

PHOTOFACT[®] with

CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index

CLEANING

LUBRICATING

HEAD DEMAGNETIZING

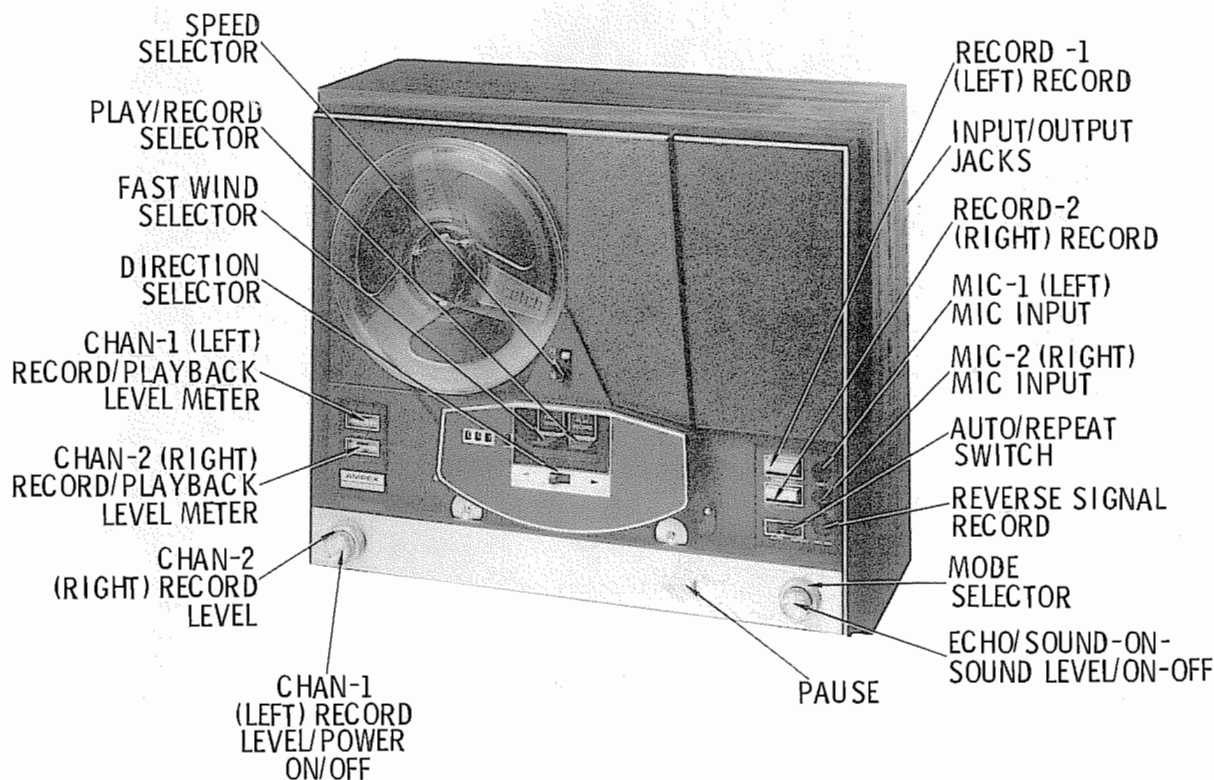
Refer to "General Servicing Information" on page 4.

Ampex Models 750, 755, 755A, 1450, 1455, 1455A.

These units are four-track monaural/stereo recorders having three speeds. 1-7/8, 3-3/4, and 7-1/2 ips. Sound-On-Sound and Sound-With-Sound recordings can be made.

Jacks are provided for both low- and high-level inputs, monitor outputs, and external amp outputs.

A power source of 110-120 volts AC, 60 cycles is required.

