



*Attachment
612-44070*

RELAYS

PHASE-COMPARISON CARRIER-PILOT RELAY

TYPE EDD12F

LOW VOLTAGE SWITCHGEAR DEPARTMENT

GENERAL  ELECTRIC

PHILADELPHIA, PA.

GEI-44221 Phase-Comparison Carrier-Pilot Relay Type EDD12F

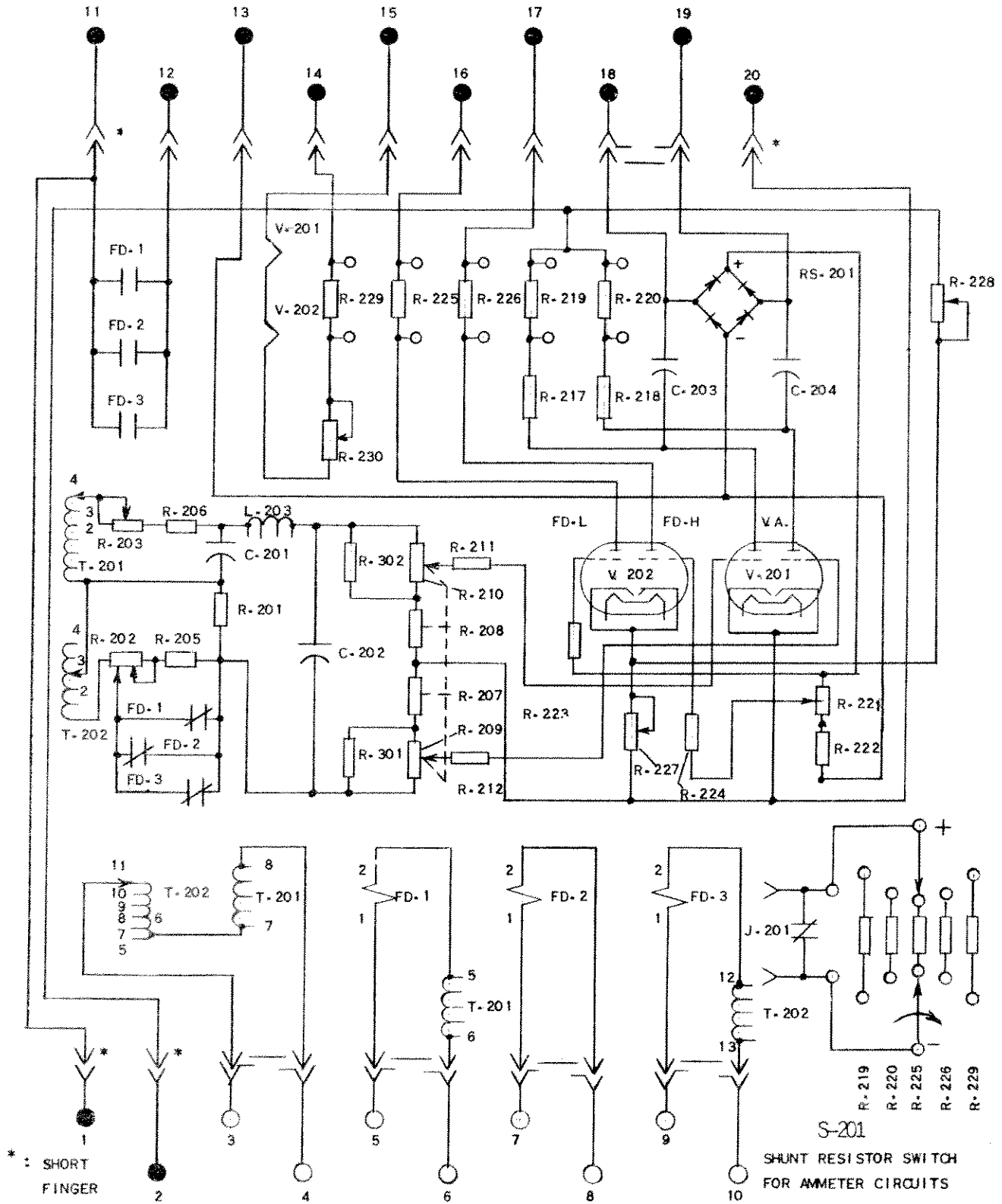


Fig. 1 (389A743)

Fig. 1 Internal Connection Diagram for Network Unit of Type EDD12F Relay

PHASE-COMPARISON CARRIER-PILOT RELAY

TYPE EDD12F

INTRODUCTION

These instructions are a supplement to instruction book GEI-44070 which is included in this book. The combination of the two form instructions for the Type EDD12F relay.

