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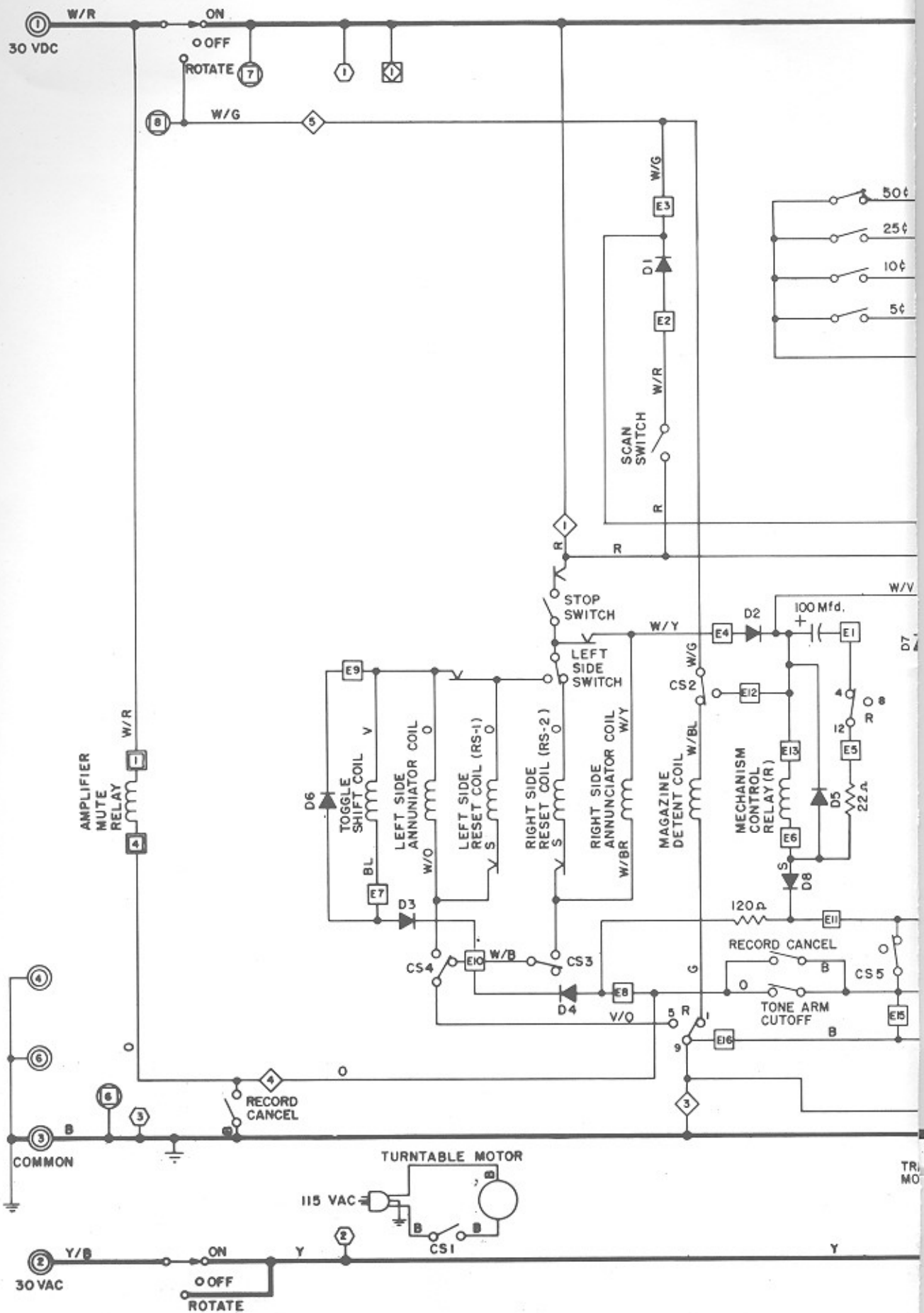
SECTION 6-SCHEMATIC & WIRING DIAGRAMS

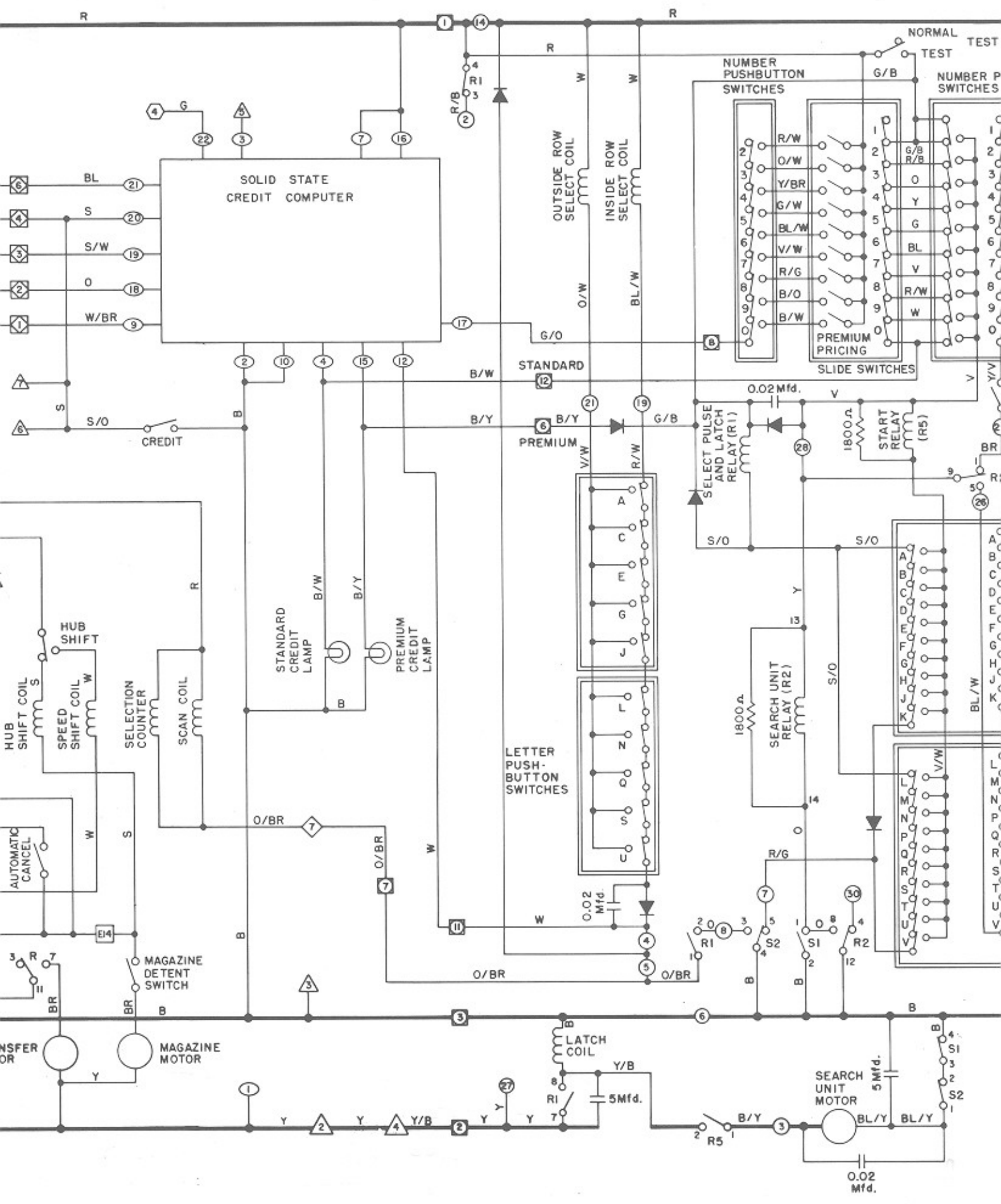
GENERAL

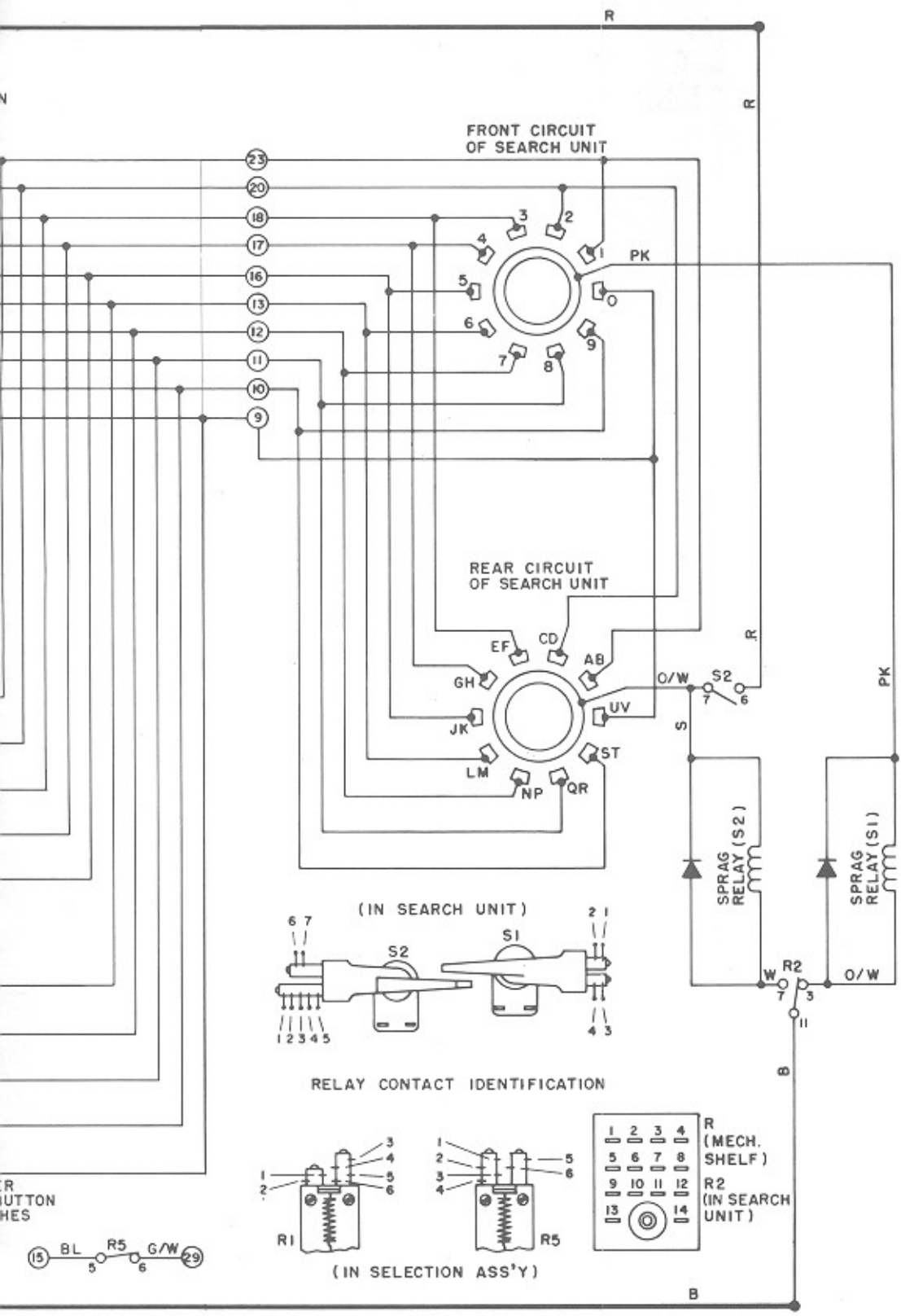
This section contains complete schematic and wiring diagrams for the phonograph and its major components and systems. Use this section in conjunction with Section 4 - Troubleshooting to isolate and correct phonograph malfunctions.

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CONNECTOR IDENTIFICATION

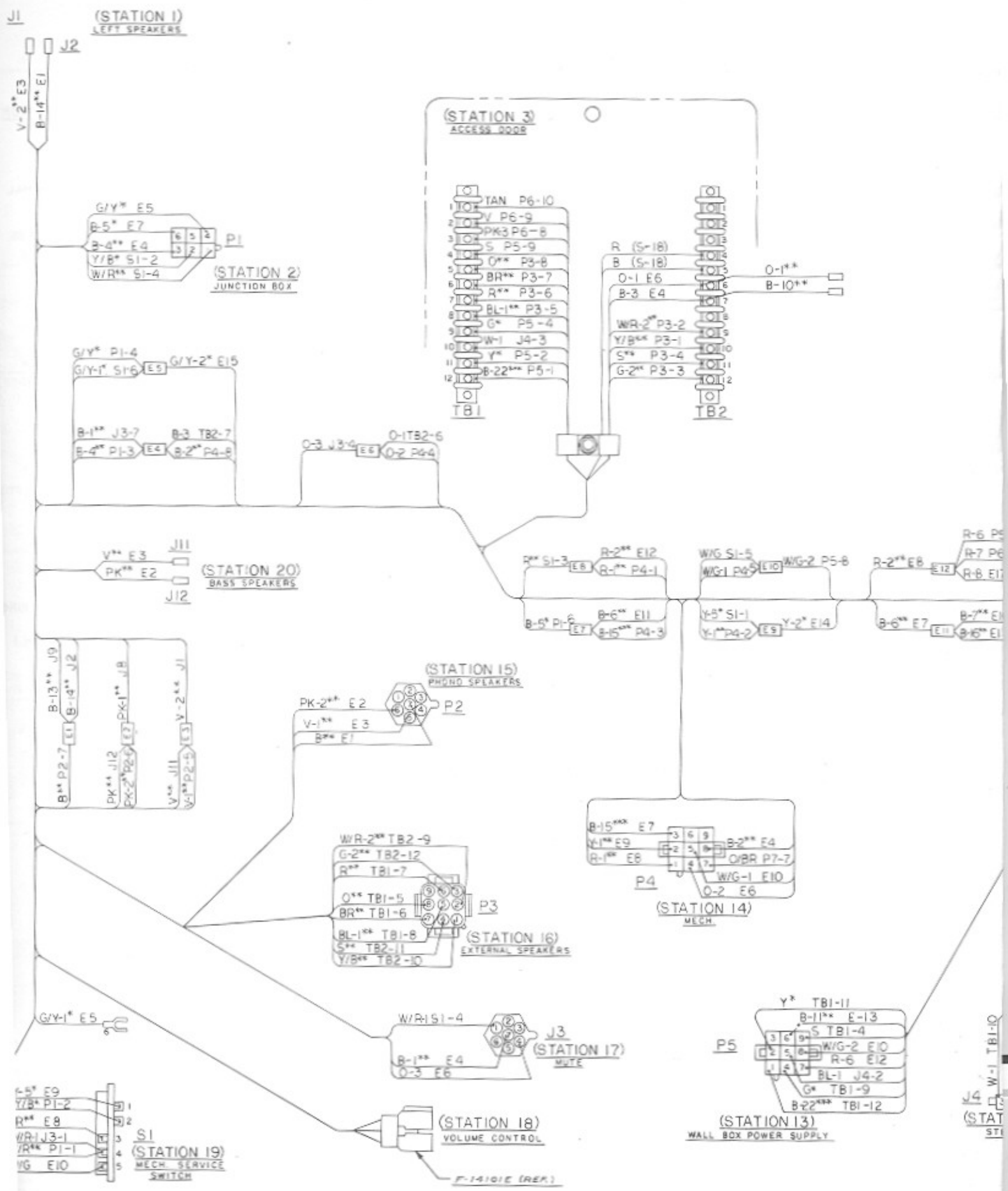
- ▲ MONEY METER
- ⊠ MECHANISM TERMINAL BOARD TERMINALS
- ◇ MAIN PHONO HARNESS TO MECHANISM
- ⊙ SEARCH UNIT EDGE CONNECTOR
- ⊠ MAIN HARNESS TO SELECTOR ASS'Y
- ⊙ CREDIT COMPUTER EDGE CONNECTOR
- ⊠ COIN SWITCHES TO MAIN HARNESS
- ⊙ MAIN HARNESS TO DOLLAR BILL ACCEPTOR
- ⊠ AMPLIFIER
- ⊙ JUNCTION BOX
- ⊠ STOP SWITCH SLIP RINGS
- CS CAM SWITCH (MECH.)
- ⊠ WALL BOX POWER SUPPLY

WIRE COLOR CODE

- B - BLACK
- BL - BLUE
- BR - BROWN
- G - GREEN
- O - ORANGE
- PK - PINK
- R - RED
- S - SLATE
- V - VIOLET
- W - WHITE
- Y - YELLOW

MODEL R-74 PHONOGRAPH SCHEMATIC DIAGRAM

FIGURE 6-1. PHONOGRAPH SCHEMATIC DIAGRAM, MODEL R-74



(STATION 1)
LEFT SPEAKERS

(STATION 3)
ACCESS DOOR

(STATION 2)
JUNCTION BOX

(STATION 20)
BASS SPEAKERS

(STATION 15)
STEREO SPEAKERS

(STATION 16)
EXTERNAL SPEAKERS

(STATION 17)
MUTE

(STATION 18)
VOLUME CONTROL

(STATION 19)
MECH. SERVICE SWITCH

(STATION 14)
MECH.

(STATION 13)
WALL BOX POWER SUPPLY

(STATION 11)
W-I TBI-0

- TBI
- 1 TOX TAN P6-10
 - 2 TOX V P6-9
 - 3 TOX PK3 P6-8
 - 4 TOX S P5-9
 - 5 TOX O** P3-8
 - 6 TOX BR** P3-7
 - 7 TOX R** P3-6
 - 8 TOX BL-1** P3-5
 - 9 TOX G* P5-4
 - 10 TOX W-1 J4-3
 - 11 TOX Y* P5-2
 - 12 TOX B-22** P5-1

- TB2
- R (S-18)
 - B (S-18)
 - O-1 E6
 - B-3 E4
 - WR-2** P3-2
 - Y/B** P3-1
 - S** P3-4
 - G-2** P3-3

J1
V-2** E3
B-14** E1
J2

- S1
- 1 C-5* E9
 - 2 Y/B* P1-2
 - 3 R** E8
 - 4 WR-1 J3-1
 - 5 Y/B** P1-1
 - 6 VG E10

- B-13** J9
- B-14** J2
- B** P2-7
- PK** J12
- PK-2** P2-5
- V** J11
- V** P2-5

- P1
- G/Y* E5
 - B-5* E7
 - B-4** E4
 - Y/B* S1-2
 - W/R** S1-4

- G/Y* P1-4
- G/Y-1* S1-5
- G/Y-2* E15
- B-1** J3-7
- B-3 TB2-7
- B-4** P1-3
- B-2** P4-8

- O-3 J3-4
- O-1 TB2-6
- O-2 P4-4

- J11
- V** E3
 - PK** E2
- J12

- P2
- PK-2** E2
 - V-1** E3
 - B** E1

- P3
- WR-2** TB2-9
 - G-2** TB2-12
 - R** TBI-7
 - O** TBI-5
 - BR** TBI-6
 - BL-1** TBI-8
 - S** TB2-11
 - Y/B** TB2-10

G/Y-1* E5

- J3
- W/R-1 S1-4
 - B-1** E4
 - O-3 E6

- R** S1-3
- R-2** E12
- R-1** P4-1
- W/G S1-5
- W/G-1 P6-5
- W/G-2 P5-8
- R-2** E8
- R-6 P5
- R-7 P6
- R-B E11
- B-5* P1-6
- B-6** E11
- B-5** P4-3
- Y-5* S1-1
- Y-1** P4-2
- Y-2* E14
- B-6** E7
- B-7** E11
- B-6** E11

- P4
- B-15** E7
 - Y-1** E9
 - R-1** E8
 - B-2** E4
 - O/BR P7-7
 - W/G-1 E10
 - O-2 E6

- P5
- Y* TBI-11
 - B-11** E-13
 - S TBI-4
 - W/G-2 E10
 - R-6 E12
 - BL-1 J4-2
 - G* TBI-9
 - B-22** TBI-12

F-14101E (REP.)