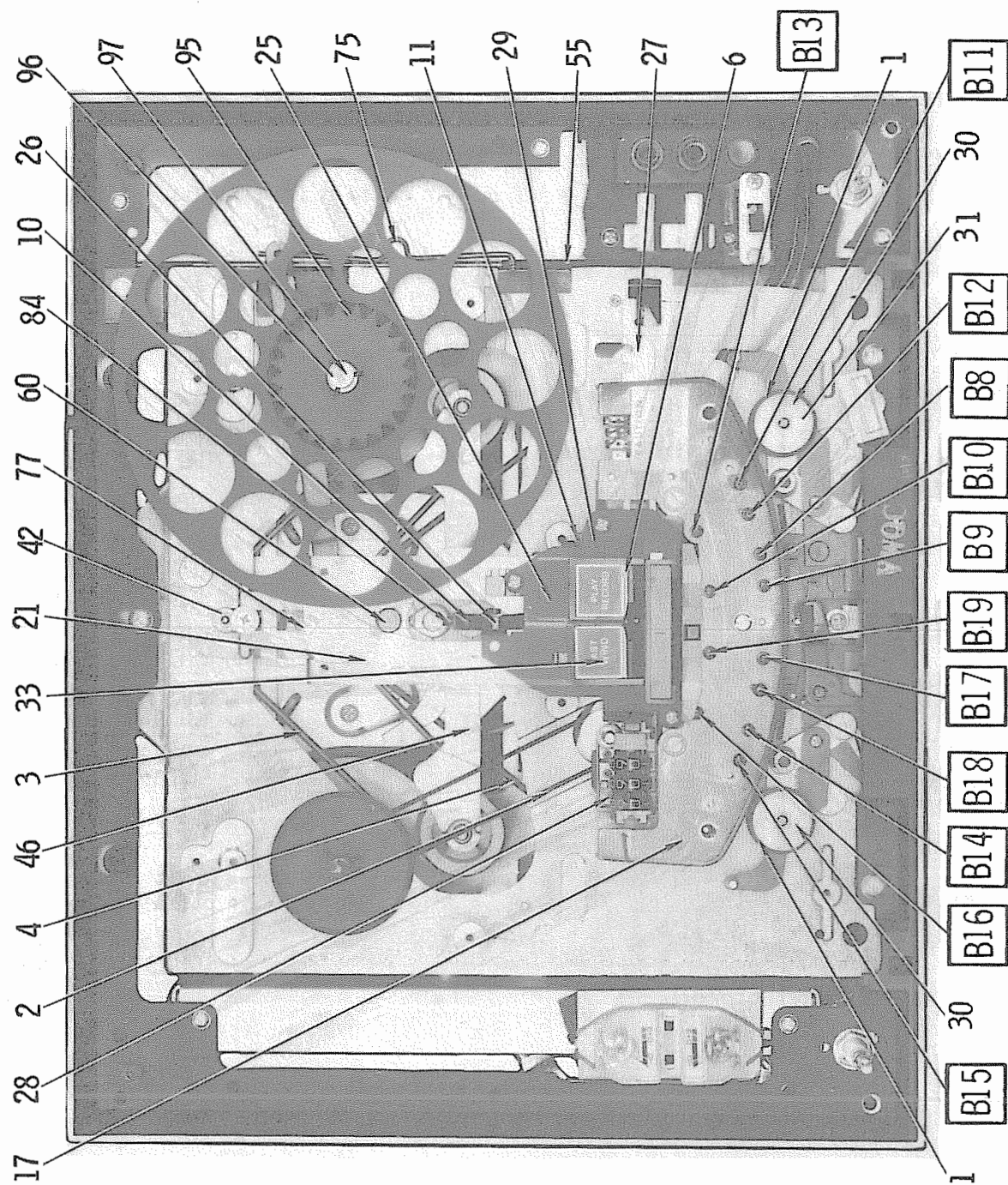


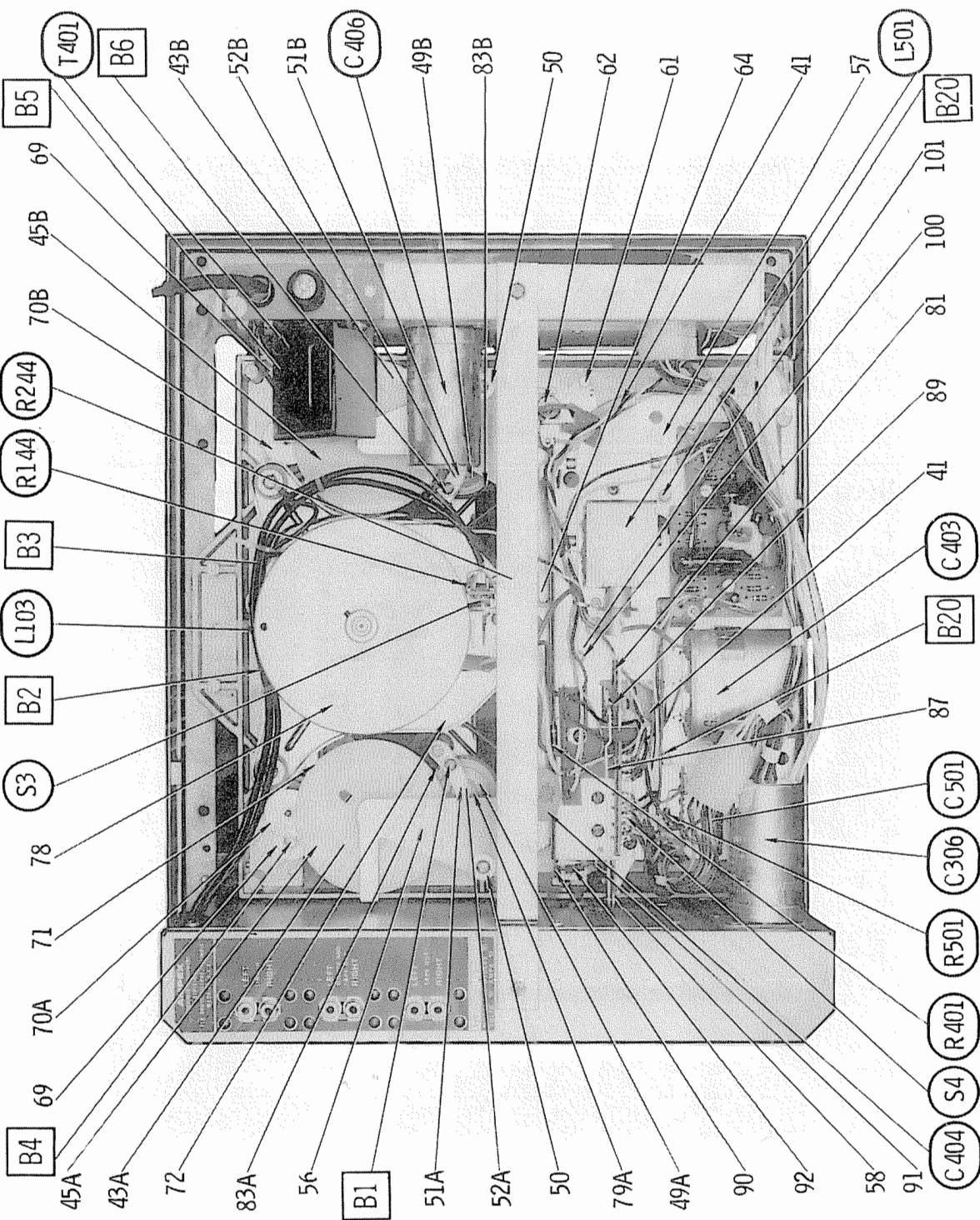
AMPEX MODELS 750, 755/A, 1450, 1455/A

MODEL 1455A

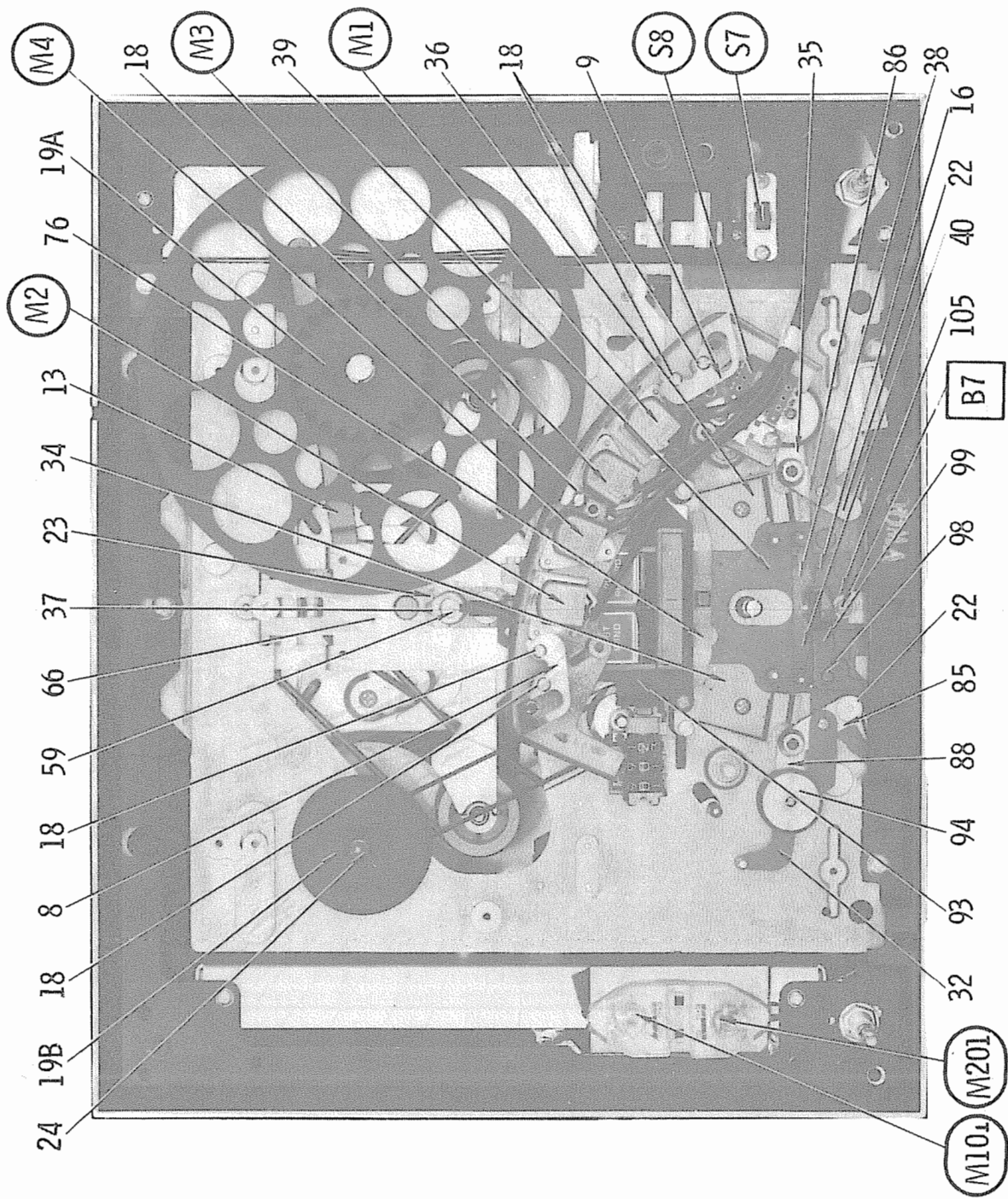
HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

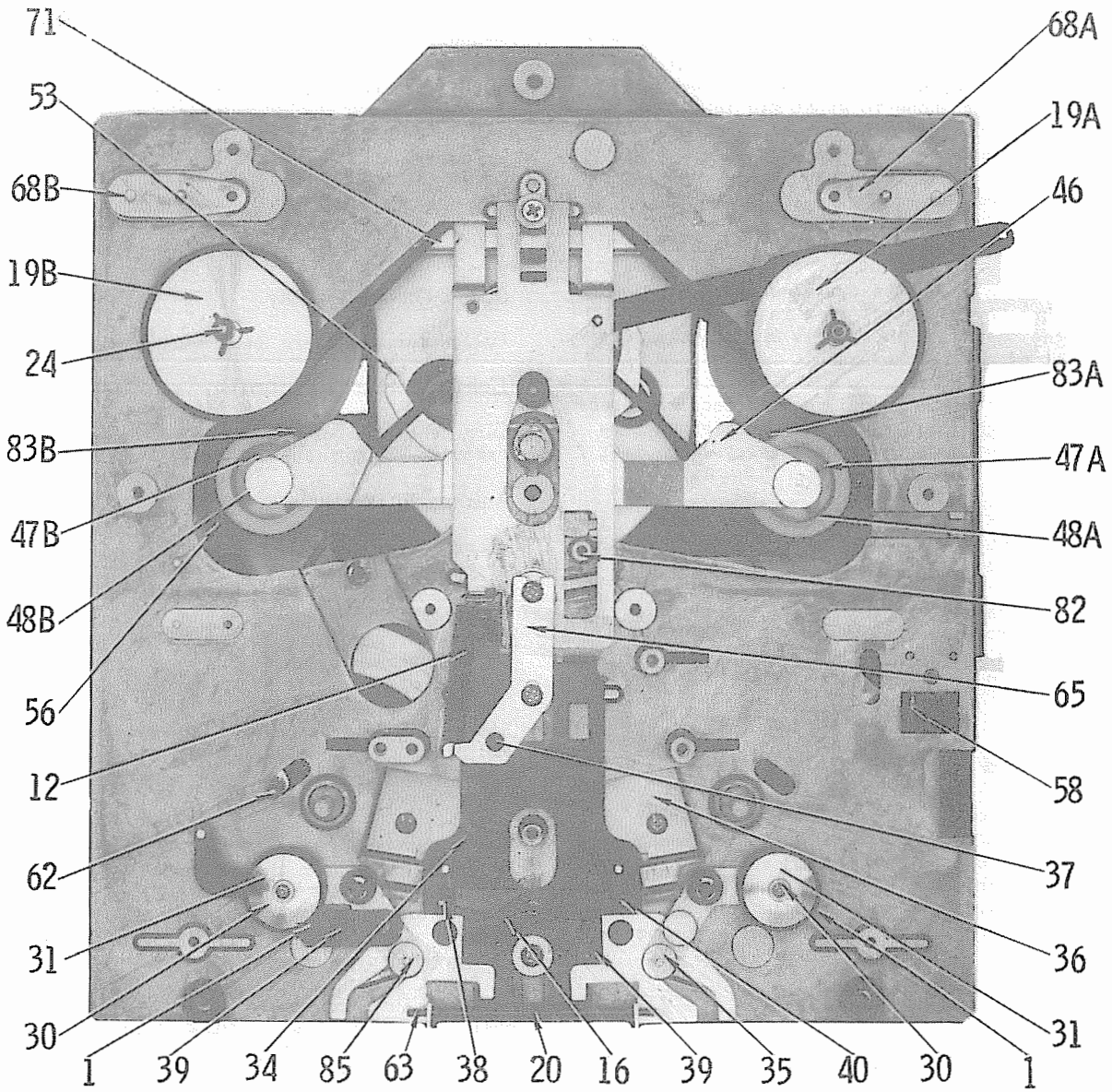
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AMPEX MODELS 750, 755/A, 1450, 1455/A





OPERATING INSTRUCTIONS

Monaural Record

Press Left Record Level control to turn on the unit, thread the tape with the supply reel on the left spindle, and select the speed.

Connect a microphone to Left Mic Input jack, set Mode Selector to Input Mon, and set the recording level with Left Record Level control.

Set Mode Selector to Mono 1, move Direction Selector to the right, press and hold Left Record button while moving Play/Record Selector forward, and record the left-channel tracks.

To record the right-channel tracks, follow the procedure in paragraphs 1, 2, and 3; except connect the microphone to Right Mic Input jack, set the recording level with Right Record Level control, set Mode Selector to Mono 2, and press and hold Right Record button while moving Play/Record Selector forward.

Monaural Play

Connect the unit to an external stereo amp, press Left Record Level control to turn on the unit, thread the tape with the supply reel on the left spindle, and select the speed.

Set Mode Selector to Mono 1, move Direction Selector to the right, move Play/Record Selector forward, and play the left-channel tracks from left to right.

To play the right-channel tracks from left to right, follow the procedure in paragraphs 1 and 2, except move Mode Selector to Mono 2.

To play a monaural recording from right to left, follow the procedure in paragraphs 1, 2, and 3; except thread the tape with the supply reel on the right spindle, and move Direction Selector to the left.

Stereo Record

Follow the procedure under "Monaural Record"; except connect microphones to Left and Right Mic Input jacks, set the recording level with Left and Right Record Level controls, set Mode Selector to Stereo Tape, and press and hold Left and Right Record buttons while moving Play/Record Selector forward.

Stereo Play

Follow the procedure under "Monaural Play", except set Mode Selector to Stereo Tape.

Sound-On-Sound Record

Follow the procedure under "Monaural Record", and make a recording on the left-channel tracks.

Rewind the tape, move the microphone to Right Mic Input jack, set Mode Selector to 1 On 2, and press and hold Right Record button while moving Play/Record Selector forward.

Set the level of the transferred information with Echo/Sound-On-Sound control, set the level of the new information with Right Record Level control, and make a Sound-On-Sound recording on the right-channel tracks.

To make a composite recording on the left-channel tracks, follow the procedure in paragraphs 1, 2, and 3; except make a recording on the right-channel tracks, move the microphone to Left Mic Input jack, set Mode Selector to 2 On 1, press and hold Left Record button while moving Play/Record Selector forward, and set the level of the new information with Left Record Level control.

Sound-On-Sound Play

Follow the procedure under "Monaural Play".

Echo (Monaural Record)

Turn Echo/Sound-On-Sound control clockwise while recording monaurally for desired echo effect.

Automatic Reverse Signal

Record a three-second 20-cycle signal at each end of the tape.

To record the reversing signal, move the tape to the end of recording in the Forward Mode, place unit in the record mode, and press Reverse Signal button.

Remove the recorded reel from the right spindle and place it on the left spindle, place empty reel on right spindle, and repeat the above paragraph.

When the unit is in the play mode and the Auto/Repeat switch is in the Auto position, the unit will play the tape from left to right and reverse the tape direction when the 20-cycle reverse signal, at the end of the tape, reaches the forward play head.

When the Auto/Repeat switch is in the Repeat position, the unit will automatically reverse the tape direction when the recorded reverse signal, at either end of the tape, reaches the appropriate play head.

DISASSEMBLY

Remove four push-on-type control knobs, press rear edge of front escutcheon, and remove escutcheon.

Remove automatic take-up reel, press rear edge of push-on-type head cover, and remove head cover.

Remove four Allen screws and four Phillips screws holding top cover to mechanism, and remove top cover.

Remove four, large Phillips screws holding mechanism to cabinet, and remove mechanism.

SEQUENCE OF OPERATION

Play (Forward)

Pushing Play/Record Slide Key (6) forward moves Assembly (39), locked by Rod (100) and Spring (101), to push Slide (21), releasing Assembly (46). Slide (21) also releases the tension on Assembly (71) and causes Rollers (22) to center Assembly (71).

Simultaneously, Assembly (39) depresses Pin (64) to tilt Lever (56), raising Pulleys (45A) and (45B).

The motor, by driving Belt (3), pivots Assembly (46), causing Tire (79A) to contact Pulley (45A). The motor -- through Pulley (66), Belt (3), Pulley (47A), Washer (48A), Clutch (49A), Tire (79A), and Pulley (45A) -- drives Turntable (19A). Also, Pulley (45A), through Lever (44A) and Drum (43A), moves Assembly (71) toward Drum (43B).

Slide (21) pivots Lever (13) to move Link (75), pivoting Assembly (55). Assembly (55) pivots Yoke (80) to pivot Assembly (82), locking the Record push buttons.

Assembly (39) also pivots Arms (35) and (85) to press Rollers (1) against the capstans and to release Levers (40) and (38), pushed by Spring (16).

The motor, through Pulley (77) and Belt (4), drives Flywheels (41).

Play (Reverse)

The sequence for Play (Reverse) is essentially the same as "Play (Forward)". However, Knob (76) is moved to the left to pull Lever (27), pivoting Lever (58), locked by Actuator (91) and Spring (92), to actuate Switch (S4), reversing the motor.

As the motor reverses, Belt (3) tilts Assembly (46), causing Tire (79B) to contact Pulley (45B). The motor -- through Pulley (66), Belt (3), Pulley (47B), Washer (48B), Clutch (49B), Tire (79B), and Pulley (45B) -- drives Turntable (19B).

Also Pulley (45B), through Lever (44B) and Drum (43B), moves Assembly (71) toward Drum (43A).

Automatic Reverse -- From Play (Forward)

The 20-cycle tone on the tape causes the reversing circuitry to actuate Solenoid (L501), pivoting Plate (89).

Plate (89) pulls Link (87) to pivot Lever (58),

locked by Actuator (91) and Spring (92), actuating Switch (S4) to reverse the motor and pushing Lever (27) to move Knob (76). As the motor reverses, the "Play (Reverse)" sequence is initiated.

Record

The Record sequence is the same as either "Play".

