

76-ENGINEER TO INSTRUCT INSTALLER TO ADD "S" STRAP WHEN ALL PARTY IDENTITY IS DIAL OFF NORMAL TIP MARKS AND NO CONTINUOUS INDUCTIVE TIP MARKS ARE ENCOUNTERED.

77-ENGINEER TO INSTRUCT INSTALLER TO REMOVE "AC" STRAP (FIGURE 12A) WHEN USED WITH EAX INSTALLATIONS HAVING UNATTENUATED DIAL TONE.

78-BEGINNING WITH ISSUE 26 IN FIGURE 3A, WHEN ACCESS IS FROM A NUMBER 2 EAX EXCHANGE, ENGINEER SHALL INSTRUCT THE INSTALLER TO REMOVE "A" OR "B" WIRING AND ADD "P" WIRING.

62-PRIOR TO ISSUE 3, "A" STRAPS & WIRING, "B" STRAPS & WIRING, TERMINALS DT, DT1, DT2, DT3, DT4, AND "B" APPARATUS (INDUCTION COIL AND RESISTOR R2 & R3) ARE NOT SHOWN IN FIGURE 3A.

63-ENGINEER TO INSTRUCT INSTALLER TO REMOVE "AC" STRAP (FIGURE 12A) WHEN USED WITH EAX INSTALLATIONS HAVING UNATTENUATED DIAL TONE.

64-ENGINEER TO INSTRUCT INSTALLER TO REMOVE "A" OR "B" WIRING AND ADD "P" WIRING.

65-ENGINEER TO INSTRUCT INSTALLER TO REMOVE "A" OR "B" WIRING AND ADD "P" WIRING.

66-ENGINEER TO INSTRUCT INSTALLER TO REMOVE "A" OR "B" WIRING AND ADD "P" WIRING.

67-ENGINEER TO INSTRUCT INSTALLER TO REMOVE "A" OR "B" WIRING AND ADD "P" WIRING.

68-ENGINEER TO INSTRUCT INSTALLER TO REMOVE "A" OR "B" WIRING AND ADD "P" WIRING.

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74-ENGINEER TO INSTRUCT INSTALLER TO REMOVE "A" OR "B" WIRING AND ADD "P" WIRING.

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129-ENGINEER TO INSTRUCT INSTALLER TO REMOVE "A" OR "B" WIRING AND ADD "P" WIRING.

ENGINEERING NOTES (CONT'D)

52-ENGINEER TO INSTRUCT THE INSTALLER TO STRAP BETWEEN TERMINALS "M1-MO" AND "OC" AND "TC" AS REQUIRED. WHEN DIAL TYPE SUBSETS ACCESS THE CIRCUIT, EITHER THROUGH A REGISTER-SENDER OR DIALED DIRECT, ONE ROTARY POSITION OF SWITCH "RS" MUST BE RESERVED FOR THIS TYPE OF ACCESS. ASSUME THE LAST DIGIT OF THE ROUTING TRANSLATION, OR IF DIALED DIRECT AND THE LAST DIGIT IS A SEVEN, THE ENGINEER WOULD INSTRUCT THE INSTALLER TO STRAP BETWEEN TERMINALS "M7" AND "OC". ALL OTHER TERMINALS (A7, A7A, B7, B7A, C7 AND C7A) ON THIS ROTARY POSITION WOULD BE LEFT VACANT. THIS "M7" TO "OC" STRAP CONDITIONS THE CIRCUIT FOR DIAL SPEED AND PARTY IDENTITY TESTS THROUGH FIGS 3A AND 4A OR H-85175 AND H-85001-B OR EQUIV. WHEN TCMF SUBSETS ACCESS THIS CIRCUIT, THE ROTARY POSITION OF SWITCH "RS" ASSOCIATED WITH THE LAST ROUTING DIGIT WILL MARK THIS AS A TCMF TYPE CALL. THE ENGINEER WOULD INSTRUCT THE INSTALLER TO STRAP BETWEEN TERMINALS "M1-MO" AND "TC" FOR TCMF TYPE OF ACCESS. ASSUME THE LAST ROUTING DIGIT ON A ACCESS IS ONE, ON ANOTHER ACCESS A THREE, AND ON ANOTHER ACCESS A FIVE, THE ENGINEER WOULD INSTRUCT THE INSTALLER TO STRAP BETWEEN TERMINALS "M1", "M3", "M5" AND "TC". THIS STRAPPING ARRANGEMENT CONDITIONS THE CIRCUIT FOR TCMF AND PARTY IDENTITY TESTS THROUGH FIG 2A AND THE TEST RECEIVER CIRCUIT (H-850679-A OR EQUIV)

53-TCMF PARTY IDENTITY TESTS (PARTY 1 OR 2) ARE AUTOMATICALLY MADE WHEN THIS CIRCUIT (FIG 2A) OR 12A IS ACCESSED. WHEN ACCESSED VIA A SELECTOR LEVEL AND FIG 1A, THE PARTY CHECK IS MADE BY KEYING IN THE DIGIT 1 OR 2 CORRESPONDING TO THE SUBSET PARTY MARK. IF CORRECT IDENTIFICATION IS MADE, DIAL TONE WILL BE RETURNED AND THE CIRCUIT IS CONDITIONED TO TEST THE SUBSETS NUMERICAL OSCILLATOR COMBINATIONS. THE PUSH BUTTONS ARE OPERATED IN A SEQUENTIAL ORDER, STARTING WITH BUTTON 1-2-3 ETC. IF ALL DIGITS ARE RECEIVED CORRECTLY, FIG 2A OR 12A WILL RETURN A "ZIP-ZIP-ZIP" TONE INDICATING A GOOD TEST. IF A DIGIT FAILED TO REGISTER PROPERLY, THE "ZIP" TONE WILL NOT BE RETURNED WHICH INDICATES A SUBSET OSCILLATOR MALFUNCTION. WHEN CORRECT PARTY IDENTIFICATION IS NOT MADE, AND WHEN THE PARTY DIGIT 1 OR 2 IS PLACED INTO THE TEST RECEIVER, BUSY-TONE WILL BE MOMENTARILY RETURNED FOLLOWED BY DIAL TONE WHICH WILL INDICATE A PARTY IDENTITY FAILURE. ON RECEIPT OF THE DIAL TONE, THE NUMERICAL OSCILLATOR COMBINATIONS CAN BE CHECKED IN A SEQUENTIAL MANNER WITH RESULTANT "ZIP" TONE RETURNED FOR PROPER DIGIT REGISTRATION, OR LACK OF "ZIP" TONE FOR SUBSET MALFUNCTION.

54-"X" STRAP IS CONNECTED WHEN DIGIT VERIFICATION IS DESIRED AFTER EACH KEYED DIGIT. WITH "X" STRAP CONNECTED, THE APPLIED DIAL TONE WILL BE MOMENTARILY INTERRUPTED WHICH WILL INDICATE PROPER DIGIT REGISTRATION. NO TONE INTERRUPTION INDICATES THAT ONE OR BOTH OF THE OSCILLATORS ASSOCIATED WITH THE DEPRESSED TOUCH KEY IS FAULTY.

55-THE DIAL PARTY IDENTITY CIRCUIT (FIG 4A) OR 13A IS SEIZED BY DIALING A DIGIT INTO FIG 3A (OR EQUIV)

56-PARTY IDENTITY TEST IS MADE BY DIALING "0" INTO THIS CIRCUIT (FIG 4A) OR 13A FOLLOWED BY THE PARTY DIGIT. IF CORRECT IDENTIFICATION IS MADE, THIS CIRCUIT (FIG 4A) OR 13A WILL RELEASE AND DIAL TONE WILL BE RETURNED FROM FIG 3A. IF CORRECT IDENTIFICATION IS NOT MADE, BUSY TONE WILL BE RETURNED FROM THIS CIRCUIT (FIG 4A) OR 13A AND FURTHER TESTING WILL BE PREVENTED.

57-IF ANY DIGIT OTHER THAN "0" IS RECORDED (FIG 4A) OR 13A, 1PM TONE (OFFICE SELECTION) WILL BE RETURNED AFTER THE FIRST DIALED DIGIT, AND FURTHER TESTING WILL BE PREVENTED.

58-IF THE TIP SIDE OF THE LINE IS GROUNDED, BUSY TONE WILL BE RETURNED FROM THIS CIRCUIT (FIG 4A) OR 13A AFTER THE FIRST DIALED DIGIT, AND FURTHER TESTING WILL BE PREVENTED.

59-NORMALLY ONE FIG 6A IS PROVIDED FOR EACH FIG 5A. WHEN MULTIPosition DISPLAY IS REQUIRED, ENGINEER TO SPECIFY ONE FIG 6A FOR THE REQUIRED NUMBER OF TEST DESK POSITIONS (FIGS 5A). WHEN FIGURES 10A ARE PROVIDED, ONE FIGURE 6A IS REQUIRED FOR EACH TEST DESK POSITION EQUIPPED FOR TCMF TESTING.

60-FOR TYPICAL CONNECTION OF LEAD "T2", SEE CKT. H-85920-A, FIG. 2A, OR EQUIV.

61- WHEN CONTINUOUS TONE SOURCE IS NOT AVAILABLE, ENGINEER TO INSTRUCT INSTALLER TO ADD "V" STRAPS.

MANUFACTURING NOTES (CONT'D)

16-PRIOR TO ISSUE 26, IN FIGURE 1A, CAPACITORS C3A, C3B, RESISTORS R2, R3, R4 WERE PART OF "W" WIRING AND APPARATUS PROVIDED FOR CXP-5, BALANCED TONES AND TERMINALS EBT, BTR, PI TO P6, RESISTORS R5, R6 AND WIRING "AD & AE" WERE NOT SHOWN. WITH ISSUE 26, TERMINALS, RESISTORS AND CAPACITORS AND WIRING "AD" BECAME PART OF CIRCUIT FIGURE 1A, TO PROVIDE PROPER BALANCED TONES FROM NUMBER 2 EAX TONE SOURCE TO THIS CIRCUIT WITH "U" WIRING. INSTALLER TO CUT STRAPS "AD" BETWEEN TERMINALS P2 & P3 AND P8 & P6 AND ADD STRAPS "AE" TO TERMINALS P1 & P2 AND P4 & P5.