Type EDD12F relay is similar to Type EDD12D relay for panel mounting except for internal connections of the network and tripping units which have been modified to be suitable for combined directional and phase-comparison carrier-pilot relaying.

Contact Rating

The current closing rating of the tripping contacts is 30 amperes total for voltages not exceeding 250 volts. If two tripping circuits are used the rating is 15 amperes for each circuit.

Connection Diagrams

Internal-Network Unit	Fig. 1
Internal-Tripping Unit	Fig. 2
External	Fig. 3
Elementary	Fig. 4

These instructions do not purport to cover all details or variation in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

GEI-44221 Phase-Comparison Carrier-Pilot Relay Type EDD12F

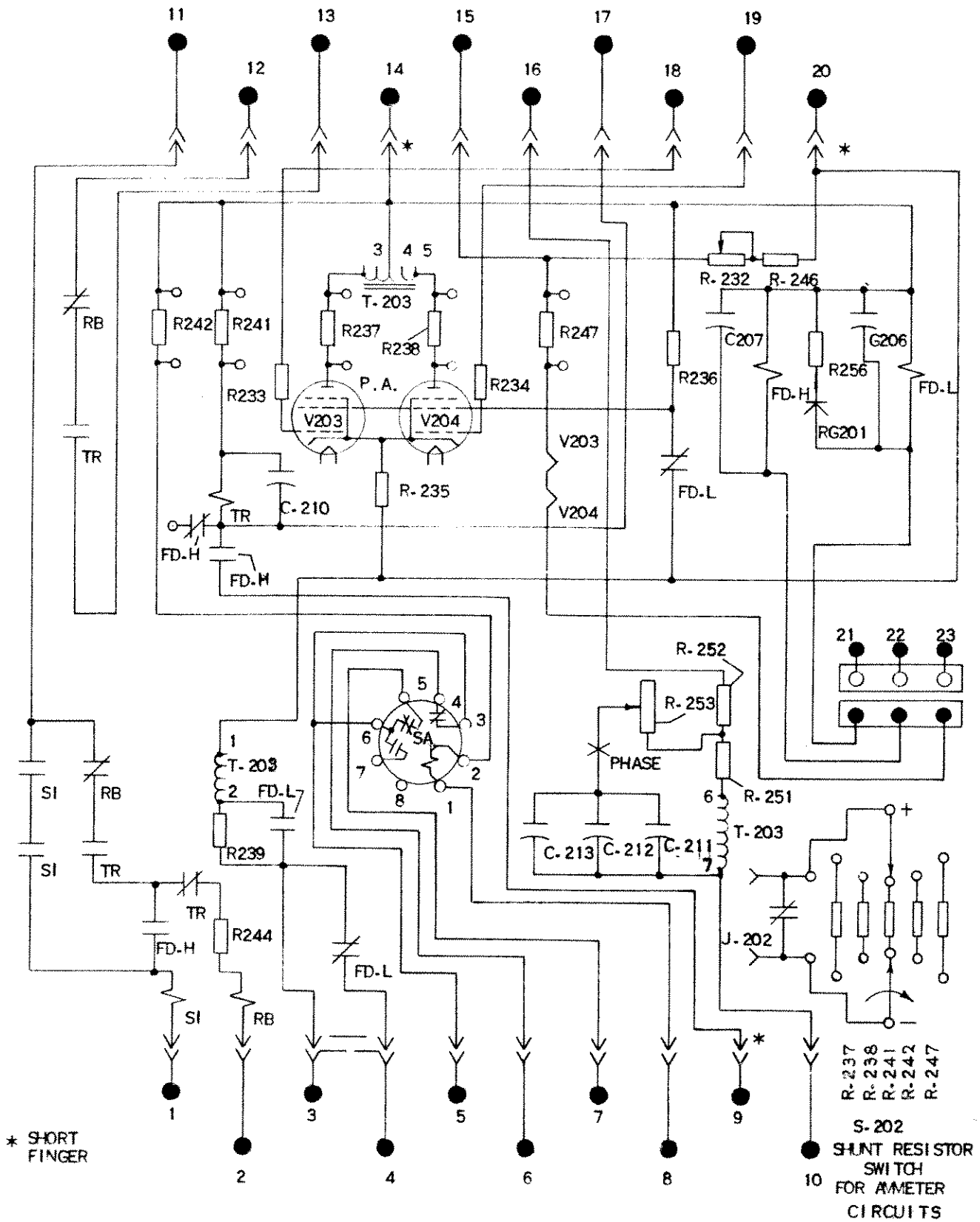


Fig. 2 Internal Connection Diagram for Tripping Unit Type EDD12F Relay

Fig. 2 (403.1)

