E-103M	CAP ORDER MD015E-103M	C1	1	EA	1
	3					78	5	TAP10M16	CAP 10u 16V TANT	C2	1	EA	1
	3					79	5	TAP10M16	CAP 10u 16V TANT	C3	1	EA	1
	3					80	5	A5E-103M	CAP ORDER MD015E-103M	C4	1	EA	1
	3					81	5	TAP10M16	CAP 10u 16V TANT	C5	1	EA	1
	3					82	5	TAP10M16	CAP 10u 16V TANT	C6	1	EA	1
	3					85	5	609-3282S-2	CONNECTOR SEE M20-999-3205	E1	1	EA	1
	3					86	5	609-3282S-2	CONNECTOR SEE M20-999-3205	E2	1	EA	1

Level					Line	Tp	Component	Description	ID	Qty	UM	Total
		3			87	5	609-3282S-2	CONNECTOR SEE M20-999-3205	E3	1	EA	1
		3			88	5	929950-00	JUMPER		3	EA	3
		3			93	5	VA2.5/10-G-5.08	0.2 IN HEADER (MSTB SERIES)	J2	1	EA	1
		3			94	5	2.5/10-ST-5.08	PLUG 0.2 IN MSTB SERIES		1	EA	1
		3			96	5	VA2.5/8-G-5.08	0.2 IN HEADER (MSTB SERIES)	J3	1	EA	1
		3			97	5	2.5/8-ST-5.08	PLUG 0.2 IN MSTB SERIES		1	EA	1
		3			112	5	15.551	MEC SWITCH	S2	1	EA	1
		3			113	5	15.501	SWITCH MOMENTARY	S3	1	EA	1
		3			114	5	15.501	SWITCH MOMENTARY	S4	1	EA	1
		3			118	5	16.327	LENS LED YELLOW 16-327-04		3	EA	3
		3			119	5	16.922	LED RECT YELLOW		3	EA	3
		3			122	5	16.325	BEZEL EXTENDED BLACK 16.325-09		3	EA	3
		3			123	5	16.300-07	BUTTON ORANGE (OLD # 16.300)		3	EA	3
		3			124	5	16.27	EXTENDER FOR EXTENDED BEZELS		3	EA	3
		3			127	5	MPS8098	TRANSISTOR NPN AMP	Q1	1	EA	1
		3			128	5	MPS8098	TRANSISTOR NPN AMP	Q2	1	EA	1
2					23	5	99014	TRANSFORMER, E. CRAFTSMEN	T1	1	EA	1
2					24	5	195-G20	REACTOR, 5mH, 20A HAMMOND	L1	1	EA	1
2					25	5	26F6618FA	CAPACITOR	C4	1	EA	1
2					26	5	CGS553U040X4C	CAP 55,000MF 40V	C1	1	EA	1
2					27	5	CGS113U040V3C	CAP 11,000u 40V	C2	1	EA	1
2					28	5	26F6623FA	CAPACITOR	C3	1	EA	1
2					29	5	1N250B	DIODE NTE5986 SPR 05-005	CR1	1	EA	1
2					30	5	1N250B	DIODE NTE5986 SPR 05-005	CR2	1	EA	1
2					31	5	1N5626	DIODE	CR3	1	EA	1
2					32	5	0400C	OHMITE RESISTOR SEE L50J25R	R1	1	EA	1
2					33	5	3R79P102J	RESISTOR: 2W 5% 1K	R2	1	EA	1
2					34	5	RS10-0.1 OHM	RES 10W 1% 0R1	R3	1	EA	1
2					35	5	S87R5D2B1D1-12	RELAY POTTER & BRUMFIELD	K1	1	EA	1
2					36	5	1N4001	DIODE GEN PURP	CR4	1	EA	1
2					37	5	HA15-0.9-A	CONTROL P/SUPPLY 12V, 0.9A		1	EA	1
2					38	5	10A2075P1	KEEPER PLATE R-1		1	EA	1
2					39	5	6J4	LINE FILTER, 120/240V	LF1	1	EA	1
2					40	5	206705-1	CONN, 9 PIN PANEL RECEPTACLE	J1	1	EA	1
