

CONSOLE CONNECTOR KIT 7670 INSTALLATION INSTRUCTIONS

FOR USE WITH: CONN Organ Models:* 541,542,543,550,551, 626,627,628,
630 (Type 2) ,631,632,633,640, 641,642,645,650.

LESLIE Speaker Model: 600

KIT CONTENT

Console Connector Assembly	069690	Tremolo Control	
Cable Assembly, speaker	069831		
Cable Assembly, 9-conductor, 30-foot	021600	Brown	069880
Oiler	053025	Ebony	069898
Installation Instructions	069976	Ivory	069906
Screw, wood, 6 x 1/2, Phillips head (4)	029124	Multi-Rank Control	
Screw, sheet metal, 8 x 1/2, Phillips head (2)	029132	Brown	069948
Staple, insulated (8)	028464	Ebony	069955
		Ivory	069963

CAUTION: Due to the presence of electrical potential and the danger of moving mechanical parts, installation procedures or adjustments requiring work inside the LESLIE speaker cabinet or the organ console should be performed only by a service man authorized by the dealer or factory to perform such work.

INSTALLATION

CAUTION: DISCONNECT ORGAN POWER BEFORE PROCEEDING!

1. Remove the organ back.
2. Mount the console connector chassis on the bottom shelf below the amplifier. Use the cadmium plated screws from the hardware package.
3. Mount the tremolo and multi-rank switches beneath the left end of the lower keyboard. Use the black oxide wood screws from the hardware package.
4. Drill a 1-in. hole beneath the left end of the upper keyboard. Route the control cables through this hole to the rear of the organ. Fasten the cables in place with insulated staples from the hardware kit.

*If Conn pipes are to be added to the model 600, refer to AUXILIARY SPEAKER INSTALLATION on page 4.

5. Connect the tremolo and multi-rank control plugs to the labeled sockets on the console connector chassis. (See A on figure 1.)
6. Attach the six-pin console connector plug to the ELECTRO MUSIC 251 TONE CABINET socket beside the Conn amplifier. Do not plug it into the ELECTRO MUSIC 251 TONE CABINET socket on the Conn amplifier itself. (B)

7. Detach the socket from the Conn internal tremolo unit. (C) Replace it with the socket end of the five-circuit console connector interceptor.
8. Insert Conn tremolo unit socket into plug end of the five-circuit console connector interceptor. (D)
9. Connect the speaker cable to the LESLIE SPKR socket on the console connector chassis. Connect the other end of the cable to the 9-pin plug on the LESLIE speaker.
10. Adjust the LESLIE speaker volume controls according to the owner's manual.

Installation is now complete.

MODEL 600 SPEAKER CONTROLS

With the kit properly installed the multi-rank switch controls the model 600 space generator. The LESLIE tremolo switch controls the tremolo generators within model 600. The treble horn and drum rotor are controlled by the Conn tremolo unit control tab. The Conn's EXTERNAL SPEAKER tab switches the LESLIE speaker on and off.

Ordering Parts

Standard hardware, connectors, and electronic components should be purchased locally. Non-standard items may be obtained through a LESLIE speaker dealer. Orders should include part numbers as listed.

NOTE: THIS SOCKET IS MOUNTED ON A JUNCTION BOX IN CONN ORGANS ABOVE MODEL 628.