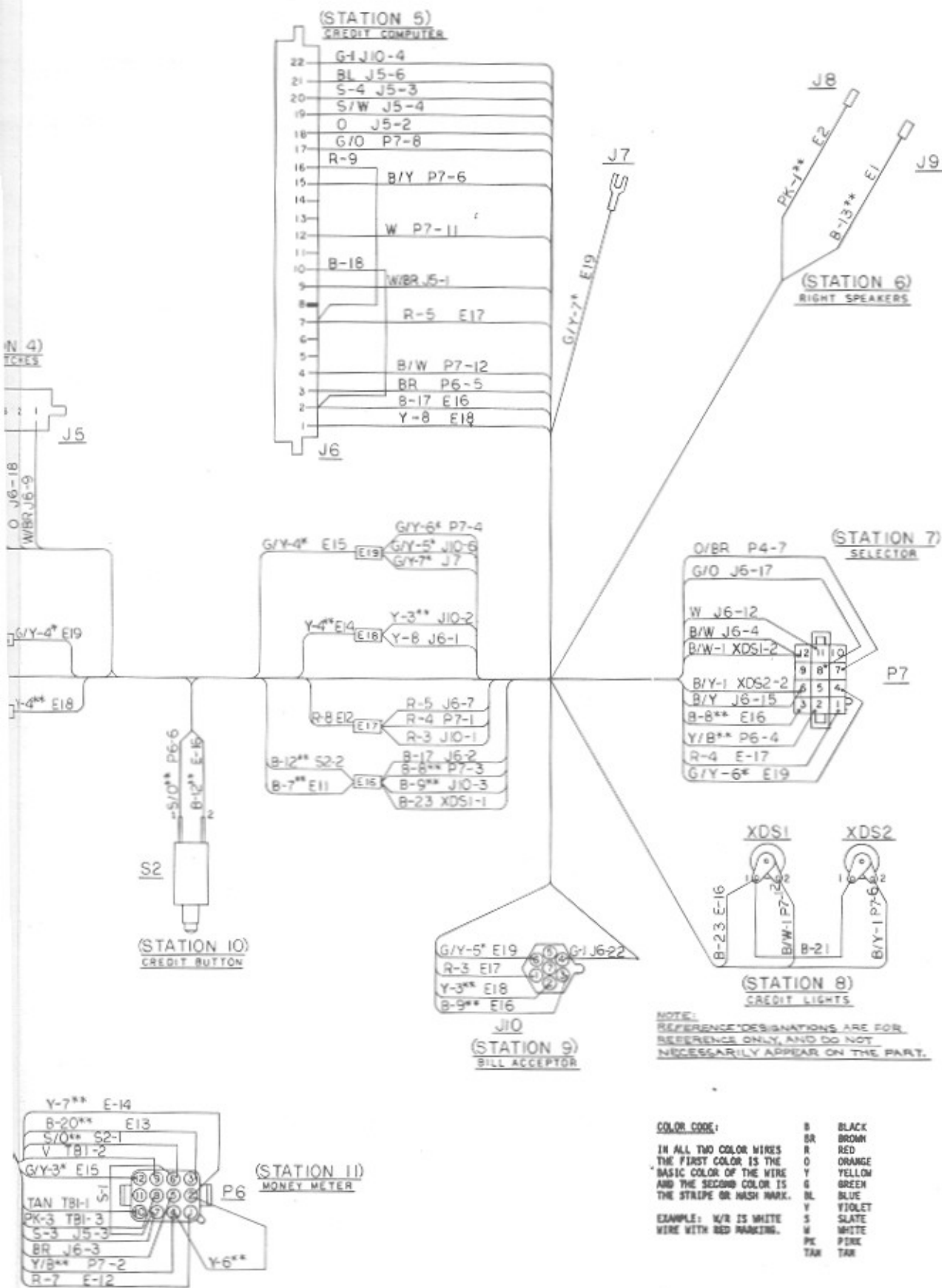
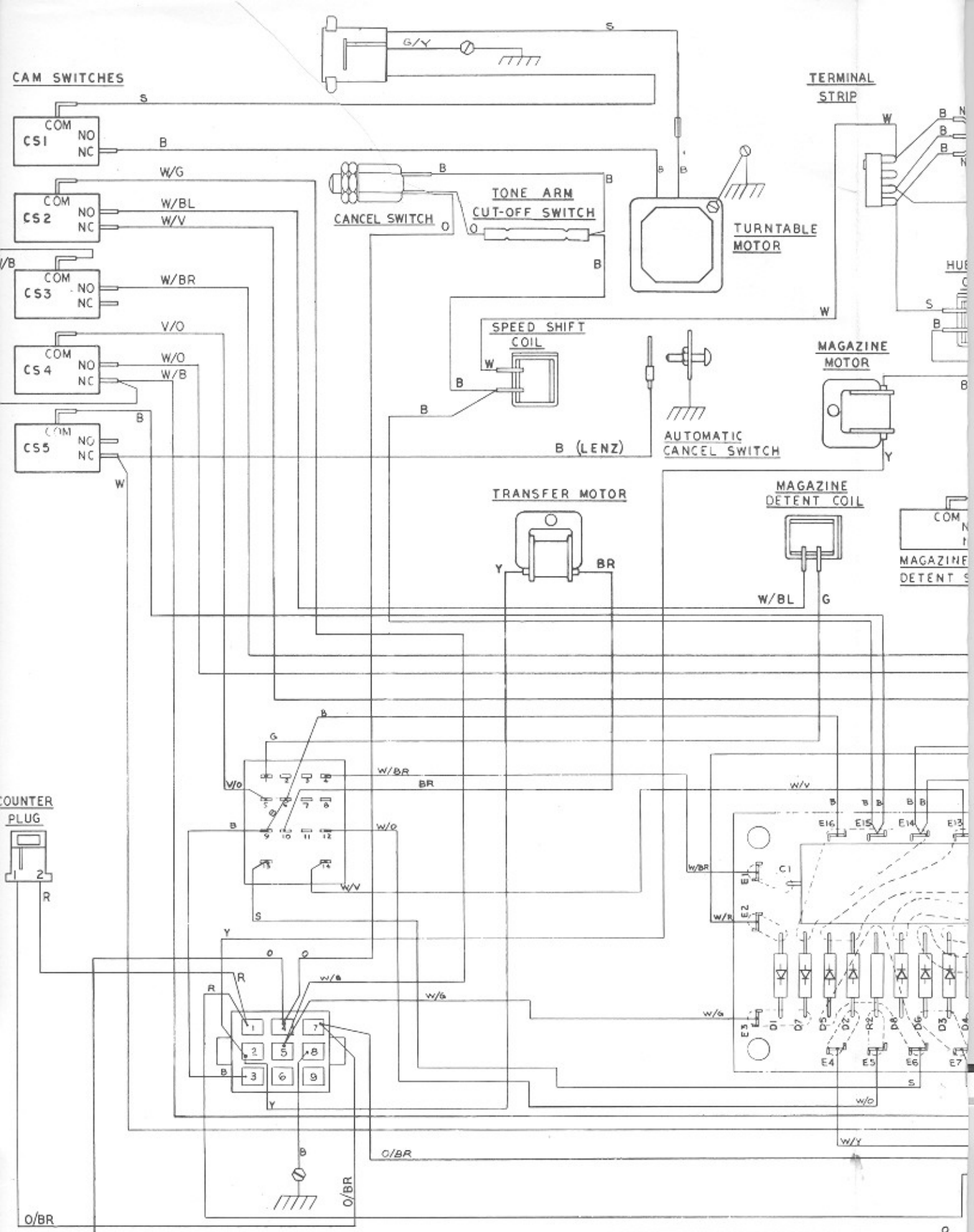
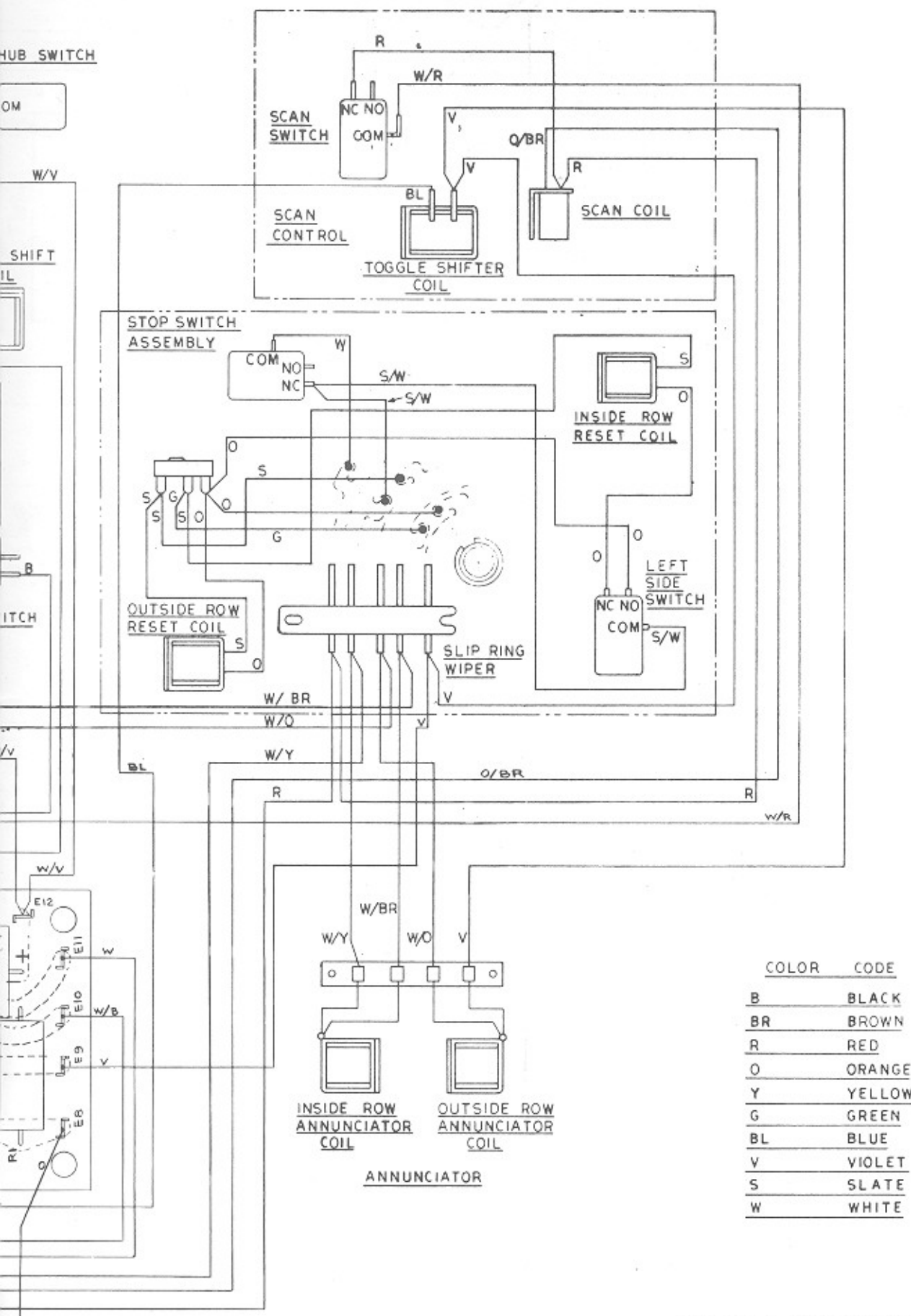


FIG-2
PHONO HARNESS DIAGRAM



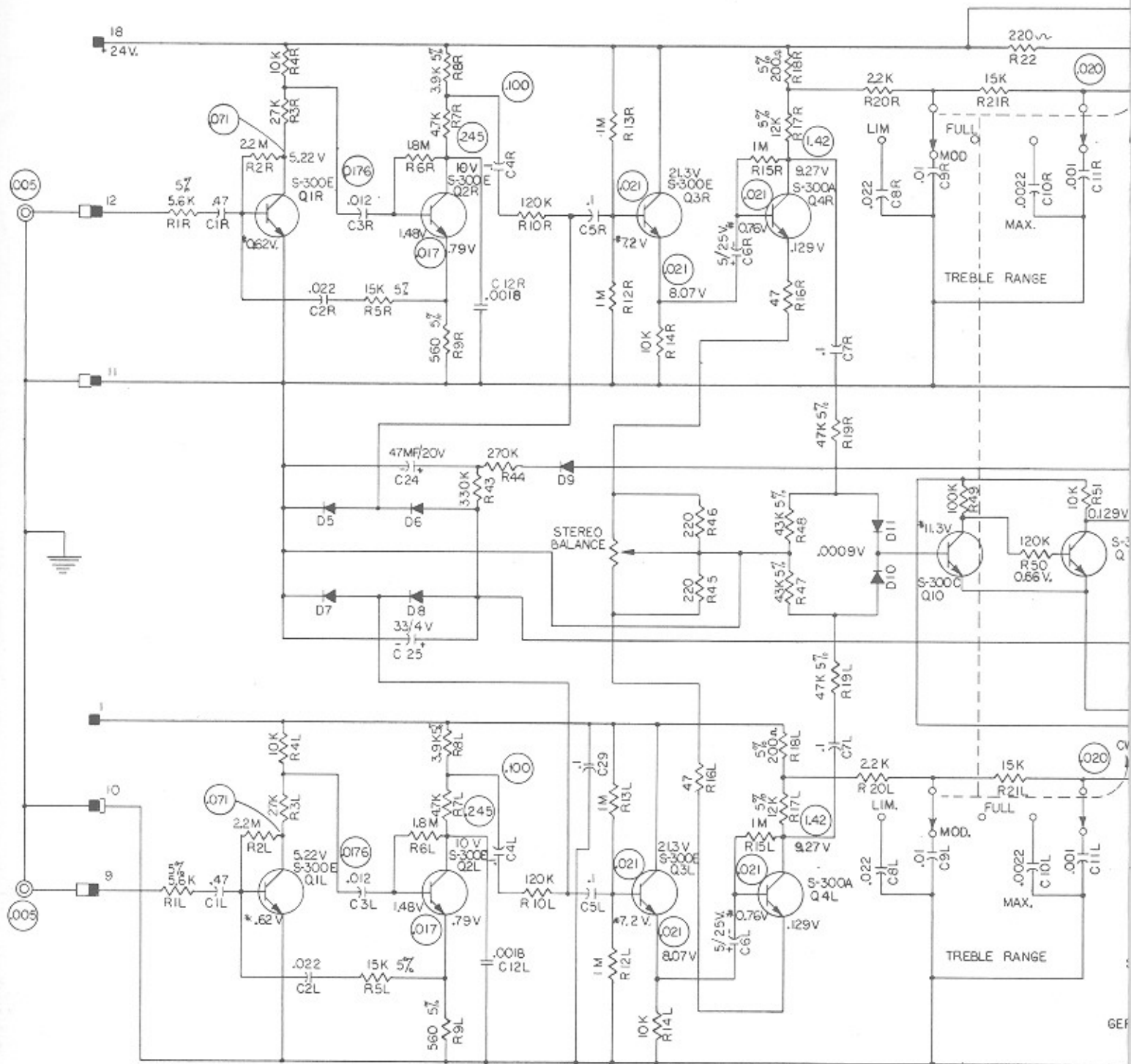


COLOR	CODE
B	BLACK
BR	BROWN
R	RED
O	ORANGE
Y	YELLOW
G	GREEN
BL	BLUE
V	VIOLET
S	SLATE
W	WHITE

IN ALL TWO COLOR WIRES, THE FIRST COLOR IS THE BASIC COLOR OF THE WIRE AND THE SECOND COLOR IS THE STRIPE OR HASH MARK.

EXAMPLE: WIR IS WHITE WIRE WITH RED MARKING.

FIGURE 6-3. RECORD CHANGER WIRING DIAGRAM



NOTE:

CAPACITOR RATINGS ARE 100 V. MIN. UNLESS OTHERWISE SPECIFIED.
 CAPACITOR VALUES ARE IN μ F. UNLESS OTHERWISE SPECIFIED.
 A.C. SIGNAL VOLTAGE READINGS ARE ENCIRCLED & MEASURED TO CHASSIS WITH AN A.C. VTVM.
 THE SIGNAL FREQUENCY IS 1 KC. VOLUME CONTROL AT MAX.
 TREBLE RANGE CONTROL AT FULL & BASS BOOST AT MIN.
 ALL RESISTORS ARE 1/2 WATT & 10% TOL. UNLESS OTHERWISE SPECIFIED.
 D.C. VOLTAGES ARE AS INDICATED BY A 11 MEG OHM VTVM & ARE APPROXIMATE FOR A 20,000 OHMS PER VOLT METER.
 NO INPUT SIGNAL.
 * INDICATES VOLTAGE SEVERELY AFFECTED BY LOADING OF 20,000 OHMS PER VOLT METER.
 FOR ASS'Y. SEE DWG. B-3758 B

COMPONENT REF IDENTIFICATION	DESCRIPTION	QTY	ROWE PART NO.
PRE-AMPLIFIER ASSEMBLY (2 WIRE VOLUME CONTROL) 602-03758			
R, C1L	Capacitor, Mylar, 0.47 MFD, 100V		701-00240
R, C2L	Capacitor, Mylar, 0.022 MFD, 100V		702-00241
R, C3L	Capacitor, Mylar, 0.012 MFD, 100V		703-00241
R, C4L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C5L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C6L	Capacitor, Electrolytic, 5MFD, 25V		702-00233
R, C7L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C8L	Capacitor, Mylar, 0.022 MFD, 100V		704-00240
R, C9L	Capacitor, Mylar, 0.01 MFD, 100V		707-00240
R, C10L	Capacitor, Ceramic Disc, 0.0022 MFD, 100V		703-00224
R, C11L	Capacitor, Ceramic Disc, 0.001 MFD, 100V		702-00224
R, C12L	Capacitor, Ceramic Disc, 0.0018 MFD, 100V		712-00224
R, C13L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C14L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C15L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C16L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C17L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C18L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C19L	Capacitor, Mylar, 0.0047 MFD, 100V		716-00240
R, C20L	Capacitor, Mylar, 0.01 MFD, 100V		707-00240
R, C21L	Capacitor, Mylar, 0.033 MFD, 100V		710-00240
R, C22L	Capacitor, Ceramic Disc, 0.0047 MFD, 100V		704-00224
R, C23L	Capacitor, Electrolytic, 5 MFD, 25V		702-00233
	Capacitor, Tantalum, 47 MFD, 15V		702-00251
		Alternate	702-00250
	Capacitor, Tantalum, 33 MFD, 4V		701-00251
		Alternate	701-00250
	Capacitor, Electrolytic, 100 MFD, 25V		706-00233
	Capacitor, Mylar, 0.1 MFD		702-00240
	Capacitor, Electrolytic, 5 MFD, 25V		702-00233
	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, D1L	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
R, D2L	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
R, D3L	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
R, D4L	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Germanium, (1N191, ITT, Sylvania, Gen'l Instr.)		701-00351
R, R1L	Resistor, Carbon, 5.6K \pm 5%, 1/2 W		718-00106
R, R2L	Resistor, Carbon, 2.2 Meg, 1/2 W		704-00102
R, R3L	Resistor, Carbon, 27 K, 1/2 W		724-00104
R, R4L	Resistor, Carbon, 10 K, 1/2 W		713-00102
R, R5L	Resistor, Carbon, 15 K \pm 5%, 1/2 W		716-00106
R, R6L	Resistor, Carbon, 1.8 Meg, 1/2 W		708-00121
R, R7L	Resistor, Carbon, 4.7K, 1/2 W		708-00104
R, R8L	Resistor, Carbon, 3.9K \pm 5%, 1/2 W		725-00104
R, R9L	Resistor, Carbon, 560 Ohm \pm 5%, 1/2 W		703-00104
R, R10L	Resistor, Carbon, 120 K, 1/2 W		703-00106
R, R12L	Resistor, Carbon, 1 Meg, 1/2 W		706-00102
R, R13L	Resistor, Carbon, 1 Meg, 1/2 W		706-00102

COMPONENT REF
DESIGNATION

DESCRIPTION

ROWE
PART NO.