ENGINEERING NOTES:

51-A PREDETERMINED ACCESS CODE WILL BE KEYED INTO A REGISTER-SENDER, WHICH IN TURN WILL ROUTE THE TEST CALL TO THIS CIRCUIT. A PREDETERMINED ACCESS CODE, WHICH THE REGISTER SENDER WILL TRANSMIT, WILL BE ASSIGNED FOR EACH TYPE OF TCMF SUBSET USED AT A PARTICULAR CENTRAL OFFICE. FOR EXAMPLE, A 10 PUSH BUTTON SUBSET WILL HAVE ONE ACCESS CODE, A 12 BUTTON SUBSET WILL HAVE ANOTHER ACCESS CODE, AND WHERE APPLICABLE, A 16 BUTTON SUBSET WILL HAVE ANOTHER ACCESS CODE. A MAXIMUM OF TEN ACCESS CODES CAN BE ASSIGNED WHICH WILL COVER ALL TYPES OF SUBSETS IN ANY GIVEN CENTRAL OFFICE, THAT IS, NINE TCMF AND ONE DIAL TYPE ACCESS. TO CONDITION THE TEST RECEIVER CIRCUIT (H-850679-A OR EQUIV) TO ACCOMMODATE THE TYPE OF TCMF SUBSET THAT IS TO BE TESTED, THE ENGINEER IS TO INSTRUCT THE INSTALLER TO STRAP BETWEEN TERMINALS A1-AO/A1A-AOA, B1-BO/B1A-BOA, C1-CO/C1A-COA AND TERMINALS N10-N16 AS REQUIRED. FOR EXAMPLE, IF A BASIC 10 PUSHBUTTON SUBSET IS TO BE TESTED, AND THE LAST ROUTING DIGIT IS A ONE, THE ENGINEER WOULD INSTRUCT THE INSTALLER TO STRAP TERMINALS "A1" TO "N10" AND "A1A" TO "N16". THIS STRAPPING ARRANGEMENT IS BASED ON EACH TCMF SUBSET HAVING A FULL COMPLEMENT OF 16 PUSH BUTTONS.

THE BASIC 10 PUSH BUTTON SUBSET WOULD NOT HAVE THE 11 THRU 16 PUSH BUTTONS. AS AN EXAMPLE, A 16 PUSH BUTTON TCMF SUBSET WOULD HAVE THE FOLLOWING FUNCTIONS:

PUSH BUTTON	FUNCTION	PRIORITY
1	1	
2	2	
3	3	
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	
10	0	
11	SPARE	
12	END-OF-SIGNALING	
13		
14		
15		
16		

WHEN A 16 PUSH BUTTON TCMF SUBSET ACCESSES THIS CIRCUIT, NO STRAPPING IS REQUIRED BETWEEN LEVELS OF SWITCH "RS" AND TERMINALS "M10-M16". THE TEST RECEIVER CIRCUIT (H-850679-A OR EQUIV) IS NORMALLY CONDITIONED TO ACCEPT THE FULL COMPLEMENT OF 16 SIGNALS. SUBSETS THAT DO NOT UTILIZE THE FULL COMPLEMENT OF 16 PUSH BUTTONS, THE TEST RECEIVER (H-850679-A OR EQUIV), THROUGH LEVELS OF ROTARY SWITCH "RS", IS CONDITIONED TO BY-PASS THE MISSING PUSH BUTTONS. FOR EXAMPLE, IF A 12 PUSH BUTTON SUBSET IS TO BE TESTED, AND THE LAST ROUTING DIGIT IS A THREE, THE ENGINEER WOULD INSTRUCT THE INSTALLER TO STRAP TERMINALS "A3" TO "N12" AND "A3A" TO "N16". IF A 11 PUSH BUTTON SUBSET, WITH THE NO 11 PUSH BUTTON MISSING, ACCESSED THIS CIRCUIT, AND THE LAST ROUTING DIGIT WAS A NINE, THE ENGINEER WOULD INSTRUCT THE INSTALLER TO STRAP TERMINALS "A9" TO "N10", "A9A" TO "N11", "B9" TO "N13" AND "B9A" TO "N16".

MANUFACTURING NOTES:

1-MAKE FINAL SPEED CHECK OF PRIME MOVER RELAYS WITH COVER IN PLACE.

2-"X" CONTACTS OPERATE FIRST.

3-ON ROTARY SWITCH, LEVEL A IS NEAREST MOUNTING FRAME.

4-BUSY KEY SPRING DESIGNATIONS IN PARENTHESES ARE USED WHEN TURN KEY IN LIEU OF BUSY KEY IS PROVIDED. WHEN BUSY KEY IS USED (FIG. 1A), TERMINAL STRIP TERMINALS ARE NEEDED.

5-P DENOTES PAIR

6-L DENOTES LOCKING
NL DENOTES NON-LOCKING

7-THE OUTPUT ACROSS SPRINGS 5 & 6 (LEFT TEST JACK PULSE MEASURE SPRINGS 1 & 2) OF RELAY PM1 AT 48.5 TO 50 VOLTS SHALL HAVE A PULSE RATIO OF 55 TO 70% BREAK, AND SPEED OF 10.0:3 P.P.S. TO OBTAIN THIS OUTPUT, VARY RESIDUALS OF RELAYS PM1 & PM2 WITHIN SPECIFIED LIMITS. (SEE TABLE A)

8-FIG. 1A, 2A, 3A, 7A;
TERMINALS WITH NUMERICAL AND ALPHABETICAL DESIGNATIONS DENOTE EITHER TERM. BLK. TERMINATIONS (ALPHABETICAL) OR CONNECTOR TERMINATIONS (NUMERICAL). IN FIG. 1A, TERMINALS WITH ONLY ALPHABETICAL DESIGNATIONS DENOTE TERM. BLK. TERMINATIONS ONLY. TERM. BLK. TERMINATIONS USE COLOR CODES. CONNECTOR TERMINATION DO NOT USE COLOR CODES.

9-PRIOR TO ISSUE 6, THE FOLLOWING ITEMS WERE NOT SHOWN.
FIG. 1A-DIODES CR2 & CR3, TERMINALS ML1, ML2, TA1 & CH3, STRAPS "C" OR "E" AND LEADS TO CH3.
FIG. 2A-DIODE CR7, TERMINALS IP1, IP2, IP3, IP4, BL1, BL2, BL3, CH2, CH3, STRAPS "C", "H" OR "E", AND LEADS 60 1PM, BL5, CH3 & SEL.
FIG. 3A-ADDED "H" WIRING AND APPARATUS (DIODE CR4) TO REPLACE "G" WIRING.
FIG. 4A-ADDED CR5 ("F" APPARATUS).
FIG. 8A-NEW FIGURE ADDED.
FIG. 9A-NEW FIGURE ADDED.
FIG. 10A-NEW FIGURE ADDED.
FIG. AC-NEW REFERENCE FIGURE ADDED.
NOTES 63, 64 & 65 ADDED.
WITH ISSUE 6, ALL THE ABOVE ITEMS LISTED IN NOTE 9 BECAME STANDARD.

WHEN FIGURES 10A ARE PROVIDED, ONE FIGURE 6A IS REQUIRED FOR EACH TEST DESK POSITION EQUIPPED FOR TCMF TESTING.

10-WITH ISSUE 8 IN FIGURE 1A, REMOVED REFERENCE TO STRAP "E" BETWEEN TERMINALS ML1 & ML2, IN FIGURE 2A, REMOVED REFERENCE TO STRAP "E" BETWEEN TERMINALS IP1 & IP2, STRAP "D" BETWEEN IP1 & IP2, STRAP "C" BETWEEN IP1 & IP2, CHANGED STRAPS "E" TO READ STRAPS "C" BETWEEN TERMINALS BL1 & BL2 & IP1 & IP2, AND ADDED "K" WIRING & APPARATUS TO SUPERSEDE "J" WIRING & APPARATUS.

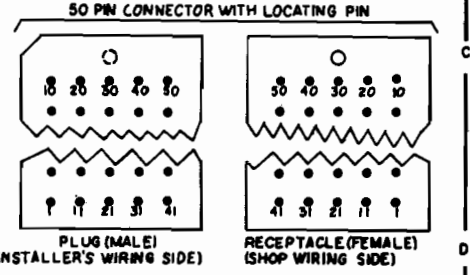
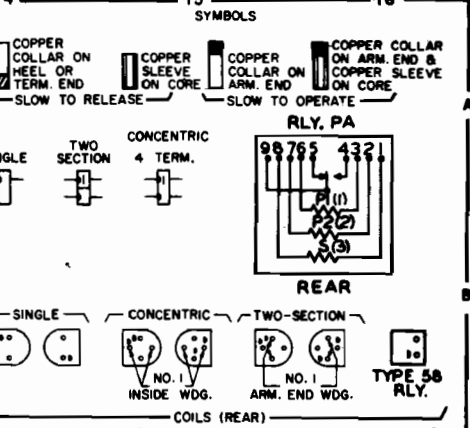
11-WITH ISSUE 11, SPRING NUMBERS (N) FOR RELAY "A" AND "AA" IN FIGURES 3A AND 4A ARE STANDARD.

12-PRIOR TO ISSUE 15, "L" STRAP BETWEEN TERMINAL DT & DT1 WAS NOT SHOWN. (SEE NOTE 68)

13-PRIOR TO ISSUE 20, IN FIGURE 3A, RESISTORS R2 AND R3 WERE PART OF "B" APPARATUS AND WERE SHOWN BETWEEN "IND" TERMINAL 3 AND TERMINAL DT3 AND BETWEEN "IND" TERMINAL 4 AND TERMINAL DT4 RESPECTIVELY. "M" WIRING WAS PART OF THE CIRCUIT AND WAS NOT DESIGNATED. "N" WIRING AND APPARATUS AND "P" WIRING WERE NOT SHOWN. BEGINNING WITH ISSUE 20, RESISTORS R2 AND R3 ARE RE-LOCATED BETWEEN TERMINAL DT1 AND CONTACT SPRING "1" ON RELAY "B" ("M" APPARATUS) AND BETWEEN TERMINAL DT2 AND CONTACT SPRING 5 ON RELAY "B", RESPECTIVELY AND RESISTORS R2 AND R3 BECAME PART OF THE MAIN FIGURE 3A AND "N" WIRING AND APPARATUS SUPERSEDES "M" WIRING FOR NEW MANUFACTURE. FOR INSTALLER "P" WIRING SEE NOTE 74.

14-PRIOR TO ISSUE 23, IN FIGURE 4A & 13A "R" WIRING AND "S" STRAP WERE NOT SHOWN. BEGINNING WITH ISSUE 23, "R" WIRING IS NORMALLY PROVIDED & "S" STRAP IS INSTALLERS OPTION (SEE NOTE 76)

15-PRIOR TO ISSUE 23, "V" WIRING (FIGURE 1A AND 12A) WAS PART OF CIRCUIT AND "W" WIRING AND APPARATUS (FIGURES 1A, 3A, 12A & 13A), "T" STRAP (FIGURE 1A & 12A), INSTALLERS "U" STRAP (FIGURES 1A, 3A, 12A & 13A) WERE NOT SHOWN, AND SPRING NUMBERS OF RELAYS BSD & DC (FIGURE 1A) IN PARENTHESES () WERE USED. BEGINNING WITH ISSUE 23, "V" WIRING (FIGURE 1A & 12A) IS NO LONGER PROVIDED, "T" STRAP (FIGURE 1A & 12A) IS NORMALLY PROVIDED, "U" STRAPS (FIGURE 1A, 3A, 12A & 13A) ARE OPTIONAL INSTALLERS STRAPS, "W" WIRING AND APPARATUS (FIGURES 1A, 3A, 12A & 13A) AND SPRING NUMBERS NOT IN PARENTHESES () FOR RELAYS BSD & DC (FIGURE 1A) BECAME STANDARD.



