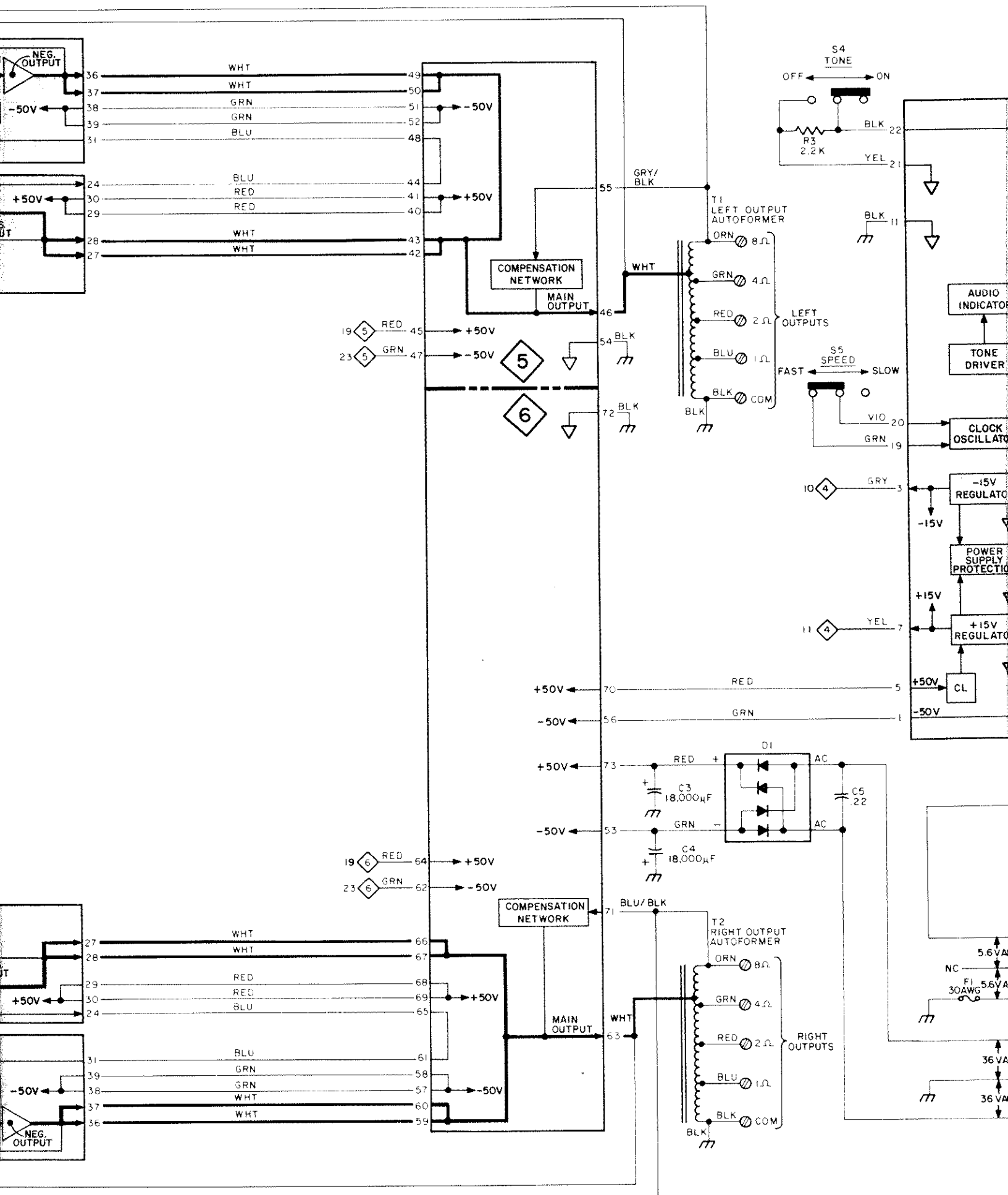
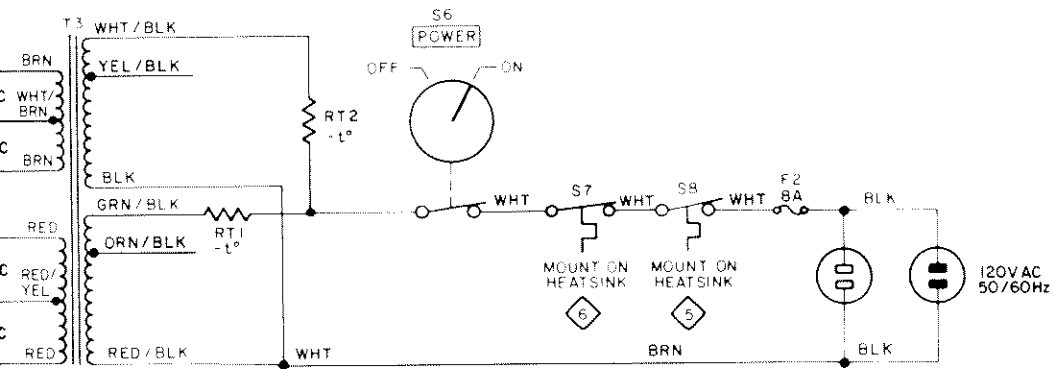
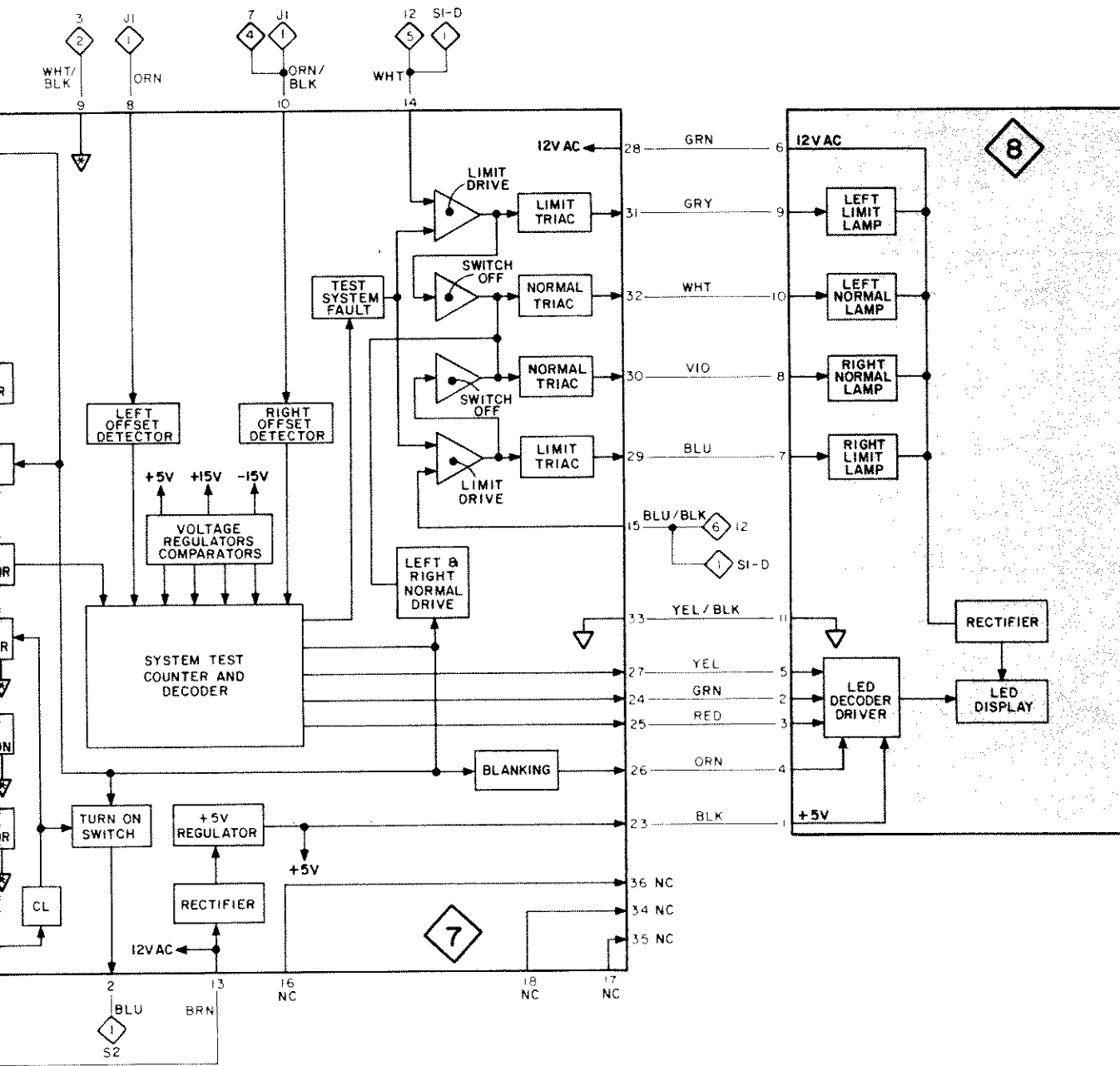
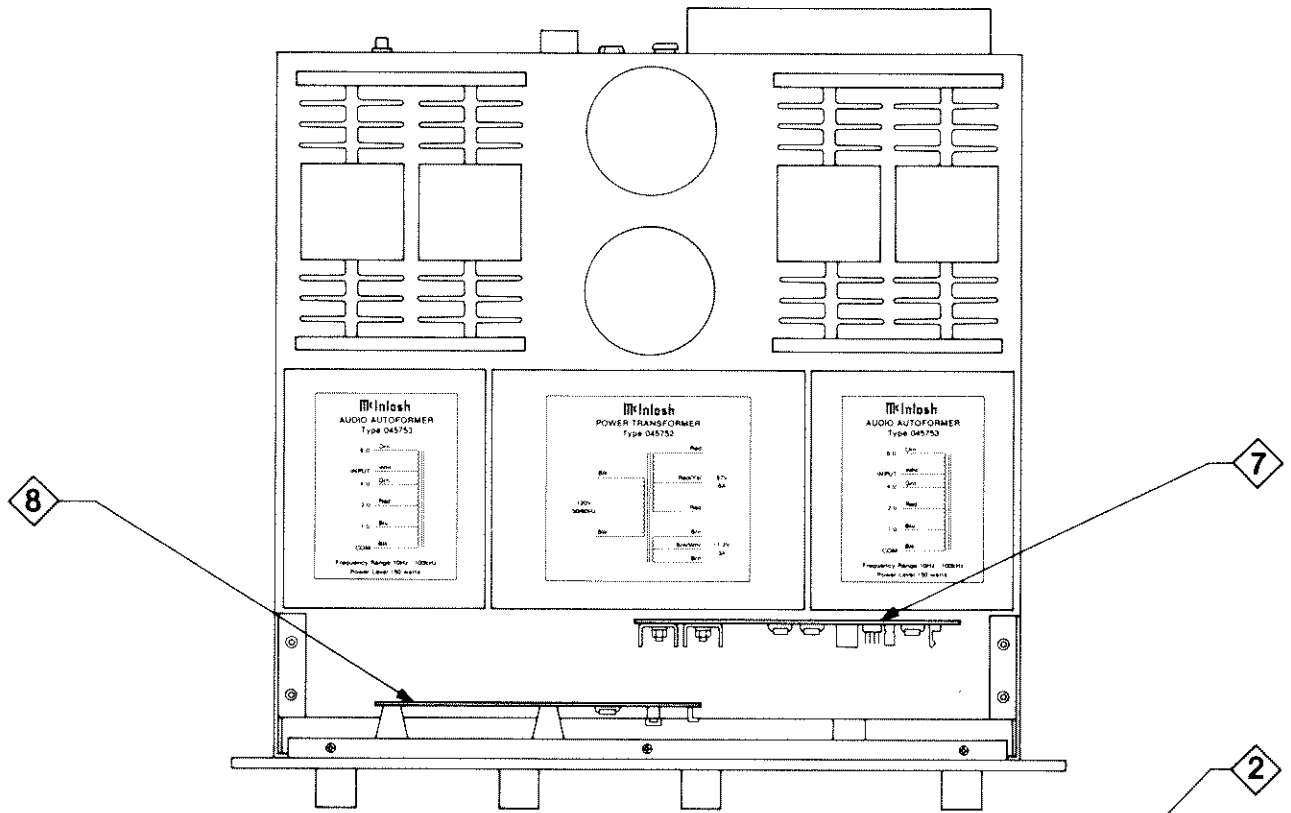


Schematic No 156102

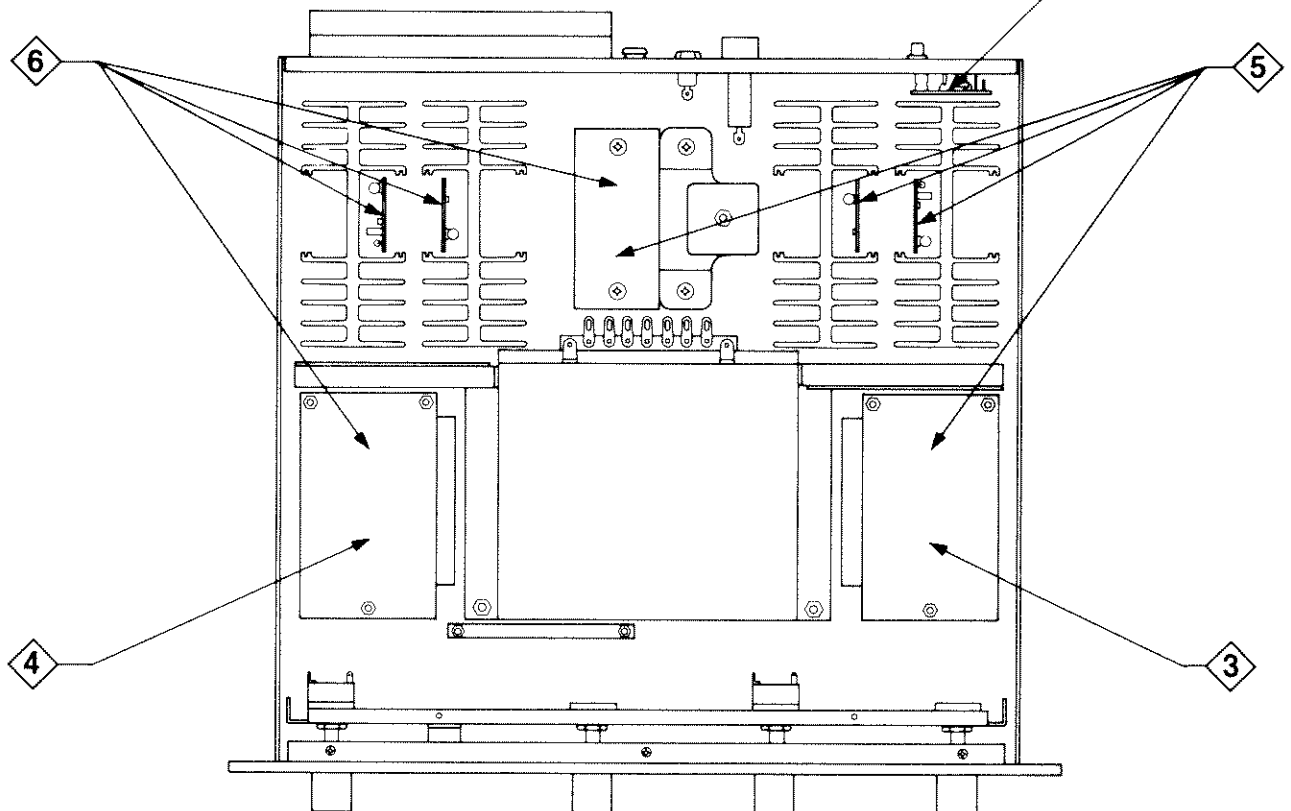




# SECTION LOCATION



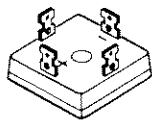
Top View



Bottom View

## PARTS LIST

Symbol No.	Part No.	Name/Description
<b>CAPACITORS</b> (CD = Ceramic Disc, ELECT = Electrolytic, MPE = Metalized Polyester)		
C1	061159	CD, .01 $\mu$ F, + 80 - 20%, 50V
C2	061159	CD, .01 $\mu$ F, + 80 - 20%, 50V
*C3	066340	ELECT, 18,000 $\mu$ F, 60V
*C4	066340	ELECT, 18,000 $\mu$ F, 60V
C5	064267	MPE, .22 $\mu$ F, 400V
<b>DIODES</b> (BRID = Bridge, RECT = Rectifier, Si = Silicon)		
*D1	070092	Si, BRID, RECT, 35A, 200V, MDA3502



D1

<b>FUSES and FUSEHOLDERS</b> (FA = Fast Action)		
*F1	174188	Fusible Link, #30 solid copper wire
*F2	089008	Fuse, 8 Amp, 125V, MDL
*	178114	Fuseholder, UL/CSA-Slot, Bussman HMM
<b>RESISTORS</b> (CF = Carbon Film, MF = Metal Film)		
*R1	134273	Left Gain Control
*R2	134273	Right/Mono Gain Control
R3	141057	CF, 2.2K, 5%, 1/4W
<b>THERMISTORS</b>		
*RT1	144151	Thermistor, 5 $\Omega$
*RT2	144151	Thermistor, 5 $\Omega$
<b>SWITCHES</b>		
*S1	148055	Mode Switch
*S2	146183	Speaker Switch
S3		(Not Used)
*S4	148052	Tone Switch
*S5	148052	Speed Switch
*S6	146183	Power Switch
*S7	153017	Thermal Cut-Out Switch
*S8	153017	Thermal Cut-Out Switch
<b>TRANSFORMERS</b>		
*T1	045753	Audio
*T2	045753	Audio
*T3	045752	Power
<b>MISCELLANEOUS</b>		
	084038	Strain Relief (Line Cord)
	117009	AC Receptacle, Black
*J1	117049	Headphone Jack, 3/8"
	170119	Line Cord, 18 Ga.