R14R, R14L	Resistor, Carbon, 10 K, 1/2 W	713-00102
R15R, R15L	Resistor, Carbon, 1 Meg, 1/2 W	706-00102
R16R, R16L	Resistor, Carbon, 47 Ohm, 1/2 W	708-00120
R17R, R17L	Resistor, Carbon, 12 K 5%, 1/2 W	714-00107
R18R, R18L	Resistor, Carbon, 200 Ohm \pm 5%, 1/2 W	701-00109
R19R, R19L	Resistor, Carbon, 47 K \pm 5%, 1/2 W	701-00102
R20R, R20L	Resistor, Carbon, 2.2 K, 1/2 W	710-00102
R21R, R21L	Resistor, Carbon, 15 K, 1/2 W	708-00106
R22	Resistor, Carbon, 220 Ohm, 1/2 W	711-00106
R23R, R23L	Resistor, Carbon, 150 K, 1/2 W	702-00102
R24R, R24L	Resistor, Carbon, 150 K, 1/2 W	702-00102
R25R, R25L	Resistor, Carbon, 1 Meg, 1/2 W	706-00102
R26R, R26L	Resistor, Carbon, 68 Ohm, 1/2 W	719-00102
R27R, R27L	Resistor, Carbon, 4.7 K 1/2 W	708-00104
R28R, R28L	Resistor, Carbon, 220 K, 1/2 W	707-00102
R29R, R29L	Resistor, Carbon, 1 Meg, 1/2 W	706-00102
R30R, R30L	Resistor, Carbon, 1 Meg, 1/2 W	706-00102
R31R, R31L	Resistor, Carbon, 68 Ohm, 1/2 W	719-00102
R32R, R32L	Resistor, Carbon, 4.7 K, 1/2 W	708-00104
R33R, R33L	Resistor, Carbon, 1 Meg, 1/2 W	706-00102
R34R, R34L	Resistor, Carbon, 220 K, 1/2 W	707-00102
R36R, R36L	Resistor, Carbon, 150K, 1/2 W	702-00102
R38R, R38L	Resistor, Carbon, 270 K, 1/2 W	704-00107
R39R, R39L	Resistor, Carbon, 33 K, 1/2 W	707-00106
R41R, R41L	Potentiometer, Linear, 10 K (Stackpole No. 20C; CTS No. X-201) with Resistor, Carbon, 6.8 K, 1/2 W	705-00400 718-00104
R42R, R42L	Resistor, Carbon, 4.7 K, 1/2 W	708-00104
R43	Resistor, Carbon, 330 K, 1/2 W	712-00102
R44	Resistor, Carbon, 270 K, 1/2 W	704-00107
R45, R46	Resistor, Carbon, 220 Ohm, 1/2 W	711-00106
R47, R48	Resistor, Carbon, 43 K \pm 5%, 1/2 W	722-00120
R49	Resistor, Carbon, 100 K, 1/2 W	718-00102
R50	Resistor, Carbon, 120 K, 1/2 W	703-00106
R51	Resistor, Carbon, 10 K, 1/2 W	713-00102
R52	Potentiometer, Linear, 200 Ohm	200-13023
R56	Resistor, Carbon, 390 K, 1/2 W	722-00106
R57	Resistor, Carbon, 15 Ohm, 1/2 W	702-00120
R58	Resistor, Carbon, 15 K, 1/2 W	708-00106
R59	Resistor, Carbon, 18 K, 1/2 W	708-00102
R60	Resistor, Carbon, 22 K, 1/2 W	711-00104
R61	Resistor, Carbon, 33 K \pm 5%, 1/2 W	714-00106
R62	Thermistor, 51 K @ 25°C (Keystone Carbon Co. No. RL2006-26900-150-S2)	701-00370
Q1R, Q1L	Transistor, Silicon, NPN (Sprague Elec. TZ-1205; Motorola SPS 1481; G.E. X32B4683)	705-00300
Q2R, Q2L	Transistor, Silicon, NPN (Sprague Elec. TZ-1205; Motorola SPS 1481; G.E. X32B4683)	705-00300
Q3R, Q3L	Transistor, Silicon, NPN (Sprague Elec. TZ-1205; Motorola SPS 1481; G.E. X32B4683)	705-00300
Q4R, Q4L	Transistor, Silicon, NPN (G.E. X32B4680; Motorola SPS6978)	701-00300
Q5R, Q5L	Transistor, Silicon, NPN (G.E. X32B4680; Motorola SPS6978)	705-00300
Q6R, Q6L	Transistor, Silicon, NPN (See Q1R)	705-00300
Q7R, Q7L	Transistor, Silicon NPN (See Q1R)	705-00300
Q8R, Q8L	Transistor, Silicon, NPN (G.E. X32B4682; Motorola SPS6979)	702-00300
Q9R, Q9L	Transistor, Silicon, NPN (G.E. X32B4686; Motorola SPS6980)	703-00300
Q10	Transistor, Silicon, NPN (G.E. X32B4686; Motorola SPS6980)	703-00300
Q11	Transistor, Silicon, NPN (See Q8R)	702-00300

MISCELLANEOUS PARTS

Switch, Rotary, 4 Pole, 3 Position, Non-Shorting (Treble Range Control)	200-13024
Switch, Rotary, 2 Pole, 3 Position, Non-Shorting, (Stereo Balance)	200-13025
Circuit Board, Pre-Amplifier	602-03788

FIGURE 6-4. PRE-AMPLIFIER SCHEMATIC DIAGRAM

COMPONENT REF
DESIGNATION

DESCRIPTION

ROWE
PART NO.

64W POWER AMPLIFIER 601-02193

C1, C2	Capacitor, Electrolytic, 2500 MFD, 50V	201-15181
C3, C4	Capacitor, Electrolytic, 500 MFD, 25V(Sprague No.43D; Mallory No.TT;G.E. No.76F)	711-00233
C5	Capacitor, Tantalum, 2.2 MFD, 35V(Sprague No.196D, 198D;Mallory No.TDC; Kemet No.T362)	712-00251
C6	Capacitor, Mylar, 0.1 MFD; 400V(Paktron Type MB; Sprague Type 225P, 418P; Electromotive No.P92242-1)	701-00213
CB-1	Circuit Breaker, 2 Amp(ETA Products Co. Series 41-06-P30-1125)	715-00733
CR1 to CR4	Diode, Silicon(Motorola No. MR 752)	710-00350
K1	Relay (Potter and Brumfield No.KH4487-1)	200-12751
Q1, Q3	Transistor, Darlington Amplifier, Silicon, NPN(Motorola No.MJE6044)	704-00302
Q2, Q4	Transistor, Darlington Amplifier, Silicon, PNP(Motorola No. MJE6041)	705-00302
R1	Resistor, Carbon, 10K, 1/2W	713-00102
T1	Transformer, Power	401-06317
Z2	Integrated Circuit, Linear, Voltage Regulator(Fairchild No.UA7824;Motorola No.MC7824CP)	702-00365

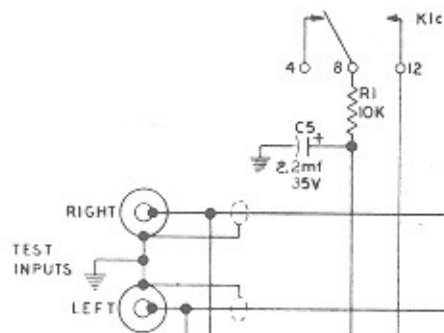
MISCELLANEOUS PARTS

	Cord and Plug Assembly	702-00502
	Strain Relief	705-02322
	Retaining Bracket(Pre-Amp Edge Connector) (2 Req'd)	200-09295
	Heat Sink	401-06321
	Insulator, Mica (4 Req'd)	201-15196
	Washer Torque (4 Req'd)	201-15197
	Eyelet (2 Req'd)	207-03709
	Washer (2 Req'd)	720-01208
	Chassis Assembly with Lettering	601-02192
	Circuit Board Support	705-05000

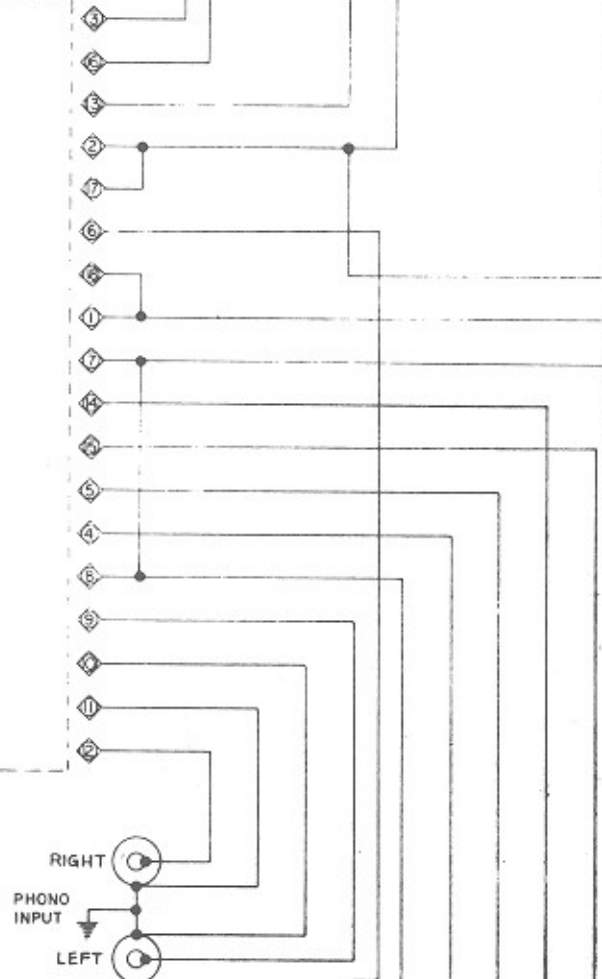
DRIVER BOARD ASSEMBLY 403-06316

C1, C2	Capacitor, Tantalum, 47 MFD, 15V (Sprague 196D; Mallory TDC; ITT TAG, TAP	702-00251
C3	Capacitor, Mylar, 0.01 MFD, 100V (Sprague 225P. Paktron FM720; Amperex C280)	707-00240
C4, C5	Capacitor, Tantalum, 47 MFD, 15V (See C1)	702-00251
C6	Capacitor, Ceramic Disc, 470 MFD, 100V (Sprague, Centralab, Skottie Elect; Radio Mat'l Corp.)	701-00224
C7	Capacitor, Electrolytic, 100 MFD, 50V (Sprague 43D; Mallory TCW)	719-00233
C8	Capacitor, Electrolytic, 5 MFD, 50V (Sprague 30D; Mallory TT; Collins ASD; G.E. 76F)	703-00233
C9	Capacitor, Ceramic Disc, 220pFD, 100V (Same Type As C6)	706-00224
C10	Capacitor, Tantalum, 47 MFD, 15V (See C1)	702-00251
C11	Capacitor, Mylar, 0.01 MFD, 100V (See C3)	707-00240
C12	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
C13	Capacitor, Tantalum, 15 MFD, 18V (Same Type As C1)	705-00251
C14	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
C15	Capacitor, Ceramic Disc, 220 pFD, 100V (Same Type As C6)	706-00224
C16	Capacitor, Ceramic Disc, 56 pFD, 100V (Same Type As C6)	720-00224

COMPONENT REF DESIGNATION	DESCRIPTION	ROW/ PART
C17	Capacitor, Tantalum, 2.2 MFD, 15V (Same Type As C1)	707-002
C18	Capacitor, Mylar, 0.22 MFD, 100V (Paktron FM1100; Amperex C280)	703-002
C19	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-002
CR1 to CR8	Diode, Silicon (1N4002, Solitron, Westinghouse, Motorola, Transitron)	702-003
CR9	Diode, Zener (1N961B, Solitron, Motorola, ITT, Transitron)	714-003
F1, F2	Fuse, Cartridge, 2 Amp (Buss No. AGC-2; Littlefuse No.312002)	701-007
Q3	Transistor, Silicon, PNP(Motorola MPS-A56; Fairchild MPS-A56)	704-003
Q4	Transistor, Silicon, NPN(Motorola MPS-A06; Fairchild MPS-A06)	708-003
Q5, Q6	Transistor, Silicon, NPN(Motorola SPS6979; Sprague TZ8630; G.E.X32B 4682)	702-003
Q7	Transistor, Silicon, Dual NPN(Motorola MD8002; 2N2919, Fairchild, Texas Instr; Nat'l Semi-Conductor)	701-003
Q8, Q9	Transistor, Silicon, PNP (See Q3)	704-003
R1, R2	Resistor, Wirewound, 0.47 Ohm, 2W (I.R.C. Type BWH)	714-001
R3	Resistor, Carbon, 180 Ohm, 1/4W	7-9900-
R4	Resistor, Carbon, 220 Ohm, 1/4W	7-9900-
R5, R6	Resistor, Carbon, 15K, 1/4W	7-9900-
R7	Resistor, Carbon, 820 Ohm, 1/4W	7-9900-
R8	Resistor, Carbon, 2.2K, 1/4W	7-9900-
R9	Resistor, Carbon, 470 Ohm, 1/4W	7-9900-
R10	Resistor, Carbon, 180 Ohm, 1/4W	7-9900-
R11	Resistor, Carbon, 390 Ohm, 1/4W	7-9900-
R12	Resistor, Carbon, 220 Ohm, 1/4W	7-9900-
R13	Resistor, Carbon, 2.7K, 1/4W	7-9900-
R14	Resistor, Carbon, 2.2K, 1/4W	7-9900-
R15	Resistor, Carbon, 4.7K, 1/4W	7-9900-
R16	Resistor, Wirewound, 0.27 Ohm, 2W	718-001
R17	Resistor, Carbon, 22 Ohm, 1W	716-001
R18	Resistor, Carbon, 470 Ohm, 1/4W	7-9900-
R19	Resistor, Carbon, 68 Ohm, 1/4W	7-9900-
R20	Resistor, Carbon, 3.3K, 1/4W	7-9900-
R21	Resistor, Carbon, 12K, 1/4W	7-9900-
R22	Resistor, Carbon, 10 MEG, 1/4W	7-9900-
R23	Resistor, Carbon, 47 Ohm, 1/4W	7-9900-
R24	Resistor, Carbon, 1K, 1/4W	7-9900-
R25	Resistor, Carbon, 5.6K, 1/4W	7-9900-
R26	Resistor, Carbon, 18K, 1/4W	7-9900-
R27	Resistor, Carbon, 1.2K, 1/4W	7-9900-
R28	Resistor, Carbon, 6.8K, 1/4W	7-9900-
Z1	Diode Assembly, Bias (Made Up of Three 711-00350 Diodes)	301-036
MISCELLANEOUS PARTS		
	Transistor Socket (4 Req'd)(Molex No.09-52-3030)	201-151
	Fuse Clip (8 Required)	200-507
	Driver Circuit Board (2 Required)	403-063



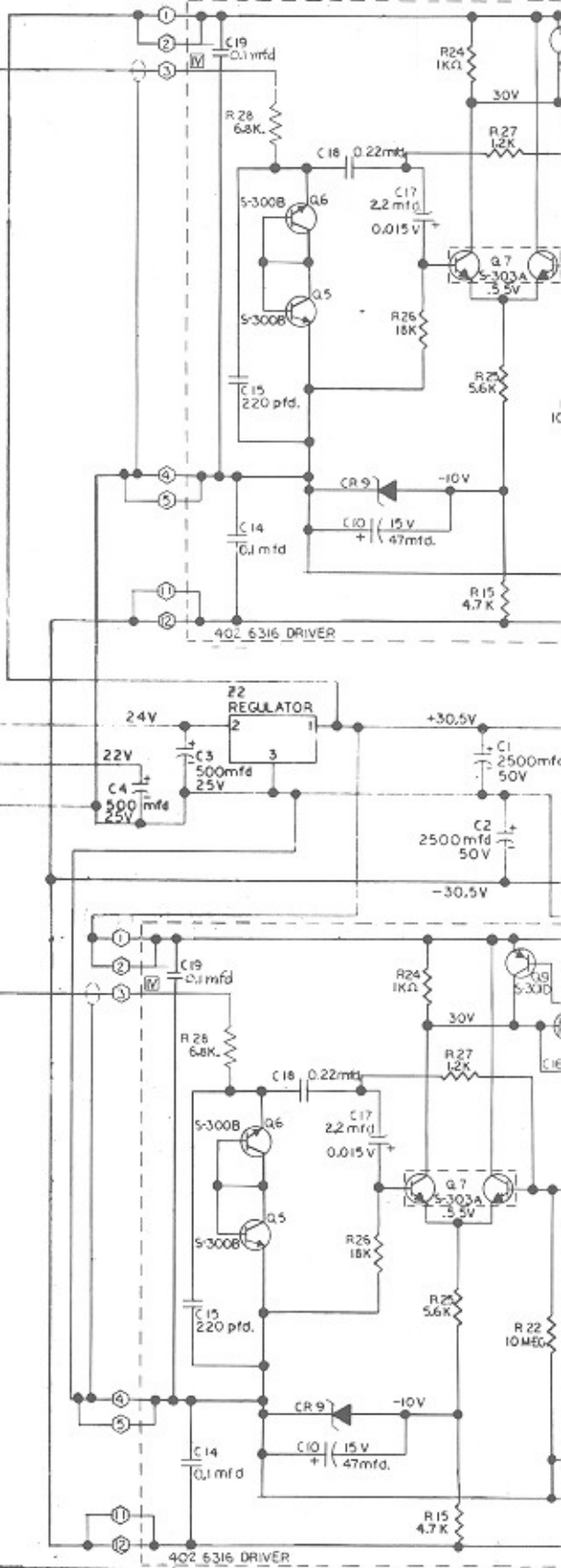
R-3758B
PRE AMP OR
R-3800 PRE AMP



NOTE:

- AC MAX SIGNAL INPUT AND OUTPUT
- ALL DC MEASUREMENTS TAKEN WITH CHASSIS COMMON AND WITH NO SIGNAL

F-13540C
R-2185A STATION 16
VOLUME CONTROL



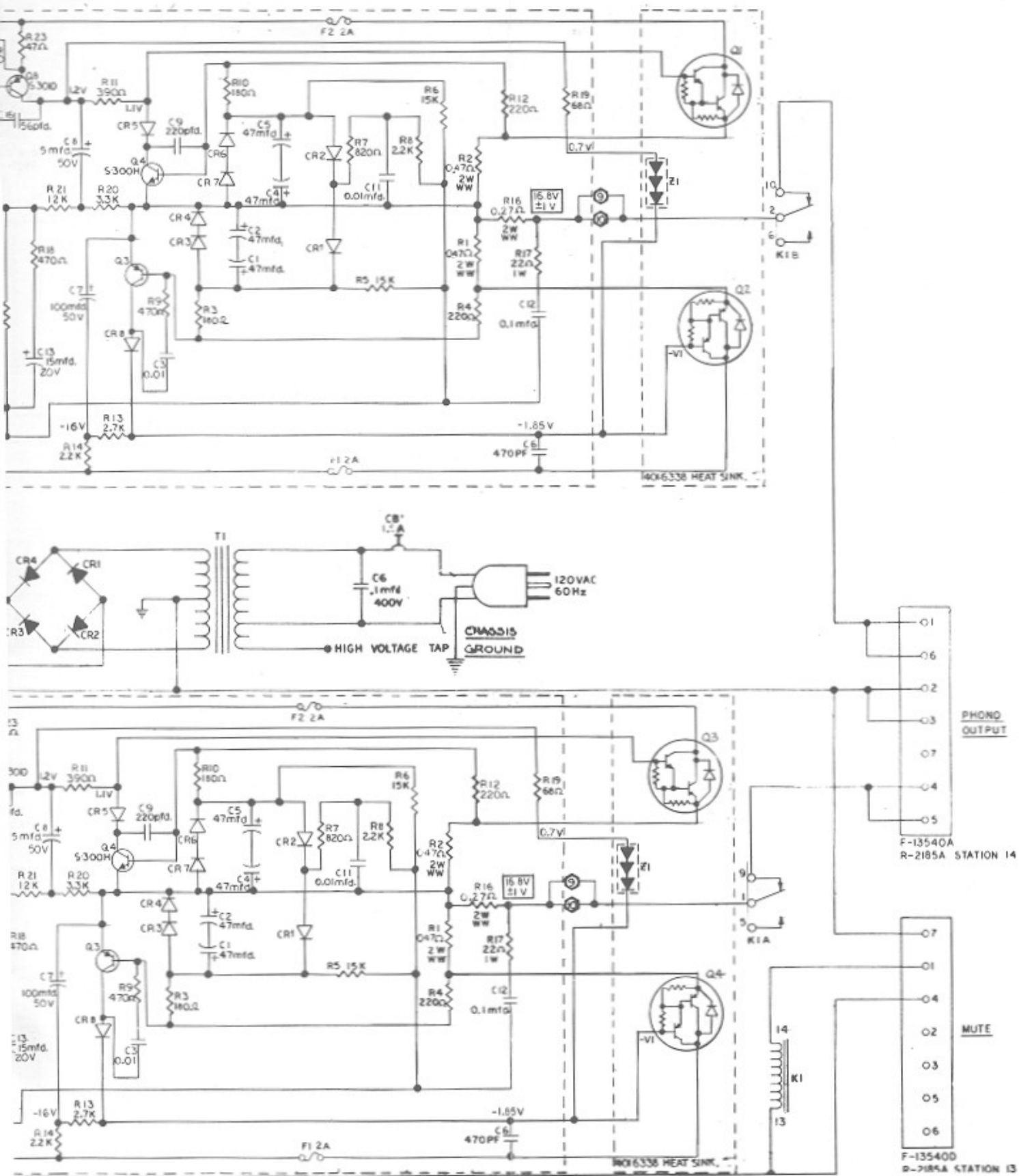
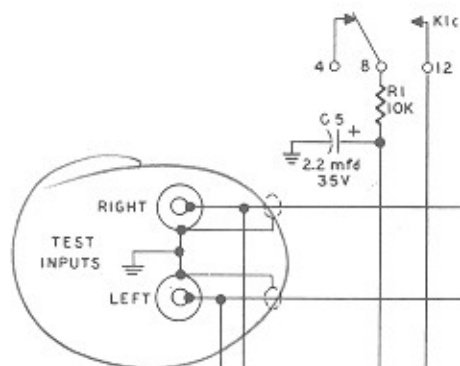
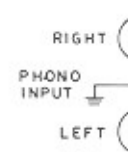
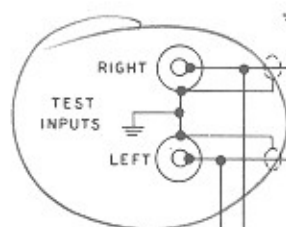


FIGURE 6-5. 64 WATT AMPLIFIER SCHEMATIC DIAGRAM



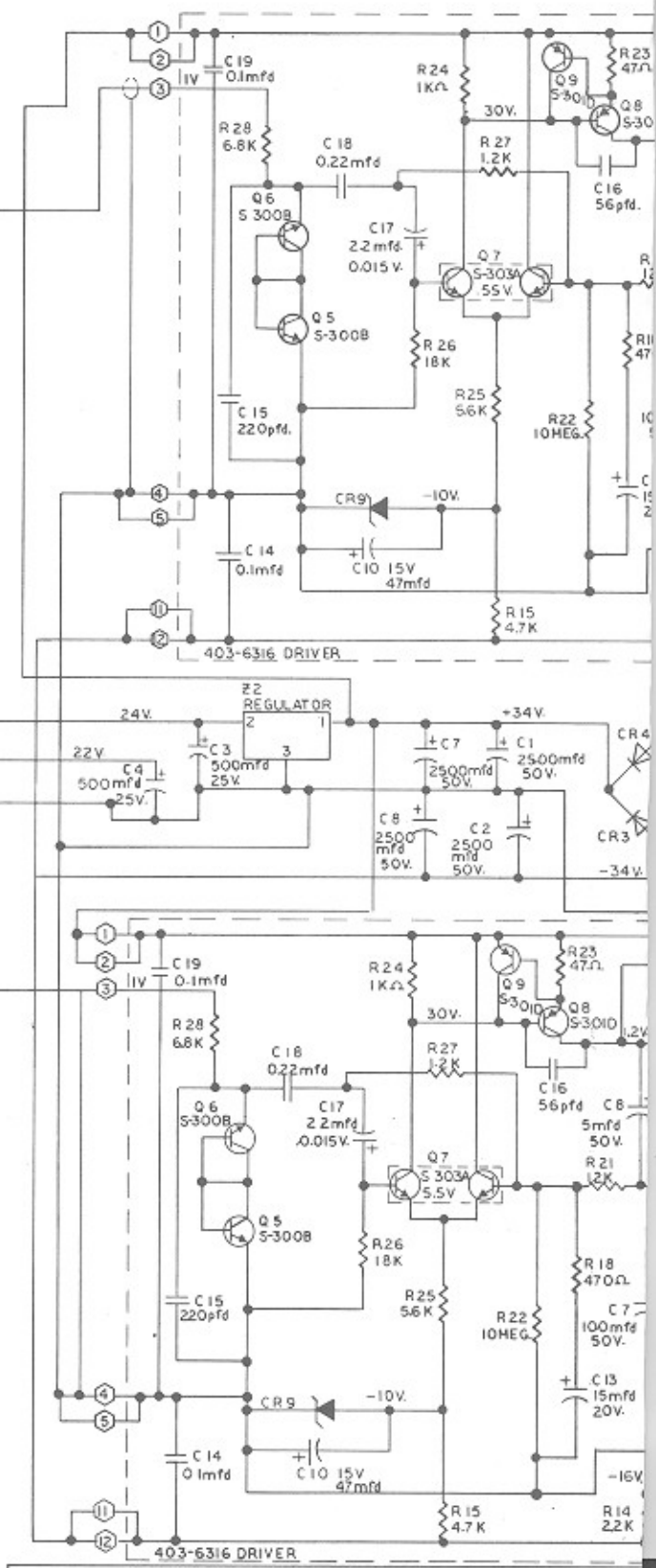
R-3758B
PRE AMP

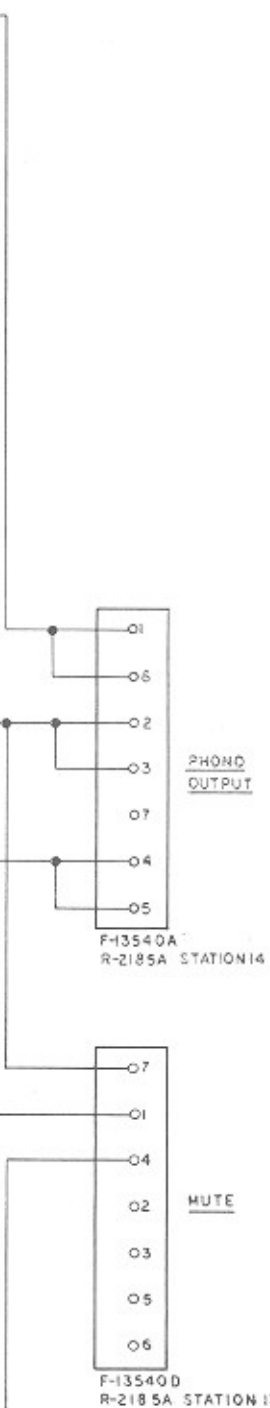
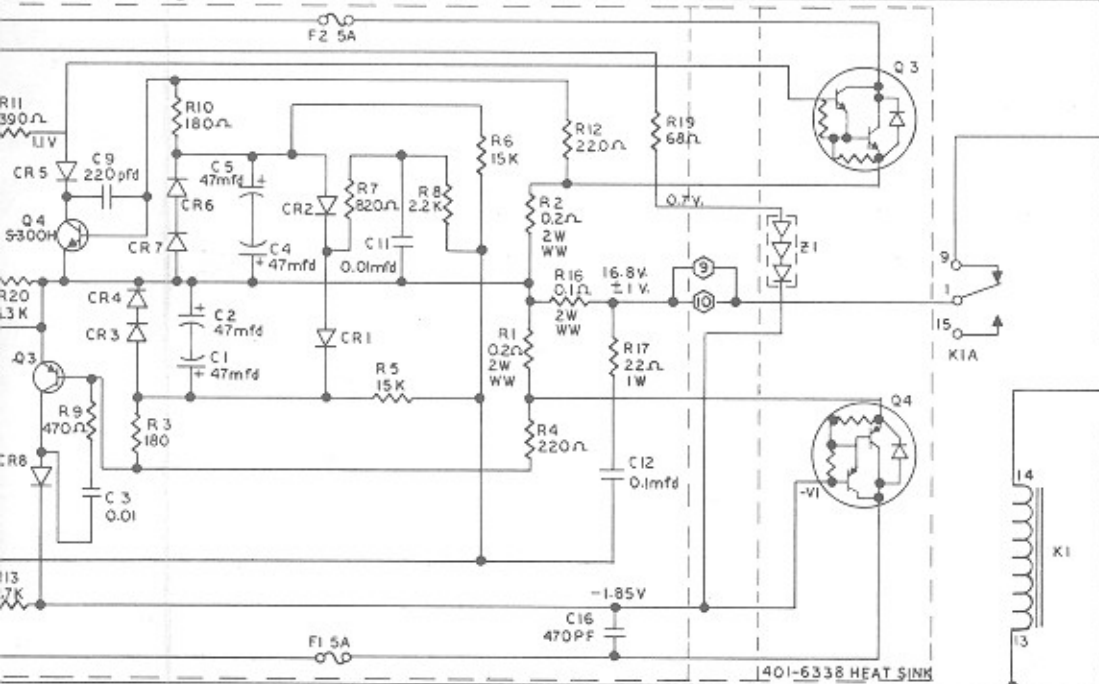
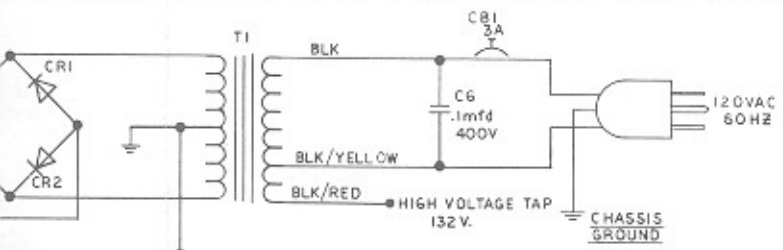
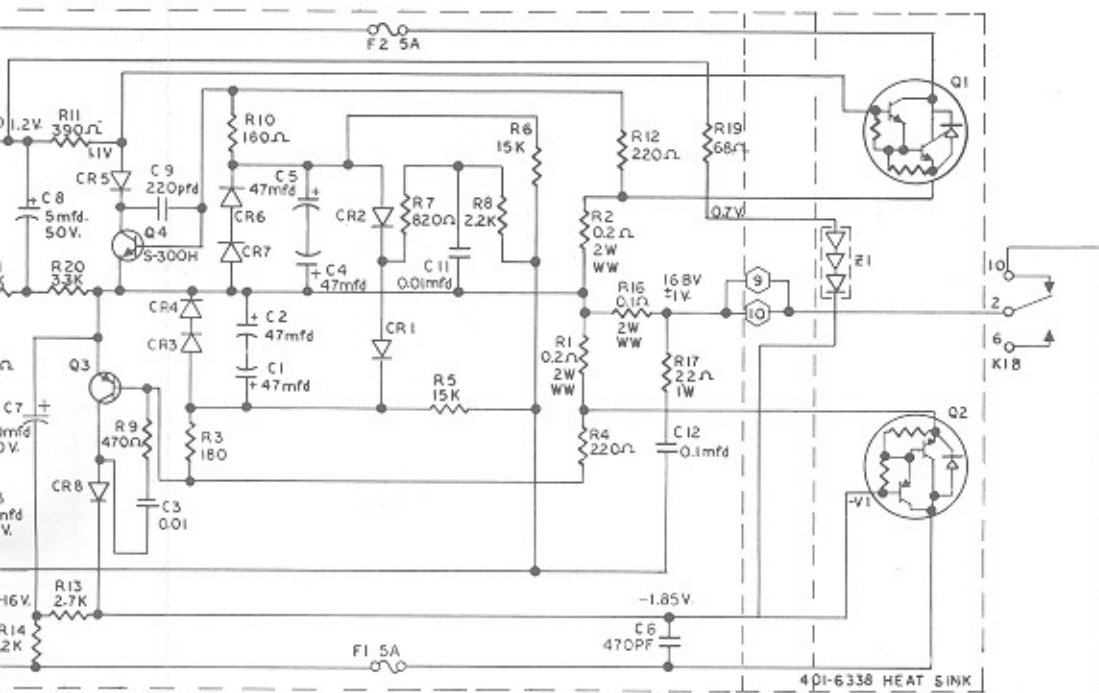


NOTE:

AC MAX SIGNAL INPUT AND OUTPUT
 ALL DC MEASUREMENTS TAKEN WITH CHASSIS COMMON AND WITH NO SIGNAL. IDLE CURRENT 20 MILLI AMPS ±25% TAKEN WITH AMMETER IN PLACE OF 5 AMP FUSE ON EITHER THE PLUS OR MINUS SUPPLY. CURRENT READINGS ON EITHER SUPPLY AT THE 5 AMP FUSE SHOULD BE EQUAL. USE HIGH VOLTAGE TAP ON T1 IF AC LINE IS 130 VOLTS OR MORE.

F-1354 0C
 R-2185A STATION 16
 VOLUME CONTROL





COMPONENT REF SIGNATION	DESCRIPTION	ROWE PART NO.
120W POWER AMPLIFIER 601-07404		
C1, C2	Capacitor, Electrolytic, 2500 MFD, 50V	201-15181
C3, C4	Capacitor, Electrolytic, 500 MFD, 25V (Sprague No. 43D; Mallory No. TT; G.E. No.76F)	711-00233
C5	Capacitor, Tantalum, 2.2 MFD, 35V (Sprague No.196D, 198D; Mallory No.TDC;Kemet No.T362)	712-00251
C6	Capacitor, Mylar, 0.1 MFD, 400V (Paktron Type MB; Sprague Type 225P, 418P; Electromotive P92242-1)	701-00213
C7, C8	Capacitor, Electrolytic, 2500 MFD, 50V	201-15181
CB-1	Circuit Breaker, 3 Amp(E.T.A. Products Co.Series 41-06-P30-1125)	717-00733
CR1 to CR4	Diode, Silicon (Motorola No. MR752)	710-00350
K1	Relay (Potter & Brumfield, No.KH-4487-1)	200-12751
R1	Resistor, Carbon, 10K, 1/2W	713-00102
T1	Transformer, Power	401-06337
Z2	Integrated Circuit, Linear, Voltage Regulator(Fairchild No.UA7824;Motorola No.MC7824CP)	702-00365
MISCELLANEOUS PARTS		
	Cord and Plug Assembly, 3 Conductor	702-00502
	Strain Relief	705-02322
	Retaining Bracket(Pre-Amplifier Edge Connector)(2 Required)	200-09295
	Circuit Board Support (8 Required)	706-05000
	Washer Flat (4 Required)	718-01208
	Harness Assembly 601-02185 Containing	
	Edge Connector, 12 Circuit (2 Req'd)(Driver Board Connectors)	204-50572
	Edge Connector, 18 Circuit (Pre-Amplifier Connector)	208-13333
	Socket, Relay	202-13782
	Housing Plug, Combo-Line, 7 Circuit (Phono Spkrs.)	201-13540
	Housing, Plug, Combo-Line, 7 Circuit, Black (Vol. Control)	203-13540
	Housing, Plug, Combo-Line, 7 Circuit, Brown (Mute)	204-13540
	Chassis Assembly with Lettering	601-07403
HEAT SINK ASSEMBLY 401-06338		
Q1, Q1	Transistor, Darlington Amplifier, Silicon, NPN,(Motorola No.MJ4031)	707-00302
Q2, Q2	Transistor, Darlington Amplifier, Silicon, NPN, (Motorola No. MJ4034)	706-00302
Z1, Z1	Diode Assembly, Bias (Made up of three 711-00350 Diodes)	301-03693
MISCELLANEOUS PARTS		
	Eyelet	206-03709
	Washer, Flat (2 Req'd)	720-01207
	Insulator (4 Req'd)	200-13189
	Connector and Cable Assembly	301-04219
	Heat Sink	401-05472
DRIVER BOARD ASSEMBLY 402-06316		
C1, C2	Capacitor, Tantalum, 47 MFD, 15V (Sprague 196D; Mallory TDC; ITT TAG, TAP)	702-00251
C3	Capacitor, Mylar, 0.01 MFD, 100V (Sprague 225P. Paktron FM720; Amperex C280)	707-00240
C4, C5	Capacitor, Tantalum, 47 MFD, 15V (See C1)	702-00251
C6	Capacitor, Ceramic Disc, 470 MFD, 100V (Sprague, Centralab, Skottie Elect; Radio Mat'l Corp.)	701-00224
C7	Capacitor, Electrolytic, 100 MFD, 50V (Sprague 43D; Mallory TCW)	719-00233
C8	Capacitor, Electrolytic, 5 MFD, 50V (Sprague 30D; Mallory TT; Collins ASD; G.E. 76F)	703-00233

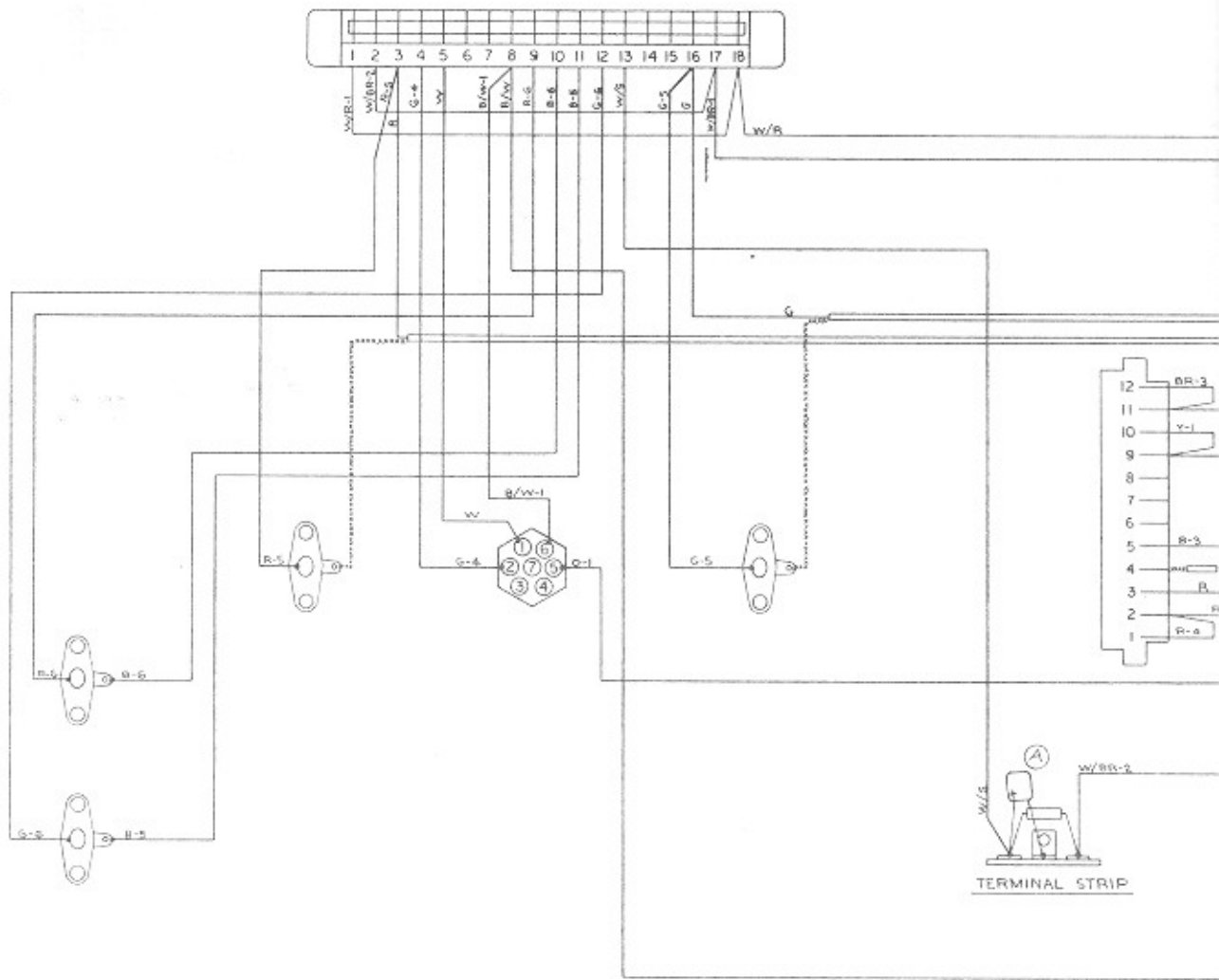
COMPONENT REF
DESIGNATION

DESCRIPTION

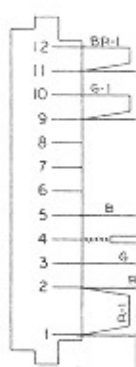
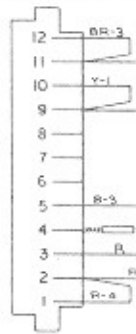
ROWE
PART NO.