2					41	5	206708-1	CONN, 9 PIN PLUG BODY		2	EA	2
2					42	5	206966-4	CONN, 9 PIN CLAMP		2	EA	2
2					43	5	66180-1	PIN		9	EA	9
2					44	5	66181-1	SOCKET AMP		18	EA	18
2					45	5	4600N	FAN EXHAUST PAPST.		1	EA	1
2					46	5	476042	FINGER GUARD		1	EA	1
2					48	5	MDA12	FUSE 12A SLO/BLO F1	F1	1	EA	1
2					49	5	8301512	SOCKET, 10A/250V INT'L	J2	1	EA	1
2					50	5	V150LA10A	VARISTOR S14K150 SPR 04-072		1	EA	1
2					52	5	216B8880P13	METER 3-1/2" PANEL NCR X 1 R13	M1	1	EA	1
2					53	5	#9 MOUNTING BKT	MOUNTING BRACKET		2	EA	2

Level						Line	Tp	Component	Description	ID	Qty	UM	Total
2						55	5	VPC-86-2	HANDLE, 4.50" MTG HOLES, BLK		2	EA	2
2						56	5	302C920P122	CAPACITOR BRACKET		2	EA	2
2						57	5	VR12	CAPACITOR CLAMP		1	EA	1
2						58	5	VR8	CAPACITOR CLAMP		1	EA	1
2						59	5	302C920P210	CAPACITOR BRACKETS		2	EA	2
2						60	5	17250	CORDSET,#18 10A/250V INT'L/USA		1	EA	1
2						61	5	AM2A9A810240-20	CIRCUIT BREAKER SEE NEW #		1	EA	1
2						62	5	572-4863-010516	WINCHESTER POST		2	EA	2
2						64	5	GFT-6	TERMINAL BOARD		1	EA	1
2						65	9	20B2514	WIRING DIAGRAM R-3		0	EA	0
2						66	9	RL10A2093	RUNNING LIST R-3		0	EA	0
1						25	1	10A2121G2	UHF BI-DIR CPLR ASSY (MX100)R1		1	EA	1
2						2	9	10A2121A2	ASSEMBLY DRAWING R-0		0	EA	0
2						10	5	2056-0000-00	CONNECTOR		5	EA	5
2						11	4	10A2120P1	PCB DIR CPLR R-0		1	EA	1
	3					1	5	250-GX0600-5511	0.060" +/- 0.002" 1oz 36X48		5	IN	5
2						12	4	10A2122P1	SHIELD CASE R-1		1	EA	1
2						13	5	9C12063A1000JL	RESISTOR 100 OHMS 1/4W 5%	R1,R2	2	EA	2
2						14	5	10A357P1	SHIELD CASE COVER R-5		1	EA	1
2						15	5	10A2108P1	BOTTOM COVER R-0		1	EA	1
2						18	5	9C12063A39R0JL	RESISTOR 39R 1/4 5% CHIP	R3-R5	3	EA	3
2						19	5	9C12063A1500JL	RESISTOR 150R 1/4W 5% CHIP	R6-R11	6	EA	6
2						22	5	QITPCS	1/4" TIN PLATED COPPER STRIP		0	EA	0
2						24	9	21B1316	ASSEMBLY DRAWING R-2.1		1	EA	1
1						26	5	206705-1	CONN, 9 PIN PANEL RECEPTACLE		1	EA	1
1						29	5	66180-1	PIN		9	EA	9
1						31	5	20B2726P1	BRACKET, FILTER REV 0		1	EA	1
1						32	5	4600N	FAN EXHAUST PAPST.		2	EA	2
1						33	5	554148	FAN GUARD ROTRON		2	EA	2
1						34	5	31C1426P1	FAN BRACKET R-1		1	EA	1
1						37	5	VPC-86-2	HANDLE, 4.50" MTG HOLES, BLK		2	EA	2
1						39	1	20B1235G8	METERING PCB ASSY MX100V R-17		1	EA	1
