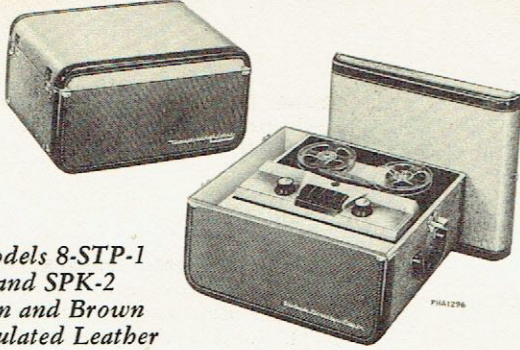


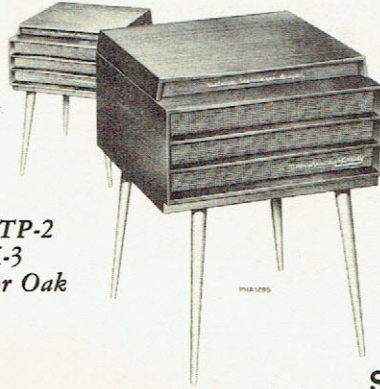
AMERICAN PHONO, INC.
445 PARK AVENUE
NEW YORK 22, N. Y.



RCA VICTOR



Models 8-STP-1
and SPK-2
Tan and Brown
Simulated Leather



Models 8-STP-2
and SPK-3
Mahogany or Oak

Stereotape Player MODELS 8-STP-1, 8-STP-2

Amplifier Chassis RS-162
Tape Transport TR-2-6

Companion Speaker Unit

MODELS SPK-2, SPK-3 SERVICE DATA

— 1956 No. 25 —

PREPARED BY COMMERCIAL SERVICE
RCA SERVICE CO., INC.
CAMDEN 8, N. J.

FOR
RADIO CORPORATION OF AMERICA
RCA VICTOR RADIO AND "VICTROLA" DIVISION

SPECIFICATIONS

TAPE USED 1/4" stereophonic (twin track)
or conventional (either half-track or full-track)

TAPE SPEED 7.5" per second

TUBE COMPLEMENT

1. RCA 12AX7 Two-stage preamp. (left)
2. RCA 12AX7 Two-stage preamp. (right)
3. RCA 12AX7 Two-channel AF amplifier
4. RCA 6AQ5 Left channel output
5. RCA 6AQ5 Right channel output
6. RCA 5Y3GT Rectifier

One #44 pilot lamp is used.

POWER SUPPLY RATING (8-STP-1 or 8-STP-2)
115 volts, 60 cycles 125 watts

POWER OUTPUT (each channel)
Undistorted . . . 3 watts Maximum . . . 5 watts

SPEAKERS (3 in each unit)

- One 6 1/2" PM 3.2 ohm v.c.
- Two 3 1/2" PM 6.8 ohm v.c.
- Effective input impedance of SPK-2 and SPK-3 is 3.2 ohms.

CABINET DIMENSIONS

	Height	Width	Depth
8-STP-1	9-11/16"	17-11/16"	14 3/4"
SPK-2	9-9/16"	17-11/16"	11-5/16"
8-STP-2	28"	20"	17-15/16"
SPK-3	28"	20"	17-15/16"

WEIGHT (net)

8-STP-1	8-STP-2	SPK-2	SPK-3
35 lbs.	46 lbs.	10 lbs.	25 1/2 lbs.

DESCRIPTION

These instruments are designed especially for stereophonic sound reproduction from prerecorded stereophonic tapes. The conventional tapes (either half-track or full-track) may also be used. Although the Stereotape Players are designed for use in conjunction with their Companion Speaker Units for stereophonic sound reproduction, the Stereotape Players may also be used alone for normal high-fidelity sound reproduction. Provision was made in the design of "Victrola" phonograph Models 7-HF-4, 7-HF-5 and 8-HFP-1 for their use with the Stereotape Players as companion speaker units.

The amplifier is designed with two channels, each channel having four stages of amplification. Switching is provided in the third stage to permit full power output with either stereophonic or

conventional tapes. A selenium rectifier is used to supply d.c. to the heaters of the first two stages of amplification; this is done to hold hum at a very low level. An adjustable gain control is used in conjunction with a dual loudness control and a dual tone control to provide equal amplification and tone in both channels.

Tape operation is controlled by four pushbuttons and a "STOP" bar. Two PLAY pushbuttons are used; one for stereophonic tapes and one for conventional tapes. The amplifier channel selection switch is actuated by the "SINGLE" pushbutton.

A 30-foot cable with plug-in connectors is used to connect the Stereotape Player to its Companion Speaker Unit. Space is provided in the speaker unit for storage of the connecting cable.

Tmks. ® Reg. U. S. Pat. Off.

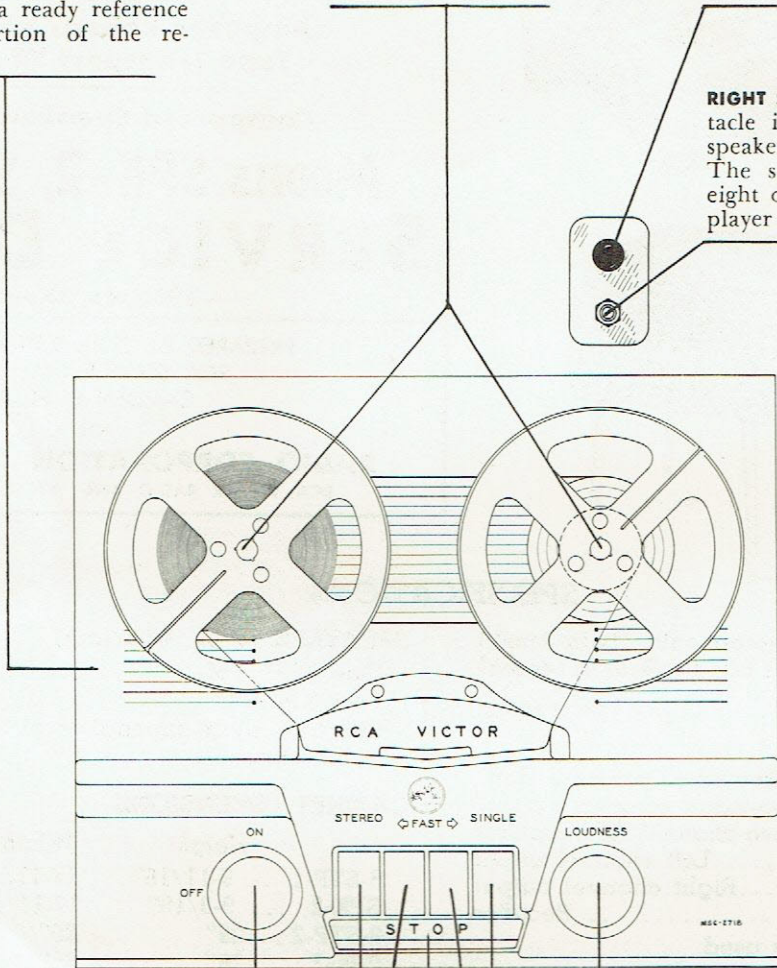
CONTROLS

TAPE INDEX The numerals and horizontal lines printed on the base plate are convenient playing time indicators. They serve as a ready reference to any desired portion of the recorded tape.

SPINDLES The two vertical shafts are spindles for the tape reels. The tape is threaded as shown with dull side in.

STONE This is a dual tone control for adjusting the tonal response of both channels simultaneously.

RIGHT SIDE STEREO SPEAKER This receptacle is for connecting a companion speaker unit for stereophonic sound. The speaker unit should be placed eight or more feet to the right of the player unit.



ON-OFF This control turns the power "on" and "off." The knob cannot be turned while either the **FAST** ► (fast forward) or the ◄ **FAST** (fast rewind) pushbutton is pushed down.

LOUDNESS This is a dual loudness control. It adjusts the level of both channels simultaneously.

SINGLE For listening to half-track or full-track conventional tapes.

FAST: ► For advancing the tape at a fast rate in order to play at some inside spot on the reel of tape.

STOP: For stopping tape motion. *Always, before pressing any pushbutton, push the STOP bar. The STOP bar should also be depressed before turning the ON-OFF power control.*

◄ **FAST:** For rapidly rewinding tape which has just been played.

STEREO For listening to stereophonic sound tapes.