\* Parts marked with an asterisk (\*) are replacement parts stocked by our Service Department and must be ordered from McIntosh. These parts must be ordered by part number. Parts not marked may be obtained from electronic parts suppliers.

## INSTALLATION HARDWARE

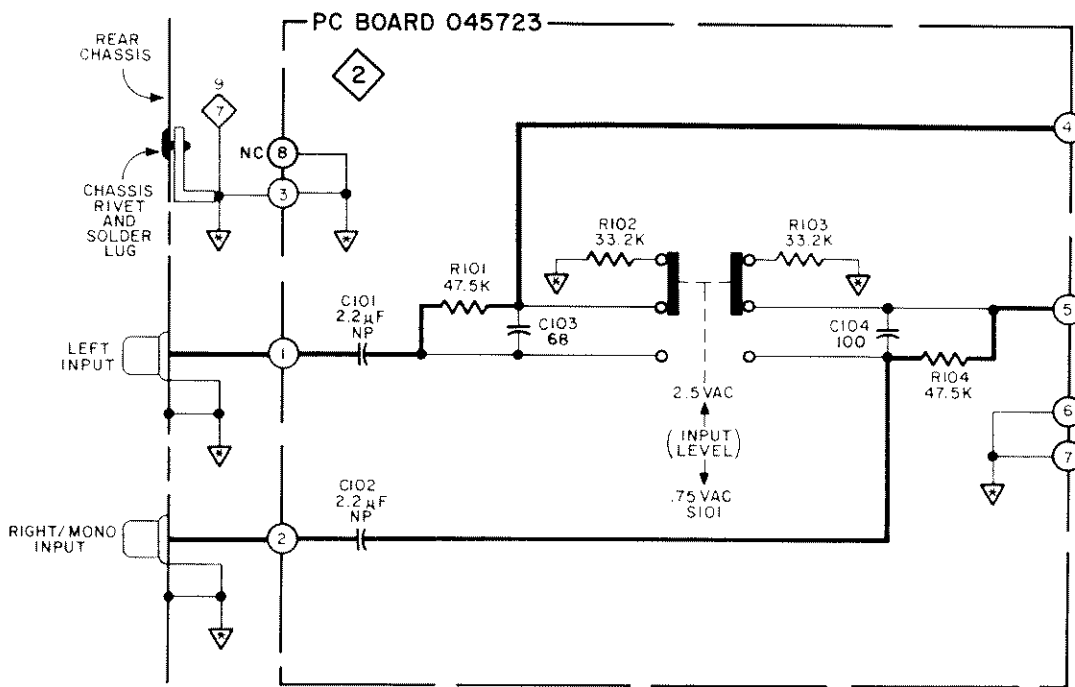
Symbol No.	Part No.	Name, Description
*017218		Plastic feet, secure w/101072 screws
*045392		Hardware package
101072		8x $\frac{3}{4}$ Screws (for plastic feet)
101016		10x1- $\frac{1}{4}$ Screws (for shelf mounting)
101077		10x1 Screws (for shelf mounting)

## FRONT PANEL and TRIM

Symbol No.	Part No.	Name, Description
*017219		Normal and limit windows
*017299		System test window
*045861		Front panel, complete
*090157		Left gain knob
*090157		Right/mono gain knob
*090157		Speakers knob
*090157		Power knob
*104017		Knob felt washers, 3/4 dia.

## SHIPPING CARTON

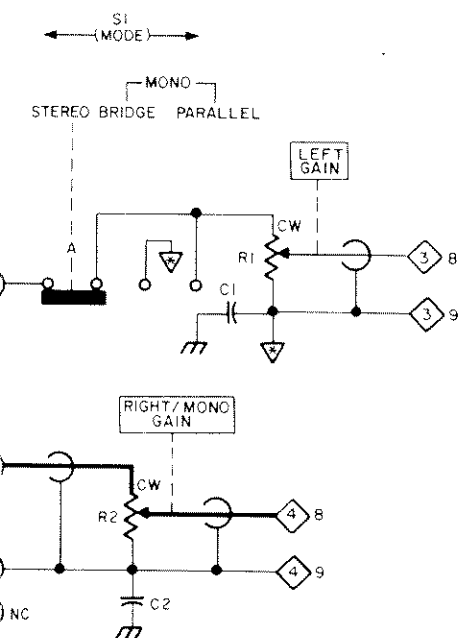
Symbol No.	Part No.	Name, Description
*033241		Shipping Skid
*033389		Shipping Carton only
101034		10 x 2" Screws (3 required to mount shipping skid)
104033		10 x 1 $\frac{3}{4}$ " Flat Washer (3 used with 101034 screws)
*045945		Shipping Carton, Complete with all parts listed above



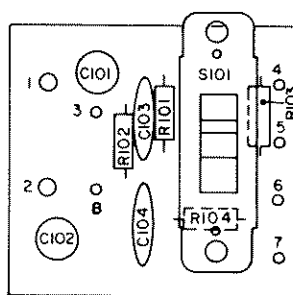
Schematic No. 156103

# CONNECTION DIAGRAM

## 2 INPUT LEVEL



### PARTS LOCATION



PCB 045723

### PARTS LIST

Symbol No.	Part No.	Name/Description
<b>CAPACITORS</b> (CD = Ceramic Disc, ELECT = Electrolytic)		
*C101	066302	ELECT, 2.2 $\mu$ F, 25V, NP
*C102	066302	ELECT, 2.2 $\mu$ F, 25V, NP
C103	061133	CD, 68pF, 10%, N750, CG
C104	061023	CD, 100pF, 10%, 500V, N1500
<b>RESISTORS</b> (MF = Metal Film)		
*R101	144108	MF, 47.5K, 1%, 1/4W
*R102	144106	MF, 33.2K, 1%, 1/4W
*R103	144106	MF, 33.2K, 1%, 1/4W
*R104	144108	MF, 47.5K, 1%, 1/4W
<b>SWITCHES</b>		
*S101	148053	Input Level Switch

\* Parts marked with an asterisk (\*) are replacement parts stocked by our Service Department and must be ordered from McIntosh. These parts must be ordered by part number. Parts not marked may be obtained from electronic parts suppliers.

# MC 2150

Stereo Power Amplifier

# Schematics

039318

Sheet **1** of **2**

---

## McIntosh

---

This sheet includes sections:

- ① INTERCONNECTION DIAGRAM
- ② INPUT LEVEL
- ③ PREAMP INPUT and HEADPHONE OUTPUT  
(LEFT CHANNEL)
- ⑤ POWER OUTPUT and POWER GUARD  
(LEFT CHANNEL)

The continuous improvement of its products is the policy of McIntosh Laboratory Incorporated, who reserve the right to improve design without notice. Because of the constant upgrading of McIntosh products' circuitry and components, the Company cannot insure, and does not warrant, the accuracy of the within schematic material, which is intended for information only.

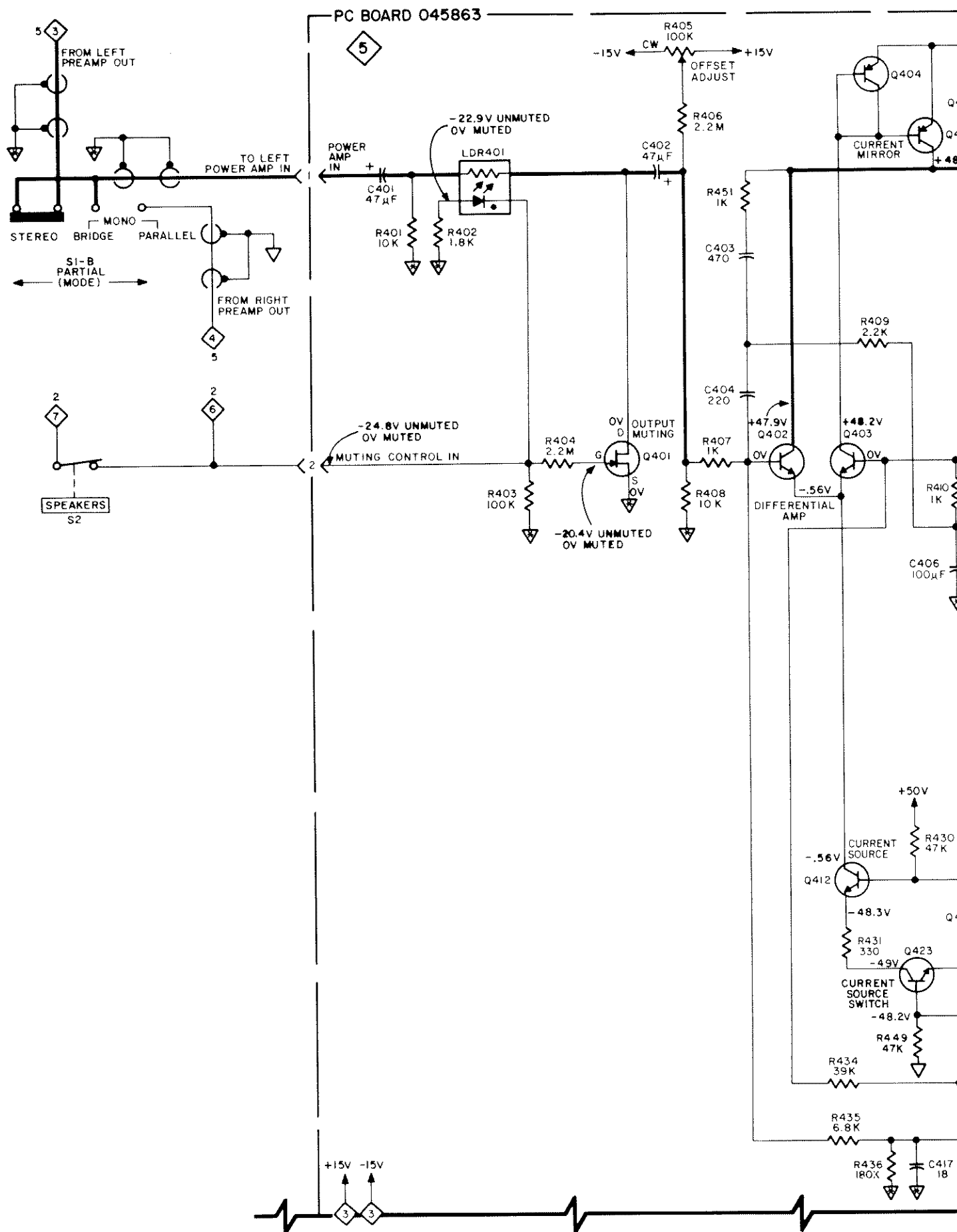
**McIntosh Laboratory Inc. 2 Chambers Street, Binghamton, NY 13903-9990**

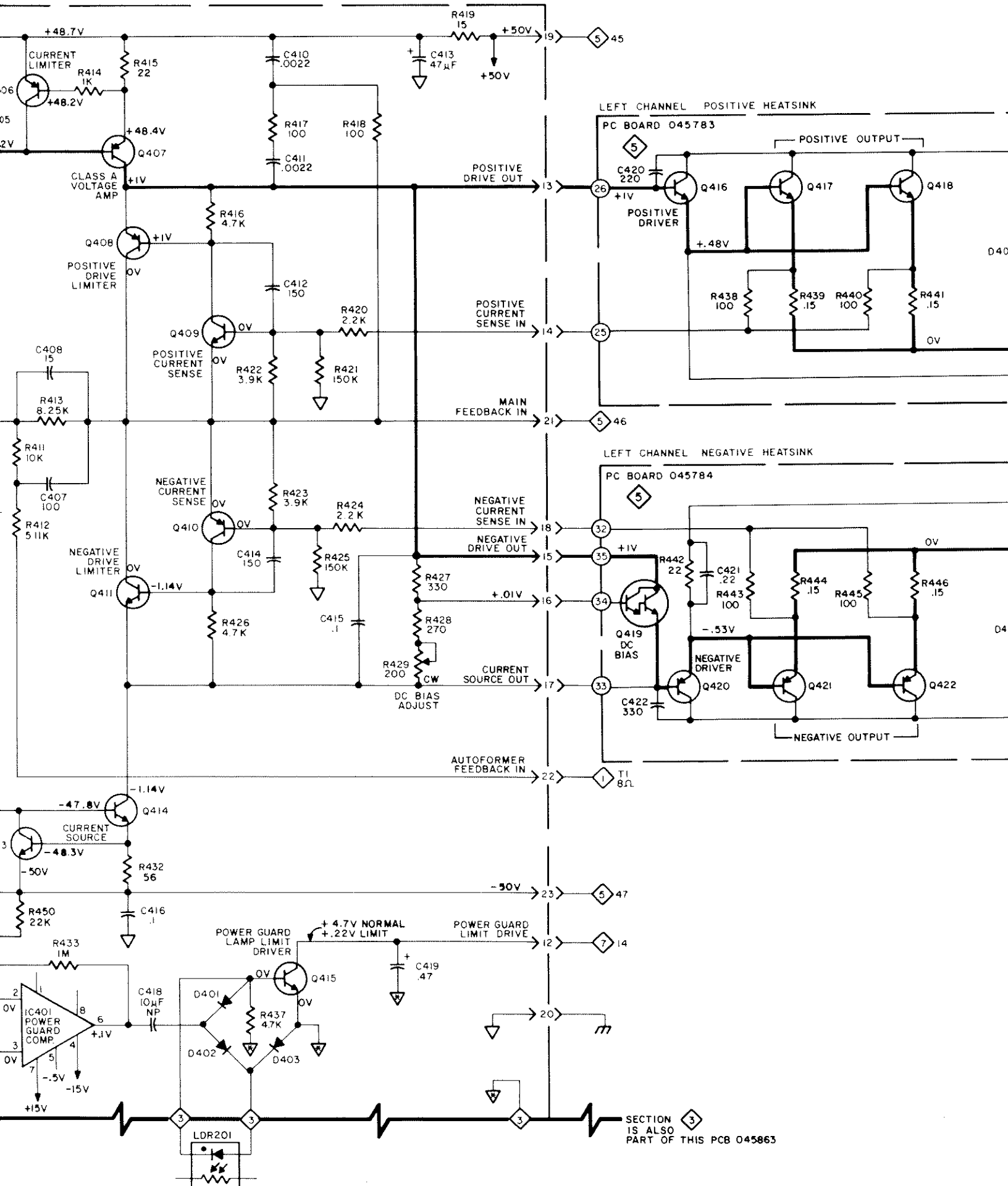
Printed in U.S.A.

