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2500 SERIES PHONOGRAPHS

COIN EQUIPMENT

2500S-2500, 2510S-2510, 2504S-2504

References to "Right hand" and "Left hand" are made when viewing the phonograph from the front, unless otherwise specified.

The coin equipment used on all Wurlitzer 1961 models consists of the National Coin Separator, the nickel, dime, quarter, and half dollar Slug Rejectors and the Wurlitzer coin register mechanism (playrak). These units are mounted on the inside of the right hand panel. The figures following show the method for removal of the units.

CAUTION!
Turn the line switch OFF before removing the playrak!

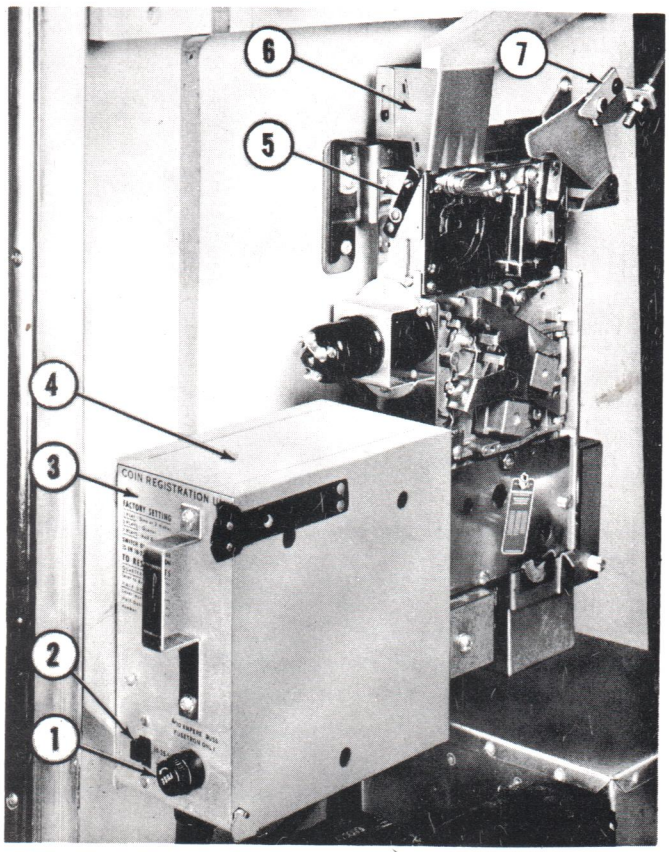


Fig. 1. COIN EQUIPMENT

1.	Fuse Post	51485
2.	Slide Switch	62886
3.	Coin Register Mechanism (Playrak)	115851
4.	Cover Assembly - Coin Register Mechanism	112070
5.	Latch Spring - Coin Separator	National
6.	Lower Coin Chute Assembly - Complete	68552
7.	Lever and Bracket Assembly	68546

The front plate of the playrak (Fig. 2, Item 1) is cut back to provide clearance for raising the unit and disengaging its hinge pins as shown.

The 5-10-25 slug rejector may be removed by first removing the coin separator (Fig. 2, Item 6). The procedure is as follows: Raise the lower coin chute (Fig. 1, Item 6). Unlatch the lever (Item 7) and move the lever and bracket assembly aside. Release the latch spring (Item 5), lift and remove the coin separator (Fig. 2, Item 6) and the slug rejector as shown in Figure 2, Item 7.

CAUTION!
When replacing the slug rejector, handle with care so as to prevent damage to the nickel flipper (Fig. 2, Item 10).

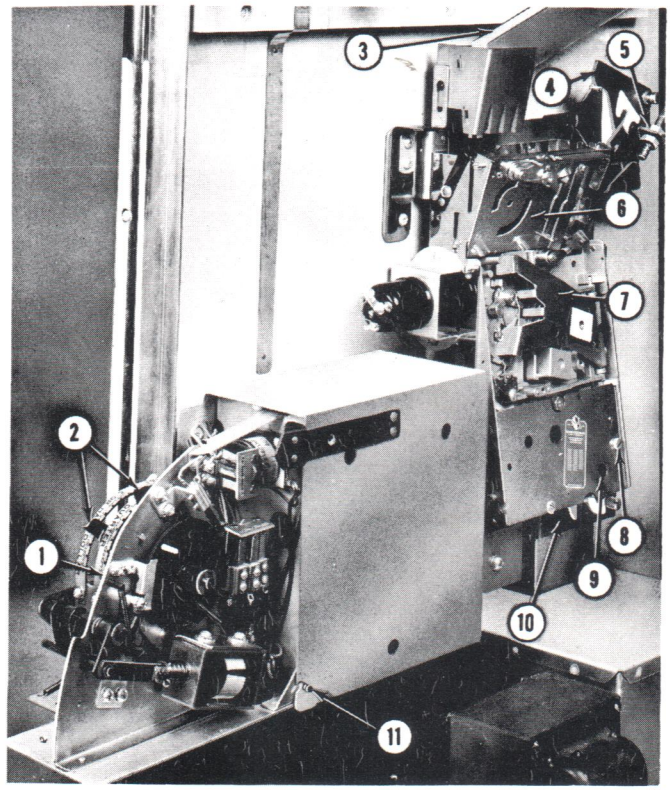


Fig. 2. REMOVAL OF COIN EQUIPMENT

1.	Front Plate and Shaft Assembly	66122
2.	Stop Lever and Spring Assembly	66132
3.	Coin Chute and Bracket Assembly	118518
4.	Pin and Actuator Assembly	68545
5.	Reject Rod and Button Assembly	119249
6.	50¢ Slug Rejector (Coin Separator)	National
7.	5-10-25¢ Slug Rejector	National
8.	Screw, 6-32 x 1/4" Filister Hd. - Special	National
9.	Screw, 6-32 x 1/8" Truss Hd.	National
10.	Nickel Flipper	National
11.	Hinge Pin	66445

It is recommended that National Rejectors, Inc. and their branch offices be employed for service or replacement of parts other than those indicated by Wurlitzer part numbers. The mechanical adjustments of National components of the slug rejector assembly should be made in accordance with the "Rejector Manual", furnished by National Rejectors, Inc.

Phonographs as shipped from the factory are normally set to operate one play for two nickels or one dime, three plays for one quarter and seven plays

for a half dollar. However, they may be changed to operate on five cent play if desired by removing the two screws (Fig. 2, Items 8 and 9) and setting the nickel flipper (Item 10) in the position shown. Replace the screws (Items 8 and 9) in the reverse positions, thus holding the nickel flipper in the five cent play position. Replace the slug rejector and reset the stop levers (Fig. 2, Item 2) to the required credits for dimes and quarters. The slide switch (Fig. 1, Item 2) must be set to the 5-10-25 position. The half dollar coin stop, part number 118426 packed in the cash bag, should be installed at the back of the coin entrance on the selector switch mounting plate using the 6-32 x 5/16" R.H. screw furnished.

1. PLAYRAK ADJUSTMENTS

CAUTION!
Make these adjustments with the power OFF!

a. COIN SWITCH

The coin switches should be adjusted to provide a 1/32" opening of the contact points with the coin paddles held against the slug rejector coin exits under tension of the long movable blades of the coin switch assembly as shown in Figure 3.

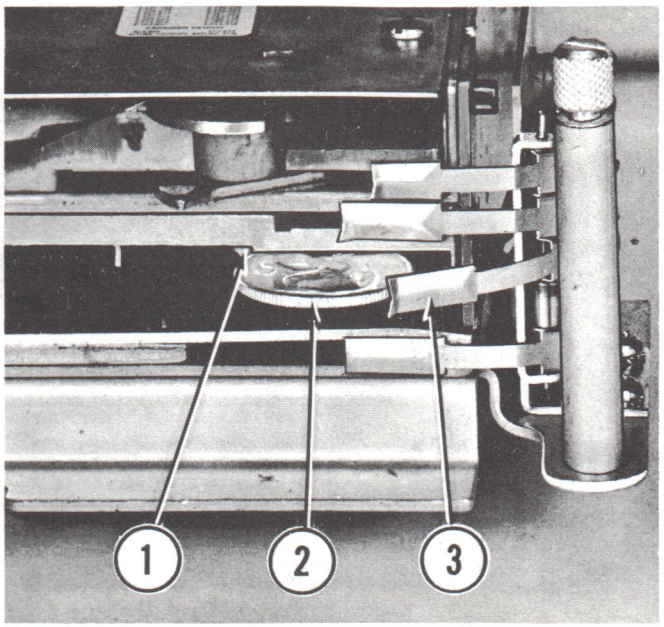


Fig. 3. COIN SWITCH ADJUSTMENT

1. Critical Point
2. Coin
3. Coin Paddle - Long - 10-25-50¢ 68311A
   - Short - 5¢ 68311B
   Shaft 68311C

The tension of the movable blades should be adjusted so that a thin coin, when stopped on its coin paddle and released, will actuate the movable blade, making contact with the stationary blade, and clear the paddle. A pulse of more than 3 seconds duration should normally blow the .8 ampere fuse (Fig. 1, Item 1) in the coin magnet circuit.

The final test for the coin switches should be made with the coin register mechanism in the phonograph in its normal operating condition. Test each individual coin track ten consecutive times, with coins of varied wear. If one coin fails to register correctly, that particular coin switch should be examined and, if necessary, readjusted.

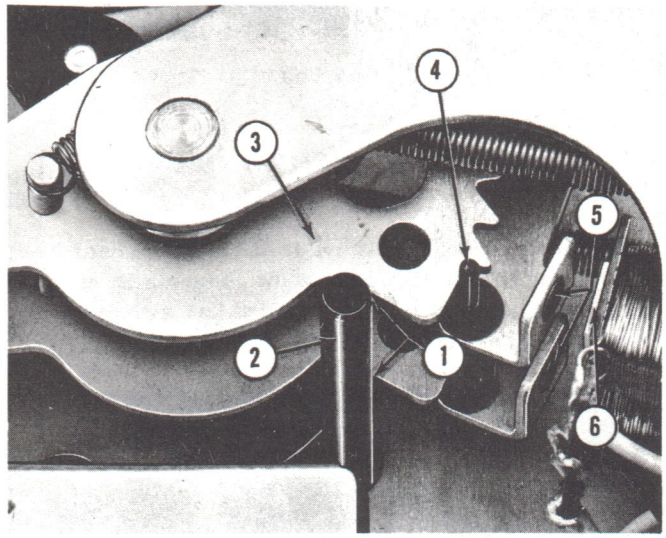


Fig. 4. PLAYRAK ADJUSTMENTS

1. Point of Contact - Driver Pin
2. Driver Pin - Cancel Wheel Assembly 66124
3. Accumulator Wheel and Hub Assembly 66131
4. Stud - Lever, Hub and Stud Assembly 66129
5. Armature End of Lever, Hub and Stud Assembly
6. Coin Magnet and Bracket Assembly 66128

Before making any mechanical adjustments on the playrak, check for the condition shown in Figure 4, Item 1. When the studs (Item 4) on the lower end of the two lever, hub and stud assemblies are engaged with the first tooth of their respective accumulator ratchet as shown, the drive pin (Item 2) of the cancel wheel should rest squarely against the edge of the two accumulator quadrants. Should this condition not exist, examine the playrak for bent studs or sprung frame. Correction should be made before proceeding with the adjustments.

b. KEY SWITCH ADJUSTMENT

The key switch and bracket assembly may be adjusted by loosening the mounting screws (Fig. 5, Item 1). The cancel wheel should be in its normal rest position, all credits cancelled and the nylon screw (Item 4) resting on the flat portion of the formed blade as shown at Item 3. Loosen the switch bracket mounting screws (Item 1) and move the assembly to provide 1/32" opening of the contact points as shown at Item 2. Tighten the mounting screws (Item 1) and add one credit on either accumulator

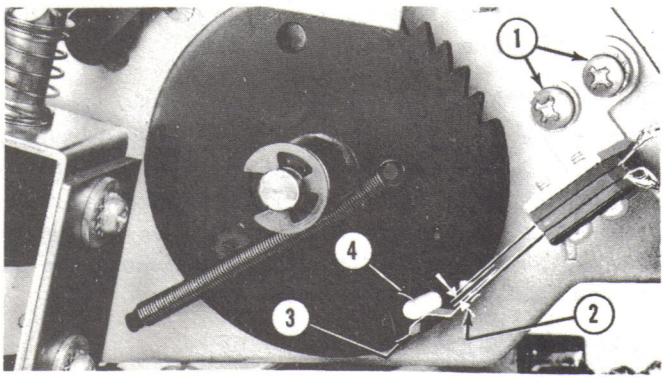


Fig. 5. KEY SWITCH ADJUSTMENT

1. Screw, 6-32 x 1/4", R. Hd.	73533-22
2. Dimension - 1/32"	
3. Key Switch	66082
4. Screw, 4-40 x 1/2", R. Hd. Nylon	74288-6

quadrant. The nylon screw on the cancel wheel should now clear the formed tip of the long blade as shown in Figure 6, Item 1, allowing the key switch to close with a 1/32" wiping action.

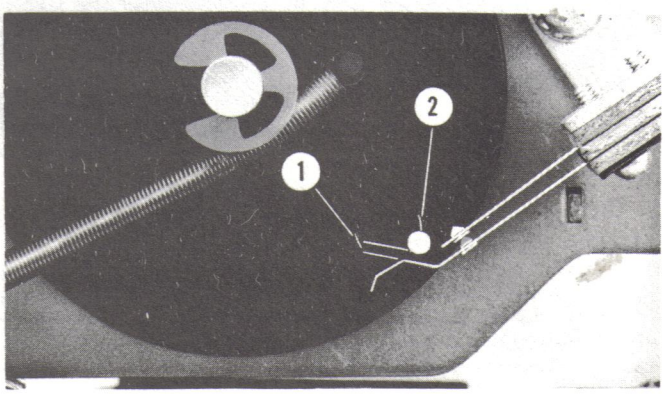


Fig. 6. KEY SWITCH CLEARANCE ADJUSTMENT

1. Clearance	
2. Screw, 4-40 x 1/2" R. Hd. Nylon	74288-6

c. STOP LEVER AND QUADRANT INDEXING STRIP

The stop levers (Fig. 7, Item 2) should be set at 5 credits and the escapement studs released, allowing the two accumulator ratchets to advance to 5 credits. The driver pin on the cancel wheel (Fig. 8, Item 1) should rest squarely against the edge of both accumulator ratchets as shown at Item 2. Should this condition not exist, loosen the indexing strips adjusting screws (Fig. 7, Items 1 & 3) and with the 10¢-50¢ indexing strip set at the center of its adjusting range, move the 25¢ indexing strip until the above condition is met. Tighten the adjusting screws in the indexing strips.

d. CANCEL STROKE ADJUSTMENT

The cancel solenoid adjusting screws (Fig. 7, Item 4) should be loosened and solenoid backed off before making this adjustment. Add 5 or more cred-

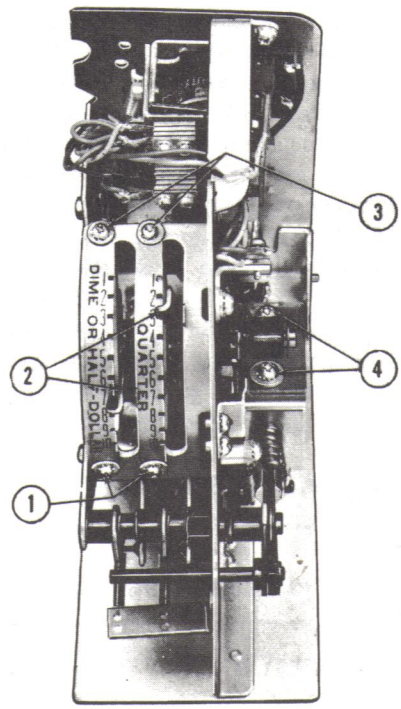


Fig. 7. STOP LEVER AND QUADRANT INDEXING STRIP ADJUSTMENT

1. Screw, 4-40 x 3/16", R. Hd.	73533-1
2. Stop Lever and Spring Assembly	66132
3. Screw, 4-40 x 3/16", R. Hd.	73533-1
4. Screw, 6-32 x 1/4", R. Hd.	73533-22

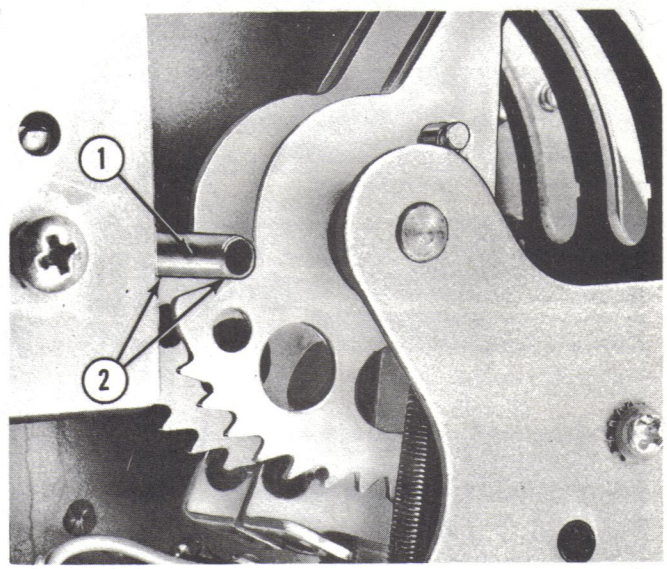


Fig. 8. STOP LEVER AND QUADRANT INDEXING STRIP ADJUSTMENT

1. Driver Pin - Cancel Wheel Assembly	66124
2. Accumulator Wheel and Hub Assembly	66131

its on the accumulator ratchet quadrant. Manually actuate the cancel solenoid plunger as shown in Figure 9, Item 1. The cancel pawl (Item 4) should return the cancel wheel and accumulator quadrant one full tooth plus .010" over travel as shown in Figure 10, Item 1. Should adjustment be required loosen the screw (Fig. 9, Item 3) and turn the eccentric adjust-

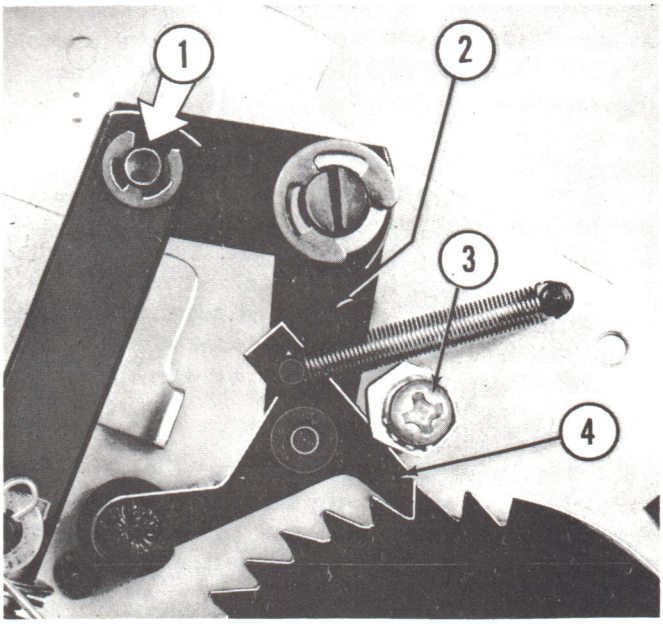


Fig. 9. CANCEL STROKE ADJUSTMENT

1. Manually actuate at this point
2. Pivot Arm and Pawl Assembly 66125
3. Adjustment Cam 42868
4. Pin and Pawl Assembly 66127

ment cam to provide the correct cancel action. Tighten the screw (Item 3) and its lock nut on the back side of the mounting plate.

NOTE: Too much over travel at Item 1, Figure 10 may cause free play.

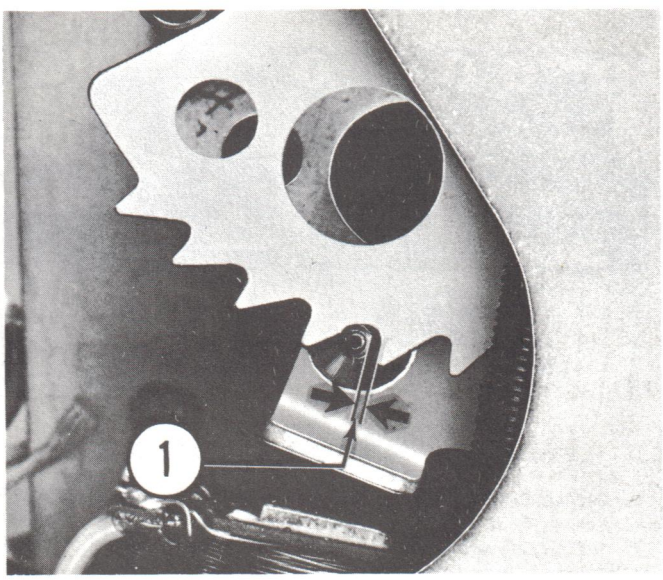


Fig. 10. OVERTRAVEL - CANCEL STROKE ADJUSTMENT

1. Dimension .010" Overtravel

The cancel solenoid should be positioned by manually holding the cancel solenoid plunger in its actuated position; move the solenoid up on its elongated mounting holes until the plunger bottoms in the solenoid. Tighten the screws (Fig. 7, Item 4).

e. CANCEL PAWL STOP BRACKET ADJUSTMENT

Loosen the adjusting screws (Fig. 11, Item 1) and move the stop bracket (Item 2) to permit the cancel pawl to engage the tooth of the cancel wheel at a point 1/3 the length of the slant surface from the tip of the tooth as shown at Item 3. During cancel operation, the cancel pawl stop bracket should be free from the edge of the cancel pawl (Item 4) marked "No Drag."

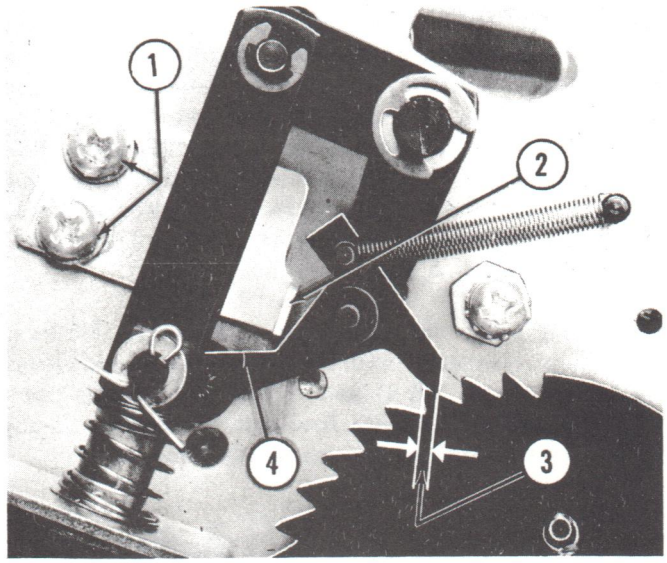


Fig. 11. STOP BRACKET ADJUSTMENT

1. Screw, 6-32 x 3/16" R. Hd. 73533-21
2. Stop Bracket - Pawl 66069
3. Dimension - Engagement 1/3 of Slant Surface
4. No Drag of Pawl on Bracket

2. SELECTOR SWITCH ADJUSTMENT

a. CONNECTOR LINK ADJUSTMENT - 2500

Figure 12 shows the underside of the 2500 Selector Switch Assembly. Should any adjustments be

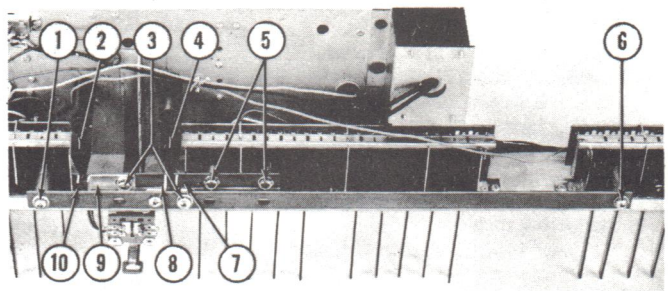


Fig. 12. CONNECTOR LINK ADJUSTMENT - 2500

1. Screw, 8-32 x 1-1/4 R. Hd. 73533-44
2. Shaft, Link and Lever Assembly, Numbers 111898
3. Screw, 8-32 x 1/4 R. Hd. 73533-34
4. Shaft, Link and Lever Assembly, Letters 111897
5. Screw, 8-32 x 5/8, R. Hd. 73533-39
6. Screw, 8-32 x 1-1/4, R. Hd. 73533-44
7. Adjusting Clip 112417
8. Adjusting Clip 112417
9. Adjusting Clip 116369
10. Connector Link, Number Switch 116255

required, readjust the entire assembly through the following sequence:

(1) Loosen the linkage adjusting screws (Fig. 12, Items 1, 3, 5 & 6) and the two latch lever adjusting screws (Fig. 15, Items 5 & 6). Check all selector switch push rods and latch bars for freedom of action. If any bind exists, correct before proceeding with the adjustments.

(2) Hold the selector switch assembly with the push rods down as shown in Figure 12 and allow the selector switches to assume their natural rest position. Allow the shaft, link and lever assemblies (Items 2 & 4) to fall into their natural vertical positions. Maintain this position and set the connecting links (Items 8 & 10) to zero clearance with the shaft, link and lever assemblies (Items 2 & 4). Tighten the screws (Items 1, 5 & 6).

(3) Set the adjustable clips (Items 7 & 9) to minimum clearance with the shaft, link and lever assembly (Items 2 & 4) and tighten the screws (Item 3). Check for complete freedom of action. If any bind exists repeat the foregoing adjustments.

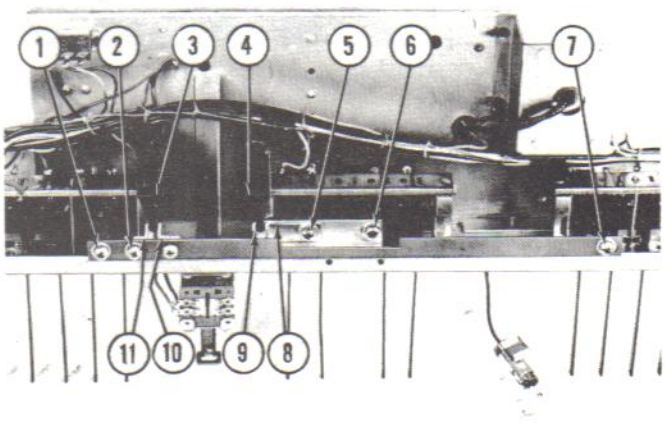


Fig. 13. CONNECTOR LINK ADJUSTMENT - 2504

1.	Screw, 8-32 x 1-1/4", R. Hd.	73533-44
2.	Screw, 8-32 x 1/4, R. Hd.	73533-34
3.	Shaft, Link and Lever Assembly, Numbers	111898
4.	Shaft, Link and Lever Assembly, Letters	111897
5.	Screw, 8-32 x 5/8", R. Hd.	73533-39
6.	Screw, 8-32 x 5/8", R. Hd.	73533-39
7.	Screw, 8-32 x 1-1/4", R. Hd.	73533-44
8.	Adjusting Clip	116369
9.	Connector Link, Letters	116251
10.	Adjusting Clip	112417
11.	Adjusting Clip	112417

b. CONNECTOR LINK ADJUSTMENT - 2504

Figure 13 shows the underside of the 2504 Selector Switch Assembly. Should any adjustment be required, readjust the entire assembly through the following sequence:

(1) Loosen the linkage adjusting screws (Fig. 13, Items 1, 2, 5, 6 & 7) and the two latch lever adjusting screws (Fig. 15, Items 5 & 6). Check all selector switch push rods and latch bars for freedom of action. If any bind exists, correct before proceeding with the adjustments.

(2) Hold the selector switch assembly with the push rods down as shown in Figure 13 and allow the selector switches to assume their natural rest position. Allow the shaft, link and lever assemblies (Items 3 & 4) to fall into their natural vertical positions. Maintain this position and set the connecting links (Items 9 & 10) to zero clearance with the shaft, link and lever assemblies (Items 3 & 4). Tighten the screws (Items 1, 6 & 7).

(3) Set the adjustable clips (Items 8 & 11) to minimum clearance with the shaft, link and lever assemblies (Items 3 & 4) and tighten the screws (Items 2 & 5). Check for complete freedom of action. If any bind exists repeat the foregoing adjustments.

c. CONNECTOR LINK ADJUSTMENT - 2510

Figure 14 shows the underside of the 2510 selector switch assembly. Should any adjustment be required, readjust the entire assembly through the following sequence:

(1) Loosen the linkage adjusting screws (Fig. 14, Items 1, 2, 5 & 6) and the two latch lever adjusting screws (Fig. 15, Items 5 & 6). Check all selector switch push rods and latch bars for freedom of action. If any bind exists, correct before proceeding with the adjustments.

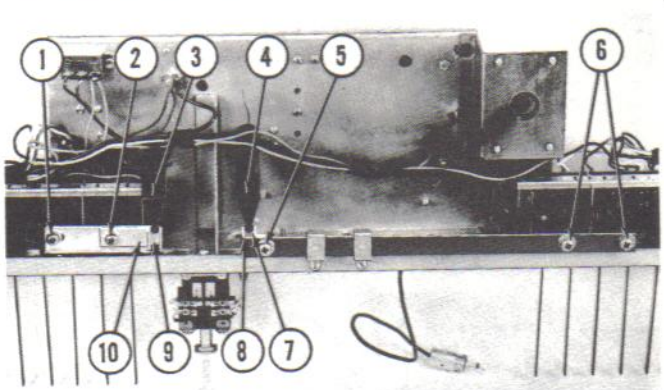


Fig. 14. CONNECTOR LINK ADJUSTMENT - 2510

1.	Screw, 8-32 x 5/8", R. Hd.	73533-39
2.	Screw, 8-32 x 5/8", R. Hd.	73533-39
3.	Shaft, Link and Lever Assembly, Numbers	111898
4.	Shaft, Link and Lever Assembly, Letters	111897
5.	Screw, 8-32 x 1/4", R. Hd.	73533-34
6.	Screw, 8-32 x 1-1/4", R. Hd.	73533-44
7.	Adjusting Clip	112417
8.	Connector Link, Letters	116259
9.	Connector Link, Numbers	116252
10.	Adjusting Clip	116369

(2) Hold the selector switch assembly with the push rods down as shown in Figure 14 and allow the selector switches to assume their natural rest

position. Allow the shaft, link and lever assemblies (Items 3 & 4) to fall into their natural vertical positions. Maintain this position and set the connecting links (Items 8 & 9) to zero clearance with the shaft, link and lever assemblies (Items 3 & 4). Tighten the screws (Items 1 & 6).

(3) Set the adjustable clips (Items 7 & 10) to minimum clearance with the shaft, link and lever assemblies (Items 3 & 4) and tighten the screws (Items 2 & 5). Check for complete freedom of action. If any bind exists, repeat the foregoing adjustments.

d. PRELIMINARY ADJUSTMENT OF LATCH SOLENOID

Loosen the latch solenoid adjusting screws (Fig. 15, Item 2). Manually hold the solenoid plunger (Item 1) firmly bottomed in the solenoid and set the solenoid to provide 3/64" maximum clearance between the tab on the release lever (Item 4) and the trip lever (Item 3). The plunger travel should not exceed 3/16 of an inch.

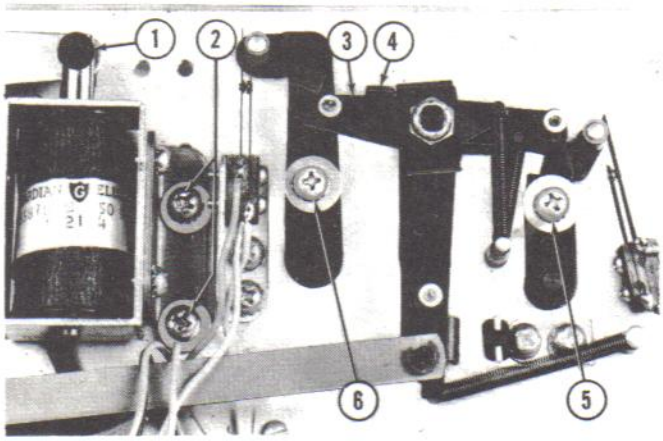


Fig. 15. PRELIMINARY ADJUSTMENT OF LATCH SOLENOID

1.	Plunger, Latch Solenoid	112104-1
2.	Screw, 8-32 x 1/4", R. Hd.	73533-34
3.	Trip Lever, Stud and Spacer Assembly - Letters	117694
4.	Stop Tab on Release Lever, Stud and Spacer Assem.	56713
5.	Screw, 8-32 x 1/4, R. Hd.	73533-34
6.	Screw, 8-32 x 1/4, R. Hd.	73533-34

e. STOP BRACKET ADJUSTMENT - LATCH SOLENOID

The stop bracket (Fig. 16, Item 3) should be adjusted with the release lever (Item 4) in its normal rest position. Loosen the adjusting screws (Item 2) and move the stop bracket to provide 1/64 inch clearance between the square stud on the pawl and the trip lever as shown at Item 1.

f. LATCH ADJUSTMENT

(1) The latch adjusting screws (Fig. 15, Items 5 & 6) were loosened to perform the link adjustments. To adjust the latch levers, energize the latch solenoid and manually hold a letter button fully depressed. Move the letter latch pawl (Fig. 17, Item 1) to allow the trip lever (Item 2) to move and rest against the stop tab (Item 3). The square stud on the letter latch pawl (Item 1) should rest firmly against the trip lever (Item 2). Maintain this setting and tighten the screw (Item 8). Release the letter button by depressing the reset button and check each letter button for proper latching and selector switch contact engagement.

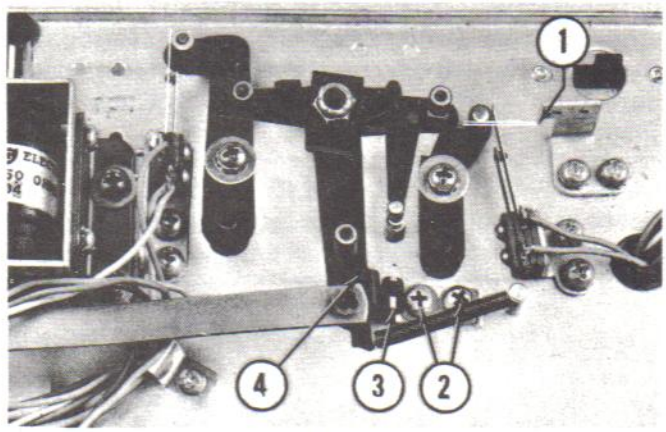


Fig. 16. STOP BRACKET ADJUSTMENT, LATCH SOLENOID

1.	Dimension 1/64" clearance	
2.	Screw, 8-32 x 1/4", R. Hd.	73533-34
3.	Stop Bracket	56628
4.	Release Lever, Stud and Spacer Assembly	56713

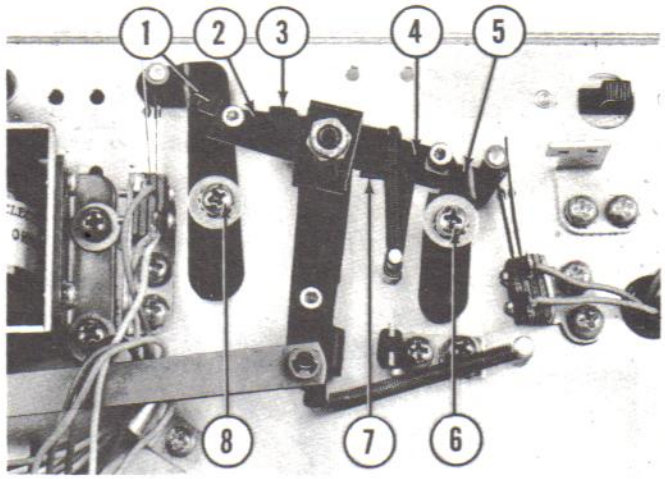


Fig. 17. LATCH ADJUSTMENT

1.	Pawl Stud and Spacer Assembly, Letters	65009
2.	Trip Lever Stud and Spacer Assembly, Letters	117694
3.	Stop Tab on Release Lever, Stud and Spacer Assem.	56713
4.	Pawl, Spring Stud and Spacer Assembly, Numbers	117691
5.	Trip Lever and Spacer Assembly, Numbers	117695
6.	Screw, 8-32 x 1/4", R. Hd.	73533-34
7.	Stop Tab on Release Lever, Stud and Spacer Assem.	56713
8.	Screw, 8-32 x 1/4", R. Hd.	73533-34

(2) The number latch pawl is adjusted in the same manner as the letter latch pawl. With the latch solenoid energized, manually hold a number button

fully depressed. Move the lever (Fig. 17, Item 5) to allow the pawl (Item 4) to rest against the stop tab (Item 7). The trip lever (Item 5) should rest firmly against the square stud (Item 4). Tighten the screw (Item 6).