Fast Forward (With Direction Knob to the Right)

Moving Fast Wind Slide Key (33) pivots Lever (29) to lock Key (6) and pushes Slide (21) to release Assembly (46). Slide (21) also releases the tension on Assembly (71) and causes Rollers (22) to center Assembly (71).

The motor, by driving Belt (3), tilts Assembly (46), causing Tire (83A) to contact Drum (43A). The motor -- through Pulley (66), Belt (3), Pulley (47A), Tire (83A), Drum (43A), Lever (44A), and Pulley (45A) -- drives Turntable (19A).

Rewind

Moving Direction Selector Knob (76) and Fast Wind Slide Key (33) causes Lever (29), pivoted by Key (33), to lock Key (6).

Knob (76) pulls Lever (27) to pivot Lever (58), locked by Spring (92) and Actuator (91), actuating Switch (S4) to reverse the motor rotation.

Key (33) pushes Slide (21) to release Assembly (46) to release tension on Assembly (71), and to cause Rollers (22) to center Assembly (71).

The motor, by driving Belt (3), tilts Assembly (46) causing Tire (83B) to contact Drum (43B). The motor -- through Pulley (66), Belt (3), Pulley (47B), Tire (83B), Drum (43B), and Lever (44B) -- drives Turntable (19B).

Stop

Moving Key (33) or Key (6) to its original position reverses the sequence initiated by each knob. In addition, Rollers (22) contacting Assembly (71) cause Turntable (19) supplying the tape, through Lever (44) and Drum (43), to move Assembly (71) toward Turntable (19) taking up the tape.

Drum (43) on Turntable (19) taking up the tape also pulls Assembly (71), causing Assembly (71) to be forced downward by Roller (70), applying a greater braking torque through Drum (43), Spring (15), and Lever (44) to Turntable (19) supplying the tape.

AMPEX MODELS 750, 755/A, 1450, 1455/A

TROUBLE CHART

IMPORTANT: Before consulting this chart, refer to "General Servicing Information" on page 4.

SYMPTOM	REMARKS
Take-up reels revolve erratically, or not at all in Play or Record	Play Take-up Torque misadjusted. Tires (79) worn or dirty. Turntables (19) binding. Belt (3) dirty, worn, or broken.

TROUBLE CHART (Continued)

SYMPTOM	REMARKS
Take-up reel does not revolve in Fast Forward.	Tire (83A) dirty or worn. Pulleys (47A), (47B), or (42) binding. Belt (3) dirty, worn, or broken. Assembly (46) binding. Supply Reel drag excessive.
Supply reel does not revolve in Rewind.	Motor not reversed by Switch (S4). Tire (83B) dirty or worn. Assembly (46) binding. Turntable (19B) binding. Take-up Reel Drag excessive.
Supply reel spills tape in forward positions.	Supply Reel Drag misadjusted.
Take-up reel spills tape in Rewind	Take-up Reel Drag misadjusted.
Reels do not stop immediately when Stop function is selected.	Braking Torque misadjusted. Pads on Assembly (71) dirty or worn.
Capstan does not rotate in Play or Record.	Belt (4) worn, dirty, or broken. Flywheels (41) binding. Motor defective or not supplied with power.
Tape rides up and down between capstan and pressure roller.	Rollers (1) dirty or worn. Capstans bent. Excessive Supply Reel Drag. Excessive Play Take-up Torque.
Wow or Flutter.	Rollers (1) dirty, worn or binding. Insufficient Pressure Roller Pressure. Flywheel (41) binding. Belt (4) dirty or worn. Excessive Supply Reel Drag. Excessive Play Take-up Torque. Motor Defective.
Sound is weak or distorted.	Head (M1), (M2), or (M3) dirty, misadjusted, or defective. Amplifiers defective. Bias Oscillator defective. Levers (38) and (40) not contacting tape.
Erase weak or inoperative.	Head (M4) dirty, misadjusted, or defective. Head (M4) not supplied with sufficient current.

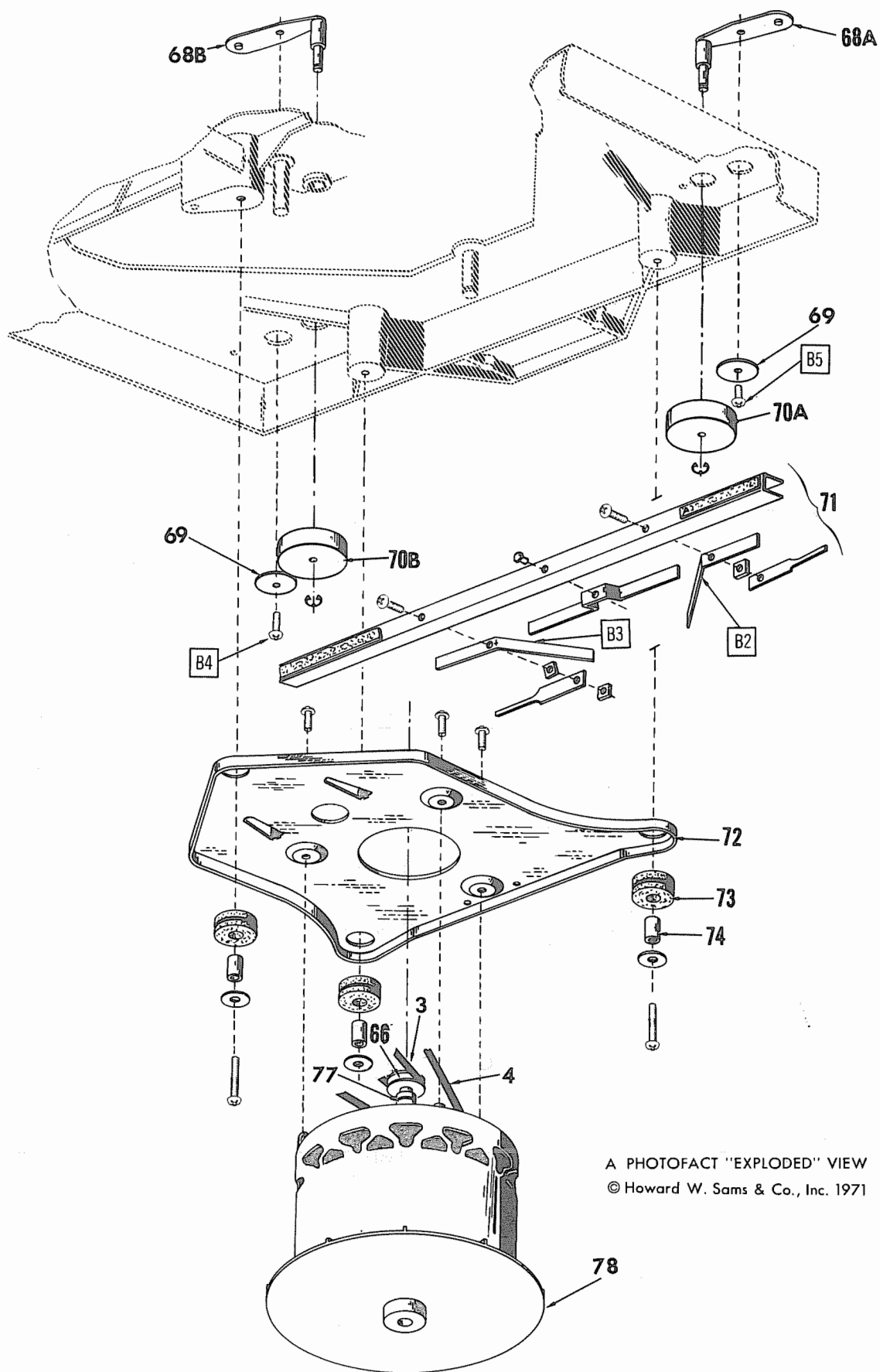
ADJUSTMENTS

<p>IMPORTANT: Before making any adjustments, refer to "General Servicing Information" on page 4.</p> <ol style="list-style-type: none"> 1. All voltage measurements referred to in this chart are made at a tape speed of 7-1/2 ips with an audio VTVM having a flat response to 100KC. 2. All torque measurements are made at a tape speed of 7-1/2 ips with a spring scale applied to a point 2 inches from spindle center. 3. All pressure measurements are made by using a spring scale to determine that point at which pressure is just removed. 	
ADJUST	REMARKS
Play Take-up Torque	Nominal value 1-1/2 ounce. Controlled by B1 in forward and B6 in reverse.
Fast Forward Take-up Torque	Nominal value 20 ounces. Controlled by condition of Tire (83A).
Rewind Torque	Nominal value 20 ounces. Controlled by condition of Tire (83B).

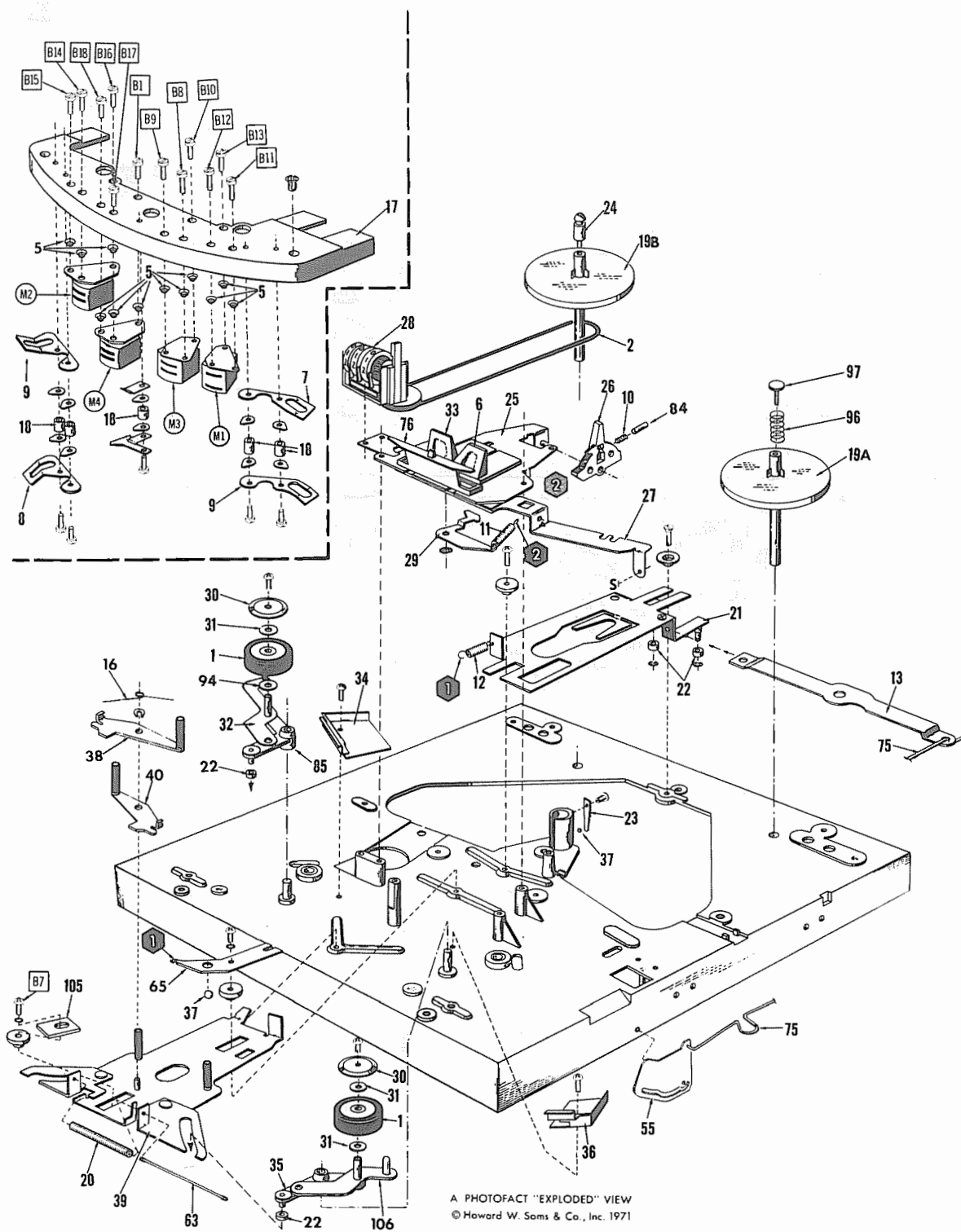
ADJUSTMENTS (Continued)