THE FOUR PUSH BUTTONS AND THE STOP BAR

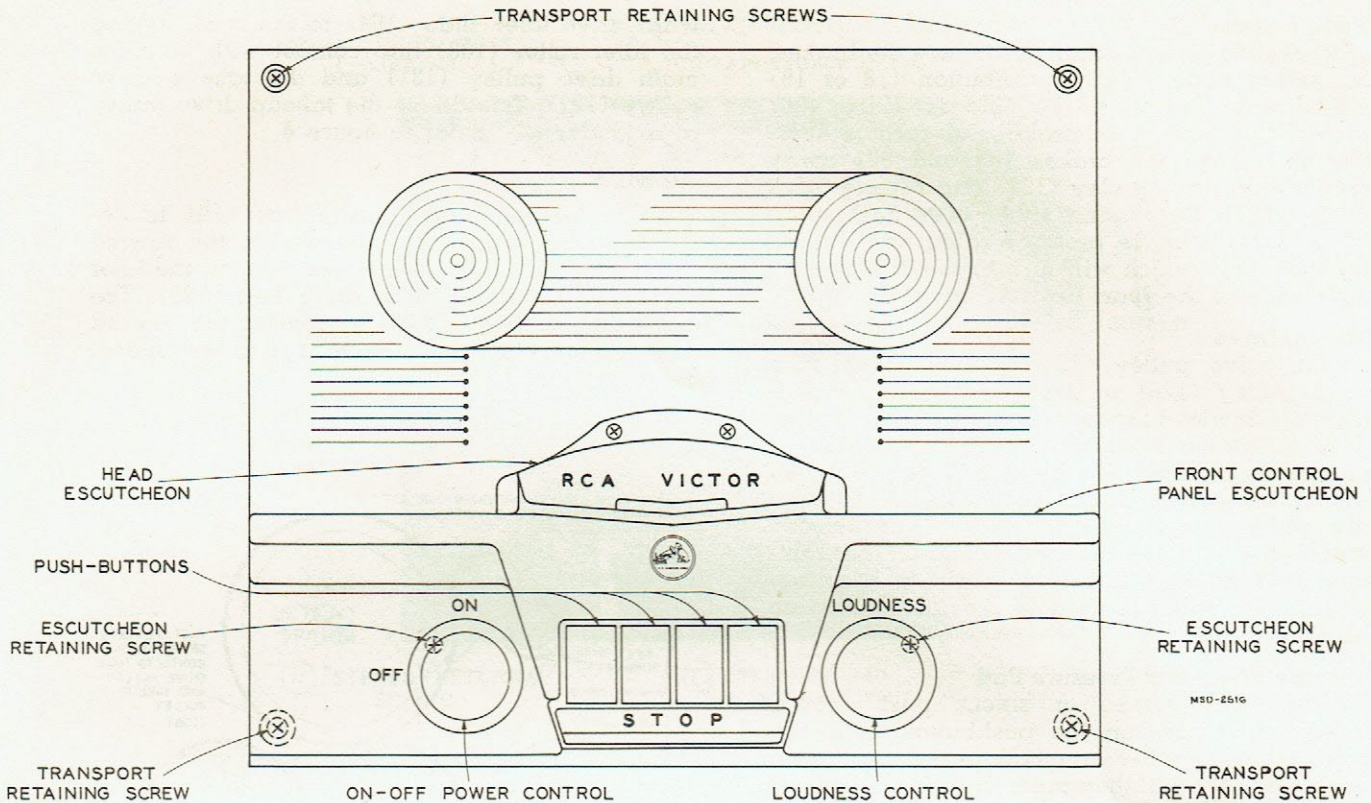


Figure 2—Top View of Tape Transport

DISASSEMBLY INSTRUCTIONS

Access to Tubes

Model 8-STP-1

1. Remove access plate (screen) from bottom of cabinet (attached by six screws).
2. Remove fan from tape mechanism. Refer to page 7 for correct position when replacing.

Model 8-STP-2

1. Remove cabinet bottom and leg assembly from cabinet (attached by ten screws).
2. Remove fan from tape mechanism. Refer to page 7 for correct position when replacing.

To Remove Assembly From Cabinet

1. Obtain access to interior of cabinet as described above.
2. Disconnect speaker leads from speaker.
3. Remove top control knobs and tone control knob at rear of chassis (pull off).
4. Remove screws (under knobs) holding escutcheon.
5. Depress and latch all four pushbuttons simultaneously.
6. Lift escutcheon off.
7. Remove four mechanism mounting screws (at corners of base panel).
8. Feed power cord through hole in storage compartment (Model 8-STP-1 only).
9. Grip mechanism with fingers at openings in base panel and lift straight upward without tilting.

To Remove Amplifier Chassis From Assembly

1. Remove assembly from cabinet as described at left.
2. Remove pilot lamp socket from its mounting bracket.
3. Remove amplifier power input connector (P2-B) from its mating socket.
4. Disconnect record/play head connector from its socket (J2) on amplifier.
5. Remove screws holding amplifier chassis to base panel.

TAPE TRANSPORT CONTROLS FUNCTION

On-Off Power Switch

Power is applied to motor and amplifier by turning left-hand control knob to "ON." An interlock bar (23) prevents the knob from being turned when either of the two "FAST" pushbuttons are in the depressed position.

Turning the left-hand control knob causes eccentric cams (55) mounted on the control shaft (61) to move an idler drive wheel (66) into contact with flywheel and stepped motor pulley (126).

NOTE: Numbers in parentheses refer to reference numbers on illustrations.

Brake Release

Depressing any pushbutton releases the brakes; depressing either "FAST" pushbutton (18 or 19) will directly move brake release slide (88) against the tension of brake arm springs (91). This will move the brakes (89 and 90) away from takeup drive pulley (132) and rewind drive pulley (128). Depressing either PLAY pushbutton (17 or 20) will move pressure roller arm actuating slide (94) which will in turn move brake release slide to the rear. Refer to figure 7.

Takeup Drive

Main drive pulley (131) is belt-driven from motor pulley (126) at constant speed independent of flywheel speed. Takeup drive pulley (132) is driven from small-diameter section of dual drive pulley (131) by means of a flat belt (133). This belt is designed to slip on the dual drive pulley to provide a constant forward tension on the tape with any amount of tape on the right-hand reel. Refer to figures 3, 4 and 5. A spring-loaded idler roller is used to provide tension on the takeup belt.

Pressure Roller and Pressure Pad

When either "STEREO" or "SINGLE" pushbutton is depressed, a cam on the pushbutton indirectly forces pressure roller arm (75) to the rear; pressure roller (47) will then press tape firmly against the capstan (50). At the same time, the pressure pad (73) will press the tape lightly against the head (7). Refer to figures 6 and 7.

"Stereo"

When the "STEREO" pushbutton (17) is depressed it releases the brakes and forces the pressure roller (47) against the capstan (50).

"Fast Forward"

When the "FAST →" pushbutton (19) is depressed, the pushbutton cam pushes the fast forward drive idler slide (104) to the rear, forcing the idler roller (108) into contact with both the main drive pulley (131) and the takeup drive pulley (132). This drives the takeup drive pulley at a fast speed. Refer to figure 4.

"Rewind"

When the "← FAST" pushbutton (18) is depressed, the pushbutton cam pushes the rewind drive idler slide (97) to the rear, forcing the idler roller (100) against main drive belt (125). The drive belt is thus caused to contact the rewind drive pulley (128) and drive it at a fast speed. Refer to figure 3.

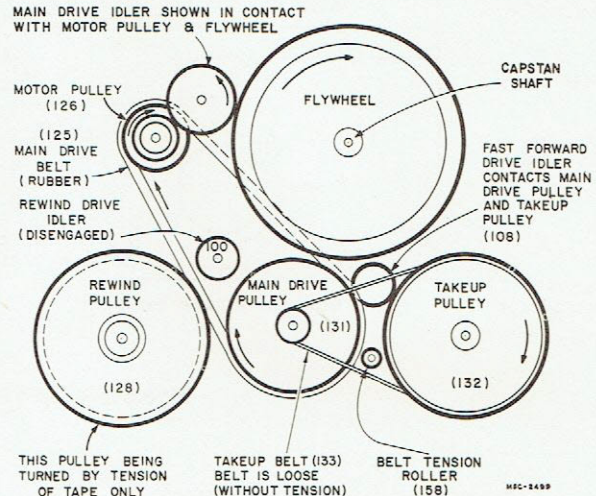


Figure 4—Diagram of Mechanical Drive System—
"Fast Forward"

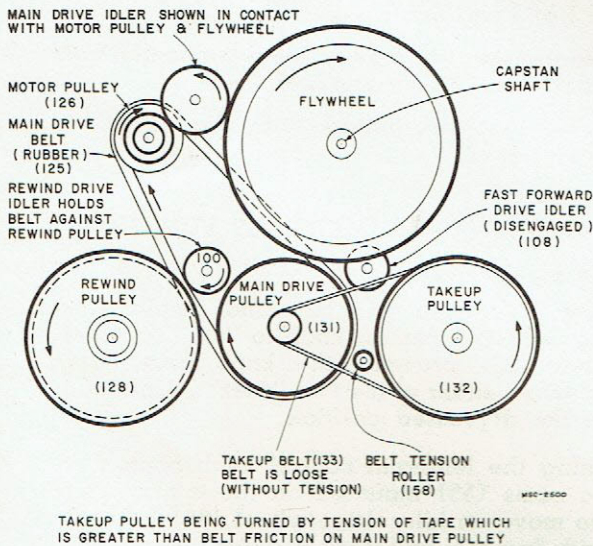


Figure 3—Diagram of Mechanical Drive System—
"Fast Rewind"

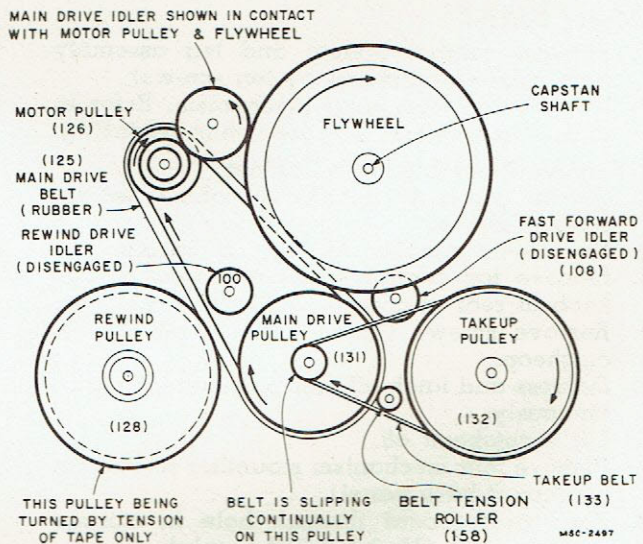


Figure 5—Diagram of Mechanical Drive System—
"Stereo" or "Single"