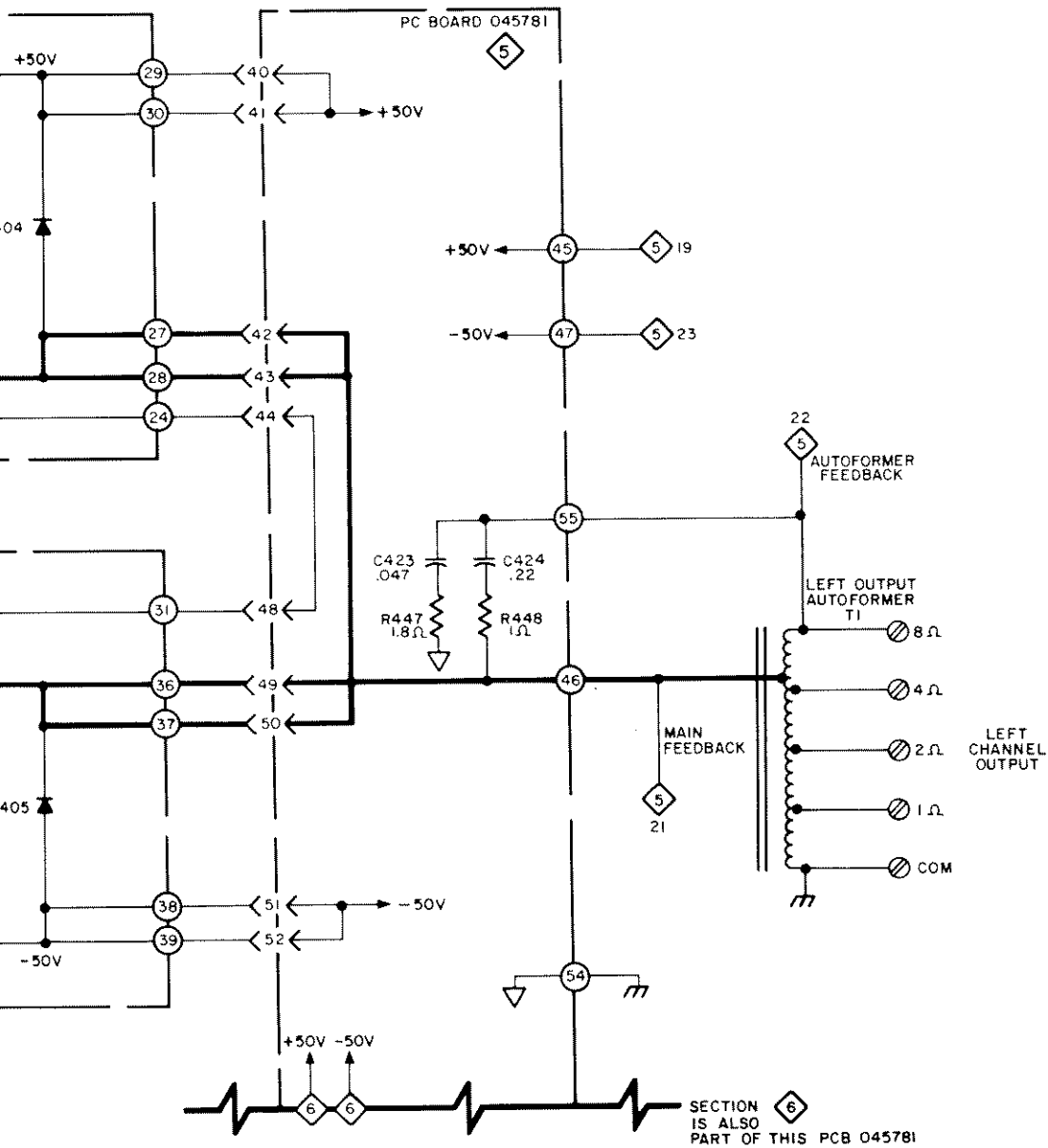
Telephone (607) 723-3512

Part No. 039318

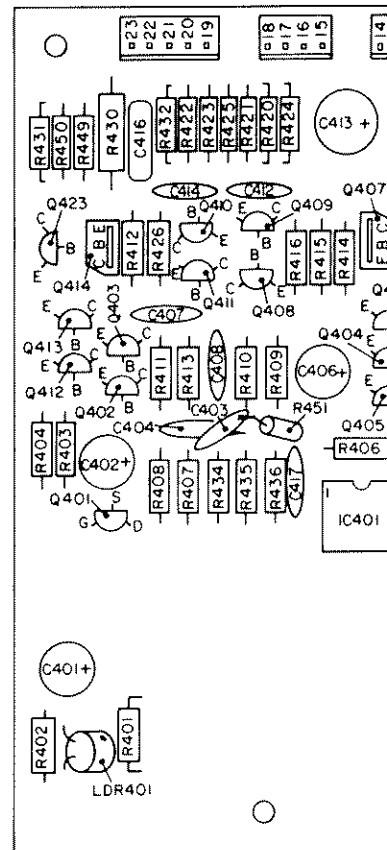




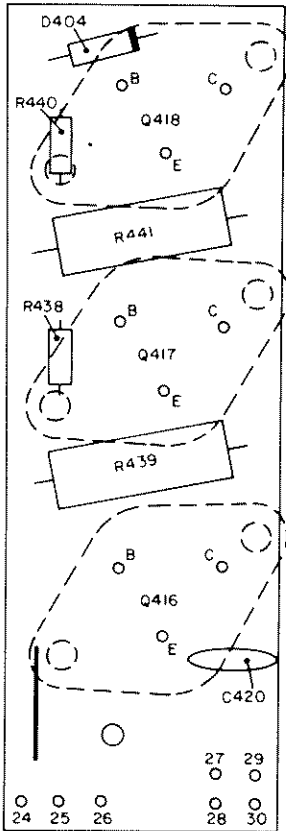
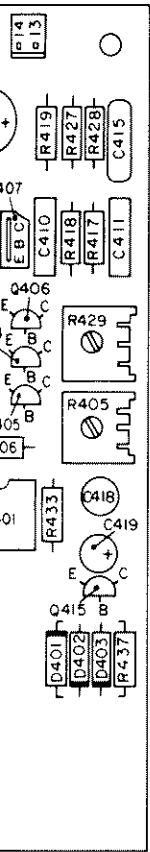




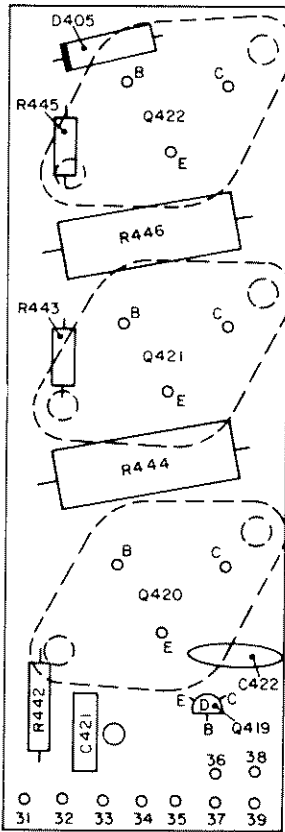
## PARTS LOCATION



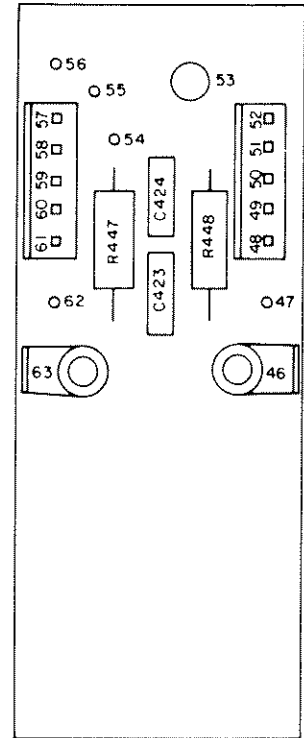
# MC 2150



PCB 045783 Nearest to center of unit



PCB 045784 Nearest to side of unit

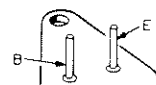
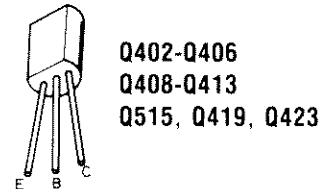
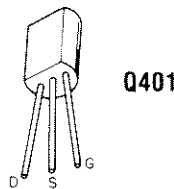


PCB 045781

## PARTS LIST

Symbol No.	Part No.	Name/Description
<b>CAPACITORS</b> (CD = Ceramic Disc, ELECT = Electrolytic, MPE = Metalized Polyester, PF = Polyester Film)		
C401	066215	ELECT, 47 $\mu$ F, 16V
C402	066215	ELECT, 47 $\mu$ F, 16V
C403	061128	CD, 470pF, 10%, 500V, Z5F
C404	061027	CD, 220pF, 10%, 500V, Z5F
C405		(Not Used)
C406	066226	ELECT, 100 $\mu$ F, 16V
C407	061023	CD, 100pF, 10%, 500V, N1500
*C408	061114	CD, 15pF, 5%, 500V, N330
C409		(Not Used)
C410	064165	PF, .0022 $\mu$ F, 5%, 100V
C411	064165	PF, .0022 $\mu$ F, 5%, 100V
C412	061024	CD, 150pF, 10%, 500V, Z5F
C413	066215	ELECT, 47 $\mu$ F, 16V
C414	061024	CD, 150pF, 10%, 500V, Z5F

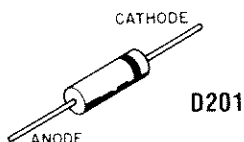
*Q418	132208	Si, NPN
*Q419	132090	Si, NPN, DAR, Selected MPS-A14
*Q420	132204	Si, PNP, Selected MJ 4237
*Q421	132209	Si, PNP
*Q422	132209	Si, PNP
*Q423	132195	Si, NPN, Selected 2N6428A



Q416-Q418

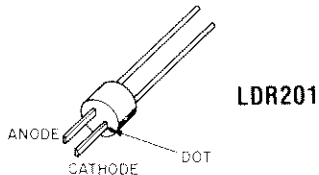
## PARTS LIST

Symbol No.	Part No.	Name/Description
<b>CAPACITORS</b> (CD = Ceramic Disc, ELECT = Electrolytic)		
C201	061016	CD, 33pF, 10%, 500V, NPO
C202	066237	ELECT, 2.2 $\mu$ F, 50V
C203	066313	ELECT, 47 $\mu$ F, 80V, DC
*C204	061140	CD, 3.9pF, $\pm$ .25pF, 100V, NPO
C205	061161	CD, .047 $\mu$ F, +80 -20%, 50V
C206	061161	CD, .047 $\mu$ F, +80 -20%, 50V
<b>DIODES</b> (Si = Silicon, STAB = Stabistor)		
*D201	070046	Si, STAB, 1.3V, 2%, 10mA, Selected MZ236



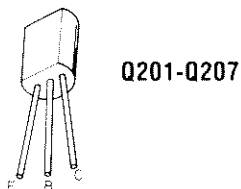
## LIGHT DEPENDENT RESISTORS

\*LDR201 144070 LDR, CLM6000



## TRANSISTORS (Si = Silicon)

*Q201	132056	Si, PNP, 2N5087
*Q202	132056	Si, PNP, 2N5087
*Q203	132195	Si, NPN, Selected 2N6428A
*Q204	132195	Si, NPN, Selected 2N6428A
*Q205	132195	Si, NPN, Selected 2N6428A
*Q206	132172	Si, PNP, MPS-A55
*Q207	132171	Si, NPN, MPS-A05