CAUTION!
Check to make sure that the adjustments have not changed when the screws were tightened.

g. FINAL LATCH SOLENOID ADJUSTMENT.

(1) Loosen the latch solenoid adjusting screws (Fig. 15, Item 2). Manually hold the plunger (Item 1) firmly bottomed in the solenoid. Move the solenoid to provide 5/64 of an inch maximum clearance between the tab on the release lever (Item 4) and the letter trip lever (Item 3).

(2) The plunger travel should not exceed 3/16 of an inch. Check the release lever action for mechanical bind of plunger in latch solenoid.

h. CONTROL SWITCH ADJUSTMENT

Manually hold the latch solenoid plunger (Fig. 18, Item 1) in the actuated position. Loosen the adjusting screws (Item 4) and move the control switch and bracket to provide 1/32 inch to 1/16 inch opening (Item 8) of the normally closed contacts. The normally open contacts (Item 7) should close with a 1/32 inch wiping action.

i. LETTER AND NUMBER LATCH SWITCH ADJUSTMENT

Manually hold the latch solenoid plunger (Fig. 18, Item 1) in the actuated position. Loosen the letter latch switch adjusting screws (Item 2) and set the long blade of the switch assembly to zero clearance with the insulated stud on the trip lever as shown at Item 3. The contacts are set normally open 1/32 inch. When a letter button is latched the contacts should close with a 1/32 inch wiping action.

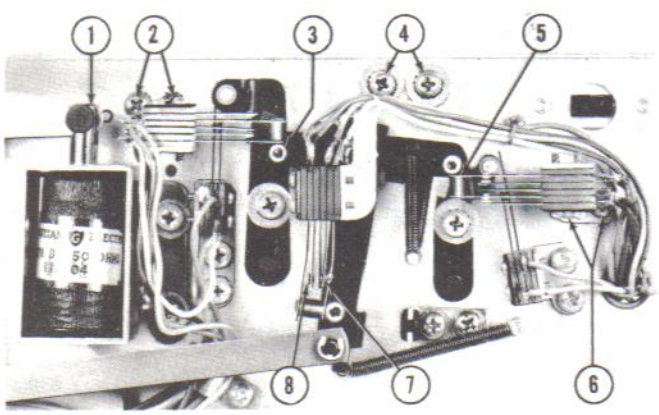


Fig. 18. CONTROL AND LATCH SWITCH ADJUSTMENT

1.	Plunger, Latch Solenoid	112104-1
2.	Screw, 8-32 x 1/4", R. Hd.	73533-34
3.	Zero Clearance	
4.	Screw, 8-32 x 1/4", R. Hd.	73533-34
5.	Zero Clearance	
6.	Screw, 8-32 x 1/4", R. Hd.	73533-34
7.	Contacts Close with 1/32" wipe	
8.	Contacts Open 1/32"	

The number latch switch may be adjusted in the same manner by loosening the screws (Item 6). The contact setting should be the same as for the letter switch above.

j. LETTER AND NUMBER SERIES SWITCH ADJUSTMENT

The letter series switch should be adjusted when the latch solenoid is in the normal rest position. Loosen the adjusting screws (Fig. 19, Item 4) and set the long blade of the series switch to zero clearance with the fiber stud on the pawl as shown at Item 1. The contacts should open 1/32 inch when any letter button is depressed and should close with a 1/32 inch wiping action when the letter button is released.

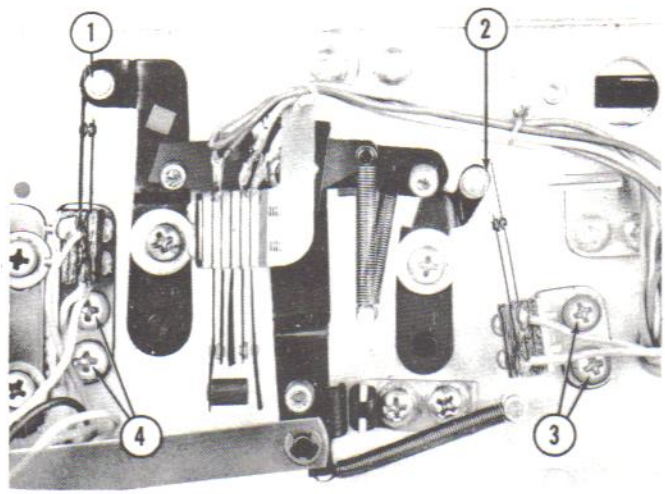


Fig. 19. LETTER AND NUMBER SERIES SWITCH ADJUSTMENT

1.	Zero Clearance	
2.	Zero Clearance	
3.	Screw, 8-32 x 1/4", R. Hd.	73533-34
4.	Screw, 8-32 x 1/4", R. Hd.	73533-34

The number series switch may be adjusted in the same manner by loosening the screws (Item 3). The long blade of the number series switch should be set to zero clearance with the fiber stud on the trip lever as shown at Item 2. The contacts should open 1/32 inch when any number button is depressed and close with a 1/32 inch wiping action when the number button is released.

3. ELECTRIC SELECTOR ADJUSTMENTS

a. ROTATING PLATE AND ROCKER ARM ADJUSTMENT - 2500

All adjustments on the Electric Selector Assembly may be made with the assembly mounted on

the changer or removed from the changer. When adjustment is attempted while mounted on the changer the power should be turned OFF.

(1) Manually depress the number "1" solenoid plunger (Fig. 20, Item 15) and turn the rotating plate and rocker arm assembly (Item 12) in a clockwise direction by turning the nylon gear (Item 18) of the selector motor assembly. One of the 10 stop pins (Item 8) will contact the depressed plunger of the number "1" solenoid. Continued rotation of the nylon

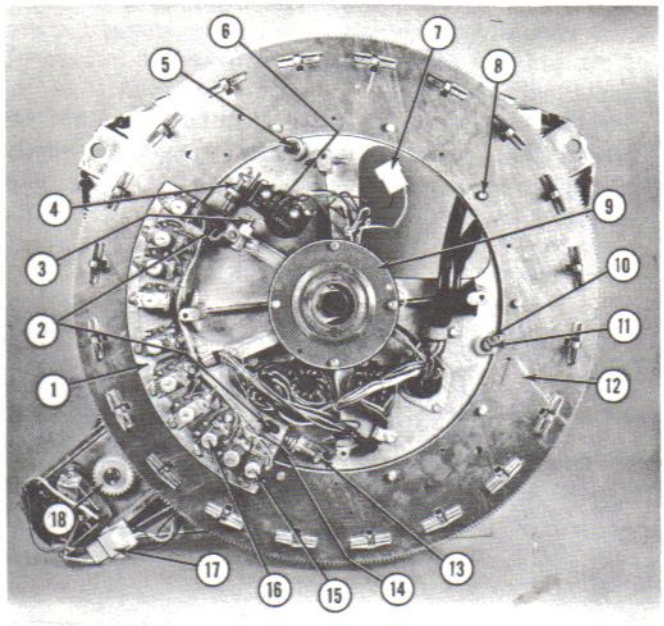


Fig. 20. ELECTRIC SELECTOR - 2500

1.	Mounting Casting Assembly, Number Quadrant	115915
2.	Shoulder Screw - Selector - (2)	68649
3.	Screw, 8-32 x 1, Hex Head - (2)	73793-88
4.	Screw, 10-32 x 1, Hex Head - (2)	73793-122
5.	Stud - (2)	68657
6.	Micro Switch - (2) - Reverse and Start	110558
7.	3 Circuit Cap - Amp Lock	117823
8.	Stop Pin - (10)	115411
9.	Contact Plate Assembly	66186
10.	Retaining Ring - (3)	73724-31
11.	Stud, Eccentric - (1)	69659
12.	Rotating Plate and Rocker Assembly	111481
13.	Screw, 10-32 x 1, Hex Head - (2)	73793-122
14.	Spring - Quadrant Retracting	62773
15.	Solenoid, Selector Stop, Number 1	68804
16.	Solenoid, Selector Stop, Number 2-0	68617
17.	Socket 6 Circuit Amp Lock	113528
18.	Nylon Gear, Motor and Gear Assembly	111913

gear will drive the number quadrant (Item 1) until it rests against the forward stop screw (Item 4). In this position, the left hand end of the actuator bar (Fig. 21, Item 4) of the rocker arm should be in line with the left hand edge of the formed tip of the Letter Coil plunger (Item 1) with a maximum overtravel of 1/32 inch. The forward stop adjusting screw (Fig. 20, Item 4) may be set to provide correct alignment. The tip of the rocker arm (Fig. 21, Item 3) may contact the edge of the selector pin (Item 2) on the center line of the rocker arm tip with a tolerance of 1/32 inch either side of center.

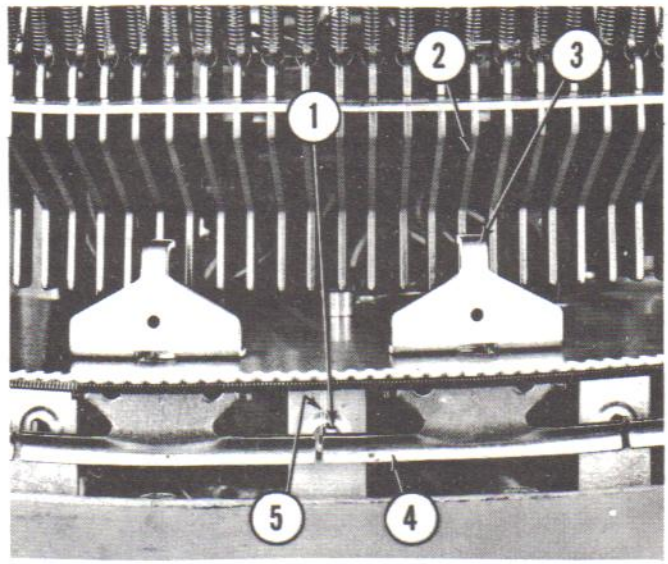


Fig. 21. ELECTRIC SELECTOR - 2500

1.	Formed Tip of Plunger - Selector Solenoid (20)	68594
2.	Number One Latch Pin (inner)	110941
3.	Tip of Rocker Arm (20)	67926
4.	Actuating Bar, Rocker Arm	67926
5.	Dimension 1/32" maximum overtravel	

(2) Release the nylon gear and allow the number quadrant to return to rest position. Then repeat the foregoing steps depressing the number "0" stop solenoid plunger (Fig. 20, Item 16). Manually hold the number quadrant in its forward stop position with the nylon gear (Item 18) and check the alignment of the letter solenoid plungers with the rocker arm actuating bars. The number "0" position will be at the opposite end of the rocker arm actuating bar from the number "1" position and the right hand edge of the formed tip of the letter solenoid plungers should be approximately 1/16" to 1/32" in from the end of the bars.

b. START SWITCH ADJUSTMENT

The start switch (Fig. 22, Item 6) should be checked after any adjustment of the forward stop screw (Fig. 20, Item 4). It is actuated by the forward movement of the number quadrant and the adjusting screw (Fig. 22, Item 4). It is important that this switch operate very close to the time when the number quadrant stops against the forward stop screw. The following method may be used to adjust the start switch. Manually hold a number solenoid plunger depressed. Turn the rotating plate and rocker arm assembly in a clockwise direction by turning the selector motor nylon gear (Fig. 20, Item 18) until the number quadrant (Item 1) rests against the forward stop screw (Item 4). Hold the number quadrant firmly in position with the nylon gear and back out the actuating screw (Fig. 22, Item 3) until the switch is in its normally closed position. Turn the actuating

screw (Item 3) in until the switch actuates plus one full turn for overtravel.

c. BACK STOP SCREW ADJUSTMENT

The number quadrant (Fig. 20, Item 1) is held against the back stop screw (Item 13) in its normal rest position by its retracting spring (Item 14). The back stop screw should be adjusted to provide 1/16" overtravel of the number quadrant after the start switch resets on return of the number quadrant.

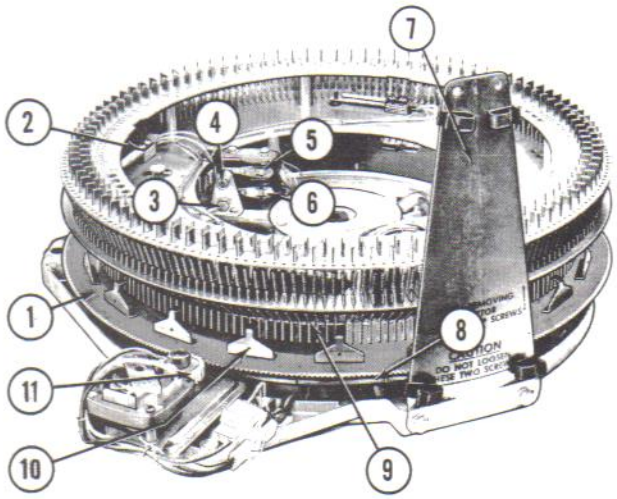


Fig. 22. ELECTRIC SELECTOR - 2500

1.	Rotating Plate and Rocker Arm Assembly	111481
2.	Override Switch Assembly (4)	65952
3.	Screw, Adjusting, Start Switch, 8-32 x 1, Hex Head	73793-88
4.	Screw, Adjusting, Reverse Switch, 8-32 x 1 Hex Head	73793-88
5.	Switch, Reverse	110558
6.	Switch, Start	110558
7.	Silk Screen and Support Plate Assembly	68799
8.	Actuating Bar, Rocker Arm	67926
9.	Wobble Ring	67927
10.	Rocker Arm	67926
11.	Gear and Hub Assembly, Selector Motor	68717

The following method may be used to adjust the back stop screw. The number quadrant must be in its normal rest position. Turn the back stop screw (Fig. 20, Item 13) in, driving the number quadrant forward until the start switch (Fig. 22, Item 6) actuates. Turn the back stop screw out until the start switch resets plus two full turns for overtravel.

d. REVERSE SWITCH ADJUSTMENT

This adjustment should follow any adjustment of the back stop screw. Figure 22, Item 5 shows the reverse switch. While the number quadrant is in its normal rest position turn the adjusting screw (Item 4) in until the reverse switch actuates. Then back the adjusting screw out until the reverse switch resets plus 1/2 to 1 full turn for overtravel.

e. OVERRIDE SWITCH ADJUSTMENT (Wobble Plate Switch)

(1) 2500 Electric Selector

When a selector latch pin (Fig. 23, Item 1) is released the wobble ring (Item 7) is moved upward by the tension of the selector latch pin spring (Item 9). The spacer (Item 8) closes the contacts of one override switch (Item 3). To check for correct switch action, choose a selector pin midway between two spacers. Release the selector pin and slowly work the pin up and down. The override switch contacts should make at about 1/3 of the upward travel of the pin and allow the pin to make its full travel. Should adjustment be required the blades of the switches may be formed with a suitable contact adjusting tool. Each pair of override switches should be checked using pins number E-8, K-8, Q-8 and V-8, making sure that the contacts on either side of the released selector pin close with a good wiping action and permit the pin to make its full travel.

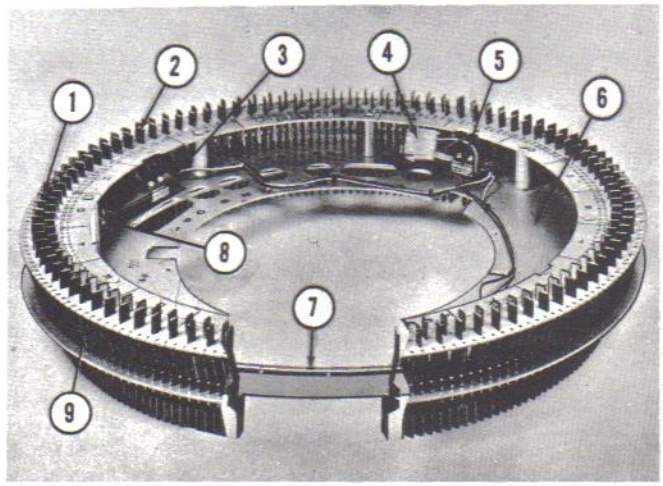


Fig. 23. SELECTOR PLATE AND LATCH PIN ASSEMBLY - 2500

1.	Latch Pin, Outer 100	110942
2.	Latch Pin, Inner 100	110941
3.	Override Switch Assembly (4)	65952
4.	Socket - 3 Circuit Amp Lock	117824
5.	Override Switch Assembly (4)	65952
6.	Selector Plates and Spacer Assembly	111027
7.	Wobble Ring	67927
8.	Spacer (4)	68650
9.	Spring (200)	110480

(2) The foregoing adjustment will apply to the 100 and the 104 selector pin assembly although the override switches are mounted on the wobble plate.

(a) Pins number A-6, D-2, F-5 and H-10 should be used to check the override switches on the 100 selector pin assembly.

(b) Pins number A-20, A-23 and D-13 should be used to check the override switches on the 104 selector pin assembly.

f. ROTATING PLATE AND ROCKER ARM ADJUSTMENT - 2510

(1) The guide plate, held by the adjusting screws (Fig. 24, Item 7), should be set to zero clearance with the stop bracket (Item 4) on the rotating plate and rocker arm assembly.

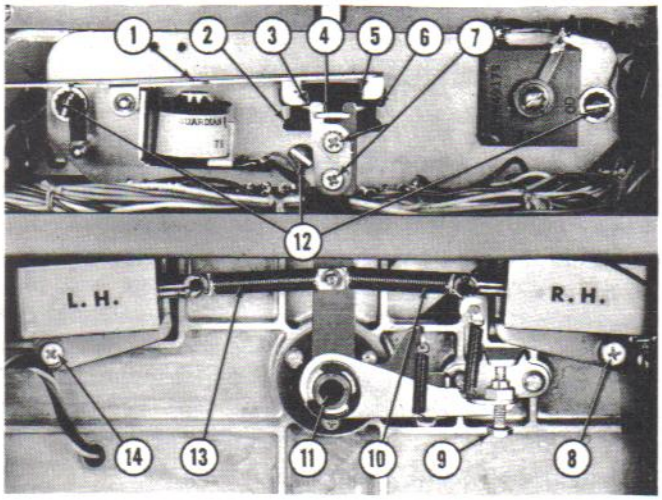


Fig. 24. ROTATING PLATE AND ROCKER ARM ADJUSTMENT - 2510

1.	Stop Arm Assembly	115862
2.	Stop Tab - Mounting Plate and Spring Stud Assembly	117986
3.	Stop Tab - Stop Arm Assembly	115862
4.	Stop Bracket - Selector	115789
5.	Stop Tab - Stop Arm Assembly	115862
6.	Stop Tab - Mounting Plate and Spring Stud Assembly	117986
7.	Screw 8-32 x 3/16", R. Hd.	73533-33
8.	Screw, 8-32 x 5/16", R. Hd.	73533-35
9.	Screw, 8-32 x 7/8", Hex Head	73793-87
10.	Spring and Plug Assembly	64783
11.	Centering Shaft and Plate Assembly	115812
12.	Screw, 10-32 x 7/16", R. Hd.	73692-49
13.	Spring and Plug Assembly	64783
14.	Screw, 8-32 x 5/16", R. Hd.	73533-35

(2) The adjusting screw (Item 9) should be set to align the tips of the 20 rocker arms (Fig. 25, Item 1) with 10 selector pins number 3, A through K, and 10 selector pins number 8, A through K. This is the normal rest position for the rotating plate and rocker arm assembly.

(3) Manually move the rotating plate and rocker arm assembly to the extreme right hand stop position with the stop bracket (Fig. 24, Item 4) resting against the stop tab (Item 6). In this position the tips of the 20 rocker arms should align with 10 selector pins number 1, A through K, and 10 selector pins number 6, A through K. Should adjustment be required the three mounting screws (Item 12) may be loosened and the stop magnet mounting plate moved to provide correct alignment.

(4) Manually hold the rotating plate and rocker arm assembly in its extreme left hand position with the stop bracket (Fig. 24, Item 4) resting against the stop tab (Item 2). In this position the tips of the 20 rocker arms should align with 10 selector pins number 5, A through K, and 10 selector pins number 0, A through K. The stop coil mounting plate may be moved to arrive at a satisfactory setting for both the right and left hand positions.

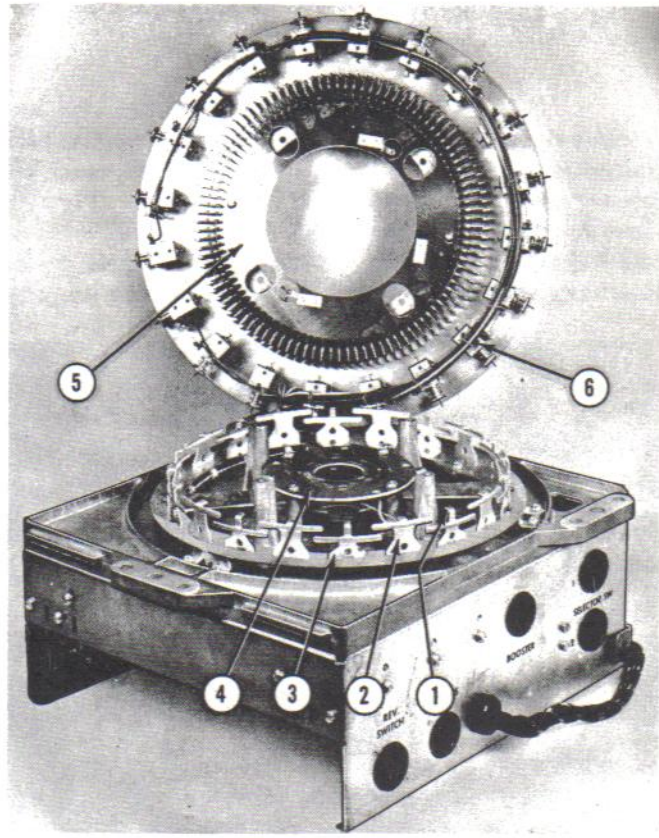


Fig. 25. ELECTRIC SELECTOR ASSEMBLY - 2510

1.	Tip of Rocker Arm	
2.	Rocker Arm, Long (10)	115788
3.	Rocker Arm, Short (10)	117692
4.	Contact Plate Assembly	66186
5.	Wobble Plate	115796
6.	Solenoid - Selector (20)	64602

(5) The right hand intermediate stop position should be checked by manually operating the stop magnet armature (Item 1) and moving the rotating plate and rocker arm assembly to position the stop bracket (Item 4) against the stop tab (Item 5) on the armature. In this position the tips of the 20 rocker arms (Fig. 25, Item 1) should align with 10 selector pins number 2, A through K, and 10 selector pins number 7, A through K. Should adjustment be required the stop tab (Fig. 24, Item 5) may be formed.

(6) The left hand intermediate stop position should be checked in the same manner as for the right hand intermediate stop. The stop bracket (Fig. 24, Item 4) should be manually held against the stop tab (Item 3) on the stop magnet armature. In this position the tips of the 20 rocker arms (Fig. 25, Item 1) should align with 10 selector pins number 4, A through K, and 10 selector pins number 9, A through K. Should adjustment be required the stop tab (Fig. 24, Item 3) may be formed.

g. ROTATING PLATE AND ROCKER ARM ADJUSTMENT - 2504

(1) The rotating plate and rocker arm assembly on the 104 electric selector can best be adjusted with the electric selector removed from the phonograph. The tips of the rocker arms (Fig. 26, Item 8) should be aligned with the 26 selector pins in the "A" group when the rotating plate is held in its normal rest position by its retracting spring (Item 1).

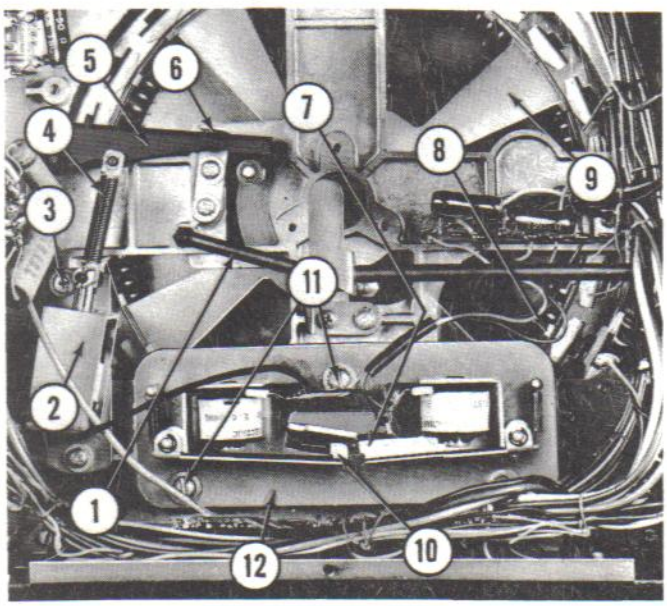


Fig. 26. ELECTRIC SELECTOR ASSEMBLY - 2504

1.	Spring - Rocker Plate Return	64781
2.	Solenoid, Driver	64722
3.	Screw, 8-32 x 5/16", R. Hd.	73533-35
4.	Spring and Plug Assembly	64783
5.	Pin, Hub and Arm Assembly	64637
6.	Stop Bracket, Drive Arm	66989
7.	Stop Arm Assembly, R. H. "C" Setting	64653
8.	Rocker Arm Tip	
9.	Rotating Plate	64609
10.	Stop Arm Assembly, L. H. "B" Setting	64654
11.	Screw, 10-32 x 7/16", R. Hd.	73692-49
12.	Mounting Plate and Magnet Assembly	64645

Adjustment may be accomplished by loosening the three screws (Fig. 26, Item 11) and moving the stop coil mounting plate (Item 12). Manually hold the rotating plate and rocker arm assembly to the extreme right hand stop position and check the alignment of the tips of the 26 rocker arms with the 26 selector pins in the "D" group. The stop coil mounting plate (Item 12) may be moved to obtain a satisfactory alignment at both "A" and "D" groups.

The alignment of the rocker arms with 26 pins in the "B" group should be checked by manually holding the "B" stop coil armature (Item 10) in its actuated position and turn the rocker plate assembly until its stop bracket rests against the stop tab on the armature (Item 10). The tips of the rocker arms should be in alignment with the 26 selector pins in the "B" group. Should adjustment be required the stop tab on the armature may be formed. The "C" stop position should be checked in the same manner by manually holding the "C" stop coil armature (Item 7) in its actuated position and turning the rocker plate until its stop bracket rests against the stop tab on the armature (Item 7). The tips of the 26 rocker arms should align with the 26 selector pins in the "C" group. Should adjustment be required the stop tab on the armature (Item 7) may be formed.

(2) DRIVER SOLENOID ADJUSTMENT - 2504

The driver solenoid (Fig. 26, Item 2) serves to rotate the rocker plate assembly (Item 9) to either the B, C or D stop positions as selected. The solenoid plunger is connected to the pin, hub and drive arm assembly (Item 5) by a spring and plug assembly (Item 4). The alignment of the solenoid and plunger may be adjusted to provide straightline action of the plunger within the solenoid by loosening the solenoid bracket mounting screws, one of which is shown at Item 3, and moving the solenoid. The mounting holes are located so that when the rocker plate assembly is in the "D" group position and the plunger is bottomed in the solenoid the spring (Item 4) is stretched 1/32" to 1/16". Should this condition not exist examine the linkage and studs for loose fittings, loose mounting of the driver solenoid or the plugs in the spring and plug assembly (Item 4) not properly mounted. The plugs are threaded and screw into the ends of the spring.

(3) STOP BRACKET ADJUSTMENT

With the rotating plate and rocker arm assembly held in its normal rest position by its retracting spring (Fig. 26, Item 1), set the stop bracket (Item 6) to provide 1/32" clearance between the drive arm assembly (Item 5) and the roller and bearing assembly on the rotating plate.

The rotating plate and rocker arm assembly must turn freely on its three nylon roller assemblies. To check for freedom of movement the electric selector assembly must be in its normal upright position with the rotating plate and rocker arm assembly resting on the three nylon guide rollers.

h. DRIVER SOLENOID ADJUSTMENT - 2510

(1) Manually hold the right hand driver solenoid plunger bottomed in the solenoid. The coupling spring of the plug and spring assembly (Fig. 24, Item 10) should stretch 1/16" while the stop bracket (Item 4) on the rotating plate and rocker arm assembly is held firmly against the extreme right hand stop position (Item 6). Should adjustment be required the solenoid mounting bracket may be moved by loosening the two mounting screws, one of which is shown at Item 8. It is important to maintain the straight in-line position between the solenoid and plunger.

(2) The left hand driver solenoid plunger should be checked by manually holding the plunger bottomed in the solenoid. The coupling spring (Item 13) should stretch 1/16" while the stop bracket (Item 4) on the rotating plate and rocker arm assembly is firmly held against the extreme left hand stop (Item 2). Should adjustment be required the solenoid mounting bracket may be moved by loosening the two mounting screws, one of which is shown at Item 14.

i. ELECTRIC SELECTOR CENTERING

(1) Centering of the 200 selection electric selector assembly must be carefully done whenever the electric selector assembly is removed from the changer mechanism. The assembly is held in position by two mounting screws (Fig. 27, Item 6) and by the mounting plate and silk screen assembly (Fig. 22, Item 7) at the rear of the changer. Observe the caution label on the mounting plate and only remove the upper two screws (Fig. 28, Item 2), holding the L bracket (Item 4) to the casting. It should be noted that there has been a change in the mounting plate and silk screen assembly after April 16, 1960. Therefore, when sending replacement electric selector assemblies to operators it will be necessary to have the correct mounting plate for the particular phonograph needing the replacement. Discussion of the alignment procedure will follow after the centering procedure.

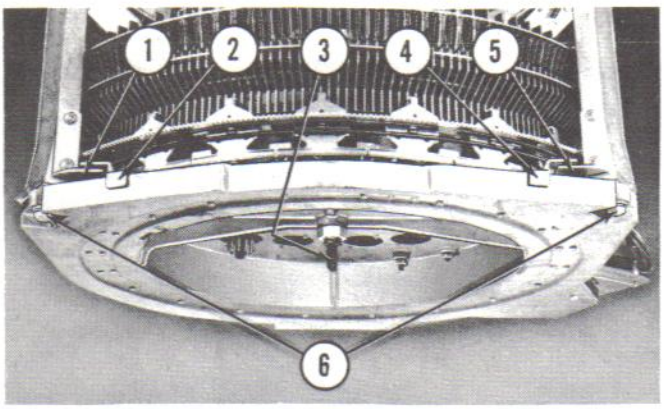


Fig. 27. ELECTRIC SELECTOR CENTERING

1.	Guide Bracket, L. H., Selector Support Casting	68757
2.	Guide Bracket, L. H.	68759
3.	Centering Shaft	69247
4.	Guide Bracket, R. H.	68760
5.	Guide Bracket, R. H., Selector Support Casting	68758
6.	Mounting Screws, (2), 1/4-20 x 1, Hex Head	73793-150

(2) The front edge of the electric selector casting is provided with two guide brackets (Fig. 27, Items 2 & 4) which fit over two guide plates (Items 1 & 5) on the front hangers. The engagement of these brackets and hangers serves to support the front of the electric selector assembly, while the rear mounting plate and L bracket is loosely fastened by its two screws. The centering shaft, number 69247 (Fig. 27, Item 3) or a number two Phillips screw driver should be inserted through the center bushing of the electric selector and into the main selector shaft. The two front mounting screws and the two screws at the rear should be turned in by hand until the mounting surfaces make contact. While in this loose condition the electric selector assembly should be positioned so that the centering shaft (Item 3) slides freely in and out of the main shaft. Carefully maintain this alignment and tighten the four mounting screws. As a final test for correct centering of the electric selector, insert the centering shaft (Item 3) into the main selector shaft. One full turn of the record carrier in a clockwise direction only should cause the centering shaft to drop out. If the centering shaft does not drop out, the mounting screws should be loosened and the assembly re-centered. When centering of the electric selector assembly has been completed the selector crank arm adjustments should be checked and the mechanism checked for correct selections.