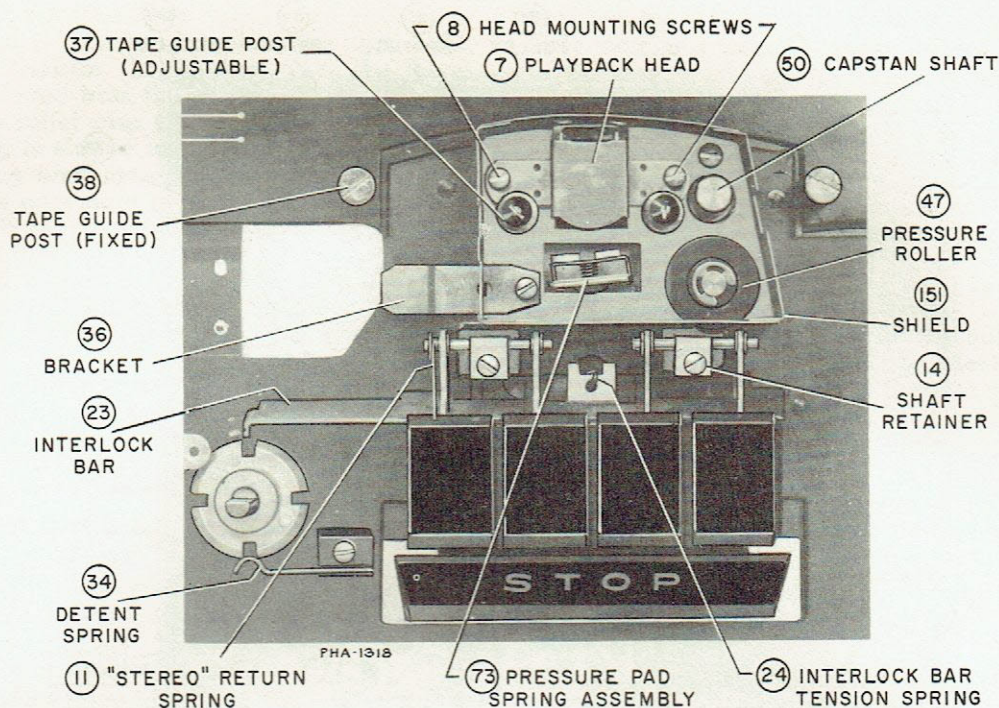


Figure 6—Top View of Player Panel (Front Center)

"Single"

When the "SINGLE" pushbutton (20) is depressed it releases the brakes and forces the pressure roller (47) against the capstan (50). At the same time, a cam on the "SINGLE" pushbutton pushes down on a push-rod. The push-rod, in contact with a switch lever, turns the "STEREO-SINGLE" switch (51) to the "SINGLE" position. When the "SINGLE" pushbutton is unlatched, the switch is returned by spring tension to the "STEREO" position.

"Stop"

Depressing the "STOP" bar (81) at any time unlatches any pushbutton which may have been depressed. The unlatching action allows the brake release slide (88) to be pushed forward by the springs attached to the two brake arms (89 and 90) and allows the brake pads to contact both the takeup drive pulley (132) and the rewind drive pulley (128). Refer to figure 7.

ADJUSTMENTS

Record-Playback Head Adjustment

1. Thread a standard frequency tape (RCA 12-5-61T or equivalent) on the tape transport.
2. While playing the 1000 cycle section of tape: Adjust Right Hand Tape Guide for maximum output; adjust Left Hand Tape Guide so that tape is approximately level across front of head and maximum output is maintained.
3. While playing the 12,000 cycle section of tape: Adjust Head Mounting Screws for the angular position of head which will give maximum output. Head should be as far forward as possible and mounting screws must be tight.

Gain Control

An adjustable gain control is used to enable the gain of the two channels to be equalized.

To set the gain control:

1. Thread a standard frequency tape (RCA #12-5-61T or equivalent) on the player.
2. Connect an output meter across the terminals of the 6½" speaker contained in the Stereotape Player.
3. Turn Stereotape Player "on" and allow it to warm up for several minutes. Set volume control at normal playing position (top tap).
4. Depress the "STEREO" pushbutton and while playing the 1000 cycle portion of the tape, note the output meter reading.
5. Depress "STOP" bar and reverse tape reels to turn tape upside down.
6. Disconnect the output meter from the Stereotape Player and connect to the 6½" speaker of the Companion Speaker Unit.
7. Repeat Step #4.
8. Adjust R8 (gain control) to obtain the same indication on the output meter as was noted in Step 4. Refer to figure 10 for location of the gain control.

Brake Pad Adjustment

Both brake pads (89A and 90A) should engage their respective drums with equal force and at the same instant. The brake pads should engage the drums (128 and 132) with the maximum pad area—brake arm must not be bent at an angle to equalize timing. Unequal brake pad wear will be due to a rough brake drum.

Brake equalization is accomplished by bending the ends of the brake arm actuating lever (88). For access to ends of actuating lever, remove drive pulley (131). Refer to figure 7.