2						10	5	20B1233P1	PCB R-4		1	EA	1
2						11	9	20B1234	PATTERN R-3		0	EA	0
2						12	9	20B1236	SILKSCREEN R-3		0	EA	0
2						14	9	20B1245	SCHEMATIC R-5		0	EA	0
2						15	5	CE100F24-11	END CONNECTORS		1	EA	1
2						16	5	B1570-B-1/4-05	SPACER TIN PLATED		4	EA	4
2						17	5	EC100F-11	Cover End IDC 0.1" 11pin Pandu		1	EA	1
2						18	5	MLSS100-11	LOCKING HEADER	J3	1	EA	1
2						19	5	1280B	TURRET		2	EA	2
2						20	5	2062-0000-00	RECEPTACLE SEE 50-651-0000-31	J1	1	EA	1
2						21	5	2062-0000-00	RECEPTACLE SEE 50-651-0000-31	J2	1	EA	1
2						22	5	508-AG11D	IC SOCKET 8 PIN		3	EA	3
2						23	5	630-09472	CAP 4700p 100V CERAMIC	C1	1	EA	1

Level						Line	Tp	Component	Description	ID	Qty	UM	Total
2						24	5	630-09472	CAP 4700p 100V CERAMIC	C2	1	EA	1
2						25	5	681-10689	CAP 68p 100V CERAMIC	C3	1	EA	1
2						26	5	681-10689	CAP 68p 100V CERAMIC	C4	1	EA	1
2						27	5	681-10689	CAP 68p 100V CERAMIC	C5	1	EA	1
2						28	5	681-10689	CAP 68p 100V CERAMIC	C6	1	EA	1
2						29	5	344-15474	CAP u4763V FILM SEE 372-21474	C7	1	EA	1
2						30	5	344-21104	CAP u1 100V FILM 344-25104	C8	1	EA	1
2						31	5	TAP2.2M16	CAP 2u2 16V TANT	C9	1	EA	1
2						32	5	630-09472	CAP 4700p 100V CERAMIC	C10	1	EA	1
2						34	5	550-3640-450200	INDUCTOR 10uH SEE 1537-36	L1	1	EA	1
2						35	5	550-3640-450200	INDUCTOR 10uH SEE 1537-36	L2	1	EA	1
2						37	5	HP5082-2800	DIODE SEE IN5711	CR1	1	EA	1
2						38	5	HP5082-2800	DIODE SEE IN5711	CR2	1	EA	1
2						39	5	HP5082-2800	DIODE SEE IN5711	CR3	1	EA	1
2						40	5	HP5082-2800	DIODE SEE IN5711	CR4	1	EA	1
2						41	5	1N4148	DIODE SWITCHING	CR5	1	EA	1
2						42	5	LM358N	IC OP AMP	U1	1	EA	1
2						43	5	LM358N	IC OP AMP	U2	1	EA	1
2						44	5	LM358N	IC OP AMP	U3	1	EA	1
2						45	5	MPS8598	TRANSISTOR PNP GEN PURP	Q1	1	EA	1
2						46	5	MPS8598	TRANSISTOR PNP GEN PURP	Q2	1	EA	1
2						52	5	3R152P911J	RES 1/4W 5% 910	R1	1	EA	1
2						53	5	3R152P510J	RES 1/4W 5% 51	R2	1	EA	1
2						54	5	3R152P911J	RES 1/4W 5% 910	R3	1	EA	1
2						55	5	3R152P510J	RES 1/4W 5% 51	R4	1	EA	1
2						56	5	3R152P472J	RES 1/4W 5% 4K7	R5	1	EA	1
2						57	5	3R152P472J	RES 1/4W 5% 4K7	R6	1	EA	1
2						58	5	3R152P472J	RES 1/4W 5% 4K7	R7	1	EA	1
2						59	5	3R152P472J	RES 1/4W 5% 4K7	R8	1	EA	1
2						60	5	3R152P102J	RES 1/4W 5% 1K	R9	1	EA	1