Phase-Comparison Carrier-Pilot Relay Type EDD12F GEI-44221

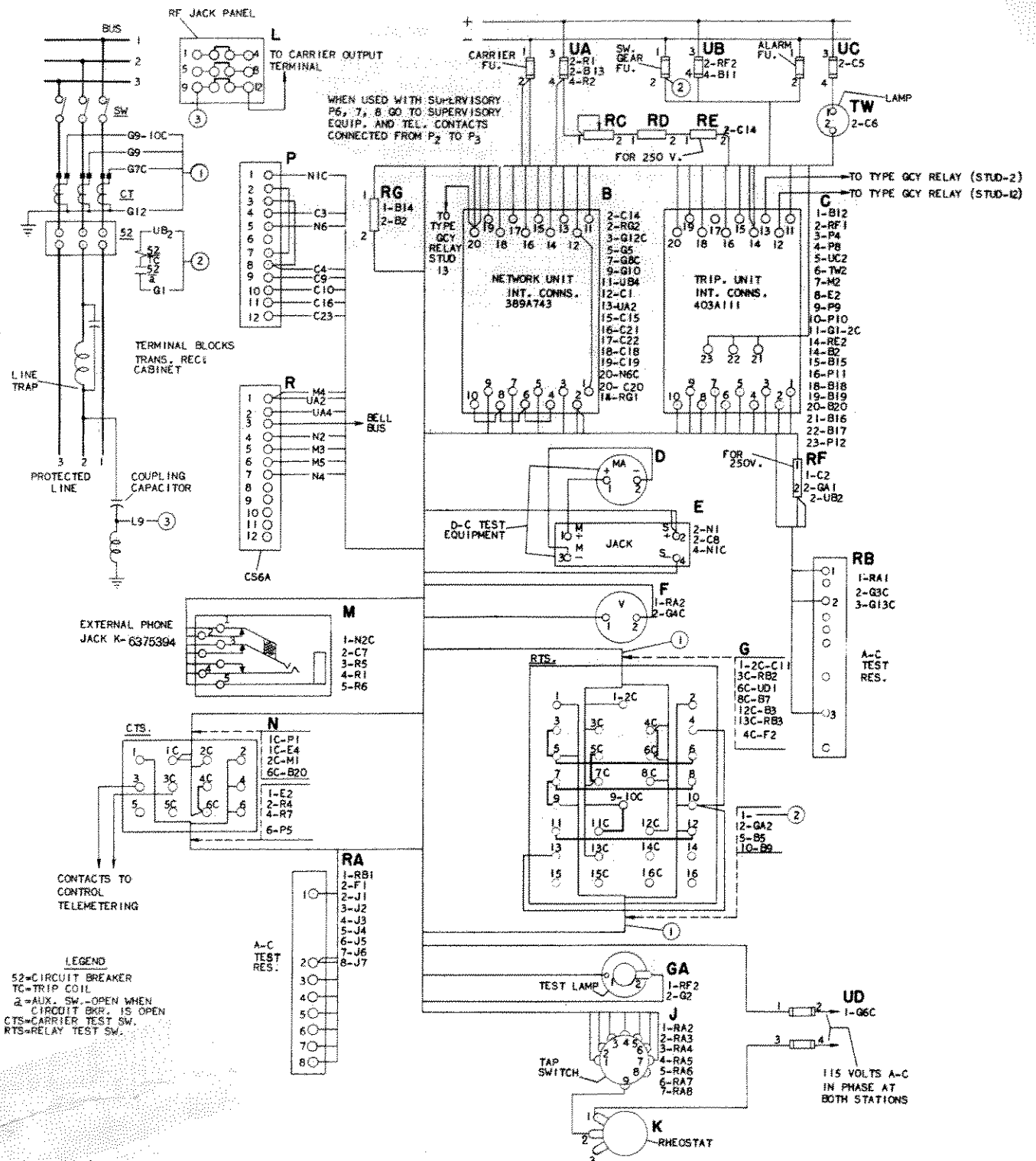


Fig. 3 External Connection Diagram for Type EDD12F Relay

