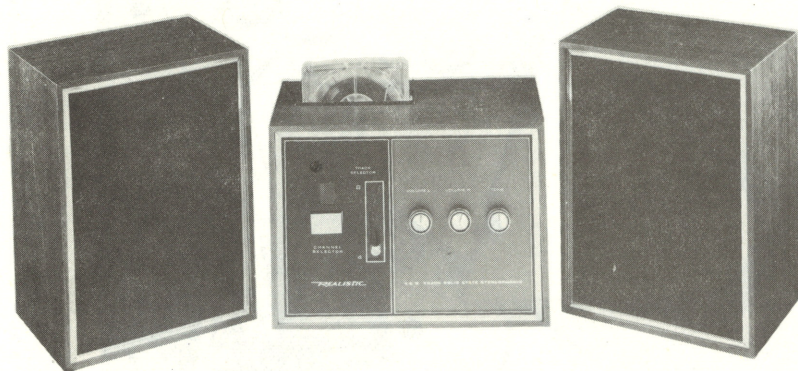


# PHOTOFACT<sup>®</sup> with

# CIRCUITRACE<sup>®</sup>

For Supplier Address See PHOTOFACT Index



Realistic Model 484 (14-984)  
4/8 Track Stereo

## OPERATING INSTRUCTIONS

### Eight-Track Cartridge Play

Move 4/8 Track Selector lever to "8" and connect speakers.

Insert cartridge until it locks and turns unit on.

Set operating controls as desired.

Press program selector to play desired tracks, **103** or allow unit to select tracks automatically.

Remove cartridge to turn unit off.

### Four-Track Cartridge Play

Move 4/8 Track Selector lever to "8" and connect speakers.

Insert cartridge until it locks and turns unit on.

Move 4/8 Track Selector lever to "4".

Set operating controls as desired.

Press Channel Selector to play desired tracks.

Move 4/8 Track Selector lever to "8" and remove cartridge to turn unit off.

REALISTIC MODEL 484 (14-984)

## DISASSEMBLY

Remove six, small Phillips screws holding cabinet back.

Remove three, push-on-type knobs and remove one knob held with a setscrew.

Remove two, large Phillips screws and one smaller Phillips screw from cabinet bottom.

Remove six, large Phillips screws from mechanism plate and remove mechanism assembly.