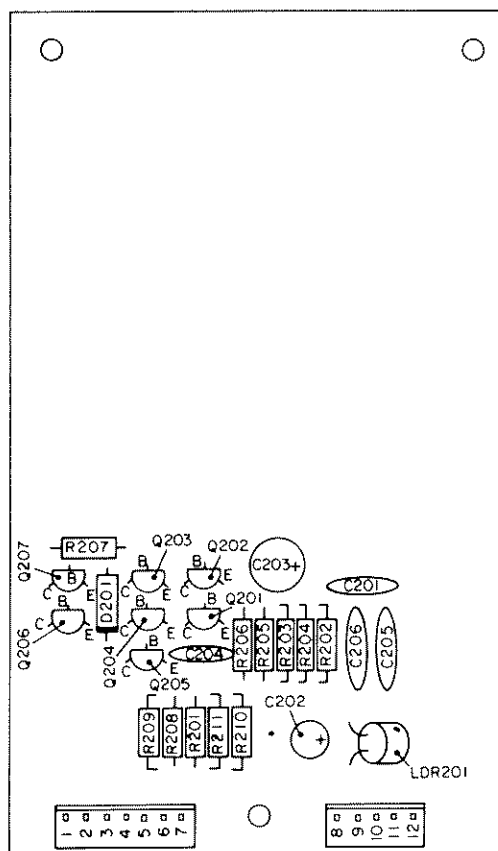


## RESISTORS (CF = Carbon Film, MF = Metal Film)

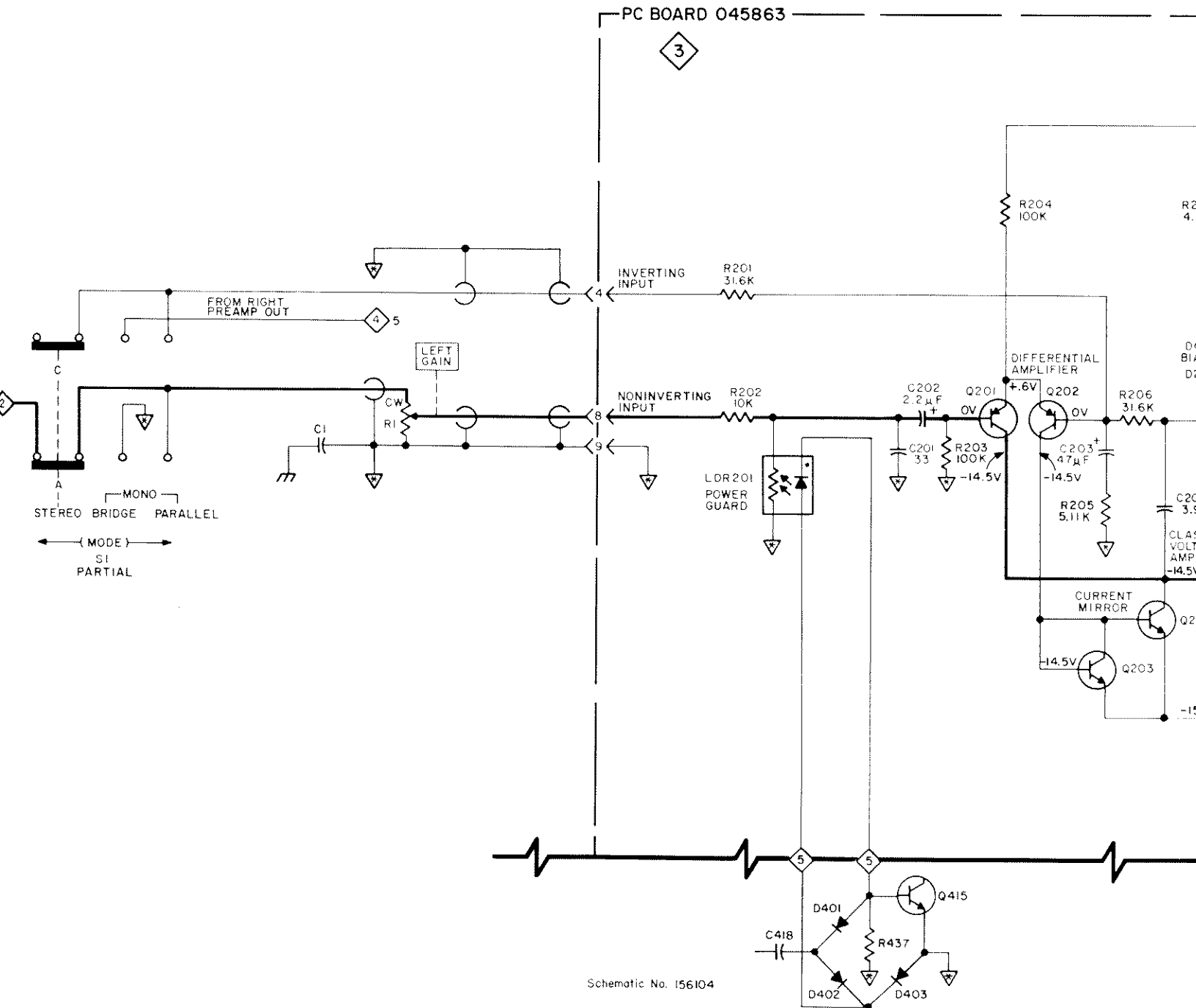
*R201	144148	MF, 31.6K, 1%, 1/4W
R202	141072	CF, 10K, 5%, 1/4W
R203	141096	CF, 100K, 5%, 1/4W
R204	141096	CF, 100K, 5%, 1/4W
*R205	144083	MF, 5.11K, 2%, 1/4W
*R206	144148	MF, 31.6K, 1%, 1/4W
R207	141064	CF, 4.7K, 5%, 1/4W
R208	141140	CF, 15 $\Omega$ , 5%, 1/4W
R209	141140	CF, 15 $\Omega$ , 5%, 1/4W
R210	141029	CF, 150, 5%, 1/4W
R211	141029	CF, 150, 5%, 1/4W

\* Parts marked with an asterisk (\*) are replacement parts stocked by our Service Department and must be ordered from McIntosh. These parts must be ordered by part number. Parts not marked may be obtained from electronic parts suppliers.

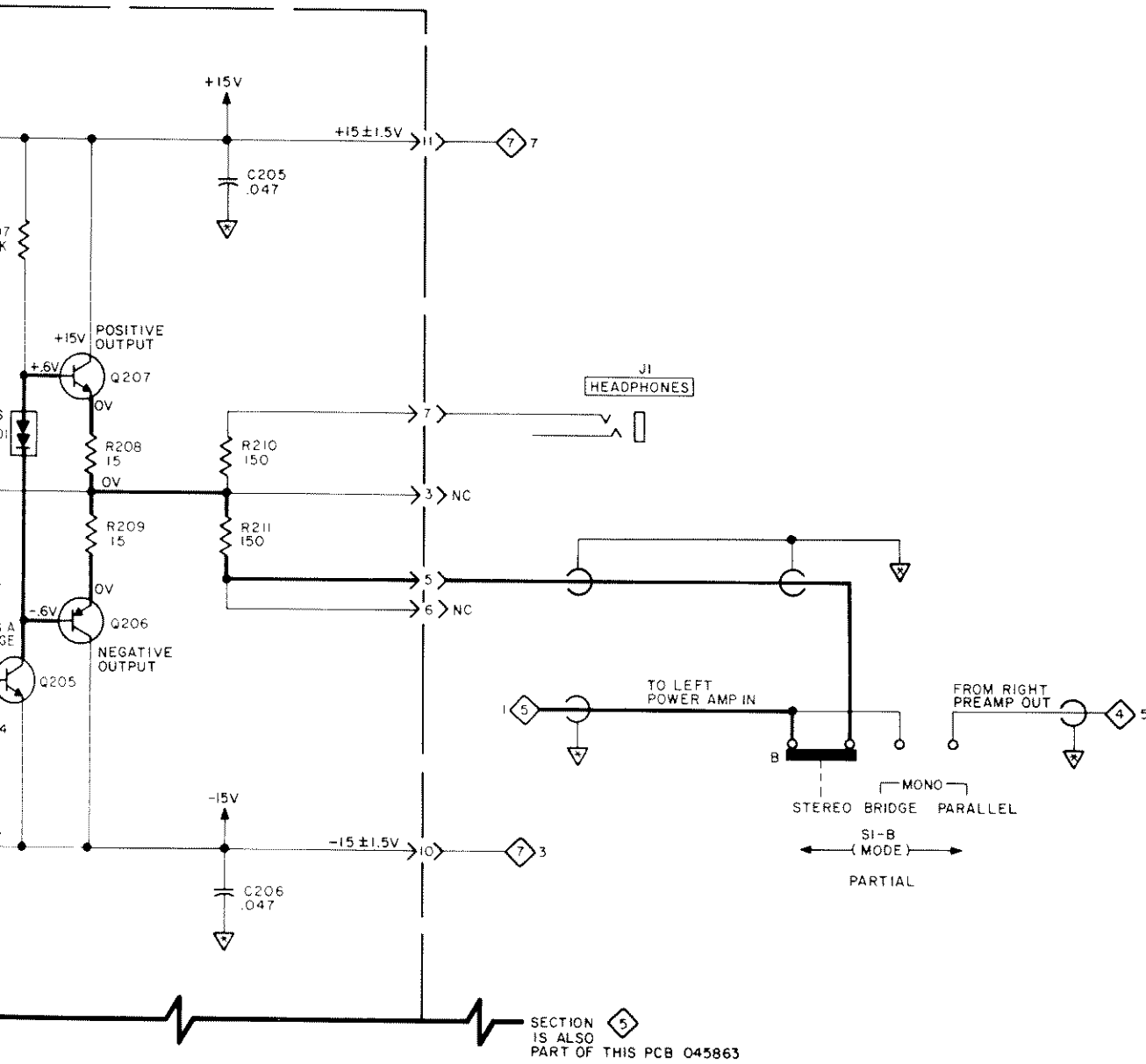
## PARTS LOCATION



PCB 045863



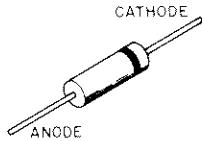
# ARD (LEFT CHANNEL)



C415	064186	MPE, .1 $\mu$ F, 5%, 63V
C416	064186	MPE, .1 $\mu$ F, 5%, 63V
C417	061112	CD, 18pF, 10%, 500V, NPO
*C418	066316	ELECT, 10 $\mu$ F, 25V, NP
C419	066244	ELECT, .47 $\mu$ F, 50V
C420	061027	CD, 220pF, 10%, 500V, Z5F
C421	064190	MPE, 0.22 $\mu$ F, 5%, 63V
C422	061029	CD, 330pF, 10%
C423	064250	MPE, .047 $\mu$ F, 10%, 63V
C424	064258	MPE, .22 $\mu$ F, 10%, 63V

**DIODES** (Si = Silicon, SIG = Signal, RECT = Rectifier)

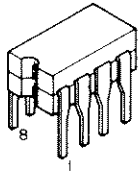
*D401	070047	Si, SIG, 75V, 10mA, IN4148
*D402	070047	Si, SIG, 75V, 10mA, IN4148
*D403	070047	Si, SIG, 75V, 10mA, IN4148
*D404	070031	Si, RECT, 400 PIV, 1.5A
*D405	070031	Si, RECT, 400 PIV, 1.5A



**D401-D405**

**INTEGRATED CIRCUITS** (AN = Analog, BP = Bipolar)

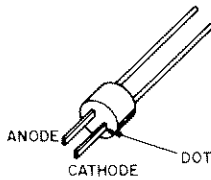
*IC401	133066	AN, BP, Operation Amp, NE-5534AN
--------	--------	----------------------------------



**IC401**

**LIGHT DEPENDENT RESISTORS**

*LDR401	144159	LDR, CLM6500
---------	--------	--------------



**LD401**

**TRANSISTORS** (DAR = Darlington, J-FET = Junction FET, Si = Silicon, N = N Channel)

*Q401	132193	Si, N, J-FET, 2N4392
*Q402	132185	Si, NPN, Selected 2N6429A
*Q403	132185	Si, NPN, Selected 2N6429A
*Q404	132150	Si, PNP, MPS-D55
*Q405	132150	Si, PNP, MPS-D55
*Q406	132150	Si, PNP, MPS-D55
*Q407	132194	Si, PNP
*Q408	132150	Si, PNP, MPS-D55
*Q409	132143	Si, NPN, MPS-D05
*Q410	132150	Si, PNP, MPS-D55
*Q411	132143	Si, NPN, MPS-D05
*Q412	132185	Si, NPN, Selected 2N6529A
*Q413	132195	Si, NPN, Selected 2N6428A
*Q414	132196	Si, NPN
*Q415	132195	Si, NPN, Selected 2N6428A
*Q416	132203	Si, NPN, Selected MJ4247
*Q417	132208	Si, NPN

**Q407, Q414**

**RESISTORS** (CF = Carbon Film, MF = Metal Film, POT = Potentiometer, WW = Wirewound, FP = Flameproof)

R401	141072	CF, 10K, 5%, 1/4W
R402	141055	CF, 1.8K, 5%, 1/4W
R403	141096	CF, 100K, 5%, 1/4W
R404	141124	CF, 2.2M, 5%, 1/4W
*R405	134389	POT, 100K 10%
R406	141124	CF, 2.2M, 5%, 1/4W
R407	141049	CF, 1K, 5%, 1/4W
R408	141072	CF, 10K, 5%, 1/4W
R409	141057	CF, 2.2K, 5%, 1/4W
*R410	144090	MF, 1K, 1%, 1/4W
*R411	144053	MF, 10K, 1%, 1/4W
*R412	144083	MF, 5.11K, 2%, 1/4W
*R413	144153	MF, 8.25K, 1%, 1/4W
R414	141049	CF, 1K, 5%, 1/4W
*R415	144160	FP, 22 $\Omega$ , 5%, 1/4W
R416	141064	CF, 4.7K, 5%, 1/4W
R417	141025	CF, 100, 5%, 1/4W
R418	141025	CF, 100, 5%, 1/4W
*R419	144158	FP, 15 $\Omega$ , 5%, 1/4W
R420	141057	CF, 2.2K, 5%, 1/4W
R421	141100	CF, 150K, 5%, 1/4W
R422	141062	CF, 3.9K, 5%, 1/4W
R423	141062	CF, 3.9K, 5%, 1/4W
R424	141057	CF, 2.2K, 5%, 1/4W
R425	141100	CF, 150K, 5%, 1/4W
R426	141064	CF, 4.7K, 5%, 1/4W
R427	141037	CF, 330, 5%, 1/4W
R428	141035	CF, 270 $\Omega$ , 5%, 1/4W
*R429	134368	POT, Linear, 200 $\Omega$ , 10%
R430	141196	CF, 47K, 5%, 1/2W
R431	141037	CF, 330, 5%, 1/4W
R432	141154	CF, 56 $\Omega$ , 5%, 1/4W
R433	141120	CF, 1M, 5%, 1/4W
R434	141086	CF, 39K, 5%, 1/4W
R435	141068	CF, 6.8K, 5%, 1/4W
R436	141102	CF, 180K, 5%, 1/4W
R437	141064	CF, 4.7K, 5%, 1/4W
R438	141025	CF, 100, 5%, 1/4W
*R439	139125	WW, .15 $\Omega$ , 5%, 5W, Noninductive
R440	141025	CF, 100, 5%, 1/4W
*R441	139125	WW, .15 $\Omega$ , 5%, 5W, Noninductive
*R442	144066	FP, 22 $\Omega$ , 10%, 1/2W
*R443	141025	CF, 100, 5%, 1/4W
*R444	139125	WW, .15 $\Omega$ , 5%, 5W, Noninductive
R445	141025	CF, 100, 5%, 1/4W
*R446	139125	WW, .15 $\Omega$ , 5%, 5W, Noninductive
*R447	139077	WW, 1.8 $\Omega$ , 10%, 2W
*R448	139147	WW, 1 $\Omega$ , 5%, 2W
R449	141088	CF, 47K, 5%, 1/4W
R450	141080	CF, 22K, 5%, 1/4W
R451	141049	CF, 1K, 5%, 1/4W

\* Parts marked with an asterisk (\*) are replacement parts stocked by our Service Department and must be ordered from McIntosh. These parts must be ordered by part number. Parts not marked may be obtained from electronic parts suppliers.



# PARTS LIST

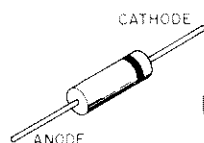
**Symbol Part**  
**No. No. Name/Description**

**CAPACITORS** (CD = Ceramic Disc, ELECT = Electrolytic,  
MPE = Metalized Polyester, PF = Polyester Film)

C501	066215	ELECT, 47 $\mu$ F, 16V
C502	066215	ELECT, 47 $\mu$ F, 16V
C503	061128	CD, 470pF, 10%, 500V, Z5F
C504	061027	CD, 220pF, 10%, 500V, Z5F
C505		(Not Used)
C506	066226	ELECT, 100 $\mu$ F, 16V
C507	061023	CD, 100pF, 10%, 500V, N1500
*C508	061114	CD, 15pF, 5%, 500V, N330
C509		(Not Used)
C510	064165	PF, .0022 $\mu$ F, 5%, 100V
C511	064165	PF, .0022 $\mu$ F, 5%, 100V
C512	061024	CD, 150pF, 10%, 500V, Z5F
C513	066215	ELECT, 47 $\mu$ F, 16V
C514	061024	CD, 150pF, 10%, 500V, Z5F
C515	064186	MPE, .1 $\mu$ F, 5%, 63V
C516	064186	MPE, .1 $\mu$ F, 5%, 63V
C517	061112	CD, 18pF, 10%, 500V, NPO
*C518	066316	ELECT, 10 $\mu$ F, 25V, NP
C519	066244	ELECT, .47 $\mu$ F, 50V
C520	061027	CD, 220pF, 10%, 500V, Z5F
C521	064190	MPE, 0.22 $\mu$ F, 5%, 63V
C522	061029	CD, 330pF, 10%
C523	064250	MPE, .047 $\mu$ F, 10%, 63V
C524	064258	MPE, .22 $\mu$ F, 10%, 63V

**DIODES** (Si = Silicon, SIG = Signal, RECT = Rectifier)

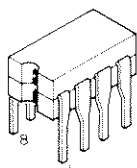
*D501	070047	Si, SIG, 75V, 10mA, IN4148
*D502	070047	Si, SIG, 75V, 10mA, IN4148
*D503	070047	Si, SIG, 75V, 10mA, IN4148
*D504	070031	Si, RECT, 400 PIV, 1.5A
*D505	070031	Si, RECT, 400 PIV, 1.5A



**D501-D505**

**INTEGRATED CIRCUITS** (AN = Analog, BP = Bipolar)

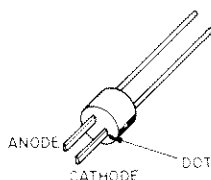
*IC501	133066	AN, BP, Operation Amp, NE-5534AN
--------	--------	----------------------------------