C9	Capacitor, Ceramic Disc, 220pFD, 100V (Same Type As C6)	706-00224
C10	Capacitor, Tantalum, 47 MFD, 15V (See C1)	702-00251
C11	Capacitor, Mylar, 0.01 MFD, 100V (See C3)	707-00240
C12	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
C13	Capacitor, Tantalum, 15 MFD, 18V (Same Type As C1)	705-00251
C14	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
C15	Capacitor, Ceramic Disc, 220 pFD, 100V (Same Type As C6)	706-00224
C16	Capacitor, Ceramic Disc, 56 pFD, 100V (Same Type As C6)	720-00224
C17	Capacitor, Tantalum, 2.2 MFD, 15V (Same Type As C1)	707-00251
C18	Capacitor, Mylar, 0.22 MFD, 100V (Paktron FM1100; Amperex C280)	703-00240
C19	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
CR1 to CR8	Diode, Silicon (1N4002, Solitron, Westinghouse, Motorola, Transitron)	702-00350
CR9	Diode, Zener (1N961B, Solitron, Motorola, ITT, Transitron)	714-00355
F1, F2	Fuse, Cartridge, 5 Amp (Buss MTH-5)	710-00720
Q3	Transistor, Silicon, PNP(Motorola MPS-A56; Fairchild MPS-A56)	704-00301
Q4	Transistor, Silicon, NPN(Motorola MPS-A06; Fairchild MPS-A06)	708-00300
Q5, Q6	Transistor, Silicon, NPN(Motorola SPS6979; Sprague TZ8630; G.E.X32B 4682)	702-00300
Q7	Transistor, Silicon, Dual NPN(Motorola MD8002; 2N2919, Fairchild, Texas Instr; Nat'l Semi-Conductor)	701-00303
Q8, Q9	Transistor, Silicon, PNP (See Q3)	704-00301
R1, R2	Resistor, Wirewound, 0.2 Ohm (IRC Type BWH)	701-00126
R3	Resistor, Carbon, 180 Ohm, 1/4W	7-9900-181
R4	Resistor, Carbon, 220 Ohm, 1/4W	7-9900-221
R5, R6	Resistor, Carbon, 15K, 1/4W	7-9900-153
R7	Resistor, Carbon, 820 Ohm, 1/4W	7-9900-821
R8	Resistor, Carbon, 2.2K, 1/4W	7-9900-222
R9	Resistor, Carbon, 470 Ohm, 1/4W	7-9900-471
R10	Resistor, Carbon, 180 Ohm, 1/4W	7-9900-181
R11	Resistor, Carbon, 390 Ohm, 1/4W	7-9900-391
R12	Resistor, Carbon, 220 Ohm, 1/4W	7-9900-221
R13	Resistor, Carbon, 2.7K, 1/4W	7-9900-272
R14	Resistor, Carbon, 2.2K, 1/4W	7-9900-222
R15	Resistor, Carbon, 4.7K, 1/4W	7-9900-472
R16	Resistor, Wirewound, 0.1 Ohm (IRC Type BWH)	702-00126
R17	Resistor, Carbon, 22 Ohm, 1W	716-00108
R18	Resistor, Carbon, 470 Ohm, 1/4W	7-9900-471
R19	Resistor, Carbon, 68 Ohm, 1/4W	7-9900-680
R20	Resistor, Carbon, 3.3K, 1/4W	7-9900-332
R21	Resistor, Carbon, 12K, 1/4W	7-9900-123
R22	Resistor, Carbon, 10 MEG, 1/4W	7-9900-106
R23	Resistor, Carbon, 47 Ohm, 1/4W	7-9900-470
R24	Resistor, Carbon, 1K, 1/4W	7-9900-102
R25	Resistor, Carbon, 5.6K, 1/4W	7-9900-562
R26	Resistor, Carbon, 18K, 1/4W	7-9900-183
R27	Resistor, Carbon, 1.2K, 1/4W	7-9900-122
R28	Resistor, Carbon, 6.8K, 1/4W	7-9900-682
MISCELLANEOUS PARTS		
	Polarizing Wafer Assembly (Q1), 3 Circuit (2 Req'd)	703-00750
	Polarizing Wafer Assembly (Q2), 4 Circuit (2 Req'd)	704-00750
	Clip, Fuse (8 Req'd)	200-50775
	Driver Circuit Board (2 Req'd)	403-06315

FIGURE 6-6. 120 WATT AMPLIFIER SCHEMATIC DIAGRAM



WIRE CHART					
CODE	REQ'D	LENGTH	COLOR	STRIP	SPEC.
101	1	2	BLACK	1/4 x 1/4	5010



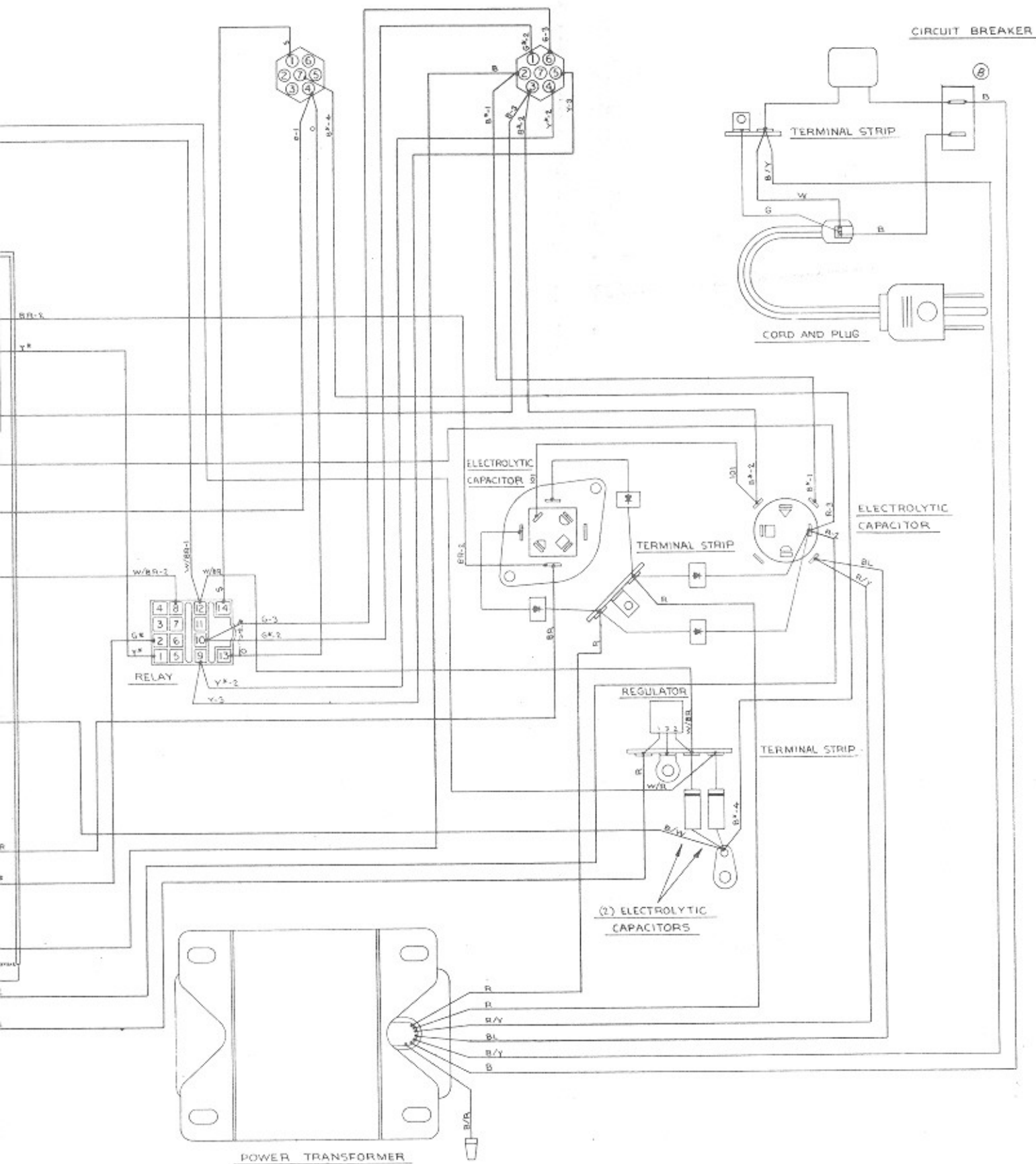
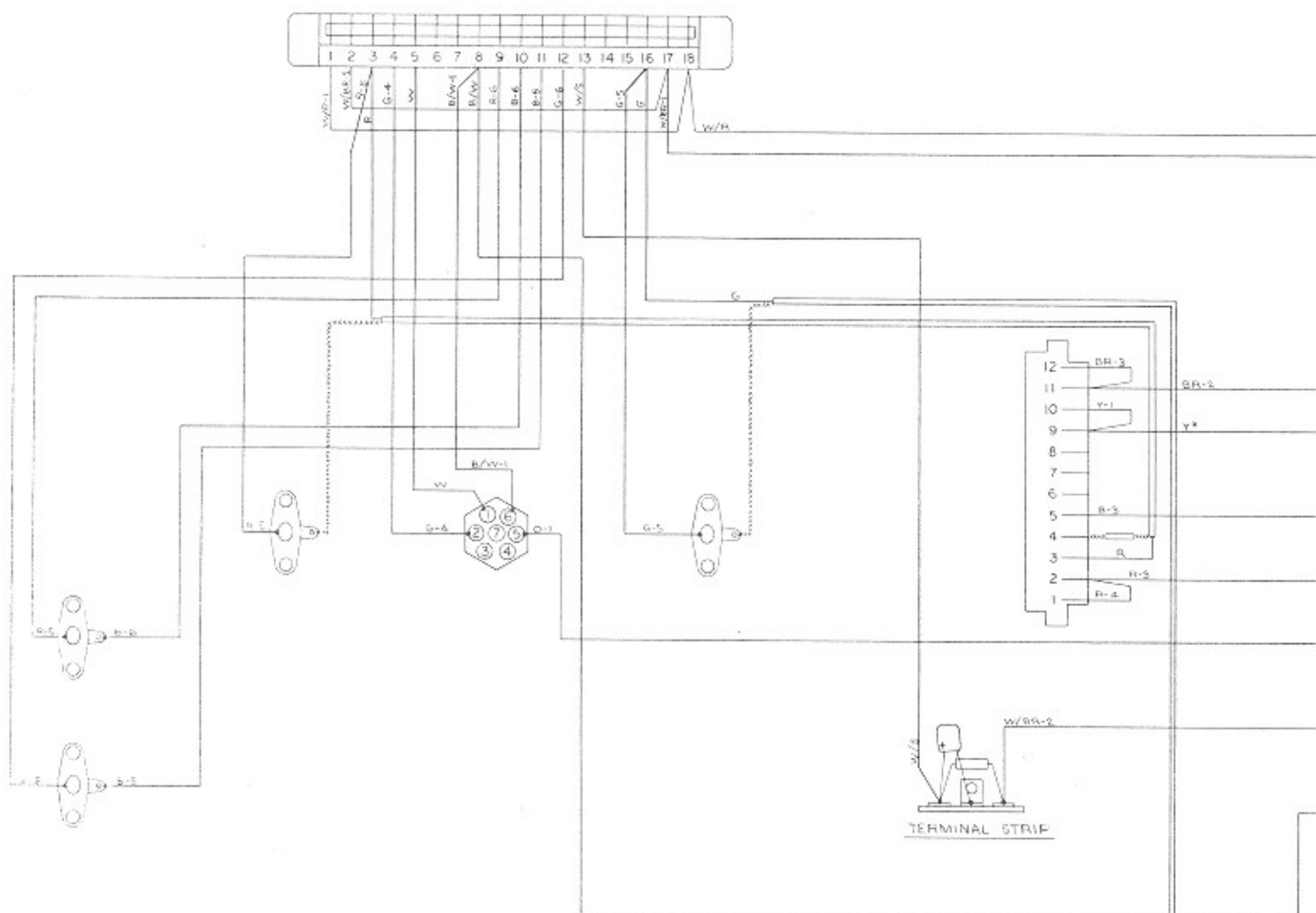
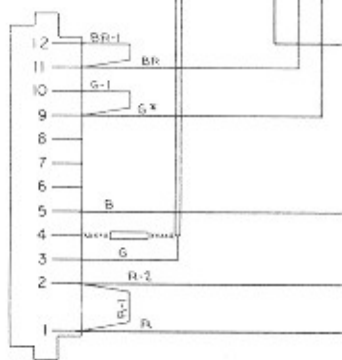


FIGURE 6-7. 64 WATT AMPLIFIER WIRING DIAGRAM



WIRE CHART

CODE	REQ. L.	LENGTH	COLOR	STRIP	SPEC.
101	1	4	BROWN 1/2"		
102	1	2	RED	1/2 x 1/8"	5010
103	1	3	BROWN	1/2 x 1/8"	5010



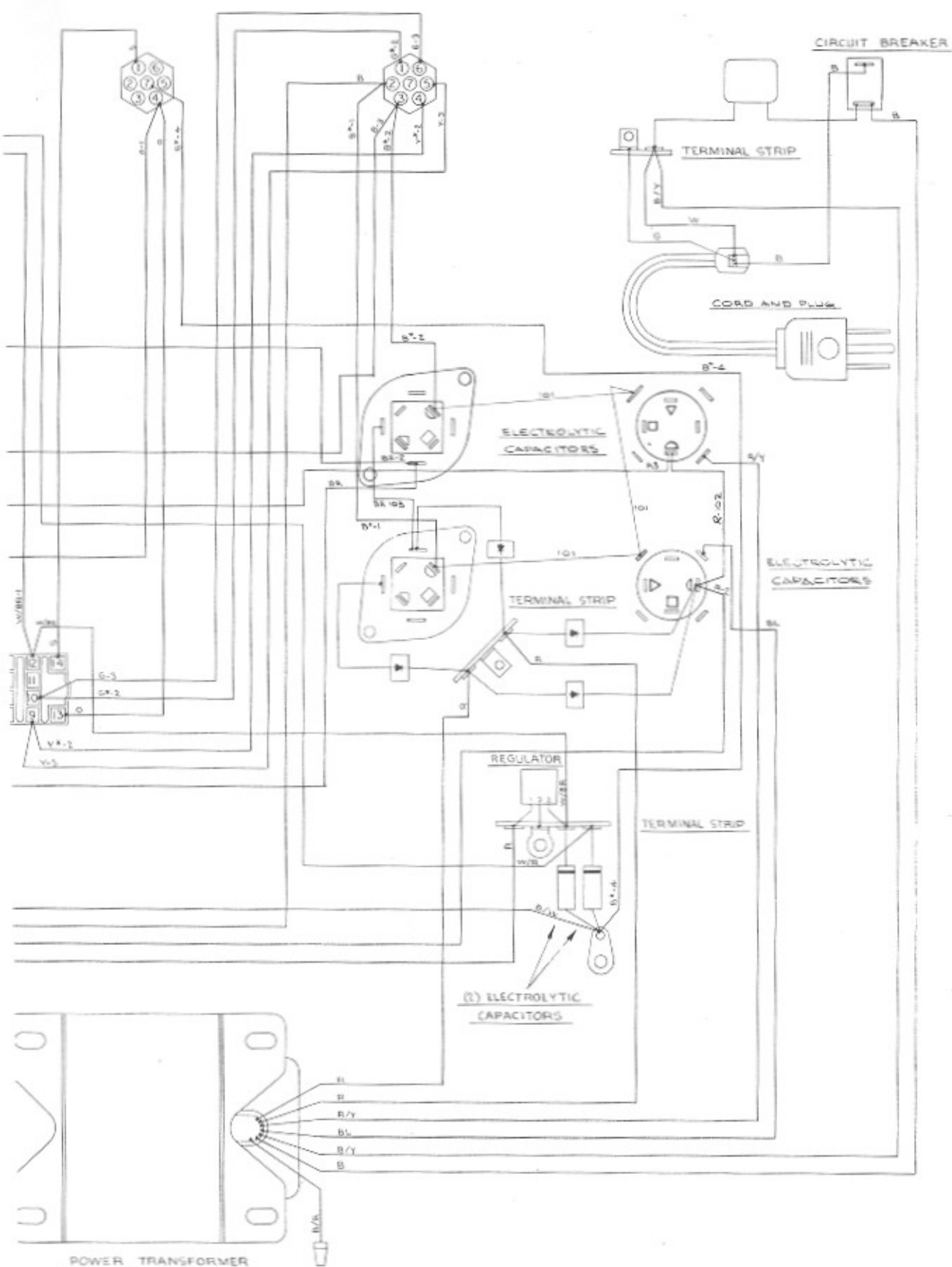
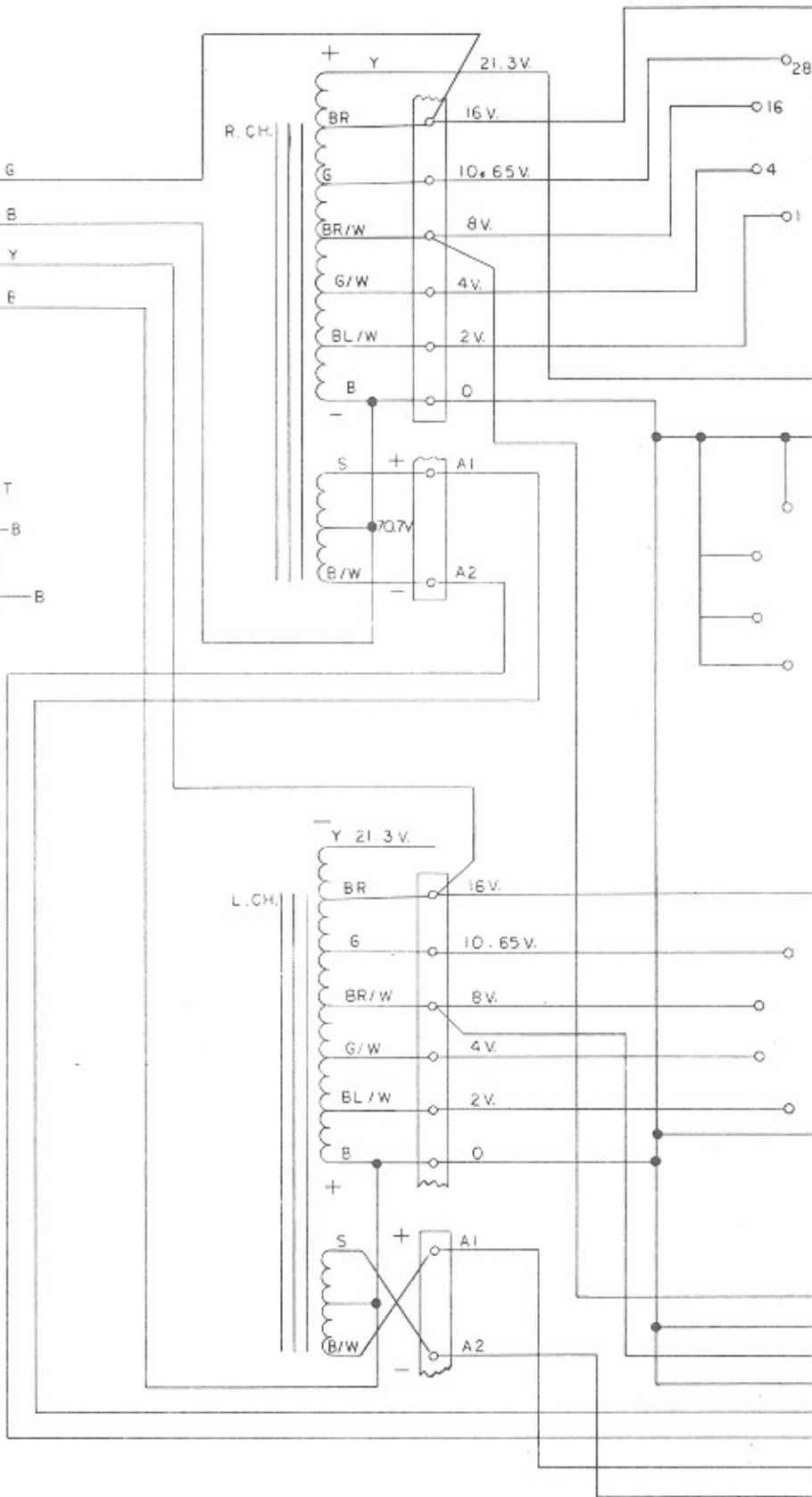
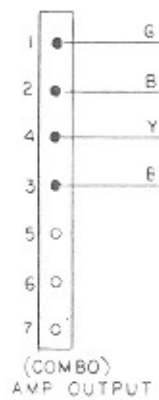