2						61	5	3R152P102J	RES 1/4W 5% 1K	R10	1	EA	1
2						62	5	3R152P275J	RES 1/4W 5% 2M7	R11	1	EA	1
2						63	5	3R152P275J	RES 1/4W 5% 2M7	R12	1	EA	1
2						64	5	3R152P101J	RES 1/4W 5% 100	R13	1	EA	1
2						68	5	3R152P122J	RES 1/4W 5% 1K2	R17	1	EA	1
2						69	5	3329H-1-102	POT 1K	R18	1	EA	1
2						70	5	3R152P122J	RES 1/4W 5% 1K2	R19	1	EA	1
2						71	5	3329H-1-102	POT 1K	R20	1	EA	1
2						72	5	3R152P104J	RES 1/4W 5% 100K	R21	1	EA	1
2						74	5	3R152P104J	RES 1/4W 5% 100K	R23	1	EA	1
2						78	5	3R152P513J	RES 1/4W 5% 51K	R27	1	EA	1
2						79	5	3R152P513J	RES 1/4W 5% 51K	R28	1	EA	1
2						80	5	3R152P102J	RES 1/4W 5% 1K	R29	1	EA	1
2						81	5	3329H-1-104	POT 100K	R30	1	EA	1
2						82	5	3R152P513J	RES 1/4W 5% 51K	R31	1	EA	1
2						83	5	3329H-1-104	POT 100K	R32	1	EA	1
2						84	5	3R152P513J	RES 1/4W 5% 51K	R33	1	EA	1
2						85	5	3R152P472J	RES 1/4W 5% 4K7	R34	1	EA	1
2						86	5	3R152P472J	RES 1/4W 5% 4K7	R35	1	EA	1
2						87	5	3329H-1-103	POT 10K	R36	1	EA	1
2						88	5	3R152P101J	RES 1/4W 5% 100	R37	1	EA	1
2						89	5	3R152P393J	RES 1/4W 5% 39K	R38	1	EA	1
2						91	5	3R152P393J	RES 1/4W 5% 39K	R40	1	EA	1

Level					Line	Tp	Component	Description	ID	Qty	UM	Total
	2				92	5	3R152P103J	RES 1/4W 5% 10K	R41	1	EA	1
	2				93	5	3329H-1-103	POT 10K	R42	1	EA	1
	2				94	5	3R152P101J	RES 1/4W 5% 100	R43	1	EA	1
	2				95	5	3R152P393J	RES 1/4W 5% 39K	R44	1	EA	1
	2				96	5	3R152P100J	RES 1/4W 5% 10	R45	1	EA	1
	2				98	5	MC78L12CP	IC VOLT REG	VR1	1	EA	1
	2				101	5	630-09472	CAP 4700p 100V CERAMIC	C11	1	EA	1
	2				102	5	630-09472	CAP 4700p 100V CERAMIC	C12	1	EA	1
	2				103	5	630-09472	CAP 4700p 100V CERAMIC	C13	1	EA	1
	2				107	5	3R152P101J	RES 1/4W 5% 100	R39	1	EA	1
1					41	5	216B8880P31	METER NCR X 1 R-13		1	EA	1
1					42	1	10A1168G2	STATUS DISPLAY PCB ASSY R-5		1	EA	1
	2				2	9	10A1168A2	ASSEMBLY DRAWING R-2		0	EA	0
	2				10	4	10A1166P1	PCB STATUS DISPLAY R-1		1	EA	1
	2				11	9	10A1167	P.C. PATTERN		0	EA	0
	2				12	9	10A1169	SILKSCREEN		0	EA	0
	2				16	5	MLSS100-11	LOCKING HEADER	J1	1	EA	1
	2				19	5	7101-K-Y-C-Q	SWITCH SPST (C & K) SPR97-018	S1	1	EA	1
	2				23	5	1N4001	DIODE GEN PURP	CR1	1	EA	1
	2				25	5	521-9165	LED RED DIALITE "PLL"	CR2	1	EA	1
	2				26	5	521-9165	LED RED DIALITE "PLL"	CR3	1	EA	1