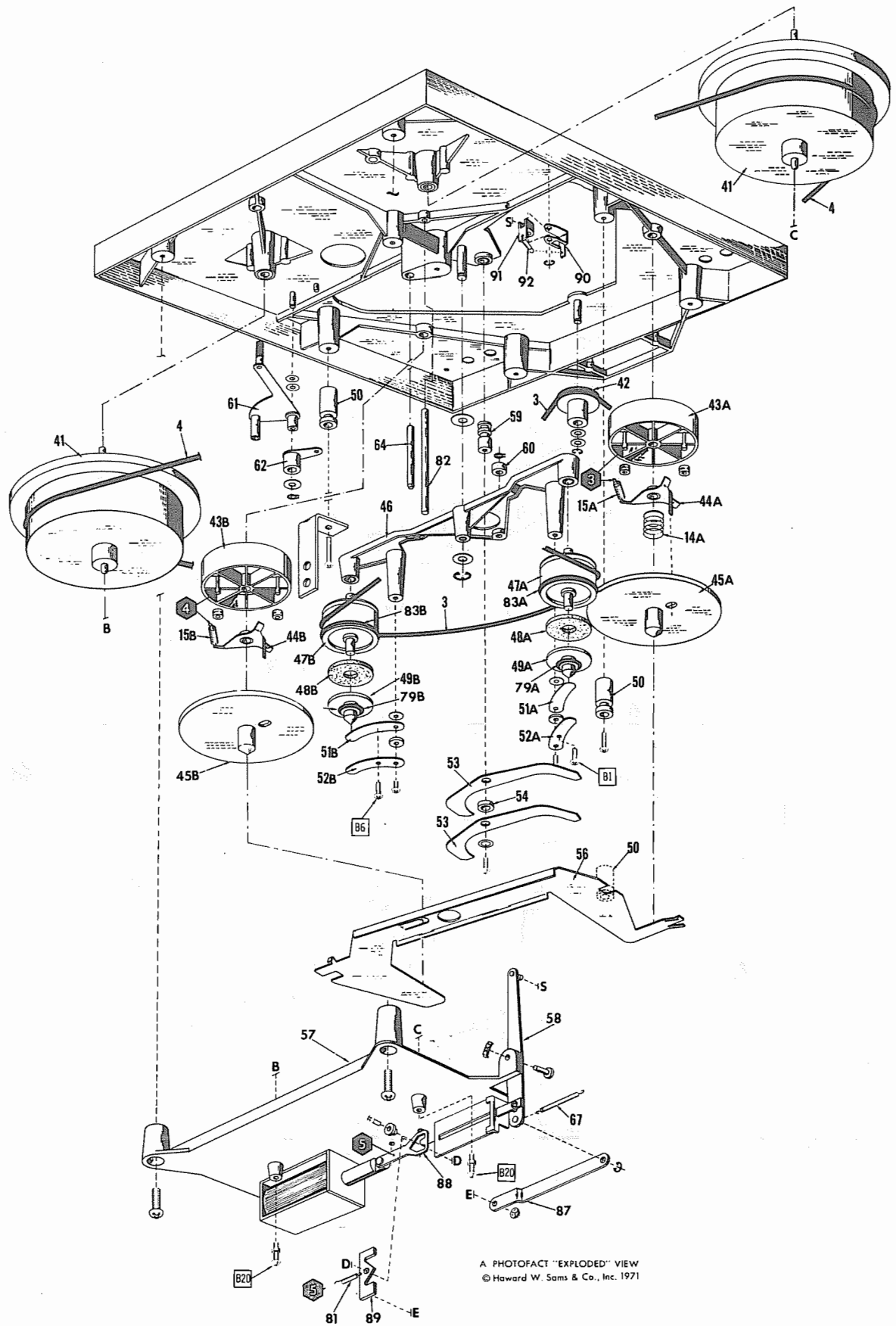
ADJUST	REMARKS
Supply Reel Drag	Nominal value 1 ounce in Play and 1/2 ounce in Fast Forward. Controlled by angle of tab on Assembly (71) at B2.
Take-up Reel Drag	Nominal value 1 ounce in Rewind. Controlled by angle of tab on Assembly (71) at B3.
Pressure Roller Pressure	Nominal value 14 ounces. Controlled by tension of Spring (20).
Braking Torque	Measured in Stop with Assembly (71) at full travel over reel being measured. Nominal value 4 ounces counterclockwise on supply reel. Controlled by loosening B5 and repositioning Arm (68B). Nominal value 4 ounces clockwise on Take-up reel. Controlled by loosening screw B4 and repositioning Arm (68A).
Flywheel Play	Adjust B20 for a slight vertical play of Flywheel (41A) or (41B).
Pause Position	Loosen B7 and position Detent (105) until Rollers (1) move from the capstan 1/64 inch when Pause button is depressed.
Forward Record Head Position	Adjust B8, B9, and B10 until top of upper pole piece is even with top of a properly threaded tape, adjust B8 until pole pieces are perpendicular to edge of tape, and adjust B9 and B10 equally in opposite directions until mounting plate is parallel to Casting (17).
Forward Play Head Height	Adjust B11, B12, and B13 equally until top of upper pole piece is even with top of a properly threaded tape.
Forward Play Head Azimuth	Connect an AC VTVM across left output, play an Azimuth test tape forward, and adjust B11 for maximum output.
Forward Play Head Zenith	Adjust B12 and B13 equally in opposite directions until mounting plate is parallel to Casting (17).
Forward Erase Head Position	Adjust B17, B18, and B19 until bottom of lower pole piece is even with bottom of a properly threaded tape. Adjust B17 until pole pieces are perpendicular to edge of tape, and adjust B18 and B19 equally in opposite directions until the mounting plate is parallel to Casting (17).
Reverse Play Head Height	Adjust B14, B15, and B16 equally until bottom of lower pole piece is even with bottom of a properly threaded tape.
Reverse Play Head Azimuth	Remove automatic threading reel assembly and place an azimuth test tape on right spindle and select reverse play. Connect an AC VTVM across left output and adjust B14 for maximum peak.
Reverse Play Head Zenith	Adjust B15 and B16 equally in opposite directions until the mounting plate is parallel to Casting (17).
Erase Current	Nominal value 14 ma (68V rms) in each section of each head. No adjustment provided.
Record Bias	Select Stereo record. Nominal value 12.5V rms (1.2ma) across each section of Head (M3). Adjust R141 for left-channel section and R241 for right channel.
Bias Oscillator	Nominal frequency 82 KC. Controlled by setting of slug in T301.
Record Level Indicator Calibration	Select stereo record mode and disable bias oscillator by disconnecting B+ to bias oscillator (orange lead to E303 on circuit board). Move Mode Selector to Input Monitor and apply a 1000-cycle signal at .002V rms to Left (Right) Mic Input and adjust Left (Right) Record Level control for .02V rms across left (right) channel section of Record Head (M3). Adjust R135 (R235) for an indication at the dividing line "0" on Left (Right) Record Level Meter.
Playback Level	Select Play mode and apply a 1000-cycle signal at .0035V rms across left (right) channel section of play head and move Mode Selector to Stereo Tape. Adjust R112 (R212) for .70V rms across Left (Right) Tape Output jack.

AMPEX MODELS 750, 755/A, 1450, 1455/A



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MECHANICAL PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1*	4045017-10	Pressure Roller (2 used)	35	4045009-20	Right Pressure Roller Arm
	(1) (2)		36	7290071-02	Lower Right Head Shield
2*	7310013-10*	Counter Belt (Models 1450, 1455)*	37	420-031	Ball Bearing (7/32 inch) (2 used)
*	4315002-10*	Counter Belt (Models 750,755)*	38	7040056-02	Left Lever Assembly (Model 1450)
3	4315003-10	Wind Belt		7040056-03	Left Lever Assembly (Model 1455)
4	4315004-30	Capstan Belt	39	7040098-01	Play Slide Assembly (Models 750,755)
5	4275016-10	Head Mounting Spring		7040144-02	Play Slide Assembly (Models 1450, 1455)
6	7100018-03(5)	Record/Play Slide Key (Models 1450, 1455)	40	7040056-01	Right Lever Assembly (Models 1450, 1455)
	7100018-02	Record/Play Slide Key (Models 750, 755)	41	4045000-10	Flywheel (2 used)
7	4215043-20	Upper Right Tape Guide	42	7030051-02	Idler Pulley
8	4215043-30	Lower Left Tape Guide	43	4255007-10	Brake Drum (2 used)
9	4215043-10	Lower Right or Upper Left Tape Guide	44	4045013-10	Take-up Turntable Lever Assembly (2 used)
10	4275006-10	Speed Shift Knob Spring	45	4255009-10	Play Wind Pulley (2 used)
11	4275003-10(5)	Fast Wind Hold Spring	46	7040231-01	Yoke Arm Assembly
12	4275007-10	Fast Wind Slide Spring	47	7040229-01	Wind Drive Pulley (2 used)
13	7230062-01	Interlock Lever	48	7440073-01	Play Clutch Washer (2 used)
14	4275010-10	Play Drive Pulley Spring (2 used)	49	4225010-10	Play Clutch (2 used) (Models 750, 755)
15	4275004-10	Brake Pulley Spring (2 used)		4225010-10	Play Clutch (2 used) (Models 1450, 1455)
16	7270008-01	Tape Take-up Spring (Model 1450)	50	4215021-10	Actuator Post (2 used)
	7270008-02	Tape Take-up Spring (Model 1455)	51	4275001-10	Clutch Pressure Spring (2 used)
	4275021-10	Tape Take-up Spring (Models 750,755)	52	4335000-10	Clutch Pressure Plate (2 used)
17	7040350-02	Head Base (Models 1450,1455)	53	4215018-10	Belt Guide (2 used)
	4335007-20	Head Base (Models 750,755)	54	4225002-10	Belt Guide Spacer
18	4225001-10	Tape Guide Spacer (3 used)	55	7040241-01	Interlock Cam and Hub Assembly
19	4255012-30	Turntable (2 used)(Models 1450,1455)	56	4235016-20	Play Lever
	4255012-20	Turntable (2 used)(Models 750,755)	57	7330055-02	Thrust Plate (Model 1450)
20	7270006-01	Pressure Roller Spring		7330055-05	Thrust Plate (Model 1455)
21	4045016-30	Wind Slide (Model 1450)		7330055-01	Thrust Plate (Model 750)
	4045016-50	Wind Slide (Models 755, 1455)		7330055-04	Thrust Plate (Model 755)
	4045015-30	Wind Slide (Model 750)	58	7040220-01	Reverse Actuator Lever (Models 1450 and 1455)
22	4255000-10	Idler Cam Roller (4 used)		7040220-02	Reverse Actuator Lever (Models 750 and 755)
23	4275008-10	Speed Shift Index Spring	59	4215009-10	Speed Change Shaft
24	4105011-10	Turntable Cap	60	4255008-10	Yoke Roller
25	7040174-03	Control Plate (Models 1450, 1455)	61	4235002-10	Tape Switch Arm
	4335001-20	Control Plate (Models 750,755)	62	4045024-10	Tape Switch Dampener Arm
26	4105010-10	Speed Shift Knob	63	7210003-01	Capstan Spring Rod
27	7230031-01	Reverse Interlock Lever (5)	64	4165000-10	Play Lever Actuator Pin
28	4145000-20	Counter (5)	65	7260005-01	Ball Retainer Bracket
29	4235003-10	Play Wind Interlock Lever (5)	66	7250075-02	Wind Pulley (Models 1450,1455)
30	7100000-10	Capstan Idler Cover Plate (2 used)		7250064-01	Wind Pulley (Models 750,755)
31	7440028-03	Thrust Washer (2 used) (1)	67	7270026-01	Reverse Lever Rod Spring (Models 750 and 755)
32	7040047-09	Left Tape Tension Arm (Models 750,1450, and 1455)	68	4045012-10	Brake Roller Arm (2 used)
	7040047-11	Left Tape Tension Arm (Model 755)	69	501-609	Flat Washer
33	7100017-02	Wind Slide Key (Models 750,755)	70	4255001-10	Brake Roller (2 used)
	7100017-03	Wind Slide Key (Models 1450,1455)	71	4035004-10	Brake Channel Assembly
34	7290071-01	Lower Left Head Shield	72	7330038-01	Motor Mounting Plate
			73	4135001-10	Motor Plate Shock Mount (3 used)
			74	4225003-10	Motor Grommet Spacers (3 used)
			75	7230064-01	Cam Link
			76	7100019-01	Direction Knob (5)
			77	4045025-20	60-Cycle Motor Pulley (Models 1450 and 1455)

AMPEX MODELS 750, 755/A, 1450, 1455/A

MECHANICAL PARTS LIST (Continued)