FIGURE 6-8. 120 WATT AMPLIFIER WIRING DIAGRAM



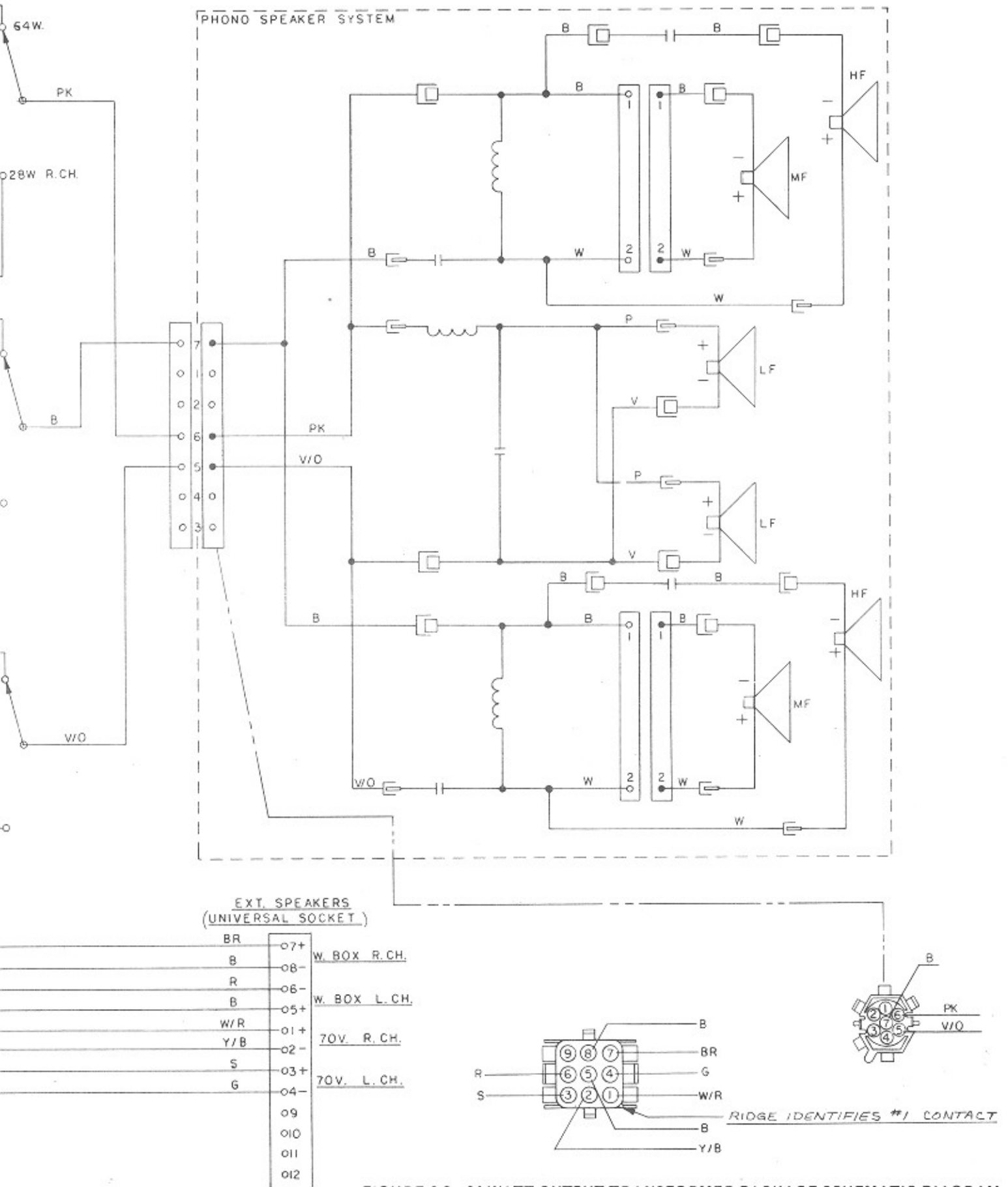
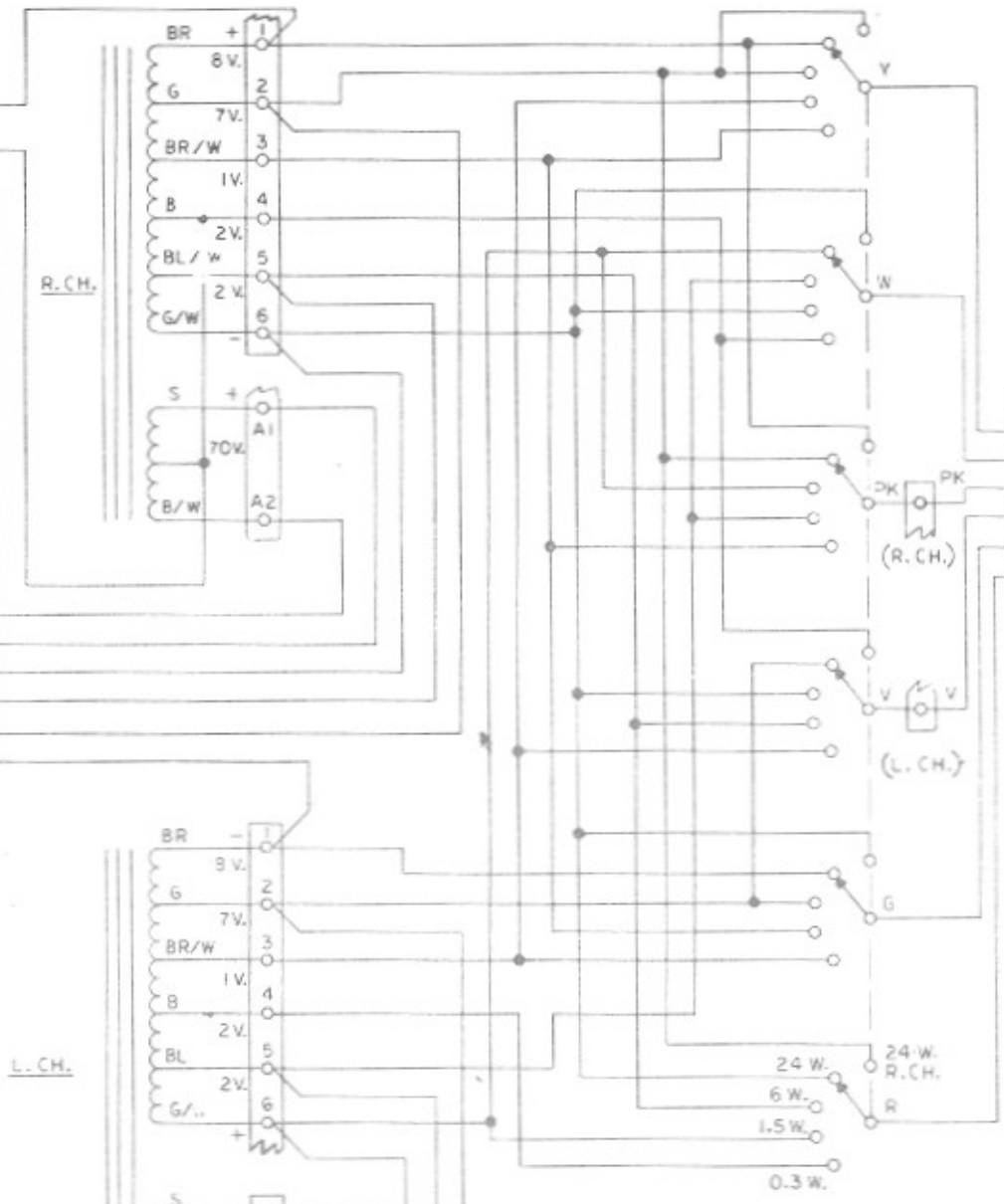
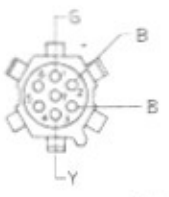
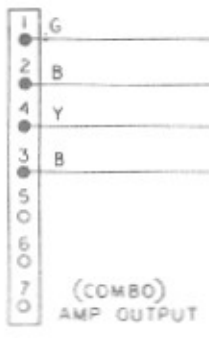
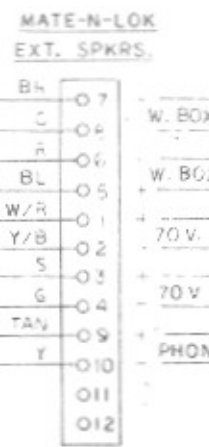
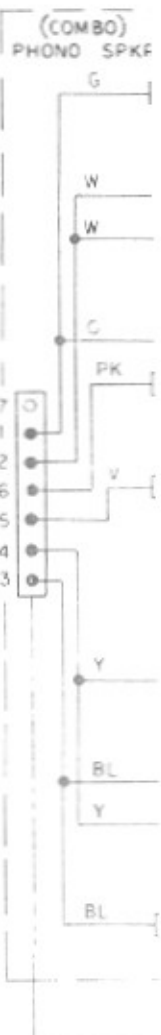
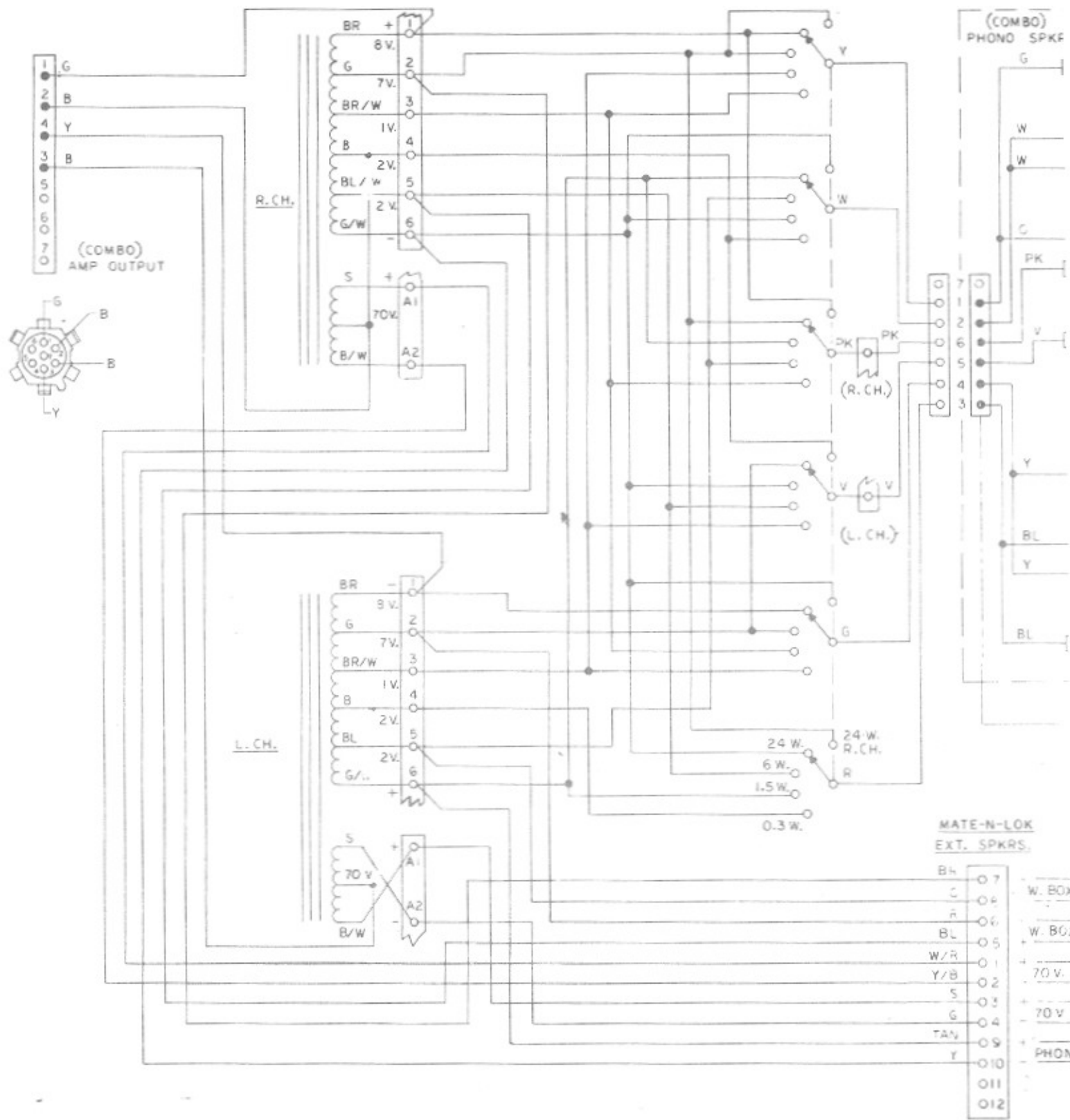
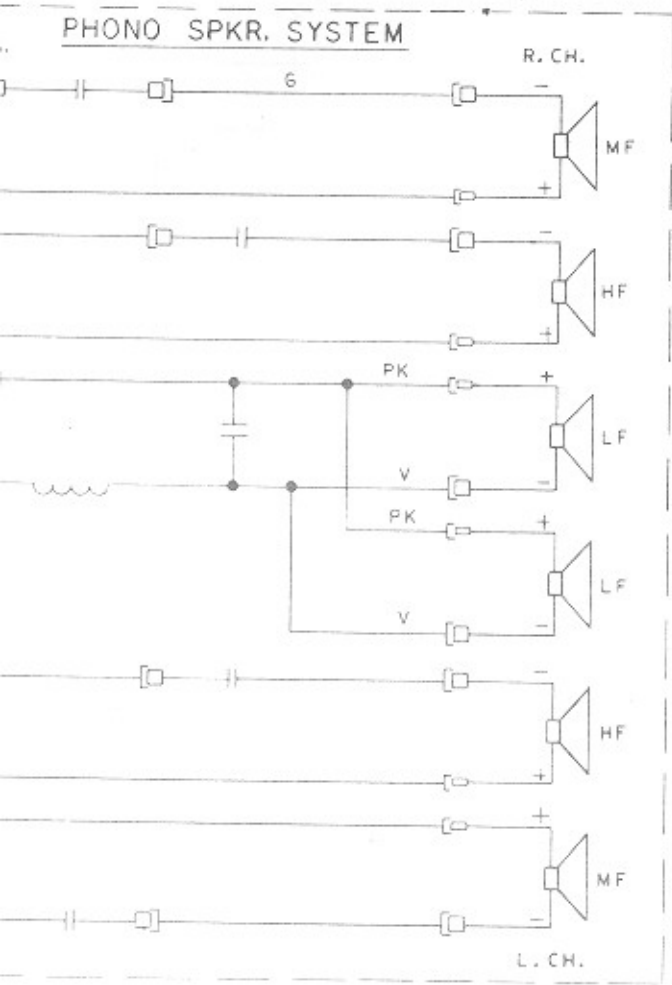


FIGURE 6-9. 64 WATT OUTPUT TRANSFORMER PACKAGE SCHEMATIC DIAGRAM





BR
 CH. O
 R
 CH. BL
 W/R
 CH. Y/R
 S
 CH. G
 VIEW

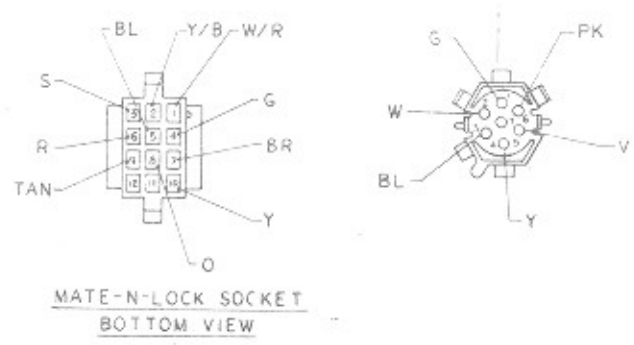
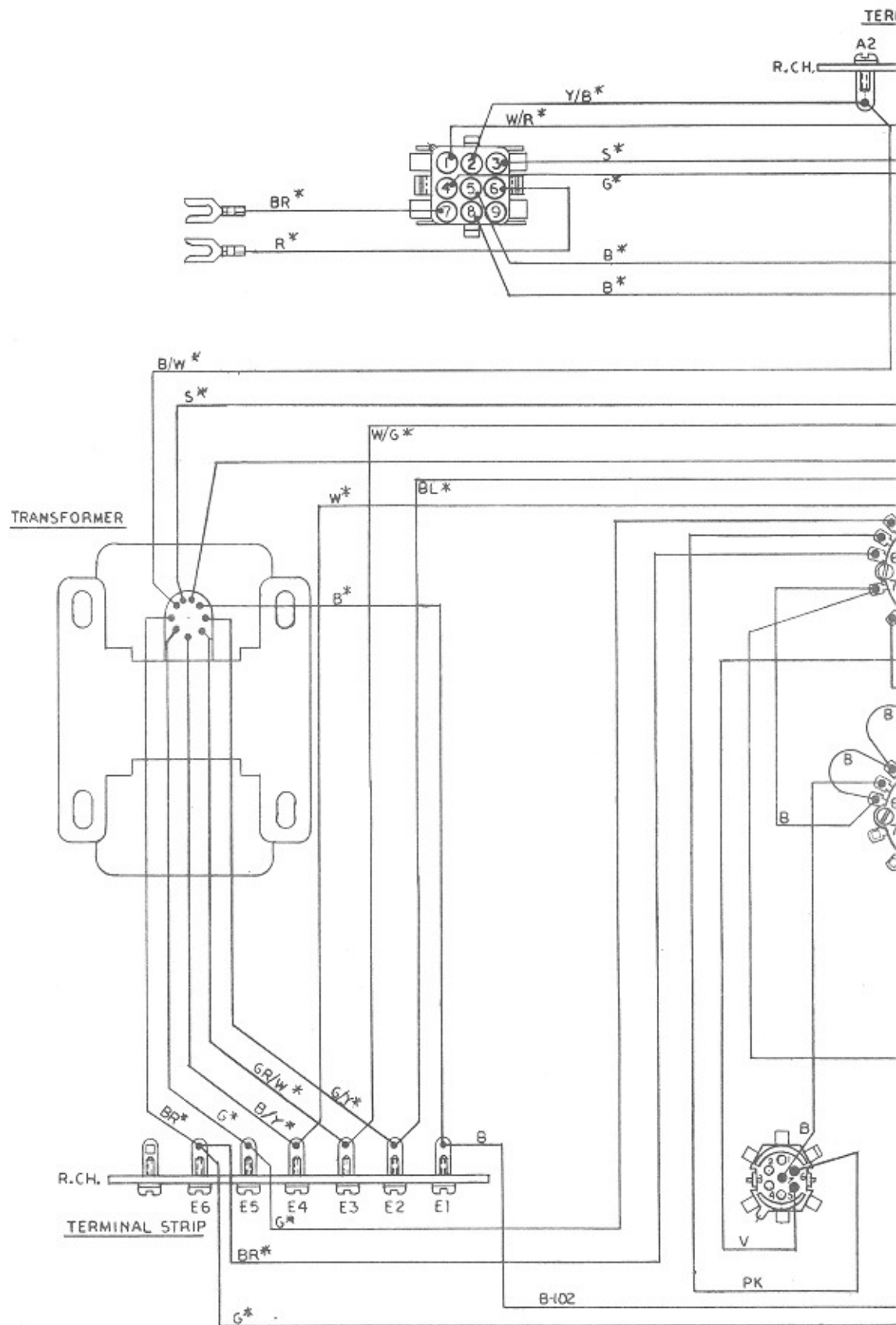