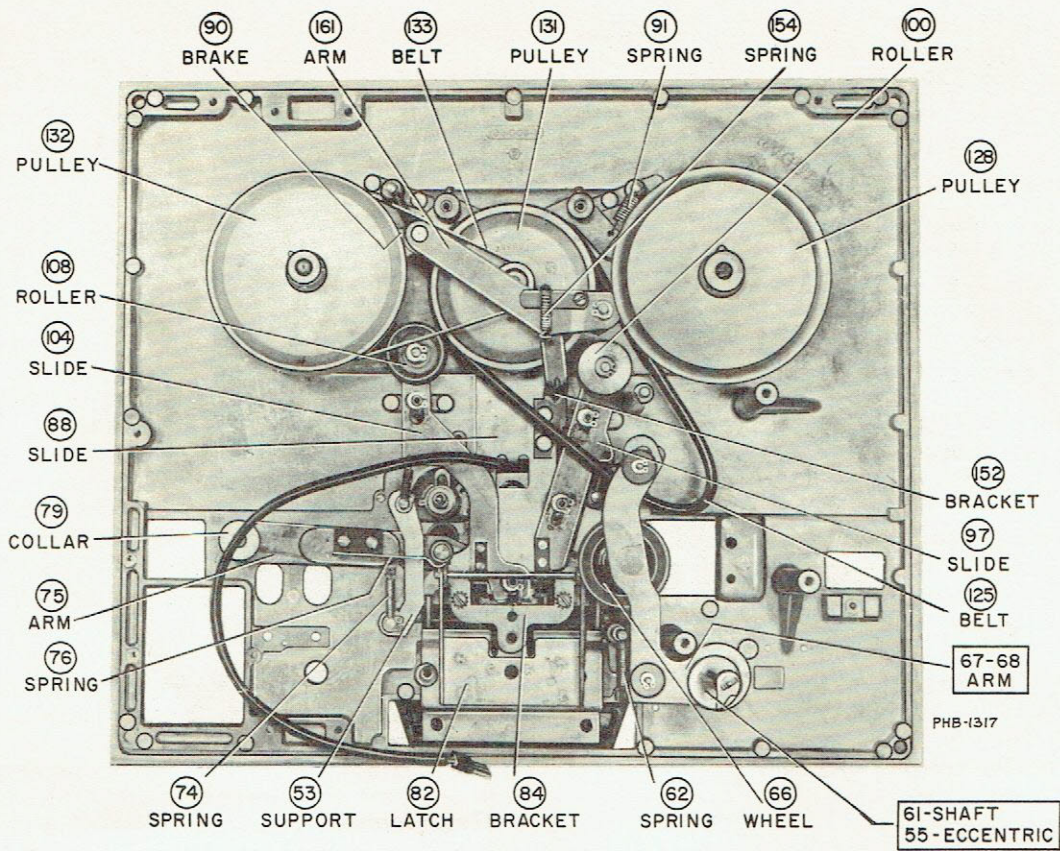


Figure 7—Bottom View of Tape Transport with Motor and Flywheel Removed

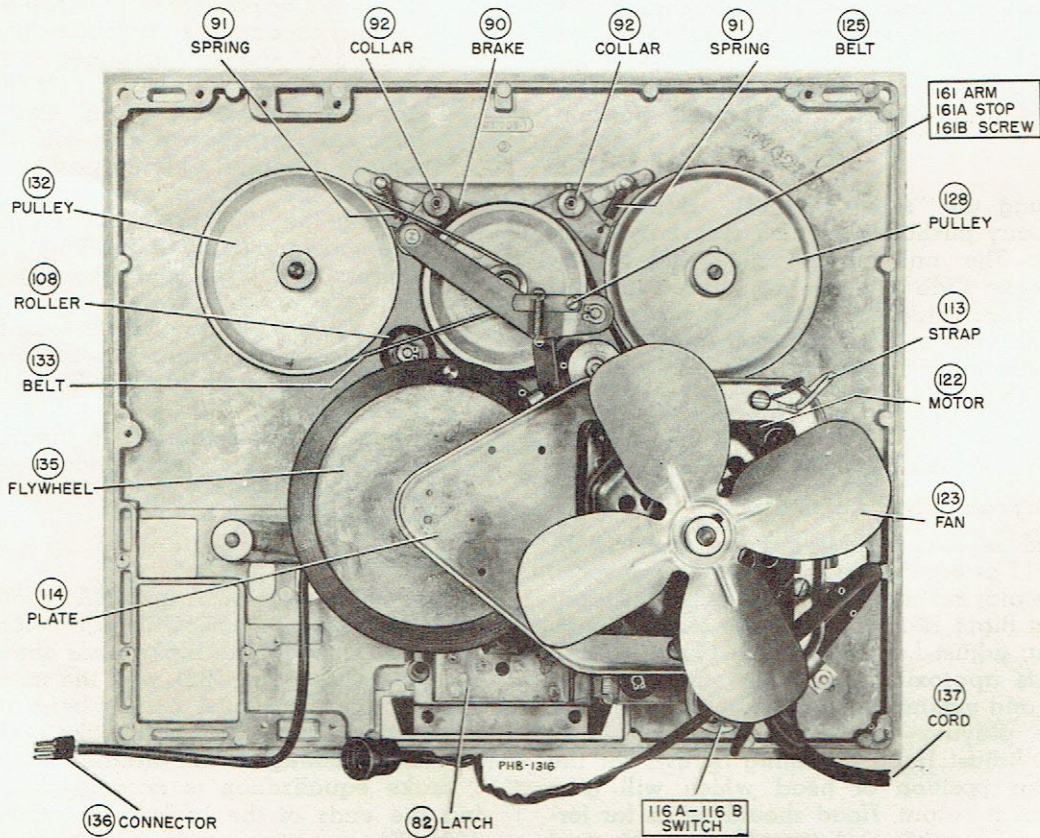


Figure 8—Bottom View of Tape Transport Complete with Motor and Flywheel

Pressure Roller Adjustment

The pressure roller (47) holds the tape tight against the capstan (50) during PLAY. The force is mainly derived from the formed spring (76) on the pressure roller arm (75). One mounting hole of the spring is slotted to permit adjustment. The proper spring tension is determined by measuring the force necessary to pull tape past the capstan (50). With mechanism stopped and either PLAY pushbutton depressed, it should require a tension of 32 ounces to cause tape slippage. Excessive pressure will make it difficult to latch either of the PLAY pushbuttons.

Pressure Pad Adjustment

Refer to figure 7. The tension of the pressure

pad spring (72) is fixed in its mounting and the only adjustment is by the front-to-rear position of the play head (7). Although the mounting lugs of the head are slotted, the correct position of the head is as far forward as possible.

The pressure pad assembly must not bind on its mounting when pressed against the head. There must be clearance between the retaining lugs of the pad assembly and its mounting.

Position of Fan Blade

When replacing the fan blade, it should be placed on the motor shaft with the hub of the fan blade outward, away from the motor. The hub should be nearly flush with the end of the motor shaft.

SERVICE HINTS**Pushbuttons Fail to Latch Into Position**

Stop bar compression spring (83) broken, resulting in latch plate of stop bar assembly (82) not being held against cam of pushbutton.

No Fast Forward or Rewind

1. Fast forward drive idler (108) or rewind drive idler (100) missing.
2. Broken pressure spring on rewind slide (97) or fast forward slide (104).

No Drive on Takeup Reel

1. Takeup drive belt (133) broken.
2. Bind in bearing of takeup hub (51).
3. Tape improperly threaded.
4. Bind in bearing of takeup arm (161) or takeup arm roller (158).
5. Takeup arm tension spring (154) unhooked.

Speed Variation or "Wow"

1. Refer to figures 4, 5 and 6. Check capstan (50) pressure roller (47) idler wheel (66) main drive pulley (131) and main drive belt (125) for presence of oil or foreign material. Clean contact surfaces with cleaning fluid.
2. Check setscrews in motor pulley (126) and flywheel (135) for tightness.
3. Check pressure roller arm tension spring (76). Pressure roller must have sufficient force on capstan (50) to require 32 ounces tension on tape before slippage occurs when either PLAY pushbutton is latched.
4. Check slides (67 and 68) for freedom of movement and slide tension springs (62) for tension.

Tape Overruns or Spills When Stop Bar is Depressed During Fast Forward or Rewind

1. Brakes not adjusted properly. See *Brake Pad Adjustment* on page 5.
2. Brake pads worn out.
3. Unequal tension of brake springs (91).

Tape Overruns During "Stereo" or "Single" Operation

Auxiliary brake pad (89C) not in contact with left-hand (rewind) pulley (128). The brake pad mounting arm (flat spring 89B) may be bent or broken.

Excessive Mechanical Noise When Idling

Takeup belt tension roller (158) touches takeup drive pulley (132). Adjust position of takeup arm stop (161A) to provide clearance. Refer to figure 8.

No Sound from Any Speaker

1. Pressure pad (73) fails to hold tape against head (7) due to misplaced spring (72).
2. Right-hand tape guide (37) improperly positioned.
3. Tape improperly threaded. Dull side of tape must face inward on reel and against head.
4. Open circuit in head or connecting cable.
5. Defect in amplifier circuit.
6. SINGLE-STEREO switch actuating lever improperly positioned on switch shaft. Switch must be fully actuated in both directions.
7. Actuating lever return spring weak or unhooked.

Sound on Internal Speakers—No Sound on External Speakers**"STEREO" BUTTON DEPRESSED**

1. External speakers disconnected.
2. Defect in "right channel" amplifier (V2, V3A, V4).
3. Defect in lower head or connecting cable.

"SINGLE" BUTTON DEPRESSED

1. External speakers disconnected.
2. Defect in circuit of V3A or V4.

Sound on External Speakers—No Sound on Internal Speakers**"STEREO" BUTTON DEPRESSED**

1. Defect in "left channel" amplifier (V1, V3B, V5).
2. Defect in upper head or connecting cable.

"SINGLE" BUTTON DEPRESSED

1. Defect in circuit of V3B or V5.

Breaking of Tape

Frequent breaking of tape may be caused by improper adjustment of brakes or failure to depress STOP bar before changing pushbutton function.

"Play" Pushbuttons Cannot be Depressed

Latch bar tension spring (24) unhooked.