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
78	4255016-10	Fan Blade (Models 1450,1455)	93	7030041-01	Play Control Assembly
	7250018-01	Fan Blade (Models 750,755)		(6)	(Models 1450 and 1455)
79*	7310002-01*	Play Clutch Tire* (2 used)		7030041-02	Play Control Assembly
80	7230060-01	Record Interlock Yoke			(Models 750 and 755)
	(7)		94	7440028-06	Thrust Washer
81	7270028-01	Reverse Solenoid Spring		(2 Used)	
	(Model 1450)		95	4045045-10	Take-up Reel (Models 1450
82	7040235-01	Record Lock Arm and Stud			and 1455)
	(7)	Assembly	96	4275019-10	Reel Spring (Models 1450
83*	7310001-01*	Wind Drive Tire (2 used,			and 1455)
		Replace in Pairs)*	97	7400002-01	Thumb Screw (Models 1450
84	4215007-10	Speed Change Insert Pin			and 1455)
85	4045009-10	Left Pressure Roller Arm	98	7270000-10	Tape Brake Arm Spring (Model
	(2)			1455)	
86	4035001-20	Left Capstan Idler Assembly	99	7040126-01	Tape Brake Arm Assembly
	(3)	(Models 750 and 1450)			(Model 1455)
	4035001-92	Left Capstan Idler Assembly	100	7210285-01	Play Slide Lock Rod
		(Models 755 and 1455)		(7)	
87	7230014-01	Reverse Lever Link	101	7270160-01	Slide Lock Rod Spring
		(Models 1450 and 1455)	102	7210284-01	Pause Button Shaft
88	4035001-91	Right Capstan Idler Assembly		(7)	
	(4)		103	7270159-01	Pause Button Shaft Spring
89	7230017-01	Reverse Linkage Toggle Plate		(7)	
90	7260027-01	Toggle Anchor Bracket	104	7230204-01	Pause Arm
		(Models 1450 and 1455)		(7)	
91	7220016-01	Block Actuator (Models	105	7040343-01	Pause Detent
		1450 and 1455)	106		Right Tape Tension Arm
92	7270023-01	Toggle Anchor Spring			
		(Models 1450 and 1455)			

(1) Part of Assembly (86).

(7) Not Shown on Exploded View.

(2) Part of Assembly (88).

(3) Includes Ref. Nos. (1), (30), (31), and (35).

* Counter Belt -- WALSCO Replacement Number 1410-50.

(4) Includes Ref. Nos. (1), (30), (85), and (94).

* Play Clutch Tire -- WALSCO Replacement Number 1428-05.

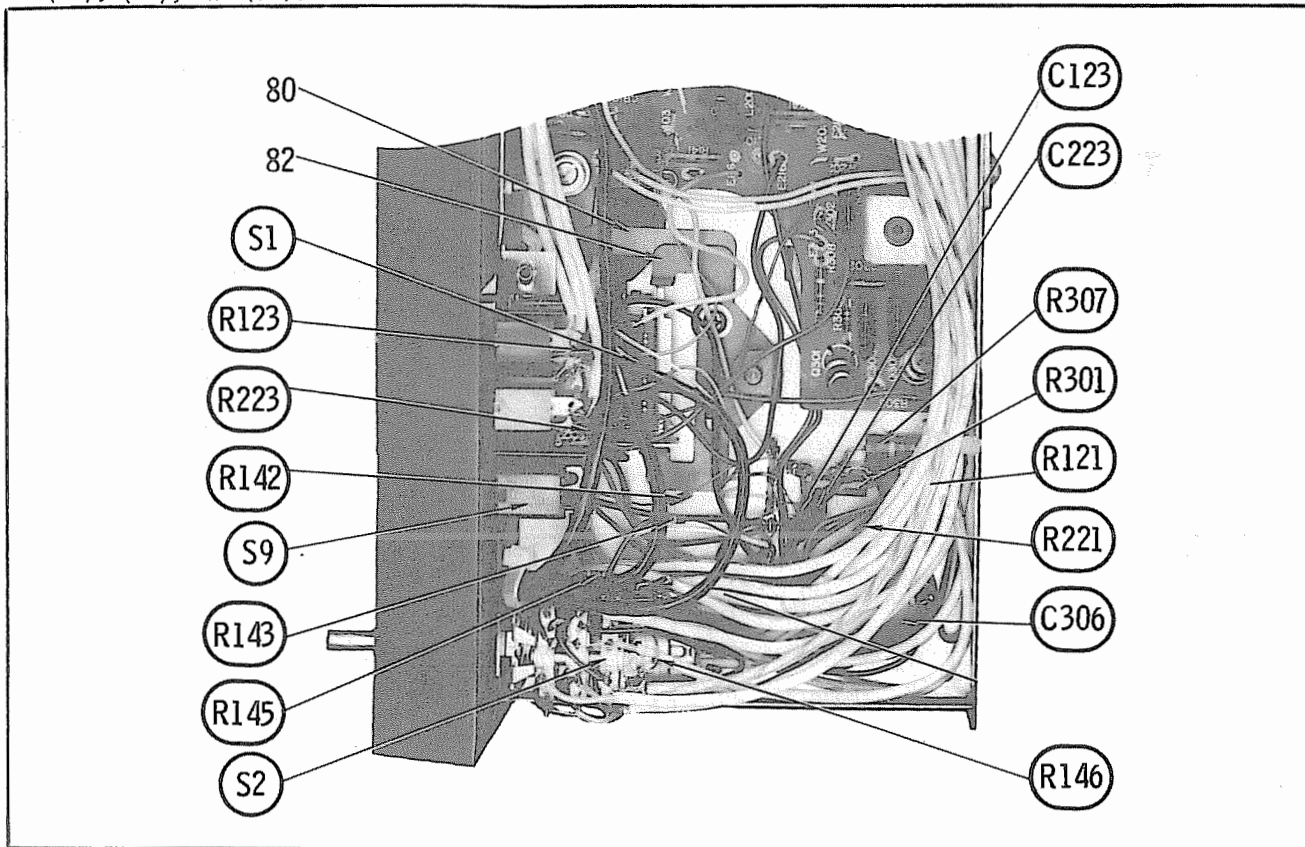
(5) Part of Assembly (93).

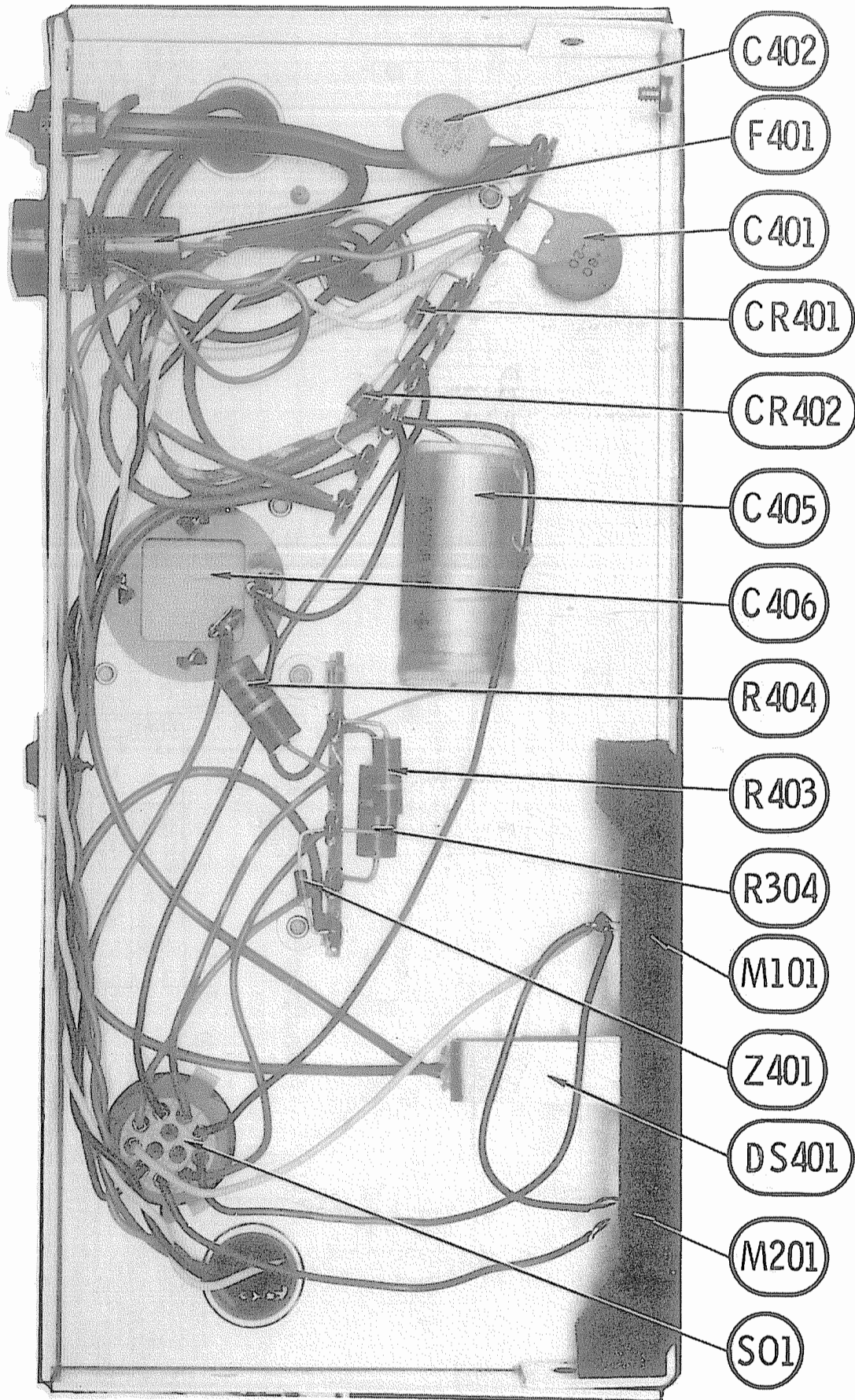
* Pressure Roller -- WALSCO Replacement Number 1499-36.

(6) Includes Ref. Nos. (6), (11), (27), (28),

* Wind Drive Tire -- WALSCO Replacement Number 1428-04.

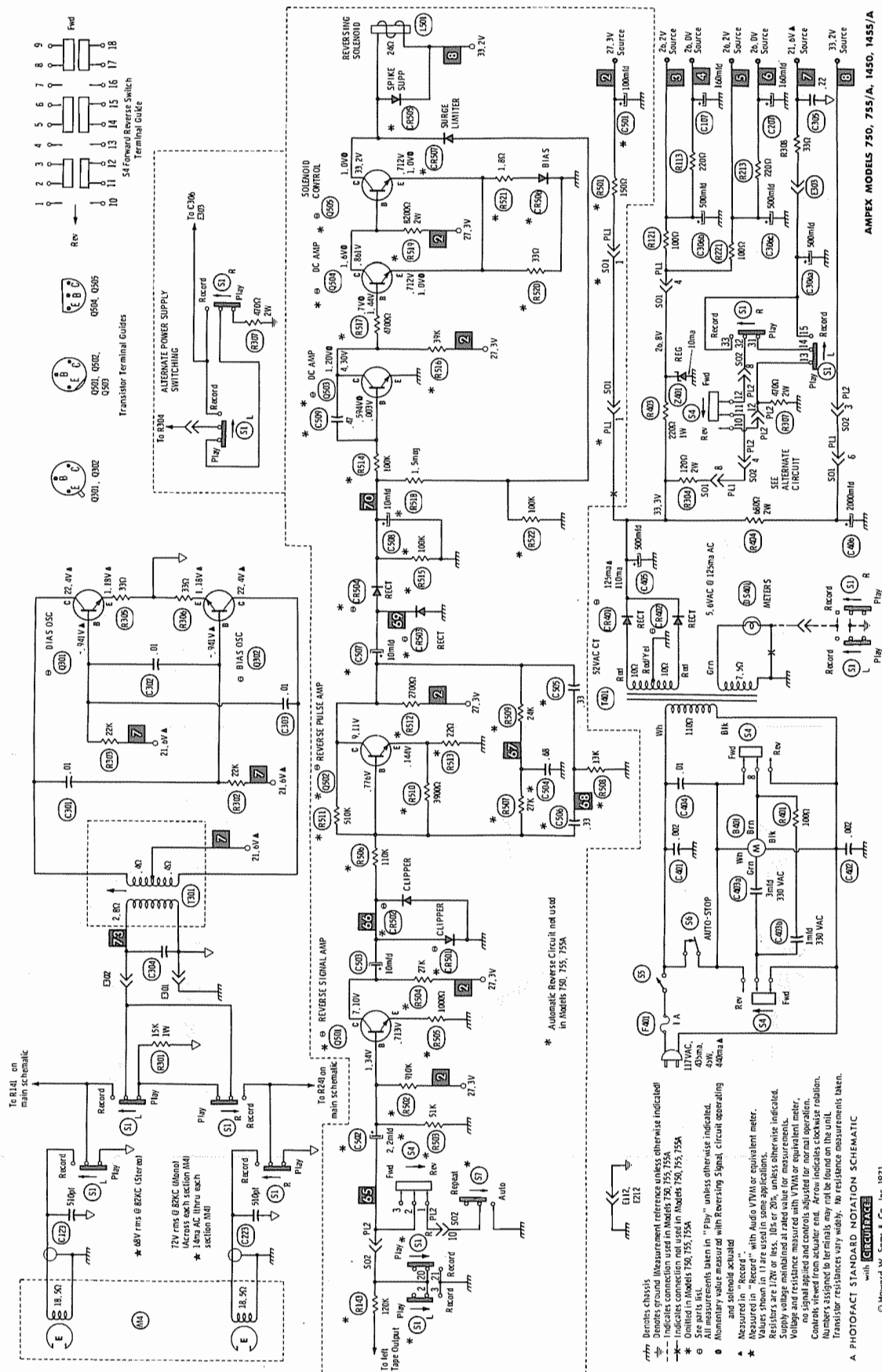
(29), (33), and (76).