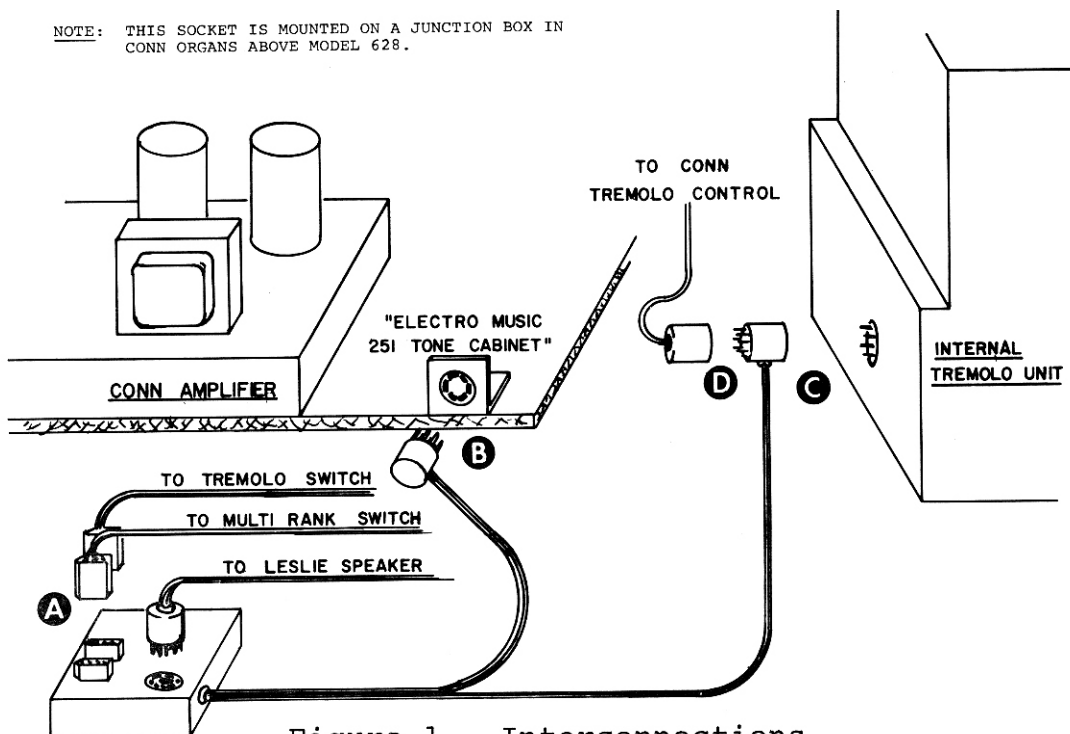


Figure 1. Interconnections

PARTS LIST: 069690 CONSOLE CONNECTOR ASSEMBLY

Circuit Board Assembly (small)	069778
Circuit Board Assembly (large)	069781
Interceptor Assembly (includes P2, S3)	063727
Cable and Plug Assembly (includes P1)	069799
Can Assembly, lamp housing	063826
Transformer (T1)	022244
Socket, 9-contact (S4)	061713
Housing, socket, 3-circuit, natural (white) (S6)	042077
Housing, socket, 3-circuit, red (S5)	043265
Contact, female	023556
Bushing, strain relief	034769
Grommet	028811
Bushing, .196 x .312 x .500	050740
Bushing, .196 x .312 x .625	055079

PARTS LIST: TREMOLO CONTROL

Switch Case	Switch, Cable, &	
brown 103750	Plug Assembly	042150
ebony 103760		
ivory 103770	Switch Retainer (2)	048744
Case Coyer	Screw, thread-cutting,	
brown 048702	6-32 x 3/8 (2)	029140
ebony 048710		
ivory 048728	Label, OFF/TREM/ON	103690
Switch Knob	Cork, adhesive	029157
brown 048066		
ebony 048074		

PARTS LIST: MULTI-RANK CONTROL

Switch Case	Switch, Cable, &	
brown 103750	Plug Assembly	069877
ebony 103760		
ivory 103770	Switch Retainer (2)	048116
Case Coyer	Screw, thread-cutting,	
brown 048702	6-32 x 3/8 (2)	029140
ebony 048710		
ivory 048728	Label, OFF/MULTI-RANK/ON	103700
Switch Knob	Cork, adhesive	029157
brown 048066		
ebony 048074		

REF DESIG	DESCRIPTION	PART NO.	REF DESIG	DESCRIPTION	PART NO.
D1,2	Rectifier, 30PIV, 500mW	041616	R35,36	Resistor, 1K	023713
M1,2	Neon Lamp - NE2E	063958	R37,38	Resistor, 1K	023713
R29,30	Resistor, 100K	028498	Q8,9	Transistor, MSPS 4382	026237
R31,32	Resistor, LDR,VT-904	117980	Q10,11	Transistor,2N341	4030254
R33,34	Resistor, 120K	027078		Circuit Board, etched	065292