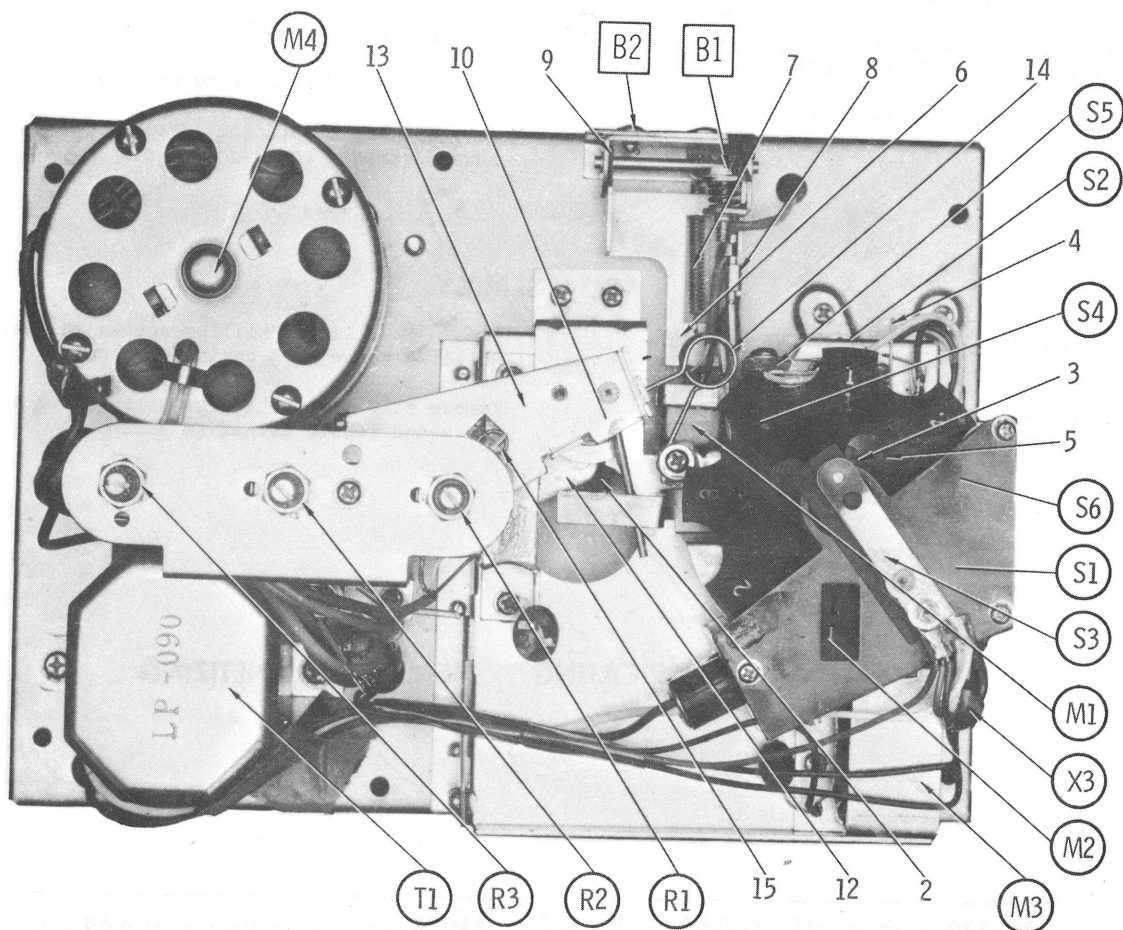
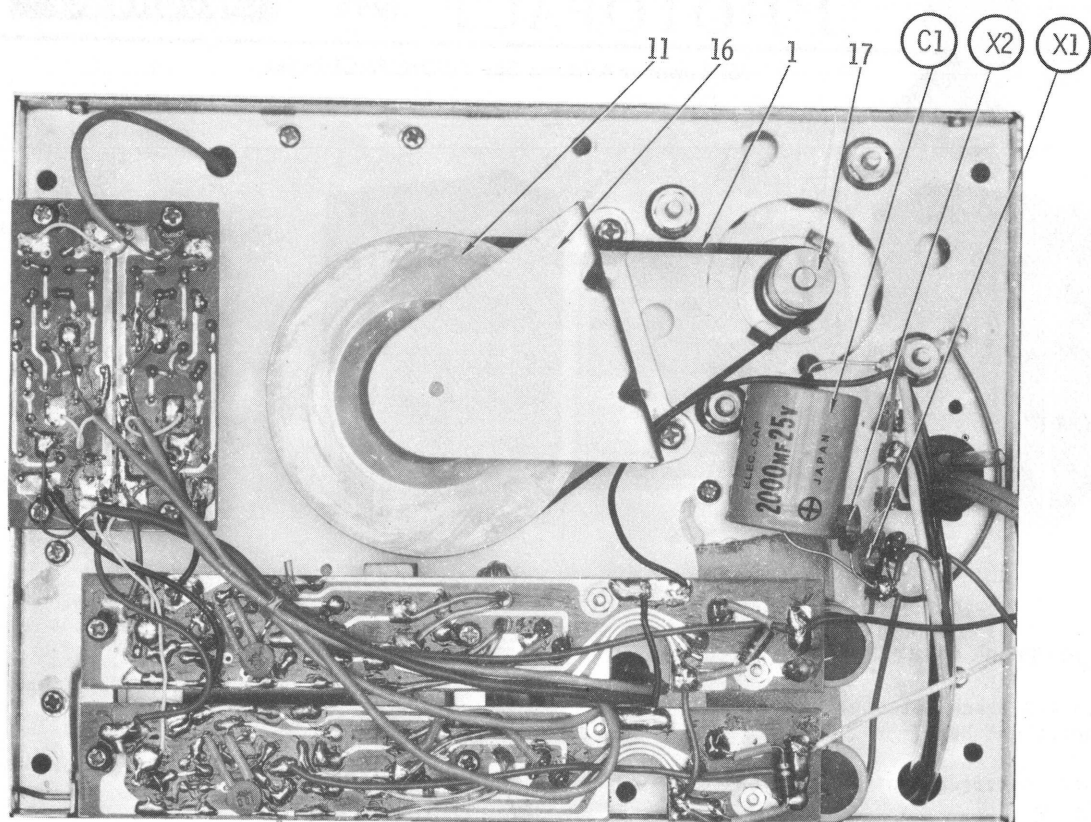
## CLEANING LUBRICATING HEAD DEMAGNETIZING

Refer to "General Servicing Information" on page 4.

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## ADJUSTMENTS

ADJUST	REMARKS
Head Height	Play a test cartridge, follow instructions with cartridge, and adjust B1 for proper response.
Head Azimuth	Connect an AC VTVM across the right output. Play a test cartridge, loosen Screw (B2), and tilt Plate (9) for maximum output. Retighten Screw (B2).
Pressure Roller Pressure (4 Track)	Nominal value 2 pounds. Controlled by tension of Spring (14) and Spring (15).

