

FIG. 1A

START & LEVEL MARKING CKT.
(NOTE 9)

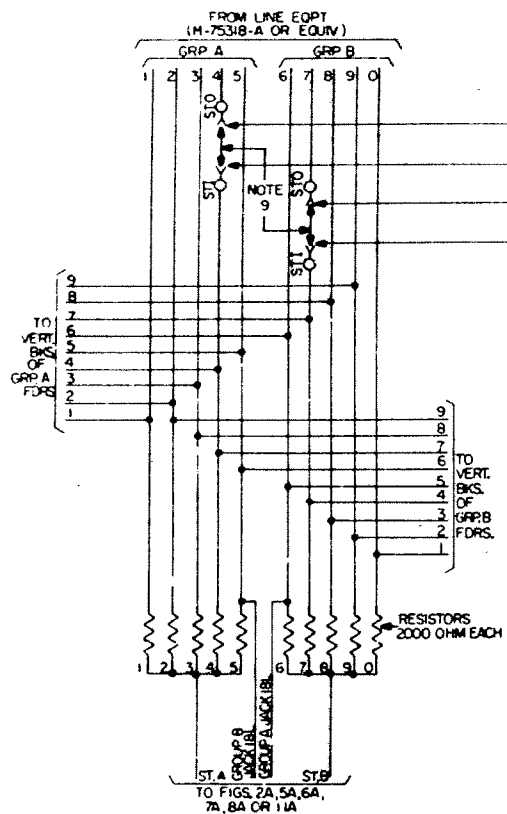
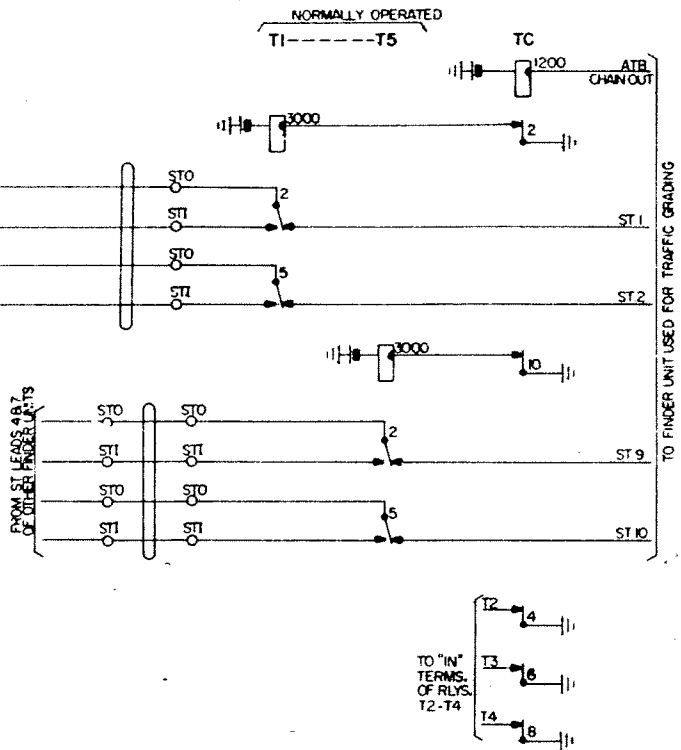


FIG. 10A

ST. LEAD TRANS. CKT.
(NOTE 57)

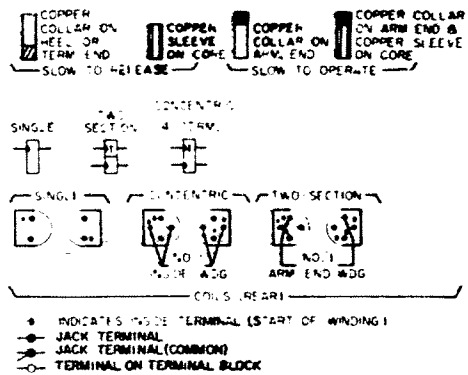


APR AND/OR WIRING	ISSUES		WAS PART OF	SUPERSEDED BY	FACTORY	WIRING BY	FIGURE OR SUFFIX	TABLE NOTES
	FIRST USED	LAST USED						
A	1						12A	A
B	4							
C	1	3						8,76
D	4							8
E	1							52
F	1							7
G	1	3						11
H	1	8					8A, 11A	
I								
J	9						8A, 11A	
K	1	10						
L	11							
M								
N								
O								
P								
Q								
R								
S								
T								
U								
V								
W								
X								
Y								
Z								

ENGINEERING NOTES:

- THE TIME 1 & TIME 2 LEADS SHALL HAVE A TIME INTERVAL OF 6 SECONDS MINIMUM, 20 SECONDS MAXIMUM.
- ADD STRAP "E" WHEN ONLY GROUP "A" RELAYS ARE USED.
- CONNECT TIME 1 & TIME 2 LEADS DIRECTLY TO TIMER IF TIME PULSE DISTRIBUTION IS NOT PROVIDED.
- PROVIDE FIGURES MR AND MRL WHEN MESSAGE REGISTER EQUIPMENT IS USED. (SEE NOTE 90).
- THIS GROUP CIRCUIT IS DESIGNED TO WORK WITH LINE EQUIPMENT WHICH PRESENTS STOPPING BATTERY THRU APPROXIMATELY 1200 OHMS (H-75318-A). SEE H-850665-8 FOR USE WITH LINE EQUIPMENT PRESENTING APPROXIMATELY 600 OHM STOPPING BATTERY (H-35521-A OR EQUIVALENT).
- ENGINEER SHALL INSTRUCT INSTALLER TO REMOVE "F" STRAP WHEN SHELF PROVIDES GROUP RELAY -MB MONITOR LEADS.
- ORDER FIGURE 10A WHEN A 200-LINE FINDER UNIT IS USED TO GRADE THE TRAFFIC FOR 40 LINES FROM EACH OF 5 OTHER (REGULAR) LIMEFINDER SHELVES.
- ENGINEER TO SPECIFY FIGS. 2A, 5A, 6A & 7A FOR ADDITIONS TO H-850665-A ISSUES 1-3, OR OLOCR GROUP RELAYS OTHER THAN H-850665-A. ENGINEER TO SPECIFY FIGS. 8A OR 11A, & 12A FOR NEW SHELVES OR ADDITIONS TO H-850665-A ISSUE 4 OR LATER. ENGINEER TO SPECIFY FIG. 9A FOR NEW APPLICATIONS ONLY WHERE OVERFLOW FEATURES ARE NOT REQUIRED. SPECIAL APPLICATIONS ONLY.
- WHEN EITHER FIGURE 8A OR 11A IS SPECIFIED, RELEASE ALARM RELAY AND DISTRIBUTOR SPARK-KILLER ARE ORDERED BY SHELF STOCKLIST.

SYMBOLS



MANUFACTURING NOTES:

- "X" CONTACTS OPERATE FIRST.
- SHELF JACKS 1U & 3U, 17U & 19U MAKE CONTACT WHEN THE SWITCH IS REMOVED.
- JACK POINTS 1L & 2L ARE USED ONLY WITH FIG. 6A & 7A.
- JACK POINTS 22U & 24U ARE USED WHEN FIG. 5A, 7A, OR 11A IS USED.
- ON ROTARY SWITCH, LEVEL A IS NEAREST SWITCH FRAME.
- ON FIG. 5A, 7A & 11A THIS JACK IS LEFT TEST JACK.
- SHOP SHALL WIRE "F" STRAP IN FIGURES 2A, 5A, 6A & 7A ONLY.
- ISSUES 1-3 WIRING & APPARATUS "C" WERE PART OF FIGURES 2A, 5A, 6A & 7A AND CAPACITOR S3 WAS 0.2MF, AND FIGURES 8A, 9A, 10A, 11A, 12A, RR & WIRING & APPARATUS "D" WERE NOT SHOWN. BEGINNING WITH ISSUE 4, WIRING & APPARATUS "D" SUPERSEDES WIRING & APPARATUS "C", AND RELAY VT SPRING NUMBERS ARE THOSE NOT IN PARENTHESES. SEE TABLE "A" FOR USE OF WIRING & APPARATUS "A".
- STRAP FIGURE 1A TERMINALS ST1 AND STD WHEN FIGURE 10A IS NOT USED.
- PRIOR TO ISSUE 4, DIODES CR1 & CR2 WERE FD-1029-DF. BEGINNING WITH ISSUE 4, ALL DIODES ARE FD-1029-DB UNLESS OTHERWISE INDICATED.
- PRIOR TO ISSUE 4, WIRING & APPARATUS "C" WERE PART OF CIRCUIT. WIRING & APPARATUS "C" ARE NO LONGER REQUIRED.
- PRIOR TO ISSUE 9, IN FIGURES 8A & 11A, RELAY ATB HAD SPRING NUMBERS SHOWN IN PARENTHESES (). BEGINNING WITH ISSUE 9, USE SPRING NUMBERS OF RELAY ATB NOT IN PARENTHESES ().

INSTALLING NOTES:

- IF ISSUES 1-3 MAIN FIGURE HAS TERMINALS PC FOR GROUP A AND GROUP B CONNECTED TOGETHER, INSERT DIODE CR5 IN WIRING "C".

MAINTENANCE NOTES:

- WHEN TEST CIRCUIT H-85119-A OR EQUIVALENT IS USED TO CHECK THE MESSAGE REGISTER EQUIPMENT, REMOVE LAMP MR AND REPLACE WITH SNAP IN PLUG BUTTON.

TABLE A - GROUP RELAYS				
FIGURE	RELEASE ALARM RELAY FIG. RR	DISTRIBUTOR SPARK-KILLER WIRING, APP. "A"	MESSAGE REGISTER TEST JACKS FIG. MR	APPLICATION (SEE NOTE 58)
2A		*		A & M
5A		*	*	
6A	*	*	*	
7A	*	*	*	
8A				STANDARD (NOTE 59)
11A			*	SPECIAL (NOTE 59)

RUNNING LIST RLDM-850665-	906
	905
	904
	903
	902
	901
	900
	A99
	A98
	A97
STOCKLIST DM-850665-	A96
	A95
	A94
	A93
	A92
	A91
	A90
	A56
	A55
	A54
	A53
	A52
	A51
	A50
JUMPER LIST JL-850665-A	



ASSOCIATED DRAWINGS		
DRAWING NO.	ISS.	DESCRIPTION
AM-850665-A	11	ADJUSTMENT
E-850665-A	4	EXPLANATION

DESIGNED: TRM/A
APP'D: L.L. SMITH
SCALE: 1" = 1" (DO NOT SCALE DRAWING)
DATE: 6-9-59
COMMON EQPT FOR LINE FINDERS
H-850665-A
AUTOMATIC ELECTRIC COMPANY
NORTH LAKE, ILL., U.S.A. © GENOA, ILL., U.S.A. © WHITING, WISC., U.S.A. ©

ROT STOP
UPPER
ROT STOP
LOWER