Resistors 1/2W 10%

AUXILIARY SPEAKER INSTALLATION

1. Remove the lower back Panel from the LESLIE speaker.
2. Detach the green socket (S17) from its plug on the stationary channel 1 amplifier circuit board.
3. Connect this socket to the plug (P19) on the stationary channel 2 amplifier circuit board.
4. Place the Conn Pipes on top of the LESLIE speaker.
5. Attach the spade lugs on the speaker cable assembly (part no. 069831) to the terminals of the speaker in the Conn Pipes.

NOTE: The plain (unribbed) wire from contact 2 of the connector must be attached to the ground (common) terminal.

6. Attach the speaker cable connector to plug P17 (vacated in step 2) on the stationary channel 1 amplifier circuit board.
7. Replace the lower back panel.

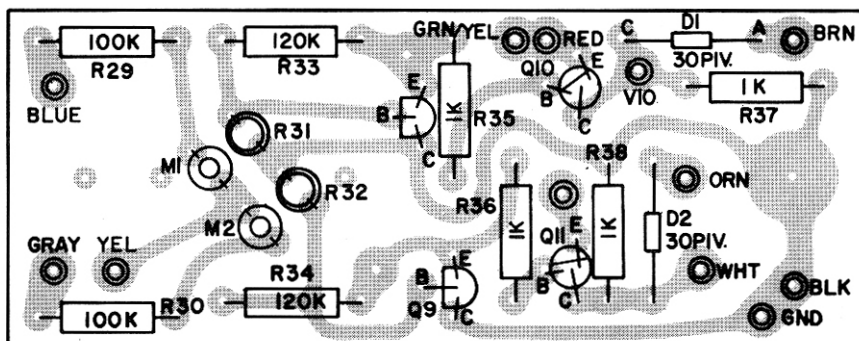


Figure 2. Motor Sensor Circuit Board Assembly 069778

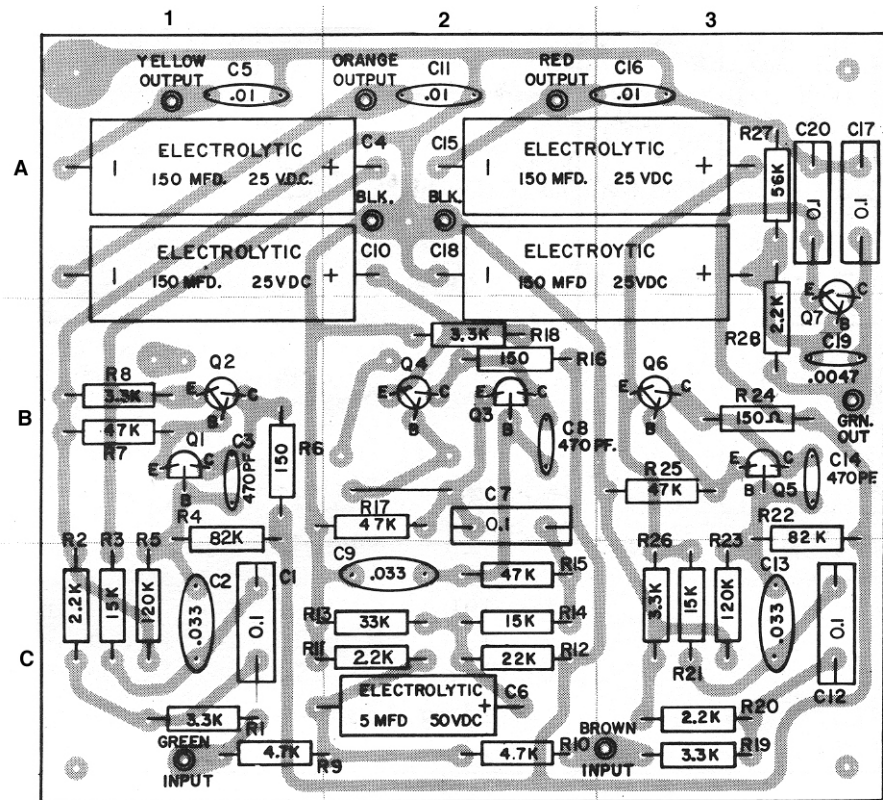


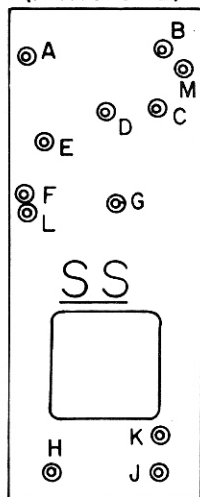
Figure 3. Crossover Circuit Board Assembly 069781

PART NO.	LOCATION	DESCRIPTION	EMI NO.
C1	C1	Capacitor, Poly, .1 Mfd, 200V, 20%	022251