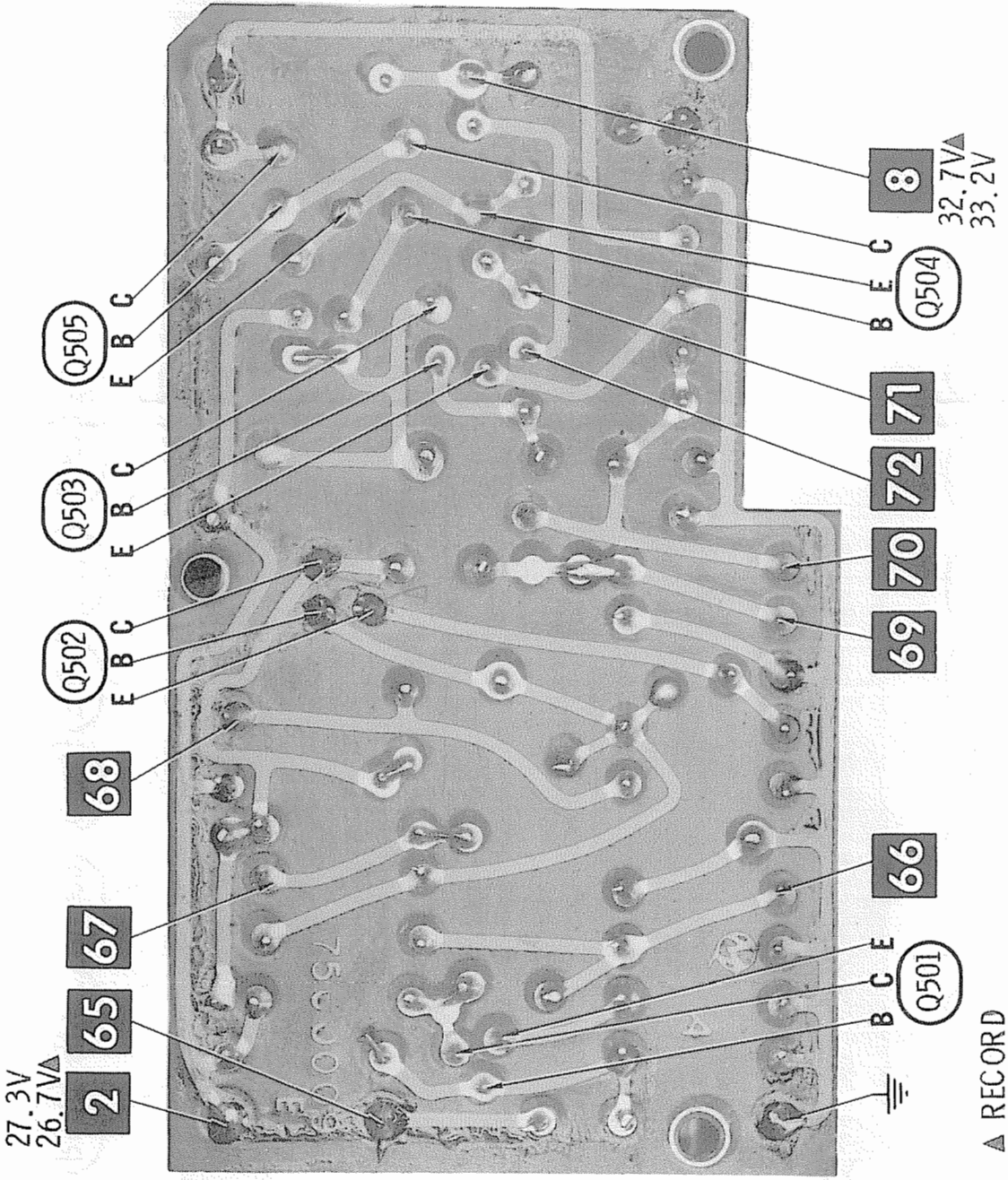


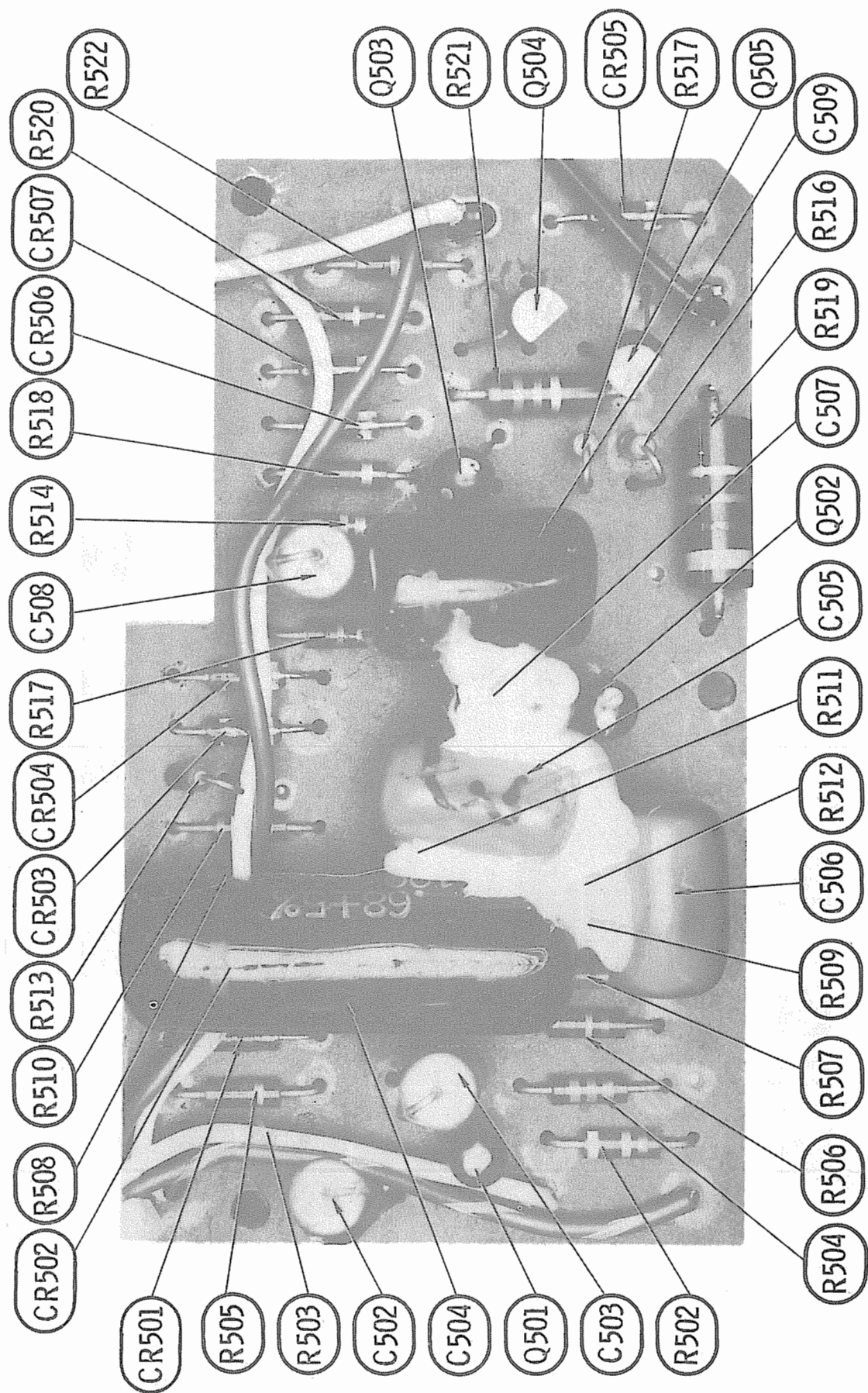


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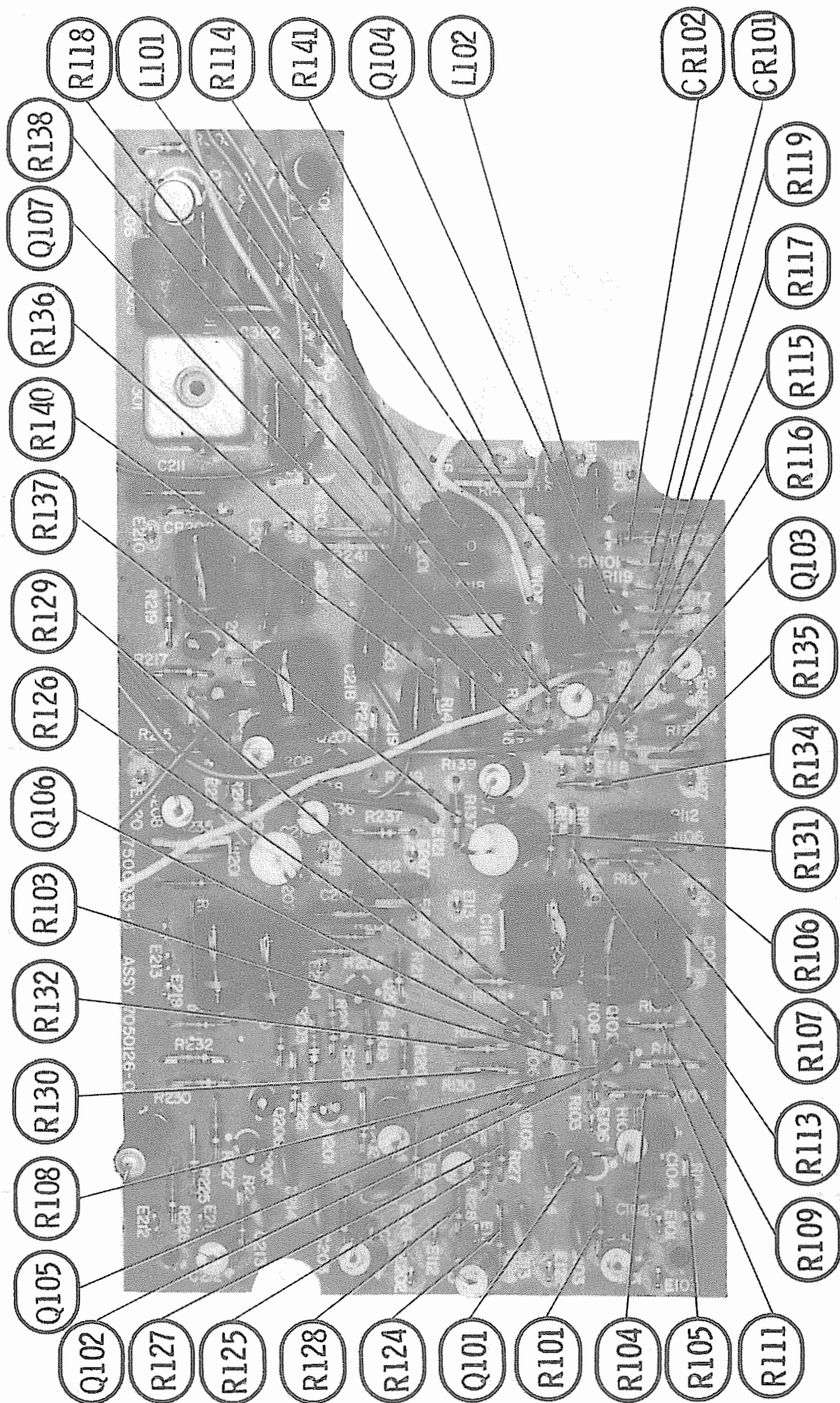
SEE MAIN SCHEMATIC, PAGES 30-31.