- INDICATES INSIDE TERMINAL (START OF WINDING)
- TERMINAL ON UNIT TERMINAL BLOCK.
- UNIT TERMINAL BLOCK TERMINAL (COMMON)
- TERMINAL ON TERMINAL STRIP ASSEMBLY. (USED WHEN BUSY KEY IS PROVIDED) (TERM. NO. 1 IS TOP OR RIGHT TERM. AS SEEN FROM REAR)
- TERM. ON TERM. STRIP ASSEMBLY AT RELAY TCS OR RELAY TC (REL. 1A, 1A1A) (TERM. NO. 1 IS TOP OR RIGHT TERM. AS SEEN FROM REAR)
- DENOTES CONNECTOR PLUG TERMINAL.
- DENOTES CONNECTOR RECEPTACLE TERMINAL.
- DENOTES TERM. BLK. TERM., OR TERM. ON TIE POINT TERM. ASSEMBLY WHEN NUMBERS IN BRACKETS [] ARE INDICATED (FIG. 2A & 3A)

STOCKLIST	DESCRIPTION
DH-850678-710 (FIG. 12A)	
DH-850678-709 (FIG. 12A)	
DH-850678-708 (FIG. 9A)	
DH-850678-707 (FIG. 10A)	
DH-850678-706 (FIG. 8A)	
DH-850678-705 (FIG. 5A)	
DH-850678-704 (FIG. 7A)	
DH-850678-703 (FIG. 3A)	
DH-850678-702 (FIG. 2A)	
DH-850678-701 (FIG. 1A)	
H-887324 (FIG. 6A)	
DH-850678-700 (FIG. 7A)	
DH-850678-679 (FIG. 5A)	
DH-850678-678 (FIG. 5A)	
DH-850678-677 (FIG. 4A)	
DH-850678-676 (FIG. 3A)	
DH-850678-675 (FIG. 2A)	
DH-850678-674 (FIG. 1A)	
DH-850678-673 (FIG. 4A)	
DH-850678-672 (FIG. 3A)	
DH-850678-671 (FIG. 2A)	
DH-850678-670 (FIG. 1A)	

ASSOCIATED DRAWINGS		
DRAWING NO.	ISS.	DESCRIPTION
AH-850678-A	20	ADJUSTMENT
E-850678-A	4	EXPLANATION

DESIGNED J.F. HIRSH 2-28-66
APP'D J.P. JALLITS 2-28-66
SCALE: DATE: 3-3-66
DO NOT SCALE DRAWING

DIAL SPEED AND/OR TCMF SUBSET AND PARTY IDENT. CKT. SELECTOR LEVEL & TEST DESK ACCESS

H-850678-A
SHEET 1 OF 12

AUTOMATIC ELECTRIC COMPANY
NORTH LAKE, ILL., U.S.A. GENOA, ILL., U.S.A. WAUKESHA, WIS., U.S.A.

APP. AND/OR WIRING	ISSUES	WAS PART OF	WAS SUPERSEDED BY	FIGURE OR SUFFIX	TABLE	NOTES
A	1		*	3A	62	
B	3		*	3A	92	
C	6		*	1A, 2A	9, 67, 10	
D	16		*	11	67, 72	
E	20		*	12A	67, 69, 73	
F	6		*	2A	9, 10, 67, 69	
G	20		*	12A	67, 69, 73	
H	6	7	*	1A, 2A	9, 10	
I	6		*	4	9	
J	1	5	H	3A	9	
K	6		*	3A	9	
L	1	7	K	2A	10	
M	8		*	2A	10	
N	13		*	2A	12, 68	
O	20		*	12A	12, 68, 72	
P	1	19	N	3A	13	
Q	20		*	3A	13	
R	20		*	3A	13, 74, 78	
S	20	26	AG	12A		
T	27		*	12A		
U	23		*	4A, 13A	14	
V	23		*	4A, 13A	14, 76	
W	23		*	1A, 12A	15, 75	
X	1	22	*	1A, 12A	15	
Y	23		*	1A, 13A	15	
Z	1		*	2A	54	
AA	20		*	12A	54, 72	
AB	1		*	2A	61	
AC	20		*	12A	61, 72	
AD	20		*	12A		
AE	28		*	1A		
AF	1	18	GMS	2A	71	
AG	19		*	2A	71	
AH	19		*	2A	71	
AI	1	24	AB	12A	77	
AJ	25		*	12A	77	
AK	26		*	12A	77	
AL	25		*	1A	16	
AM	28		*	1A	16	

MAINTENANCE NOTES:
90-WITH SPEED KEY OPERATED, SPEED SHALL BE 60 P.P.M.
±2 MEASURED VISUALLY AT SPEED KEY LAMP. VARY RESIDUAL OF RELAY PM2 TO OBTAIN DESIRED SPEED. PULSES MAY BE MEASURED WITH TEST SET AT PULSE MEASURING JACK. (SEE TABLE A)