**IC501**

**LIGHT DEPENDENT RESISTORS**

*LDR501	144159	LDR, CLM6500
---------	--------	--------------

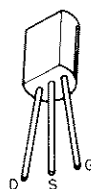


**LDR501**

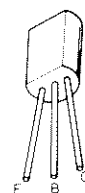
**TRANSISTORS** (DAR = Darlington, J-FET = Junction FET,  
Si = Silicon, N = N Channel)

*Q501	132193	Si, N, J-FET, 2N4392
*Q502	132185	Si, NPN, Selected 2N6429A
*Q503	132185	Si, NPN, Selected 2N6429A

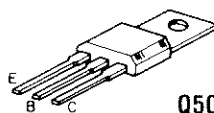
*Q519	132090	Si, NPN, DAR, Selected MPS-A14
*Q520	132204	Si, PNP, Selected MJ 4237
*Q521	132209	Si, PNP
*Q522	132209	Si, PNP
*Q523	132195	Si, NPN, Selected 2N6428A



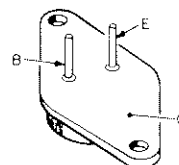
**Q501**



**Q502-Q506**  
**Q508-Q513**  
**Q515, Q519, Q523**



**Q507, Q514**

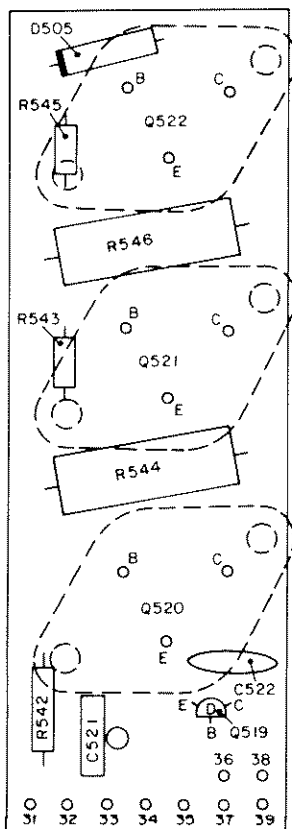
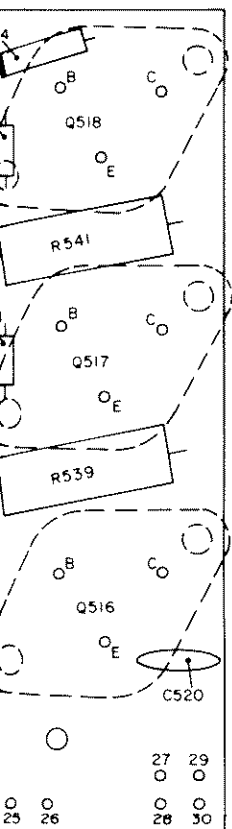
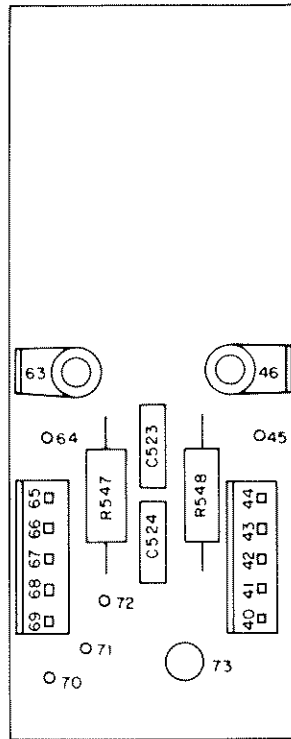
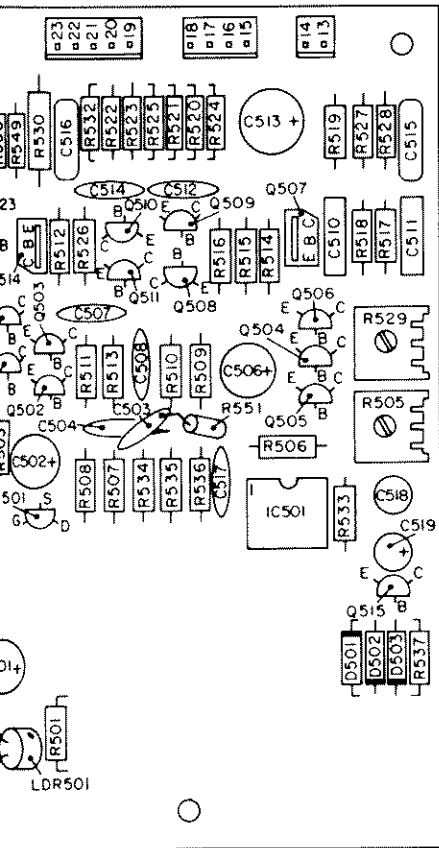


**Q516-Q518**  
**Q520-Q522**

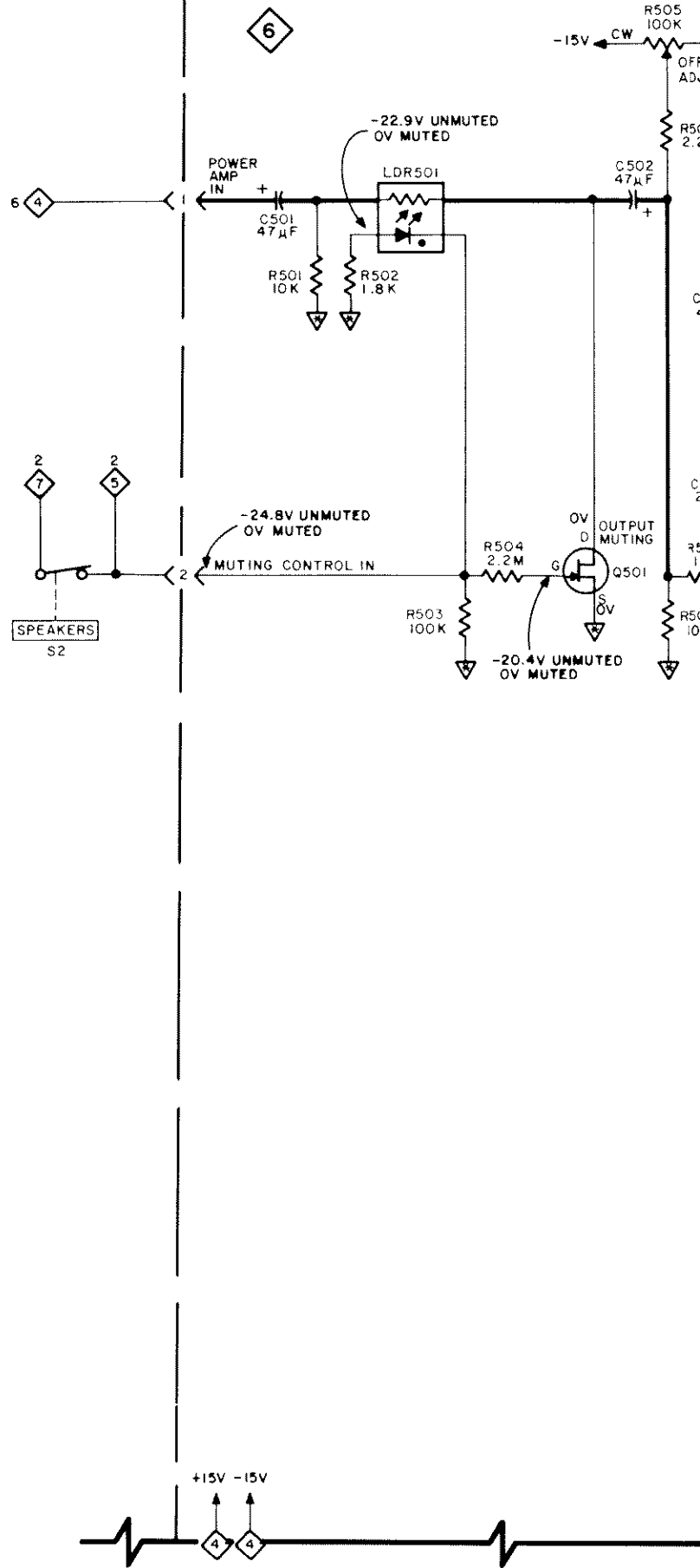
**RESISTORS** (CF = Carbon Film, MF = Metal Film,  
POT = Potentiometer, WW = Wirewound,  
FP = Flameproof)

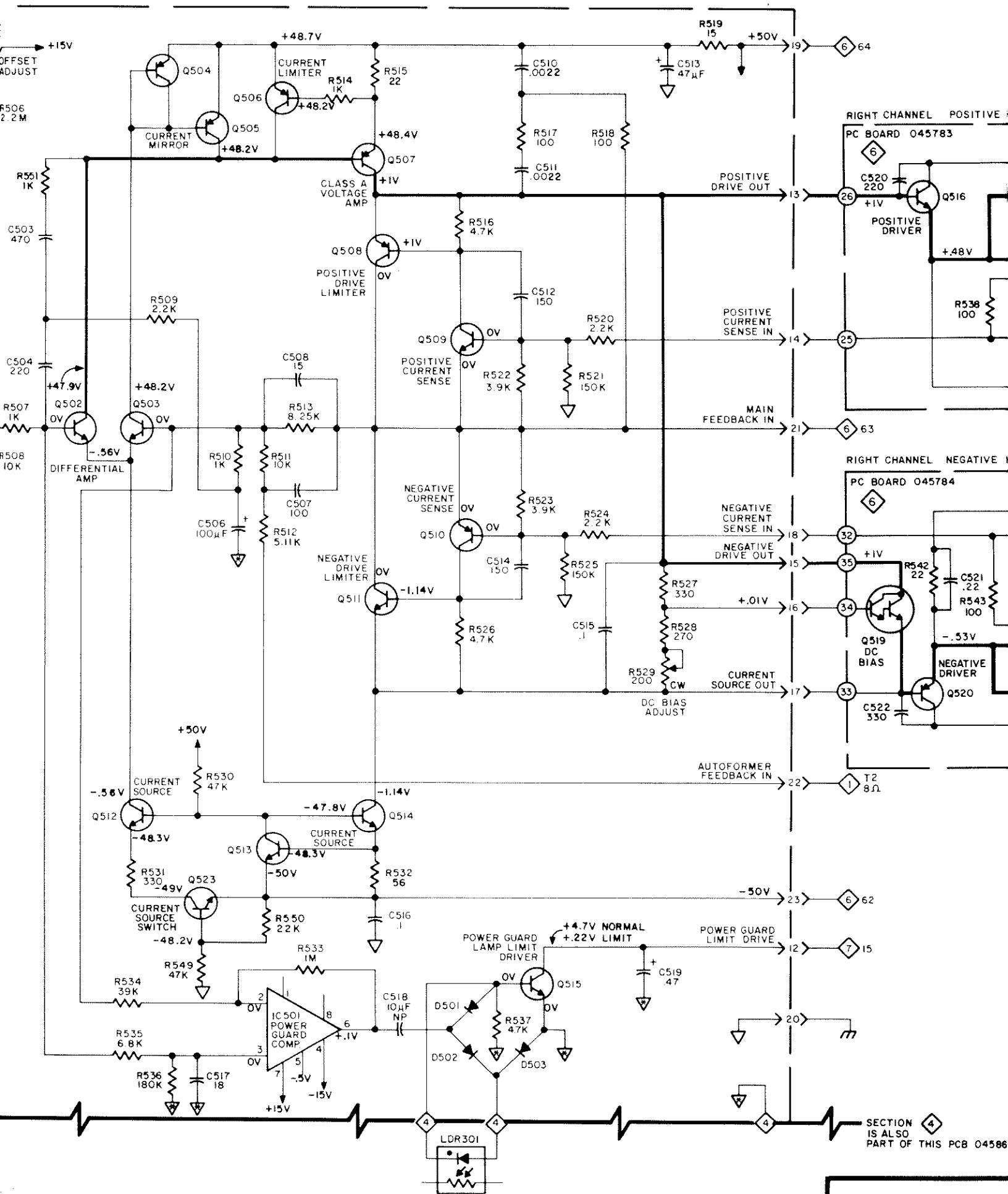
R501	141072	CF, 10K, 5%, 1/4W
R502	141055	CF, 1.8K, 5%, 1/4W
R503	141096	CF, 100K, 5%, 1/4W
R504	141124	CF, 2.2M, 5%, 1/4W
*R505	134389	POT, 100K 10%
R506	141124	CF, 2.2M, 5%, 1/4W
R507	141049	CF, 1K, 5%, 1/4W
R508	141072	CF, 10K, 5%, 1/4W
R509	141057	CF, 2.2K, 5%, 1/4W
*R510	144090	MF, 1K, 1%, 1/4W
*R511	144053	MF, 10K, 1%, 1/4W
*R512	144083	MF, 5.11K, 2%, 1/4W
*R513	144153	MF, 8.25K, 1%, 1/4W
R514	141049	CF, 1K, 5%, 1/4W
*R515	144160	FP, 22 $\Omega$ , 5%, 1/4W
R516	141064	CF, 4.7K, 5%, 1/4W
R517	141025	CF, 100, 5%, 1/4W
R518	141025	CF, 100, 5%, 1/4W
*R519	144158	FP, 15 $\Omega$ , 5%, 1/4W
R520	141057	CF, 2.2K, 5%, 1/4W
R521	141100	CF, 150K, 5%, 1/4W
R522	141062	CF, 3.9K, 5%, 1/4W
R523	141062	CF, 3.9K, 5%, 1/4W
R524	141057	CF, 2.2K, 5%, 1/4W
R525	141100	CF, 150K, 5%, 1/4W
R526	141064	CF, 4.7K, 5%, 1/4W
R527	141037	CF, 330, 5%, 1/4W
R528	141035	CF, 270 $\Omega$ , 5%, 1/4W
*R529	134368	POT, Linear, 200 $\Omega$ , 10%
R530	141196	CF, 47K, 5%, 1/2W
R531	141037	CF, 330, 5%, 1/4W
R532	141154	CF, 56 $\Omega$ , 5%, 1/4W
R533	141120	CF, 1M, 5%, 1/4W
R534	141086	CF, 39K, 5%, 1/4W
R535	141068	CF, 6.8K, 5%, 1/4W
R536	141102	CF, 180K, 5%, 1/4W
R537	141064	CF, 4.7K, 5%, 1/4W
R538	141025	CF, 100, 5%, 1/4W
*R539	139125	WW, .15 $\Omega$ , 5%, 5W, Noninductive
R540	141025	CF, 100, 5%, 1/4W
*R541	139125	WW, .15 $\Omega$ , 5%, 5W, Noninductive
*R542	144066	FP, 22 $\Omega$ , 10% 1/2W
*R543	141025	CF, 100, 5%, 1/4W