FIGURE 6-10. 120 WATT OUTPUT TRANSFORMER PACKAGE SCHEMATIC DIAGRAM



CODE	REQ'D.	LENGTH	STRIP	COLOR	SPEC.
101	1	4	1/32 X 1	BLACK	5033
102	1	4	1/32 X 1/32	BLACK	5033

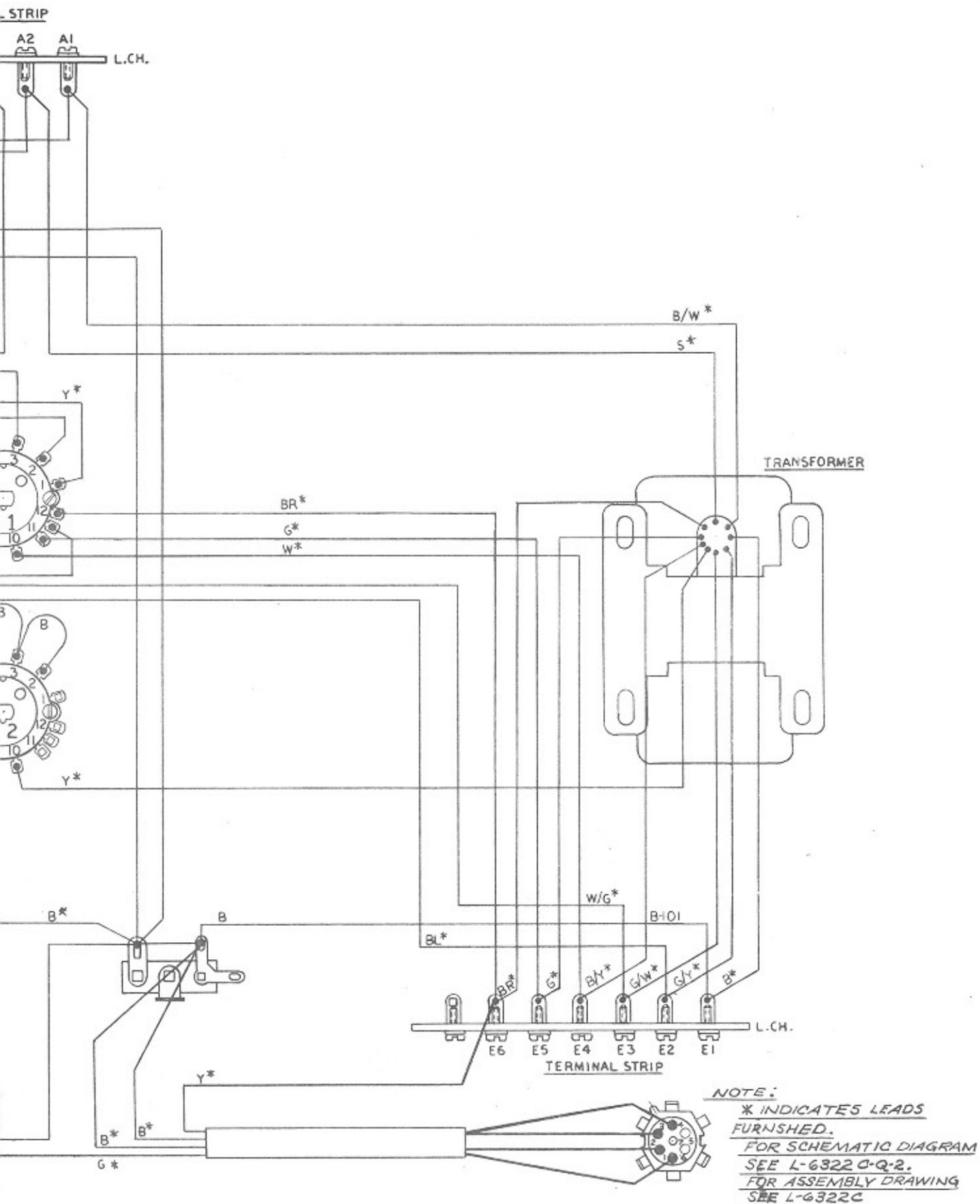
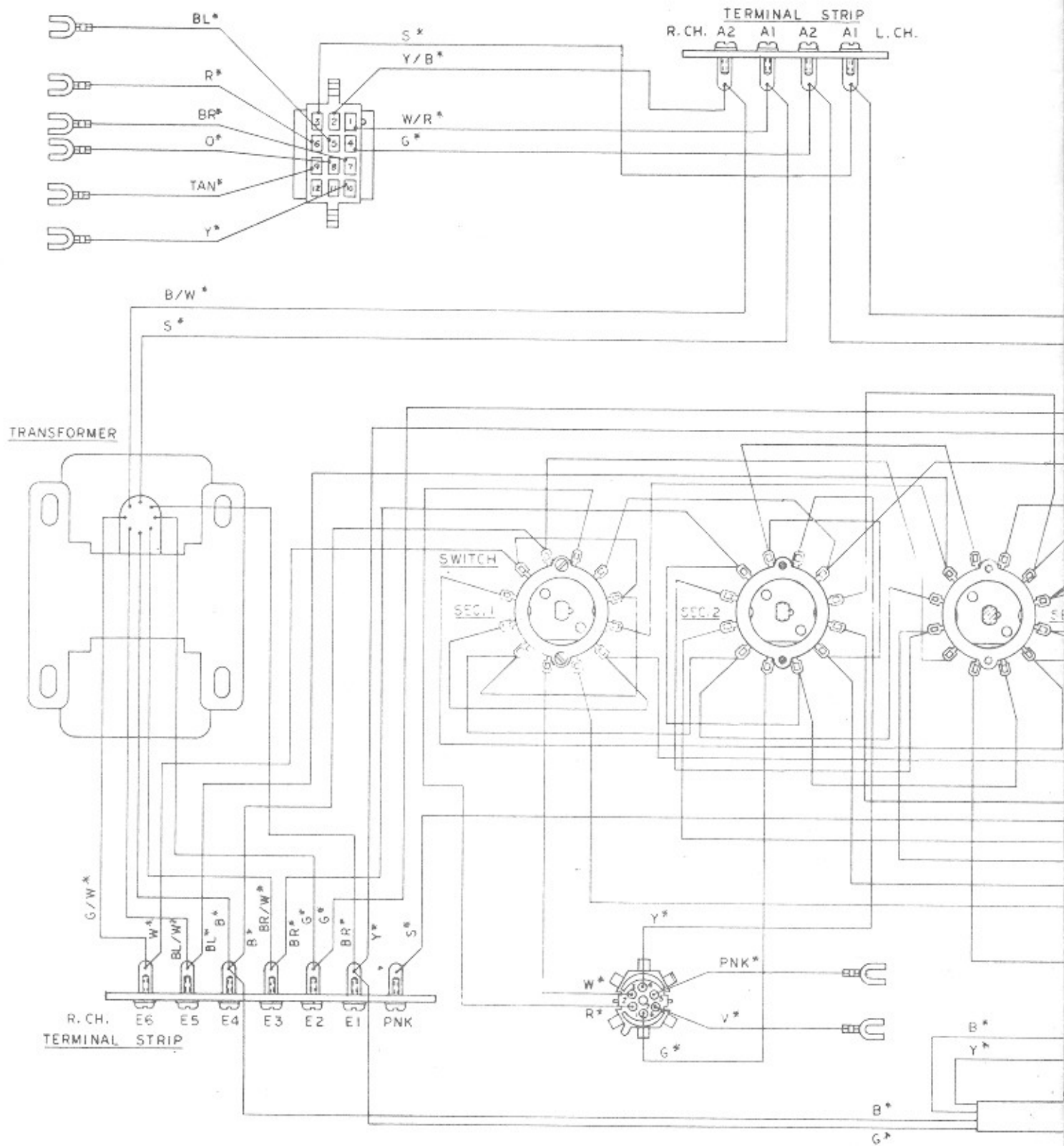


FIGURE 6-11. 64 WATT OUTPUT TRANSFORMER PACKAGE WIRING DIAGRAM



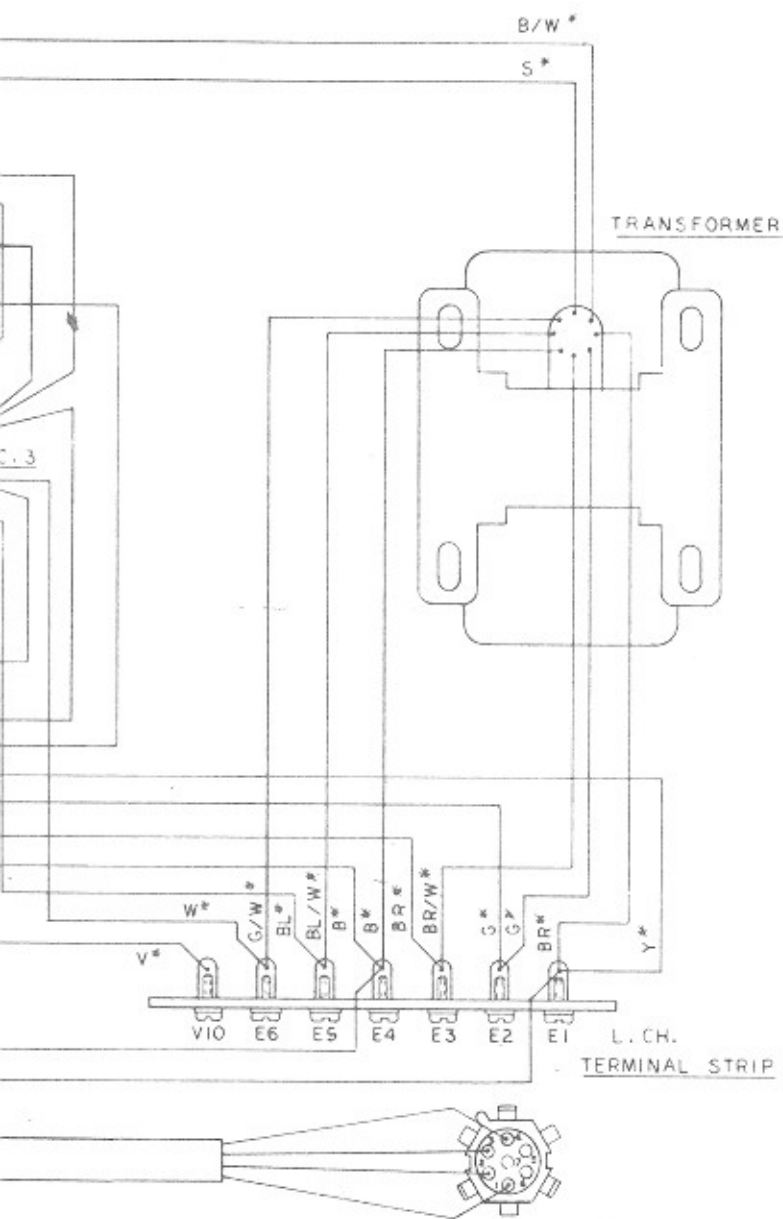
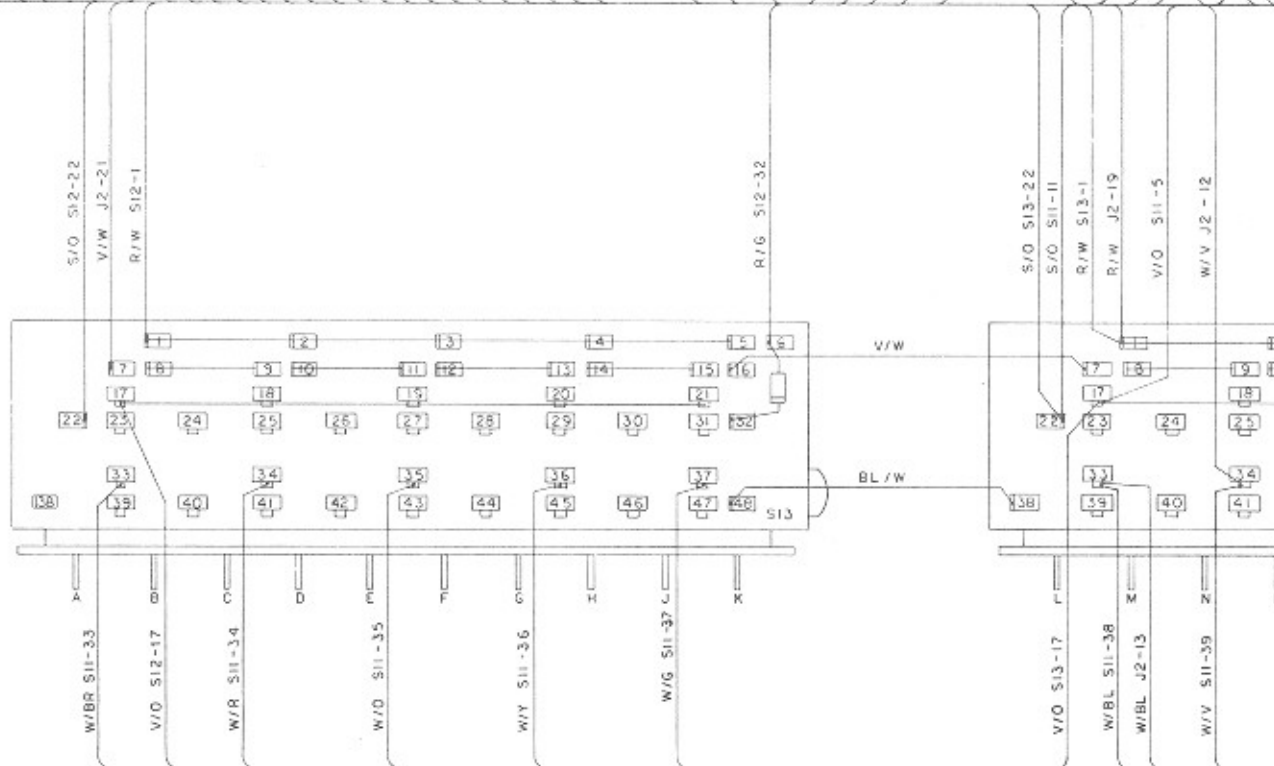
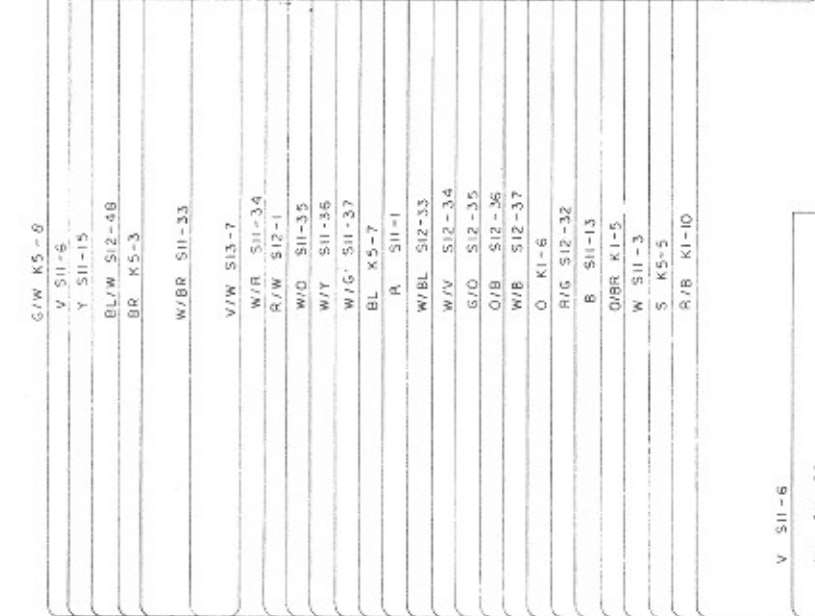


FIGURE 6-12. 120 WATT OUTPUT TRANSFORMER PACKAGE WIRING DIAGRAM

30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



COLOR CODE:

IN ALL TWO COLOR WIRES
THE FIRST COLOR IS THE
BASIC COLOR OF THE WIRE
AND THE SECOND COLOR IS
THE STRIPE OR HASH MARK.

EXAMPLE: W/R IS WHITE
WIRE WITH RED MARKING.