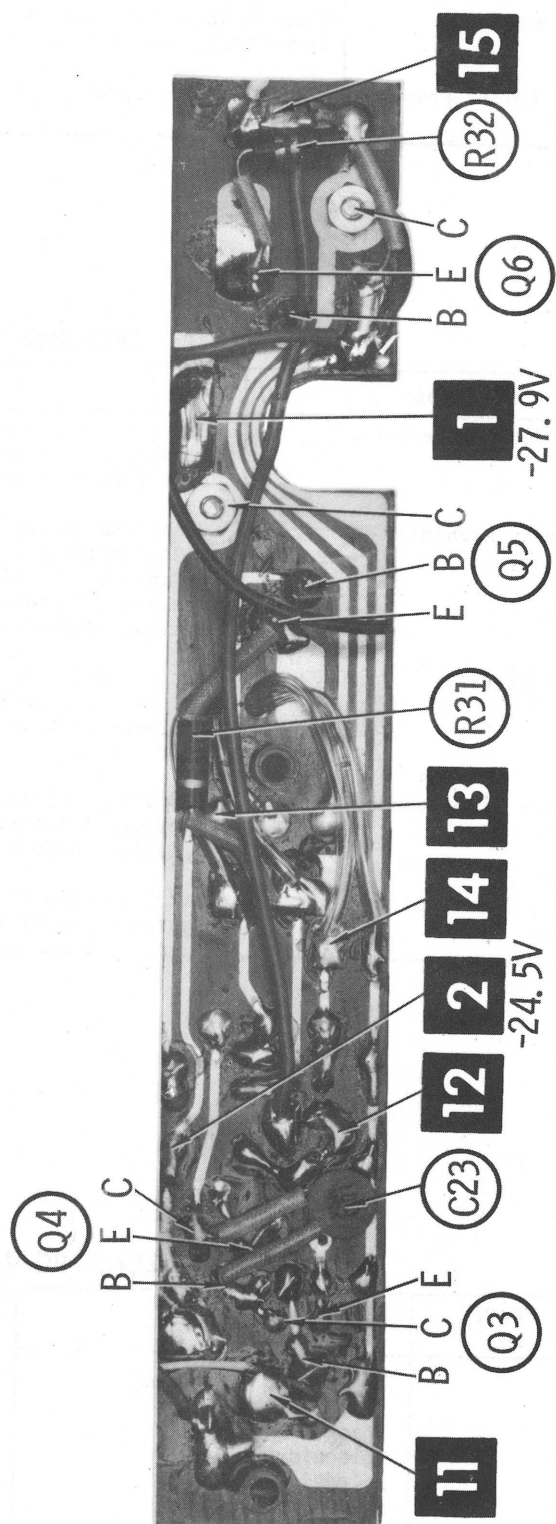
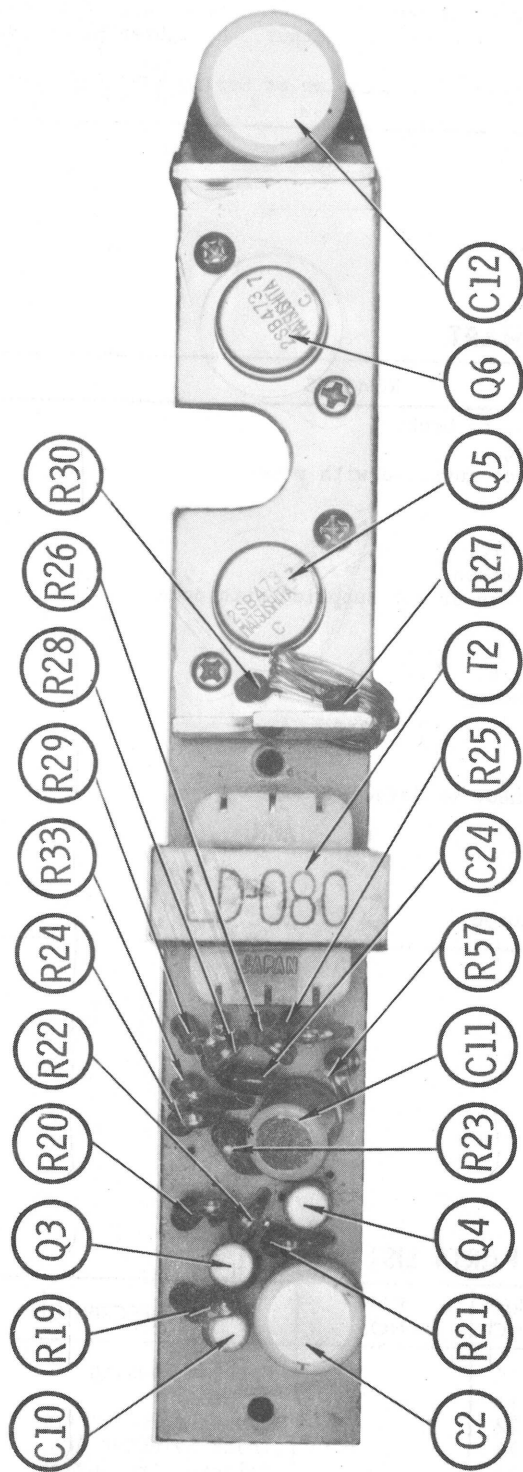
## TROUBLE CHART

SYMPTOM	REMARKS
Capstan does not rotate.	Belt (1) dirty, worn, or broken. Assembly (10) binding. Motor defective or not supplied with power.
Track Shift Mechanism inoperative.	Switch (S2) dirty. Cam (3) binding or worn. Springs on Arm (4) broken. Solenoid (M3) defective or not supplied with power. Cartridge defective.
Wow or Flutter.	Belt (1) dirty or worn. Capstan dirty or binding. Cartridge defective. Motor defective.
Sound weak or distorted.	Head dirty, misaligned, or defective. Cartridge defective. Amplifiers defective.
Tape is pulled from cartridge.	Cartridge defective. Capstan dirty or scored.