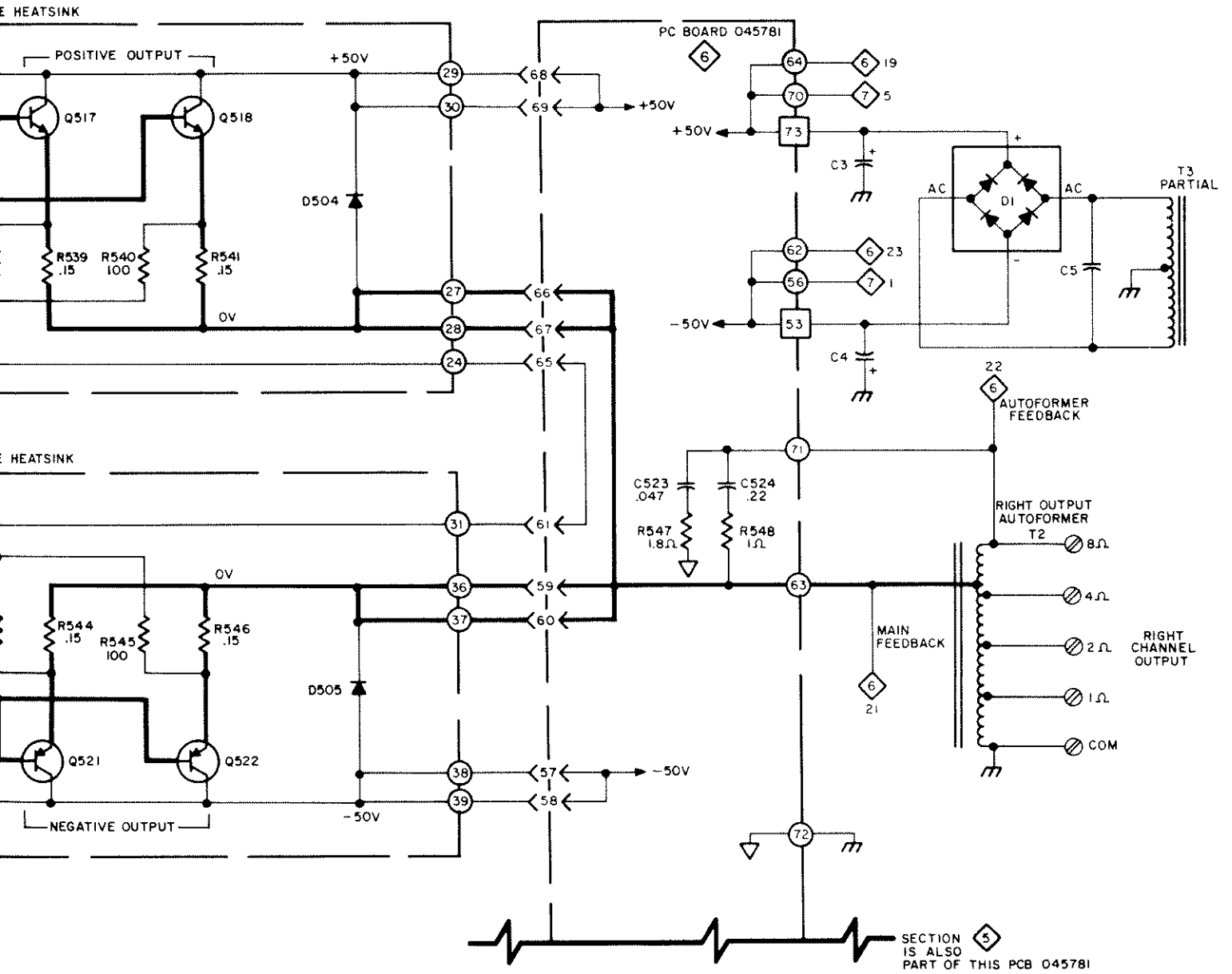
**PARTS LOCATION**



**PC BOARD 045863**





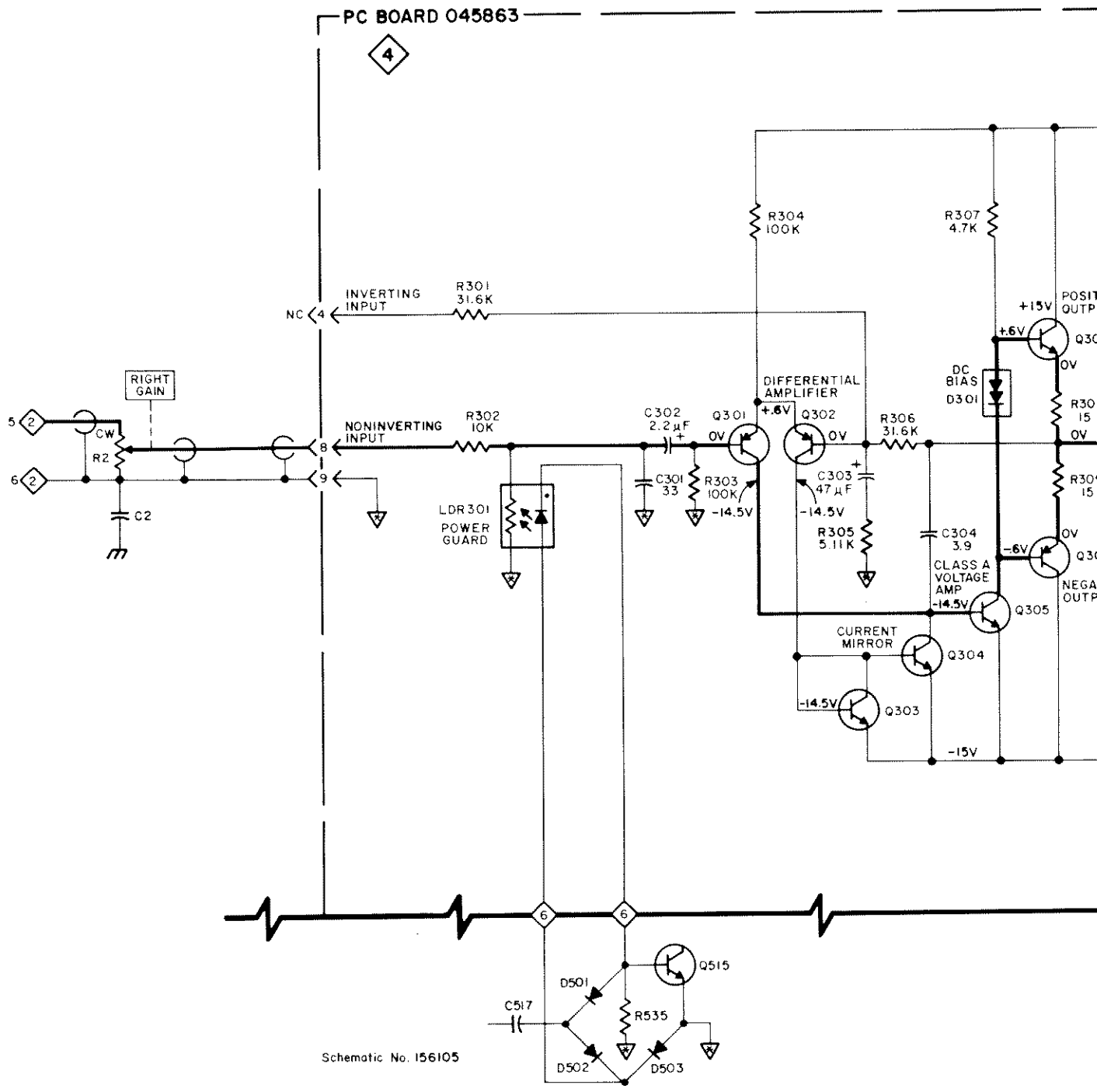


*Q503	132185	Si, NPN, Selected 2N6428A
*Q504	132150	Si, PNP, MPS-D55
*Q505	132150	Si, PNP, MPS-D55
*Q506	132150	Si, PNP, MPS-D55
*Q507	132194	Si, PNP
*Q508	132150	Si, PNP, MPS-D55
*Q509	132143	Si, NPN, MPS-D05
*Q510	132150	Si, PNP, MPS-D55
*Q511	132143	Si, NPN, MPS-D05
*Q512	132185	Si, NPN, Selected 2N6429A
*Q513	132195	Si, NPN, Selected 2N6428A
*Q514	132196	Si, NPN
*Q515	132195	Si, NPN, Selected 2N6428A
*Q516	132203	Si, NPN, Selected MJ4247
*Q517	132208	Si, NPN
*Q518	132208	Si, NPN

*R544	139125	WW, .15Ω, 5%, 5W, Noninductive
R545	141025	CF, 100, 5%, 1/4W
*R546	139125	WW, .15Ω, 5%, 5W, Noninductive
*R547	139077	WW, 1.8Ω, 10%, 2W
*R548	139147	WW, 1Ω, 5%, 2W
R549	141088	CF, 47K, 5%, 1/4W
R550	141080	CF, 22K, 5%, 1/4W
R551	141049	CF, 1K, 5%, 1/4W

\* Parts marked with an asterisk (\*) are replacement parts stocked by our Service Department and must be ordered from McIntosh. These parts must be ordered by part number. Parts not marked may be obtained from electronic parts suppliers.

PCB side



SECTION

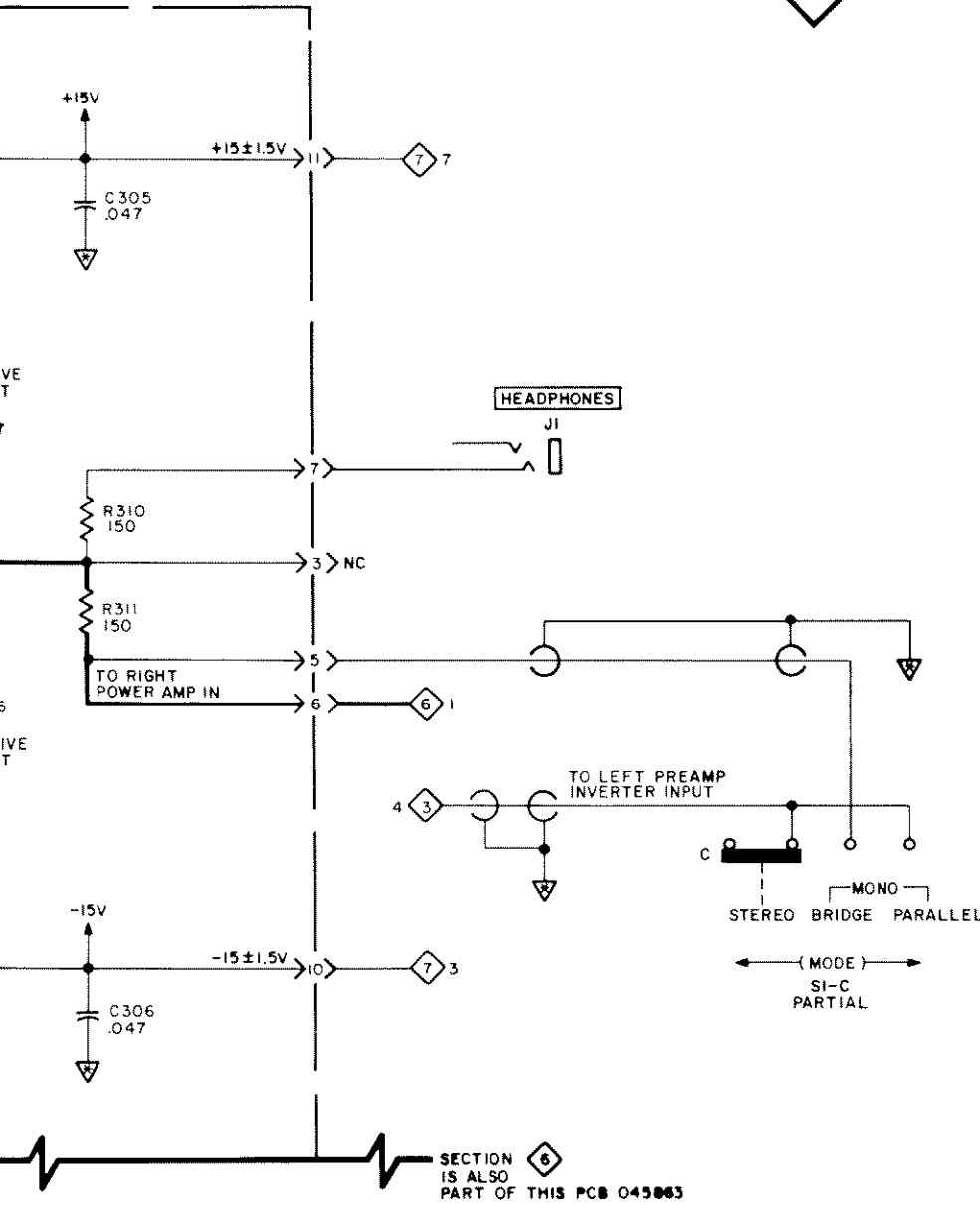


POWER OUTPUT and POWER

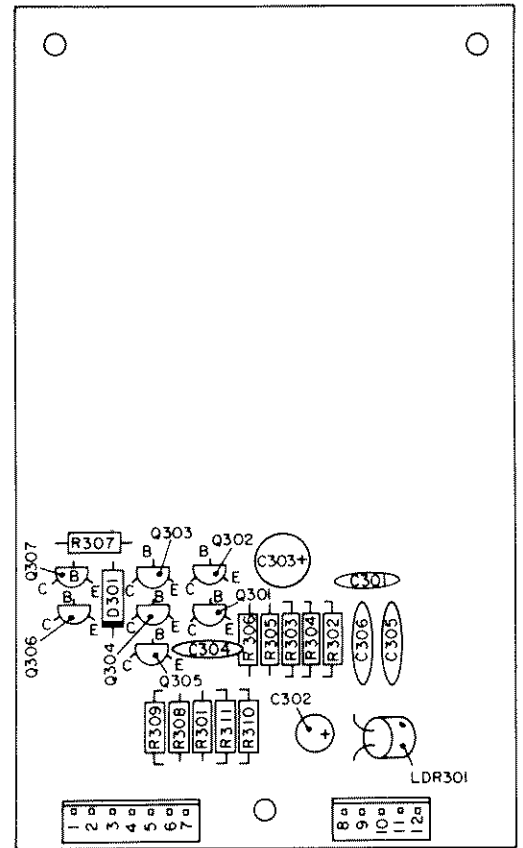
SECTION



PREAMP INPUT and HEADPHONE



PARTS LOCATION



PCB 045863

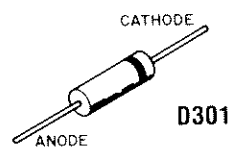
# GUARD (RIGHT CHANNEL)

# ONE OUTPUT (RIGHT CHANNEL)

## PARTS LIST

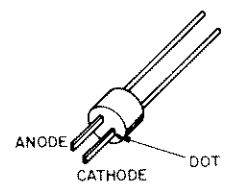
Symbol No.	Part No.	Name/Description
<b>CAPACITORS</b> (CD = Ceramic Disc, ELECT = Electrolytic)		
C301	061016	CD, 33pF, 10%, 500V, NPO
C302	066237	ELECT, 2.2 $\mu$ F, 50V
C303	066313	ELECT, 47 $\mu$ F, 80V, DC
*C304	061140	CD, 3.9pF, $\pm$ .25pF, 100V, NPO
C305	061161	CD, .047 $\mu$ F, +80 - 20%, 50V
C306	061161	CD, .047 $\mu$ F, +80 - 20%, 50V

<b>DIODES</b> (Si = Silicon, STAB = Stabistor)		
*D301	070046	Si, STAB, 1.3V, 2%, 10mA, Selected MZ236



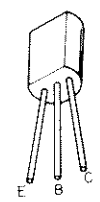
**D301**

<b>LIGHT DEPENDENT RESISTORS</b>		
*LDR301	144070	LDR, CLM6000



**LDR301**

<b>TRANSISTORS</b> (Si = Silicon)		
*Q301	132056	Si, PNP, 2N5087
*Q302	132056	Si, PNP, 2N5087
*Q303	132195	Si, NPN, Selected 2N6428A
*Q304	132195	Si, NPN, Selected 2N6428A
*Q305	132195	Si, NPN, Selected 2N6428A
*Q306	132172	Si, PNP, MPS-A55
*Q307	132171	Si, NPN, MPS-A05



**Q301-Q307**

<b>RESISTORS</b> (CF = Carbon Film, MF = Metal Film)		
*R301	144148	MF, 31.6K, 1%, 1/4W
R302	141072	CF, 10K, 5%, 1/4W
R303	141096	CF, 100K, 5%, 1/4W
R304	141096	CF, 100K, 5%, 1/4W
*R305	144083	MF, 5.11K, 2%, 1/4W
*R306	144148	MF, 31.6K, 1%, 1/4W
R307	141064	CF, 4.7K, 5%, 1/4W
R308	141140	CF, 15 $\Omega$ , 5%, 1/4W
R309	141140	CF, 15 $\Omega$ , 5%, 1/4W
R310	141029	CF, 150, 5%, 1/4W
R311	141029	CF, 150, 5%, 1/4W

\* Parts marked with an asterisk (\*) are replacement parts stocked by our Service Department and must be ordered from McIntosh. These parts must be ordered by part number. Parts not marked may be obtained from electronic parts suppliers.