CHANGE NOTES CONTINUED ON SHEET 2

1953-54	ISS: 23	1954-55	ISS: 23	1955-56	ISS: 23	1956-57	ISS: 23	1957-58	ISS: 23	1958-59	ISS: 23	1959-60	ISS: 23	1960-61	ISS: 23	1961-62	ISS: 23	1962-63	ISS: 23	1963-64	ISS: 23	1964-65	ISS: 23	1965-66	ISS: 23	1966-67	ISS: 23	1967-68	ISS: 23	1968-69	ISS: 23	1969-70	ISS: 23	1970-71	ISS: 23	1971-72	ISS: 23	1972-73	ISS: 23	1973-74	ISS: 23	1974-75	ISS: 23	1975-76	ISS: 23	1976-77	ISS: 23	1977-78	ISS: 23	1978-79	ISS: 23	1979-80	ISS: 23	1980-81	ISS: 23	1981-82	ISS: 23	1982-83	ISS: 23	1983-84	ISS: 23	1984-85	ISS: 23	1985-86	ISS: 23	1986-87	ISS: 23	1987-88	ISS: 23	1988-89	ISS: 23	1989-90	ISS: 23	1990-91	ISS: 23	1991-92	ISS: 23	1992-93	ISS: 23	1993-94	ISS: 23	1994-95	ISS: 23	1995-96	ISS: 23	1996-97	ISS: 23	1997-98	ISS: 23	1998-99	ISS: 23	1999-00	ISS: 23	2000-01	ISS: 23	2001-02	ISS: 23	2002-03	ISS: 23	2003-04	ISS: 23	2004-05	ISS: 23	2005-06	ISS: 23	2006-07	ISS: 23	2007-08	ISS: 23	2008-09	ISS: 23	2009-10	ISS: 23	2010-11	ISS: 23	2011-12	ISS: 23	2012-13	ISS: 23	2013-14	ISS: 23	2014-15	ISS: 23	2015-16	ISS: 23	2016-17	ISS: 23	2017-18	ISS: 23	2018-19	ISS: 23	2019-20	ISS: 23	2020-21	ISS: 23	2021-22	ISS: 23	2022-23	ISS: 23	2023-24	ISS: 23	2024-25	ISS: 23	2025-26	ISS: 23	2026-27	ISS: 23	2027-28	ISS: 23	2028-29	ISS: 23	2029-30	ISS: 23	2030-31	ISS: 23	2031-32	ISS: 23	2032-33	ISS: 23	2033-34	ISS: 23	2034-35	ISS: 23	2035-36	ISS: 23	2036-37	ISS: 23	2037-38	ISS: 23	2038-39	ISS: 23	2039-40	ISS: 23	2040-41	ISS: 23	2041-42	ISS: 23	2042-43	ISS: 23	2043-44	ISS: 23	2044-45	ISS: 23	2045-46	ISS: 23	2046-47	ISS: 23	2047-48	ISS: 23	2048-49	ISS: 23	2049-50	ISS: 23	2050-51	ISS: 23	2051-52	ISS: 23	2052-53	ISS: 23	2053-54	ISS: 23	2054-55	ISS: 23	2055-56	ISS: 23	2056-57	ISS: 23	2057-58	ISS: 23	2058-59	ISS: 23	2059-60	ISS: 23	2060-61	ISS: 23	2061-62	ISS: 23	2062-63	ISS: 23	2063-64	ISS: 23	2064-65	ISS: 23	2065-66	ISS: 23	2066-67	ISS: 23	2067-68	ISS: 23	2068-69	ISS: 23	2069-70	ISS: 23	2070-71	ISS: 23	2071-72	ISS: 23	2072-73	ISS: 23	2073-74	ISS: 23	2074-75	ISS: 23	2075-76	ISS: 23	2076-77	ISS: 23	2077-78	ISS: 23	2078-79	ISS: 23	2079-80	ISS: 23	2080-81	ISS: 23	2081-82	ISS: 23	2082-83	ISS: 23	2083-84	ISS: 23	2084-85	ISS: 23	2085-86	ISS: 23	2086-87	ISS: 23	2087-88	ISS: 23	2088-89	ISS: 23	2089-90	ISS: 23	2090-91	ISS: 23	2091-92	ISS: 23	2092-93	ISS: 23	2093-94	ISS: 23	2094-95	ISS: 23	2095-96	ISS: 23	2096-97	ISS: 23	2097-98	ISS: 23	2098-99	ISS: 23	2099-00	ISS: 23	2100-01	ISS: 23	2101-02	ISS: 23	2102-03	ISS: 23	2103-04	ISS: 23	2104-05	ISS: 23	2105-06	ISS: 23	2106-07	ISS: 23	2107-08	ISS: 23	2108-09	ISS: 23	2109-10	ISS: 23	2110-11	ISS: 23	2111-12	ISS: 23	2112-13	ISS: 23	2113-14	ISS: 23	2114-15	ISS: 23	2115-16	ISS: 23	2116-17	ISS: 23	2117-18	ISS: 23	2118-19	ISS: 23	2119-20	ISS: 23	2120-21	ISS: 23	2121-22	ISS: 23	2122-23	ISS: 23	2123-24	ISS: 23	2124-25	ISS: 23	2125-26	ISS: 23	2126-27	ISS: 23	2127-28	ISS: 23	2128-29	ISS: 23	2129-30	ISS: 23	2130-31	ISS: 23	2131-32	ISS: 23	2132-33	ISS: 23	2133-34	ISS: 23	2134-35	ISS: 23	2135-36	ISS: 23	2136-37	ISS: 23	2137-38	ISS: 23	2138-39	ISS: 23	2139-40	ISS: 23	2140-41	ISS: 23	2141-42	ISS: 23	2142-43	ISS: 23	2143-44	ISS: 23	2144-45	ISS: 23	2145-46	ISS: 23	2146-47	ISS: 23	2147-48	ISS: 23	2148-49	ISS: 23	2149-50	ISS: 23	2150-51	ISS: 23	2151-52	ISS: 23	2152-53	ISS: 23	2153-54	ISS: 23	2154-55	ISS: 23	2155-56	ISS: 23	2156-57	ISS: 23	2157-58	ISS: 23	2158-59	ISS: 23	2159-60	ISS: 23	2160-61	ISS: 23	2161-62	ISS: 23	2162-63	ISS: 23	2163-64	ISS: 23	2164-65	ISS: 23	2165-66	ISS: 23	2166-67	ISS: 23	2167-68	ISS: 23	2168-69	ISS: 23	2169-70	ISS: 23	2170-71	ISS: 23	2171-72	ISS: 23	2172-73	ISS: 23	2173-74	ISS: 23	2174-75	ISS: 23	2175-76	ISS: 23	2176-77	ISS: 23	2177-78	ISS: 23	2178-79	ISS: 23	2179-80	ISS: 23	2180-81	ISS: 23	2181-82	ISS: 23	2182-83	ISS: 23	2183-84	ISS: 23	2184-85	ISS: 23	2185-86	ISS: 23	2186-87	ISS: 23	2187-88	ISS: 23	2188-89	ISS: 23	2189-90	ISS: 23	2190-91	ISS: 23	2191-92	ISS: 23	2192-93	ISS: 23	2193-94	ISS: 23	2194-95	ISS: 23	2195-96	ISS: 23	2196-97	ISS: 23	2197-98	ISS: 23	2198-99	ISS: 23	2199-00	ISS: 23	2200-01	ISS: 23	2201-02	ISS: 23	2202-03	ISS: 23	2203-04	ISS: 23	2204-05	ISS: 23	2205-06	ISS: 23	2206-07	ISS: 23	2207-08	ISS: 23	2208-09	ISS: 23	2209-10	ISS: 23	2210-11	ISS: 23	2211-12	ISS: 23	2212-13	ISS: 23	2213-14	ISS: 23	2214-15	ISS: 23	2215-16	ISS: 23	2216-17	ISS: 23	2217-18	ISS: 23	2218-19	ISS: 23	2219-20	ISS: 23	2220-21	ISS: 23	2221-22	ISS: 23	2222-23	ISS: 23	2223-24	ISS: 23	2224-25	ISS: 23	2225-26	ISS: 23	2226-27	ISS: 23	2227-28	ISS: 23	2228-29	ISS: 23	2229-30	ISS: 23	2230-31	ISS: 23	2231-32	ISS: 23	2232-33	ISS: 23	2233-34	ISS: 23	2234-35	ISS: 23	2235-36	ISS: 23	2236-37	ISS: 23	2237-38	ISS: 23	2238-39	ISS: 23	2239-40	ISS: 23	2240-41	ISS: 23	2241-42	ISS: 23	2242-43	ISS: 23	2243-44	ISS: 23	2244-45	ISS: 23	2245-46	ISS: 23	2246-47	ISS: 23	2247-48	ISS: 23	2248-49	ISS: 23	2249-50	ISS: 23	2250-51	ISS: 23	2251-52	ISS: 23	2252-53	ISS: 23	2253-54	ISS: 23	2254-55	ISS: 23	2255-56	ISS: 23	2256-57	ISS: 23	2257-58	ISS: 23	2258-59	ISS: 23	2259-60	ISS: 23	2260-61	ISS: 23	2261-62	ISS: 23	2262-63	ISS: 23	2263-64	ISS: 23	2264-65	ISS: 23	2265-66	ISS: 23	2266-67	ISS: 23	2267-68	ISS: 23	2268-69	ISS: 23	2269-70	ISS: 23	2270-71	ISS: 23	2271-72	ISS: 23	2272-73	ISS: 23	2273-74	ISS: 23	2274-75	ISS: 23	2275-76	ISS: 23	2276-77	ISS: 23	2277-78	ISS: 23	2278-79	ISS: 23	2279-80	ISS: 23	2280-81	ISS: 23	2281-82	ISS: 23	2282-83	ISS: 23	2283-84	ISS: 23	2284-85	ISS: 23	2285-86	ISS: 23	2286-87	ISS: 23	2287-88	ISS: 23	2288-89	ISS: 23	2289-90	ISS: 23	2290-91	ISS: 23	2291-92	ISS: 23	2292-93	ISS: 23	2293-94	ISS: 23	2294-95	ISS: 23	2295-96	ISS: 23	2296-97	ISS: 23	2297-98	ISS: 23	2298-99	ISS: 23	2299-00	ISS: 23	2300-01	ISS: 23	2301-02	ISS: 23	2302-03	ISS: 23	2303-04	ISS: 23	2304-05	ISS: 23	2305-06	ISS: 23	2306-07	ISS: 23	2307-08	ISS: 23	2308-09	ISS: 23	2309-10	ISS: 23	2310-11	ISS: 23	2311-12	ISS: 23	2312-13	ISS: 23	2313-14	ISS: 23	2314-15	ISS: 23	2315-16	ISS: 23	2316-17	ISS: 23	2317-18	ISS: 23	2318-19	ISS: 23	2319-20	ISS: 23	2320-21	ISS: 23	2321-22	ISS: 23	2322-23	ISS: 23	2323-24	ISS: 23	2324-25	ISS: 23	2325-26	ISS: 23	2326-27	ISS: 23	2327-28	ISS: 23	2328-29	ISS: 23	2329-30	ISS: 23	2330-31	ISS: 23	2331-32	ISS: 23	2332-33	ISS: 23	2333-34	ISS: 23	2334-35	ISS: 23	2335-36	ISS: 23	2336-37	ISS: 23	2337-38	ISS: 23	2338-39	ISS: 23	2339-40	ISS: 23	2340-41	ISS: 23	2341-42	ISS: 23	2342-43	ISS: 23	2343-44	ISS: 23	2344-45	ISS: 23	2345-46	ISS: 23	2346-47	ISS: 23	2347-48	ISS: 23	2348-49	ISS: 23	2349-50	ISS: 23	2350-51	ISS: 23	2351-52	ISS: 23	2352-53	ISS: 23	2353-54	ISS: 23	2354-55	ISS: 23	2355-56	ISS: 23	2356-57	ISS: 23	2357-58	ISS: 23	2358-59	ISS: 23	2359-60	ISS: 23	2360-61	ISS: 23	2361-62	ISS: 23	2362-63	ISS: 23	2363-64	ISS: 23	2364-65	ISS: 23	2365-66	ISS: 23	2366-67	ISS: 23	2367-68	ISS: 23	2368-69	ISS: 23	2369-70	ISS: 23	2370-71	ISS: 23	2371-72	ISS: 23	2372-73	ISS: 23	2373-74	ISS: 23	2374-75	ISS: 23	2375-76	ISS: 23	2376-77	ISS: 23	2377-78	ISS: 23	2378-79	ISS: 23	2379-80	ISS: 23	2380-81	ISS: 23	2381-82	ISS: 23	2382-83	ISS: 23	2383-84	ISS: 23	2384-85	ISS: 23	2385-86	ISS: 23	2386-87	ISS: 23	2387-88	ISS: 23	2388-89	ISS: 23	2389-90	ISS: 23	2390-91	ISS: 23	2391-92	ISS: 23	2392-93	ISS: 23	2393-94	ISS: 23	2394-95	ISS: 23	2395-96	ISS: 23	2396-97	ISS: 23	2397-98	ISS: 23	2398-99	ISS: 23	2399-00	ISS: 23	2400-01	ISS: 23	2401-02	ISS: 23	2402-03	ISS: 23	2403-04	ISS: 23	2404-05	ISS: 23	2405-06	ISS: 23	2406-07	ISS: 23	2407-08	ISS: 23	2408-09	ISS: 23	2409-10	ISS: 23	2410-11	ISS: 23	2411-12	ISS: 23	2412-13	ISS: 23	2413-14	ISS: 23	2414-15	ISS: 23	2415-16	ISS: 23	2416-17	ISS: 23	2417-18	ISS: 23	2418-19	ISS: 23	2419-20	ISS: 23	2420-21	ISS: 23	2421-22	ISS: 23	2422-23	ISS: 23	2423-24	ISS: 23	2424-25	ISS: 23	2425-26	ISS: 23	2426-27	ISS: 23	2427-28	ISS: 23	2428-29	ISS: 23	2429-30	ISS: 23	2430-31	ISS: 23	2431-32	ISS: 23	2432-33	ISS: 23	2433-34	ISS: 23	2434-35	ISS: 23	2435-36	ISS: 23	2436-37	ISS: 23	2437-38	ISS: 23	2438-39	ISS: 23	2439-40	ISS: 23	2440-41	ISS: 23	2441-42	ISS: 23	2442-43	ISS: 23	2443-44	ISS: 23	2444-45	ISS: 23	2445-46	ISS: 23	2446-47	ISS: 23	2447-48	ISS: 23	2448-49	ISS: 23	2449-50	ISS: 23	2450-51	ISS: 23	2451-52	ISS: 23	2452-53	ISS: 23	2453-54	ISS: 23	2454-55	ISS: 23	2455-56	ISS: 23	2456-57	ISS: 23	2457-58	ISS: 23	2458-59	ISS: 23	2459-60	ISS: 23	2460-61	ISS: 23	2461-62	ISS: 23	2462-63	ISS: 23	2463-64	ISS: 23	2464-65	ISS: 23	2465-66	ISS: 23	2466-67	ISS: 23	2467-68	ISS: 23	2468-69	ISS: 23	2469-70	ISS: 23	2470-71	ISS: 23	2471-72	ISS: 23	2472-73	ISS: 23	2473-74	ISS: 23	2474-75	ISS: 23	2475-76	ISS: 23	2476-77	ISS: 23	2477-78	ISS: 23	2478-79	ISS: 23	2479-80	ISS: 23	2480-81	ISS: 23	2481-82	ISS: 23	2482-83	ISS: 23	2483-84	ISS: 23	2484-85	ISS: 23	2485-86	ISS: 23	2486-87	ISS: 23	2487-88	ISS: 23	2488-89	ISS: 23	2489-90	ISS: 23	2490-91	ISS: 23	2491-92	ISS: 23	2492-93	ISS: 23	2493-94	ISS: 23	2494-95	ISS: 23	2495-96	ISS: 23	2496-97	ISS: 23	2497-98	ISS: 23	2498-99	ISS: 23	2499-00	ISS: 23	2500-01	ISS: 23	2501-02	ISS: 23	2502-03	ISS: 23	2503-04	ISS: 23	2504-05	ISS: 23	2505-06	ISS: 23	2506-07	ISS: 23	2507-08	ISS: 23	2508-09	ISS: 23	2509-10	ISS: 23	2510-11	ISS: 23	2511-12	ISS: 23	2512-13	ISS: 23	2513-14	ISS: 23	2514-15	ISS: 23	2515-16	ISS:
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ISS: 22
ISS: 23
ISS: 24