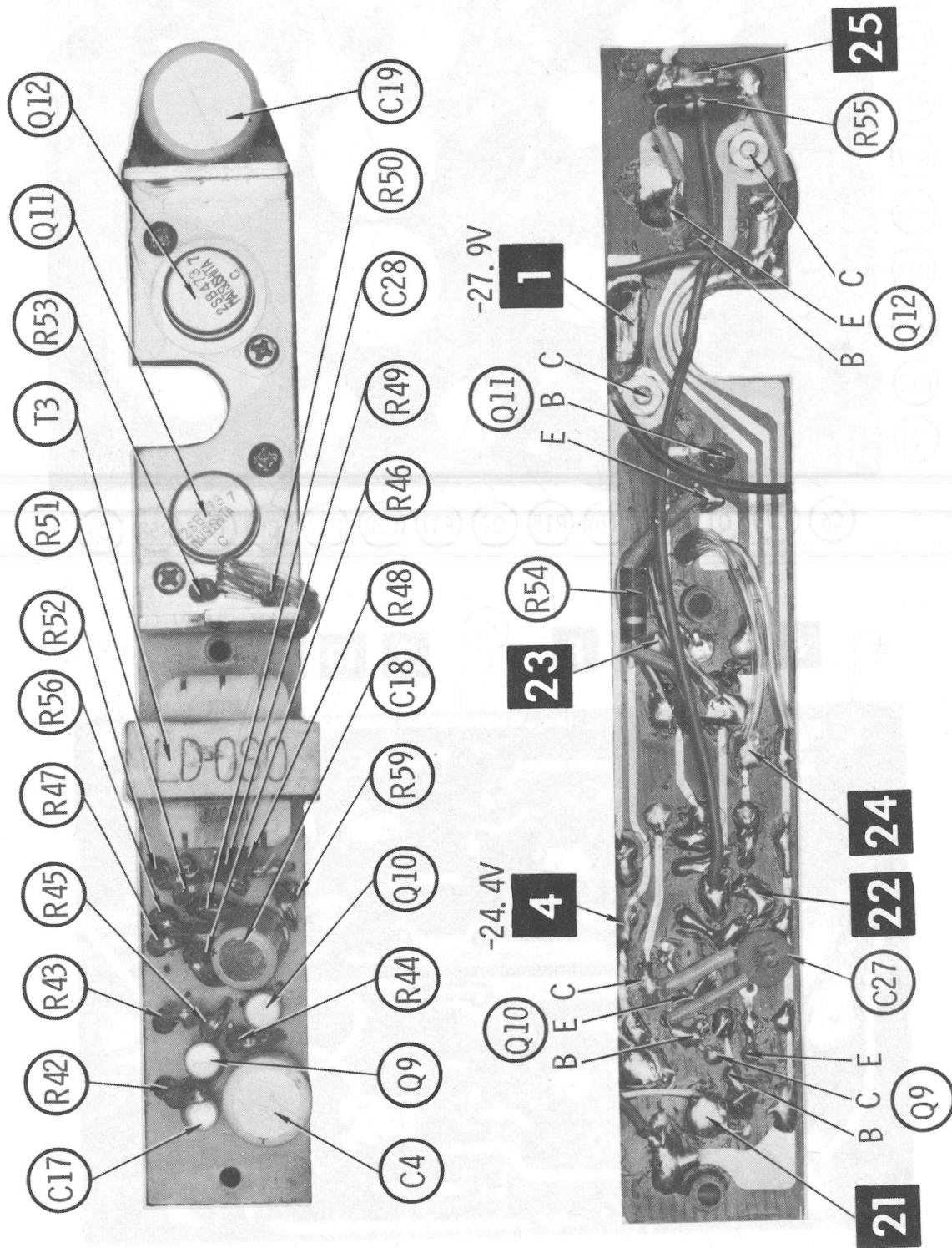
REALISTIC MODEL 484 (14-984)

## MECHANICAL PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1*		Drive Belt * (2 used)	10		Capstan Housing
2		Pressure Roller	11		Flywheel
3		Track Changing Cam	12		Pressure Roller Arm
4		Solenoid Arm	13		Track Selector Arm
5		Solenoid Arm Spring	14		Selector Arm Spring
6		Head Mounting Arm	15		Pressure Roller Spring
7		Mounting Arm Spring	16		Flywheel Bracket
8		Track Changing Arm	17		Motor Pulley
9		Azimuth Plate			