# MC 2150

Stereo Power Amplifier

# Schematics

039320

Sheet **2** of **2**

---

---

## McIntosh

---

---

This sheet includes sections:

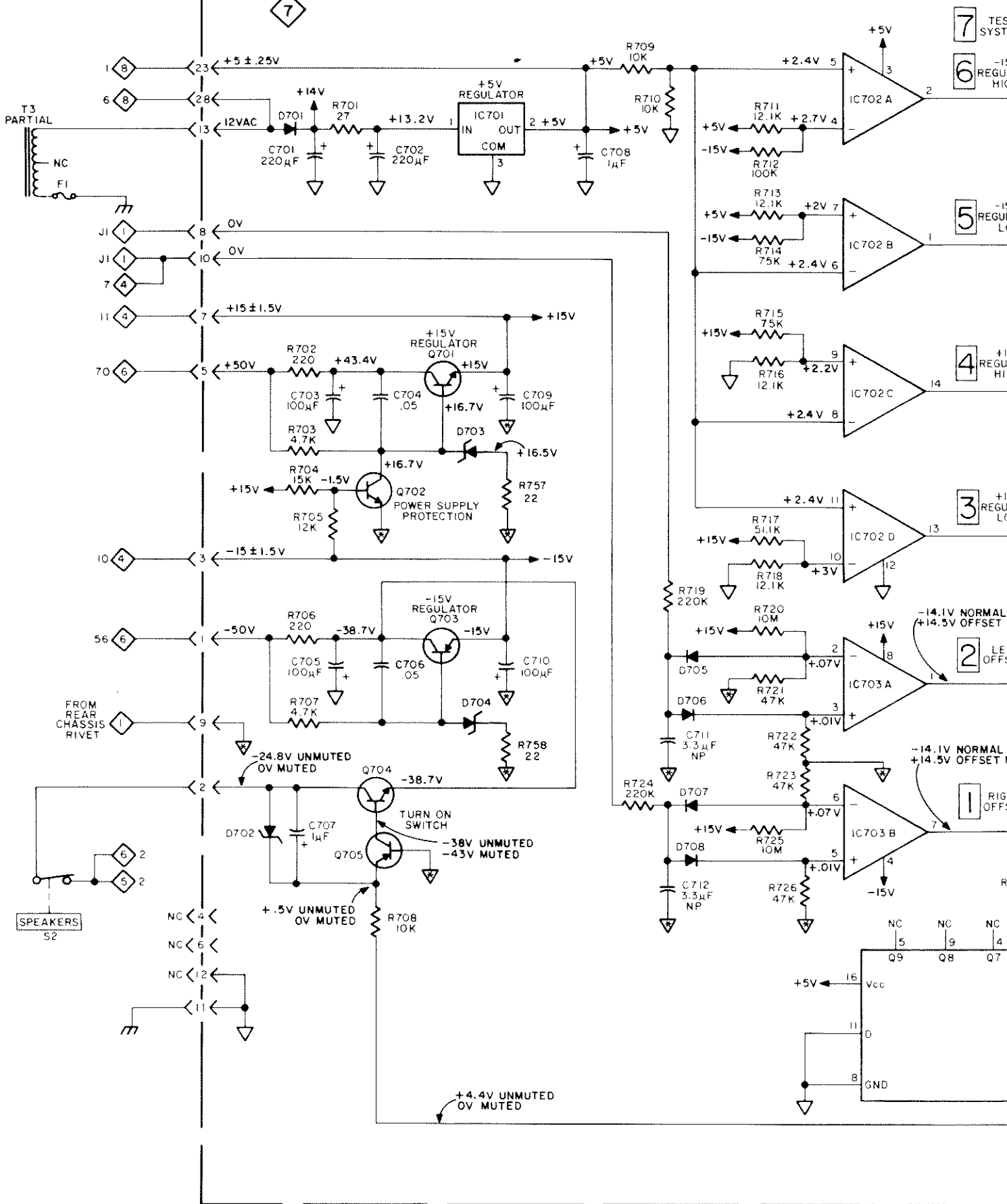
- ◆ **4** PREAMP INPUT and HEADPHONE OUTPUT  
(RIGHT CHANNEL)
  
- ◆ **6** POWER OUTPUT and POWER GUARD  
(RIGHT CHANNEL)
  
- ◆ **7** POWER SUPPLY, COUNTDOWN and  
POWER GUARD DISPLAY DRIVES
  
- ◆ **8** POWER GUARD and COUNTDOWN DISPLAYS

The continuous improvement of its products is the policy of McIntosh Laboratory Incorporated, who reserve the right to improve design without notice. Because of the constant upgrading of McIntosh products' circuitry and components, the Company cannot insure, and does not warrant, the accuracy of the within schematic material, which is intended for information only.

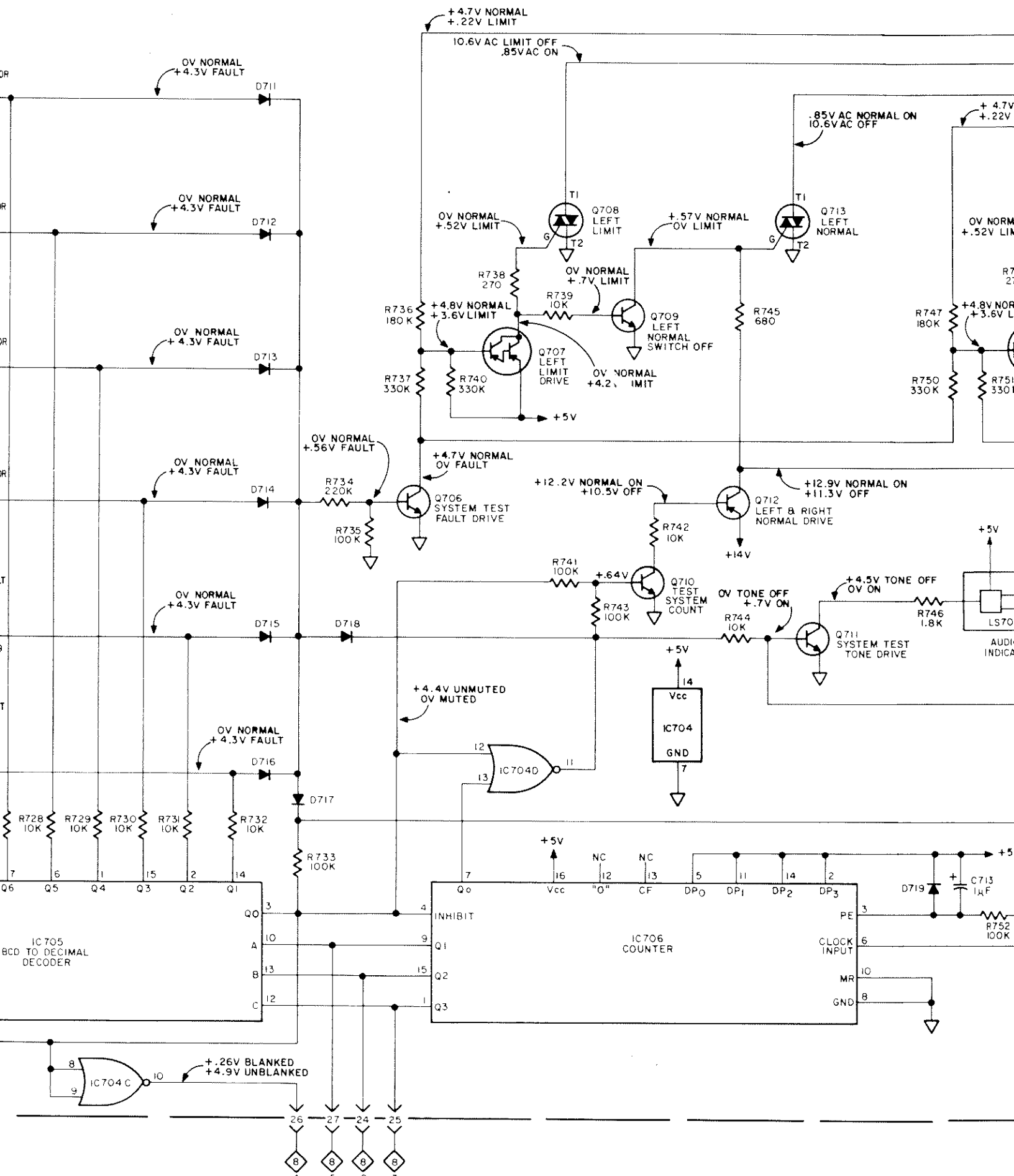
**McIntosh Laboratory Inc. 2 Chambers Street, Binghamton, NY 13903-9990**

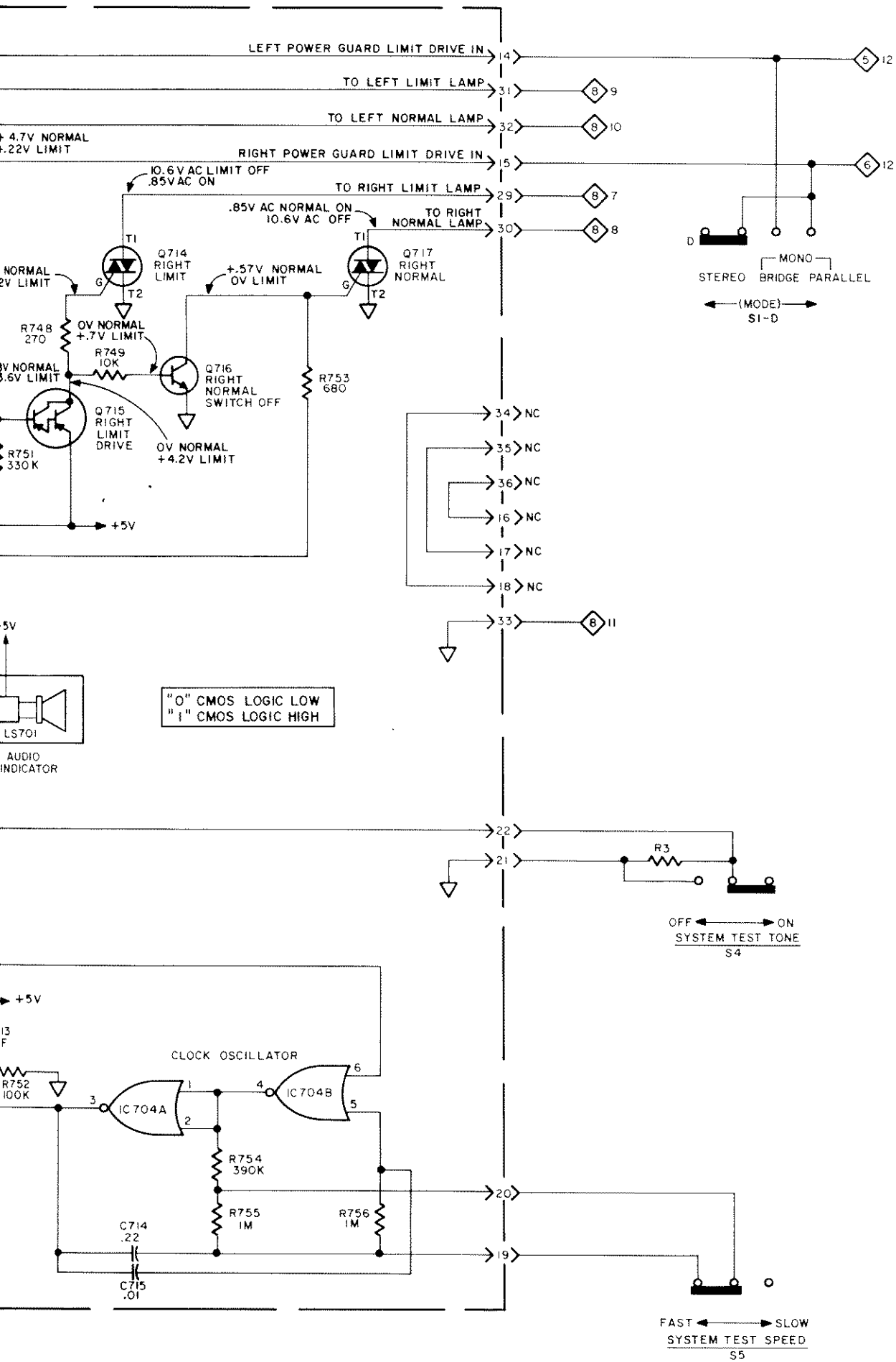


PC BOARD 045914



Schematic No. 156108



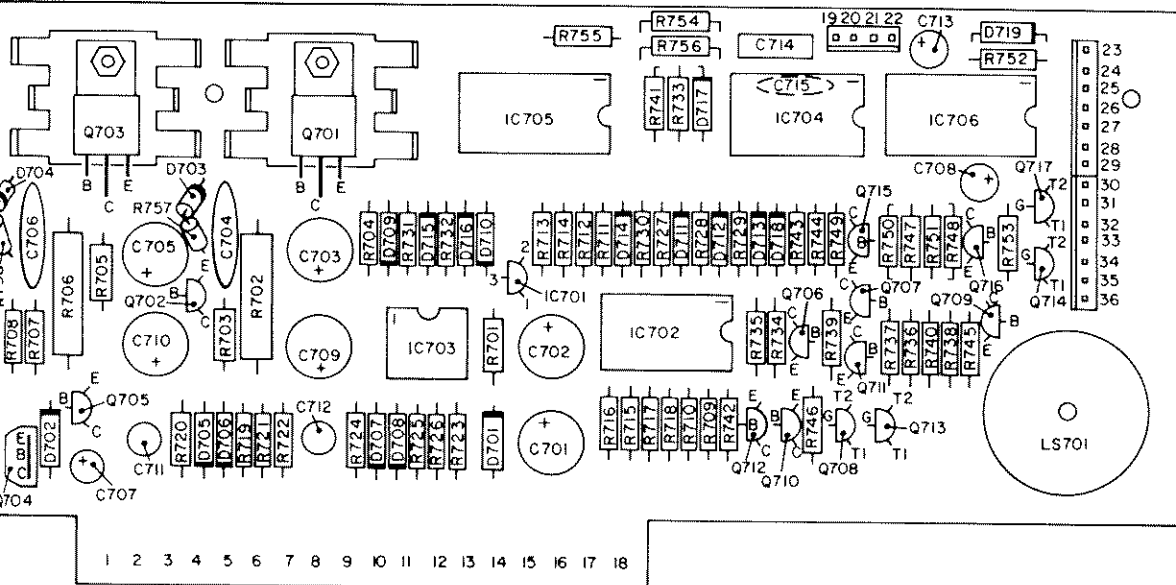


PA  
Syn  
N  
CAL

DIO

# MC 2150

## PARTS LOCATION

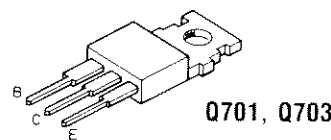


PCB 045914

## PARTS LIST

Symbol No.	Part No.	Name/Description
<b>CAPACITORS</b> (CD = Ceramic Disc, ELECT = Electrolytic, MPE = Metalized Polyester)		
C701	066330	ELECT, 220 $\mu$ F, 16V
C702	066330	ELECT, 220 $\mu$ F, 16V
C703	066329	ELECT, 100 $\mu$ F, 35V
C704	061048	CD, .05 $\mu$ F, + 80 - 20%, 100V, Z5V
C705	066329	ELECT, 100 $\mu$ F, 35V
C706	061048	CD, .05 $\mu$ F, + 80 - 20%, 100V, Z5V
C707	066242	ELECT, 1 $\mu$ F, 50V
C708	066242	ELECT, 1 $\mu$ F, 50V
C709	066329	ELECT, 100 $\mu$ F, 35V
C710	066329	ELECT, 100 $\mu$ F, 35V
C711	066277	ELECT, 3.3 $\mu$ F, 20%, 50V
C712	066277	ELECT, 3.3 $\mu$ F, 20%, 50V
C713	066242	ELECT, 1 $\mu$ F, 50V
C714	064190	MPE, .22 $\mu$ F, 5%, 63V
C715	061159	CD, .01 $\mu$ F, + 80 - 20%, 50V