T.J.G.
check interstrapping
on these blocks

CHANGES	
25-H-850678-A (CL. AC)	DESIGNATED "AA" AND ADDED "AB" & "AC" OPTIONS. ADDED NOTE 77.
M.C.	J.F.H. L.V. K.V. 4-16-75
ISSUE: 25	
26-H-850678-A (CL. B)	ADDED NOTES 16 & 78. FIG. 1A, ADDED "AD" & "AE" OPTION. REVISED FIGS. AA, AC AND STUBBING INF. IN FIGS. 1A, 3A, 12A & 13A.
D.D.	J.J.K. M.J. 4-19-76
ISSUE: 26	
27-H-850678-A (CL. D)	FIG. 12A, DESIGNATED "AF" AND ADDED "AG" OPTION.
M.J.	J.C.C. M.J. 4-29-76
ISSUE: 27	
28-H-850678-A (CL. B)	NOTE: 16 LINE 10, P. 2 PG. WERE 14 & 15. IN FIG. 1A LOC. F2 TERM. RT3 WAS PTC. ALSO MADE CHANGES PER ATTACHED MARKED PRINTS.
G.W.W.	M.J. G.W.W. 1-26-77
ISSUE: 28	
IN FIG. 1A, WIRE ON RLY. CS SP6.9 WAS BLU-ORN.	
S.R.	E.F.M. K.V. 1-10-79
ISSUE: 29	

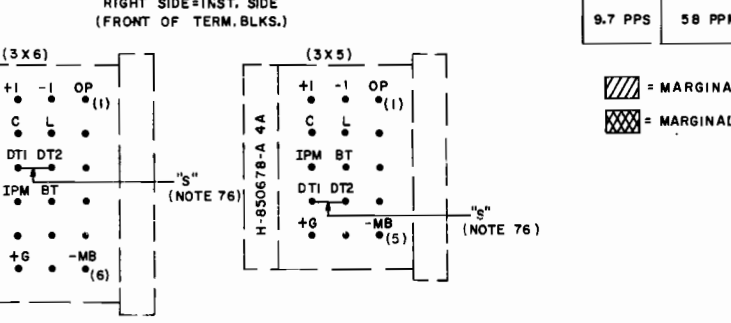
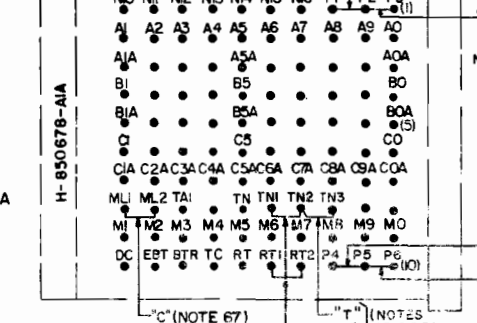
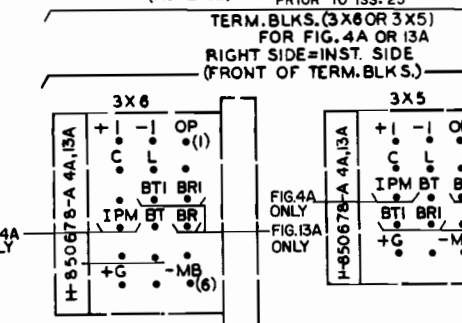
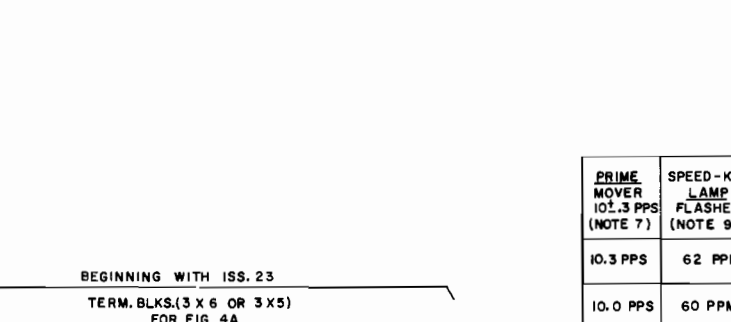
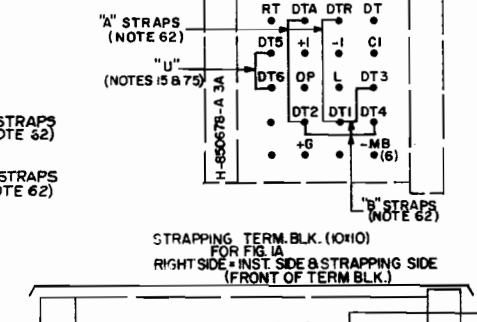
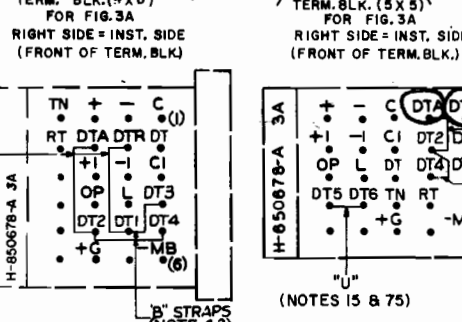
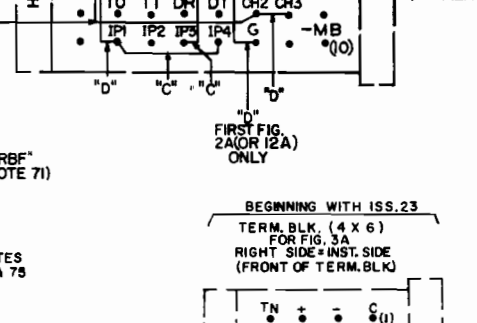
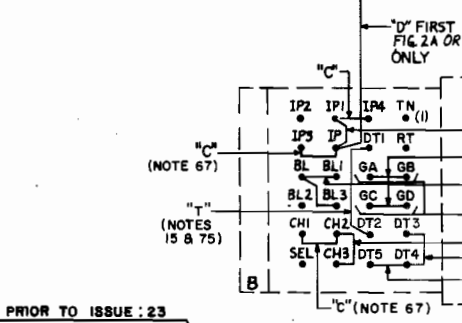
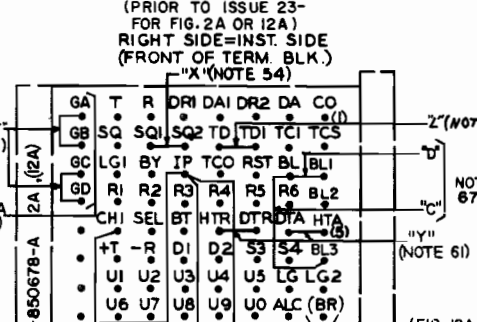
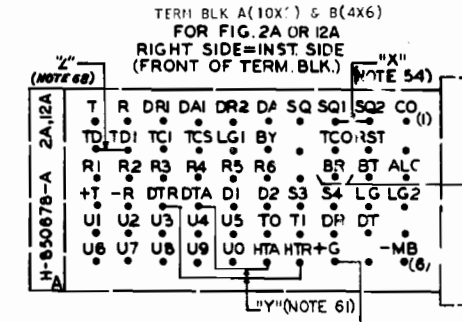
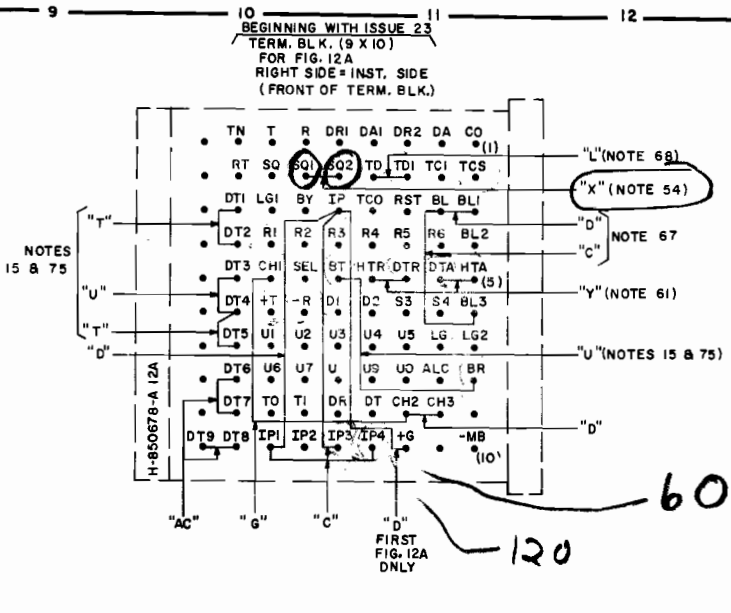
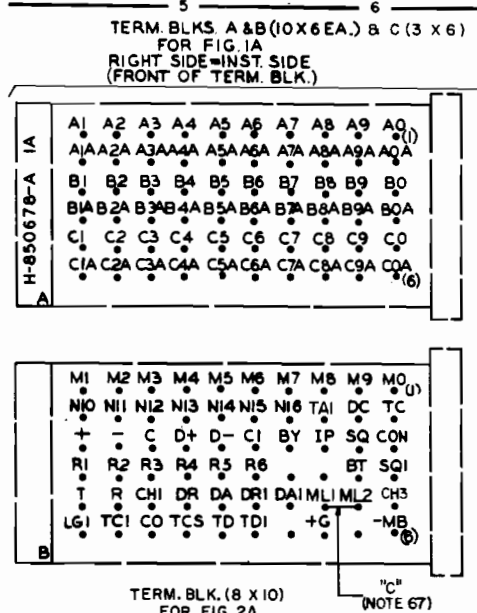
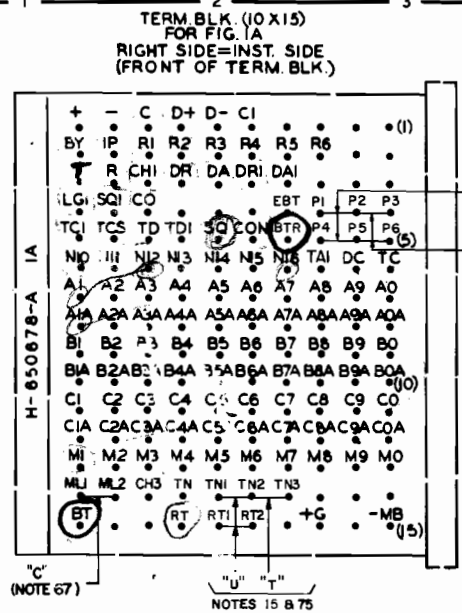


TABLE A (NOTE 7 & 90)

PRIME MOVER 101.3 PPS (NOTE 7)	SPEED-KEY LAMP FLASHES (NOTE 90)	CHAIN-RELAYS CH1-CHO STEPPING SPEED	DIAL SPEED & DIAL TEST INDICATION
10.3 PPS	62 PPM	97 MS	TOO FAST TOO SLOW OK
10.0 PPS	60 PPM	100 MS	TOO FAST TOO SLOW OK
9.7 PPS	58 PPM	103 MS	TOO FAST TOO SLOW OK