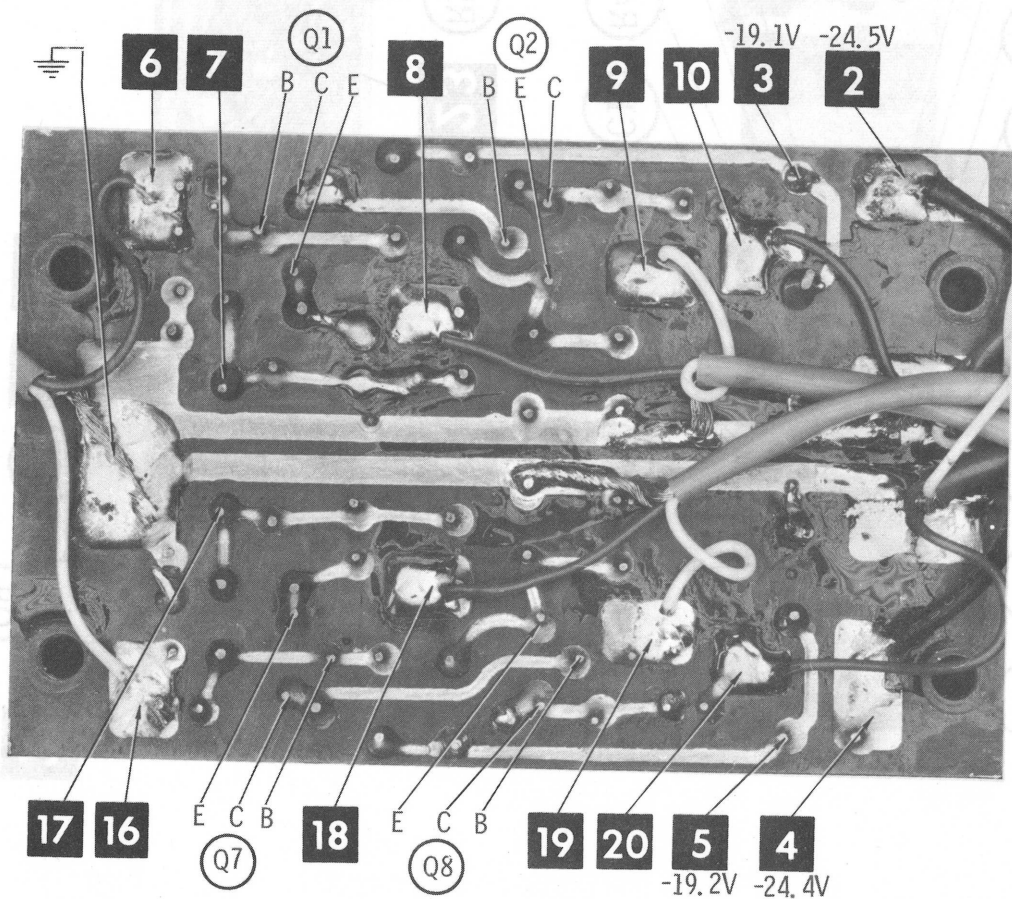
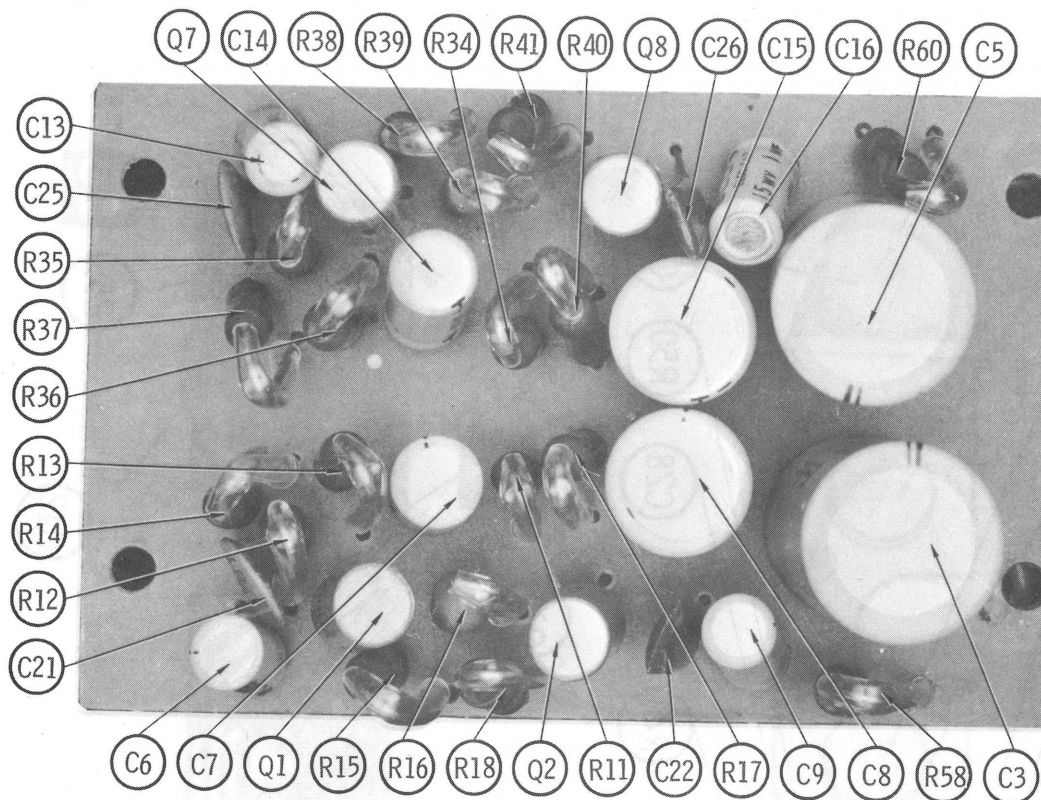






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REALISTIC MODEL 484 (14-984)



A Howard W. Sams CIRCUITRACE Photo



## PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

### WIRING DATA

General-use Unshielded Hook-up Wire .....	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Power Cord .....	Use BELDEN No. 17106 (Plastic) or 17126 (Rubber) - 6 Ft. 17109 (Plastic) or 17129 (Rubber) - 9 Ft.
Low-loss Shielded Lead (Interconnecting) .....	Use BELDEN No. 8401 or 8421
Phono Pick-up Arm Cable .....	Use BELDEN No. 8430 (Two Conductor-Unshielded) 8429 (Two Conductor-Shielded) 8419 (Three Conductor-Shielded)