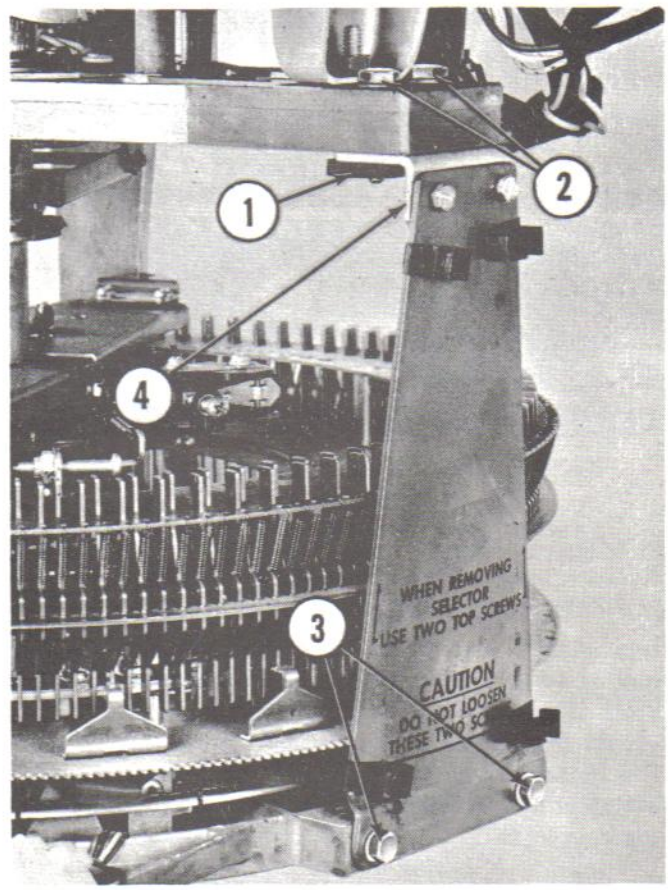


Fig. 28. ELECTRIC SELECTOR ADJUSTMENT - 2500

1.	Tapping Plate	117243
2.	Screw, 1/4-20 x 1", Hex Head	73793-150
3.	Screw, 10-32 x 1/2", Hex Head	73793-118
4.	Bracket, Support Plate	117242

(3) When the electric selector assembly must be exchanged on a 200 selection phonograph involving different rear support plates the following procedure should be used:

(a) Mount the correct rear support plate to the electric selector assembly with the two bottom screws as shown in Figure 28, Item 3, and leave the screws loose enough for the plate to slide on its elongated holes. Follow the mounting procedure outlined under paragraph (2) above up to the point where the assembly is centered with the main shaft but the front and lower rear mounting screws are still loose. Then turn the record carrier by hand until H-1 record compartment is indexed at the left hand record lift arm. Going to the rear of the phonograph, the tip and mounting bracket on the selector crank arm which engages the inner selector pins will be visible to the left of the rear support plate as shown in Figure 29, Item 1. While in this position the elec-

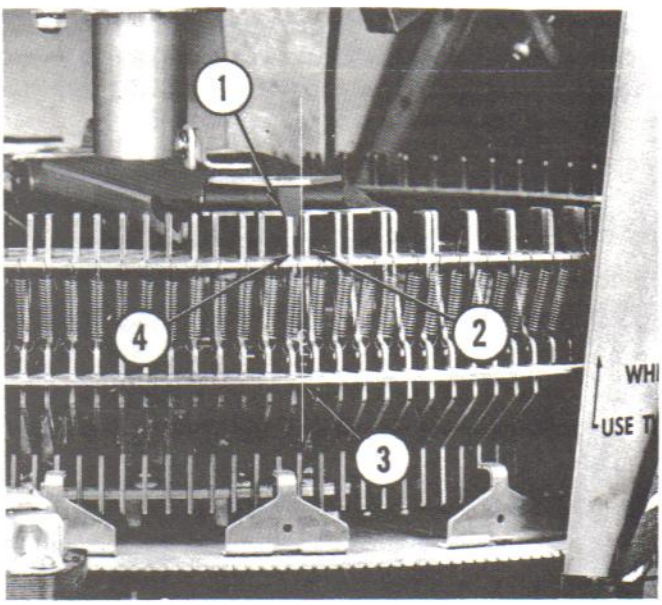


Fig. 29. ELECTRIC SELECTOR ADJUSTMENT - 2500

1. Tip and Mounting Bracket, Inner	110936
2. Selector Latch Pin, H-1	110941
3. Center Line, Location of Tip (Item 1)	
4. Selector Latch Pin, H-2	110942

tric selector assembly may be turned in either direction on its mounting to locate H-1 selector pin to the right of the tip (Item 2) on the selector arm. The tip should be approximately on the center line between H-1 inner pin and H-2 outer pin as shown in Item 3. Maintain this alignment and tighten the lower mounting screws (Fig. 28, Item 3) in the rear support plate. Continue by following the directions under paragraph (2) for centering the electric selector and tighten all mounting screws, checking to make sure that the centering shaft will slide freely in and out of the main shaft. Following the installation of the replacement electric selector and rear support plate it will be necessary to readjust the selector crank arm actuating screw, the stop screw, the kick-off screw and possibly the selector crank clearance and cancel adjustment. These adjustments will be found in the Index to Adjustments by the same names and should be set in the sequence given.

j. CENTERING OF THE 100 SELECTION ELECTRIC SELECTOR

(1) Centering of the 100 selector pin assembly normally is not required if the original unit is retained with its changer. However, where selector pin assemblies are interchanged on the 100 selection changer, the guide plates, one of which is shown in Figure 30, Item 3, should be loosened. The assembly should be loosely mounted on the three studs (Item 1) and centering shaft number 69247 or a number 2 Phillips screw driver inserted through the center bushing (Fig. 24, Item 11) into the main shaft. Tighten the guide plate retaining screws (Fig. 30, Item 4) and the three mounting screws (Item 2). Remove the centering shaft and check the selector crank arm adjustments. Also check the mechanism for correct selections.

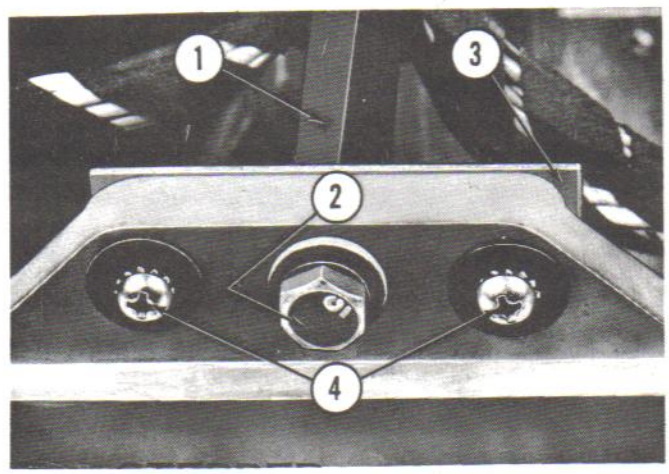


Fig. 30. GUIDE PLATES AND MOUNTING

1. Stud (3)	2504 - 64543	2510 - 115782
2. Screw (3), 1/4-20 x 1-1/2 Cap.		73793-152
3. Guide, Selector Mounting Stud		61850
4. Screw, 8-32 x 3/4, R. Hd.		73533-40

k. CENTERING OF THE 104 SELECTION ELECTRIC SELECTOR

Centering of the 104 selector pin assembly has been carefully done at the factory and if the original unit is kept with its changer it will not need re-centering provided the alignment plates, one of which is shown in Figure 30, Item 3, are not disturbed. The assembly may be easily removed by disengaging all cable plugs and removing the three mounting screws (Item 2). The screws (Item 4) should not be loosened. However, if a selector pin assembly should be mounted on another changer the alignment plates (Item 3) must be loosened. The pin assembly should be loosely mounted on the three studs (Item 1) and the centering clip number 61672-6 (Fig. 31, Item 2) snapped in place on the selector crank arm (Item 1). Shift the pin assembly on its mounting studs to obtain a uniform clearance between the centering clip and all selector pins as shown in Figure 31, Item 3.

Tighten the alignment plate retaining screws and the three mounting screws. Check the selector crank arm adjustments and the mechanism for correct selections.

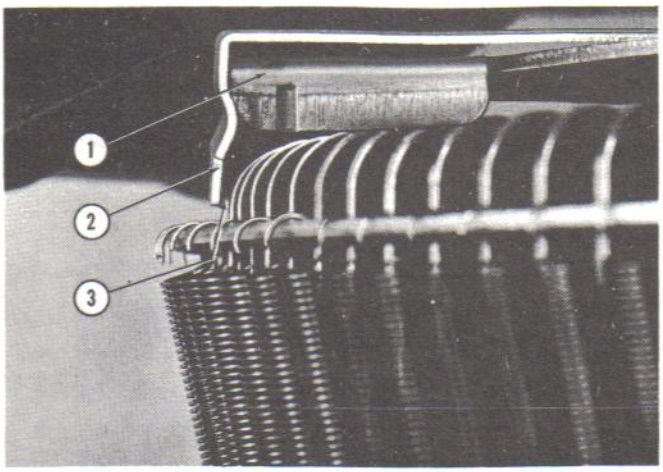


Fig. 31. ELECTRIC SELECTOR CENTERING

1.	Selector Crank	59519
2.	Centering Clip	61672-6
3.	Uniform Clearance at all Pins	

4. RECORD CHANGER ADJUSTMENTS

a. SELECTOR CRANK ARM CLEARANCE ADJUSTMENT - 2500-2510

The tips of the selector crank arms should clear the selector pins when in their normal latched position by 1/16". To vary this clearance use the adjusting screw (Fig. 32, Item 5). The 2510 has this adjusting screw in the same location but is adjusted from the upper end.

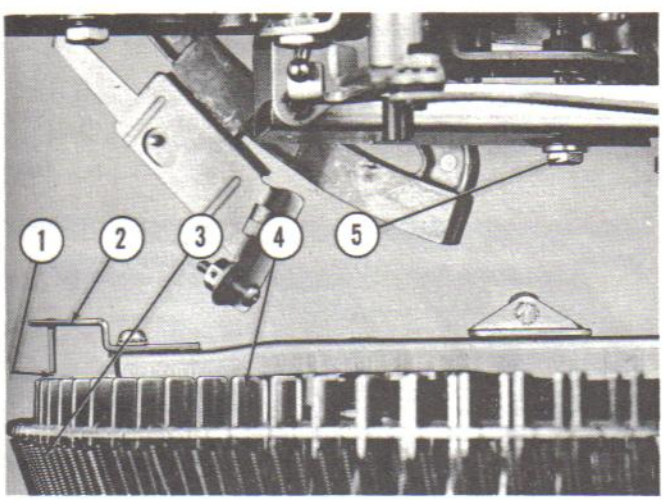


Fig. 32. SELECTOR CRANK CLEARANCE ADJUSTMENT

1.	Dimension 1/16"	
2.	Tip and Mounting Bracket Assembly, Outer	110930
3.	Spring	110480
4.	Selector Latch Pin, Outer	110942
5.	Screw, Crank Arm Clearance Adjustment - 2500	73793-124
	- 2510	73793-125

b. RECORD LOADING LEVER - 2500-2510

(1) The record loading lever mounted at the front center of the chassis mounting plate (Fig. 33, Item 2) is used to cut the power OFF the changer motor and raise the selector crank arms to a position where they will clear any released selector pins, thereby permitting servicing of the phonograph without cancelling selections which might be made. Should a record be in play position, the record loading lever should be moved to the left, the record playing allowed to trip and return to the record carrier before attempting to turn the record carrier by hand.

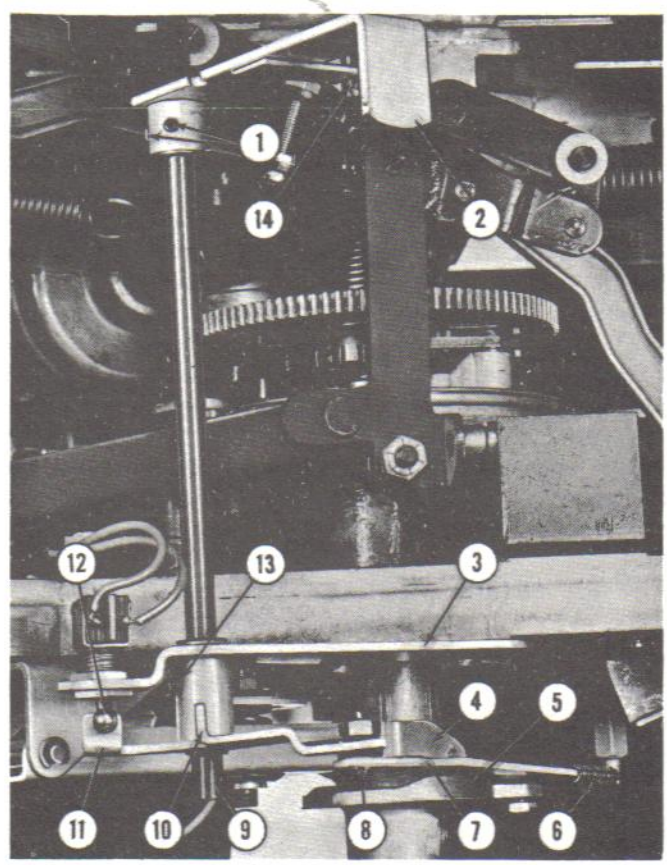


Fig. 33. RECORD LOADING LEVER ADJUSTMENT, 2500-2510

1.	Screw (2)	73511-29
2.	Release Lever and Hub Assembly	65744
3.	Switch Mounting Bracket	65728
4.	Stop Lever	68526
5.	Sleeve and Bushing Assembly, Cancel	68483
6.	Spring - Release Lever	68782
7.	Link, Release Lever	68567
8.	Pin	68491
9.	Shaft	68558
10.	Actuator Arm and Hub Assembly	68559
11.	Tab - Switch Operating - Actuator Arm and Hub Assem.	68559
12.	Toggle Switch	53648
13.	Roll Pin	73782-48
14.	Pin, Release Lever Stop	65516

(2) The release lever (Item 2), held to the shaft (Item 9) by the set screws (Item 1), should be positioned so that the toggle switch (Item 12) will be actuated in either direction by the tabs (Items 10 &

11) on the switch actuator arm and hub assembly with minimum clearance between the switch lever and actuator tab. In the load position the tips of the selector crank arms should clear any released selector pin. When in the play position the tips of the selector crank arms should clear all latched selector pins by approximately 1/16".

c. RECORD LOADING LEVER - 2504

The record loading lever and switch on the 2504 is mounted on the top front edge of the chassis mounting plate. No adjustment is needed. However, the record carrier is so arranged that it can be disengaged from the main selector shaft to facilitate servicing the phonograph. To disengage the record carrier, operate the record loading lever to its load position. Release any selector pin and manually rotate the record carrier until the selector crank arm engages the released pin. Firmly force the record carrier clockwise until the spring loaded locking lever on the underside of the record carrier slips out of engagement with the pin and hub assembly on the main selector shaft. The record carrier will turn easily on its ball bearing rollers. One full revolution of the record carrier will return it to the point of engagement, when a firm push will cause the spring loaded locking arm to snap into engagement with the pin and hub assembly. Resetting the loading lever to play position actuates the toggle switch to turn on the power to the changer motor and to re-engage the back stop pawls with the index wheel.

d. SELECTOR CRANK ARM CLEARANCE ADJUSTMENT - 2504

This adjustment is made by turning the adjusting screw (Fig. 34, Item 3) to provide 1/32" clearance (Item 1) between the crank arm and the tips of the selector pins in their latched position.

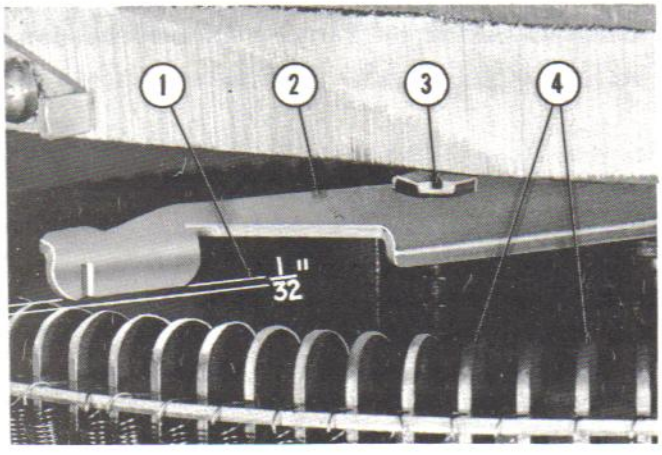


Fig. 34. SELECTOR CRANK ARM CLEARANCE - 2504

1.	Dimension 1/32"	
2.	Selector Crank	59519
3.	Screw, 8-32 x 1-3/8", Hex Head	73793-270
4.	Latch Pin	64606

e. CANCEL ARM ADJUSTMENT - 2500-2510

With a selector pin released and the tip of the selector crank arm engaged with the released selector pin (Fig. 35, Item 12) advance the mechanism in its cycle until the peak of the cancel lobe on the main cam (Item 9) has depressed the cancel lever to its maximum stroke. Stop the mechanism at this point by turning off the service switch. The selector pin should be reset with 1/64" to 1/32" clearance between the head of the adjusting screw and the washers as shown at Item 8.

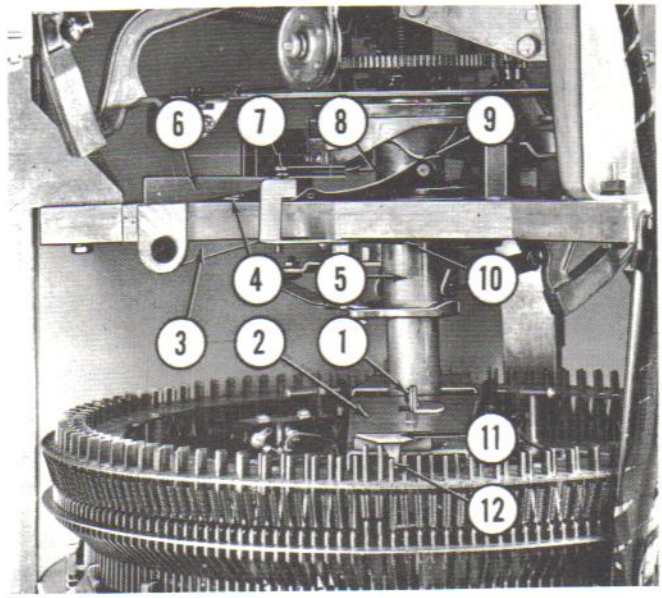


Fig. 35. CANCEL LEVER ADJUSTMENT - 2500

1.	Actuator Arm and Link Assembly	110939
2.	Selector Crank and Bracket Assembly	110944
3.	Cancel Arm, Lower Assembly	59661
4.	Spring - Cancel Arm Return	65809
5.	Sleeve and Bushing Assembly	68483
6.	Cancel Casting	59631
7.	Screw, 10-32 x 1-3/4", Hex Head	73793-125
8.	Dimension 1/32" overtravel	
9.	Point of Maximum Actuation	
10.	Cancel Arm - Lower Assembly	59661
11.	Tip and Mounting Bracket Assembly - Outer	110930
12.	Latch Pin, Outer	110942

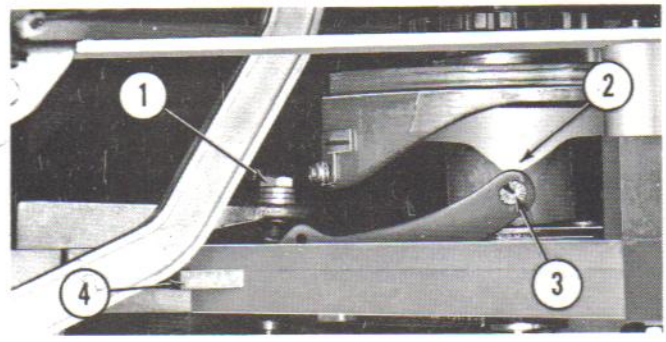


Fig. 36. CANCEL ARM ADJUSTMENT - 2504

1.	Screw, 10-32 x 1-3/4", Hex Head	73793-125
2.	Cancel Position, Main Cam and Bushing Assembly	62792
3.	Cancel Lever, Hub and Roller Assembly	59513
4.	Stop, Record Lift Arm "Down" Position	

f. CANCEL ARM ADJUSTMENT - 2504

The mechanism should be in its normal rest position with the roller on the cancel lever, hub and roller assembly (Fig. 36, Item 3) held against the main cam by its return spring. The adjusting screw (Fig. 36, Item 1) should be set to provide 1/8" to 5/32" clearance between the tips of the lower cancel arm (Fig. 37, Item 1) and the flange on the cancel sleeve (Item 2).

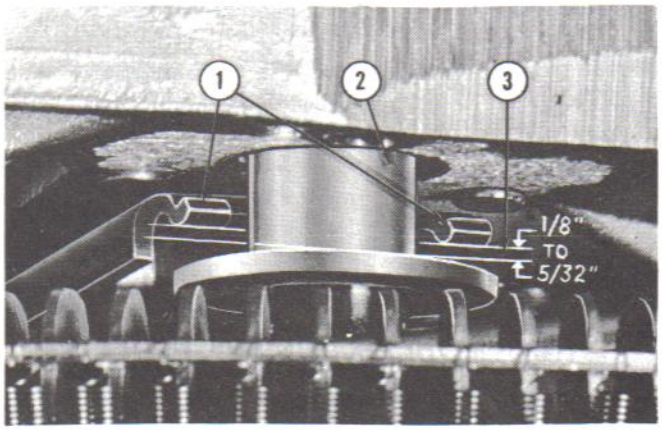


Fig. 37. CANCEL LEVER ADJUSTMENT - 2504

1.	Cancel Arm, Lower Assembly	59661
2.	Sleeve, Cancel Arm	59657
3.	Dimension 1/8" to 5/32"	

g. RECORD LIFT ARM RETRACTED ADJUSTMENT

The record lift arms are driven down by a lobe on the main cam (Fig. 38, Item 1) driving against the roller on the roller shaft, link and lever assembly (Item 5). To adjust the lift arm down position, let the mechanism stop in its normal rest position and turn the service switch off. Loosen the set screw (Item 4) and the lock nut (Item 3). Turn the adjusting screw (Item 2) in to lower both arms. They should bear against their respective stops (Fig. 36, Item 4) with sufficient tension to assure bottoming after each cycle. Tighten the lock nut (Fig. 38, Item 3) and the set screw (Item 4). The guide tips on the upper end of the lift arms should clear the lower edge of the record separators by approximately 1/4".

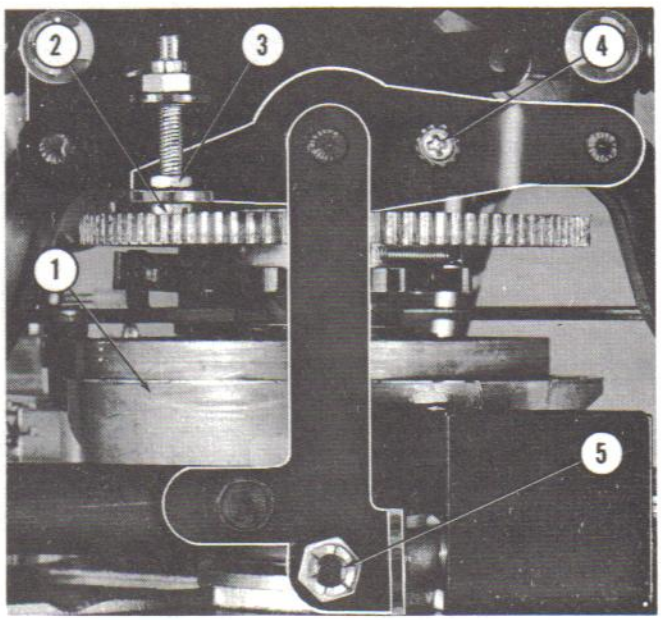


Fig. 38. RECORD LIFT ARM RETRACTED ADJUSTMENT

1.	Main Cam and Bushing Assembly	62792
2.	Screw, 10-32 x 1-1/4", Hex Head	73660-161
3.	Nut, Special	73785
4.	Screw, 8-32 x 1/4", R. Hd.	73533-34
5.	Roller Shaft, Link and Lever Assembly	59599

CAUTION:
Do not over-adjust; avoid excessive strain against the stops.

---

h. ROLLER GUIDES - RECORD LIFT ARMS - 2500

(1) The roller guides for the record lift arm spring loaded guide tips are mounted on top of the chassis mounting plate. When the arms are down the guide tips are held straight in line and centered between the guide rollers by the adjustable slotted plate (Fig. 39, Item 2).

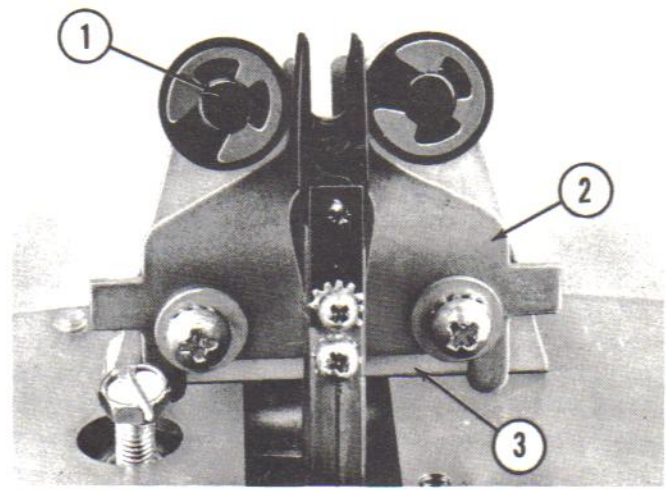


Fig. 39. BRACKET AND ROLLER GUIDE ASSEMBLY, LIFT ARM GUIDE, 2500

1.	Eccentric Stud, Lift Arm Guide	116831
2.	Plate, Lift Arm Guide	66182
3.	Bracket and Roller Assembly, Lift Arm Guide (2)	116837

(2) The eccentric stud (Item 1) should be adjusted to provide .003" to .006" clearance between the nylon rollers and the guide tips.

(3) Advance the changer in its cycle to a point where the record lift arm spring loaded guide tips clear the upper edges of the record separators and stop the mechanism by turning off the service switch. The spacing between the guide tips should be 7/16" as shown in Figure 40, Item 3. Should it be

necessary to increase this dimension the tabs (Item 2) on the nylon guide tips may be scraped or filed. Advance the mechanism to play position and turn the service switch off. Lower and raise the lift arm manually. Check to see that the guide tips leave the guide rollers with no bind and stand straight entering the record compartment. Should they run off they may be straightened by adjusting the stop (Fig. 40, Item 1).

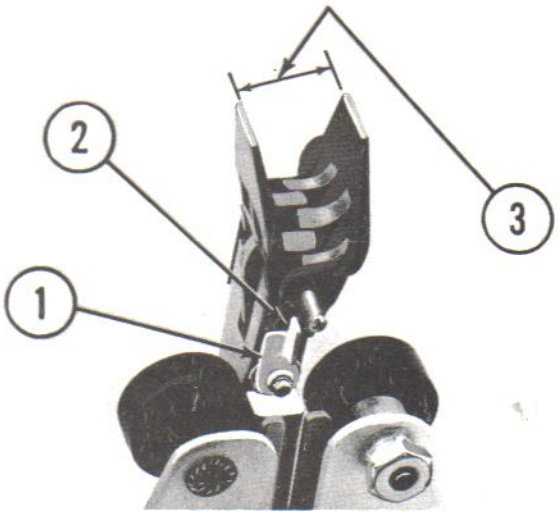


Fig. 40. BRACKET AND ROLLER ASSEMBLY, LIFT ARM GUIDE, 2500

1.	Stop, Guide Tip	65526
2.	Tabs, Nylon Guide Tip	65730 (2) R.H., 65731 (2) L.H.
3.	Dimension 7/16"	

i. RECORD LIFT ARM BRACKET AND ROLLER ASSEMBLY

The two bracket and roller assemblies, one of which is shown in Figure 39, Item 3, are the basis for the indexing procedure and are located on the chassis mounting plate by means of an assembly fixture, after which they are painted in line. The outline thus formed provides a reference for relocating the brackets should they be moved for any reason.

j. ROLLER GUIDES - RECORD LIFT ARMS - 2510-2504

The stationary guide roller (Fig. 41, Item 4) is factory set with the aid of an assembly fixture after which it is painted in line providing a fixed position for the record lift arms. The spring loaded roller (Item 3) on the adjustable mounting bracket (Item 2) should be set at the center of its adjusting range and the lift arms checked for smooth running between the guide rollers for the full length of travel. The spring tension may be varied by moving the bracket (Item 2) to provide the smooth action necessary.

k. RECORD LIFT ARM HEIGHT ADJUSTMENT

The record lift arm height adjustment may be made by stopping the mechanism in play position with a normal size record (6-7/8" diameter) clamped on the turntable. Back out the adjusting screw (Fig. 42, Item 8) until the record lift arm drags on the edge of the record. Make a scribe mark on the screw head and turn the screw in four full turns. The clearance between the edge of the record and the end of the arm should be 3/32". Both lift arms should be checked.

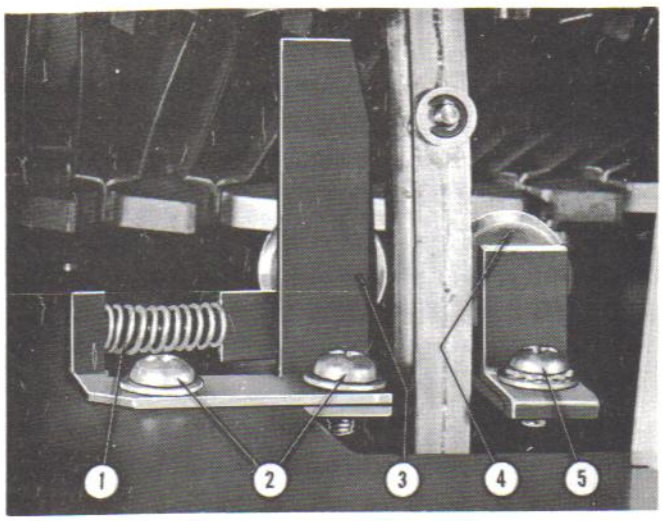


Fig. 41. ROLLER GUIDES, RECORD LIFT ARM, 2510-2504

1.	Spring (2)	60677
2.	Screws, 10-32 x 5/16" R.H. Type 23	73568-106
3.	Mounting Bracket and Roller Assembly	60658
4.	Mounting Bracket and Roller Assembly	59704
5.	Mounting Screw, Bracket and Roller Assembly	59704

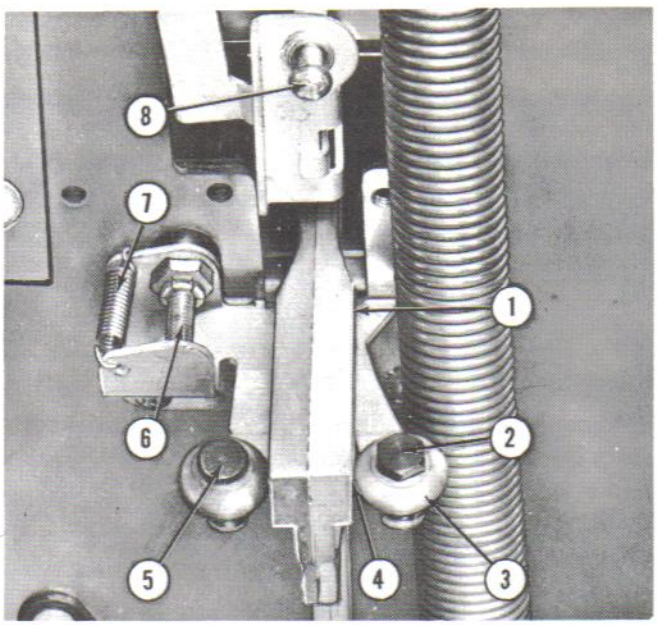


Fig. 42. LIFT ARM ADJUSTMENT, 2500

1.	Ramp, Record Lift Arm	
2.	Eccentric Stud	65986
3.	Roller	65989
4.	Clearance .005"	
5.	Bracket and Roller Assembly L.H.	65885
6.	Screw, 10-32 x 1-1/4" Hex Hd.	73660-161
7.	Spring	65958
8.	Screw, Stop Adjusting, 8-32 x 3/4" R.H.	73503-91

1. RECORD TRACK STOP BRACKET ADJUSTMENT

The record track stop brackets may be adjusted by stopping the mechanism in play position with a normal size (6-7/8" diameter) record clamped on the turntable. Loosen the adjusting screws (Fig. 43, Item 3) and insert a nickel (Item 1) between the record track (Item 5) and the bracket (Item 2). Slide the bracket up until the record track contacts the edge of the record as shown at Item 4. Tighten the screws (Item 3). Both stop brackets should be adjusted to this dimension.

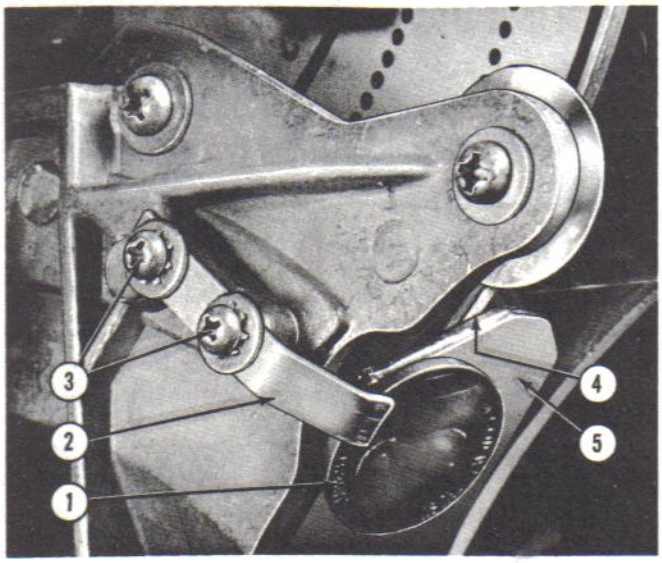


Fig. 43. RECORD TRACK STOP BRACKET ADJUSTMENT

1.	Gauge, Nickel	
2.	Stop Bracket (2)	59434
3.	Screw, 4-40 x 5/16" R.H. Sems	73533-3
4.	Point of Contact	
5.	Track	59425

m. RECORD LIFT ARM CENTERING ADJUSTMENT

(1) The record lift arms on the 200 selection mechanism differ from those on the 100 or 104 selection mechanism in that they run free of the guide rollers until the arms are nearly at maximum height, at which time the ramp (Fig. 42, Item 1) on the lower end of the lift arm contacts the rollers (Item 3) on the spring loaded bracket mounted on the underside of the chassis mounting plate. The ramp should enter and leave the rollers freely with a minimum clearance of .005" between the rollers and ramp as indicated at Item 4. This dimension may be adjusted while the lift arm is in the raised position by loosening the screw in the hex head eccentric stud (Item 2) and turning the eccentric stud for the correct clearance. Tighten the screw and manually lower and raise the lift arm to check for freedom of action.

(2) With the mechanism still in play position, clamp a perfectly flat record on the turntable and check the alignment of the lift arm with the record. The record should center with the lift arm as shown in Figure 44, Item 1. Should adjustment be required, turning the screw (Fig. 42, Item 6) will center the lift arm with the record. Both lift arms should be checked for centering.

(3) The 100 and 104 record changer lift arms are in contact with their guide rollers at all times. The above alignment has been factory set by forming and should need no adjustment.

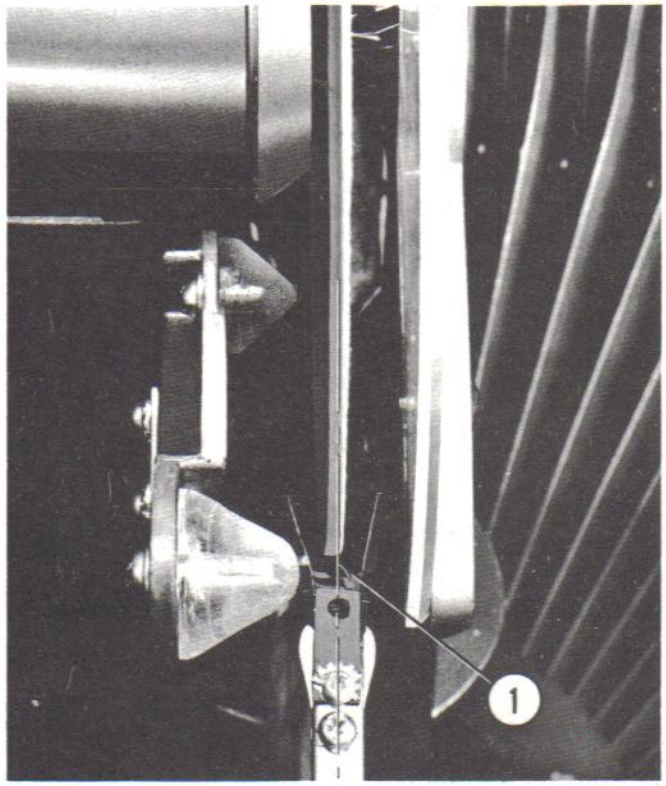


Fig. 44. RECORD LIFT ARM CENTERING, 2500

1. Center Line

n. BACK STOP PAWL ADJUSTMENT - 2500

The two back stop pawls are located on top of the chassis mounting plate to the right and left of center at the rear. Each of the back stop pawls will be adjusted independently. However, the adjustment procedure will be the same in both cases. Before proceeding with adjustment of the back stop pawls, the record changer should, otherwise, be in good running order.

(1) To adjust the left hand back stop pawl (Fig. 45, Item 3) it will be necessary to move to the rear of the changer and loosen the two screws (Item 2) shown on the right as viewed from the rear.