C2	C1	capacitor, Mylar, .033 Mfd, 100V, 10%	028654
C3	B1	Capacitor, Disc, 470 Pf, 1KV, 20%	028662
C4	A1	Capacitor, Elect., 150 Mfd, 25VDC	031294
C5	A1	Capacitor, Disc, .01Mfd, 1KV, 20%	060467
C6	C2	capacitor, Elect., 5 Mfd, 50 VDC	028589
C7	B2	Capacitor, Poly, .1Mfd, 200V, 20%	022251
C8	B2	Capacitor, Disc, 470 Pf, 1KV, 20%	028662
C9	C2	capacitor, Mylar, .033 Mfd, 100V, 10%	028654
C10	A1	capacitor, Elect. , 150 Mfd, 25VDC	031294
C11	A2	Capacitor, Disc, .01Mfd, 1KV, 20%	060467
C12	C3	Capacitor, Poly. .1Mfd, 200V, 20%	022251
C13	C3	Capacitor, Mylar, .033 Mfd, 100V, 10%	028654
C14	B3	Capacitor, Disc, 470Pf, 1KV, 20%	028662
C15	A3	Capacitor, Elect., 150 Mfd, 25vDC	031294
C16	A3	Capacitor, Disc, .01 Mid, 1KV, 20%	060467
C17	A3	Capacitor, Poly, .1Mfd, 200V, 20%	022251
C18	B3	Capacitor, Elect., 150Mfd, 25VDC	031294
C19	B3	capacitor, Disc., .0047 Mid, 100V, 10%	028431
C20	A3	capacitor, Po1y, .1 Mfd, 200V, 20%	022251
*R1	C1	Resistor, 3.3K	024141
R2	C1	Resistor, 2.2K	028571
R3	C1	Resistor, 15K	048157
R4	B1	Resistor, 82K	027102
R5	C1	Resistor, 120K	027078
R6	B1	Resistor, 150 ohm	024158