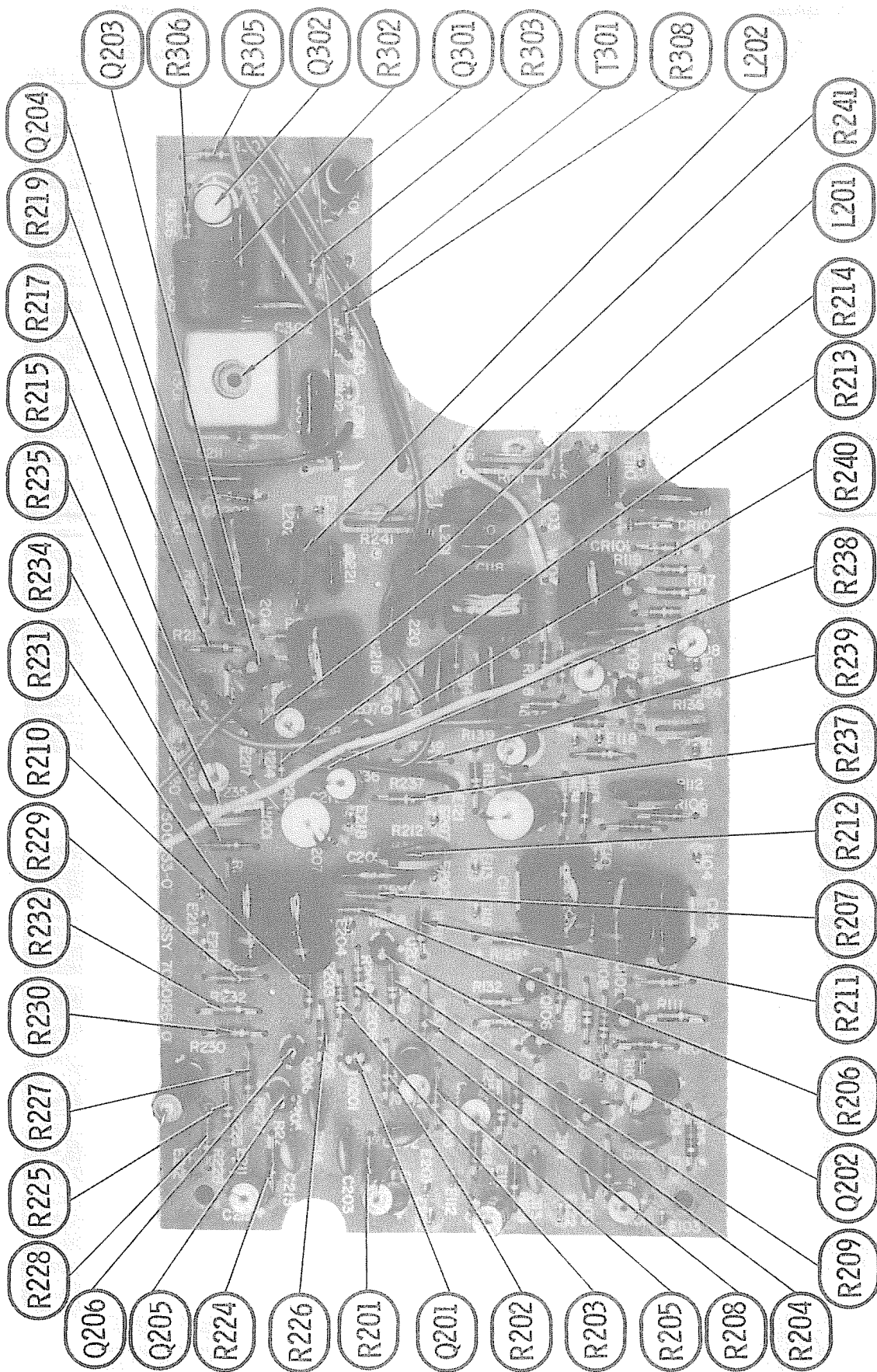




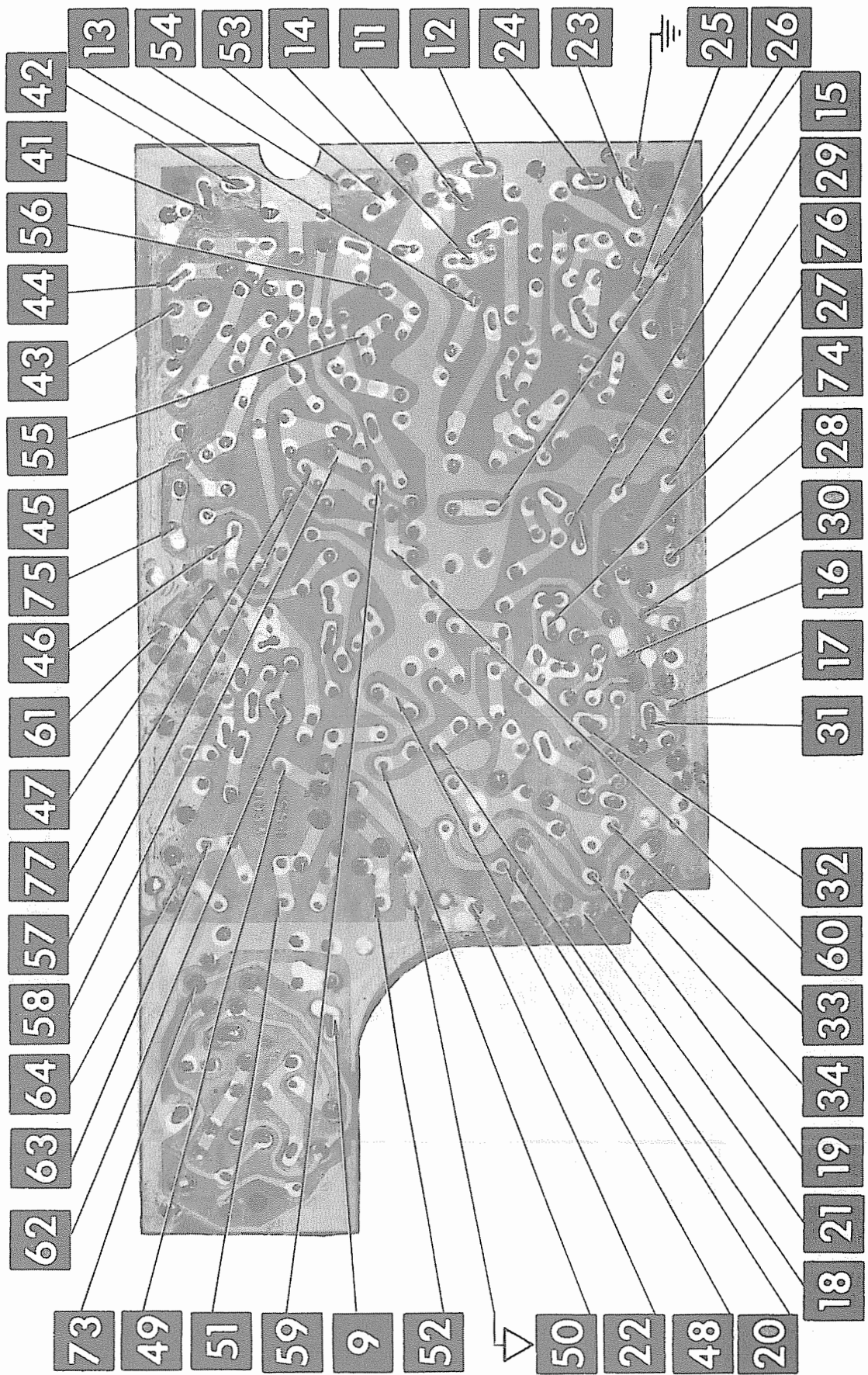


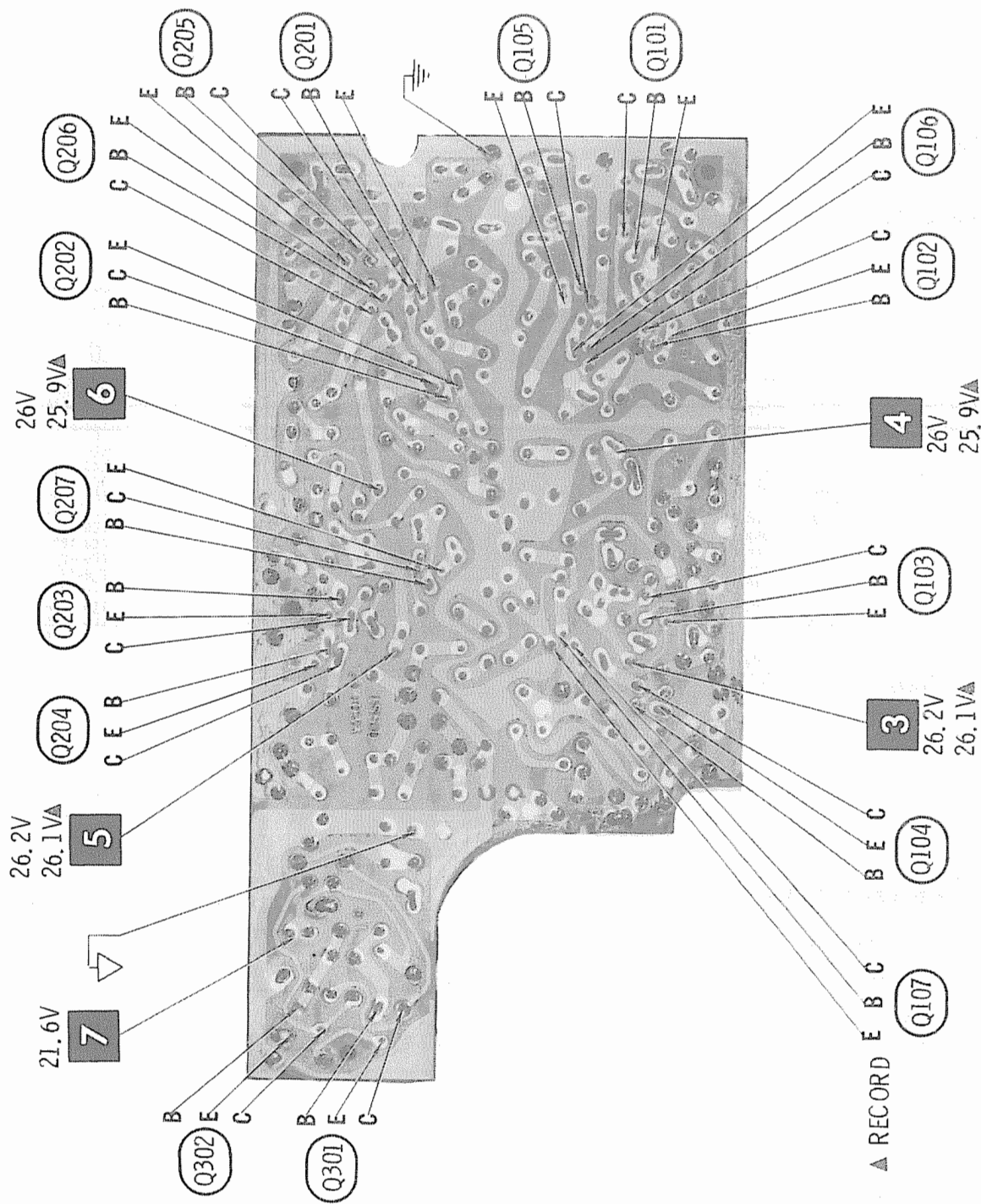






AMPEX MODELS 750, 755/A, 1450, 1455/A





AMPEX MODELS 750, 755/A, 1450, 1455/A

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 Feet 17109 (Plastic) or 17129 (Rubber) - 9 Feet
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.
Q101		Play Preamp	7570005-03	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q102		Play Preamp	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q103		Play Output	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q104		Meter Amp	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q105		Record Preamp	7570005-03 (1)	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q106		Record Preamp	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q107		Record Output	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q201		Play Preamp	7570005-03	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q202		Play Preamp	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q203		Play Output	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q204		Meter Amp	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q205		Record Preamp	7570005-03 (1)	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q206		Record Preamp	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q207		Record Output	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q301		Bias Oscillator	7570009-21	GE-20	TR-21	HEP53	SK3020	ECG 123A
Q302		Bias Oscillator	7570009-21	GE-20	TR-21	HEP53	SK3020	ECG 123A
Q501		Reverse Signal Amp	7570005-01	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q502		Reverse Pulse Amp	7570005-03	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q503		DC Amp	7570005-03	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q504		DC Amp	7570008-02	GE-20	TR-21	HEP736	SK3020	ECG 123A
Q505		Solenoid Control	7570008-02	GE-20	TR-21	HEP736	SK3020	ECG 123A