(2) Turn the record carrier slowly until the center line of one record compartment is in accurate alignment with the left hand record lift arm as shown

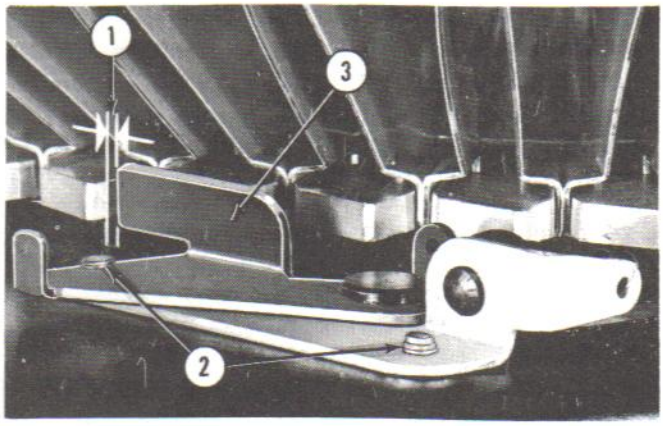


Fig. 45. BACK STOP PAWL ADJUSTMENT, 2500

1. Dimension 1/16" to 3/32" overtravel
2. Screw, 10-32 x 5/16" R.H. Sems 73676-47
3. Back Stop Pawl Assembly (2) 65890

in Figure 46. Carefully maintain this alignment and set the pawl to engage the adjacent tooth of the index wheel as shown in Figure 47. The depth of engagement should be 1/32" to 1/16" below the tip of the tooth as indicated at Item 1. The adjustment of the record compartments should be held within a tolerance of 1/32". The alignment should be checked in at least six record compartments spaced around the carrier.

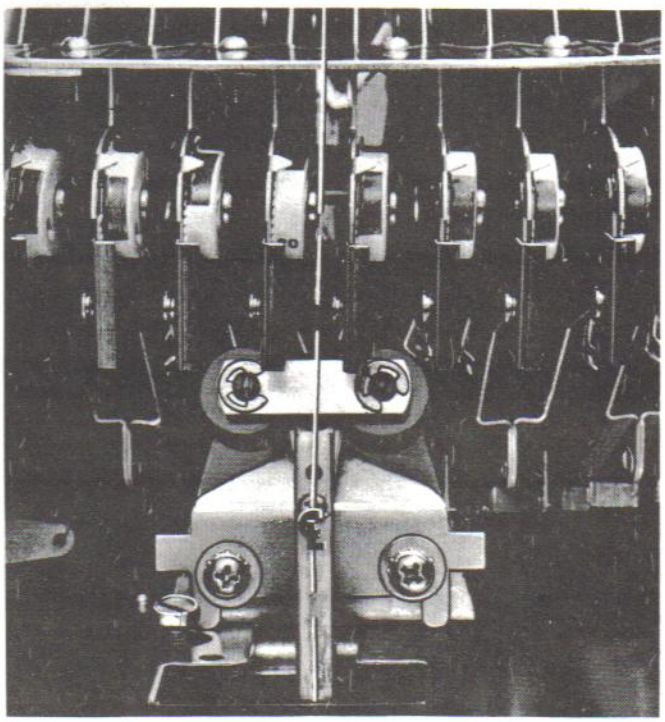


Fig. 46. BACK STOP PAWL ADJUSTMENT, 2500

1. Center Line for Adjustment

(3) The right hand back stop pawl is adjusted in the same manner by loosening the right hand back stop pawl mounting screws, manually move the record carrier slowly until the center line of one record compartment is in accurate alignment with the right hand record lift arm. Maintain this alignment and set the right hand back stop pawl to engage the adjacent tooth of the index wheel at a depth of 1/32" to 1/16" as shown in Figure 47, Item 1. Check at least six record compartments for proper alignment and six stop positions. Alignment should be held to a tolerance of 1/32 of an inch.

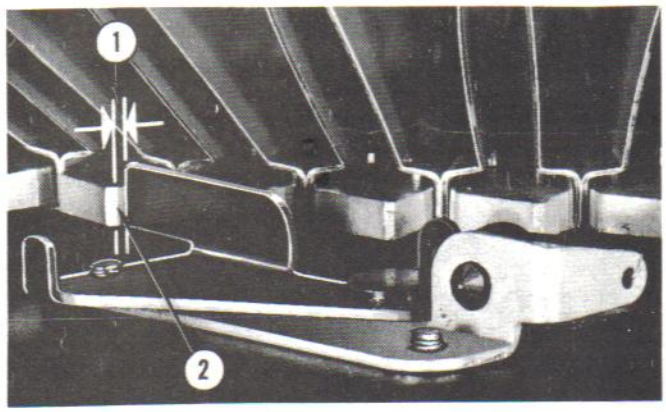


Fig. 47. BACK STOP PAWL ADJUSTMENT, 2500

1. Dimension 1/32" to 1/16", Tip of Tooth to Face of Pawl
2. Tip of Tooth

(4) The same procedure will be followed to set the back stop pawls on the 100 selection mechanism.

(5) The back stop pawls on the 104 selection mechanism are located at the front of the chassis shelf to the left and right of center. Figure 48, Item 3 shows the left hand record lift arm on the center

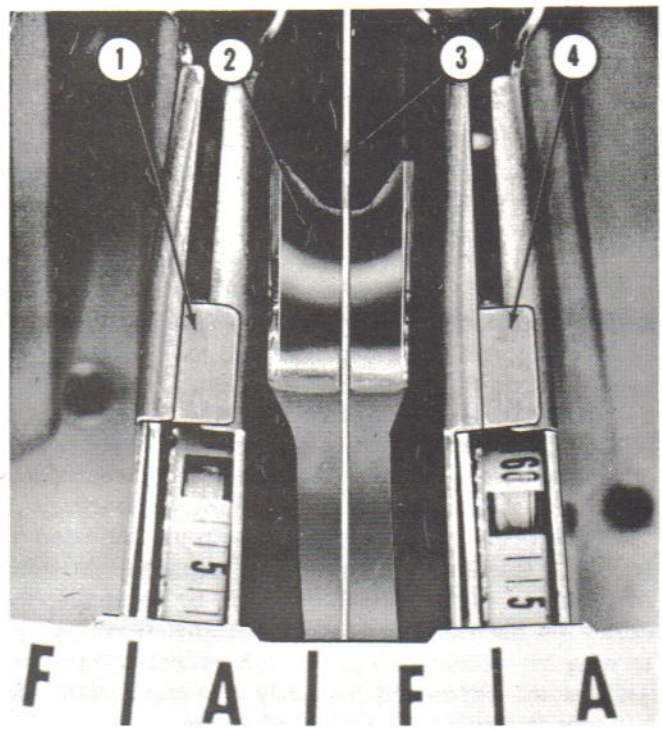


Fig. 48. BACK STOP PAWL ADJUSTMENT, 2510-2504

3. Center Line for Adjustment

line of one record compartment. The setting procedure is the same as described for the 2500 model.

NOTE: Whenever the back stop pawls are readjusted the selector crank arm adjustments must be checked.

o. ACTUATING SCREW, PLUNGER RELEASE ADJUSTMENT - 2504

(1) Turn the power off.

(2) Make sure that the reversing switch actuating plunger is latched in its "down" position by manually depressing the upper cancel arm (Fig. 36, Item 3).

(3) Release an odd number selector pin for the left hand back stop pawl such as A-13. The selector pin chosen should stop the selector crank in a convenient position for adjustment of the actuating screw (Fig. 49, Item 2).

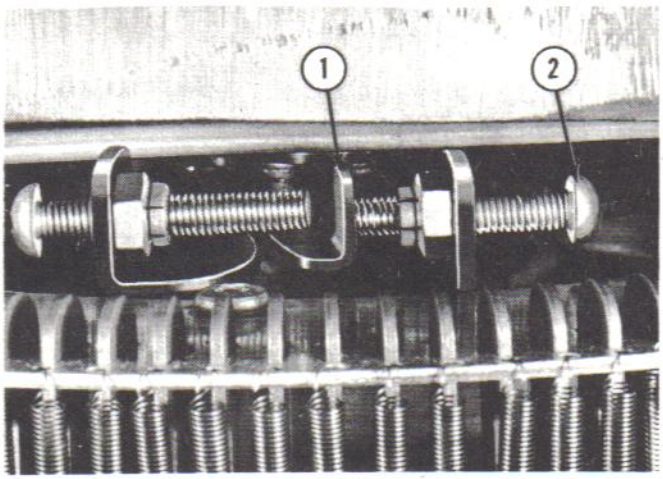


Fig. 49. ACTUATING SCREW, PLUNGER RELEASE, 2504

1.	Release Arm, Switch Plunger	59572
2.	Screw, 10-32 x 1" R.H.	73502-95

(4) Turn the record carrier slowly by hand until the selector crank arm engages the released selector pin. Continue by turning the changer motor shaft clockwise which will drive the actuating screw (Fig. 49, Item 2) forward. The forward movement of the actuating screw drives the latch lever (Item 1) which releases the spring loaded plunger (Fig. 52, Item 5). The actuating screw should be set to release the plunger when the back stop pawl (Fig. 45, Item 1) has overtraveled the correct tooth, as selected, on the index wheel a distance of 1/16" to 3/32".

(5) Relatch the plunger by depressing the upper cancel arm (Fig. 36, Item 3) and release an even number selector pin to check the timing of the plunger release with engagement of the right hand back stop pawl. The plunger release should occur when the right hand back stop pawl has overtraveled

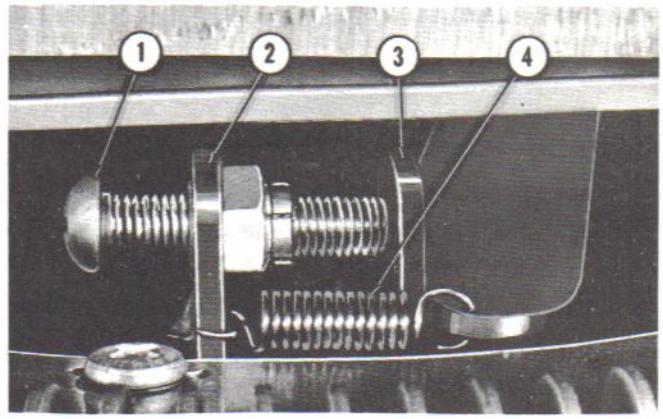


Fig. 50. KICKOFF SCREW ADJUSTMENT, 2504

1.	Screw, 10-32 x 1" R.H.	73502-95
2.	Adjusting Bracket and Stop Nut Assembly	59521
3.	Mounting Plate Assembly	59516
4.	Spring, Kickoff	59614

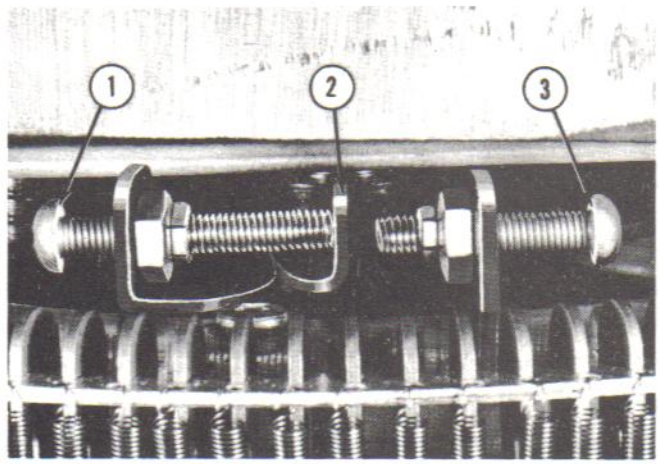


Fig. 51. STOP SCREW ADJUSTMENT, 2504

1.	Stop Screw	73502-97
2.	Release Arm	59572
3.	Actuating Screw, 10-32 x 1" R.H.	73502-95

the correct tooth, as selected, 1/16" to 3/32" providing the electric selector assembly has been carefully centered and the back stop pawls are correctly set.

(6) The timing between plunger release and back stop pawl engagement should be checked in eight different sectors of the record carrier. If the plunger releases too early, before the back stop pawl has engaged the correct tooth on the index wheel, it will result in wrong selections. If the plunger release occurs too late it may result in wrong selections by driving the index wheel far enough to engage the wrong back stop pawl and bind the selector crank arm against the selector pin. This may also cause the same selection to repeat.

p. STOP SCREW ADJUSTMENT - 2504

(1) Make sure that the reverse switch actuating plunger (Fig. 52, Item 5) is latched in its "down"

position by depressing the upper cancel arm (Fig. 36, Item 3).

(2) Turn the stop screw (Fig. 51, Item 1) in until it touches the latch lever (Item 2).

(3) Hold the latch lever against the stop screw (Item 1) while turning the screw out, until the plunger is released. Turn the screw out an additional half turn for overtravel.

(4) Check this adjustment with the power "off" by releasing an odd number selector pin. Manually turn the record carrier until the crank arm engages the released pin and releases the plunger. Continue turning the record carrier by manually turning the changer motor shaft clockwise until the plunger latch lever (Fig. 51, Item 2) is held firmly against the stop screw (Item 1) by the actuating screw (Item 3). The overtravel between the left hand back stop pawl and the correct tooth on the index wheel should be 3/16 of an inch maximum.

q. KICKOFF SCREW ADJUSTMENT - 2504

The adjusting screw (Fig. 50, Item 1) for centering of the selector crank arm is mounted on the end of the "adjusting bracket and stop nut assembly" opposite the plunger latch stop screw and actuating screw. This screw provides adjustment of the selector crank "at rest position," to avoid interference with the release of adjacent selector pins (Fig. 53, Item 1).

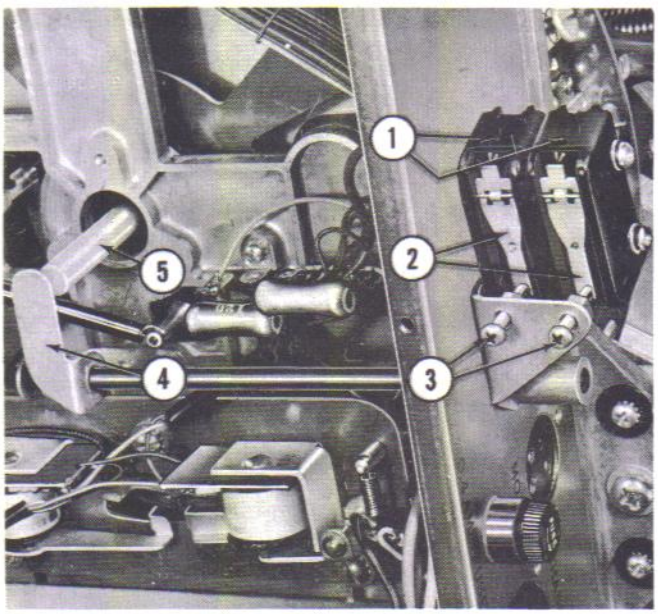


Fig. 52. PLUNGER RELEASE AND REVERSE SWITCH ADJUSTMENT, 2504

1.	Micro Switch (2)	110558
2.	Switch Actuators	
3.	Screw, 6-32 x 7/8" R.H.	73503-73
4.	Hub and Lever Assembly	64663
5.	Actuator and Plunger Assembly	115144

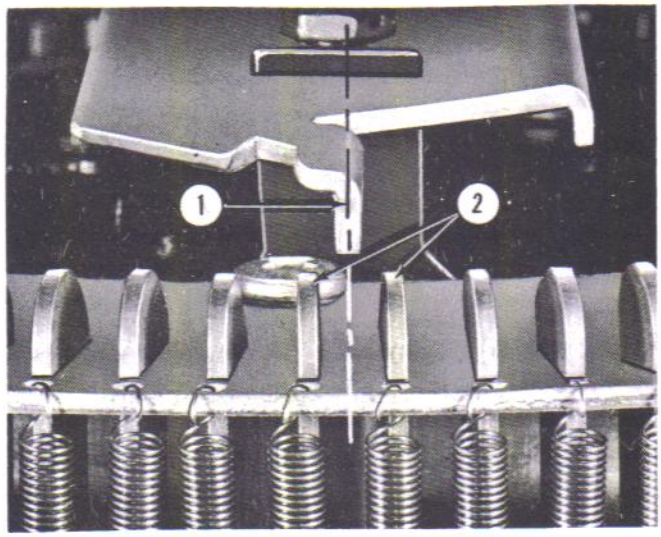


Fig. 53. SELECTOR CRANK ARM CENTERING, 2504

1. Center Line
2. Selector Latch Pin — 64606

(1) With the reverse switch actuating plunger latched in its "down" position and the power turned "off," release any convenient selector pin.

(2) Turn the record carrier slowly, by hand, until the selector crank is stopped by the released pin and the actuating plunger is released.

(3) Make sure that the tooth on the index wheel corresponding to the number of the released selector pin has engaged its back stop pawl and is held firmly against it.

(4) Cancel the selector pin by depressing the cancel lever (Fig. 36, Item 3).

(5) Adjust the kickoff screw (Fig. 50, Item 1) so that the tip of the crank rests midway between selector pins as shown in Figure 53.

r. ACTUATING SCREWS, MICRO REVERSE SWITCHES - 2504

To adjust the reverse switches (Fig. 52 Item 1) turn the service switch "off." Release any selector pin and manually rotate the record carrier until the selector crank arm engages the selector pin and releases the latch plunger. The actuating screws (Item 3) should be set to close both micro switches (Item 1) with 1/32" overtravel. Reset the actuating plunger by depressing the upper cancel lever (Fig. 36, Item 3). Manually operate each individual micro switch actuator (Item 2). Each switch should reset with 1/32" overtravel of the actuator.

s. ACTUATING SCREW ADJUSTMENT CARRIAGE SWITCH - 2500-2510

The 2500 and 2510 electric selectors use a reversing relay instead of two mechanically operated micro switches to reverse the changer motor.

Therefore, the timing of the reverse relay will be controlled by the closing of the carriage switch (Fig. 54, Item 2) when actuated by the adjusting screw (Item 3).

(1) Turn the service switch "off" and release an odd number (inner) selector pin. Pin number H-7 is suggested for making this adjustment on the 2500 while pin number D-9 is convenient on the 2510 model.

(2) Rotate the record carrier by hand until the selector crank arm engages the released pin. Continue by manually turning the changer motor shaft clockwise until the carriage switch (Fig. 54, Item 2) closes, energizing the reverse relay. As viewed from the rear of the mechanism, the right hand back stop pawl should have engaged the correct tooth on the index wheel at the instant the reverse relay operated. A tolerance of 3/64" maximum overtravel as shown in Figure 45, Item 1, may be allowed. Check this adjustment at six positions spaced around the selector pin assembly.

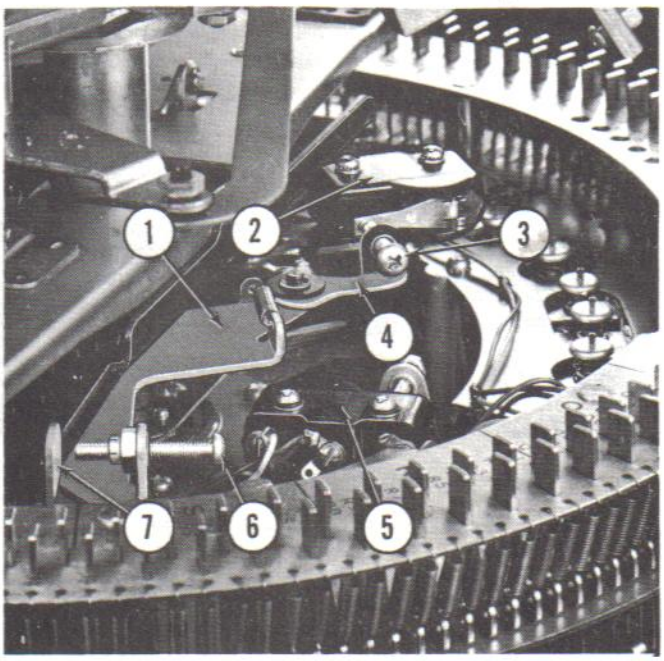


Fig. 54. ACTUATING SCREW ADJUSTMENT, CARRIAGE SWITCH

1.	Selector Shaft Assembly	115669
2.	Carriage Switch, Micro	110557
3.	Screw, 10-32 x 1" R.H.	73502-95
4.	Switch Lever and Stop Nut Assembly	110937
5.	Reverse Switch, Micro	110558
6.	Screw, 8-32 x 1-1/4" R.H.	73503-95
7.	Stop Tab, Selector Shaft Assembly	115669

NOTE: When checking the carriage switch adjustment on the 2510 mechanism, the maximum overtravel between the back stop pawl and the tooth on the index wheel when the carriage switch actuates may be 1/16" as shown in Figure 45, Item 1.

(3) Check the left hand back stop pawl, as viewed from the rear of the phonograph, by releasing an outer (even number) pin. The timing between back stop pawl engagement and reverse relay operation should be identical with the right hand pawl. If not, do not adjust the carriage switch actuating screw since it was adjusted to time the right hand pawl with the inner pins. The tip and mounting bracket assembly, which engages the outer pins, may be adjusted by loosening the mounting screws. Moving the tip and bracket assembly will time the carriage switch action. This adjustment should be checked in at least six positions spaced around the selector pin assembly. The maximum overtravel allowed, between the back stop pawl and the tooth on the index wheel at the instant the carriage switch closes, is 3/64".

t. STOP SCREW ADJUSTMENT - 2500-2510

The stop screw (Fig. 55, Item 2) serves to prevent momentum from driving the record carrier into the wrong selection. Check the stop screw setting by turning the service switch "off" and releasing an inner (odd number) pin. Manually turn the record carrier until the selector crank arm engages the released pin and the reverse relay actuates. Continue by turning the changer motor shaft clockwise until the stop screw (Fig. 55, Item 2) bears against the stop bracket (Item 1). The overtravel between the right hand (as viewed from the rear of the phonograph) back stop pawl and the correct tooth on the index wheel should be from 1/16" to 3/32" as shown in Figure 45, Item 1.

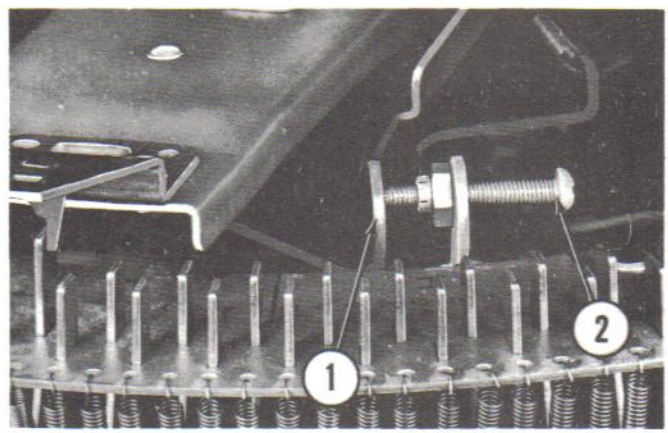


Fig. 55. STOP SCREW ADJUSTMENT, SELECTOR CRANK

1.	Stop Tab, Selector Shaft Assembly	115669
2.	Screw, 8-32 x 1-1/4" R.H.	73503-95

u. KICKOFF SCREW ADJUSTMENT - 2500-2510

Adjustment of the kickoff screw (Fig. 56, Item 1) may be accomplished with the adjusting screw in a convenient position and a tooth on the index wheel held firmly against the left hand back stop pawl, as viewed from the rear of the phonograph. The tip

(Item 3) which contacts the outer selector pins should be on the center line between the outer pin and the next adjacent inner pin as shown in Figure 56. This alignment should be checked in six positions spaced around the selector pin assembly. The adjustment of the tip which contacts the inner row of selector pins should be checked while holding a tooth on the index wheel firmly against the right hand back stop pawl, as viewed from the rear. Check at six positions spaced around the selector pin assembly. Should there be a wide variation between the alignment of the outer tip and the inner tip it indicates an error in back stop pawl setting.

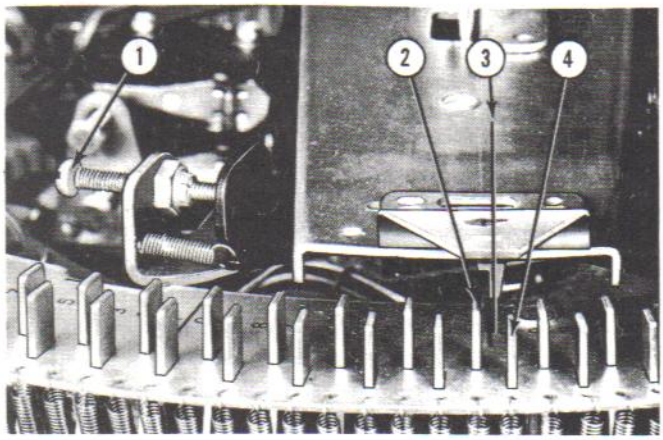


Fig. 56. KICKOFF SCREW ADJUSTMENT

1.	Screw, 8-32 x 1-1/4" R.H.	73503-95
2.	Selector Latch Pin, Inner	110941
3.	Center Line of Bracket Tip	
4.	Selector Latch Pin, Outer	110942

v. TRANSFER SWITCH ADJUSTMENT

Release any selector pin and let the mechanism advance in its cycle until the roller (Fig. 57, Item 5) has passed the cam lobe (Item 6). Turn the power "off" and back out the adjusting screw (Item 4) until the insulating stud clears the switch actuator (Item 3). Advance the mechanism in its cycle until the roller (Item 5) is again on the cam lobe (Item 6). Turn the power "off" and turn the adjusting screw (Item 4) in until the transfer switch is actuated over center by its toggle spring (Item 2). The adjusting screw should be turned two full turns beyond this point for overtravel. Run the mechanism through several cycles to check for positive switch actuation.

w. MUTE AND PLAY SWITCH ADJUSTMENT

The mute and play switch is actuated by the adjustable cam lobe (Fig. 58, Item 2). The timing marks (Item 1) should be in alignment.

(1) Release any selector pin and let the mechanism advance in its cycle until the roller (Fig. 59, Item 3) is at the base of the adjustable lobe (Item 1). The stop plate (Fig. 60, Item 1) should be set to

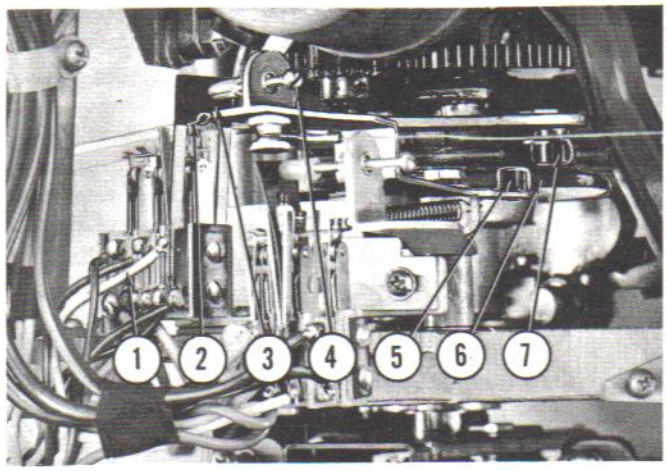


Fig. 57. TRANSFER SWITCH ADJUSTMENT

1.	Transfer Switch and Bracket Assembly	59569
2.	Over-Center Spring	59569-2
3.	Switch Actuator, Transfer Switch Assembly	59569
4.	Screw, 4-40 x 1" R.H. (Nylon Actuator-58255)	73574-31
5.	Roller, Actuator Arm Assembly	113299
6.	Long Lobe on Edge of Main Cam	62792
7.	Roller, Lever Assembly, Record Clamp	59688

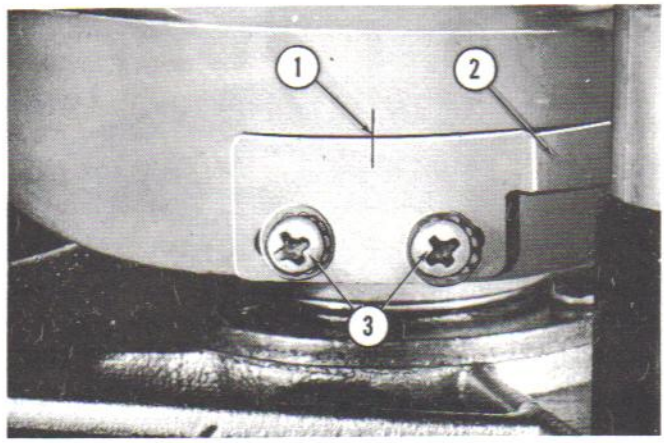


Fig. 58. MUTE AND PLAY SWITCH ADJUSTMENT

1.	Timing Marks, Main Cam and Adjustable Lobe	
2.	Adjustable Lobe	62768
3.	Screw, 5-40 x 3/8" R.H. Sems	73534-14

stop the actuating lever (Item 4) with a clearance from 0" to 1/64" between the roller and the cam surface as shown in Figure 59, Item 2.

(2) Manually turn the changer motor shaft counterclockwise until the roller is on the peak of the adjustable lobe. Continue turning the changer motor shaft in the same direction and as the roller rides off the adjustable lobe the play switch should be adjusted by the screw (Fig. 60, Item 3) to actuate with 1/16" overtravel as measured at the actuator (Item 2).

(3) Run the mechanism through several cycles to check for correct mute and play switch action. Observe closely for any forward movement of the record clamp cam (Fig. 62, Item 5) at the time the tone arm trip switch actuates or any return action

of the cam at the time the play switch actuates to stop the mechanism in play position. Either condition existing requires readjustment of the play switch cam lobe (Fig. 58, Item 2).

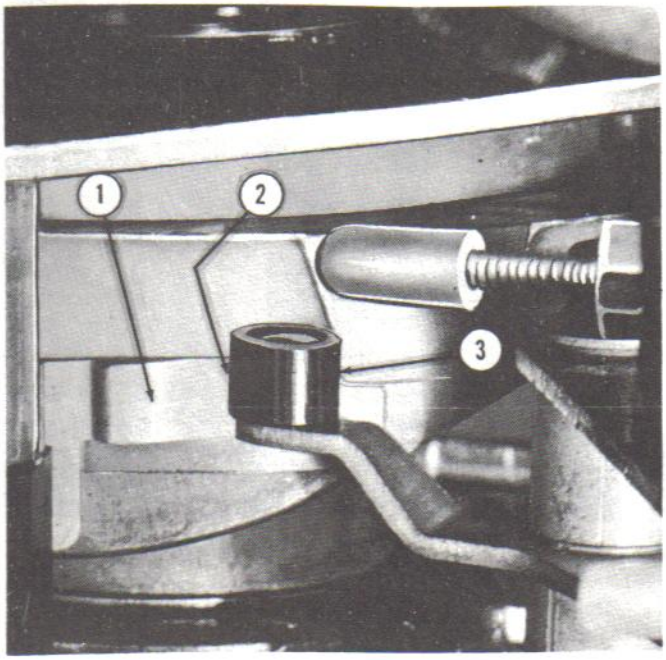


Fig. 59. MUTE AND PLAY SWITCH ADJUSTMENT

1.	Adjustable Lobe	62768
2.	Dimension, Zero to 1/64" clearance	
3.	Roller, Actuator Arm Assembly	62761

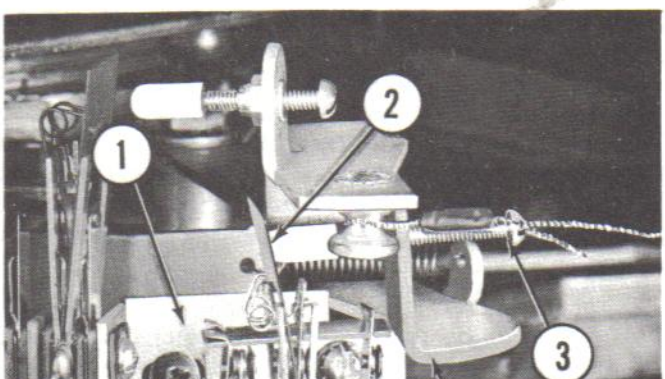


Fig. 60. MUTE AND PLAY SWITCH ADJUSTMENT

1.	Stop Plate	62769
2.	Actuator, Mute and Play Switch	65170
3.	Screw, 4-40 x 1-1/4" R.H.	73574-33
4.	Actuator Arm Assembly	62761

x. RECORD GUIDE AND SAFETY SWITCH

The record guide assembly (Fig. 61, Item 4) is a pivoted assembly, spring loaded to hold it in alignment with the records as they are delivered to the turntable by the record lift arms. Should a record jam or fail to completely return to the record carrier, a clockwise movement of the record guide will open the safety switch, turning off the power supply. This built-in safety feature prevents record breakage.

(1) The record guide assembly is normally adjusted to be parallel to the top support casting as shown in Figure 61, Item 1, by the screw (Item 2). There may be conditions where the record delivery will be improved by some realignment of the record guide. Should any change be made in the setting of the adjusting screw (Item 2), then the safety switch actuating screw (Item 3) should be adjusted. This may be accomplished by backing out the screw (Item 3) until the safety switch (Fig. 70, Item 3) opens. Turn the actuating screw in until the switch closes and continue one full turn to two full turns for overtravel.

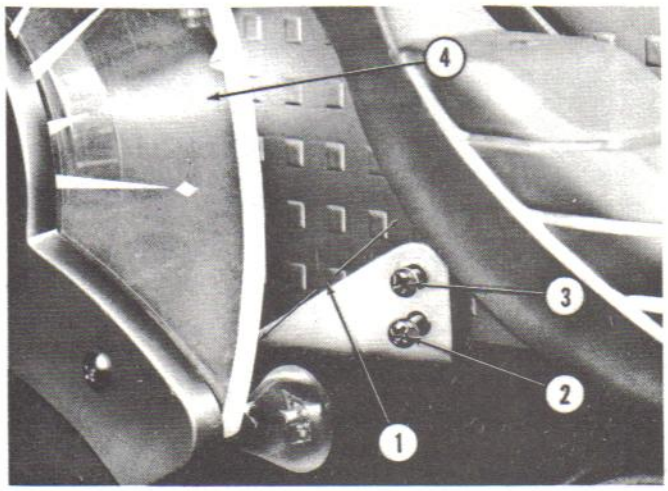


Fig. 61. RECORD GUIDE AND SAFETY SWITCH ADJUSTMENT

1.	Dimension, equal on both sides	
2.	Screw, 6-32 x 1" R.H.	73656-74
3.	Screw, 6-32 x 1-3/8" R.H.	73800
4.	Record Guide Assembly	118338

y. TURNTABLE ADJUSTMENTS

(1) The turntable release arm (Fig. 62, Item 4) must be centered about the hub of the record clamp plate (Item 2). Loosening the mounting screws (Item 6) will permit alignment of the rollers as shown in Figure 63, Item 1.

(2) The clamp plate (Fig. 63, Item 4) may be adjusted by releasing any convenient selector pin and letting the mechanism advance in its cycle to play position with a record clamped on the turntable. Turn the power "off." Pull back the clamp plate (Item 4) and loosen the lock nut (Item 3). Release the clamp plate slowly to play position and adjust the plate on the threaded clamp rod to provide 1/32" to 1/16" clearance between the rollers and the clamp plate as

shown at Items 2 and 5 and tighten the lock nut. Manually return the record clamp cam (Fig. 62, Item 5) to its normal rest position and check the clamp plate and rod (Item 2) for additional travel. The clamp rod must not jam in rest position but must return far enough to retract the turntable pilot (Fig. 64, Item 2) 1/32" to 1/16" inside the turntable housing as shown at Item 1.