On-Off Power Control Cannot be Turned

1. Latch bar tension spring (24) unhooked.
2. Latch bar bent. Bar remains engaged with dentent collar.

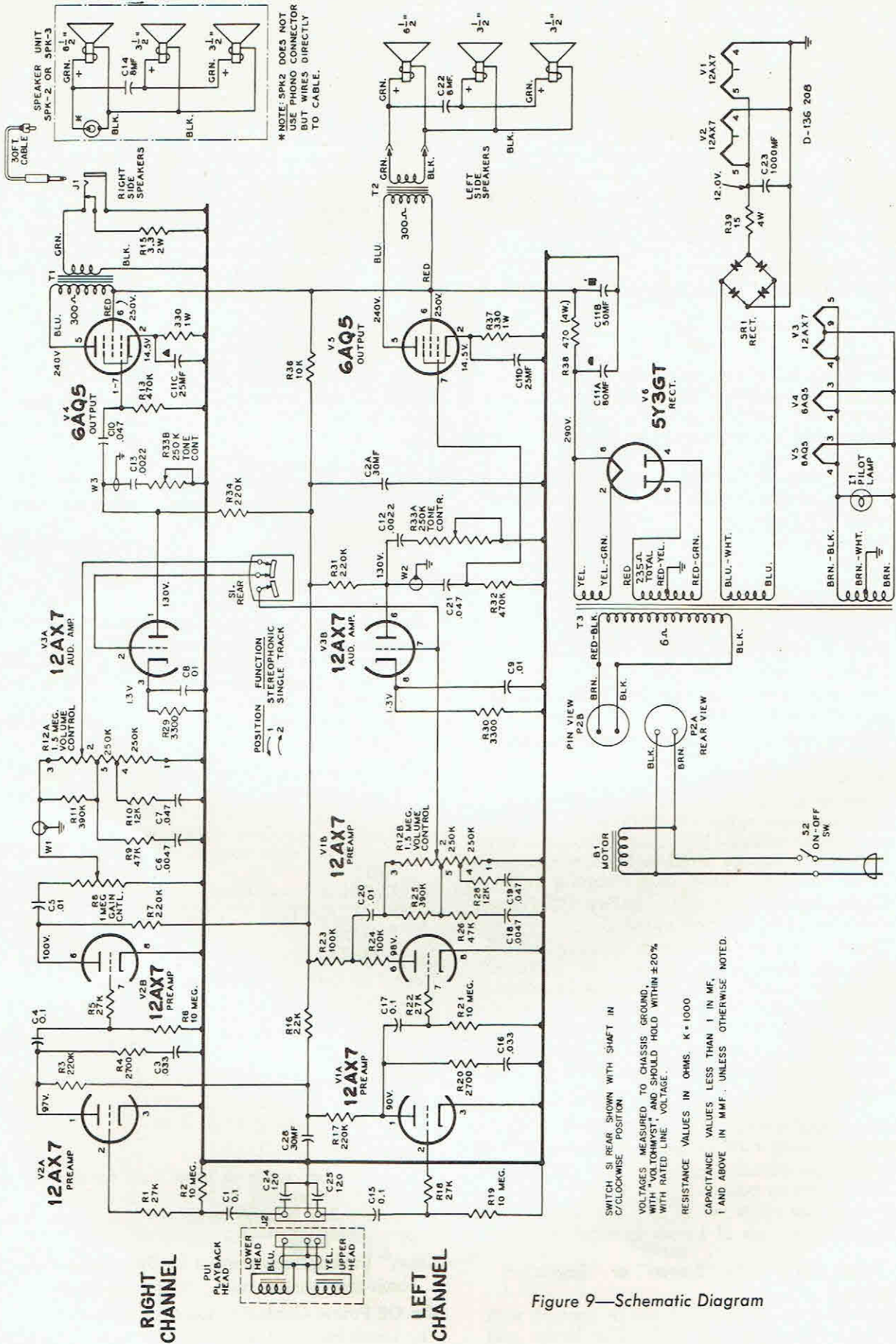


Figure 9—Schematic Diagram

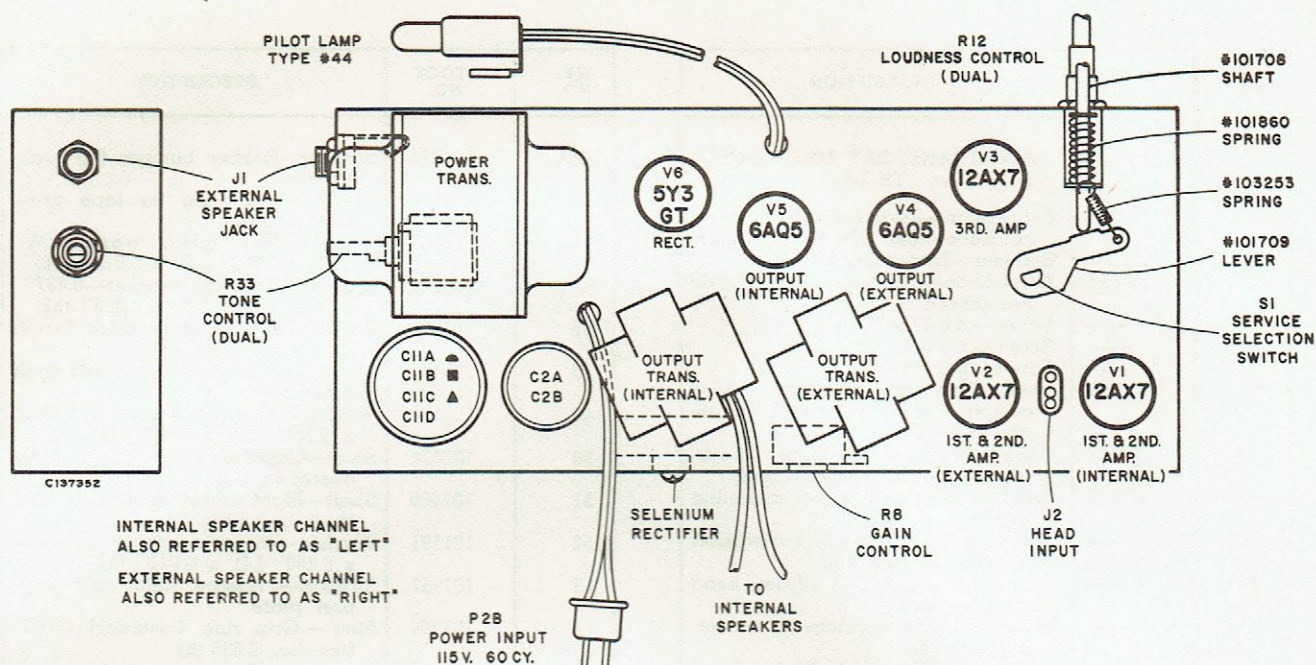


Figure 10—View of Amplifier Chassis
Showing Location of Tubes and Controls

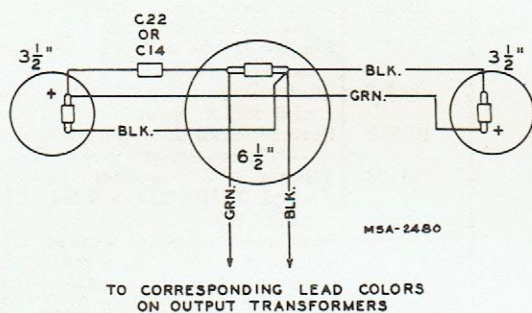


Figure 11—Speaker Connections

IMPORTANT

The three speakers must be connected as shown in the illustration above. Improper connections may result in distorted or weak reproduction.

LUBRICATION

All rotating parts are provided with generous-size "Oilite" bearings, which are factory lubricated and normally require no further attention. However, should lubrication be required use Singer sewing machine oil sparingly.

Other bearings should be lubricated with Stayput #320.

Sliding surfaces should be lubricated with Cosmolube #1.

CRITICAL LEAD DRESS

1. Dress all leads to V1 and V2 as short as possible.
2. Use common ground buss for ground connections as indicated on schematic diagram.
3. Dress all a-c power and heater leads down to chassis and away from V1, V2 and loudness control.

CLEANING

The head, capstan and pressure roller are subject to an accumulation of tape coating residue, which is worn off the tape as it passes these parts. Use a soft cloth and alcohol to clean the head surfaces, capstan and pressure roller.

CAUTION: Do not use a brush when cleaning the head as this could possibly mar the lamination.

Do not get oil on rubber parts or on surfaces which contact tape.

An occasional cleaning out of foreign matter under the plastic escutcheons is desirable. After removing the escutcheons, it will be necessary to remove the head covers. These covers are each secured by two screws. It is not necessary to remove the screws—only to loosen them.

Rubber tired idler wheels and pressure rollers must be kept free from oil or grease. Use a soft cloth and carbon tetrachloride to clean oil and grease from rubber parts.

Use care to prevent cleaning fluids from removing lubricant from "Oilite" bearings.

REPLACEMENT PARTS

ILL. NO.	STOCK NO.	DESCRIPTION
		TAPE TRANSPORT MECHANISM TR-2-6
1	103254	Escutcheon—Front control panel escutcheon—less R.H. & L.H. covers
1A	100162	Emblem—Trademark emblem.
2	101525	Escutcheon—Playback head plastic escutcheon
3	—	Screw—#6-32 x 3/8"
4	—	Screw—#8 x 1/2"
5	—	Screw—#6 x 3/4"
7	103277	Head—Dual track playback head—complete with 13" shielded cable and connector
7A	74882	Connector—3-contact male connector for playback head cable
7B	103273	Bracket—Playback head mounting bracket
7C	—	Washer—1/4" ext. tooth lockwasher
7D	—	Nut—1/4"—32 hex. nut
8	—	Screw—#6-32 x 1/4" fillister head machine screw
9	—	Bracket—Front escutcheon mounting bracket
10	—	Screw—#6-32 x 1/4" fillister head machine screw
11	101744	Spring—"STEREO" pushbutton return spring—0.140" I.D. x 0.022" dia. stk. with formed ends
12	—	Screw—#6-32 x 1/4" fillister head machine screw
13	—	Washer—#6 split lockwasher
14	101487	Retainer—Pushbutton assembly shaft retainer, 3/8" x 13/32" x 0.0478" thk. steel plate
15	101517	Ring—Grip ring (retainer) 0.118" free dia., 0.025" thk.
16	101486	Shaft—Pivot shaft for pushbutton assembly
17	101464	Button—"Stereo" button and cam assembly—black phenolic
18	101465	Button—"Rewind" button and cam assembly—black phenolic
19	101466	Button—"Fast forward" button and cam assembly—black phenolic
20	103280	Button—"Single" pushbutton assembly—black phenolic
21	14974	Screw—#8-32 x 3/16" cup point set screw for on-off interlock collar
22	101481	Collar—Interlock detent collar—die cast
23	101483	Interlock—Fast forward or rewind interlock bar
24	101514	Spring—Interlock bar tension spring—21/32" free length, 0.187" O.D.
32	—	Screw—#6-32 x 3/16" fillister hd. machine screw
33	—	Washer—Split #6 lockwasher
34	101454	Spring—Interlock detent spring—formed
35	—	Screw—#6-32 x 1/4" fillister head machine screw
36	—	Bracket—Pilot lamp mounting bracket
37	101493	Post—Tape guide post—adjustable (2 req'd)
38	101956	Post—Tape guide post—fixed (2 req'd)
43	103287	Motorboard—Motorboard sub-assembly for Model TR2-6 tape transport mechanism