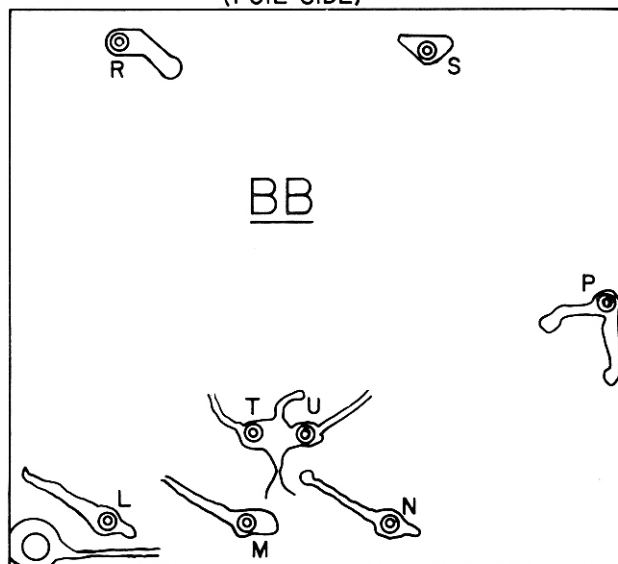
R7	B1	Resistor, 47K	028506
R8	B1	Resistor, 3.3K	024141
R9	C1	Resistor, 4.7K	028555
R10	C2	Resistor, 4.7K	028555
R11	C2	Resistor, 2.2K	028571
R12	C2	Resistor, 22K	028530
R13	C2	Resistor, 33K	028522
R14	C2	Resistor, 15K	048157
R15	C2	Resistor, 47K	028506
R16	B2	Resistor, 150 ohm	024158
R17	B2	Resistor, 4.7K	028555
R18	B2	Resistor, 3.3K	024141
R19	C3	Resistor, 3.3K	024141
R20	C3	Resistor, 2.2K	028571
R21	C3	Resistor, 15K	048157
R22	B3	Resistor, 82K	027102
R23	C3	Resistor, 120K	027078
R24	B3	Resistor, 150 ohm	024158
R25	B3	Resistor, 47K	028506
R26	C3	Resistor, 3.3K	024141
R27	A3	Resistor, 56K	024133
R28	B3	Resistor, 2.2K	028571
Q1	B1	Transistor, MSPS 4382	026237
Q2	B1	Transistor, 2N3859A	061366
Q3	B2	Transistor, MSPS 4382	026237
Q4	B2	Transistor, 2N3859A	061366
Q5	B3	Transistor, MSPS 4382	026237
Q6	B3	Transistor, 2N3859A	061366
Q7	B3	Transistor, 2N3859A	061366

* All resistors 1/2 watt, 10%

BOARD 069778
(PARTS SIDE)



BOARD 069781
(FOIL SIDE)

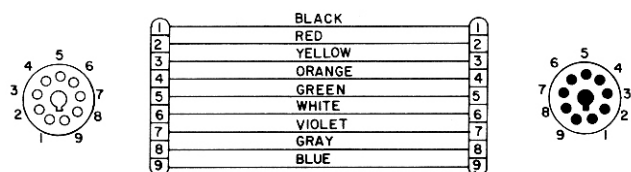


Wiring List*

FROM		COLOR	TO
SS, point	A	brown	socket S5, pin 2
	B	black	BB, point U
	C	white	socket S4, pin 6
	D	orange	socket S6, pin 2
	E	violet	socket S4, pin 7
	F	blue	socket S5, pin 3
SS,	F	gray	SS, point G
	G	gray	socket S6, pin 3
BB, point	L	yellow	socket S4, pin 3
	M	orange	4
	N	red	2
	P	green	5
Interceptor Assy		blue	SS, point H
		gray	SS, point U
		yellow	SS, point K
Cable & Plug Assy (P1)		black	socket S4, pin 1
		gray	8
		blue	9
		green	BB, point R
		brown	S
BB, point T		black	socket S4, pin 1

* SS " small board (069778)

BB = big board (069781)



PARTS LIST: 021600 SPEAKER CABLE

Plug Assembly, 9-pin	061879
Socket, 9-contact	028837
Cap, body	022046
Clamp, cut	022079
Screw, machine, 6-32 x 3/8	027979

Figure 4. Cable Assembly 021600
(Plug and Socket Shown from Wire End)

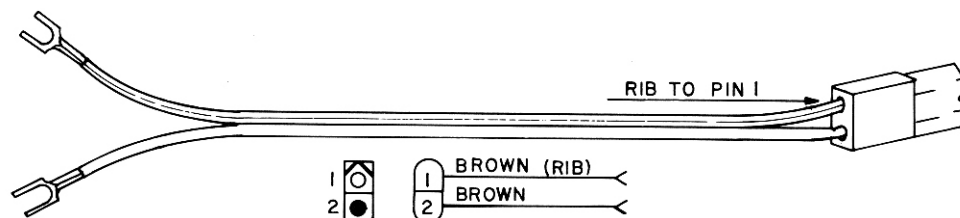


Figure 5. Speaker Cable Assembly 069831

Housing, socket, 2-circuit, natural (white)	023564	Insert, contact,male	023309
Insert, contact, female	023556	Lug, spade, #8	010439

MULTIPLE SPEAKER INSTALLATION

For complete information see the service manual for the LESLIE speaker to be added.