	2				27	5	521-9173	LED GREEN	CR4	1	EA	1
	2				29	5	3R152P511J	RES 1/4W 5% 510	R1	1	EA	1
	2				30	5	3R152P511J	RES 1/4W 5% 510	R2	1	EA	1
	2				31	5	3R152P102J	RES 1/4W 5% 1K	R3	1	EA	1
	2				32	5	3299W-1-103	POT 10K	R4	1	EA	1
	2				35	5	1N4148	DIODE SWITCHING	CR5	1	EA	1
1					43	5	KE900AB1/4	KNOB AUGAT SEE SUB		1	EA	1
1					44	5	8343	SPACER		1	EA	1
1					45	5	PA1005	SWITCH ROTARY	S1	1	EA	1
1					46	5	86350	CONNECTOR BNC BULKHEAD		2	EA	2
1					47	5	11MCX-50-2-16/111NH	MCX STRT		1	EA	1
1					49	5	2031-5005-00	CONNECTOR / SMA		6	EA	6
1					53	5	CE100F24-11	END CONNECTORS		3	EA	3
1					54	5	EC100F-11	Cover End IDC 0.1" 11pin Pandu		3	EA	3
1					55	5	35275	CONNECTOR SAME AS UG-556B/U		1	EA	1
1					56	5	2865000 202	BEAD		3	EA	3
1					57	5	DD-103	CAP 10n 1000V DISC	2C1	1	EA	1
1					58	5	630-09472	CAP 4700p 100V CERAMIC	2C2-2C7	6	EA	6
1					59	5	515-0005	MOUNT LED		3	EA	3
1					60	5	021-18102	CAP 1000u 63V ELECT	2C8, 2C9	2	EA	2
1					62	9	20B2513	FUNC. DIAGRAM R-5		0	EA	0
1					63	9	RL10A2094	RUNNING LIST R-6		0	EA	0
1					65	5	2037-5007-00	CONN'R SMA M/A COM RT ANGLE		1	EA	1
1					66	5	2037-5008-00	CONNECTOR RT ANGLE SMA RG188		3	EA	3
1					1	9	40D2207A1	ASSEMBLY DRAWING R-2		0	EA	0
1					10	5	41D1492P1	PWR SUPPLY FRT PANEL R-3		1	EA	1
1					11	1	10A1240G7	AIR SWITCH KIT FOR MX100 R13		1	EA	1
	2				23	5	20B1500P2	TYPE 3156 THERMOSTAT R-7	-	1	EA	1

Level					Line	Tp	Component	Description	ID	Qty	UM	Total
	2				26	5	RH25-3K5-1%	RESISTOR		1	EA	1
	2				27	5	8696	SPACER PHENOLIC		2	EA	2
1					12	5	41D1483P2	FRAME R-6		1	EA	1
1					13	5	8835	SPACER		4	EA	4
1					14	5	41D1499P1	REAR PANEL R-3		1	EA	1
1					15	5	41D1504P1	TOP COVER R-0		1	EA	1
1					19	5	103	INSUL WASHER		4	EA	4
1					20	4	10A181P2	HEATSINK DRILLING R-1		1	EA	1
	2				1	5	423K	HEATSINK		1	EA	1
1					22	1	30C1829G3	CTRL PCB ASSY (MX100) R-9		1	EA	1
	2				3	9	30C1829A3	ASSEMBLY DRAWING R1.2		0	EA	0
	2				9	5	30C1829P1	PCB CONTROL R-1		1	EA	1
	2				10	9	30C1829 SH3-4	PC PATTERN R-1.2		0	EA	0
	2				11	9	30C1829 SH6	SOLDER MASK R-1.2		0	EA	0
	2				12	9	30C1829 SH5	SILKSCREEN R-1.2		0	EA	0
	2				15	9	20B2515	SCHEMATIC R-0		0	EA	0
	2				21	5	514-AG11D	IC SOCKET 14 PIN		1	EA	1
	2				22	5	516-AG11D	IC SOCKET 16 PIN		3	EA	3