ILL. NO.	STOCK NO.	DESCRIPTION
43A	101571	Bumper—Rubber bumper for push-buttons
44	103157	Retainer—"C" ring for tape pressure roller
45	101507	Washer—Flat metal washer 1/8" O.D. x 0.252" I.D. x 0.010" thk.
46	101523	Washer—Cambric washer—0.437" O.D. x 0.255" I.D. x 0.005" thk.
47	101475	Roller—Tape pressure roller for 60 cycle operation only
48	101471	Shaft—Left hand reel hub and shaft assembly
49	101591	Washer—Phenolic washer 1/2" O.D. x 0.250" I.D. x 0.010" thk.
50	101474	Shaft—Capstan shaft for 60 cycle operation only
51	101469	Shaft—Right hand reel hub and shaft assembly
52	101591	Washer—Phenolic washer 1/2" O.D. x 0.250" I.D. x 0.010" thk.
53	101957	Support—Pressure roller arm support plate
54	101500	Ring—Grip ring (retainer) 0.180" free dia., 0.035 thk.
55	101455A	Eccentric—Main drive idler eccentric—less set screw (2 req'd)
56	101505	Screw—#6-32 x 1/4" cup point set screw
57	101522	Washer—Phenolic washer—1" O.D. x 0.252" I.D. x 0.015" thk.
58	101521	Washer—Phenolic washer—3/8" O.D. x 0.206" I.D. x 0.015" thk.
59	101517	Ring—Grip ring (retainer) 0.118" free dia., 0.025" thk.
60	—	Screw—#4-40 x 3/16" round head machine screw
61	101453	Shaft—Drive idler actuating shaft and switch lever
62	101512	Spring—Main drive idler arm spring—7/8" free length 0.187" O.D.
63	101508	Washer—"C" washer (retaining ring) 0.282" O.D. x 0.114" I.D. x 0.025" thk.
64	78719	Washer—Flat metal washer, 0.312" O.D. x 0.190" I.D. x 0.010" thk.
65	74078	Washer—Cambric washer—0.328" O.D. x 0.195" I.D. x 0.005" thk.
66	101492	Wheel—Main drive idler wheel, 1.500" O.D.
67	101520A	Arm—Main drive idler arm
68	103270	Arm—Speed change arm
70	101521	Washer—Phenolic washer—3/8" O.D. x 0.206" I.D. x 0.015" thk.
71	101496	Stud—Motor mounting stud
72	101479	Spring—Pressure pad coil spring 0.203" O.D. x 3/8" free length
73	101490	Spring—Pressure pad assembly (formed brass spring with pads)
74	71099	Spring—Pressure roller arm return spring, 3/4" free length, 0.187" O.D.
75	103156	Arm—Pressure roller arm
76	101450	Spring—Pressure roller arm formed spring
77	—	Washer—#6 external tooth lockwasher
78	—	Screw—#6-32 x 3/16" fillister hd.
79	101448	Collar—Pressure roller arm retaining collar—less set screw
80	101592	Screw—#8-32 x 1/4" cup point set screw
81	101478	Bar—"Stop" bar—plastic bar only

REPLACEMENT PARTS

ILL. NO.	STOCK NO.	DESCRIPTION
82	101477	Latch—Pushbutton release latch and bar assembly
83	101515	Spring—Pushbutton latch tension spring, 7/16" free length, 0.343" O.D.
84	101452	Bracket—Pushbutton latch mounting bracket
85	101517	Ring—Grip ring (retainer) 0.118" free dia., 0.025" thk.
86	101516	Shaft—Pushbutton latch pivot shaft
87	—	Screw—#6-32 x 1/4" fillister hd.
88	101446A	Slide—Brake release slide
89	103670	Brake—Left hand brake arm with pad 89A and auxiliary brake arm 89B and pad 89C
89A	101498	Pad—Felt brake pad
90	101499	Brake—Right hand brake arm with pad
91	101511	Spring—Brake arm spring, 11/16" free length, 0.218" O.D.
92	101767	Collar—Brake arm retaining collar—less set screw
93	101592	Screw—#8-32 x 1/4" cup point set screw
94	101451A	Slide—Pressure roller arm actuating slide
95	101500	Ring—Grip ring (retainer), 0.180" free dia., 0.035" thk.
96	71099	Spring—Rewind slide return spring, 3/4" free length, 0.187" O.D.
97	101456	Slide—Rewind drive idler actuating slide
98	101500	Ring—Grip ring (retainer), 0.180" free dia., 0.035" thk.
99	101502	Washer—Phenolic washer, 1/2" O.D. x 0.188" I.D. x 0.010" thk.
100	101467	Roller—Rewind drive roller (idler)—die cast aluminum
101	101503	Washer—Rubber washer, 3/8" O.D. x 3/16" I.D. x 0.031" thk.
102	101500	Ring—Grip ring (retainer), 0.180" free dia., 0.035" thk.
103	71099	Spring—Fast forward slide return spring, 3/4" free length 0.187" O.D.
104	101447	Slide—Fast forward drive roller actuating slide assembly
105	101500	Ring—Grip ring (retainer), 0.180" free dia., 0.035" thk.
106	101503	Washer—Rubber washer, 3/8" O.D. x 3/16" I.D. x 0.031" thk.
107	101502	Washer—Phenolic washer, 1/2" O.D. x 0.188" I.D. x 0.010" thk.
108	101463	Roller—Fast forward drive roller (idler)—rubber tired
109	101500	Ring—Grip ring (retainer), 0.180" free dia., 0.035" thk.
110	—	Nut—#10-32 hex nut
111	—	Washer—#10 split lockwasher
112	—	Washer—Flat metal washer, 1/2" O.D. x 0.198" I.D. x 1/32" thk.
113	—	Strap—Ground strap for motor
114	101459	Plate—Motor mounting plate and capstan shaft bearing plate assembly
115	—	Screw—#10-32 x 3/8" lg. fillister hd. machine screw
116A	101484	Switch—"On-off" switch (S2)—less bracket
116B	101593	Bracket—"On-off" switch mounting bracket
117	—	Screw—#8-32 x 1/4" binding head
118	—	Cover—Switch cover

ILL. NO.	STOCK NO.	DESCRIPTION
119	101510	Spacer—Motor mounting spacer, 0.375" lg.
120	101509	Grommet—Rubber motor mounting grommet, 9/16" O.D. x 3/8" thick (4 Req'd)
121	—	Washer—Flat metal washer, 1/2" O.D. x 0.198" I.D. x 1/32" thick
122	103375	Motor—Drive motor—115 volt, 60 cy.
123	103249	Fan—6" fan blade with set screw
123A	101589	Screw—#10-32 x 1/4" cup point set screw
125	101458	Belt—Main drive belt (rubber)
126	101473	Pulley—Motor drive pulley (stepped)
127	101592	Screw—#8-32 x 1/4" cup point set screw
128	101468	Pulley—Rewind drive pulley
129	101504	Washer—Rubber washer, 1/2" O.D. x 1/4" I.D. x 0.031" thk.
130	101591	Washer—Phenolic washer, 1/2" O.D. x 0.250" I.D. x 0.010" thk.
131	103282	Pulley—Main drive dual pulley assembly
132	103271	Pulley—Takeup drive pulley
133	103283	Belt—Takeup drive belt (flat fabric)
134	101501	Ring—Grip ring (retainer), 0.238" free dia., 0.035" thk.
135	101476	Wheel—Capstan drive flywheel
136	101800	Connector—2-contact female connector for power cable
137	102009	Cord—AC power cord and plug
138	78649	Washer—Flat brass, 7/16" O.D. x 0.260" I.D. x 0.032" thk.
139	102354	Bushing—Nylon bushing, 1/8" I.D.
140	103299	Cover—Left hand cover for control panel escutcheon—function
141	103300	Cover—Right hand cover for control panel escutcheon—volume
142	79637	Nut—Push-on type, retainer for escutcheon covers
143	103279	Cover—Nickel/iron alloy head cover—top rear
144	103278	Cover—Nickel/iron alloy head cover—top front
145	—	Screw—#2-56 x 3/16" truss hd. tapping screw
147	—	Screw—#6-32 x 1/4" fillister hd.
148	—	Washer—#6 split lockwasher
151	103281	Shield—Nickel/iron alloy shield for head—bottom
152	103346	Bracket—Take-up spring mounting bracket
153	—	Screw—#6 x 1/4" hex hd. tapping screw
154	101267	Spring—Takeup arm tension spring
155	101517	Ring—Grip ring (retainer), 0.118" free dia., 0.025" thk.
156	100196	Washer—Flat metal washer, 0.240" O.D. x 0.130" I.D. x 0.010" thk.
157	100198	Washer—Cambric washer, 0.240" O.D. x 0.130" I.D. x 0.005" thk.
158	103275	Roller—Takeup roller
159	101500	Ring—Grip ring (retainer), 0.180" free dia., 0.035" thk.
160	100197	Washer—Flat metal washer, 3/8" O.D. x 0.190" I.D. x 0.015" thk.
161	103276	Arm—Takeup arm assembly—include 161A Stop and 161B Screw
162	—	Washer—Flat metal washer, 9/32" O.D. x 0.092" I.D. x 0.50" thk.
163	103272	Collar—Stop collar for main drive idler actuating shaft
	103481	Bumper—Strain relief bumper for motor (2 req'd)