GEI-44221 Phase-Comparison Carrier-Pilot Relay Type EDD12F

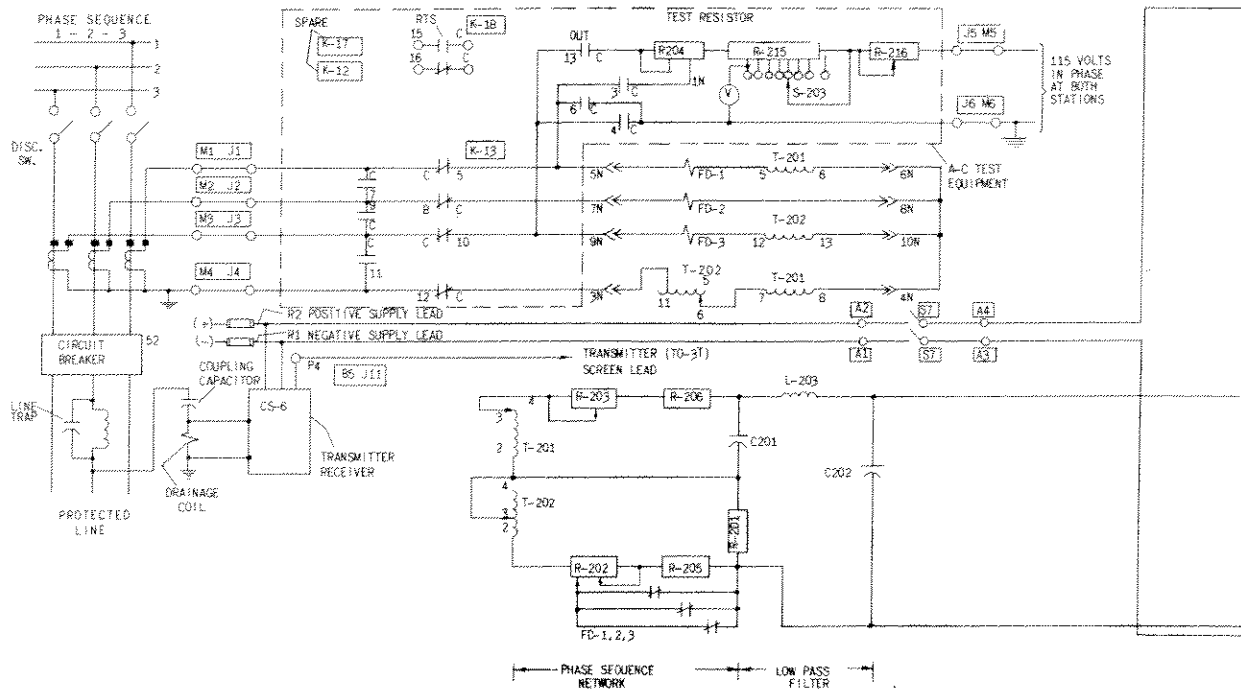


Fig. 4A (7021B70)