(1) Part #7570005-08 may be used in Models 750, 755, and 755A.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MFGR. PART OR TYPE No.	REPLACEMENT DATA				NOTES
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	RCA PART No.	SYLVANIA PART No.	
CR101	7570016-03	1N34AS	1N34A	1N34A	ECG 109	
CR102	7570016-03	1N34AS	1N34A	1N34A	ECG 109	
CR201	7570016-03	1N34AS	1N34A	1N34A	ECG 109	
CR202	7570016-03	1N34AS	1N34A	1N34A	ECG 109	
CR401	7570024-02	GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	
CR402	7570024-02	GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	
CR501	7570215-21	GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	
CR502	7570215-21	GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	
CR503	7570215-21	GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	
CR504	7570215-21	GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	
CR505	7570215-21	GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	
CR506	7570215-21	GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	
CR507	7570215-21	GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	
Z401	7570021-12					

PARTS LIST AND DESCRIPTION (CONTINUED)

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

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						
		PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C101	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C104	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C107	160 25V	D37-587	PRS1370		WBR150-35	MT1-21.5	MTA175F25	TE-1212
C108	1.6 25V	031-877	CRE751A	EA30-2	AL2-50	MT1-1	MTA2D50	TE-1201
C109	10 25V	031-878	CRE607A	EA30-10	AL10-25	MT1-5	MTA10D35	TL-1204
C112	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C115	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C117	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C201	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C204	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C207	160 25V	037-587	PRS1370		WBR150-35	MT1-21.5	MTA175F25	TE-1212
C208	1.6 25V	031-877	CRE751A	EA30-2	AL2-50	MT1-1	MTA2D50	TE-1201
C209	10 25V	031-878	CRE607A	EA30-10	AL10-25	MT1-5	MTA10D35	TL-1204
C212	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C215	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C217	8 4V	031-875	CRE457A	EA6-10	AL10-25	MT1-5	MTA10D35	TL-1087
C306A	500 50V	7550013-01			CC0035A			TVL-3301
B	500 50V							
C	500 50V							
C403A	1.75 330VAC	7540069-01						
B	1.0 330VAC							
C405	500 35V	4555000-02	PRS1390	EA5D-500	WBR500-35	QT1-31	TC50D50A	TL-1316
C406	2000 50V	7550014-03	AFH1-14		AA0174A		FP070A	TWLP-1342
C501	100 50V	7550029-02	PRS1360	EA50-100	WBR100-150	QT1-23	TC3501A	TL-1309
C502	2.2 12V	7552395-31	CRE751A	EA15-2	AL2-50	MT1-1	MTA2D50	TE-1121
C503	10 15V	7552316-41	CRE457A	EA15-10	AL10-25	MT1-5	MTA10D35	TE-1155
C507	10 15V	7552316-41	CRE457A	EA15-10	AL10-25	MT1-5	MTA10D35	TE-1155
C508	10 15V	7552316-41	CRE457A	EA15-10	AL10-25	MT1-5	MTA10D35	TE-1155

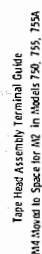
AMPEX MODELS 750, 755/A, 1450, 1455/A

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.
C102	220		GPD X5F221K	DD-221	GP220	CCD-221	GP322	10TS-T22
C103	820		GPD X5F821K	DD-821	GP820	CCD-821	GP382	10TS-T82
C105	.0068 100V	5%				1DP-1-682		225P68291
C106	.33 75V					1DP-4-334	PVC1033	225P3349R75
C110	.33 75V					1DP-4-334	PVC1033	225P3349R75
C111	.033 100V					1DP-1-333	PVC1133	225P33391
C113	220		GPD X5F221K	DD-221	GP220	CCD-221	GP322	10TS-T22
C114	820		GPD X5F821K	DD-821	GP820	CCD-821	GP382	10TS-T82
C116	.33 75V					1DP-4-334	PVC1033	225P3349R75
C118	.47 75V					1DP-4-474	PVC1047	225P4749R75
C119	.036 100V	5% #7541143-11						
C120	390	5%	ADM-15-391	CPR-390J	CD15F391J500	DM-15-391	SX339	MS-339
C121	510	5%	ADM-15-511	CPR-510J	CD15F511J500	DM-16-511	SX351	MS-351
C123	510	5%	ADM-15-511	CPR-510J	CD15F511J500	DM-16-511	SX351	MS-351
C124	180		GPD X5F181K	DD-181	GP180	CCD-181	GP318	10TS-T18
C202	220		GPD X5F221K	DD-221	GP220	CCD-221	GP322	10TS-T22
C203	820		GPD X5F821K	DD-821	GP820	CCD-821	GP382	10TS-T82
C205	.0068 100V	5%				1DP-1-682		225P68291
C206	.33 75V					1DP-4-334	PVC1033	225P3349R75
C210	.33 75V					1DP-4-334	PVC1033	225P3349R75
C211	.033 100V					1DP-1-333	PVC1133	225P33391
C213	220		GPD X5F221K	DD-221	GP220	CCD-221	GP322	10TS-T22
C214	820		GPD X5F821K	DD-821	GP820	CCD-821	GP382	10TS-T82
C216	.33 75V					1DP-4-334	PVC1033	225P3349R75
C218	.47 75V					1DP-4-474	PVC1047	225P4749R75
C219	.036 100V	5% #7541143-11						
C220	390	5%	ADM-15-391	CPR-390J	CD15F391J500	DM-15-391	SX339	MS-339
C221	510	5%	ADM-15-511	CPR-510J	CD15F511J500	DM-16-511	SX351	MS-351
C223	510	5%	ADM-15-511	CPR-510J	CD15F511J500	DM-16-511	SX351	MS-351
C224	180		GPD X5F181K	DD-181	GP180	CCD-181	GP318	10TS-T18
C301	.01 100V	5%	ADM-30-103	CPR-10000J		DM-30-103	SX110	MS-11
C302	.01 100V	5%	ADM-30-103	CPR-10000J		DM-30-103	SX110	MS-11
C303	.01 100V	5%	ADM-30-103	CPR-10000J		DM-30-103	SX110	MS-11
C304	.0022	5%	ADM-20-222	CPR-2200J	CD19F222J500	DM-19-222	SX222	MS-222
C305	.22 75V					1DP-3-224	PVC1022	225P2249R75
C401	.002 150VAC-1.4KV							125L-D20
C402	.002 150VAC-1.4KV							125L-D20
C404	.01 150VAC-1.4KV			CI-103	AC-10000		UAC110	125L-S10
C504	.68 100V	5%						
C505	.33 75V	5%				1DP-4-334	PVC1033	225P3349R75
C506	.33 75V	5%				1DP-4-334	PVC1033	225P3349R75
C509	.47 75V					1DP-4-474	PVC1047	225P4749R75

Ampex Part Number.

(CONTINUED ON PAGE 32)





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.
R112	Play Level Adjust, Left	100K	7520024-01	TSV-100K or T-100K		X201R104B	MTC15L1
R133	Record Level, Right	50K	7620061-01				
R233	Record Level/Switch, Left	50K					
R135	Meter Adjust, Left	250K	7520002-01	TSV-250K or T-250K		X201R254B	MTC254L1
R141	Bias Adjust, Left	250K	7520002-01	TSV-250K or T-250K		X201R254B	MTC254L1
R146	Echo/Sound-On-Sound Level/On-Off	100K	7620060-01	(1)			
R212	Play Level Adjust, Right	100K	7520024-01	TSV-100K or T-100K		X201R104B	MTC15L1
R235	Meter Adjust, Right	250K	7520002-01	TSV-250K or T-250K		X201R254B	MTC254L1
R241	Bias Adjust, Right	250K	7520002-01	TSV-250K or T-250K		X201R254B	MTC254L1

(1) Part number includes Mode Selector Switch.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L101	Trap Coil	4585007-04			
L102	Trap Coil	4585007-04			
L103	220KC Generator	7580012-01			
L201	Trap Coil	4585007-04			
L202	Trap Coil	4585007-04			
T301	Bias Oscillator	7580026-01			

TRANSFORMER (Power)

ITEM No.	RATING			REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @.440AMP	52VAC CT @.125A DC	5.6VAC @.125AMP AC	7580058-01				

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA						
		PART No.		BUSS PART No.		LITTELFUSE PART No.		WORKMAN PART No.
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE
F401	3AG 1 AMP @ 125VAC S10-B10	070-004	085-001	MDL1	HKP	313001.	342012	

PARTS LIST AND DESCRIPTION (CONTINUED)

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

TAPE HEADS

ITEM No.	MEASURED			PART No.	NORTONICS PART No.	DESCRIPTION
	INDUCTANCE	BIAS/ERASE VOLTS (RMS)	BIAS FREQ.			
M1	60mh	(1) 12.5V rms @ 1.2ma (2) 14.5V rms @ 1.15ma	82KC	7040160-01	1008 & QK102 1008 & QK102 1003 & QK102	4-Track Stereo Play
M2	60mh			7040161-01		4-Track Stereo Play
M3	50mh			7040224-01		4-Track Stereo Record
M4	5mh	(1) 68V rms @ 14ma (2) 72V rms @ 14ma	82KC	7040162-01		4-Track Stereo Erase

(1) Taken in stereo.

(2) Taken in monaural.

MICROPHONE

ITEM No.	REPLACEMENT DATA			REMARKS
	MFGR. PART No.	RCA REPLACEMENT	RCA STEP UP REPLACEMENT	
		HK-119	HK-112, HK-111	

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
B401	Motor	4045026-50	Tape Transport, Models 1450, 1455
L501	Solenoid	4595000-10	Tape Transport, Models 750, 755
M101	Meter	7040246-01	Reversing
M201	Meter	7140007-02	Record Level, Left Channel
S1	Switch	7140007-01	Record Level, Right Channel
S2	Switch	7620057-01	Record/Play
S3	Switch	7620062-01	Function Selector, Includes S7
S4	Switch	120-689	Equalization
S5	Switch	7620059-03	Motor Reverse (Forward-Reverse)
S6	Switch	7620061-01	AC On/Off
S7	Switch	4625009-10	Auto/Stop
S8	Switch	7620062-01	Automatic Repeat, Mounted on S2
S9	Switch	7620022-03	Head Reverse
	Printed Circuit Board	120-736	Reverse Signal Inject
	Printed Circuit Board	7050126-02	Preamp, Complete with all components, Models 1450, 1455.
	Printed Circuit Board	7500033-03	Preamp, Board Only, Models 1450, 1455.
	Printed Circuit Board	7050040-02	Auto-Reverse, Complete with all components.
	Printed Circuit Board	7500009-01	Auto-Reverse, Board only.
	Printed Circuit Board	7050126-01	Preamp, Complete with all components, Models 750, 755.
	Printed Circuit Board	7500033-01	Preamp, Board only, Models 750, 755.

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	MODEL NO.	PART No.	ITEM	MODEL NO.	PART No.
Cover, Transport		7290132-01	Head Cover	1450, 1455	4045046-16
Mounting Frame	750, 1450	7330058-01	Knob, Record Level		7100053-01
Mounting Frame	755, 1455	7330058-02	Knob, Mode Selector		7100053-02
Deck Plate Assembly	750	7040219-01	Knob, Level		7040225-01
Deck Plate Assembly	755	7040219-06	Knob, Wind	750, 755	7100017-02
Deck Plate Assembly	1450	7040219-03	Knob, Wind	1450, 1455	7100017-03
Deck Plate Assembly	1455	7040219-07	Knob, Speed Selector		4105010-10
Trim Panel	750	7290127-01	Knob, Play	750, 755	7100018-02
Trim Panel	755	7290127-02	Knob, Play	1450, 1455	7100018-03
Trim Panel	1450	7290145-01	Knob, Direction		7100019-01
Trim Panel	1455	7290145-02	Button, Reverse Signal Inject		7100064-01
Head Cover	750, 755	4045046-13	Button, Pause		7100083-01

AMPEX MODELS 750, 755/A, 1450, 1455/A