REPLACEMENT PARTS LISTING CONTINUED ON PAGE 14

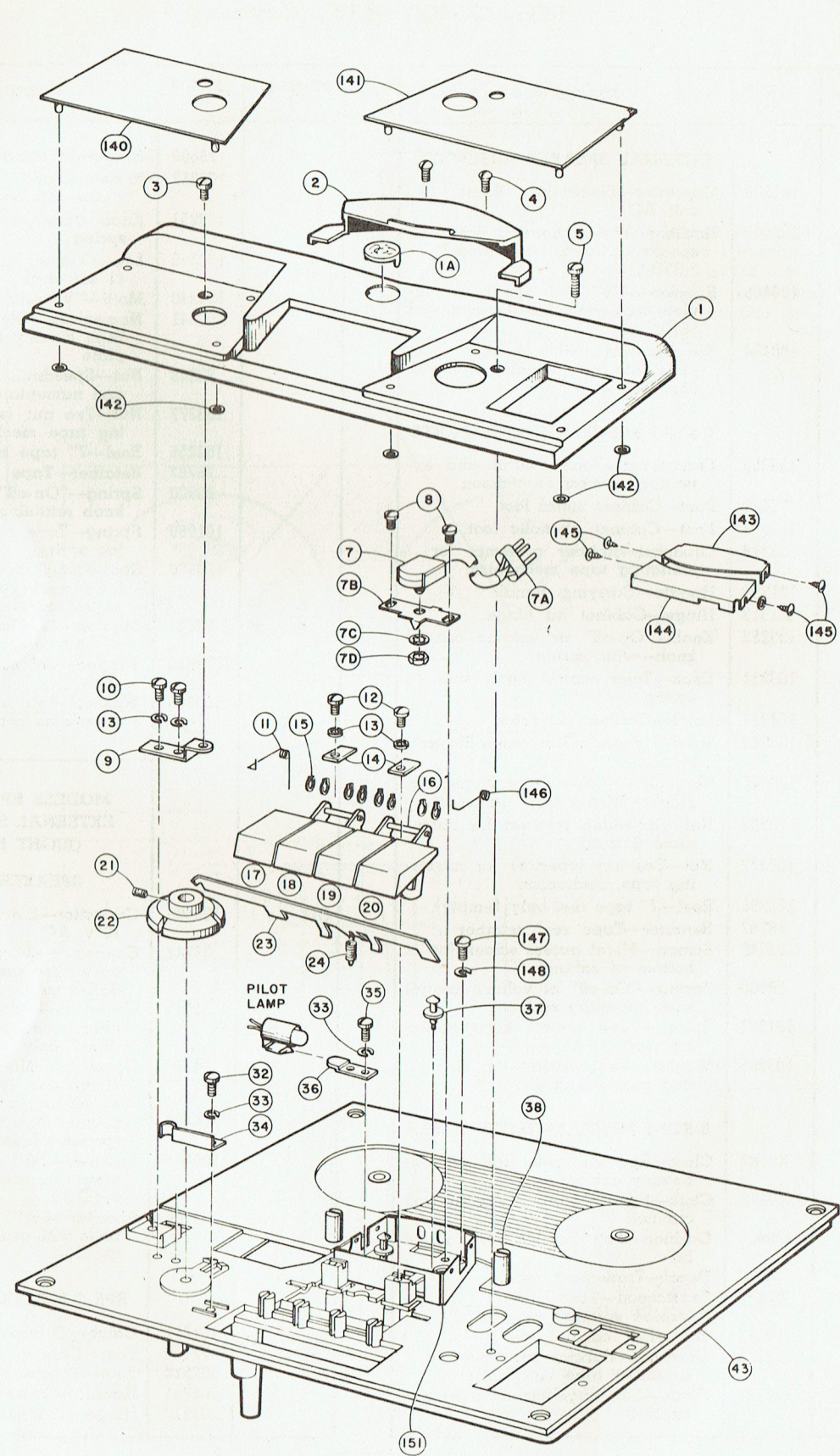


Figure 12—Exploded View of Tape Transport Mechanism—Top View

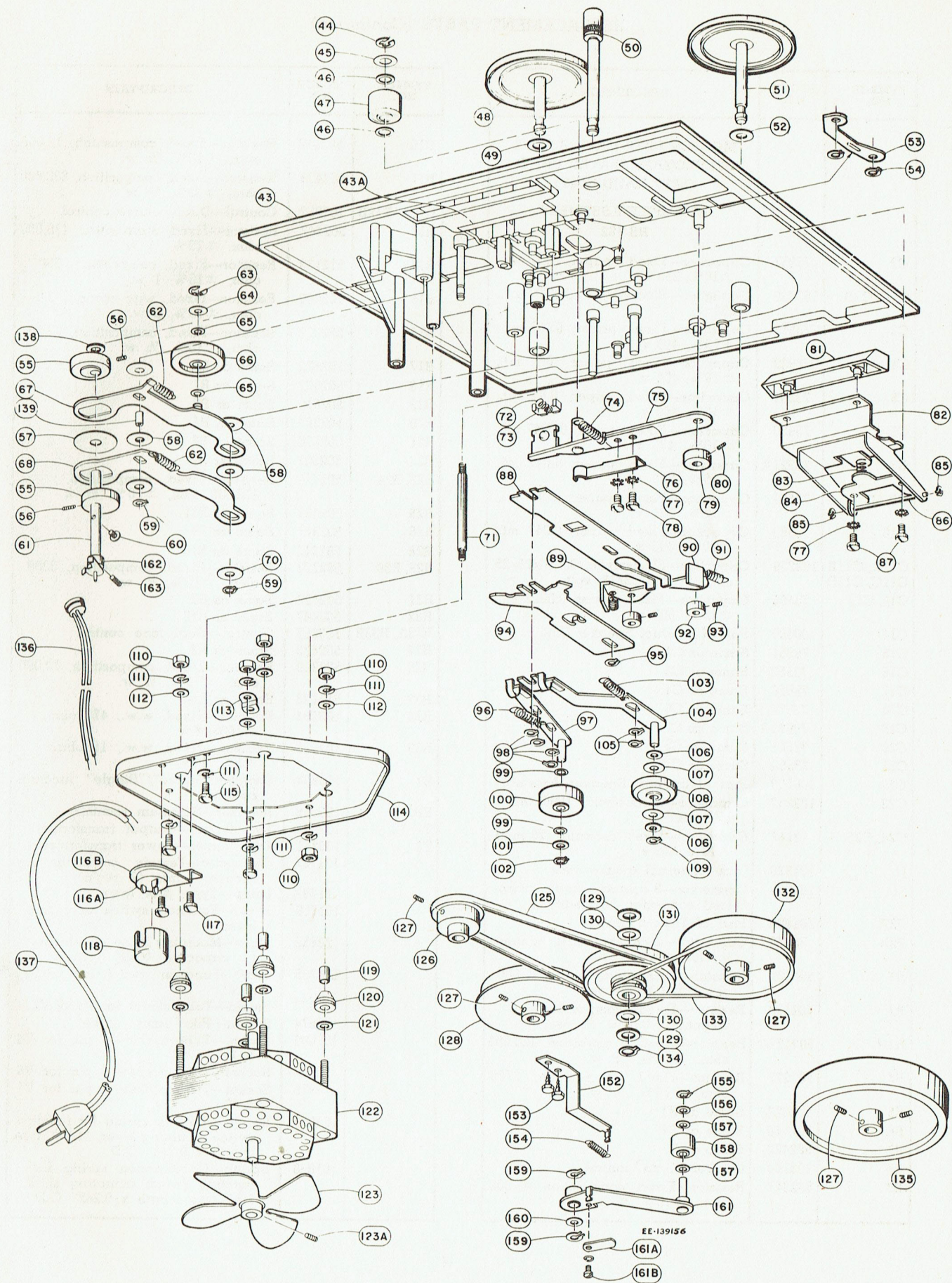


Figure 13—Exploded View of Tape Transport Mechanism—Bottom View

REPLACEMENT PARTS (Continued)

SYMBOL NO.	STOCK NO.	DESCRIPTION
MODELS 8-STP-1 AND 8-STP-2 STEREOTAPE PLAYER UNITS (LEFT HAND UNIT)		
AMPLIFIER ASSEMBLY RS-162		
C1	79251	Capacitor—Fixed, paper, 0.1 mf., ±10%, 200 v.
C2A, C2B	103298	Capacitor—Electrolytic, 30/30 mf., 250 v.
C3	73552	Capacitor—Fixed, paper, 0.033 mf., ±10%, 400 v.
C4	78922	Capacitor—Fixed, paper, 0.1 mf., ±10%, 400 v.
C5	73561	Capacitor—Fixed, paper, 0.01 mf., ±10%, 400 v.
C6	73920	Capacitor—Fixed, paper, 0.0047 mf., ±10%, 400 v.
C7	78921A	Capacitor—Fixed, paper, 0.047 mf., ±10%, 200 v.
C8, C9	73561	Capacitor—Fixed, paper, 0.01 mf., ±10%, 200 v.
C10	73553	Capacitor—Fixed, paper, 0.047 mf., ±10%, 400 v.
C11A, C11B C11C, C11D	103259	Capacitor—Electrolytic, 80/50/25/25 mf., 400/400/25/25 volt
C12, C13	73595	Capacitor—Fixed, paper, 0.0022 mf., ±10%, 600 v.
C14	100509	Part of External Speaker Unit
C15	79251	Same as C1
C16	73552	Same as C3
C17	78922	Same as C4
C18	73920	Same as C6
C19	78921A	Same as C7
C20	73561	Same as C5
C21	73553	Same as C10
C22	100509	Part of Internal Speaker Assembly
C23	103257	Capacitor—Electrolytic, 1000 mf., 15 volts
C24, C25	78142	Capacitor—Fixed, ceramic, 120 mmf., ±10%, 500 v.
J1	101526	Jack—External speaker jack
J2	101998	Connector—3-contact female polarized connector for head
P2A	101800	Part of Tape Transport
P2B	30870	Connector—2-contact male connector for power cable
R1	502327	Resistor—Fixed, composition, 27,000 ohm, ±10%, 1/2 w.
R2	502610	Resistor—Fixed, composition, 10 megohm, ±10%, 1/2 w.
R3	502422	Resistor—Fixed, composition, 220,000 ohm, ±10%, 1/2 w.
R4	502227	Resistor—Fixed, composition, 2700 ohm, ±10%, 1/2 w.
R5	502327	Same as R1
R6	502610	Same as R2
R7	502422	Same as R3
R8	103260	Control—Gain control
R9	502347	Resistor—Fixed, composition, 47,000 ohm, ±10%, 1/2 w.