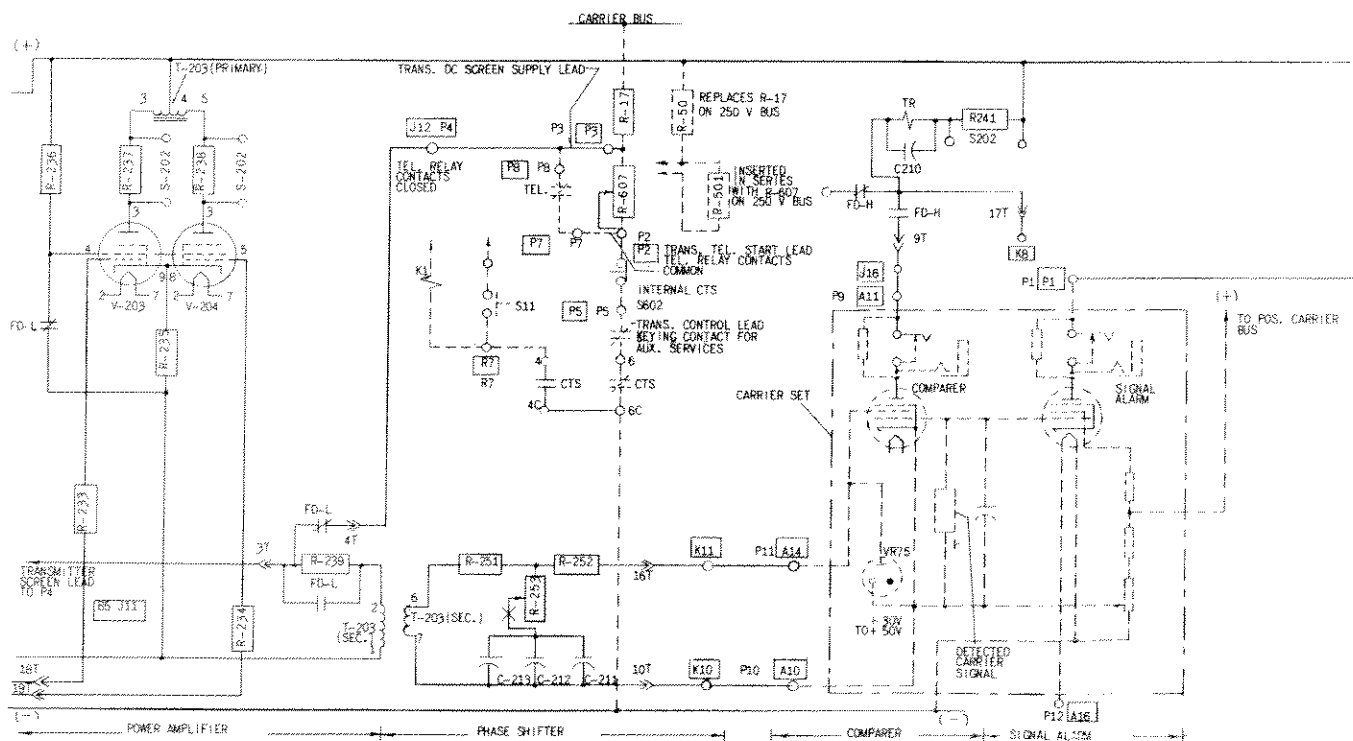


Fig. 4C (7021B70)

Fig. 4 Elementary Diagram for Type EDD12F Relay

Phase-Comparison Carrier-Pilot Relay Type EDD12F GEI-44221

Fig. 4B (7021B70)

