

INSTRUCTIONS
FOR
CARRIER OPERATED RELAY ASSEMBLY 19C303533-G3
(OPTION 7610)

Carrier Operated Relay Assembly 19C303533-G3 provides 4 form C contacts which may be used for controlling external circuits whenever a carrier is received. The relay assembly can be mounted on MASTR Station Power Supplies (Types EP-38-A & EP-39-A), Monitor Receivers (Types ER-51-A, ER-52-A & ER-53-A) or a MASTR Desk Top Station Control Unit (Type EC-69-A, B) as shown on Installation Diagrams RC-1602 and RC-2230.

When the radio receiver is unskelched, a positive voltage (approximately 2 Volts) from the base of the receiver audio amplifier transistor turns on Q1 in the carrier operated relay circuit. Current flow in the collector circuit of Q1 forward biases Q2 causing it to conduct and energize relay K1. Voltage "spikes" produced across K1 (when K1 de-energizes) are absorbed by diode CR1 to prevent damage to transistors Q1 and Q2.

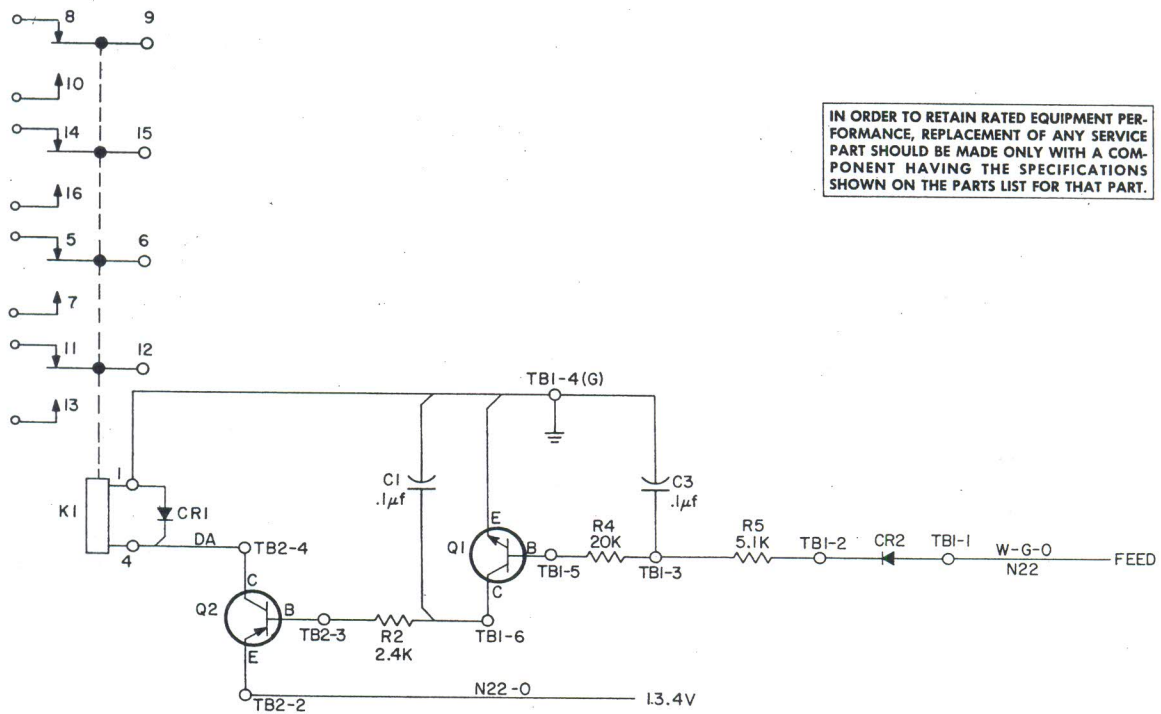
PARTS LIST

<u>Symbol</u>	<u>GE Part Number</u>	<u>Description</u>
- - - - - CAPACITORS - - - - -		
C1	19B209243-P7	Polyester: 0.1 μ F \pm 20%, 50 VDCW.
C3	19B209243-P7	Polyester: 0.1 μ F \pm 20%, 50 VDCW.
- - - - - DIODES - - - - -		
CR1	5494922-P1	Silicon; sim to Type 1N456.
CR2	19A115250-P1	Silicon.
- - - - - RELAYS - - - - -		
K1	5491595-P14	Armature: 1.5 W operating, 520 ohms \pm 15% coil res, 4 form C contacts rated at 0.5 amp at 12 VDC; sim to Allied Control T154-X-131.
- - - - - TRANSISTORS - - - - -		
Q1	19A115123-P1	Silicon: NPN; sim to Type 2N2712.
Q2	19A115706-P1	Silicon: PNP.
- - - - - RESISTORS - - - - -		
R2	3R77-P242J	Composition: 2400 ohms \pm 5%, 1/2 W.

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Symbol	GE Part No.	Description
R4	3R77-P203J	Composition: 20,000 ohms $\pm 5\%$, 1/2 W.
R5	3R77-P512J	Composition: 5100 ohms $\pm 5\%$, 1/2 W.
- - - - - TERMINAL BOARDS - - - - -		
TB1	7487424-P26	Miniature, phen: 6 terminals.
TB2	7775500-P6	Phen: 4 terminals.
- - - - - SOCKETS - - - - -		
XK1	5491595-P5	Relay: 16 contacts: sim to Allied Control 30054-2.
- - - - - MISCELLANEOUS - - - - -		
	5491595-P9	Spring retainer: sim to Allied Control 30054-2. (Used with K1.)

SCHEMATIC DIAGRAM



IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

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