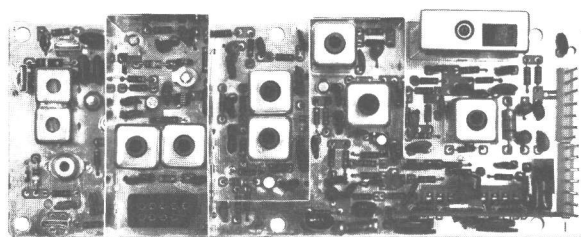


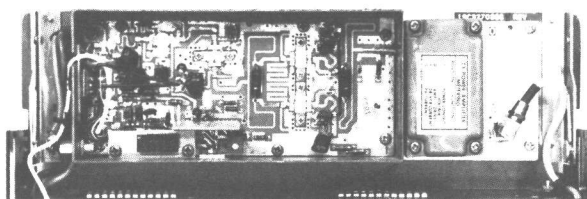
MASTR[®] II MAINTENANCE MANUAL

851-870 MHz, 90 WATT TRANSMITTER

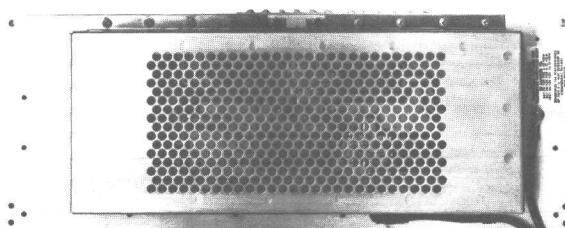
Maintenance Manual LBI30943A
(DF-3158, THIS SHEET ONLY)



EXCITER



DRIVER PA



POWER AMPLIFIER

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DESCRIPTION AND MAINTENANCE	LBI31032 (DF3158)
EXCITER	LBI30488 (DF3165)
DRIVER PA	LBI30857 (DF3174)
POWER AMPLIFIER	LBI31033 (DF3174)

851-870 MHz EXCITER 19D424075G1
DRIVER 19D430488G2
PA ASSEMBLY 19D432307G3, 4

SPECIFICATIONS*

POWER OUTPUT	90 Watts (Adjustable from 30 watts to rated power output)
FCC FILING	KT-189-A
CRYSTAL MULTIPLICATION FACTOR	48
FREQUENCY STABILITY	$\pm 0.0001\%$ (-30°C to $+60^{\circ}\text{C}$)
SPURIOUS AND HARMONIC EMISSION (Per EIA RS-152-B, Par. 4)	At least 61.5 dB below full rated power output. (Conducted) At least 58.5 dB below full rated power output. (Radiated)
MODULATION	Adjustable from 0 to ± 5 kHz swing with instantaneous modulation limiting.
MODULATION SENSITIVITY	50 to 115 Millivolts
AUDIO FREQUENCY CHARACTERISTICS	Within $+1$ dB to -3 dB of a 6 dB/octave pre-emphasis from 300 to 3000 Hz per EIA standards. Post limiter filter per FCC and EIA.
DISTORTION	Less than 2%
DEVIATION SYMMETRY	0.5 kHz maximum
DUTY CYCLE	Continuous
RF OUTPUT IMPEDANCE	50 ohms

* These specifications are intended primarily for the use of the serviceman. Refer to the appropriate Specification Sheet for the complete specifications.

WARNING

Although the highest DC voltage supplied to the transmitter is +12 VDC, high currents may be drawn under short circuit conditions. These currents can possibly heat metal objects such as tools, rings, watchbands, etc., enough to cause burns. Be careful when working near energized 12 Volt circuits!

High-level RF energy in the transmitter Power Amplifier assembly can cause RF burns upon contact. KEEP AWAY FROM THESE CIRCUITS WHEN THE TRANSMITTER IS ENERGIZED!

GENERAL ELECTRIC COMPANY • MOBILE COMMUNICATIONS DIVISION
WORLD HEADQUARTERS • LYNCHBURG, VIRGINIA 24502 U.S.A.