SYMBOL NO.	STOCK NO.	DESCRIPTION
R10	502312	Resistor—Fixed, composition, 12,000 ohm, ±10%, 1/2 w.
R11	502439	Resistor—Fixed, composition, 390,000 ohm, ±10%, 1/2 w.
R12A, R12B	103262	Control—Dual volume control
R13	502447	Resistor—Fixed, composition, 470,000 ohm, ±10%, 1/2 w.
R14	512133	Resistor—Fixed, composition, 330 ohm, ±10%, 1 w.
R15	103289	Resistor—Fixed, wire wound, 3.3 ohm, ±10%, 2 w.
R16	502322	Resistor—Fixed, composition, 22,000 ohm, ±10%, 1/2 w.
R17	502422	Same as R3
R18	502327	Same as R1
R19	502610	Same as R2
R20	502227	Same as R4
R21	502610	Same as R2
R22	502327	Same as R1
R23, R24	502410	Resistor—Fixed, composition, 100,000 ohm, ±10%, 1/2 w.
R25	502439	Same as R11
R26	502347	Same as R9
R28	502312	Same as R10
R29, R30	502233	Resistor—Fixed, composition, 3300 ohm, ±10%, 1/2 w.
R31	502422	Same as R3
R32	502447	Same as R13
R33A, R33B	103263	Control—Dual tone control
R34	502422	Same as R3
R36	502310	Resistor—Fixed, composition, 10,000 ohm, ±10%, 1/2 w.
R37	512133	Same as R14
R38	103284	Resistor—Fixed, w.w., 470 ohm, ±10%, 4 w.
R39	103285	Resistor—Fixed, w.w., 15 ohm, ±5%, 4 w.
S1	103264	Switch—"Stereo"/"Single" function switch
SRI	103258	Rectifier—Selenium rectifier
T1, T2	101718	Transformer—Output transformer
T3	103261	Transformer—Power transformer
	101727	Connector—Female connector for speaker leads (2 req'd)
	11891	Lamp—Type #44 lamp
	101709	Lever—Function switch actuating lever
	28452	Plate—Mounting plate for electrolytic capacitor (C23)
	101708	Shaft—Function switch actuating shaft
	76533	Shield—Tube shield for V1 & V2
	78574	Socket—Pilot lamp socket
	101699	Socket—Tube socket—7 pin for V4 & V5
	70827	Socket—Tube socket—8 pin for V6
	78976	Socket—Tube socket—9 pin for V1 & V2
	103253	Spring—Tension spring for function switch actuating lever, 11/16" free length x 0.218" O.D.
	101860	Spring—Compression spring for function switch actuating shaft, 1 3/4" free length x 0.242" O.D.

REPLACEMENT PARTS (Continued)

SYMBOL NO.	STOCK NO.	DESCRIPTION
C22		INTERNAL SPEAKER ASSEMBLY
	100509	Capacitor—Electrolytic, 8 mf., 10 volt AC
	100467	Housing—Plastic housing for 3 1/2" speakers (used with Model 8-STP-2)
	100465	Speaker—3 1/2" PM speaker complete with cone. Speaker stamped 961616-2
	100464	Speaker—6 1/2" PM speaker complete with cone. Speaker stamped 961615-5
		8-STP-1 MISCELLANEOUS PARTS
	103250	Escutcheon—Tone control and extension speaker escutcheon
	77490	Foot—Cabinet metal foot
	102514	Foot—Cabinet phenolic foot
	103378	Grommet—Rubber grommet for mounting tape mechanism
101715	Handle—Carrying handle	
101913	Hinge—Cabinet lid hinge	
103252	Knob—"On-off" or volume control knob—with spring	
103251	Knob—Tone control knob with spring	
101711	Latch—Cabinet lid catch	
103240	Motif—"Victrola Stereotape Player" motif	
100641	Nameplate—"New Orthophonic High Fidelity RCA Victor" nameplate	
73203	Nut—Speednut, retainer for nameplate & motif	
103377	Nut—Tee nut (special) for mounting tape mechanism	
103256	Reel—7" tape reel only (empty)	
76787	Retainer—Tape reel retainer	
103340	Screen—Metal access screen for bottom of cabinet	
30900	Spring—"On-off" or volume control knob retaining spring	
101069	Spring—Tone control knob retaining spring	
103255	Washer—Felt washer for function and control knobs	
	8-STP-2 MISCELLANEOUS PARTS	
X3582	Cloth—Speaker grille cloth for mahogany cabinet	
X3573	Cloth—Speaker grille cloth for oak cabinet	
100459	Cushion—Felt cushion for cabinet lid	
74273	Decal—Trademark decal	
103250	Escutcheon—Tone control and extension speaker escutcheon	
78377	Foot—Felt cabinet foot	
103378	Grommet—Rubber grommet for mounting tape mechanism	
72692	Hinge—Lid hinge for mahogany cabinet	

SYMBOL NO.	STOCK NO.	DESCRIPTION
	78609	Hinge—Lid hinge for oak cabinet
	103252	Knob—"On-off" or volume control knob—with spring
	103251	Knob—Tone control knob with spring
	102350	Leg—Cabinet leg with plastic glide (1 set of 4)
	103240	Motif—"Victrola Stereotape Player"
	100641	Nameplate—"New Orthophonic High Fidelity RCA Victor" nameplate
	73203	Nut—Speednut, retainer for motif and nameplate
	103377	Nut—Tee nut (special) for mounting tape mechanism
	103256	Reel—7" tape reel (empty)
	76787	Retainer—Tape reel retainer
	30900	Spring—"On-off" or volume control knob retaining spring
	101069	Spring—Tone control knob retaining spring
	100470	Stud—#6-32 brass stud with screw for mounting lid hinge (1 set of 4)
	77221	Support—Lid support for mahogany cabinet
	78610	Support—Lid support for oak cabinet
	103255	Washer—Felt washer for "On-off" or volume control knob
		MODELS SPK-2 AND SPK-3 EXTERNAL SPEAKER UNITS (RIGHT HAND UNIT)
		SPEAKER ASSEMBLY
C14	100509	Capacitor—Electrolytic, 8 mf., 10 v. AC
	33742	Connector—2-contact female connector for speaker cable (Model SPK-3 only)
	31048	Connector—Male pin connector for interconnecting cable for Model SPK-3 only
	54370	Connector—Male plug connector (telephone type)—part of interconnecting cable
	100467	Housing—Plastic housing for 3 1/2" speakers (used with Model SPK-3)
	100465	Speaker—3 1/2" PM speaker complete with cone. Speaker Stamped 961616-1
	100464	Speaker—6 1/2" PM speaker complete with cone. Speaker stamped 961615-4
		SPK-2 MISCELLANEOUS PARTS
	101711	Catch—Cabinet lid catch
	77490	Foot—Cabinet metal foot
	102514	Foot—Cabinet phenolic foot
	101715	Handle—Carrying handle
	101913	Hinge—Cabinet lid hinge

REPLACEMENT PARTS (Continued)

SYMBOL NO.	STOCK NO.	DESCRIPTION
	103240	Motif—"Victrola Stereotape Player" motif
	100641	Nameplate—"New Orthophonic High Fidelity RCA Victor" nameplate
	73203	Nut—Speednut, retainer for nameplate and motif
SPK-3 MISCELLANEOUS PARTS		
	X3582	Cloth—Grille cloth for mahogany cabinet
	X3573	Cloth—Grille cloth for oak cabinet
	100459	Cushion—Felt cushion for cabinet lid
	78377	Foot—Cabinet felt foot
	72692	Hinge—Lid hinge for mahogany cabinet

SYMBOL NO.	STOCK NO.	DESCRIPTION
	78609	Hinge—Lid hinge for oak cabinet
	102350	Leg—Metal cabinet leg with plastic glide (1 set of 4)
	103240	Motif—"Victrola Stereotape Player" motif
	100641	Nameplate—"New Orthophonic High Fidelity RCA Victor" nameplate
	73203	Nut—Speednut, retainer for nameplate and motif
	100470	Stud—#6-32 brass stud with screw for mounting lid hinge (1 set of 4)
	77221	Support—Lid support for mahogany cabinet
	78610	Support—Lid support for oak cabinet

APPLY TO YOUR RCA DISTRIBUTOR FOR PRICES OF REPLACEMENT PARTS

HOW TO SPLICE TAPE

Although plastic tape is quite durable, it can be broken or torn. This is relatively simple to correct. Overlap the ends of the broken tape and cut at an angle (Step No. 1). On a flat surface, butt the cut ends of the tape together (Step No. 2) — glossy side up — fasten the two ends together with a piece of splicing tape such as Scotch No. 41 Splicing Tape (Step No. 3). Trim the splicing tape even with the edge of the recording tape, cutting very slightly into the recording tape, then rewind as usual.

CAUTION: Do not use ordinary cellulose tape because it will bleed through, causing the tape to stick together.

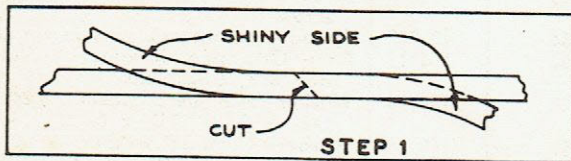


Figure 14—Tape Splicing