	2				23	5	14538	CMOS MONOSTABLE	U1	1	EA	1
	2				25	5	1LQ1	IC OPTO ISOLATOR	U3	1	EA	1
	2				26	5	14538	CMOS MONOSTABLE	U4	1	EA	1
	2				27	5	4081	IC AND GATE	U5	1	EA	1
	2				28	5	DS1E-SL2-DC12V	RELAY	K1	1	EA	1
	2				29	5	RXE090	PROTECTOR RAYCHEM	F1	1	EA	1
	2				31	5	1N4148	DIODE SWITCHING	CR1	1	EA	1
	2				32	5	1N4148	DIODE SWITCHING	CR2	1	EA	1
	2				43	5	561-2201-080	LED DIALIGHT GREEN	DS4	1	EA	1
	2				44	5	561-2201-080	LED DIALIGHT GREEN	DS5	1	EA	1
	2				45	5	3R152P102J	RES 1/4W 5% 1K	R21	1	EA	1
	2				46	5	3329H-1-204	POT 200K	R22	1	EA	1
	2				47	5	3R152P394J	RES 1/4W 5% 390K	R23	1	EA	1
	2				48	5	3R152P104J	RES 1/4W 5% 100K	R24	1	EA	1
	2				49	5	3R152P102J	RES 1/4W 5% 1K	R25	1	EA	1
	2				50	5	3R152P102J	RES 1/4W 5% 1K	R26	1	EA	1
	2				54	5	3R152P102J	RES 1/4W 5% 1K	R2	1	EA	1
	2				55	5	3329H-1-104	POT 100K	R3	1	EA	1
	2				56	5	3R152P104J	RES 1/4W 5% 100K	R4	1	EA	1
	2				57	5	3R152P104J	RES 1/4W 5% 100K	R5	1	EA	1
	2				58	5	3R152P152J	RES 1/4W 5% 1K5	R6	1	EA	1
	2				59	5	3R152P102J	RES 1/4W 5% 1K	R7	1	EA	1
	2				60	5	3R152P102J	RES 1/4W 5% 1K	R8	1	EA	1
	2				69	5	3R152P152J	RES 1/4W 5% 1K5	R17	1	EA	1
	2				74	5	4606X-101-102	RES NET 1K 2%	RN1	1	EA	1
	2				77	5	A5E-103M	CAP ORDER MD015E-103M	C1	1	EA	1
	2				78	5	TAP10M16	CAP 10u 16V TANT	C2	1	EA	1
	2				79	5	TAP10M16	CAP 10u 16V TANT	C3	1	EA	1
	2				80	5	A5E-103M	CAP ORDER MD015E-103M	C4	1	EA	1
	2				81	5	TAP10M16	CAP 10u 16V TANT	C5	1	EA	1
	2				82	5	TAP10M16	CAP 10u 16V TANT	C6	1	EA	1
	2				85	5	609-3282S-2	CONNECTOR SEE M20-999-3205	E1	1	EA	1
	2				86	5	609-3282S-2	CONNECTOR SEE M20-999-3205	E2	1	EA	1
	2				87	5	609-3282S-2	CONNECTOR SEE M20-999-3205	E3	1	EA	1
	2				88	5	929950-00	JUMPER		3	EA	3
	2				93	5	VA2.5/10-G-5.08	0.2 IN HEADER (MSTB SERIES)	J2	1	EA	1
	2				94	5	2.5/10-ST-5.08	PLUG 0.2 IN MSTB SERIES		1	EA	1
	2				96	5	VA2.5/8-G-5.08	0.2 IN HEADER (MSTB SERIES)	J3	1	EA	1
	2				97	5	2.5/8-ST-5.08	PLUG 0.2 IN MSTB SERIES		1	EA	1
	2				112	5	15.551	MEC SWITCH	S2	1	EA	1
	2				113	5	15.501	SWITCH MOMENTARY	S3	1	EA	1

Level					Line	Tp	Component	Description	ID	Qty	UM	Total
	2				114	5	15.501	SWITCH MOMENTARY	S4	1	EA	1
	2				118	5	16.327	LENS LED YELLOW 16-327-04		3	EA	3
	2				119	5	16.922	LED RECT YELLOW		3	EA	3