### TRANSISTORS

ITEM No.	TYPE No.	FUNCTION	REPLACEMENT DATA					
			MFGR. PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MOTOROLA PART No.	RCA PART No.	SYLVANIA PART No.
Q1	2SB173C	Preamp		GE-2	TR-14	HEP254	SK3004	ECG 102A
Q2	2SB175B	Preamp		GE-2	TR-14	HEP254	SK3004	ECG 102A
Q3	2SB175B	AF Amp		GE-2	TR-14	HEP254	SK3004	ECG 102A
Q4	2SB175E	Driver		GE-2	TR-14	HEP254	SK3004	ECG 102A
Q5	2SB473	Output				HEP642		ECG 131MP*
Q6	2SB473	Output				HEP642		
Q7	2SB173C	Preamp		GE-2	TR-14	HEP254	SK3004	ECG 102A
Q8	2SB175B	Preamp		GE-2	TR-14	HEP254	SK3004	ECG 102A
Q9	2SB175B	AF Amp		GE-2	TR-14	HEP254	SK3004	ECG 102A
Q10	2SB175E	Driver		GE-2	TR-14	HEP254	SK3004	ECG 102A
Q11	2SB473	Output				HEP642		ECG 131MP*
Q12	2SB473	Output				HEP642		

\* Matched Pair

### POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MFGR. PART OR TYPE No.	REPLACEMENT RECTIFIERS & DIODES			REPLACEMENT RECTIFIERS	NOTES
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	SYLVANIA PART No.	RCA PART No.	
X1	SD-1	GE-504A	8D4 or 5A4-D	ECG 116 or ECG 117	SK3030 or SK3031	
X2	SD-1	GE-504A	8D4 or 5A4-D	ECG 116 or ECG 117	SK3030 or SK3031	
X3	SD-1	GE-504A	8D4 or 5A4-D	ECG 116 or ECG 117	SK3030 or SK3031	

### ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						
		REALISTIC PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	2000 25V		PRS1296	EA30-250	WBR2000-35	MT1-23.5	TC2520	TL-1220
C2	200 25V		PRS1280	EA15-500	PC250-25	QT1-30A	MTV200DJ25	TE-1213
C3	500 15V		BCD15500	EA30-250	PC500-16	MT1-23.5	MTV500DN15	TL-1166
C4	200 25V		PRS1280	EA15-500	PC250-25	QT1-30A	MTV200DJ25	TE-1213
C5	500 15V		BCD15500	EA15-500	PC500-16	MT1-5	MTV500DN15	TL-1166
C6	10 10V		BCD25010	EP15-10	PC10-50	MT1-15	MTV10CB50	TE-1128
C7	50 6V		BCD6050	EP6-50	PC50-16	MT1-23	MTV50CB15	TE-1133
C8	100 10V		BCD10100	EP15-100	PC100-16	MT1-1	MTV100CD10	TE-1135
C9	1 15V		BCD50001	EP15-2	PC1-100	MT1-1	MTV1CB50	TE-1148
C10	1 15V		BCD50001	EP15-2	PC1-100	MT1-1	MTV1CB50	TE-1148
C11	100 10V		BCD10100	EP15-100	PC100-16	MT1-23	MTV100CD10	TE-1135
C12	500 25V		PRS1290	EA30-100	WBR500-35	QT1-30A	TC2505B	TL-1217
C13	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C14	50 6V		BCD6050	EP6-50	PC50-16	MT1-15	MTV50CB15	TE-1133
C15	100 10V		BCD10100	EP15-100	PC100-16	MT1-23	MTV100CD10	TE-1135
C16	1 15V		BCD50001	EP15-2	PC1-100	MT1-1	MTV1CB50	TE-1148
C17	1 15V		BCD50001	EP15-2	PC1-100	MT1-1	MTV1CB50	TE-1148
C18	100 10V		BCD10100	EP15-100	PC100-16	MT1-23	MTV100CD10	TE-1135
C19	500 25V		PRS1290	EA30-100	WBR500-35	QT1-30A	TC2505B	TE-1135