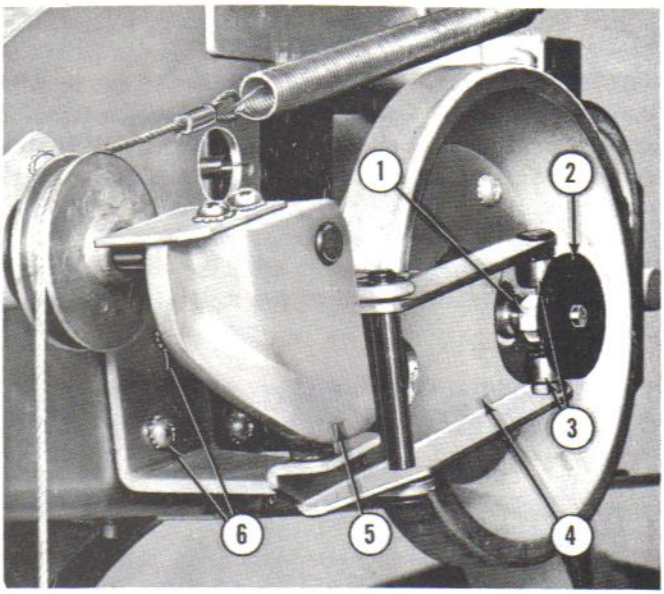


Fig. 62. TURNTABLE ADJUSTMENT

1.	Nut, 1/4"-20	73601-10
2.	Plate, Record Clamp	63205
3.	Rollers, Arm and Roller Assembly	59922
4.	Arm and Roller Assembly	59922
5.	Cam, Record Clamp	59464
6.	Screw, 8-32 x 1/4" R.H. Sems	73533-34

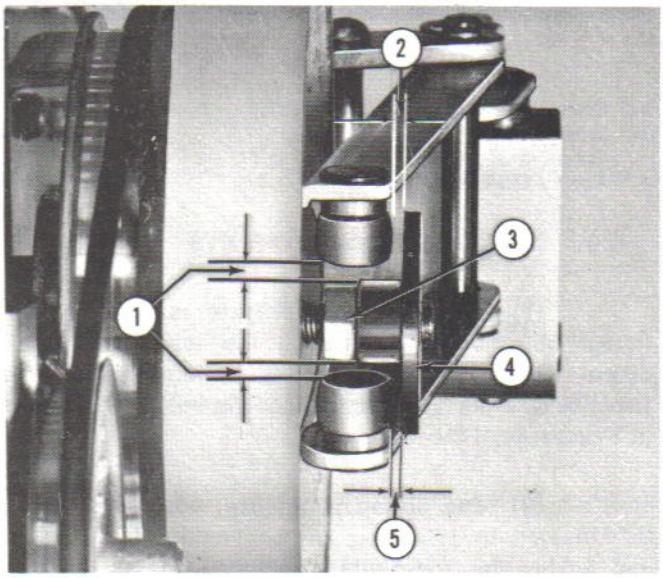


Fig. 63. TURNTABLE ADJUSTMENT

1.	Dimension, equal on both sides	
2.	Dimension, 1/32" to 1/16" clearance	
3.	Nut, 1/4"-20	73601-10
4.	Plate, Record Clamp	63205
5.	Dimension, 1/32" to 1/16" clearance	

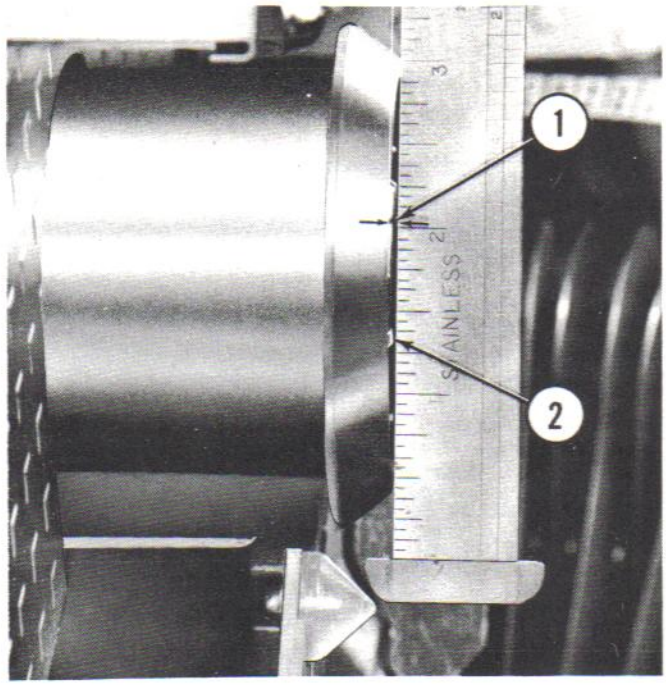


Fig. 64. TURNTABLE ADJUSTMENT

1.	Dimension, 1/32" to 1/16" inside Housing	
2.	Turntable Pilot	59449

(3) The turntable motor drive gears (Fig. 65, Items 3 & 4) are adjustable for alignment and mesh. The motor and mounting plate assembly may be removed from the top support casting by disconnecting the line plug (Fig. 66, Item 3), shown disconnected. Remove the two lock nuts (Item 4) and the retaining ring (Item 7). With the motor and mounting plate removed as shown in Figure 65, the support bracket (Item 2) should be loosened and the three motor mounting screws (Item 1) loosened. The worm gear (Item 3) should be centered over the nylon pinion gear (Item 4) and meshed to provide free running with minimum backlash. Tighten the mounting screws (Item 1).

(a) The thrust spring (Item 5) should bear against the steel ball in the end of the worm gear with a pressure of 2-1/2 to 3-1/2 ounces.

(b) Reset the support bracket (Item 2) to zero clearance with the motor housing as shown in Figure 66, Item 6, and tighten the adjusting screws.

(4) The turntable drive pulley (Fig. 66, Item 8) is mounted on the driver gear shaft by the set screw (Item 5) with .006" end play.

(5) The turntable drive belt tension is adjustable by loosening the stud (Fig. 66, Item 2) and the screw (Item 1). The upper motor mounting bracket (Item 9) may be shifted on its elongated mounting holes.

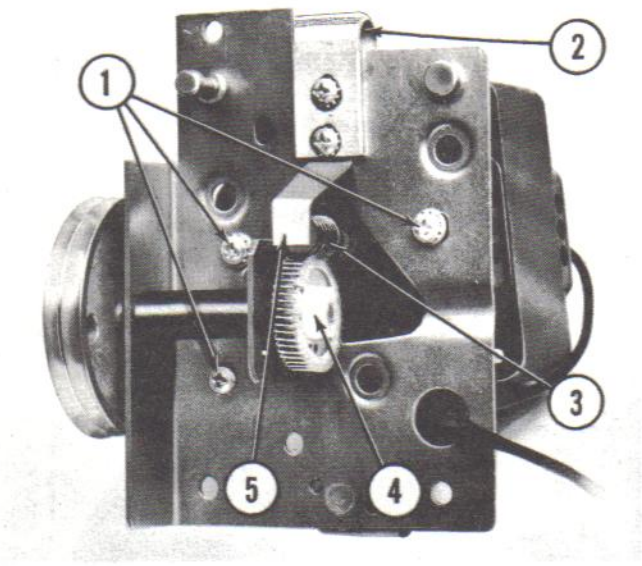


Fig. 65. TURNTABLE GEAR DRIVE ADJUSTMENT

1.	Screw, 6-32 x 5/16" R.H. Sems	73533-23
2.	Support Bracket	117792
3.	Worm Gear	115206
4.	Gear and Shaft Assembly	65203
5.	Spring Clip	60893

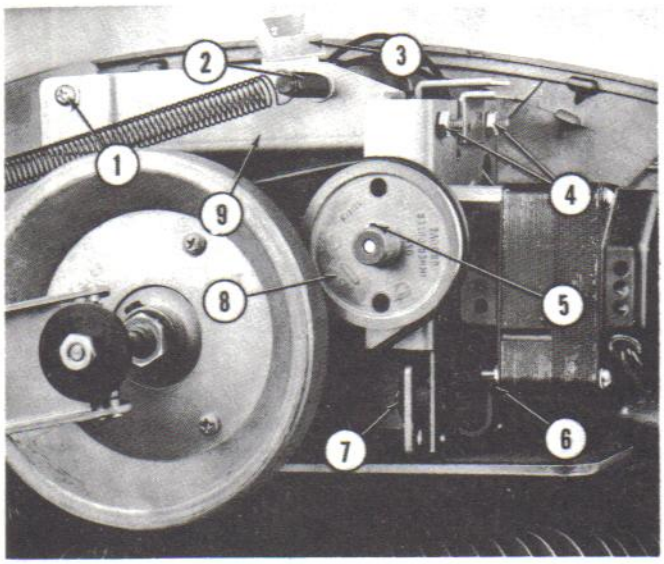


Fig. 66. TURNTABLE BELT AND DRIVE PULLEY ADJUSTMENT

1.	Screw, 8-32 x 1/2" R.H. Sems	73533-38
2.	Spring Pin	61111
3.	Cap, 3 Circuit	117823
4.	Nut, 8-32	73601-7
5.	Set Screw, 6-32 x 3/16"	73513-19
6.	Support Bracket Contacts Motor Housing	
7.	Retaining Ring	73724-25
8.	Pulley	115023
9.	Mounting Bracket Assembly	117794

z. TONE ARM ADJUSTMENTS

(1) The tone arm feed-in adjusting screw (Fig. 67, Item 1) is set at the factory using fixture X42226 (Item 3) and should need no adjustment. However, when a readjustment is required it may be accomplished by advancing the record changer in its cycle until a normal size (6-7/8" diameter) record is clamped on the turntable. Turn the service switch "off" before the needle contacts the record and adjust the feed-in screw (Item 1) to position the needle to meet the record half way in the feed-in groove. The setting should be 2-5/8" to 2-11/16", as measured from the outside circumference of the turntable pilot, to conform with R. I. A. A. standards.

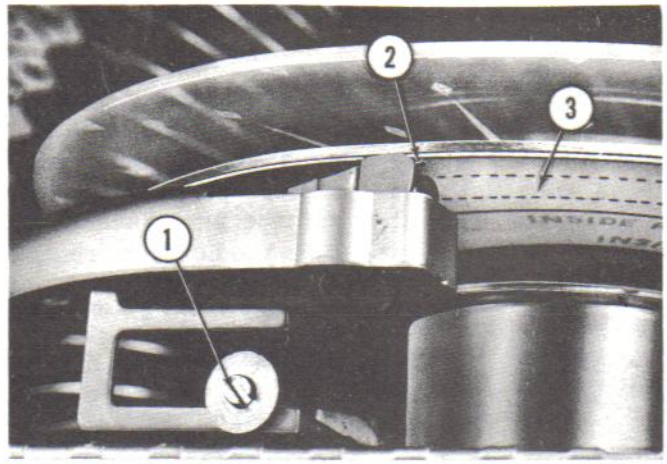


Fig. 67. TONE ARM ADJUSTMENT

1.	Stop Pin Assembly	115660
2.	Needle, Stereo, Turnover Lever, Sapphire Tips	116727
3.	Fixture	X42226

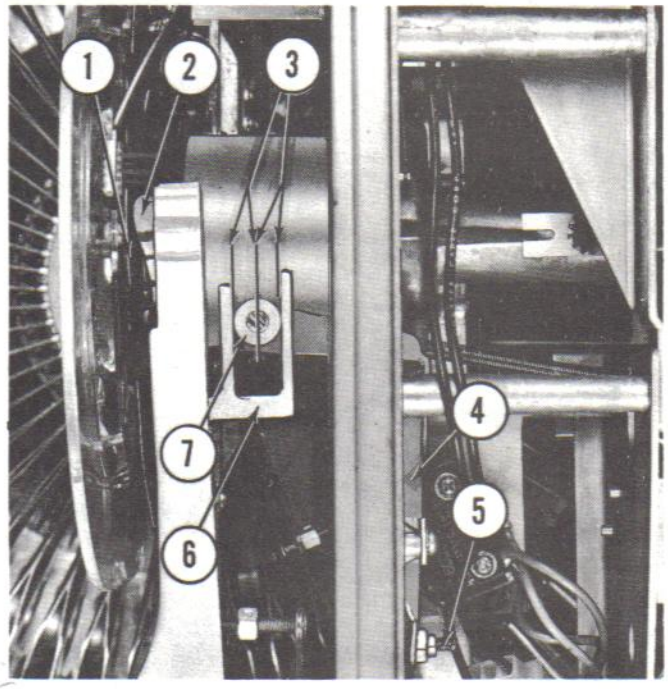


Fig. 68. TONE ARM LATCH LEVER ADJUSTMENT

1.	Record	
2.	Stereo Cartridge, Sonotone	116725
3.	Dimensions, equal on each side	
4.	Bracket and Stop Nut Assembly	117977
5.	Screw, Nylon, 8-32 x 3/4" R.H.	74288-26
6.	Latch, Tone Arm	64423
7.	Stop Pin Assembly	115660

(2) The tone arm release bracket (Fig. 68, Item 4) should be adjusted with a perfectly flat record clamped in playing position on the turntable and the power turned "off." The adjusting screw (Item 5) should be set to center the feed-in adjusting screw (Item 7) within the U shaped latch bracket as shown at Item 3.

CAUTION!

Use extreme care to prevent damage to the record or needle when making this adjustment.

(3) The needle pressure adjustment may be accomplished by turning the Nylock stop nut (Fig. 69, Item 1) to vary the spring tension on the tone arm. With a record in play position and the power "off," use a gram scale, such as Graybar 70-D (Item 3), measuring at the end of the tone arm (Item 2) the pressure needed to just pull the needle off the record.

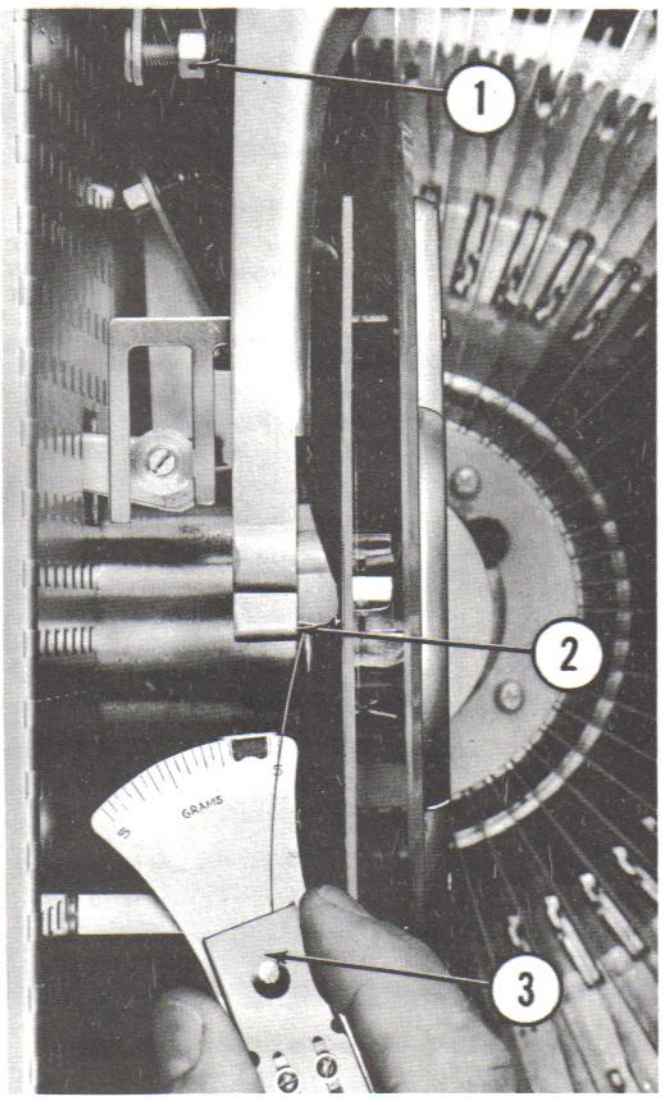


Fig. 69. NEEDLE PRESSURE ADJUSTMENT

1. Nut, 10-32 Nylock — 73865-8
2. Position for measuring needle pressure
3. Gram Scale

The recommended needle pressure is 5 to 7 grams for the Sonotone stereo cartridge.

(4) The tone arm balance adjustment should be made with the mechanism in play position, no record on the turntable and the service switch "off." Using a piece of thread (Fig. 70, Item 5), tie the tone arm in a position where the latch bracket (Item 2) clears the feed-in screw (Item 1). Measure at the pickup end of the tone arm, using a gram scale such as Graybar 70-D, the pressure needed to move the tone arm up or down. When correctly balanced by the adjusting screw (Item 4) the arm should move with no more than one gram pressure in either direction.

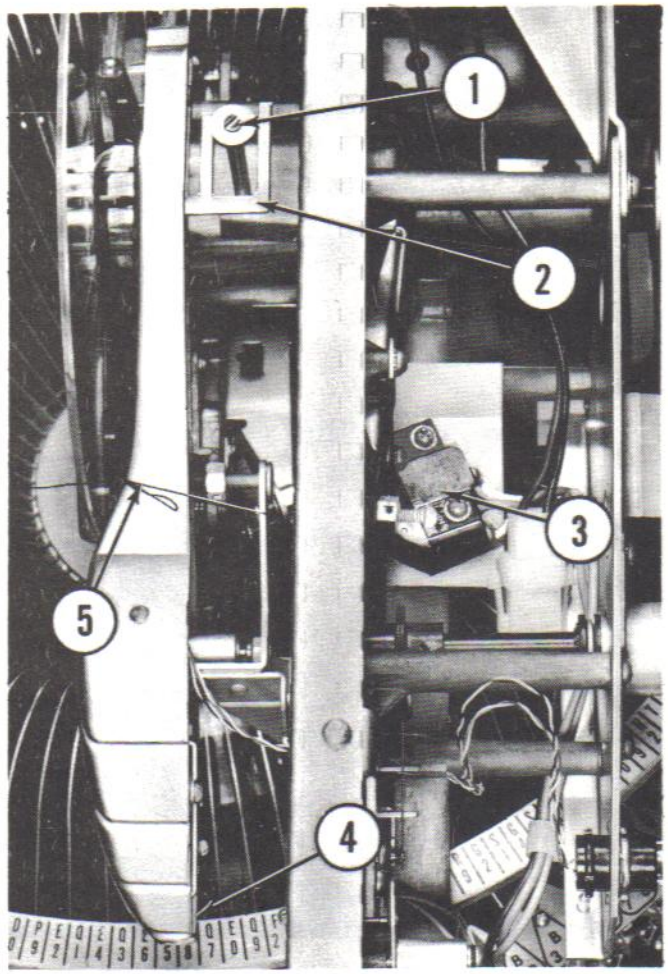


Fig. 70. TONE ARM BALANCE ADJUSTMENT

1. Stop Pin Assembly — 115660
2. Latch — 64423
3. Safety Switch, Micro — 110557
4. Screw, 10-32 x 2" R.H., Balance Adjusting — 73575-100
5. Thread, Tie Down

(5) The tone arm trip switch (Fig. 71, Item 2) is adjustable by means of the screw (Item 1) and is actuated by the bracket mounted on the tone arm (Item 5). The switch is adjusted at the factory to conform with R.I.A.A. standards using fixture X42227 which allows for extended play records. Due to the wide variation in records it may be necessary

to readjust the trip switch. This may be accomplished by measuring 1-1/4" to 1-5/16" from the edge of the center hole in a standard record and marking with chalk. Place the record in the record carrier and select the marked side. Adjust the trip switch screw (Item 1) to produce switch action when the needle is on the mark.

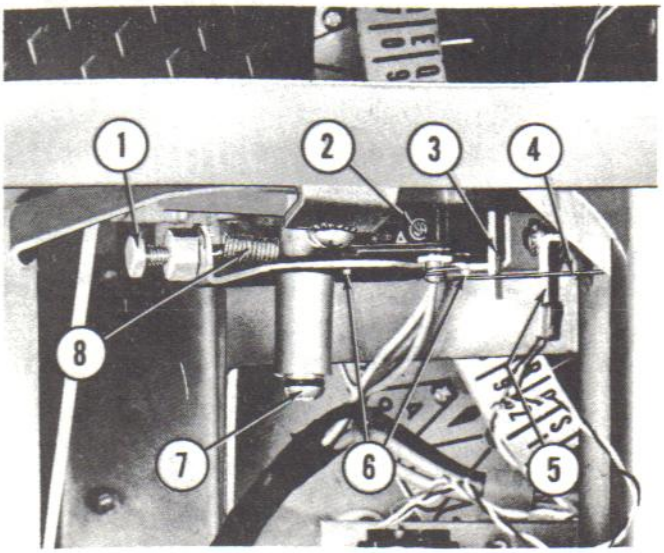


Fig. 71. TRIP SWITCH ADJUSTMENT

1.	Screw, Trip Adjusting, 8-32 x 3/4" Hex Hd.	73793-86
2.	Trip Switch	57851
3.	Adjusting Bracket	59432
4.	Arm (Trip Wire)	59583
5.	Gimbal and Stop Nut Assembly	118327
6.	Screw (2), 4-40 x 3/4" R.H.	73503-29
7.	Screw, 8-32 x 1-1/4" R.H.	73503-95
8.	Spring	59615

(a) In the event that a new trip switch must be installed proceed as follows:

1. Remove the trip switch and mounting bracket assembly by removing the screw (Fig. 71, Item 7). With the screw removed, unhook the spring (Item 8) from the anchor pin. The switch is mounted on its bracket by the two screws (Item 6).

2. When the new switch has been mounted to the bracket and the trip wire (Item 4) is in place, adjust the stop bracket (Item 3) so that as the switch resets to its normally closed position, the trip wire will have 1/32" overtravel after switch actuation, as measured at the point of contact with the stop bracket. Reinstall the trip switch and mounting bracket assembly and adjust for correct trip action as above.

(6) The tone arm needle brush adjustment should be made with the phonograph in its normal rest position. The needle brush (Fig. 72, Item 4) should be 1/4" to 1/2" below the cartridge. The dimension may be varied by loosening the mounting screws (Fig. 73, Item 2) and moving the idler wheel. The needle brush arm and shaft assembly is spring

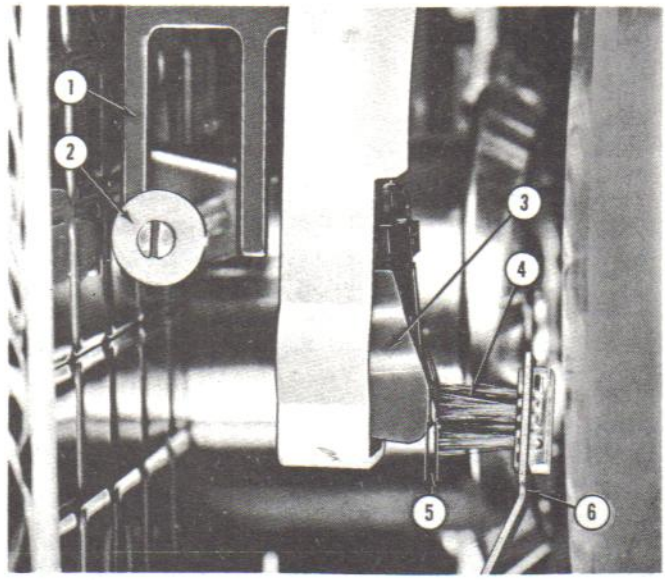


Fig. 72. TONE ARM NEEDLE BRUSH ADJUSTMENT

1.	Latch	64423
2.	Stop Pin Assembly	115660
3.	Stereo Cartridge, Sonotone	116725
4.	Brush	119080
5.	Dimension, 1/32" maximum	
6.	Arm, Brush	118331

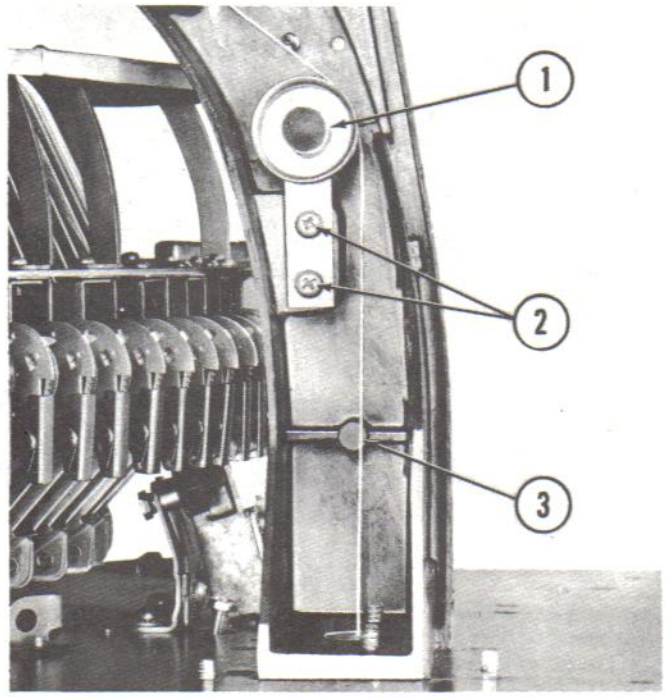


Fig. 73. NEEDLE BRUSH ADJUSTMENT

1.	Pulley and Bracket Assembly	59717
2.	Screw, 8-32 x 5/16" R.H. Sems	73533-35
3.	Cable	(Sleeve - 59881) 59888

loaded and is released by the transfer switch cam follower (Fig. 75, Item 11). The brush sweeping across the stylus removes lint and dust accumulated from the record. The tip of the stylus should project into the brush a depth of 1/32". The brush arm (Fig. 72, Item 6) may be formed to provide the correct wiping action.

NOTE: Use care in adjusting the wiping action of the needle brush to avoid damage to the cartridge.

aa. CHANGER MOTOR PINION GEAR MESH

The changer motor pinion gear (Fig. 74, Item 4) engagement with the main gear (Item 3) is adjustable by loosening the two mounting screws (Item 1). The motor and mounting bracket assembly (Item 2) may be shifted to provide minimum backlash between the pinion gear and the main gear consistent with freedom of action.

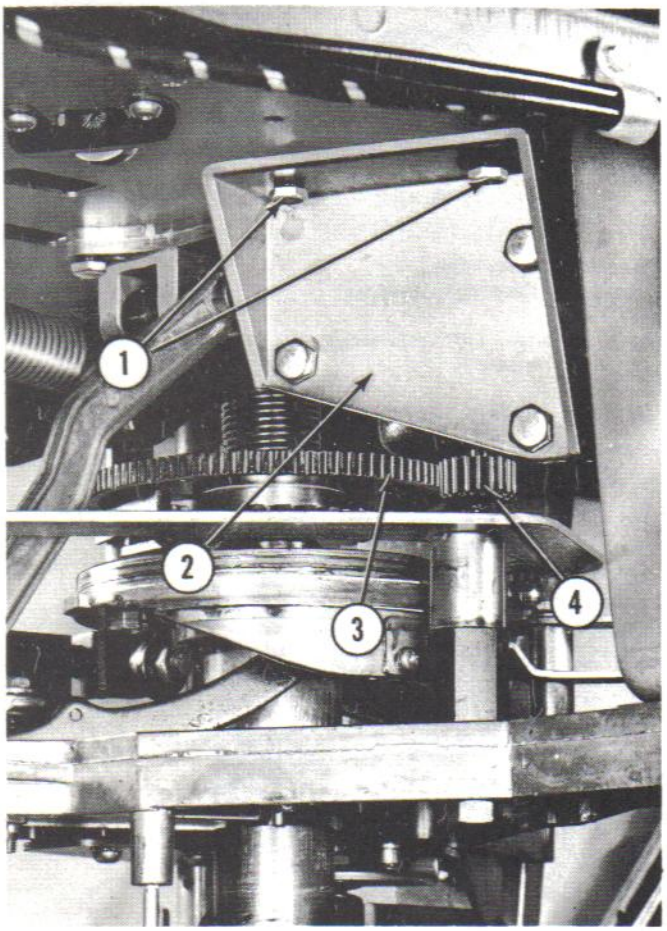


Fig. 74. CHANGER MOTOR PINION GEAR ADJUSTMENT

1.	Screw, 10-32 x 1/2" Hex Hd.	73793-118
2.	Motor Gear and Bracket Assembly	69066
3.	Gear and Ratchet Wheel Assembly	116986
4.	Pinion Gear	116997

bb. ACTUATING ARM AND CABLE ADJUSTMENT

The actuating arm and cable adjustment for the turntable and tone arm (Fig. 75, Item 2) should be made with the mechanism in play position. Set the adjusting screw (Item 1) so that the roller (Fig. 75, Item 10) on the turntable release lever touches the cam wall (Fig. 75, Item 9) with no slack in the cable (Item 4).

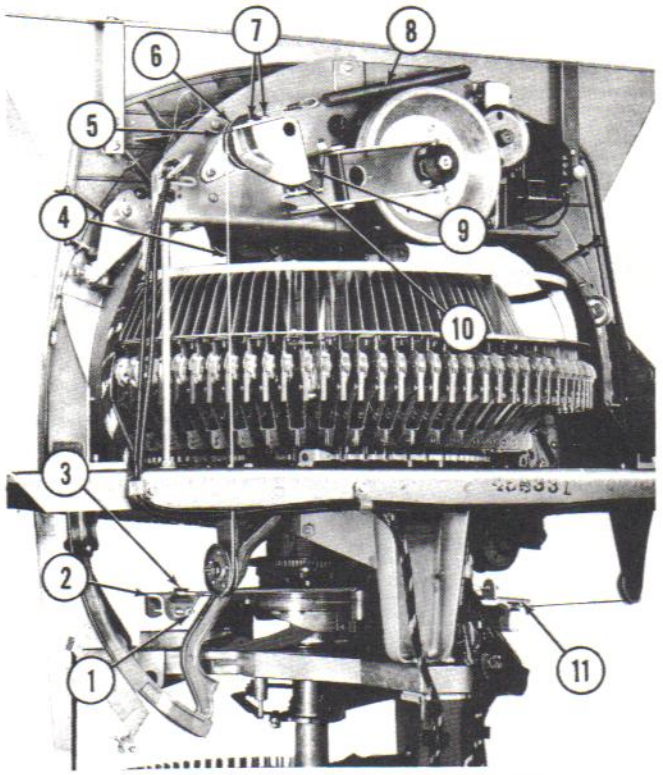


Fig. 75. ACTUATING ARM AND CABLE ADJUSTMENT TURNTABLE AND TONE ARM

1.	Screw, 10-32 x 1-3/4" R.H.	73502-99
2.	Lever Assembly, Record Clamp	59688
3.	Bracket and Pin Assembly, Lever Assembly	59688
4.	Cable and Sleeve (Sleeve - 59891)	59871-A
5.	Stop Bracket	60599
6.	Pulley	59415
7.	Screw, 8-32 x 1/4" R.H. Sems	73533-34
8.	Spring	61174
9.	Stop Wall, Cam	59464
10.	Roller, Arm and Roller Assembly	59922
11.	Actuator Arm Assembly, Transfer Switch	113299

5. MAINTENANCE

a. INSTALLATION OF NEW TURNTABLE ACTUATING CABLE

(1) To install a new cable for the turntable actuating shaft assembly, pass the cable through the hole in the drive pulley (Fig. 76, Item 3). Slide the clamps (Items 1 & 4) on the cable ends and form a loop 3/4 of an inch long at each end, fastening with the clamp. Adjust the cable through the pulley to the dimension shown at Items 6 and 7 and lock securely with the set screw (Item 5).

(2) Remove the two screws holding the stop plate to the turntable cam (Fig. 75, Item 7) to allow the cam to rotate counterclockwise, as viewed from the rear, far enough to hook the loop in the long end of the cable over the slide pin (Item 3).

(3) The short end of the cable will pass once around the drive pulley (Item 6) and hook to the

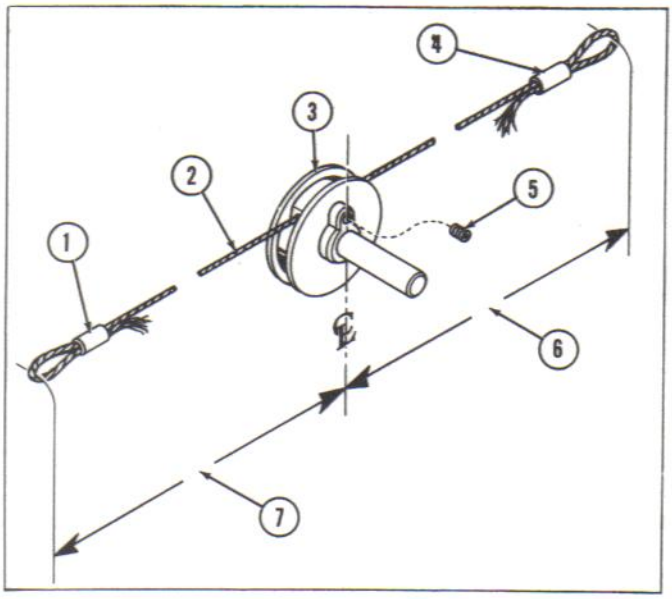


Fig. 76. INSTALLATION OF TURNTABLE CABLE

1. Sleeve	59891
2. Cable and Sleeve	59871-A
3. Pulley	59415
4. Sleeve	59891
5. Set Screw, 8-32 x 3/16"	73511-29
6. 6-3/16 inches from Center Line to Inside of Loop	
7. 18-7/8 inches from Center Line to Inside of Loop	

spring (Item 8). The free length of the spring should be approximately 3-1/4". Replace the roller of the release lever (Item 10) back of the cam and replace the stop plate (Item 5).

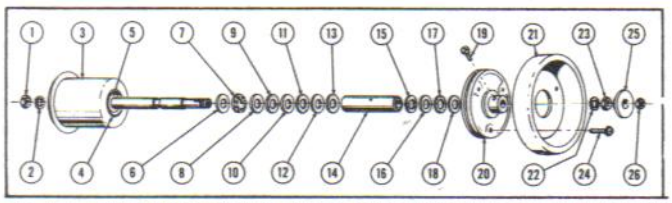


Fig. 77. SHIM PROCEDURE FOR ASSEMBLING TURNTABLE SHAFT

1. Nut	59470
2. Lock Washer	73607-12
3. Turntable and Shaft Assembly	68102
4. Oil Slinger	59571
5. Washer on Shoulder of Shaft	56530
6. Thrust Washer	59864
7. Ball Race	59867
8. Thrust Washer	59864
9. Washer - Fiber	63732
10. Shim - Steel	63731
11. Washer - Fiber	63732
12. Shim - Steel	63731
13. Washer - Fiber	63732
14. Sleeve and Bushing Assembly	64520
15. Washer - Fiber	63732
16. Shim - Steel	63731
17. Washer - Fiber	63732
18. Washer on Shoulder of Shaft	56530
19. Screw, Special	59399
20. Pulley	64190
21. Fly Wheel	59456
22. Lock Washer	73607-12
23. Nut	59470
24. Screws	73533-38
25. Plate, Record Clamp	63205
26. Nut	73601-10

b. SHIM PROCEDURE FOR ASSEMBLING TURNTABLE SHAFT

Following installation of the thrust bearing group (Fig. 77, Items 6, 7 & 8) against the turntable, three fiber washers (Items 9, 11 & 13) and two metal washers (Items 10 & 12) should always be installed on the turntable end of the shaft. They should be installed starting with a fiber washer, a metal washer next, then a fiber, a metal and ending with a fiber. The turntable shaft is installed in the sleeve and bushing after which the shim washers are installed at the fly wheel end starting with a fiber washer and ending with a fiber washer, alternating with metal washers until the shaft end play is within .008 to .013 of an inch. After assembly, the bearings should be well oiled with S.A.E. 10 motor oil.

6. SOUND SYSTEM

a. MONOPHONIC SOUND SYSTEM

(1) The 2500 series monophonic phonograph sound system consists of a Model 540 single channel amplifier with built-in "Automatic Level Control," low inertia tone arm with the Sonotone stereo pick-up and a high fidelity speaker and cross-over network. The speaker complement consists of one 12 inch p.m. heavy duty, one 12 inch p.m. mid-range and one 7 inch p.m. high frequency.

The output of the Model 540 Amplifier is provided with a terminal strip to which may be connected 8 ohm, 500 ohm or constant voltage speakers. When either the 8 ohm or 500 ohm terminals are used the Fader Control must be set on one of the Lettered steps. Remote loudness control, together with remote cancel control, is available by the use of Kit number 147A, part number 119268. Bulk cable, part number 50799, should be ordered as required.