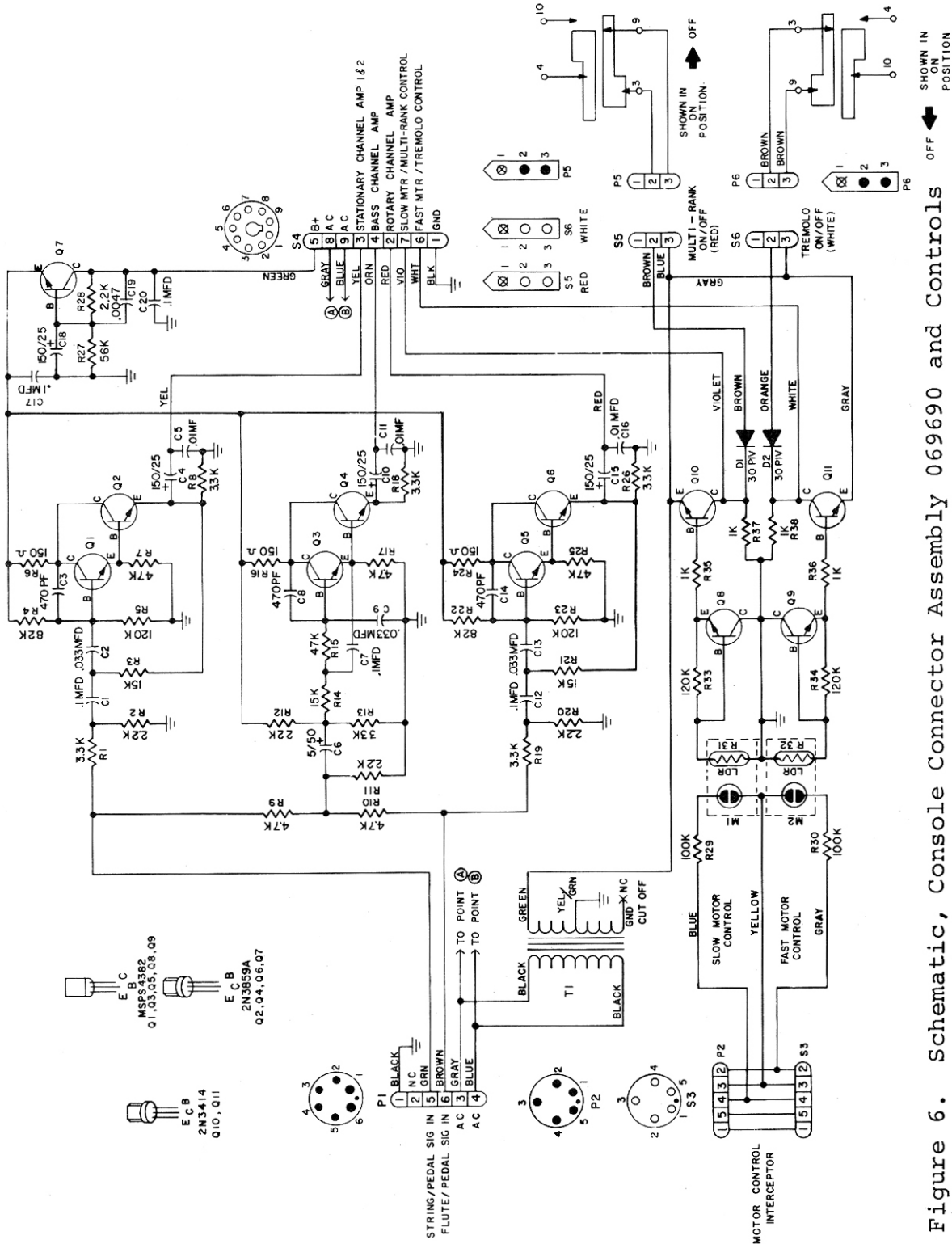


Figure 6. Schematic, Console Connector Assembly 069690 and Controls