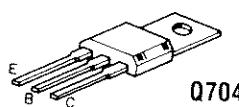
*Q710	132143	Si, NPN, MPS-D05
*Q711	132143	Si, NPN, MPS-D05
*Q712	132150	Si, PNP, MPS-055
*Q713	131011	Si, TRIAC, IB200-1
*Q714	131011	Si, TRIAC, IB200-1
*Q715	132182	Si, PNP, DAR, MPS-A64
*Q716	132143	Si, NPN, MPS-D05
*Q717	131011	Si, TRIAC, IB200-1



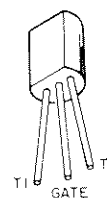
Q701, Q703



Q702  
Q705-Q707  
Q709-Q712  
Q715, Q716



Q704

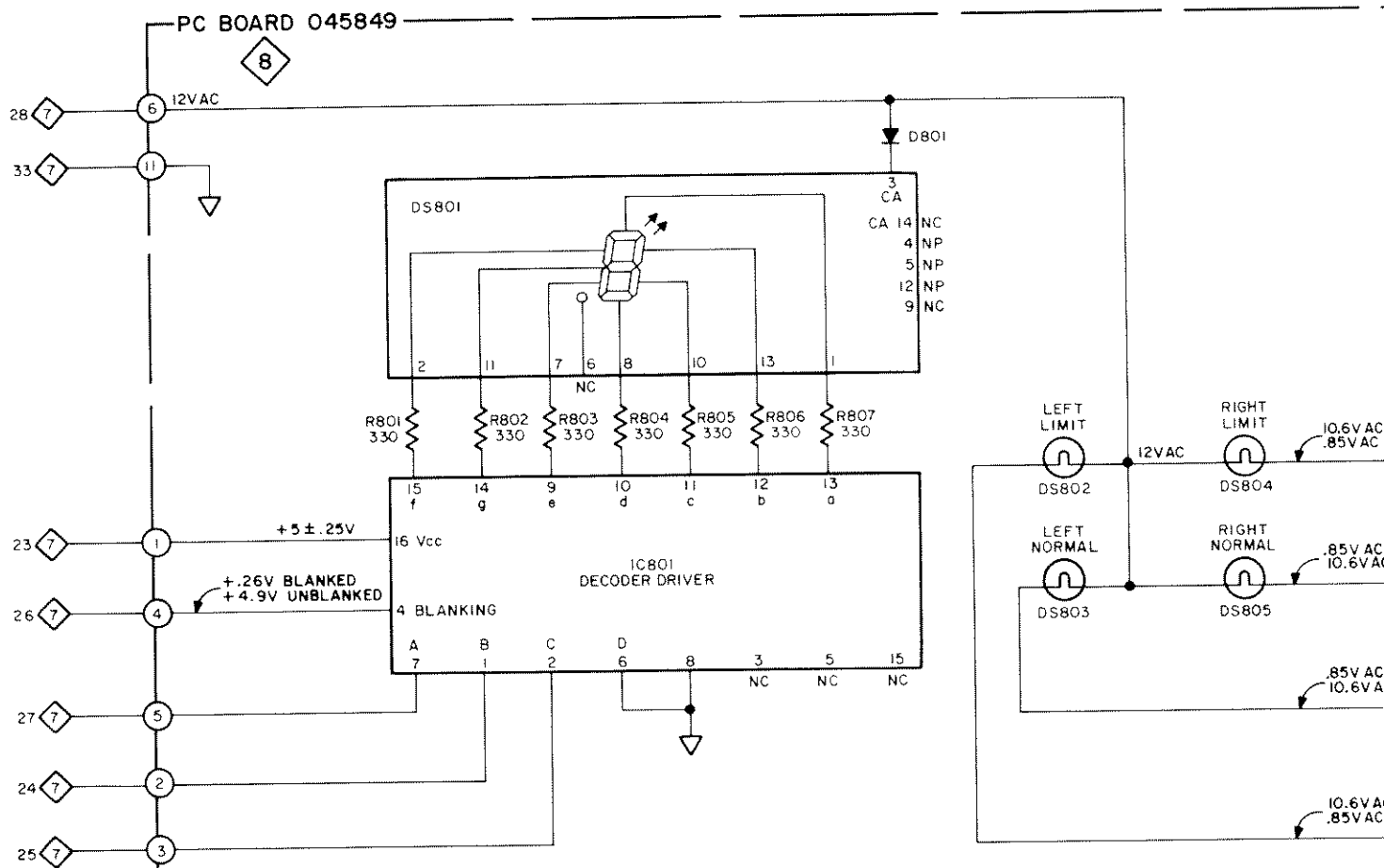


Q708, Q713  
Q714, Q717

**DIODES** (SIG = Signal, Si = Silicon, RECT = Rectifier, ZN = Zener)

*D701	070031	Si, RECT, 400 PIV, 1.5A
*D702	070065	Si, ZN, 24V, 5%, 1W

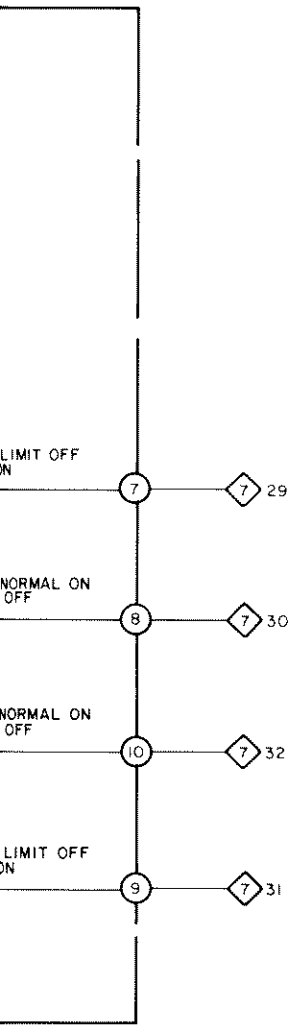
**RESISTORS** (CC = Carbon Composition, CF = Carbon Film, MF = Metal Film, WW = Wirewound)



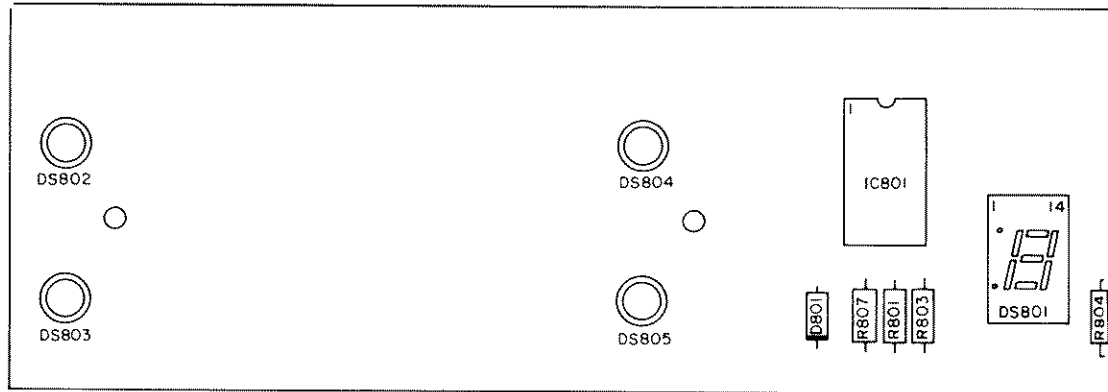
Schematic No. 156109

8

POWER GUARD and COUNTDOWN DISPLAYS



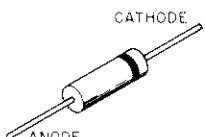
PARTS LOCATION



PCB 045849



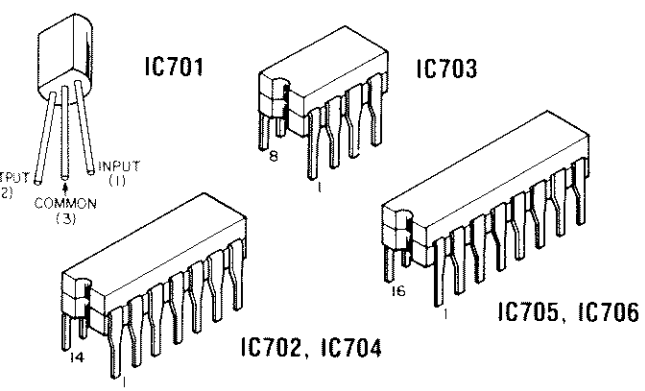
*D702	070065	Si, ZN, 24V, 5%, 1W
*D703	070114	Si, ZN, 16V, 5%, 500mW
*D704	070114	Si, ZN, 16V, 5%, 500mW
*D705	070047	Si, SIG, 75V, 10mA, IN4148
*D706	070047	Si, SIG, 75V, 10mA, IN4148
*D707	070047	Si, SIG, 75V, 10mA, IN4148
*D708	070047	Si, SIG, 75V, 10mA, IN4148
*D709	070047	Si, SIG, 75V, 10mA, IN4148
*D710	070047	Si, SIG, 75V, 10mA, IN4148
*D711	070047	Si, SIG, 75V, 10mA, IN4148
*D712	070047	Si, SIG, 75V, 10mA, IN4148
*D713	070047	Si, SIG, 75V, 10mA, IN4148
*D714	070047	Si, SIG, 75V, 10mA, IN4148
*D715	070047	Si, SIG, 75V, 10mA, IN4148
*D716	070047	Si, SIG, 75V, 10mA, IN4148
*D717	070047	Si, SIG, 75V, 10mA, IN4148
*D718	070047	Si, SIG, 75V, 10mA, IN4148
*D719	070047	Si, SIG, 75V, 10mA, IN4148



D701-D719

**INTEGRATED CIRCUITS** (AN = Analog, BP = Bipolar, DG = Digital, CMOS = Complementary MOS)

IC701	133093	AN, BP, Positive 5V Regulator, ± 5%
IC702	133092	AN, BP, Quad Comparator, MLM339AP
IC703	133028	AN, BP, Dual Hi-speed Operation Amp., MC-4558P
IC704	133064	DG, CMOS, Quad, 2-input NOR Gate, MC14001B
IC705	133082	DG, CMOS, BCD to Decimal Decoder, MC14028B
IC706	133091	DG, CMOS, Divide-By-N-4-Bit Counter, MC14526BCP



**TRANSISTORS** (DAR = Darlington, Si = Silicon)

*Q701	132174	Si, NPN, FT3055
*Q702	132143	Si, NPN, MPS-D05
*Q703	132173	Si, PNP, FT2955
*Q704	132149	Si, NPN, MPS-U07
*Q705	132147	Si, PNP, MPS-A93
*Q706	132143	Si, NPN, MPS-D05
*Q707	132182	Si, PNP, DAR, MPS-A64
*Q708	131011	Si, TRIAC, IB200-1
*Q709	132143	Si, NPN, MPS-D05

R701	141146	CF, 27, 5%, 1/4W
*R702	139158	WW, FP, 220Ω, 10%, 2W
R703	141064	CF, 4.7K, 5%, 1/4W
R704	141076	CF, 15K, 5%, 1/4W
R705	141074	CF, 12K, 5%, 1/4W
*R706	139158	WW, FP, 220Ω, 10%, 2W
R707	141064	CF, 4.7K, 5%, 1/4W
R708	141072	CF, 10K, 5%, 1/4W
*R709	144053	MF, 10K, 1%, 1/4W
*R710	144053	MF, 10K, 1%, 1/4W
*R711	144154	MF, 12.1K, 1%, 1/4W
*R712	144113	MF, 100K, 1%, 1/4W
*R713	144154	MF, 12.1K, 1%, 1/4W
*R714	144156	MF, 75K, 1%, 1/4W
*R715	144156	MF, 75K, 1%, 1/4W
*R716	144154	MF, 12.1K, 1%, 1/4W
*R717	144155	MF, 51.1K, 1%, 1/4W
*R718	144154	MF, 12.1K, 1%, 1/4W
*R719	141104	CF, 220K, 5%, 1/4W
R720	136476	CC, 10M, 10%, 1/4W
R721	141088	CF, 47K, 5%, 1/4W
R722	141088	CF, 47K, 5%, 1/4W
R723	141088	CF, 47K, 5%, 1/4W
R724	141104	CF, 220K, 5%, 1/4W
R725	136476	CC, 10M, 10%, 1/4W
R726	141088	CF, 47K, 5%, 1/4W
R727	141072	CF, 10K, 5%, 1/4W
R728	141072	CF, 10K, 5%, 1/4W
R729	141072	CF, 10K, 5%, 1/4W
R730	141072	CF, 10K, 5%, 1/4W
R731	141072	CF, 10K, 5%, 1/4W
R732	141072	CF, 10K, 5%, 1/4W
R733	141096	CF, 100K, 5%, 1/4W
R734	141104	CF, 220K, 5%, 1/4W
R735	141096	CF, 100K, 5%, 1/4W
R736	141102	CF, 180K, 5%, 1/4W
R737	141108	CF, 330K, 5%, 1/4W
R738	141035	CF, 270Ω, 5%, 1/4W
R739	141072	CF, 10K, 5%, 1/4W
R740	141108	CF, 330K, 5%, 1/4W
R741	141096	CF, 100K, 5%, 1/4W
R742	141072	CF, 10K, 5%, 1/4W
R743	141096	CF, 100K, 5%, 1/4W
R744	141072	CF, 10K, 5%, 1/4W
R745	141045	CF, 680, 5%, 1/4W
R746	141055	CF, 1.8K, 5%, 1/4W
R747	141102	CF, 180K, 5%, 1/4W
R748	141035	CF, 270Ω, 5%, 1/4W
R749	141072	CF, 10K, 5%, 1/4W
R750	141108	CF, 330K, 5%, 1/4W
R751	141108	CF, 330K, 5%, 1/4W
R752	141096	CF, 100K, 5%, 1/4W
R753	141045	CF, 680, 5%, 1/4W
R754	141110	CF, 390K, 5%, 1/4W
R755	141120	CF, 1M, 5%, 1/4W
R756	141120	CF, 1M, 5%, 1/4W
R757	141144	CF, 22, 5%, 1/4W
R758	141144	CF, 22, 5%, 1/4W

**MISCELLANEOUS**

*LS701	098195	Audio Indicator
--------	--------	-----------------

\* Parts marked with an asterisk (\*) are replacement parts stocked by our Service Department and must be ordered from McIntosh. These parts must be ordered by part number. Parts not marked may be obtained from electronic parts suppliers.