(2) The Model 540 Amplifier is slide mounted on the inside left panel of the phonograph cabinet to provide good accessibility. The Main Line Switch, the Manual Reject Switch, the Loudness Control and the Fader Switch are mounted on the rear of the amplifier chassis pan, accessible through the opening along the left edge of the lower back door. Also mounted on the rear of the amplifier chassis pan, but only accessible when the lower back door is removed, is the auxiliary speaker terminal strip and the service outlet with a maximum rating of 4 amperes.

Mounted along the top side of the amplifier chassis pan will be found the two single prong input

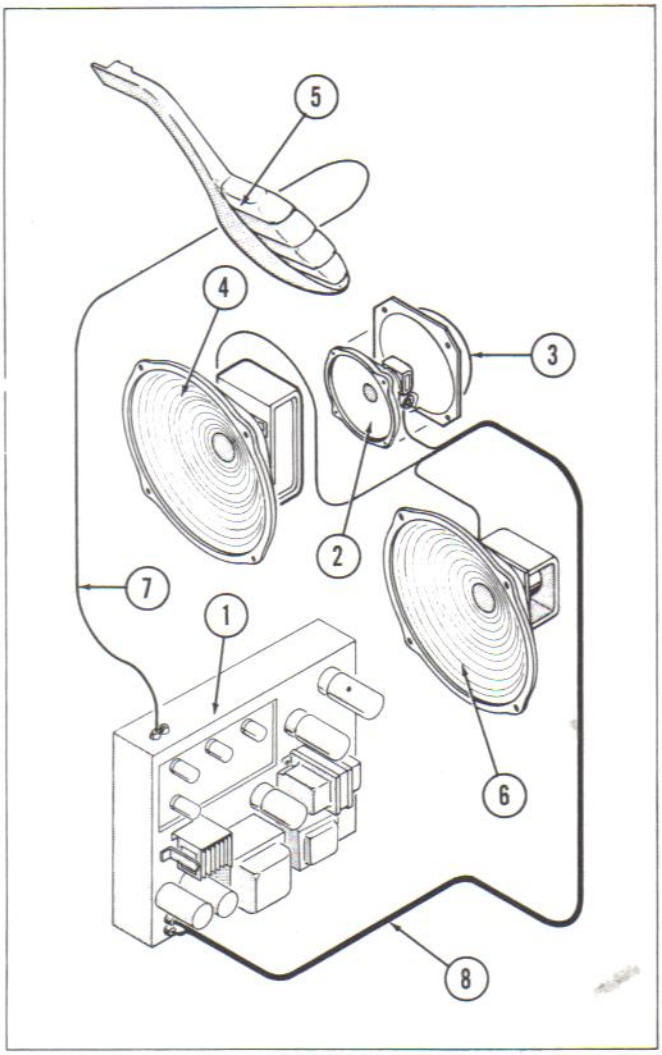


Fig. 78. LINE DRAWING - MONOPHONIC SOUND SYSTEM

1. Amplifier, Model 540, Less Tubes	118135
2. Speaker, 7"	114054
3. Cover, 7" Speaker	114058
4. Speaker, 12" Heavy Duty	117754
5. Tone Arm Assembly	118324
6. Speaker, 12" Mid Range	65192
7. Input Cable Assembly (2)	110190
8. Plug and Wire Assembly (2)	114478

sockets wired in parallel, the 6 prong muting socket, a single prong socket for auxiliary amplifier connection, treble and bass tone controls and a socket with jumper plug for remote Loudness Control. The chassis pan is also provided with a double single prong socket for connecting the cabinet speakers, an outlet for connecting the cabinet lighting and fuse holders for the 2 ampere D.C. fuse, the 2 ampere line fuse for the amplifier, the 8 ampere fuse for the 24 volt A.C. circuits and the 15 ampere main fuse. There is one eleven prong socket for connecting the electric selector to the amplifier. The A.C. and D.C. power for the phonograph is supplied by components mounted on the amplifier chassis.

(3) The types and functions of the amplifier tubes are listed in the following table:

TYPE	PART NO.	FUNCTION
7025	114046	Voltage Amplifier, Cathode Follower
12AX7	58427	Voltage Amplifier, Rectifier
12AU7	58420	Variable Resistance, Voltage Amplifier
12AX7	58427	Phase Inverter
6L6GC	28157	Power Amplifier

(4) THEORY OF OPERATION, 540 AMPLIFIER

The signal voltage generated by the pick-up cartridge is amplified by the first section of the 7025 tube following which a portion is fed by the capacitor C-14 to the voltage amplifier section of the 12AX7 tube. The second section of the 12AX7 rectifies the audio signal resulting in a varying D.C. voltage with the peaks following the amplitude of the particular record playing. The varying D.C. voltage is applied to the time constant circuit composed of C17, R41 and C18. This D.C. voltage is applied to the grid of the first section of the 12AU7 tube which acts as a variable resistance. The low amplitude passage of a record reduces the resistance of the tubes, thereby producing an increase in signal out-put to compensate for the low cut record. The high cut records have the reverse effect.

The signal passes through the cathode follower section of the 7025 tube and is then manually controlled by the Loudness Control after which it is amplified in the voltage amplifier section of the 12AU7. The signal then is manually tone controlled by the bass and treble compensators and fed to the 12AX7 phase inverter. The phase inverter drives the 6L6GC tubes in a push-pull output power stage. The type 6L6GC tube operates with a screen voltage nearly equal to the plate voltage and therefore requires only a small voltage dropping resistor in the screen circuit. In replacing these power tubes, always use type GC. Constant voltage output is obtained by use of the negative feed-back from the secondary of the output transformer. It compensates for various auxiliary speaker loads and permits maximum output with minimum distortion.

During record changing intervals the amplifier is muted by the mute and play switch shown in Figure 60. The left hand set of contacts as viewed from the rear of the phonograph is a double pole single throw switch which shunts the audio signal between the 12AU7 and 12AX7 phase inverter. The other contact of this switch is used on the Model 542 Stereo Amplifier to mute the second channel. The Model 540 Monophonic Amplifier has both contacts wired together at pins 1 and 6 of the mute socket on the amplifier. The contacts of the right hand section of the mute and play switch are closed during record changing

intervals and place a D.C. voltage on the time constant circuit of the automatic level control reducing the output and, when open, causes a gradual build-up in signal strength to the preset level of the Loudness Control.

Current for the heater elements of the amplifier tubes is supplied from two separate power transformers. The filament windings of these transformers are connected in series and in phase. When in stand-by condition the power transformer (T-1), shown on the wiring diagram 118777-2, is not energized. However, the junction power transformer (T-2) is on at this time providing partial heater current to the tubes. When a selection is made on the phonograph, transformer T-1 becomes energized through the closing of the over-ride relay contacts quickly bringing the amplifier tubes to normal temperature for playing as soon as the record is in play position.

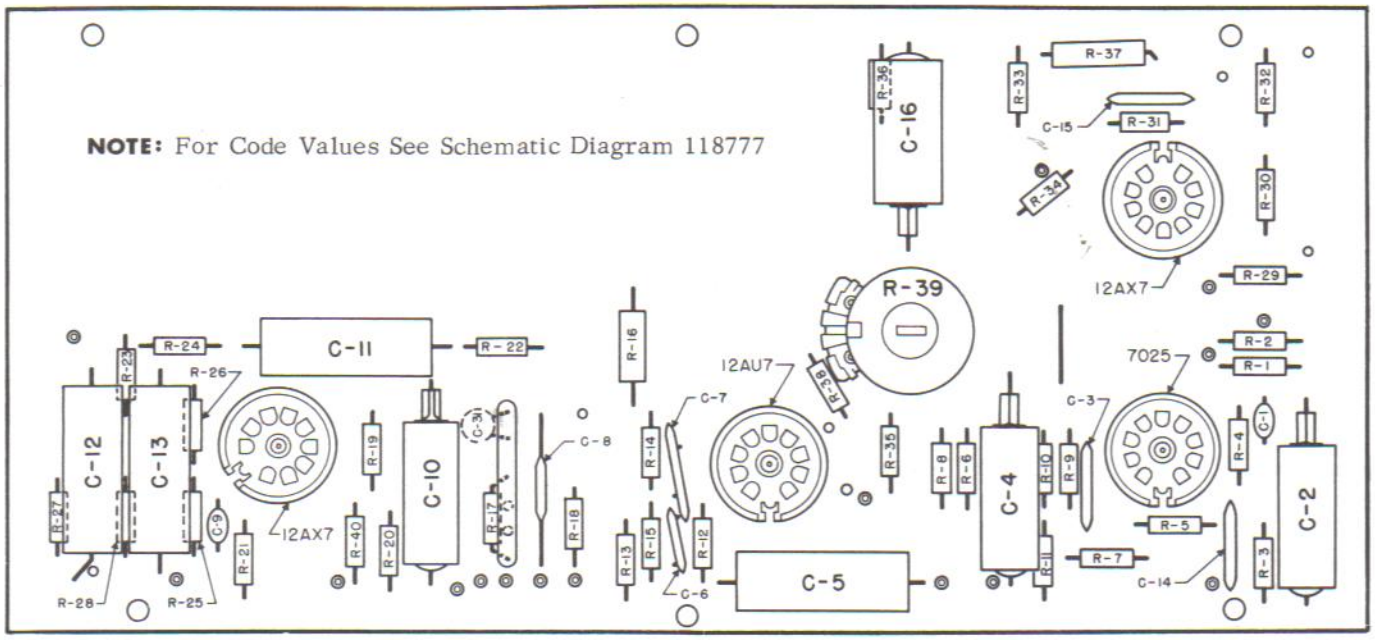


Fig. 79. PRINTED CIRCUIT BOARD - MODEL 540 AMPLIFIER (TOP SIDE)

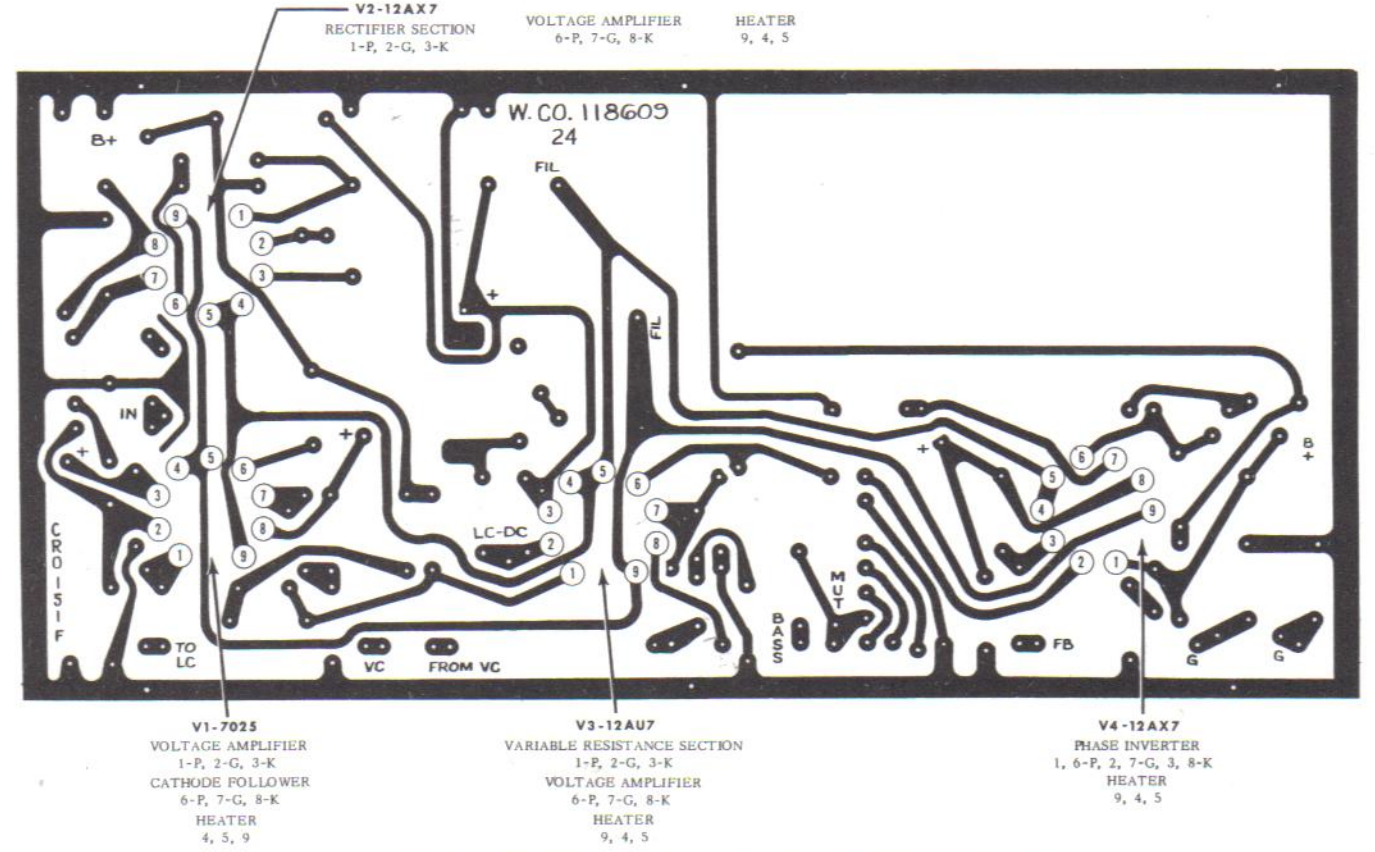


Fig. 80. PRINTED CIRCUIT BOARD - MODEL 540 AMPLIFIER (UNDER SIDE)

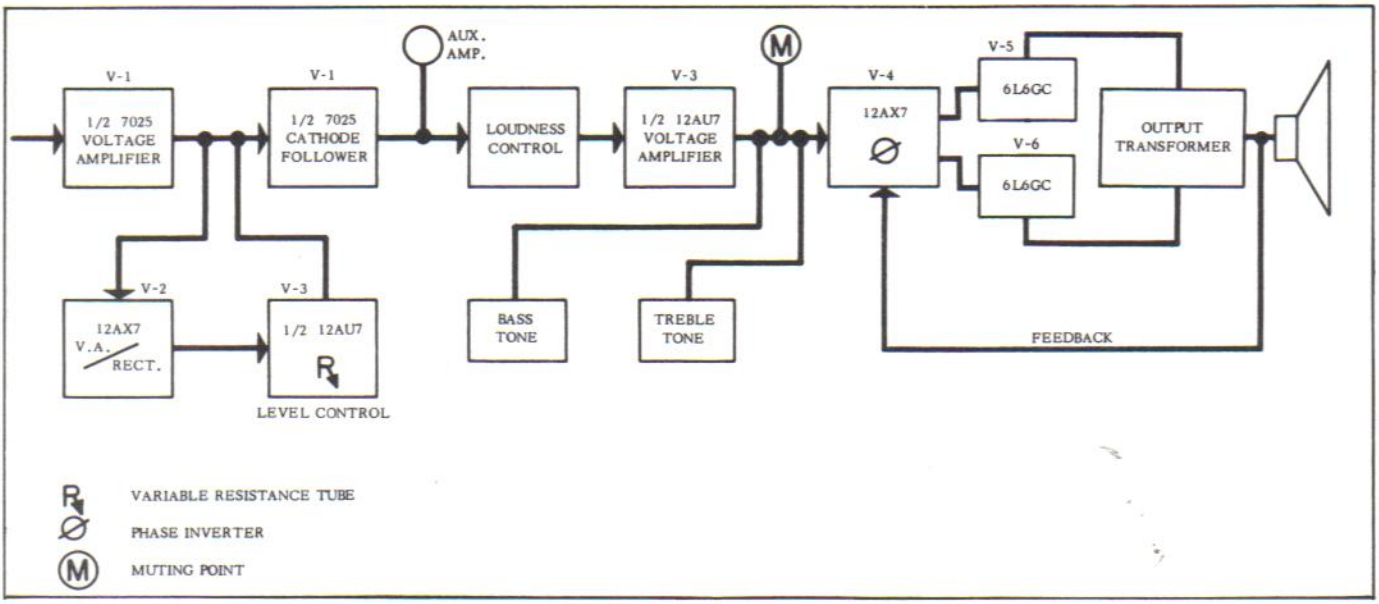


Fig. 81. MODEL 540 AMPLIFIER BLOCK DIAGRAM FOR SIGNAL TRACING

b. STEREOPHONIC SOUND SYSTEM

(1) The 2500 series stereophonic phonograph sound system consists of a Model 542 dual channel Amplifier with built-in Automatic Level Control, low inertia tone arm with Sonotone stereo pickup and a high fidelity speaker and cross-over network. The speaker complement consists of one 12 inch p.m. heavy duty, one 12 inch p.m. mid-range and one 7 inch p.m. high frequency.

The output of the Model 542 Amplifier is provided with a terminal strip for each channel to which may be connected either 500 ohm or constant voltage speakers. 4, 8 or 16 ohm speakers may be connected to both channels through the single prong sockets provided at the output of each channel. When auxiliary speakers are wired to the terminal strips, the Fader Switch must be set on one of the Lettered steps.

Remote Loudness and Cancel Control is available by the use of Kit 160, part number 117077 (with fifty feet of cable), or 117083 (with one hundred feet of cable).

(2) The Model 542 Amplifier is slide mounted on the inside left panel of the phonograph cabinet to provide good accessibility. The Main Line Switch, the Manual Reject Switch, the Loudness Control and the Fader Switch are mounted on the rear end of the amplifier chassis pan, accessible through the opening along the left edge of the lower back door. Also mounted on the rear of the amplifier chassis pan, but only accessible when the lower back door is removed, is the service outlet with a maximum rating of 4 amperes. An auxiliary stereo amplifier may be connected to the 542 stereo amplifier at the dual single prong socket labeled Aux. Amp. Each channel

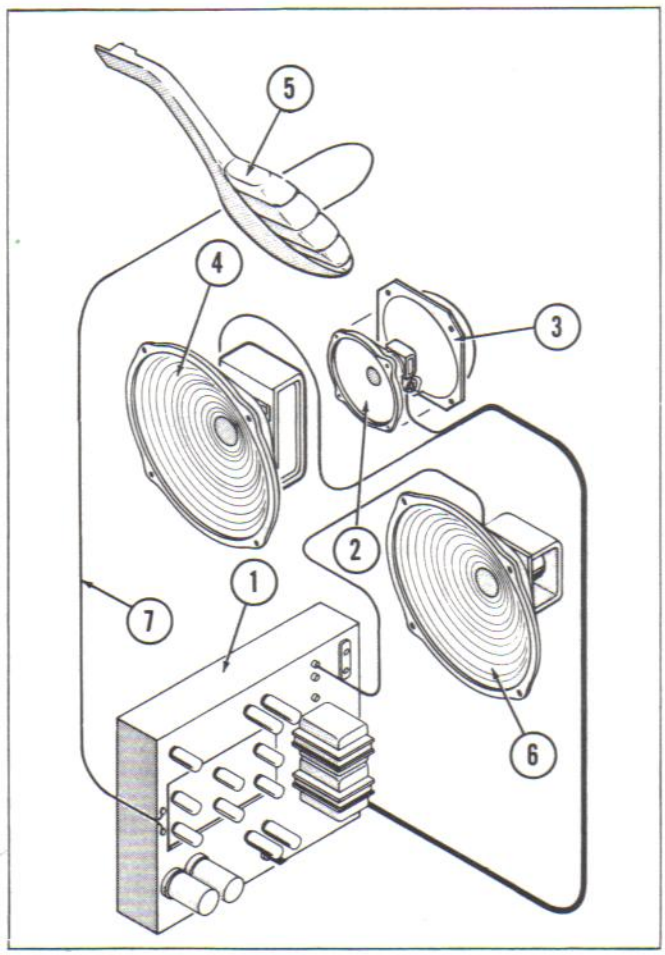


Fig. 82. LINE DRAWING STEREO SOUND SYSTEM

1.	Amplifier, Model 542, Less Tubes	118145
2.	Speaker, 7"	114054
3.	Cover, 7" Speaker	114058
4.	Speaker, 12" Heavy Duty	117754
5.	Tone Arm Assembly	118324
6.	Speaker, 12" Mid Range	65192
7.	Input Cable Assembly (2)	110190

of the Model 542 Amplifier is provided with a bass and a treble tone control. One balance control will be found which is common to both channels. The power source for the phonograph and amplifier is a separate unit mounted on the right side of the cabinet floor connecting to the amplifier through the 12 prong socket on the amplifier chassis.

(3) The types and functions of the amplifier tubes are listed in the following table:

TYPE	PART NO.	FUNCTION
7025 (2)	114046	Voltage Amplifier, Cathode Follower
12AU7 (1)	58420	Variable Resistance, Voltage Amplifier
12AX7 (1)	58427	Voltage Amplifier, Rectifier
12AX7 (2)	58427	Phase Inverter
6973 (4)	114048	Power Amplifier

(4) THEORY OF OPERATION, 542 AMPLIFIER

The audio signal from each source of the stereo cartridge is fed directly to its respective grid of the voltage amplifier section of the 7025 input tubes. A portion of the amplified signal is taken from channel A and fed to the voltage amplifier section of the 12AX7 tube. The second section of the 12AX7 rectifies the audio signal resulting in a varying D.C. voltage which is applied to the time constant circuit composed of C17, R49 and C18. This D.C. voltage is applied to the grids of the variable resistance section of both 12AU7 tubes. Thus the signal from channel A is used to control the level of both channel A and B. After passing through the cathode follower section of the 7025 tubes the Loudness Control governs the output of the amplifier. The tone controls on both channels are connected between the voltage amplifier section of the 12AU7 tubes and the 12AX7 phase inverters. Auxiliary amplifier connections are taken off following the cathode follower section of the 7025 tubes and will therefore be controlled by the automatic level control system. Between the voltage amplifier sections of the 12AU7 tubes and the 12AX7 phase inverters the signals are controlled by the manual bass and treble compensators. The balance control is connected between the input grids of the 12AX7 phase inverters and serves to equalize the level between channel A and B. It should be adjusted, after auxiliary speakers have been connected, by listening to a monaural record. Good stereo reproduction requires that the channels be balanced. The 12AX7 phase inverters drive the 6973 tubes in a push-pull power output stage. A negative feed-back circuit is employed for maximum output with minimum distortion under varying speaker loads.

During record changing intervals the amplifier is muted by the same mute and play switch used for the monophonic sound system. The wiring diagram 118771 shows the connections for this switch. Details on the operation of the tube heater circuits are the same as for the monophonic Model 540 Amplifier. The stereo power supply uses two Silicon Diode rectifiers for the 28 volt D.C. supply instead of the Selenium rectifier used on the monophonic.

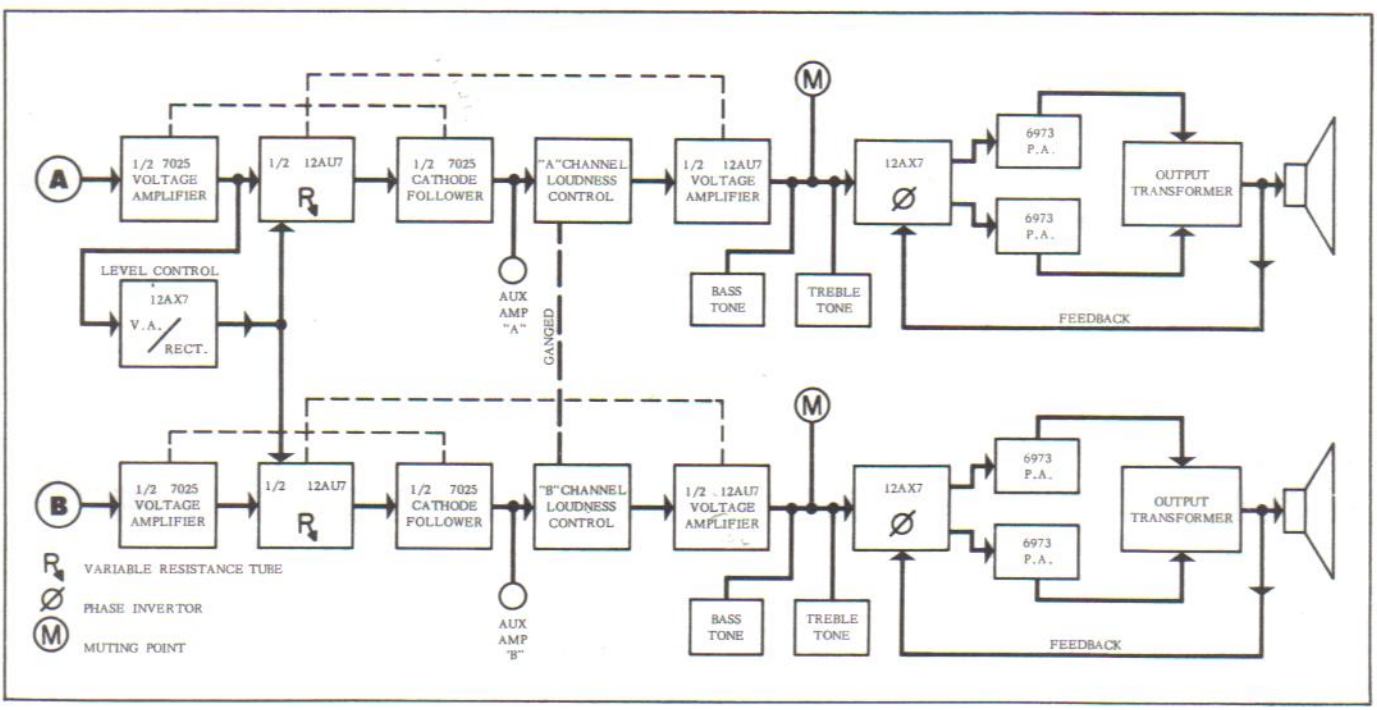
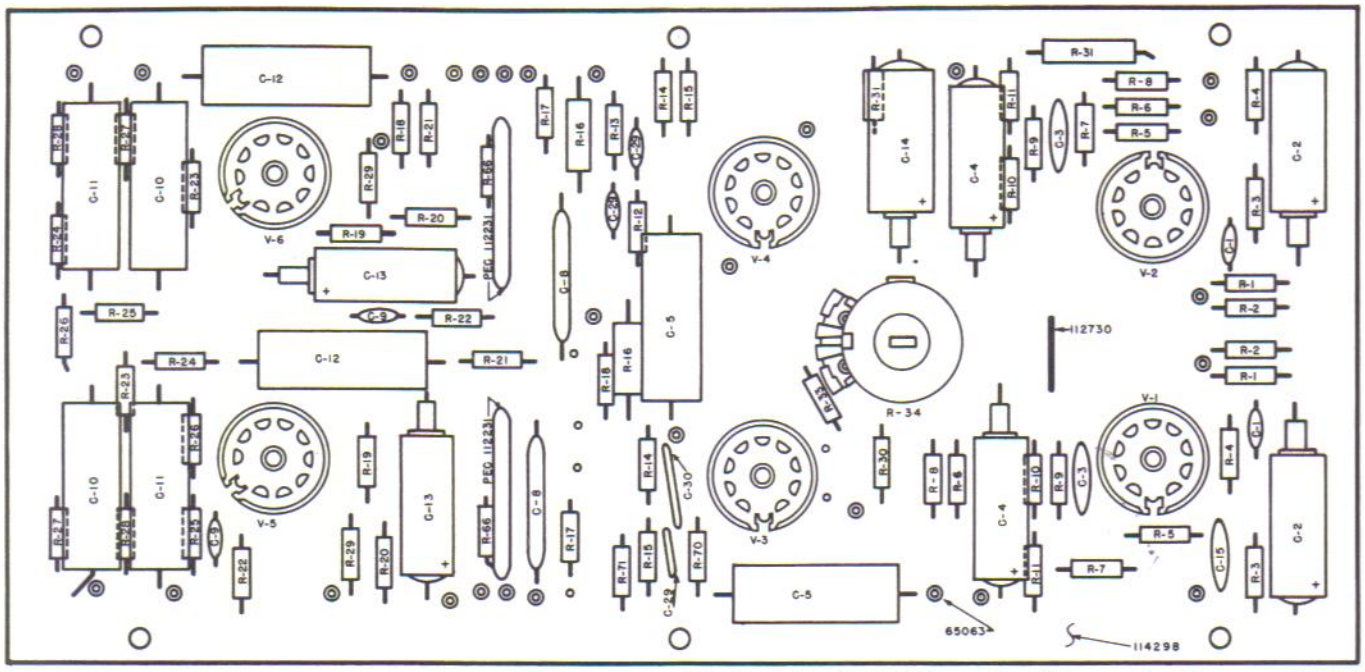


Fig. 83. MODEL 542 AMPLIFIER BLOCK DIAGRAM FOR SIGNAL TRACING



NOTE: For Code Values See Schematic Diagram 118771

Fig. 84. PRINTED CIRCUIT BOARD - MODEL 542 DUAL CHANNEL AMPLIFIER (TOP SIDE)

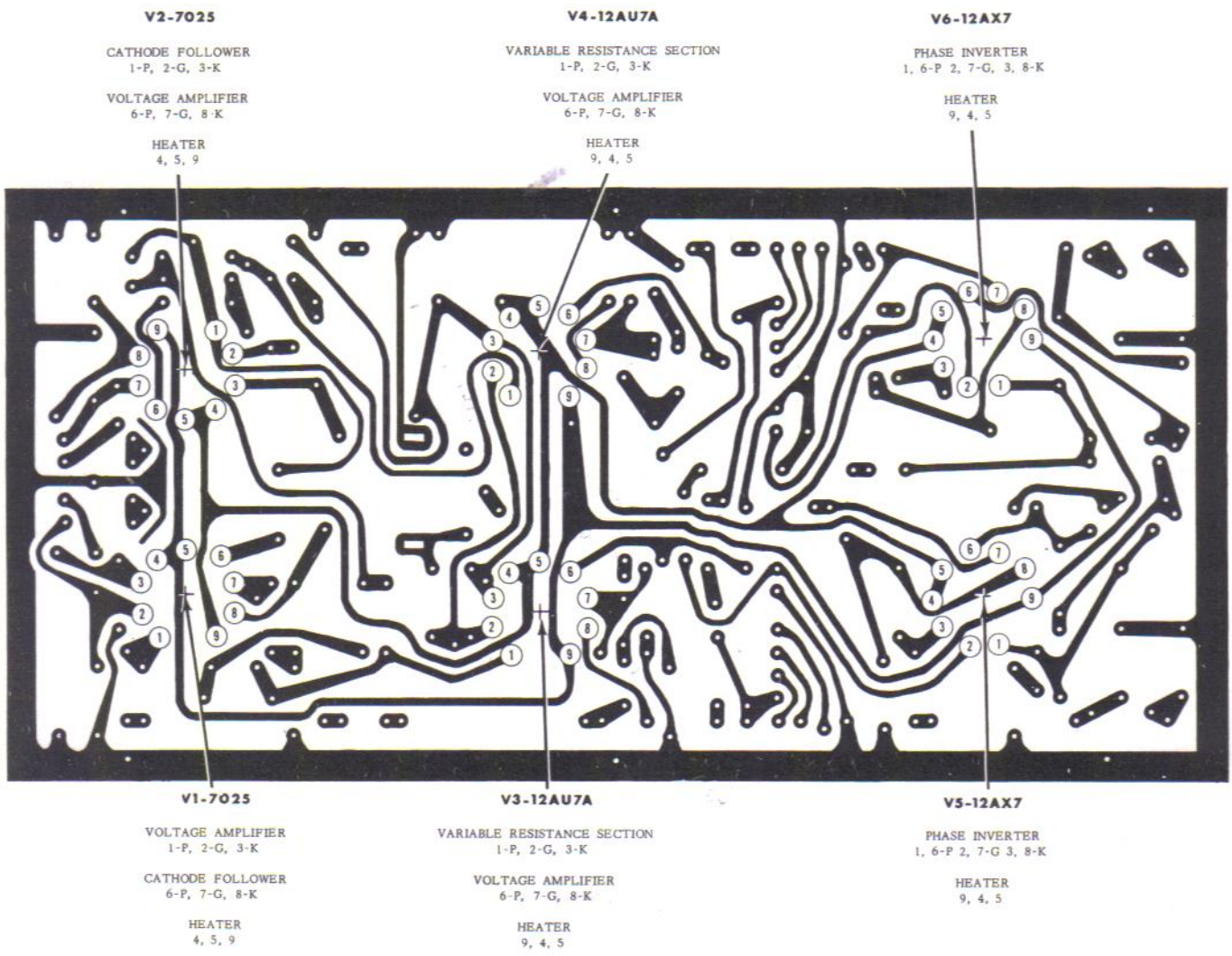


Fig. 85. PRINTED CIRCUIT BOARD - MODEL 542 DUAL CHANNEL AMPLIFIER (UNDER SIDE)

7. METHOD OF NUMBERING RELAY CONTACTS

When referring to Functional Schematics or Wiring Diagrams of the 2500 Model Phonographs, it will be noted that all relay contacts are designated by a number. Figure 84 below shows the relative position of the contacts on the various stacking arrangements in use.