/// = MARGINAL AREA - DIAL INDICATION CAN BE EITHER "OK" OR "TOO FAST"
/// = MARGINAL AREA - DIAL INDICATION CAN BE EITHER "OK" OR "TOO SLOW"

ACCESS CIRCUIT
(NOTES 9, 67, 15, 75 & 16)

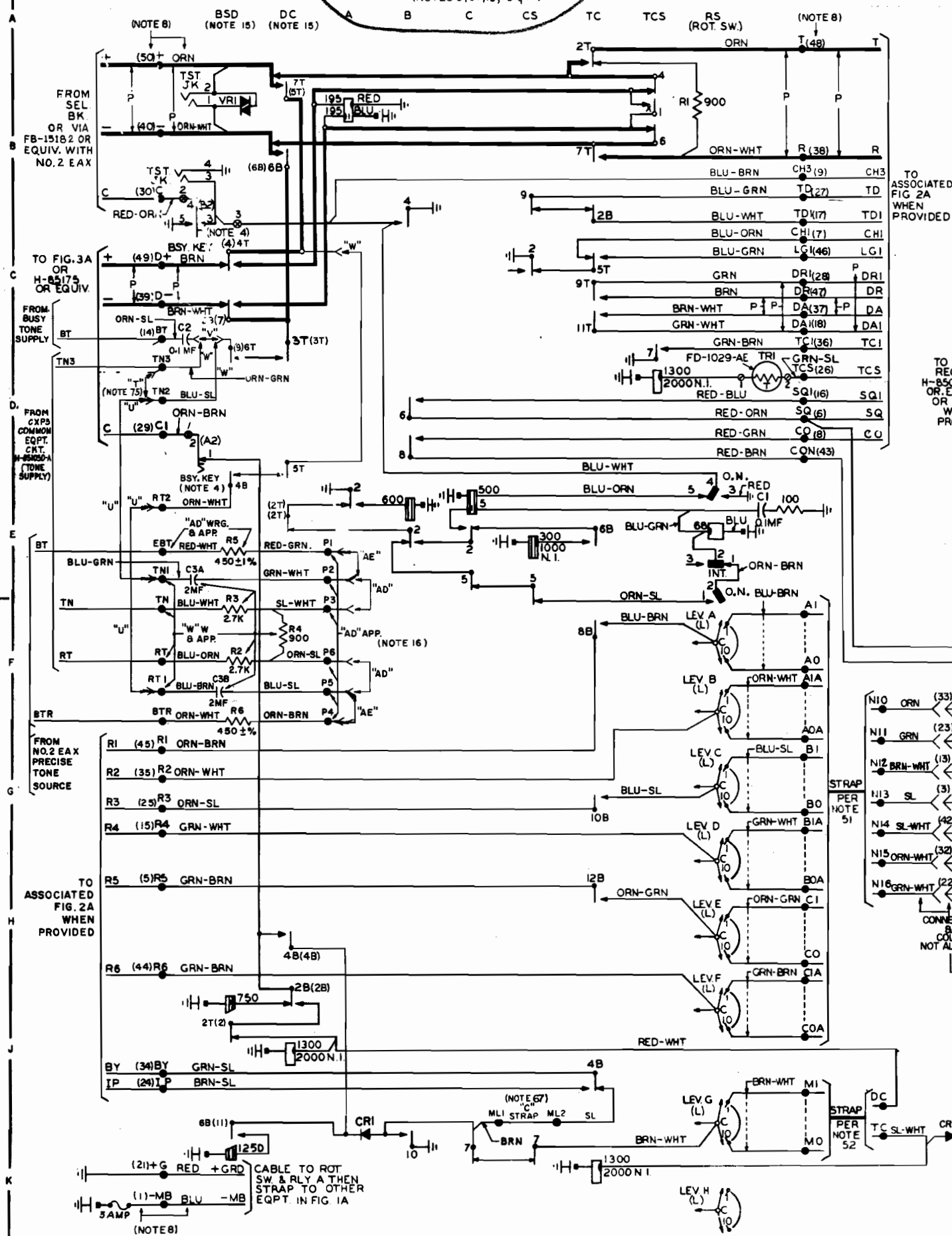


FIG. AA
TEST DESK TCMF INTERPOSITION CONNECTION CKT
(WHEN ONF FIG.2A IS PROVIDED)
(FOR REF. ONLY)

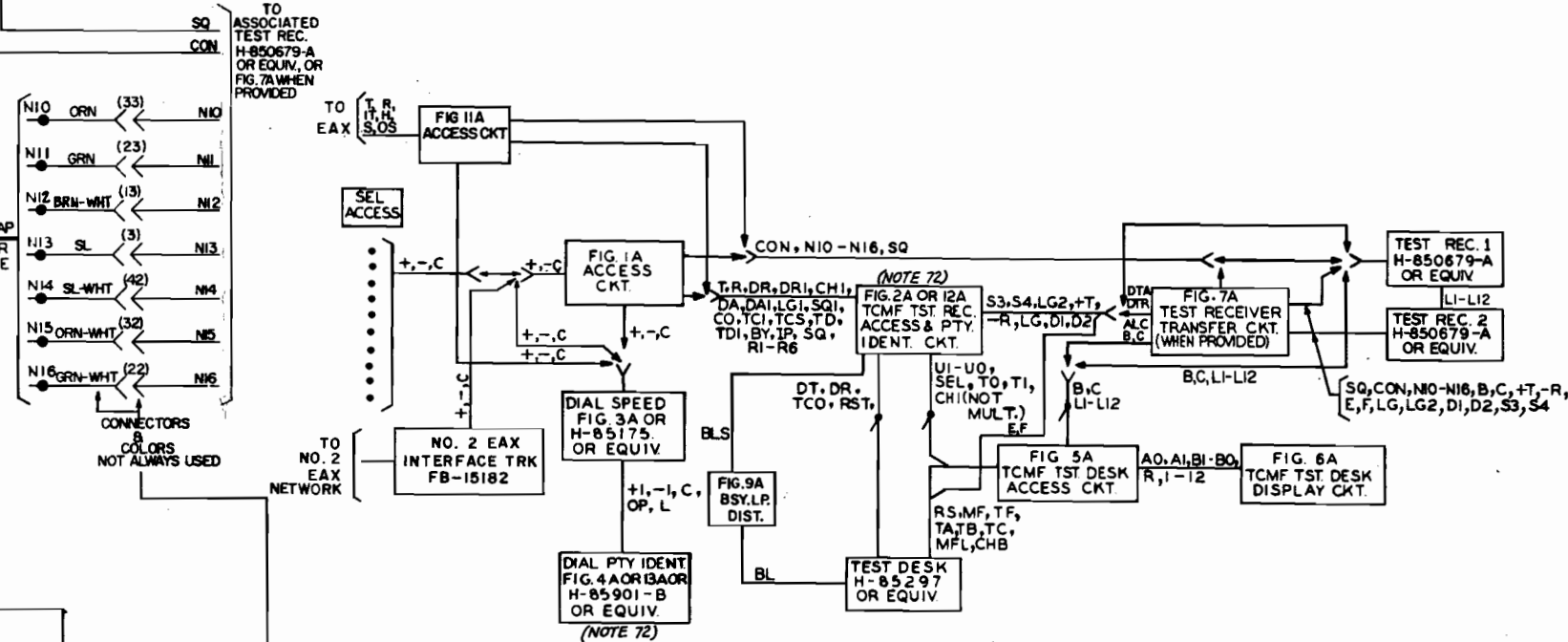
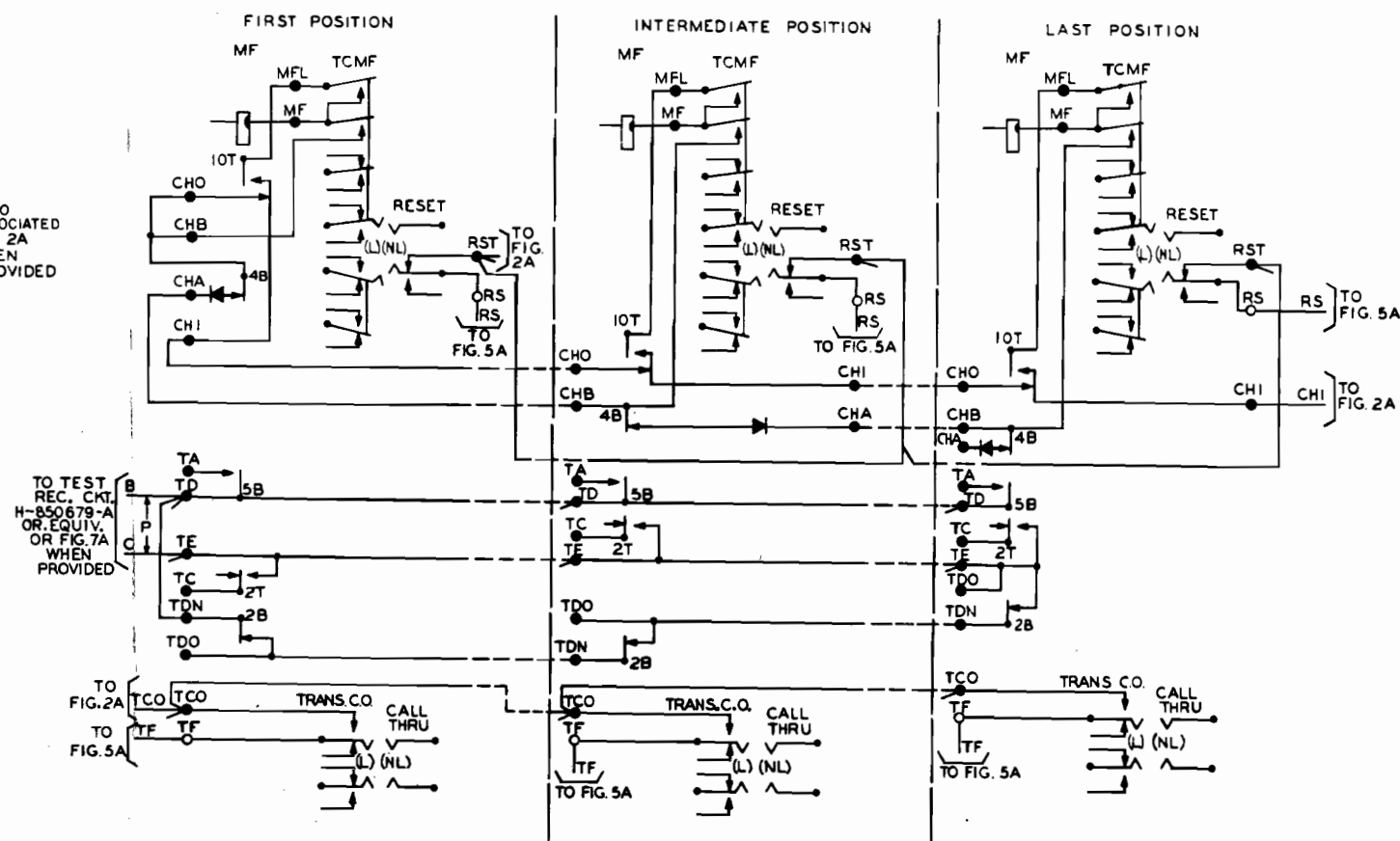
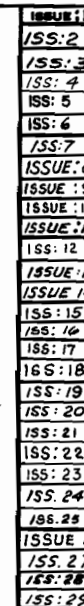