	2				122	5	16.325	BEZEL EXTENDED BLACK 16.325-09		3	EA	3
	2				123	5	16.300-07	BUTTON ORANGE (OLD # 16.300)		3	EA	3
	2				124	5	16.27	EXTENDER FOR EXTENDED BEZELS		3	EA	3
	2				127	5	MPS8098	TRANSISTOR NPN AMP	Q1	1	EA	1
	2				128	5	MPS8098	TRANSISTOR NPN AMP	Q2	1	EA	1
1					23	5	99014	TRANSFORMER, E. CRAFTSMEN	T1	1	EA	1
1					24	5	195-G20	REACTOR, 5mH, 20A HAMMOND	L1	1	EA	1
1					25	5	26F6618FA	CAPACITOR	C4	1	EA	1
1					26	5	CGS553U040X4C	CAP 55,000MF 40V	C1	1	EA	1
1					27	5	CGS113U040V3C	CAP 11,000u 40V	C2	1	EA	1
1					28	5	26F6623FA	CAPACITOR	C3	1	EA	1
1					29	5	1N250B	DIODE NTE5986 SPR 05-005	CR1	1	EA	1
1					30	5	1N250B	DIODE NTE5986 SPR 05-005	CR2	1	EA	1
1					31	5	1N5626	DIODE	CR3	1	EA	1
1					32	5	0400C	OHMITE RESISTOR SEE L50J25R	R1	1	EA	1
1					33	5	3R79P102J	RESISTOR: 2W 5% 1K	R2	1	EA	1
1					34	5	RS10-0.1 OHM	RES 10W 1% 0R1	R3	1	EA	1
1					35	5	S87R5D2B1D1-12	RELAY POTTER & BRUMFIELD	K1	1	EA	1
1					36	5	1N4001	DIODE GEN PURP	CR4	1	EA	1
1					37	5	HA15-0.9-A	CONTROL P/SUPPLY 12V, 0.9A		1	EA	1
1					38	5	10A2075P1	KEEPER PLATE R-1		1	EA	1
1					39	5	6J4	LINE FILTER, 120/240V	LF1	1	EA	1
1					40	5	206705-1	CONN, 9 PIN PANEL RECEPTACLE	J1	1	EA	1
1					41	5	206708-1	CONN, 9 PIN PLUG BODY		2	EA	2
1					42	5	206966-4	CONN, 9 PIN CLAMP		2	EA	2
1					43	5	66180-1	PIN		9	EA	9
1					44	5	66181-1	SOCKET AMP		18	EA	18
1					45	5	4600N	FAN EXHAUST PAPST.		1	EA	1
1					46	5	476042	FINGER GUARD		1	EA	1
1					48	5	MDA12	FUSE 12A SLO/BLO F1	F1	1	EA	1
1					49	5	8301512	SOCKET, 10A/250V INT'L	J2	1	EA	1
1					50	5	V150LA10A	VARISTOR S14K150 SPR 04-072		1	EA	1
1					52	5	216B8880P13	METER 3-1/2" PANEL NCR X 1 R13	M1	1	EA	1
1					53	5	#9 MOUNTING BKT	MOUNTING BRACKET		2	EA	2
1					55	5	VPC-86-2	HANDLE, 4.50" MTG HOLES, BLK		2	EA	2
1					56	5	302C920P122	CAPACITOR BRACKET		2	EA	2
1					57	5	VR12	CAPACITOR CLAMP		1	EA	1
1					58	5	VR8	CAPACITOR CLAMP		1	EA	1
1					59	5	302C920P210	CAPACITOR BRACKETS		2	EA	2
1					60	5	17250	CORDSET, #18 10A/250V INT'L/USA		1	EA	1
1					61	5	AM2A9A810240-20	CIRCUIT BREAKER SEE NEW #		1	EA	1
1					62	5	572-4863-010516	WINCHESTER POST		2	EA	2
1					64	5	GFT-6	TERMINAL BOARD		1	EA	1
1					65	9	20B2514	WIRING DIAGRAM R-3		0	EA	0
1					66	9	RL10A2093	RUNNING LIST R-3		0	EA	0