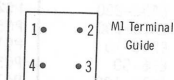
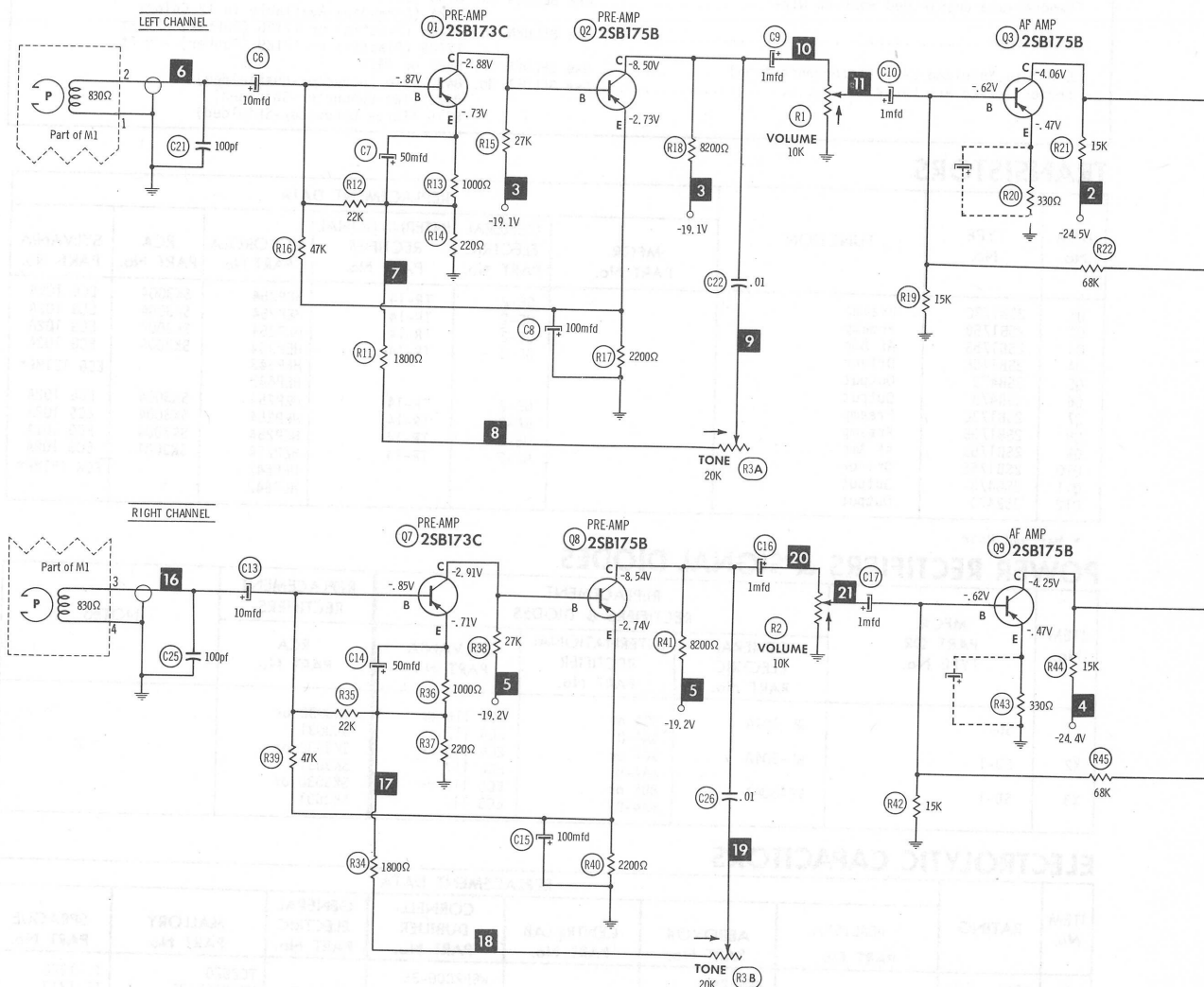
### CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C21	100 50V		GPD X5F101K	DM-101	JBZ601YP101K	CCD-101	GP310	10TS-T10
C22	.01 50V		TTP-01	CK-103	MGP01	CCD-103	TA110	TG-S10
C23	100 50V		GPD X5F101K	DM-101	JBZ601YP101K	CCD-101	GP310	10TS-T10
C24	.03 50V		TTP-03	CK-303		CCD-303	GP130	TG-S30
C25	100 50V		GPD X5F101K	DM-101	JBZ601YP101K	CCD-101	GP310	10TS-T10
C26	.01 50V		TTP-01	CK-103	MGP01	CCD-103	TA110	TG-S10
C27	100 50V		GPD X5F101K	DM-101	JBZ601YP101K	CCD-101	GP310	10TS-T10
C28	.03 50V		TTP-03	CK-303		CCD-303	GP130	TG-S30

(CONTINUED ON PAGE 120)

REALISTIC MODEL 484 (14-984)

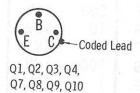
**NOTE: DEMAGNETIZE HEADS AFTER SERVICING**



Mtg.  
8kt.



Transistor Terminal Guides



- Denotes chassis
- Denotes ground (Measurement reference unless otherwise indicated)
- Indicates connection used in some versions.
- Indicates connection not used in some versions.
- Omitted in some versions.
- See parts list.