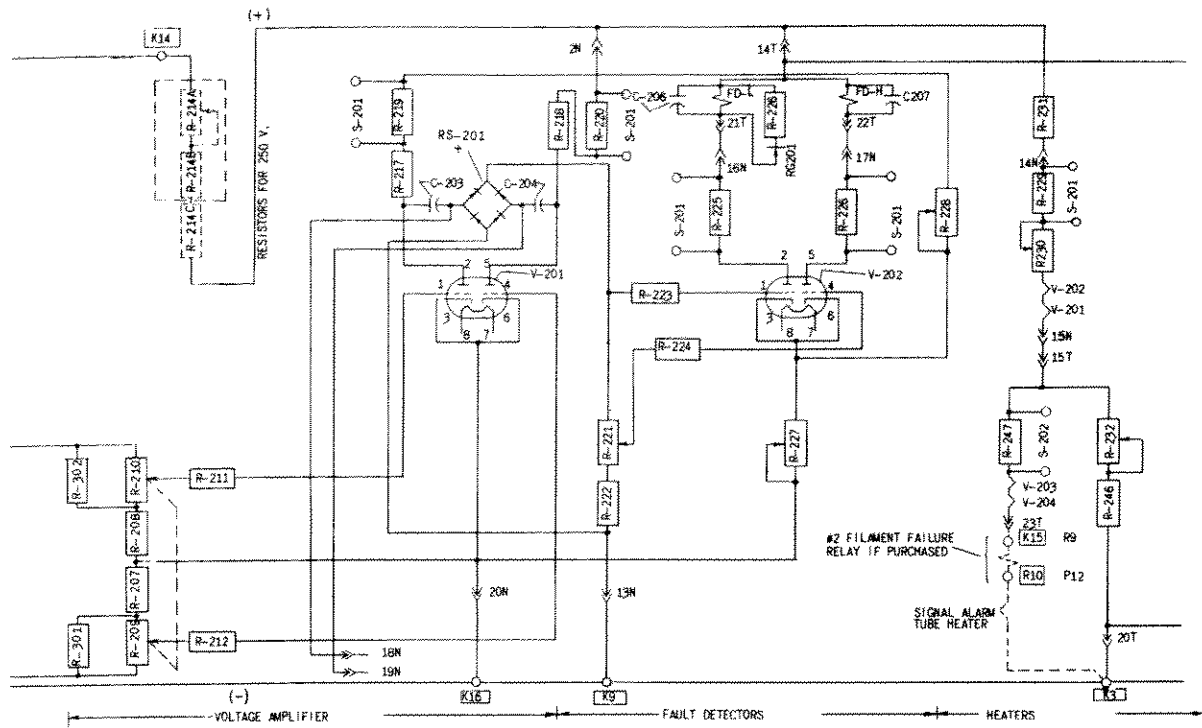


Fig. 4D (7021B70)

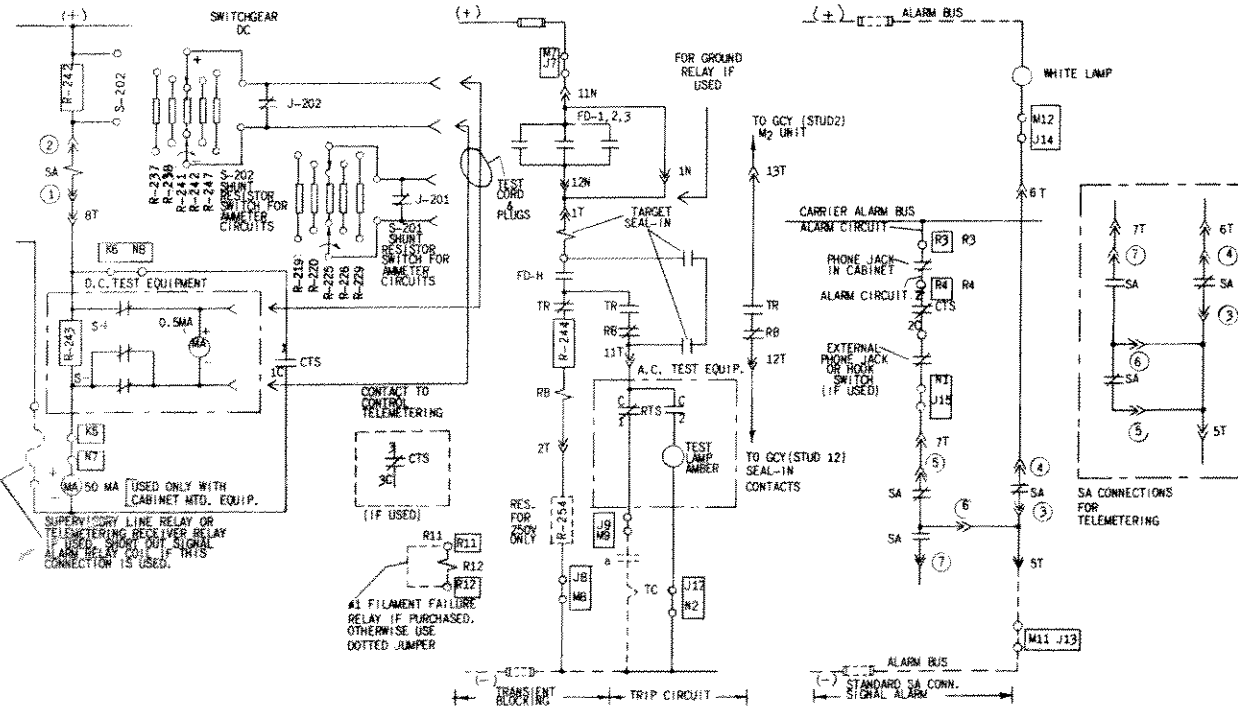
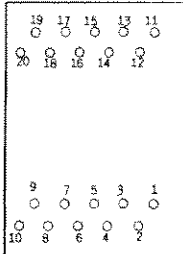
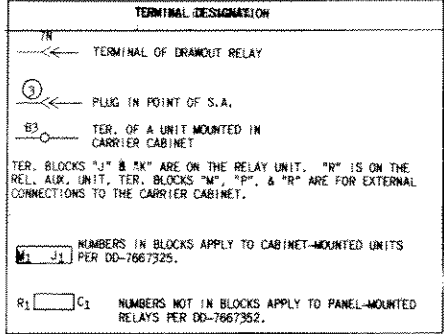