FIG. 2A



T	R	DR1	DA1	.
50	30	30	30	10
DR2	DA	SO	SO1	.
CO	TD	TD1	TC1	TC5
LGI	BY	IP	IP3	IP4
R1	R2	R3	R4	R5
R6	CH1	SEL	HTRHTA	.
DT	DR	CH3	DTR	DTA
.	.	.	.	.
+T	-R	GA	GB	.
GC	GD	.	.	.
.	.	.	.	.
.	.	+G	.	-MB
4i	3i	2i	1i	i

(BOT RECP)

	RST	TCO	BL2	BL1	BL3
50	40	30	20	10	
TO	TI	UI	U2	U3	
U4	U5	U6	U7	U8	
U9	U0	.	.	B7	
.	.	.	.	.	
L6	D1	D2	S3	S4	
L62	ALC	.	.	BT	
.	.	.	.	.	
.	.	.	.	.	
41	31	21	11	1	

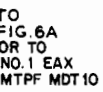
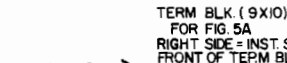
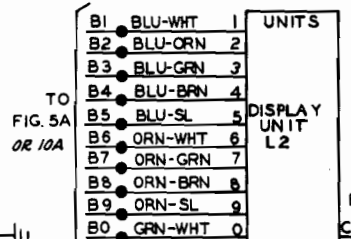
PRIME MOVER RLYS.(NOTES 1,7 & 90)



(NOTES 15 & 75)

PARTY IDENTITY TEST CKT.
(NOTES 14, 55 TO 58 & 72)

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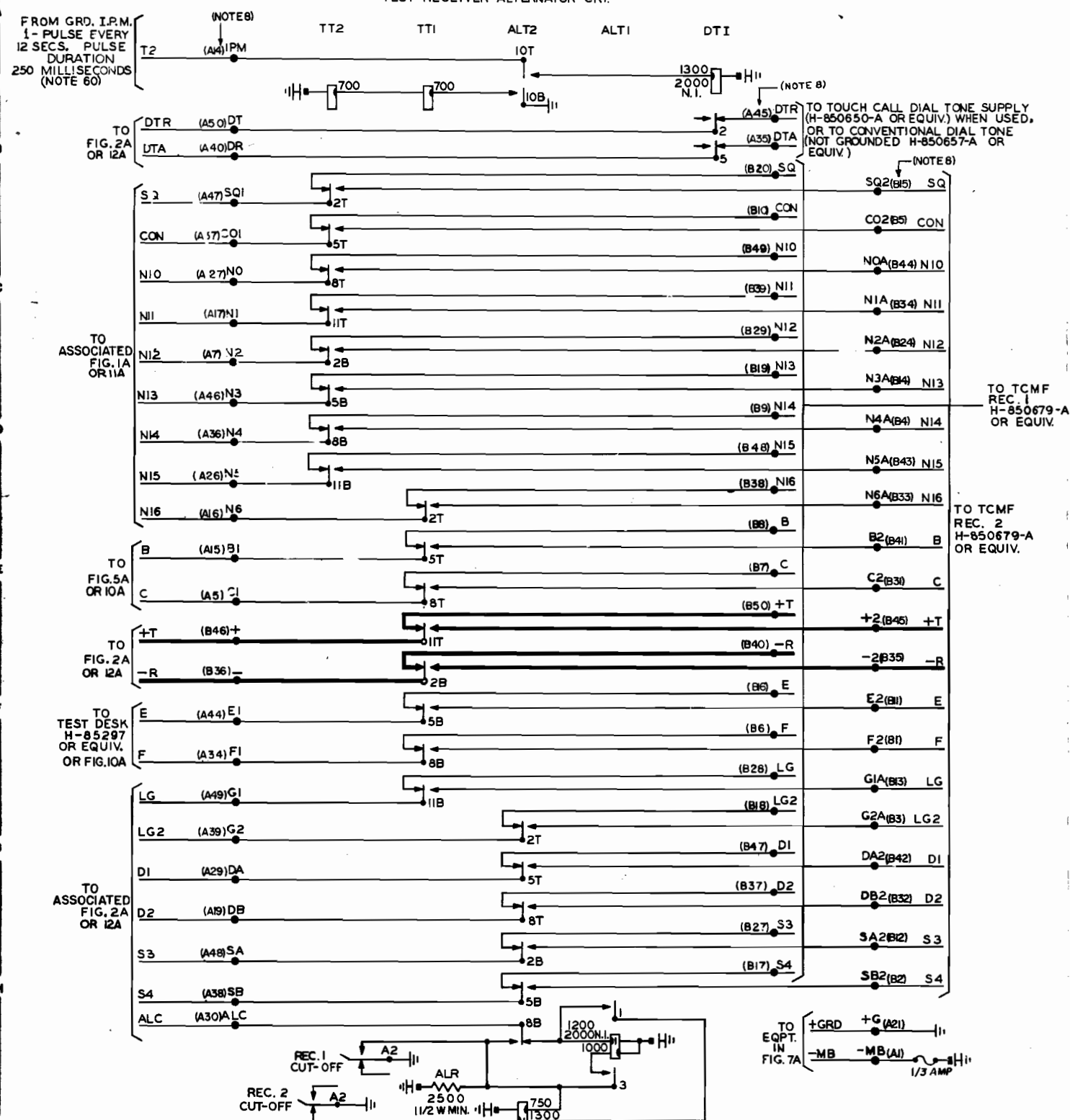
TCMF TEST DESK DISPLAY CKT.(AS REQ.)
(NOTE 59)

H-850678-A 6A

5	4	3	2	1
10	9	8	7	6
A0	A1	R	12	11
B5	B4	B3	B2	B1
B0	B9	B8	B7	B6
-MB	.	.	.	.

FIG. 7A (A&M)

TEST RECEIVER ALTERNATOR CKT



TERM. BLK. (5x10)
FOR FIG. 6A
RIGHT SIDE = INST. SIDE
(FRONT OF TERM. BLK.)

[illegible]

TERM.BLKs. A & B (7x6 EA.)
FOR FIG. 5A
RIGHT SIDE=INST. SIDE
(FRONT OF TERM. BLKS.)
ON FIRST POS. ONLY ON LAST POS. ONLY

H-850878-A	5A	RS	TF	MFL	MF	TB	TC	TA	(1)
		TD	TE	TD	TDN				
		CHA	CH	CHO	CHI				
		SEL		T0	T1	U1	U2	U3	
		U4	U5	U6	U7	U8	U9	U0	
		A0	A1	B1	B2	B3	B4		(6)

	B5	B6	B7	B8	B9	B0	R
	L1	L2	L3	L4	L5	L6	L7 (1)
	L8	L9	L0	L1	L2	1	2
	3	4	5	6	7	8	9
	10	11	12	.	.	.	.
	.	.	.	.	+G	.	-MB (6)
B							

TERM.BLKs. A & B (9X5EA.)
FOR FIG 5A
RIGHT SIDE=INST. SIDE
(FRONT OF TERM.BLKs.)
ON LAST POS. ONLY } ON FIRST POS. ONLY

RS TF MFL MF TB TC TA
 TD TE TDO TDN OAC OCB CHO CHI (1)
 SEL
 T0 T1 U1 U2 U3 U4 U5 U6 U7
 U8 U9 U0 A0 A1 B1 B2 B3 B4 (5)

	B5	B6	B7	B8	B9	B0	R	.	(1)
	L1	L2	L3	L4	L5	L6	L7	L8	L9
	L10	L11	L12	1	2	3	4	5	6
	7	8	9	10	11	.	.	.	.
	12	.	.	.	.	+C	.	-MB	.
B									

TERM. BLKS. A & B (7X6 EA.)
FOR FIG. 7A
RIGHT SIDE=INST SIDE
(FRONT OF TERM. BLKS.)

	+	-	DT	DR	G1	G2	• (1)
DA	DB	SA	SB	ALC	E1	F1	
SG1	CO1	NO	N1	N2	N3	N4	
N5	N6	B1	C1	B	C		
+T	-R	SG	CON	E	F		
N10	N11	N12	N13	N4	N15	N16	• (6)

	LG	LG2	D1	D2	S3	S4		(i)
+	2	-2	SQ2	CO2			DTA	DTR
	NOA	N1A	N2A	N3A	N4A	N5A	N6A	
B2	C2	E2		F2	GIAG2A			
	DA2	DB2	IPM					
	SA2	SB2		+C			-MB	(6)

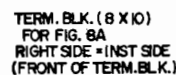
RECEPTACLES A&B-50 PINS EACH
FOR 1 CKT. OF FIG. 7A
(SHOP WIRING SIDE SHOWN)
(TOP RECP.)