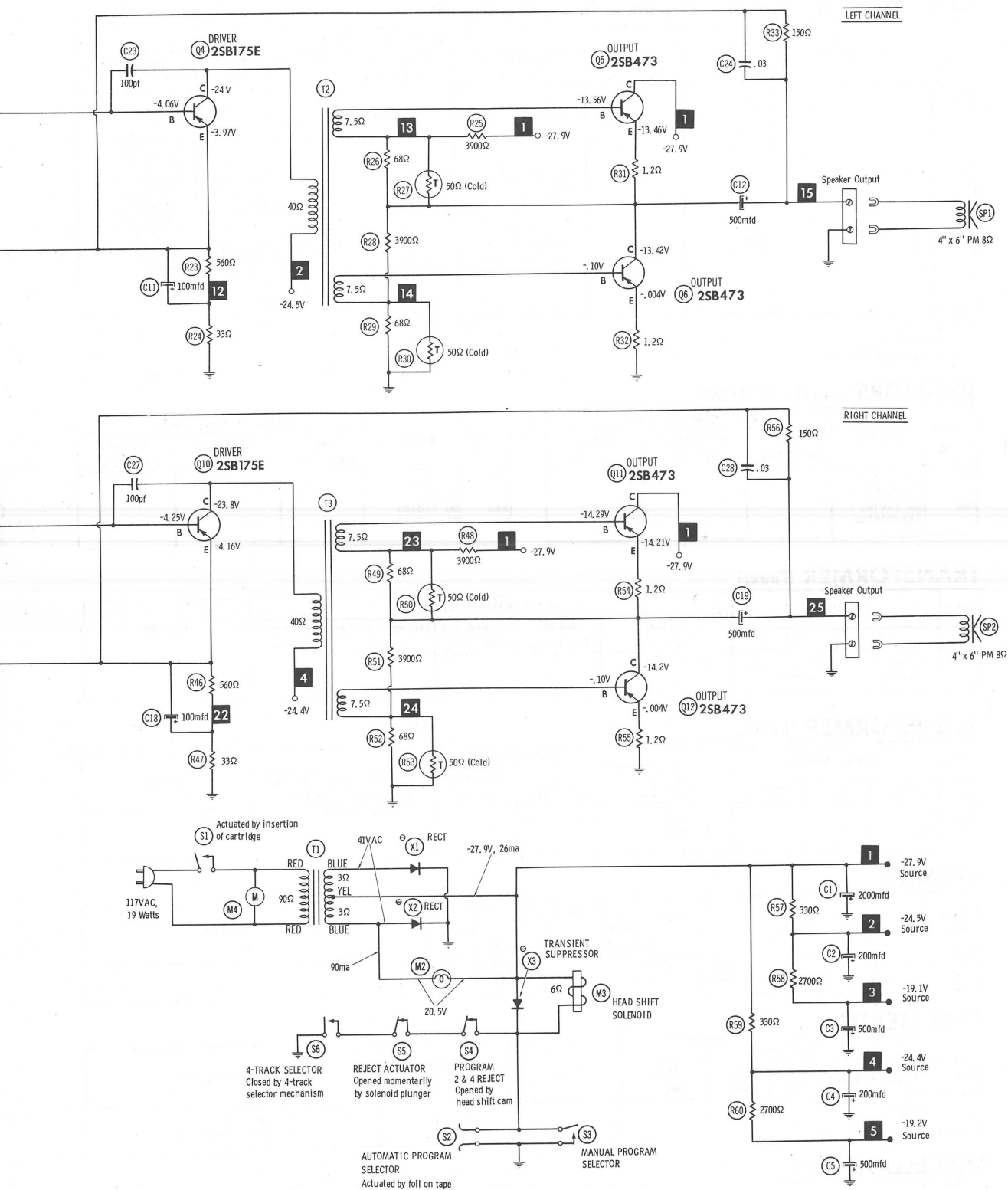
Values shown in ( ) are used in some applications.  
Resistors are 1/2W or less, 10% or 20%, unless otherwise indicated.  
Supply voltage maintained at rated value for measurements.  
Voltage and resistance measured with VTVM or equivalent meter,  
no signal applied and controls adjusted for normal operation.  
Controls viewed from actuator end. Arrow indicates clockwise rotation.  
Numbers assigned to terminals may not be found on the unit.  
Transistor resistances vary widely. No resistance measurements taken.

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## PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

### CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume	10K		F2-10K (1), SSK012		Q13-116 (1) or [BU1(1), CF61, SS1,DC1]*	RU14A,SL36(1) SL3250 or [UA14A(1), SK750] or U18 (1)
R2	Volume	10K		F2-10K (1), SSK012		Q13-116 (1) or [BU1(1), CF61, SS1,DC1]*	RU14A,SL36(1) SL3250 or [UA14A(1), SK750] or U18 (1)
R3A B	Tone tone	20K 20K		F1-25K (1), R1-25K,SSK012, CPL-2	NP-25K-S(1), NR-25K-S, UP-C-400, DC-2	B11-119,B11-119, SK1(1),QCM or [BU1(1),CF11, CR6,SS1, SS7A,DC1]*	P24L,3014 (1), RU24T14(2), CS3500

\* "SNAPTROL"

(1) Enlarge Mounting Hole

(2) Do not use 10K Tap.

### RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MFGR. PART No.
R27	50 (Cold) Thermistor			
R30	50 (Cold) Thermistor			

ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MFGR. PART No.
R50	50 (Cold) Thermistor			
R53	50 (Cold) Thermistor			

### TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @ .230Amp	41VAC/CT @ .026ADC	LP-090					

### TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	3.7	1	1	LD-080					
T3	3.7	1	1	LD-080					

### SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				MFGR. PART No.	QUAM PART No.	
SP1	4" x 6"	PM	8 ohms	AB-050	46X1Z10	
SP2	4" x 6"	PM	8 ohms	AB-050	46X1Z10	

### TAPE HEADS

ITEM No.	MEASURED		BIAS FREQ.	PART No.	NORTRONICS PART No.	DESCRIPTION
	INDUCTANCE	BIAS/ERASE VOLTS (RMS)				
M1	390mh				5800 (1)	8-Track Stereo Play (1) Use original mounting.

### MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
M2	Lamp		Track Indicator
M3	Solenoid		Headshift
M4	Motor		Tape Transport
S1	Switch		Power On/Off
S2	Switch		Automatic Program Selector
S3	Switch		Manual Program Selector
S4	Switch		Program Reject
S5	Switch		Reject Actuator
S6	Switch		4-Track Selector