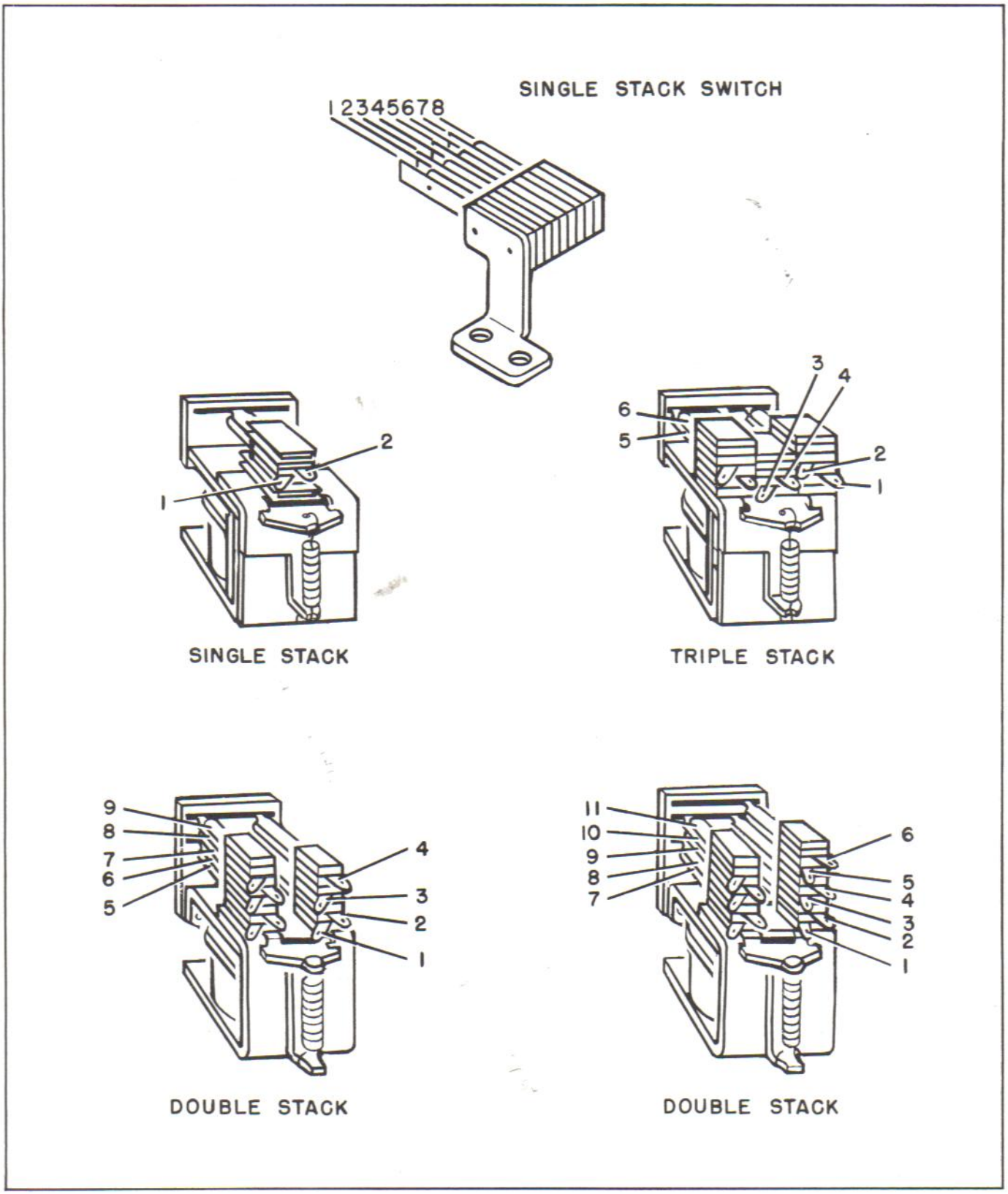


Fig. 86. METHOD OF NUMBERING RELAY CONTACTS

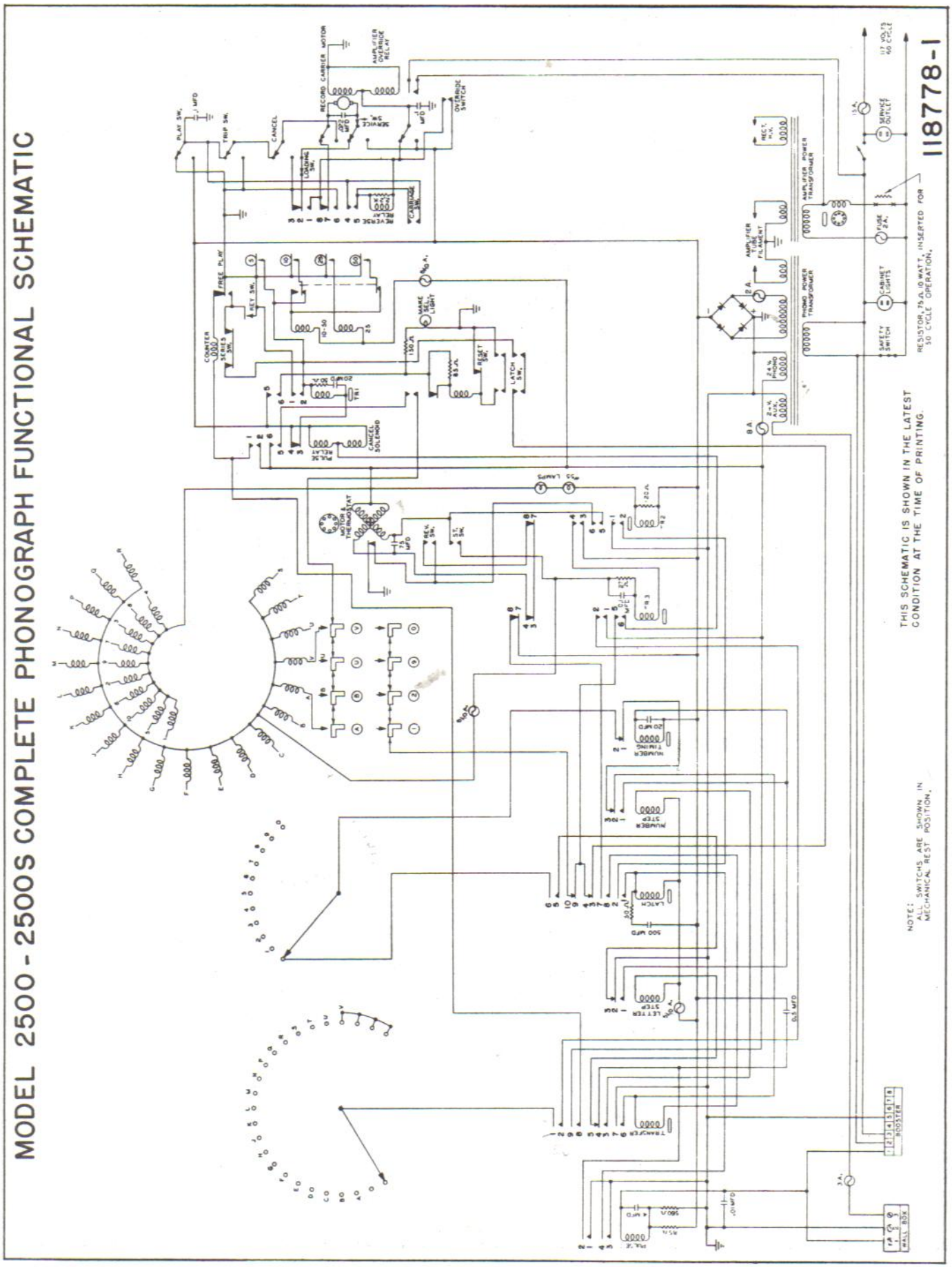
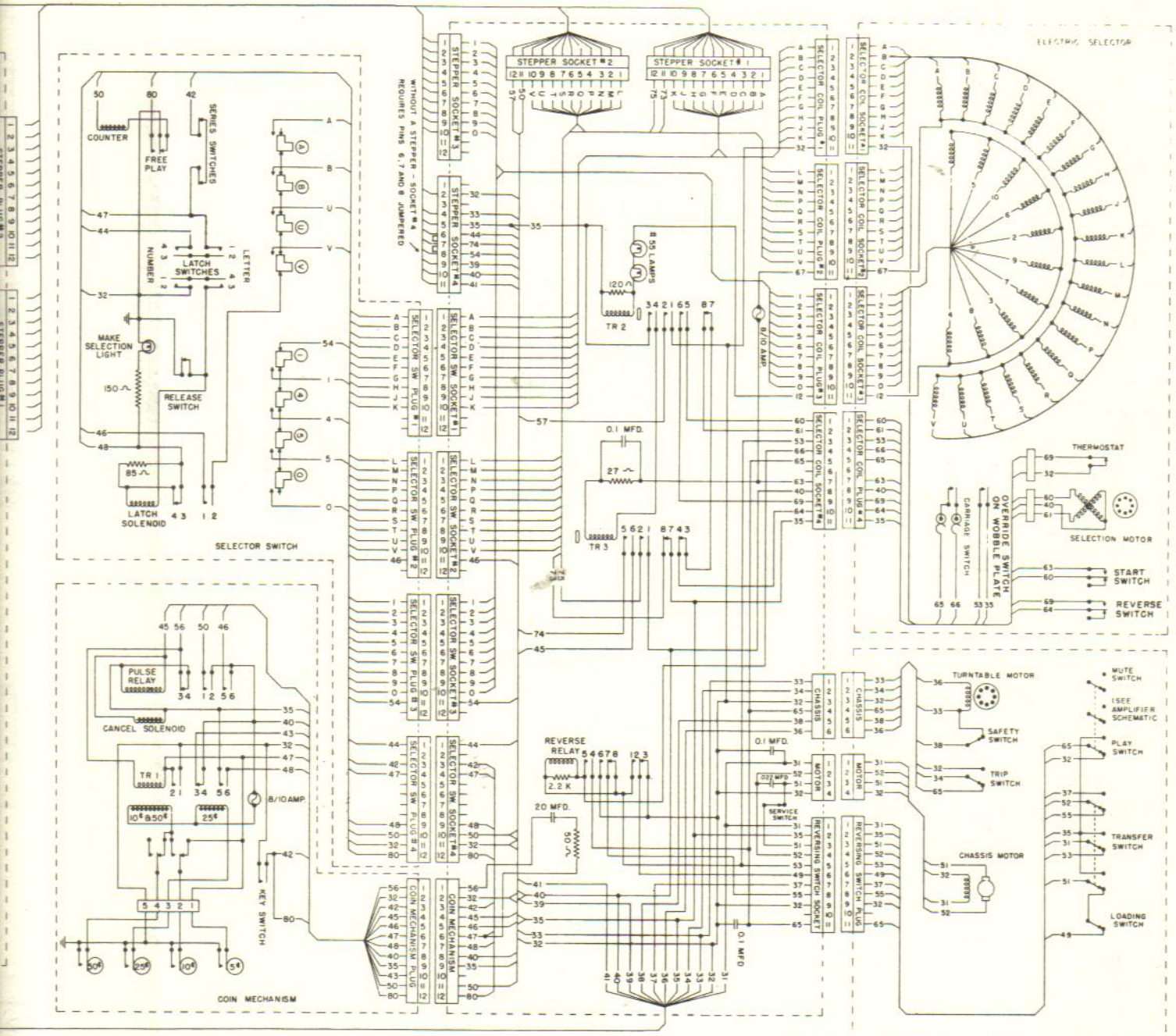


Fig. 87. Model 2500-2500S Functional Schematic

0-2500S WIRING DIAGRAM



THIS SCHEMATIC IS SHOWN IN THE LATEST CONDITION AT THE TIME OF PRINTING

118788-2

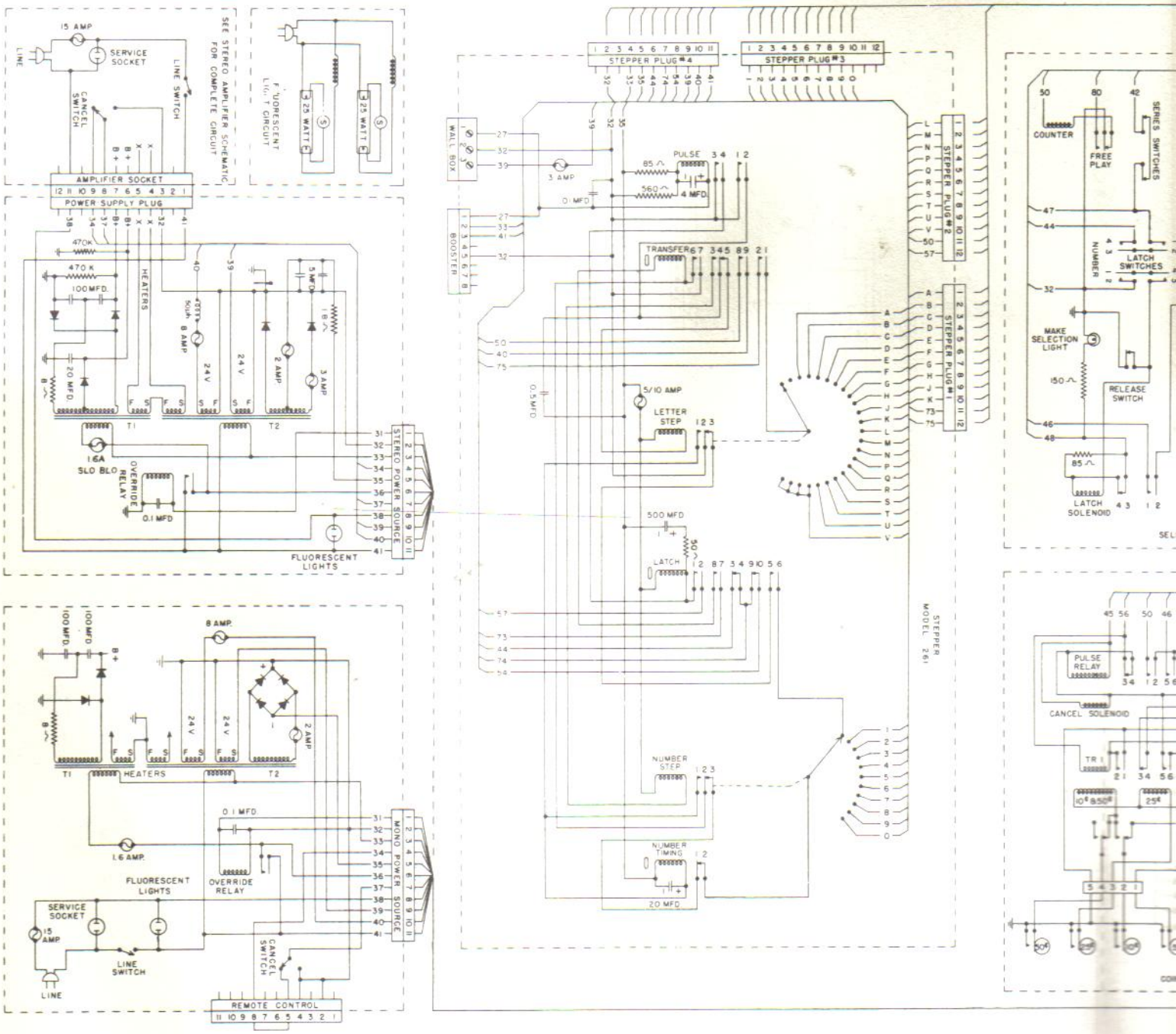


Fig. 88. Model 2500-2500S Wiring

MODEL 2510-2510S WIRIN

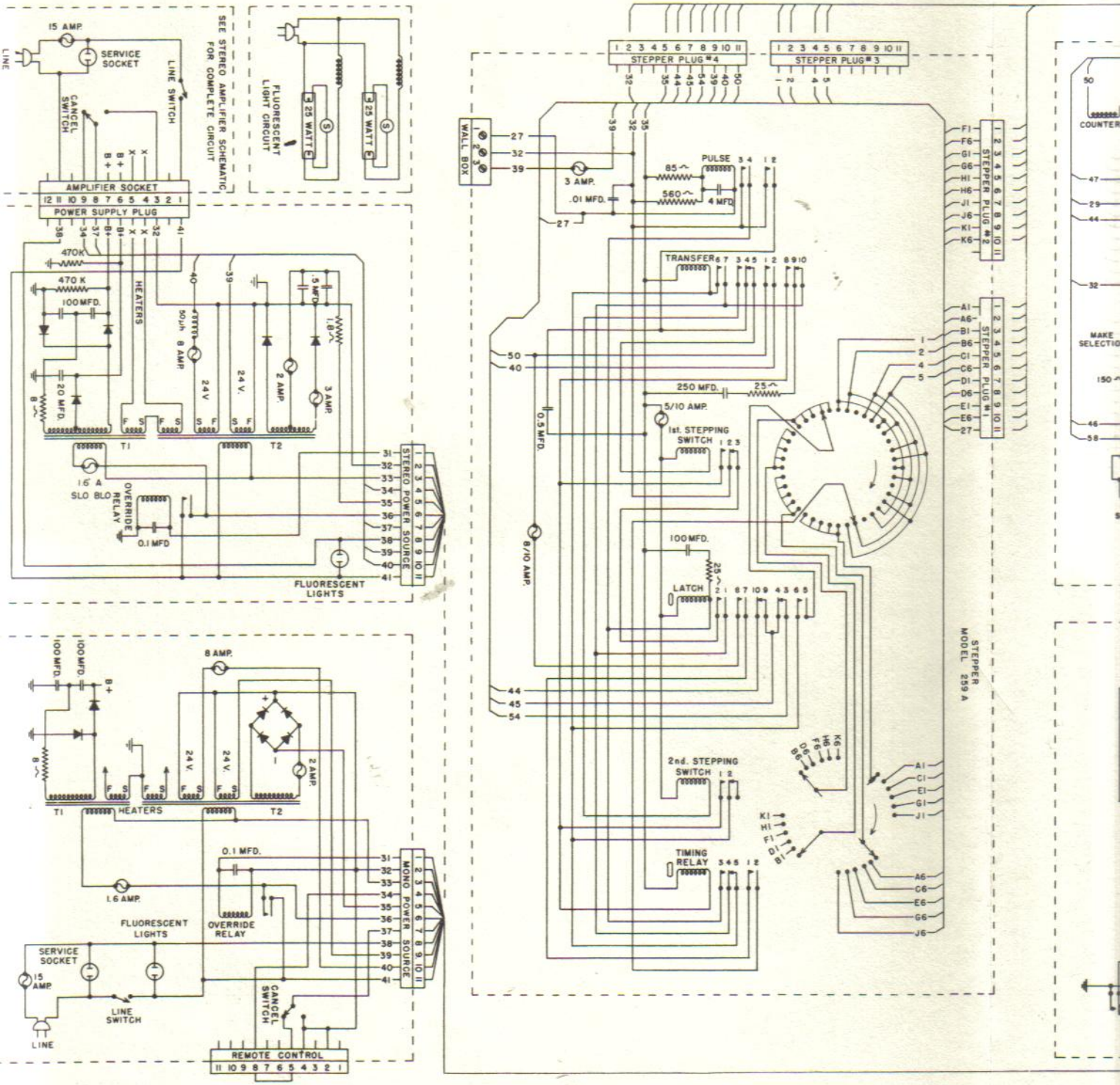
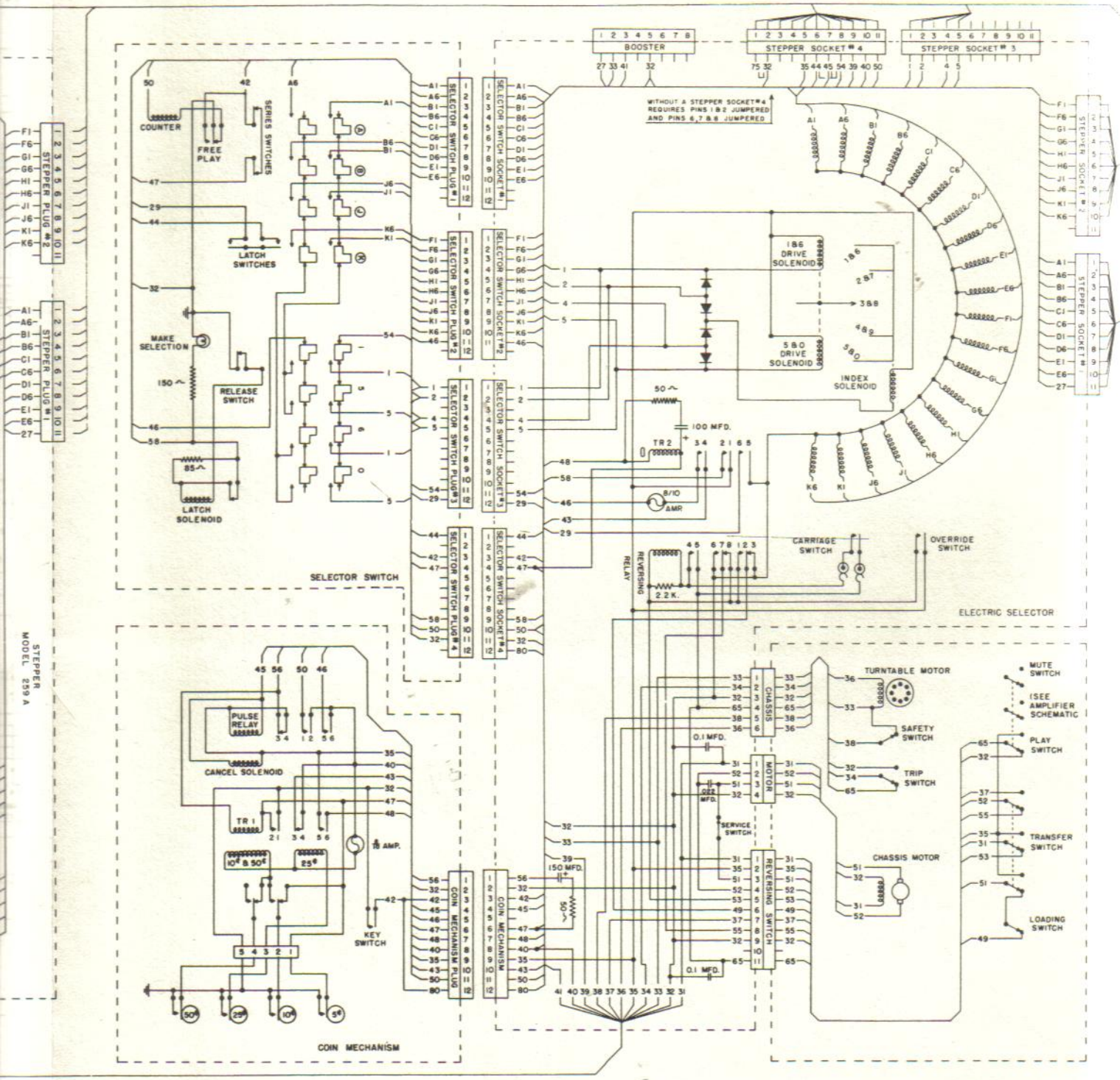


Fig. 89. Model 2510-2510S Wi

-2510S WIRING DIAGRAM



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118797-1

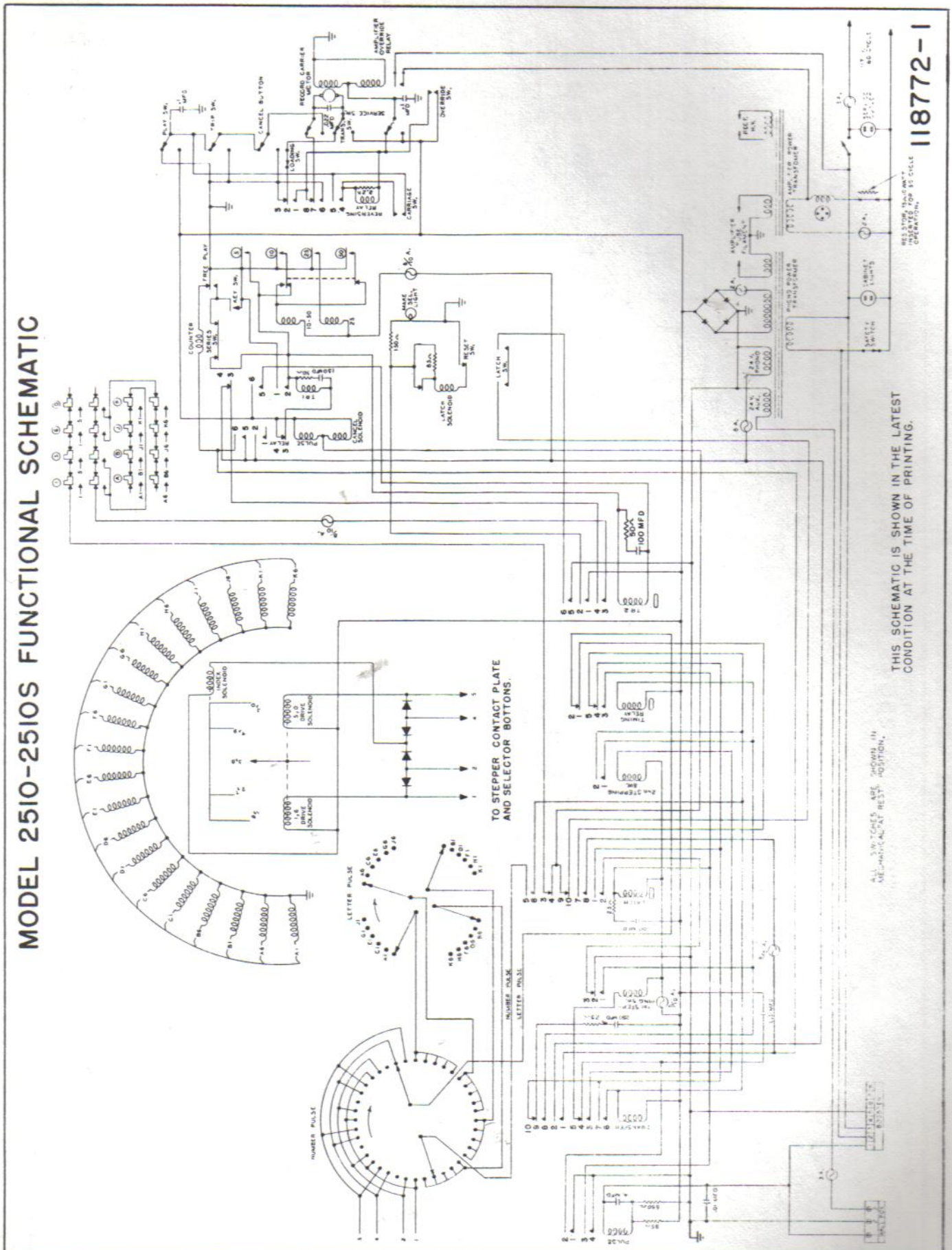


Fig. 90. Model 2510-2510S Functional Schematic

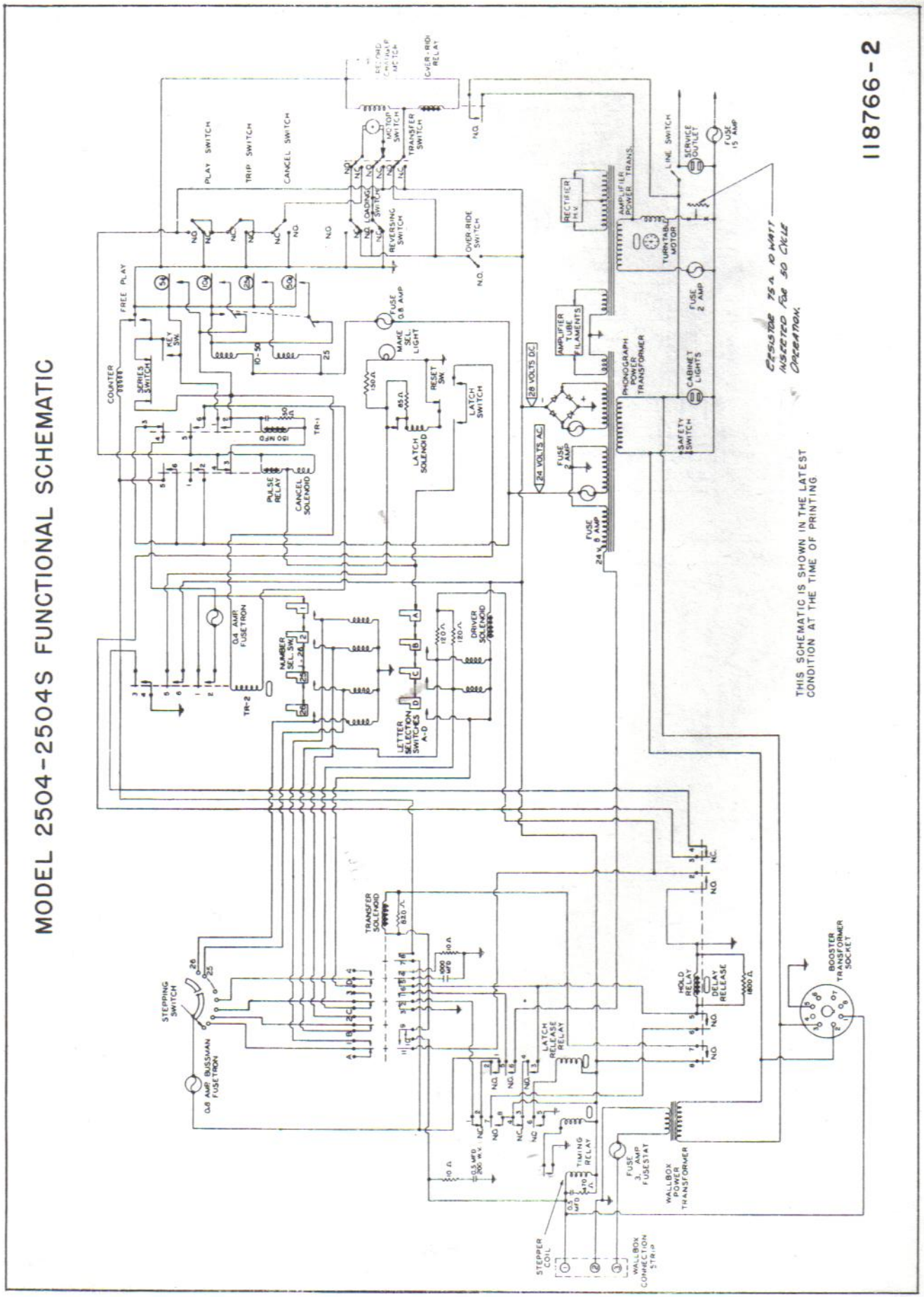


Fig. 91. Model 2504-2504S Functional Schematic

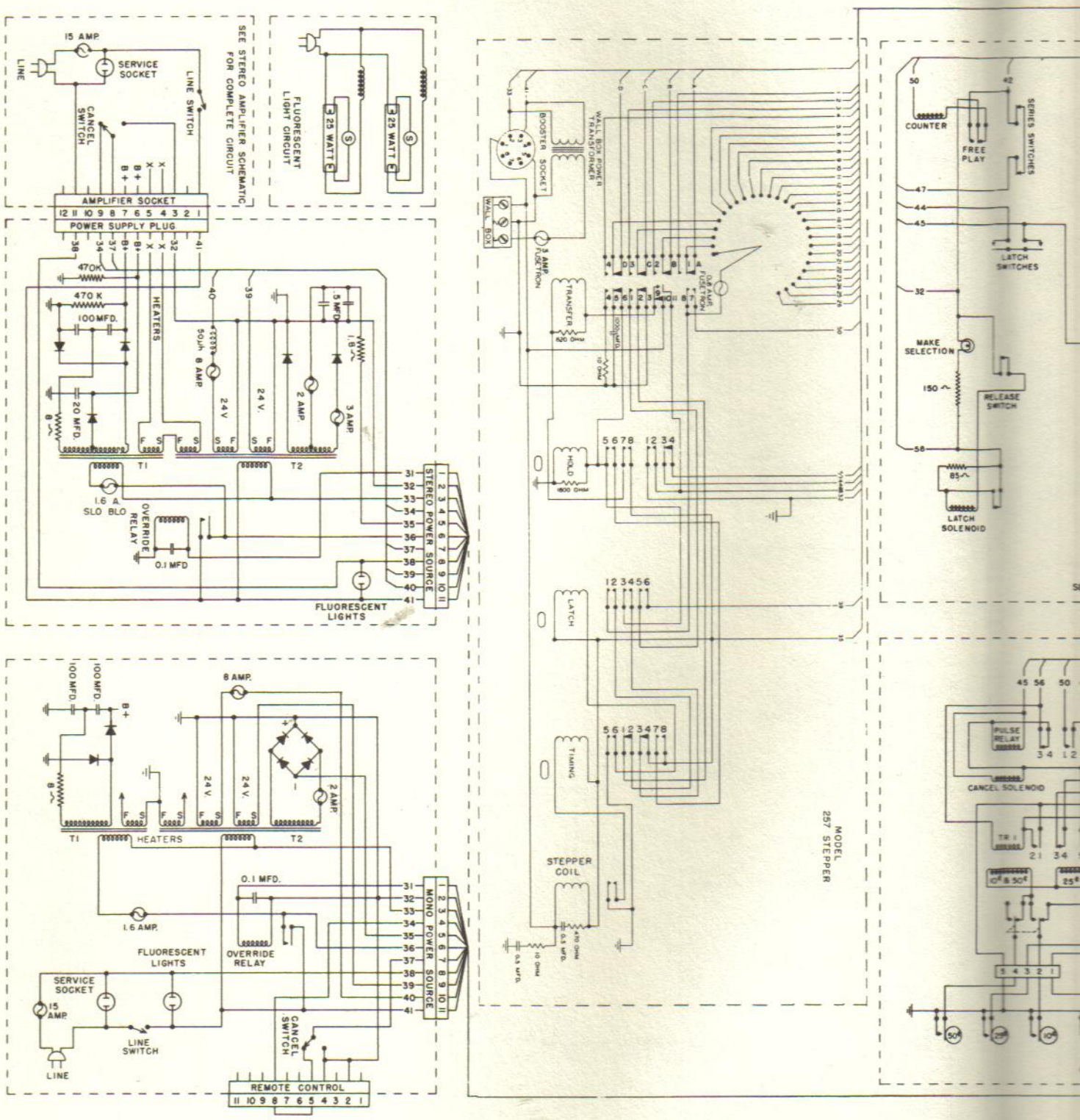
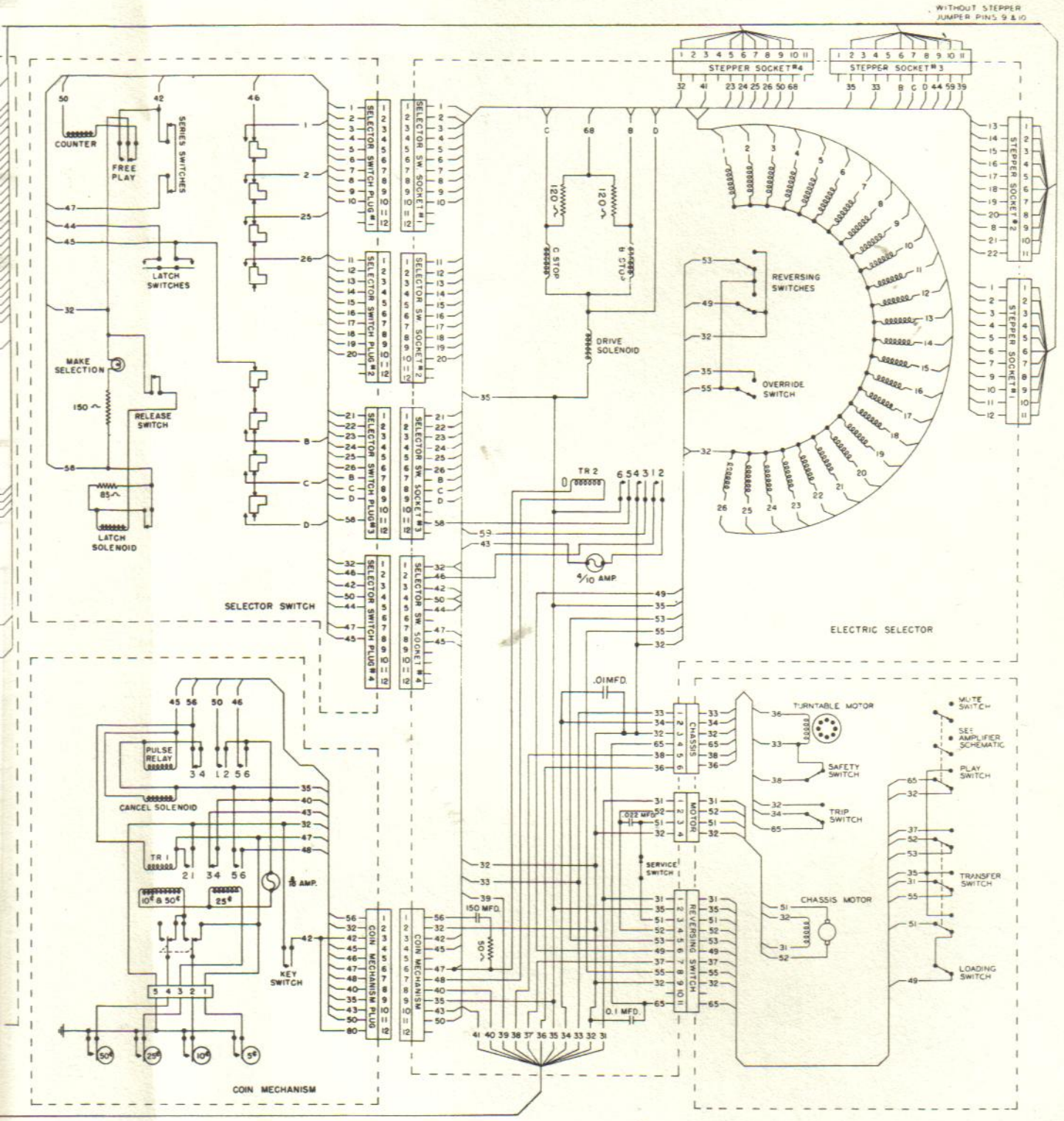