Fig. 4 Continued

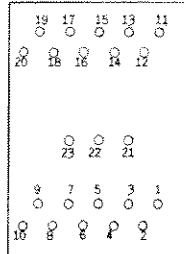
GEI-44221 Phase-Comparison Carrier-Pilot Relay Type EDD12F

LEGEND	
CL	AUX. SW. CLOSED WHEN CIR. BREAKER IS CLOSED
C	CAPACITOR
CTS	CARRIER TEST SWITCH
FD-1-2-3	FAULT DETECTOR PHASES (1-2-3)
FD-H	FAULT DETECTOR HIGH
FD-L	FAULT DETECTOR LOW
J	TEST JACK
L*	REACTOR
R*	RESISTOR
RB	TRIP BLOCKING RELAY
S	SWITCH
SA	SIGNAL ALARM RELAY
T-203	TRANSFORMER
T-201, 202	TRANSFORMER
TC	TRIP COIL ON CIRCUIT BREAKER
TR	TRIPPING RELAY
V*	VACUUM TUBE
RTS	RELAY TEST SWITCH

* SUFFIX NUMBERS ARE FOR IDENTIFICATION ONLY AND HAVE NO OTHER SIGNIFICANCE.



STUD LOCATION NETWORK UNIT (BACK VIEW)

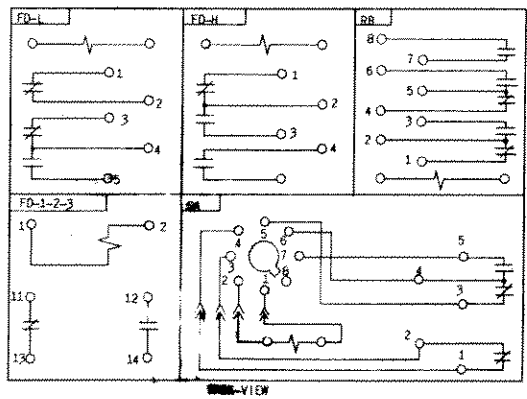


STUD LOCATION TRIP UNIT (BACK VIEW)

CONTACTS HANDLE END	POSITIONS			
	OUT	IN	OFF	* NOR
1-2	X	X	X	
3-4		X		
5-6	X			X X X
7-8	X	X	X	X X X
9-10	X	X	X	X X X
11-12	X	X	X	X X X
13-14	X			X X X
15-16	X	X	X	X X X

CONTACTS HANDLE END	POSITIONS			
	SEND	NOR.	REC.	TEST
1-2		X		
3-4	X		X	X
5-6		X	X	X
		X	X	X

SPRING RETURN (BACK-VIEW)



FRONT-VIEW

Fig. 4 Continued

Fig. 4E (7021B70)

Fig. 4F (7021B70)