- B BLACK
- BR BROWN
- R RED
- O ORANGE
- Y YELLOW
- G GREEN
- BL BLUE
- V VIOLET
- S SLATE
- W WHITE
- PK PINK
- TAN TAN

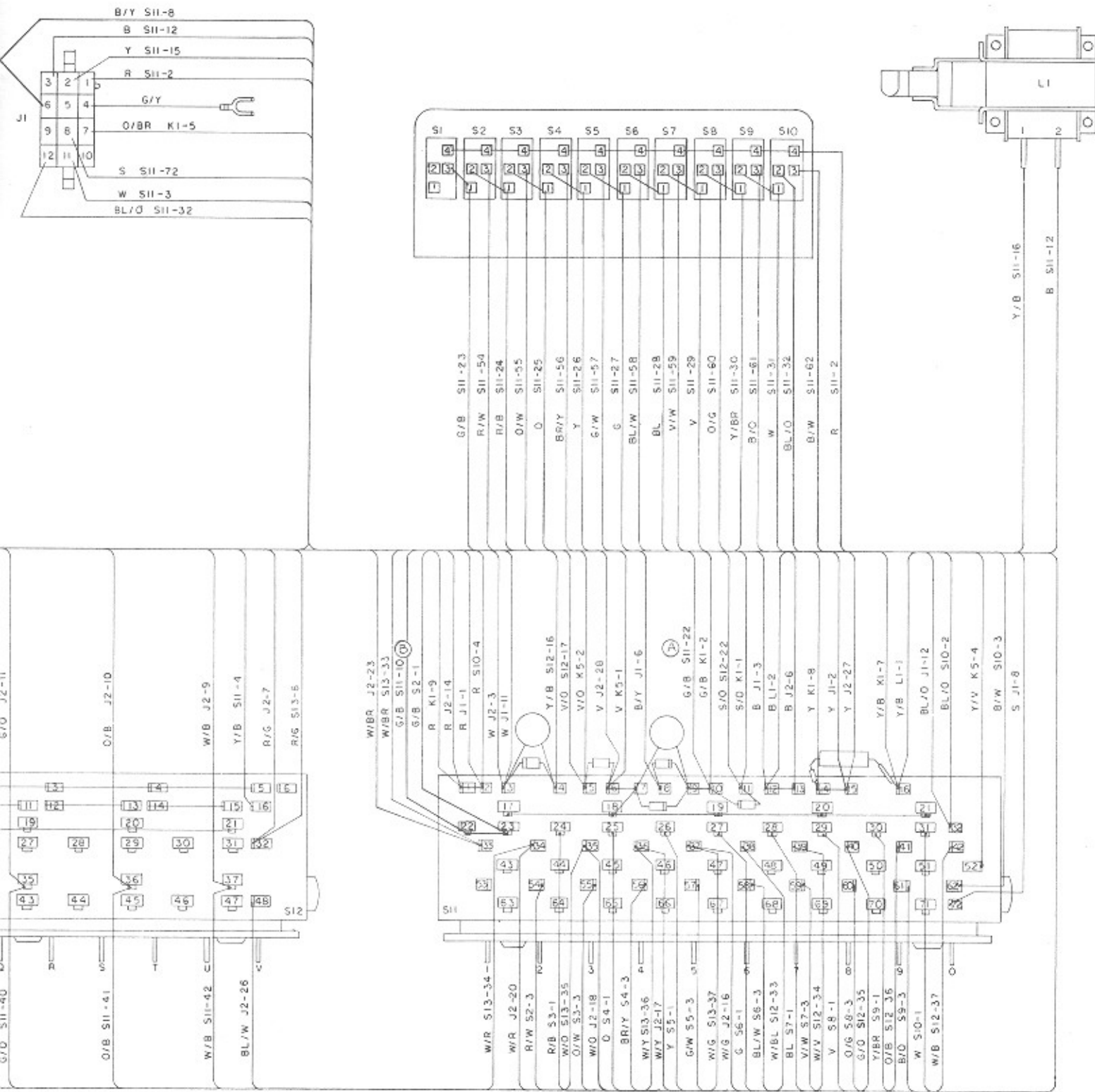
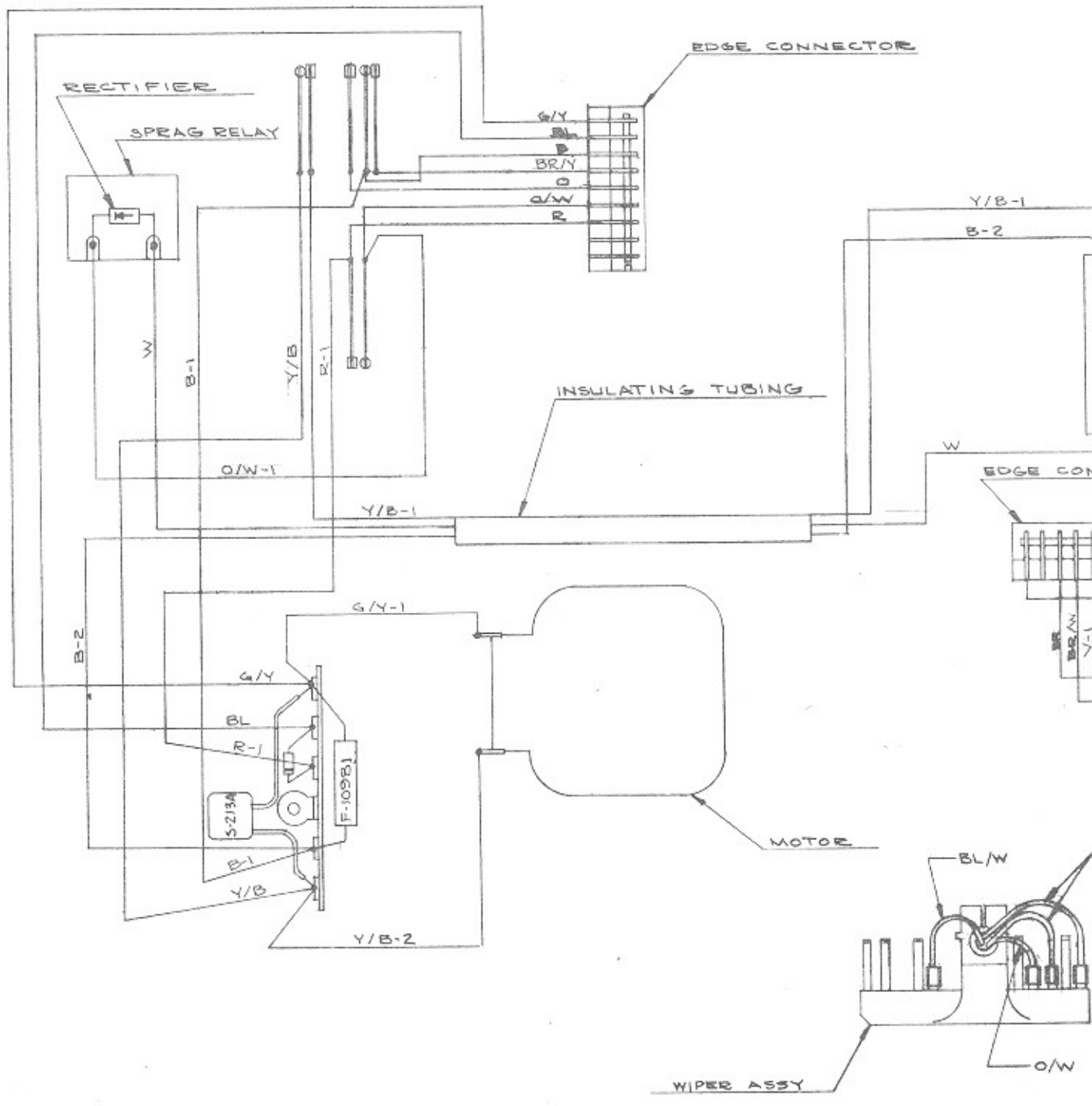


FIGURE 6-13. SELECTOR ASSEMBLY WIRING DIAGRAM



COLOR CODE

R	RED
BL	BLUE
PK	PINK
B	BLACK
S	SLATE
O	ORANGE
Y	YELLOW
G	GREEN
BR	BROWN
V	VIOLET
W	WHITE
TAN	TAN

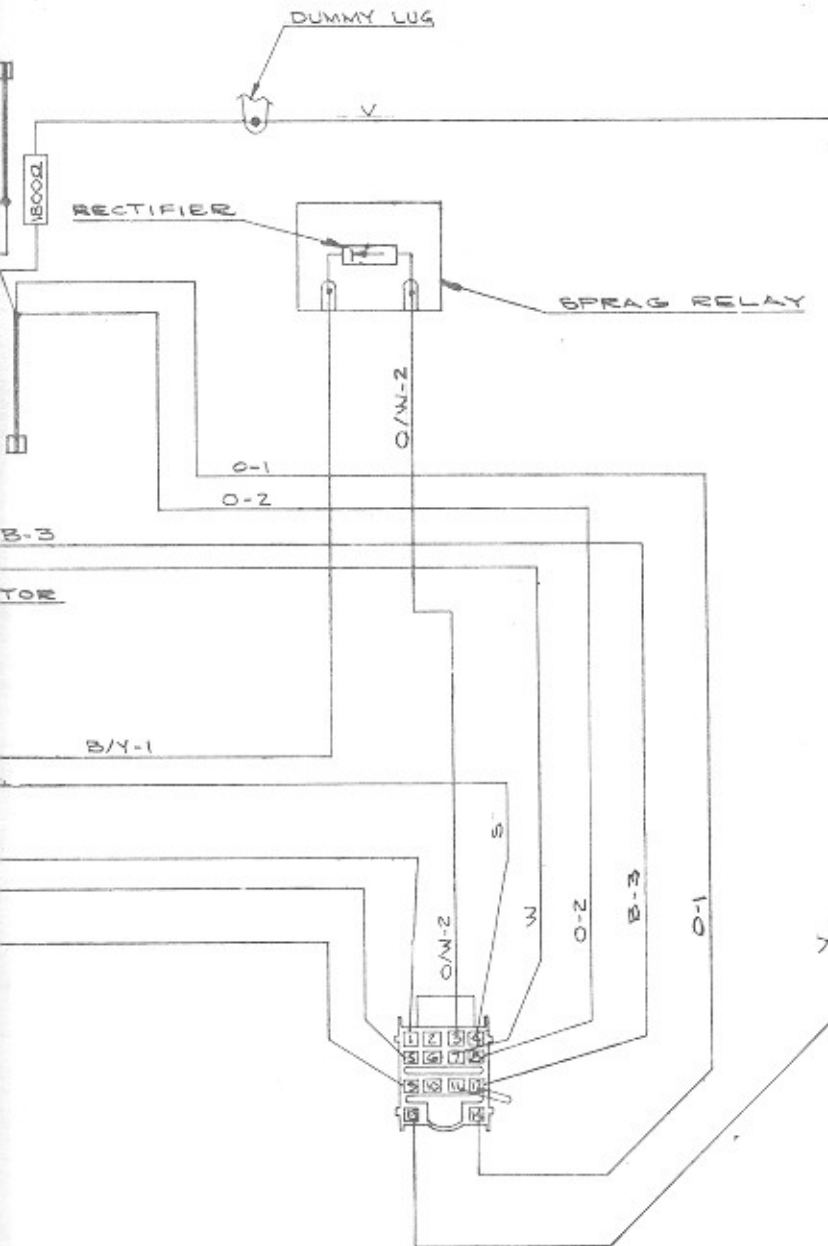
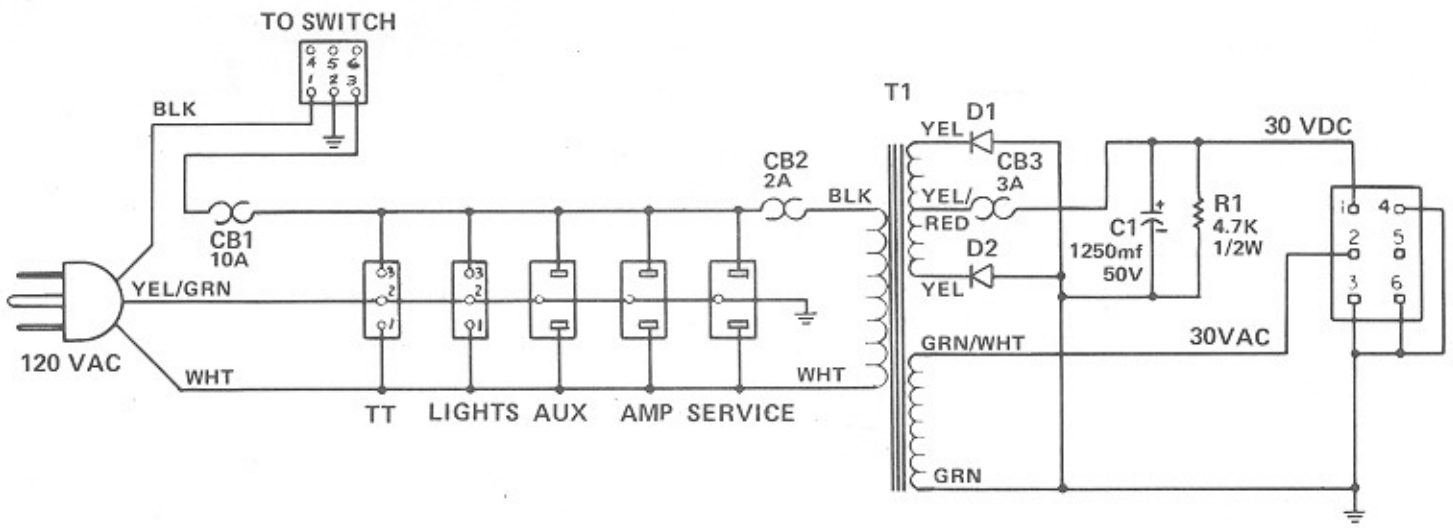


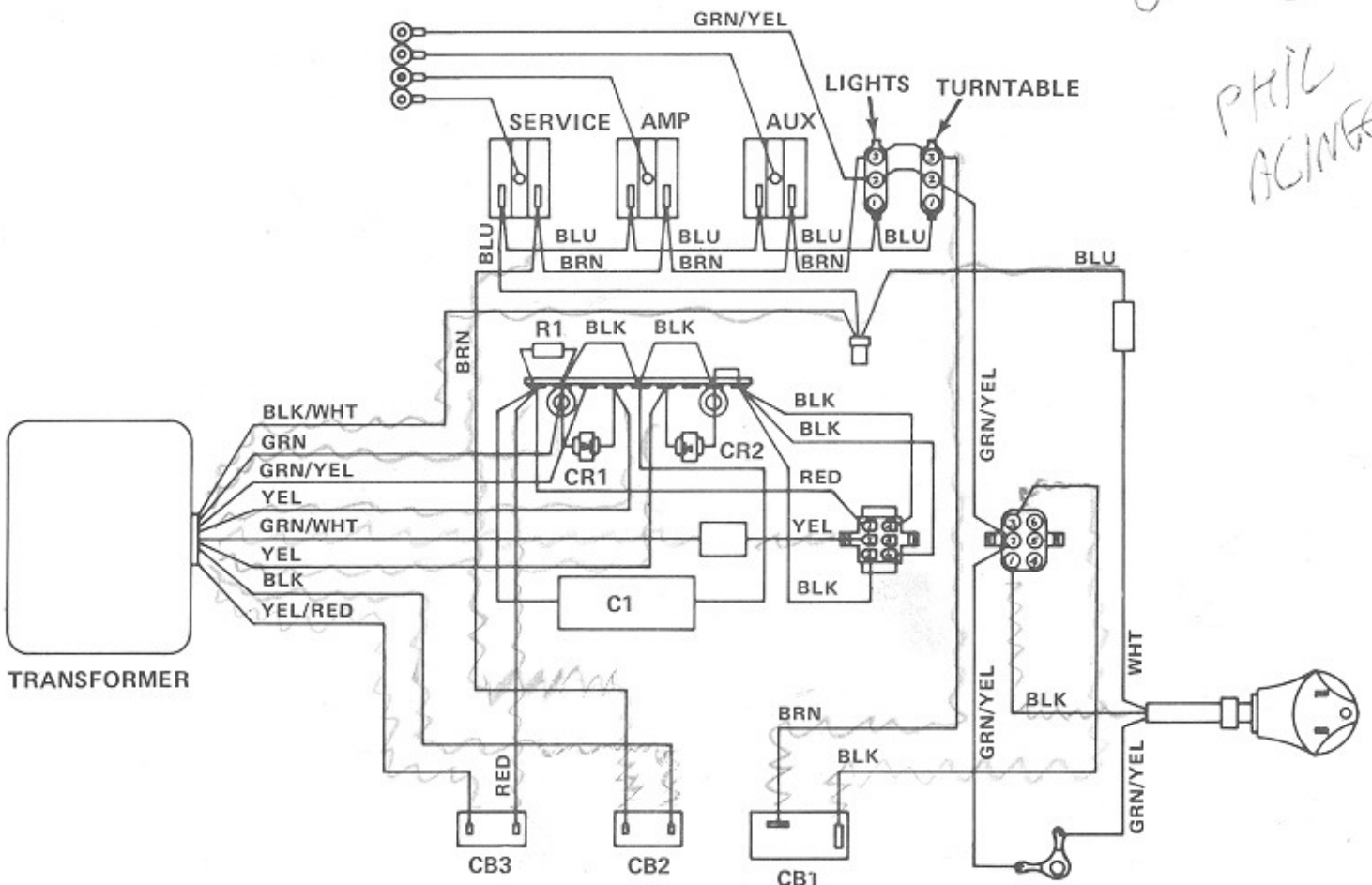
FIGURE 6-14. SEARCH UNIT ASSEMBLY WIRING DIAGRAM



L-6703A-Q-2 [F]

800 554 545

PHIL
ACIMBO



L-6703A-Q-1 [L]

FIGURE 6-15. JUNCTION BOX ASSEMBLY WIRING AND SCHEMATIC DIAGRAMS

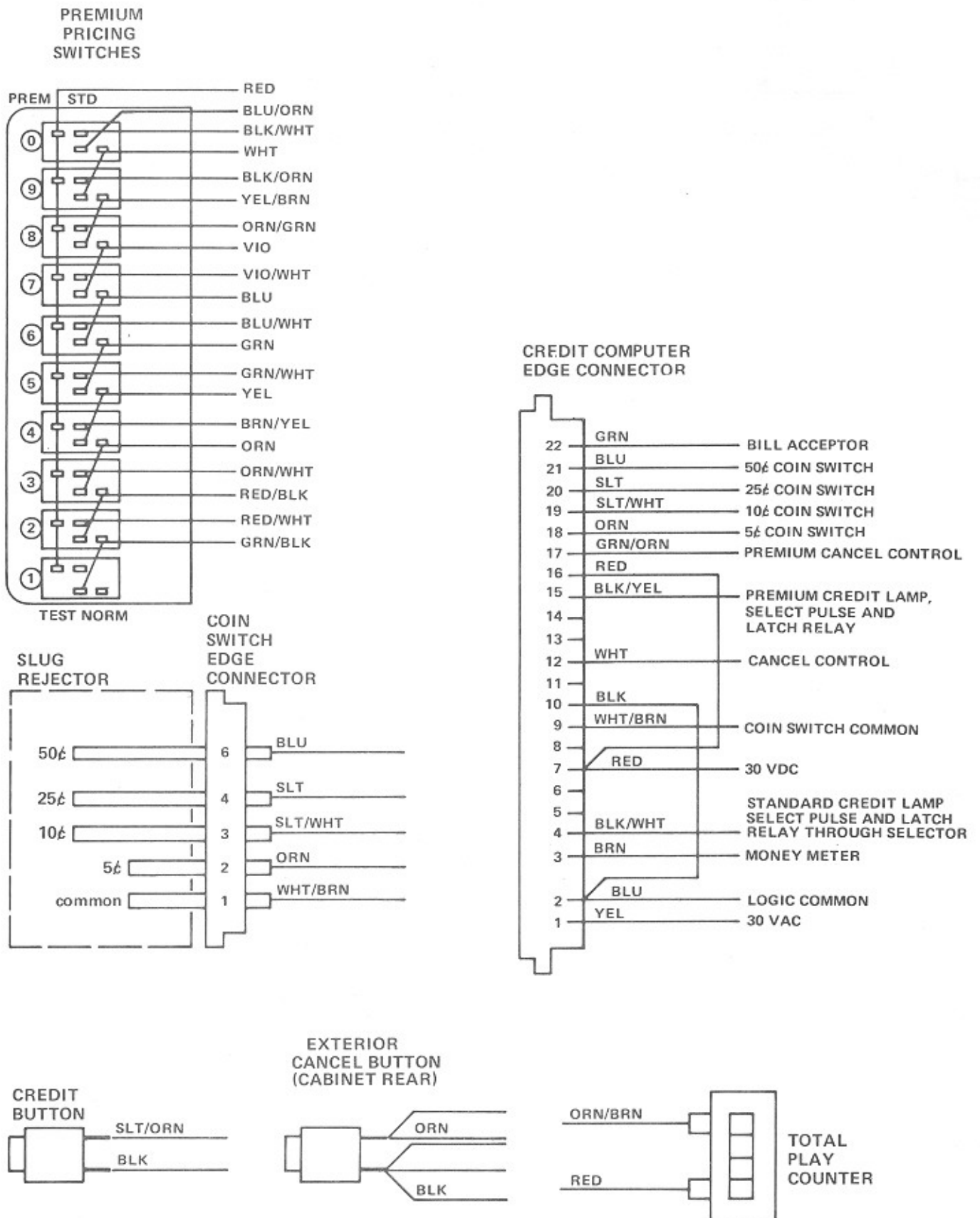


FIGURE 6-16. CREDIT AND PRICING SYSTEM WIRING DIAGRAM