DT	DR	ALC			
30	40	30	20	10	
G1	G2	DA	DB		
SA	SB				
SC1	SC2	NO	N1	N2	
NB	N4	N5	N6		
DTROTA		BI	CI		
E1	F1		FM		
41	31	21	11	1	

(BOT. RECP)

+T	-R	30	30	30	CO
NO	NE	NE	NE	NE	NH
M5	M6	LG	LG		
D1	D2	S3	S4	C	
+	-	.	E	F	
+2	-2	.	S02	CO2	
NOA	NIA	N2A	N3A	N4A	
N5A	N6A		G1A	G2A	
D02	D02		SA2	SB2	
2	2	2	E2	F2	

TCMF ALLOTTER CIRCUIT
(ONE PER TEST POSITION)
(NOTE 65)

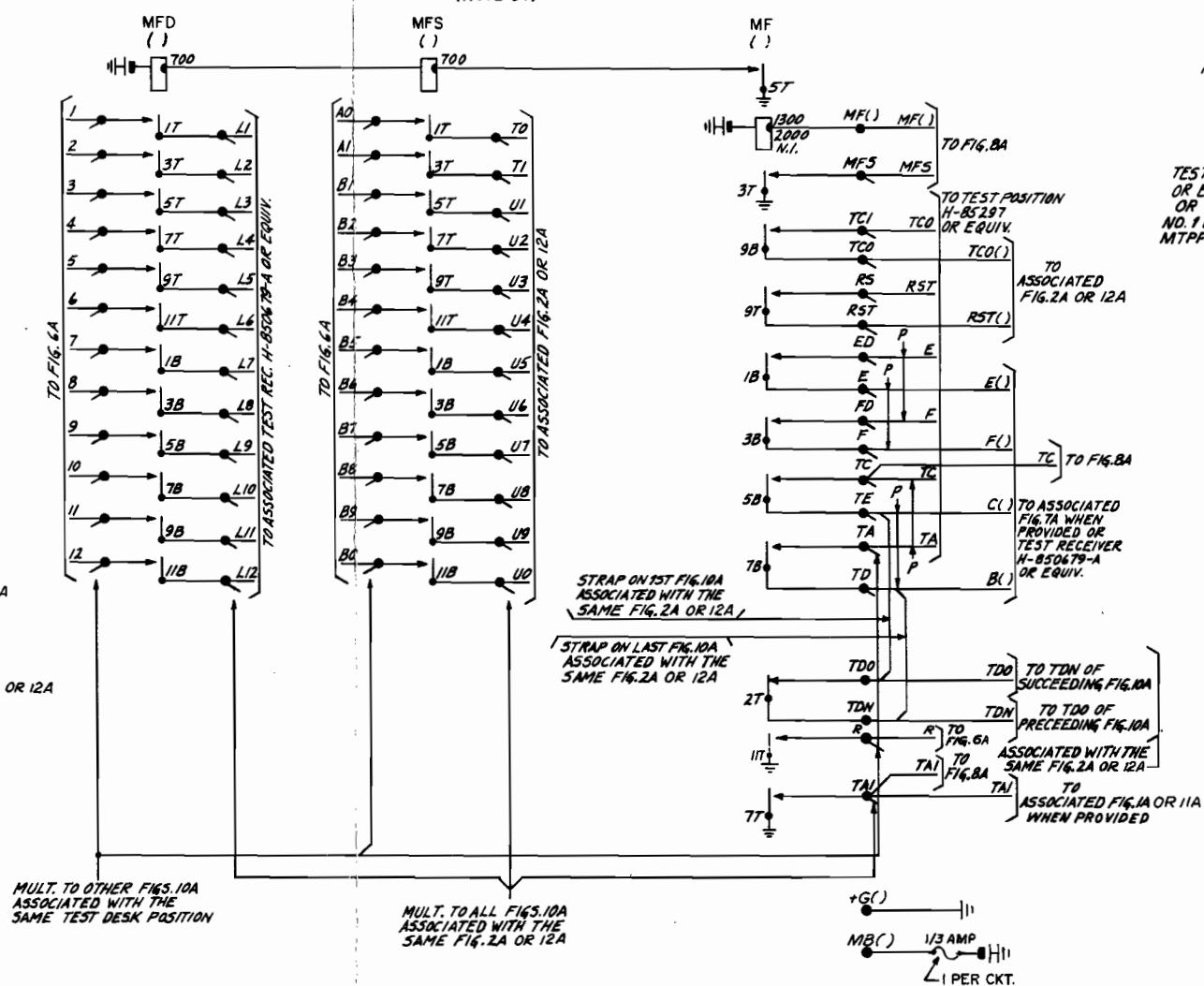


H-860678-A	TA1	MF1	DT1	DR1	SL1	MF	TC	•	(1)
	TA2	MF2	DT2	DR2	SL2	CHA	MFS	•	
	TA3	MF3	DT3	DR3	SL3	MFL	•	•	
	TA4	MF4	DT4	DR4	SL4	TF	•	•	
	TA5	MF5	DT5	DR5	SL5	SW	•	•	(5)
	TA6	MF6	DT6	DR6	SL6	RS	•	•	
	TA7	MF7	DT7	DR7	SL7	DT	•	•	
	TA8	MF8	DT8	DR8	SL8	DR	•	•	+G
	TA9	MF9	DT9	DR9	SL9	TB	•	•	
	TA10	MF10	DT10	DR10	SL10	•	•	•	-MB (10)

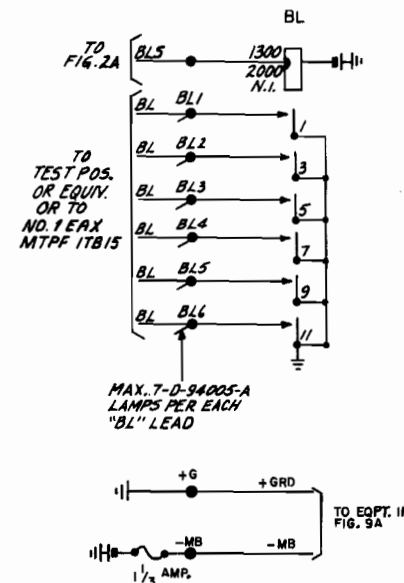
TERM. BLK. (10 X 15)
FOR 2 CKTS. OF FIG. 10A
RIGHT SIDE=INST. SIDE
(FRONT OF TERM. BLK.)

1	2	3	4	5	6	7	8	9	10	(11)
11	12	A0	A1	B1	B2	B3	B4	B5	B6	
B7	B8	B9	B0	L1	L2	L3	L4	L5	L6	
L7	L8	L9	L0	U1	U2	T1	U1	U2		
U3	U4	U5	U6	U7	U8	U9	U0		F	(15)
MF	MFS	TCI	TC0	RS	RST	ED	FD	E	F	
TC	TA	TE	TD	TD0	TDN	TAI				
1	2	3	4	5	6	7	8	9	10	
11	12	A0	A1	B1	B2	B3	B4	B5	B6	
B7	B8	B9	B0	L1	L2	L3	L4	L5	L6	(14)
L7	L8	L9	L0	U1	U2	T1	U1	U2		
U3	U4	U5	U6	U7	U8	U9	U0		R	
MF	MFS	TCI	TC0	RS	RST	ED	FD	E	F	
TC	TA	TE	TD	TD0						
TDN	TAI				+G2+G1			N32	MB1	(15)

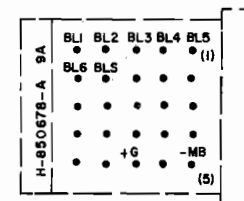
TGMF TEST DESK ACCESS CIRCUIT
(ONE FOR EACH FIG.2A OR 12A FOR EACH POSITION
(NOTE 64)



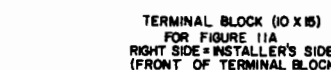
BSY LAMP DIST. CKT.
(NOTE 61)



TERMINAL BLOCK (5X5)
FOR 1 CKT. OF FIG. 9A
RIGHT SIDE=INST. SIDE
(FRONT OF TERM. BLK.)



DC	A	B	C	CS	TC	TCS	RS (ROT SW)
----	---	---	---	----	----	-----	----------------

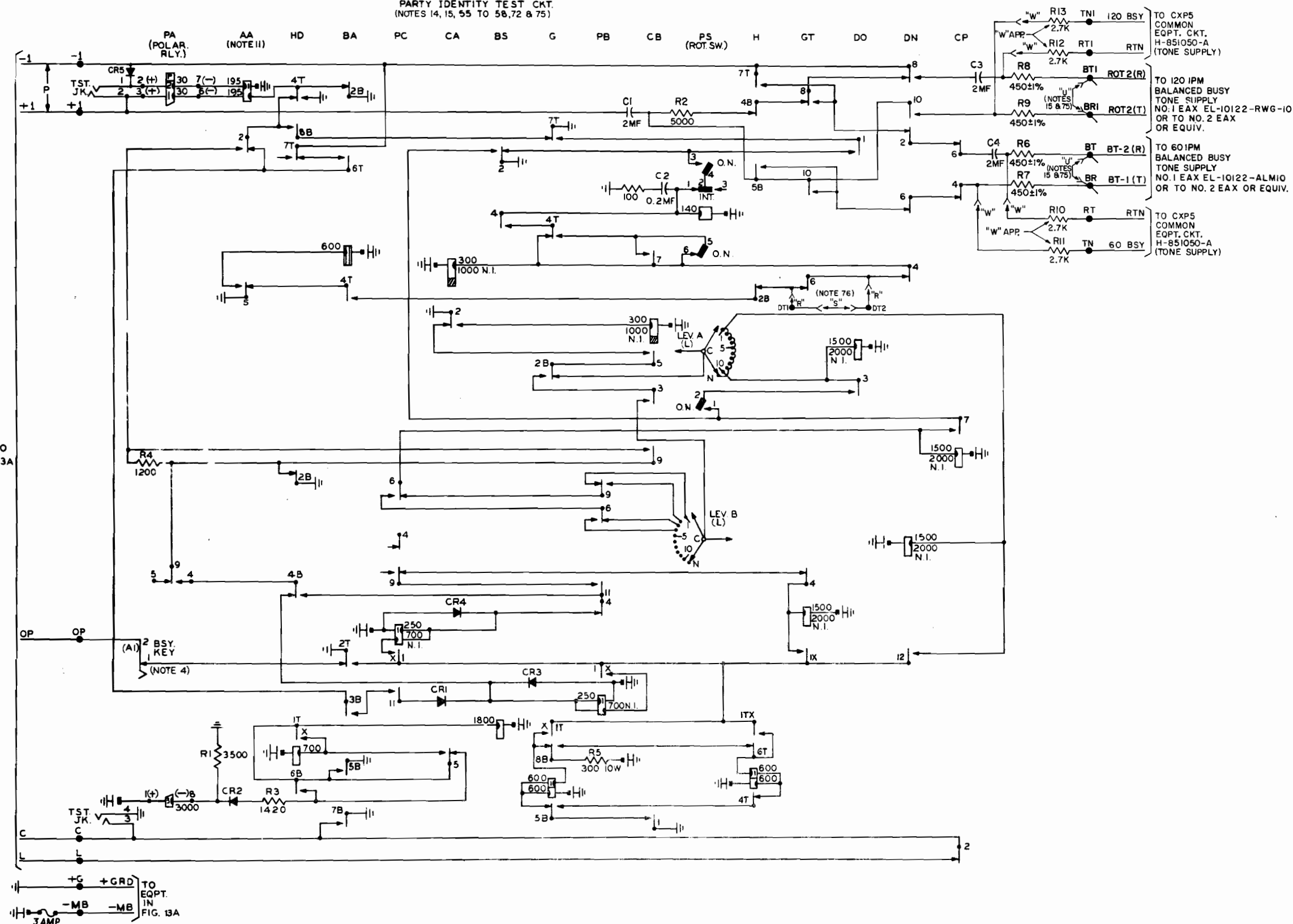


“C” —
(NOTE 69)

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FIG. 13A

PARTY IDENTITY TEST CKT.
(NOTES 14, 15, 55 TO 58, 72 & 75)



ISSUE:
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ISS: 2
ISS: 23
ISS: 24
ISS: 25
ISSUE
ISS: 2
ISS: 28
ISS: 2

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SHEET 12 OF 12

FIGS. 13A

AUTOMATIC ELECTRIC COMPANY

NORTHLAKE, ILL., U.S.A. ● GENOA, ILL., U.S.A. ○ WAUKESHA, WISC., U.S.A. ○