Fig. 92. Model 2504-2504S Wiring

04 - 2504S WIRING DIAGRAM



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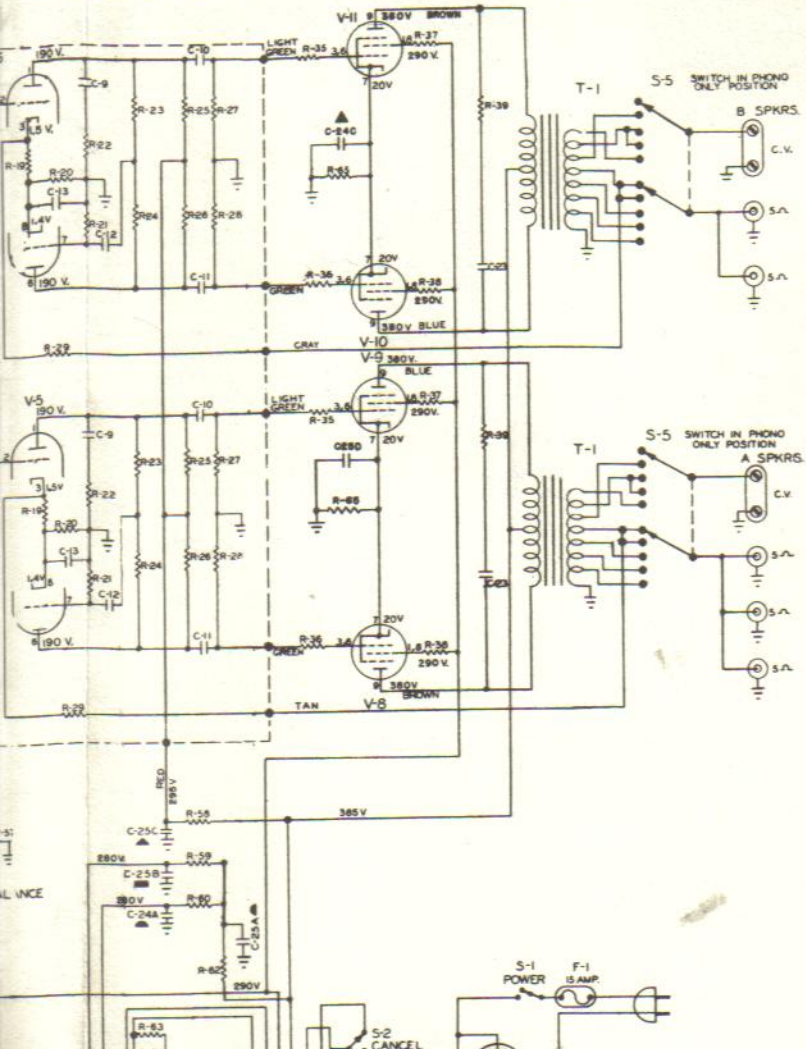
MODEL 542 AMPLIFIER – STEREO



ITEM	PART NO.	VALUE	REMARKS
R-1	72264-32	1 MEG	½W ±10%
R-2	72250-32	270 K	½W ±10%
R-3	72264-32	1 MEG	½W ±10%
R-4	72198-32	1.8 K	½W ±10%
R-5	72236-31	68K	½W ±5%
R-6	72258-31	82K	½W ±5%
R-7	72261-31	750K	½W ±5%
R-8	72274-51	2.7MEG	½W ±5%
R-9	72264-32	1 MEG	½W ±10%
R-10	72192-32	1 K	½W ±10%
R-11	72210-32	5.6 K	½W ±10%
R-12	72248-32	220 K	½W ±10%
R-13	72236-32	27K	½W ±10%
R-14	72264-32	1 MEG	½W ±10%
R-15	72192-32	1 K	½W ±10%
R-16	72176-32	47 K	1 W ±10%
R-17	72236-32	68K	½W ±10%
R-18	72254-32	56K	½W ±10%
R-19	72176-32	220Ω	½W ±10%
R-20	72192-32	1 K	½W ±10%
R-21	72248-32	220K	½W ±10%
R-22	72218-32	6.8 K	½W ±10%
R-23	72248-32	220K	½W ±10%
R-24	72248-32	220K	½W ±10%
R-25	72240-32	100 K	½W ±10%
R-26	72240-32	100 K	½W ±10%
R-27	72256-32	470 K	½W ±10%
R-28	72256-32	470 K	½W ±10%
R-29	72200-31	2.2 K	½W ±5%
R-30	72274-31	2.7 MEG	½W ±5%
R-31	72184-31	100 K	1 W ±5%
R-32	72217-31	11 K	½W ±5%
R-33	72232-32	47 K	½W ±10%
R-34	64880	500K	BIAS CONTROL
R-35	72192-32	1 K	½W ±10%
R-36	72192-32	1 K	½W ±10%
R-37	72160-32	47 Ω	½W ±10%
R-38	72160-32	47 Ω	½W ±10%
R-39	72368-32	22 K	1 W ±10%
R-42	72264-32	1 MEG	½W ±10%
R-43	72264-32	1 MEG	½W ±10%
R-44	72258-32	560 K	½W ±10%
R-45	72206-32	4.7 K	½W ±10%
R-46	72248-32	220 K	½W ±10%
R-47	72264-32	1 MEG	½W ±10%
R-48	72226-31	27K	½W ±5%
R-49	72268-31	1.5 MEG	½W ±5%
R-50A	114264	39K	LOUDNESS CONTROL
R-50B			
R-51	72184-32	470 Ω	½W ±10%
R-52	72192-32	1 K	½W ±10%
R-53	72252-32	330 K	½W ±10%
R-54	72236-32	68K	½W ±10%
R-55	72254-32	390K	½W ±10%
R-57	114463	500K	BALANCE
R-58	72368-32	22K	1 W ±10%
R-59	72352-32	4.7 K	1 W ±10%
R-60	72352-32	4.7 K	1 W ±10%
R-62	70685-2	5000 Ω	5 WATT ±10%
R-63	72160-32	47 Ω	½W ±10%
R-64	72160-32	47 Ω	½W ±10%
R-65	72999-2	310Ω	5 WATT
R-66	72246-32	180K	½W ±10%
R-70	72248-32	180K	½W ±10%
R-71	72246-32	180K	½W ±10%

ITEM	PART NO.	VALUE	REMARKS
C-1	71618-44	270 MMFD	CERAMIC
C-2	73842-51	25 MFD	25V ELECT.
C-3	70748	.01	CERAMIC
C-4	73842-51	25 MFD	25 V. ELECT.
C-5	71227-12	.1 MFD	200VOLT
C-8	71649-64	.0047MFD	CERAMIC
C-9	71624-64	470 MMFD	CERAMIC
C-10	71224-14	.047 MFD	400 VOLT
C-11	71224-14	.047 MFD	400 VOLT
C-12	71224-14	.047 MFD	400 VOLT
C-13	73842-21	25 MFD	25 V ELECT
C-14	73840-12	20 MFD	50 V ELECT
C-15	70748	.01 MFD	CERAMIC
C-16	70748	.01 MFD	CERAMIC
C-17	70634-220	1. MFD	200 VOLT
C-18	73876	2 MFD	50 VOLT
C-19	71524-12	.0039 MFD	200 VOLT
C-20	74184-11	.39 MFD	100 VOLT
C-21	74184-11	.39 MFD	100 VOLT
C-22	71618-44	270 MMFD	CERAMIC
C-23	73002-46	.0005 MFD	1600 VOLT
C-24A	74150	▲20 MFD	450 V ELECT
C-24B		■20 MFD	450 V ELECT
C-24C		▲150 MFD	50 V ELECT
C-25A	73475	▲30MFD	500V ELECT
C-25B		■20 MFD	400V ELECT
C-25C		▲20 MFD	400V ELECT
C-25D		25 MFD	50 V ELECT
C-28	114054-A	4 MFD	25V NON POLORIZED
C-29	71649-64	.0047MFD	CERAMIC
C-30	71651-74	.0056MFD	CERAMIC
S-1	53648	S.P.S.T.	POWER SW.
S-2	68770	S.P.D.T.	CANCEL SW.
S-3	64657	4 POS. SHORTING	TREBLE SW.
S-4	64857	4 POS. SHORTING	BASS SW.
S-5	118688		FADER SW.
T-1	114259		OUTPUT TRANS.
LS-1	114054	3.5 OHM	7 IN. SPEAKER
LS-2	62492	16 OHM	12 IN. SPEAKER
LS-3	114006	8 OHM	12 IN. SPEAKER
F-1	52196	15 AMP	250V FUSE
REC.	112231		TREBLE TONE

A.C. SIGNAL CHART

USE BALLANTINE A.C.-VTVM OR HEATHKIT VOLTMETER AV-2 APPLY 10 MILLIVOLT AT 1000 CPS SIGNAL TO INPUT JACKS A & B VOLUME CONTROL, BASS & TREBLE CONTROLS FULL CLOCKWISE BALANCE CONTROL SET IN MIDDLE. USE 5Ω 20 W RESISTOR AS OUTPUT LOAD FOR EACH CHANNEL.

TUBE		FUNCTION	PIN NO. 1	2	3	4	5	6	7	8	9
V1	7025	VA-CF	.35	.004					.07	.1	
V2	7025	VA-CF		.07	.1			.35	.004		
V3,V4	12 AU7	R-VA	.07					.45	.04	.01	
V5,V6	12 AX7	Ø	2.0	.18	.19			2.3	.045		
V7	12 AX7	VA-RECT	2					2	.035	.09	
V8,V9 V10,V11	6973	POWER AMP	.07		2.1			2.1		.07	46

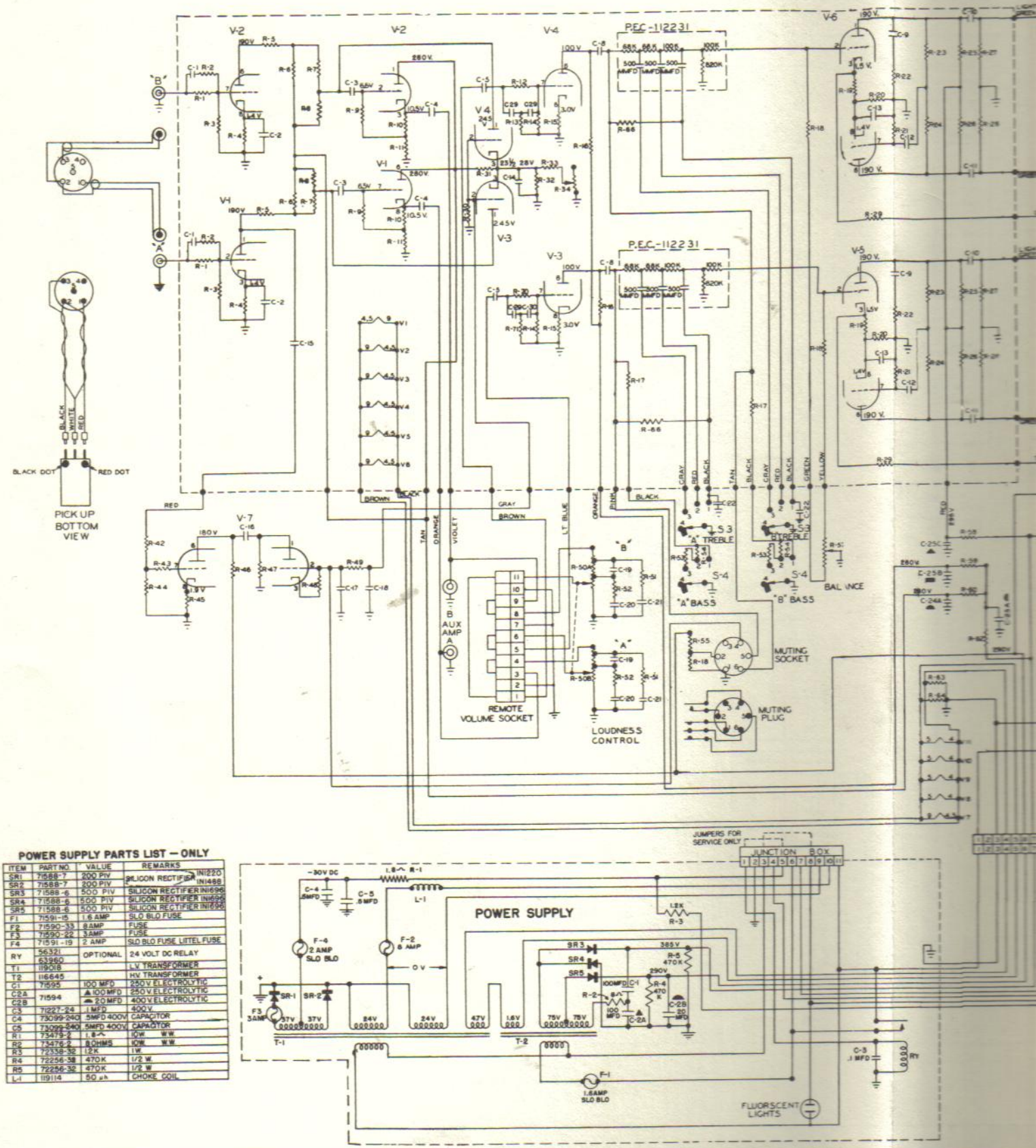
A.C. VOLTAGES MEASURED FROM GROUND
LINE VOLTAGE :117V
* MEASURED WITH VTVM

THIS SCHEMATIC IS SHOWN IN THE LATEST CONDITION AT TIME OF PRINTING.

118771-2

d System Schematic Wiring Diagram

SCHEMATIC DIAGRAM MODEL 542 AMP



POWER SUPPLY PARTS LIST — ONLY

ITEM	PART NO.	VALUE	REMARKS
SR1	71588-7	200 PIV	SILICON RECTIFIER IN1220 IN1468
SR2	71588-7	200 PIV	
SR3	71588-6	500 PIV	SILICON RECTIFIER IN1696
SR4	71588-6	500 PIV	SILICON RECTIFIER IN1696
SR5	71588-6	500 PIV	SILICON RECTIFIER IN1696
F1	71591-15	1.6 AMP	SLO BLO FUSE
F2	71590-33	8 AMP	FUSE
F3	71590-22	3 AMP	FUSE
F4	71591-19	2 AMP	SLO BLO FUSE LITTEL FUSE
RY	56321 63960	OPTIONAL	24 VOLT DC RELAY
T1	119018		LV TRANSFORMER
T2	116645		HV TRANSFORMER
C1	71595	100 MFD	250 V ELECTROLYTIC
C2A	71594	▲ 100 MFD	250 V ELECTROLYTIC
C2B		▲ 20 MFD	400 V ELECTROLYTIC
C3	71227-24	1 MFD	400 V
C4	73099-240	5MFD 400V	CAPACITOR
C5	73099-240	5MFD 400V	CAPACITOR
R1	73479-2	1.8 ^	10W W.W.
R2	73476-2	8 OHMS	10W W.W.
R3	72338-32	1.2K	1W
R4	72256-38	470K	1/2 W.
R5	72256-32	470K	1/2 W
L-1	119114	50 μh	CHOKE COIL

Fig. 93. 542 Sound System Schematic

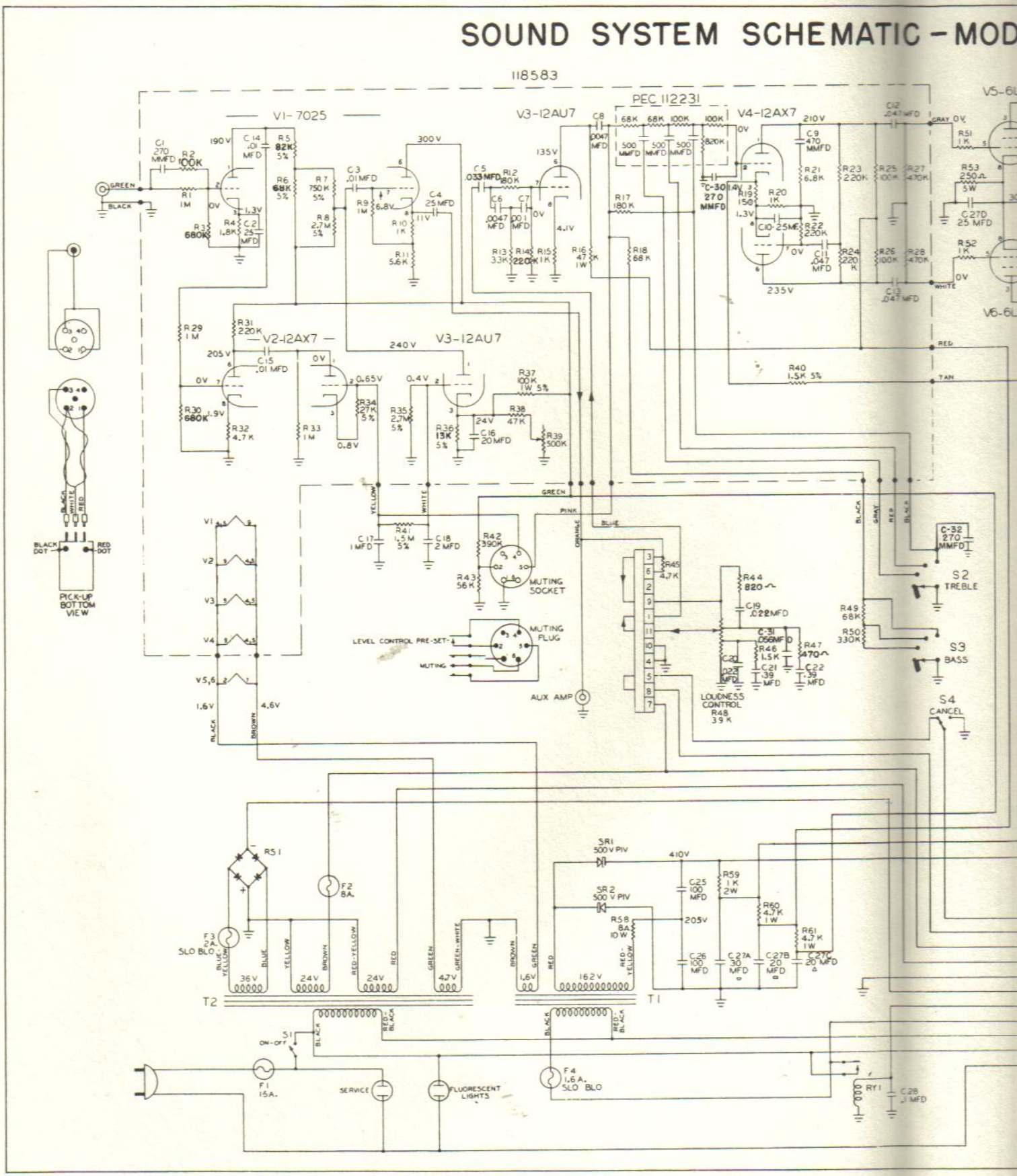
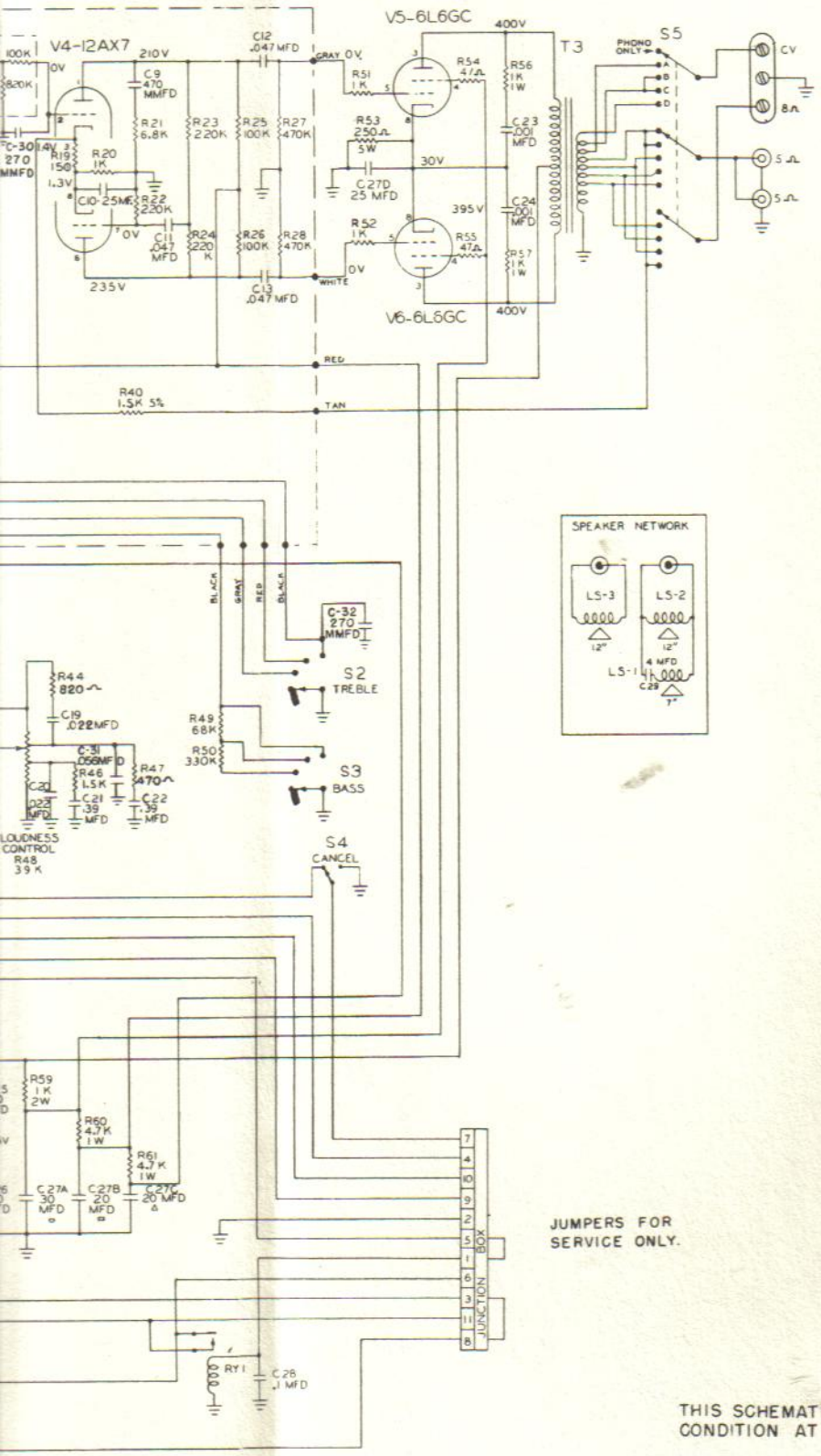


Fig. 94. 540 Sound System Schematic W

M SCHEMATIC – MODEL 540 AMPLIFIER



ITEM	PART NO.	VALUE	REMARKS
R1	72264-32	1 M	½ W 10%
R2	72246-32	100 K	½ W 10%
R3	72260-32	680K	½ W 10%
R4	72198-32	1.8 K	½ W 10%
R5	72236-31	82K	½ W 5%
R6	72236-31	68K	½ W 5%
R7	72261-31	750 K	½ W 5%
R8	72274-31	2.7 M	½ W 5%
R9	72264-32	1 M	½ W 10%
R10	72192-32	1 K	½ W 10%
R11	72210-32	5.6 K	½ W 10%
R12	72246-32	180 K	½ W 10%
R13	72228-32	33 K	½ W 10%
R14	72248-32	220K	½ W 10%
R15	72192-32	1 K	½ W 10%
R16	72276-32	47K	1 W 10%
R17	72246-32	180K	½ W 10%
R18	72236-32	68 K	½ W 10%
R19	72176-32	220Ω	½ W 10%
R20	72192-32	1 K	½ W 10%
R21	72212-32	6.8K	½ W 10%
R22	72248-32	220K	½ W 10%
R23	72248-32	220K	½ W 10%
R24	72248-32	220K	½ W 10%
R25	72240-32	100 K	½ W 10%
R26	72240-32	100 K	½ W 10%
R27	72256-32	470 K	½ W 10%
R28	72256-32	470 K	½ W 10%
R29	72264-32	1 M	½ W 10%
R30	72260-32	680K	½ W 10%
R31	72248-32	220K	½ W 10%
R32	72208-32	4.7 K	½ W 10%
R33	72264-32	1 M	½ W 10%
R34	72226-31	27K	½ W 5%
R35	72274-31	2.7 M	½ W 5%
R36	72219-31	13K	½ W 5%
R37	72284-31	100 K	1 W 5%
R38	72232-32	47 K	½ W 10%
R39	64880-	500 K	LEVEL CONTROL
R40	72196-31	1.5 K	½ W 5%
R41	72268-31	1.5 M	½ W 5%
R42	72254-32	390 K	½ W 10%
R43	72234-32	56 K	½ W 10%
R44	72190-32	820Ω	½ W 10%
R45	72208-32	4.7 K	½ W 10%
R46	72196-32	1.5 K	½ W 10%
R47	72184-32	470Ω	½ W 10%
R48	118592	39K	LOUDNESS
R49	72236-32	68 K	½ W 10%
R50	72252-32	330 K	½ W 10%
R51	72192-32	1 K	½ W 10%
R52	72192-32	1 K	½ W 10%
R53	70682-2	250Ω	5 W 10%
R54	72160-32	47Ω	½ W 10%
R55	72180-32	47Ω	½ W 10%
R56	72336-32	1 K	1 W 10%
R57	72336-32	1 K	1 W 10%
R58	73478-2	8Ω	10 W WW
R59	72480-32	1 K	2 W 10%
R60	72352-32	4.7 K	1 W 10%
R61	72352-32	4.7 K	1 W 10%

ITEM	PART NO.	VALUE	REMARKS
C1	71649-44	470 MMFD	CERAMIC
C2	73842-21	25 MFD	25 V. ELECT.
C3	71657-74	.01 MFD	CERAMIC
C4	73842-21	25 MFD	25 V. ELECT.
C5	74315-12	.033 MFD	200 V.
C6	71649-64	.0047 MFD	CERAMIC
C7	71632-44	001 MFD	CERAMIC
C8	71649-64	.0047 MFD	CERAMIC
C9	71624-64	470 MMFD	CERAMIC
C10	73842-2	25 MFD	25 V. ELECT.
C11	71224-14	.047 MFD	400 V
C12	71224-14	.047 MFD	400 V
C13	71224-14	.047 MFD	400 V
C14	71657-74	.01 MFD	CERAMIC
C15	71657-74	.01 MFD	CERAMIC
C16	73810-52	20 MFD	50 V. ELECT.
C17	70634-220	1 MFD	200 V
C18	73876	2 MFD	50 V
C19	71220-14	.022 MFD	400 V
C20	71220-14	.022 MFD	400 V
C21	74184-11	.39 MFD	100 V
C22	74184-11	.39 MFD	100 V
C23	71750-27	.001 MFD	1000 V
C24	71750-27	.001 MFD	1000 V
C25	71545-	100 MFD	250 V. ELECT.
C26	71595	100 MFD	250 V. ELECT.
C27A	73475	30 MFD	500 V. ELECT.
C27B		20 MFD	400 V. ELECT.
C27C		20 MFD	400 V. ELECT.
C27D		25 MFD	50 V. ELECT.
C28	71227-24	.1 MFD	400 V
C29	114054-A	4 MFD	25V. NON-POLOR
C30	71618-44	270MMFD	CERAMIC
C31	74318-12	.056 MFD	200 V
C32	71618-44	270MMFD	CERAMIC
F1	71590-48	15 A.	FUSE
F2	71590-33	8 A.	FUSE
F3	71591-19	2 A.	SLO-BLO FUSE
F4	71591-15	1.6A.	SLO-BLO FUSE
RY1	56321 (OPT.)	5PST	24V. DC RELAY
	63990 (OPT.)		
S1	53648	5PST	POWER SWITCH
S2	64857	4 POS. COM	TREBLE TONE
S3	64857	TIN. SHORTH	BASS TONE
S4	68770	SPDT	CANCEL SW.
S5	62507	3PST	FADER SW.
SR1	71588-6	500 V. PIV	GE,
SR2	71588-8	SILICON (OPT.	WEST.
	71588-10	RECTIFIER)	INT.
T1	118579		POWER
T2	68183		JUNCTION-POWER
T3	62430		AUDIO OUTPUT
R51	115209	RECTIFIER	SELENIUM
PEC	112231	TREBLE TONE FILTER	
LS-1	114054	3.5Ω	7" SPEAKER
LS-2	62492	16Ω	12" SPEAKER
LS-3	114006	8Ω	12" SPEAKER

A.C. SIGNAL CHART

USE BALLANTINE AC-VTVM OR HEATHKIT VOLTMETER AV-2.
APPLY 10 MILLIVOLT AT 1000 CPS SIGNAL TO INPUT JACK.
VOLUME CONTROL, BASS & TREBLE CONTROLS FULL CLOCKWISE.
USE 5Ω 20W RESISTOR AS OUTPUT LOAD.

TUBE		FUNCTION	PIN NO								
			1	2	3	4	5	6	7	8	9
V1	7025	V.A., C.F.	.37V	4MV	0.4V	1.6V	1.6V	0	70MV	3 V	4.6V
V2	12AX7	V.A., RECT.	3.5V	0	24MV	4.6V	4.6V	3.5V	0.1V	2 V	1.6V
V3	12AU7	R, V.A.	70MV	0	0	4.6V	4.6V	7.5V	65MV	7MV	1.6V
V4	12AX7	Ø	5.8V	3.5V	50MV	4.6V	4.6V	5.4V	.1V	12MV	1.6V
V5	6L6GC	P. A.	30MV	1.6V	75V	20MV	5.4V	5.4V	4.6V	30MV	
V6	6L6GC	P. A.	0	1.6V	75V	20MV	5.8V	5.8V	4.6V	30MV	
SR1	500V PIV	RECT.	60cps, A.C. VOLTS 3.5V → WITH V.T.VM. 160 V.								
SR2	500V PIV	RECT.	WITH V.T.V.M. 160V → 0 V.								

A.C. VOLTAGES MEASURED FROM GROUND.
LINE VOLTAGE 117 V.
D.C. VOLTAGES MEASURED WITH VTVM.

THIS SCHEMATIC IS SHOWN IN THE LATEST CONDITION AT TIME OF PRINTING.

118777-2

. 540 Sound System Schematic Wiring Diagram

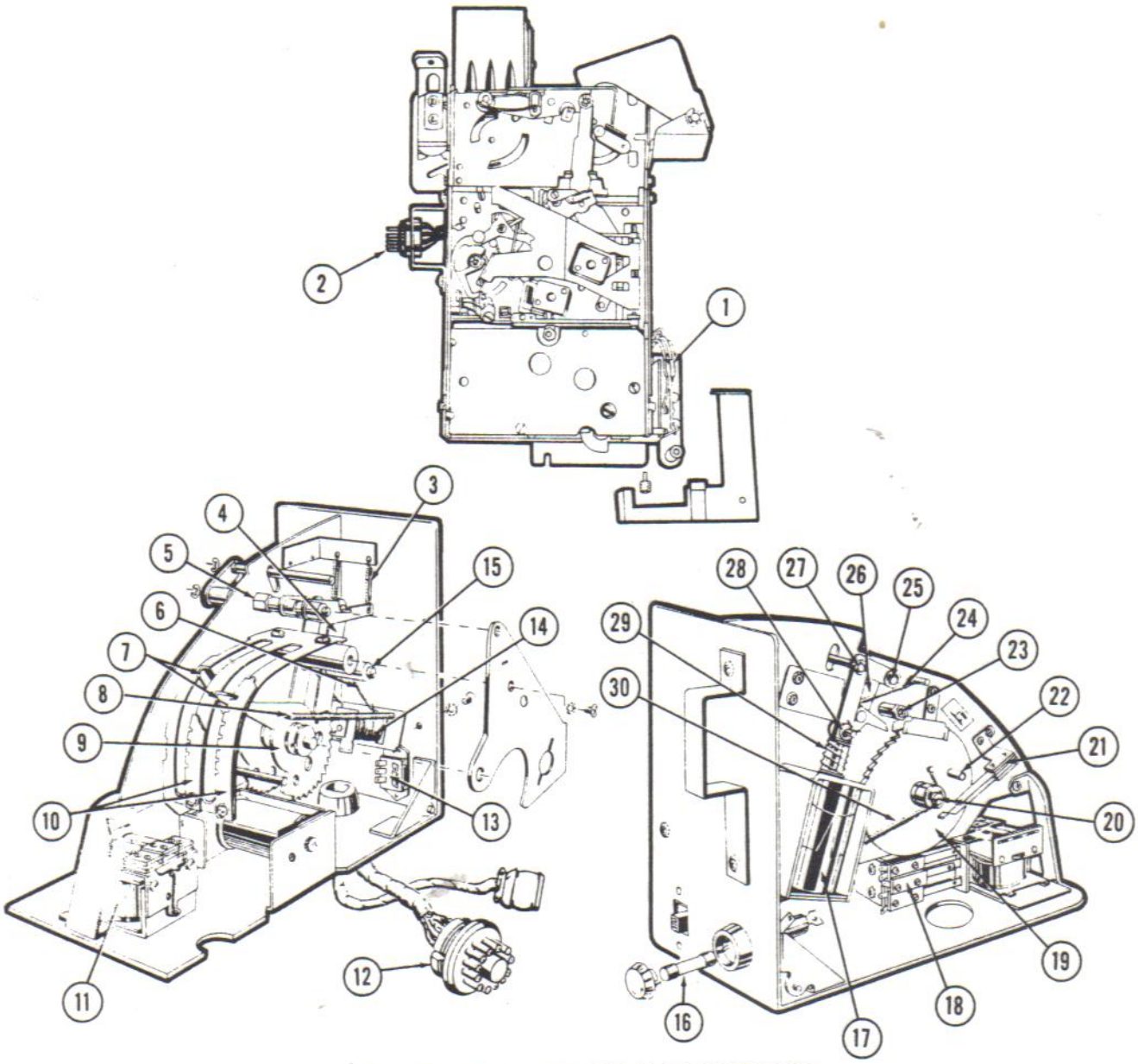


Fig. 95. PLAYRAK AND SLUG REJECTOR

1.	Coin Switch Assem., Slug Rejector, 5-10-25-50¢	119107
2.	Plug, 5 Prong (Male)	13089
	Socket, 5 Prong (Female)	16617
3.	Spring, Lockout Lever	62145
	Hub and Lever Assem., Lockout	66130
4.	Lever, Hub and Stud Assem., Magnet Armature (2)	66129
5.	Mounting Stud, Lockout Levers	66049
6.	Spring, Armature Return (2)	58781
7.	Stop Lever and Spring Assem. (2)	66132
8.	Spring, Accumulator Wheel (2)	66074
9.	Accumulator Wheel and Hub Assem. (2)	66131
10.	Indexing Strip and Silk Screen Assem. 25¢	66133
	Indexing Strip and Silk Screen Assem. 10-50¢	66135
11.	Relay, Pulse	69244
12.	Plug, 12 Prong	114324
13.	Slide Switch	62886
14.	Coin Magnet and Bracket Assembly	66128
15.	Retaining Ring (2)	73724-18
16.	Fuse Post	51485
	Fusetron, 8/10 Slow Blo	71591-10
17.	Solenoid, Cancel	65069
18.	Relay, Timing No. 1	112494
19.	Cancel Wheel Assembly	66124
20.	Retaining Ring	73724-25
21.	Switch Assembly, Key Switch	66082
22.	Screw, Switch Actuator, 4-40 x 1/2 R.H. Nylon	74288-6
23.	Adjusting Cam	42868
24.	Spring, Cancel Pawl	62145
25.	Pivot Pin, Pawl	63623
	Retaining Ring	73724-21
26.	Pivot Arm and Pawl Assembly	66125
27.	Retaining Ring, Pivot Arm and Pawl Assembly	73724-15
28.	Pin, Solenoid Plunger	65947
29.	Spring, Solenoid Plunger	66072
	Link, Solenoid	66065
30.	Spring, Cancel	66071

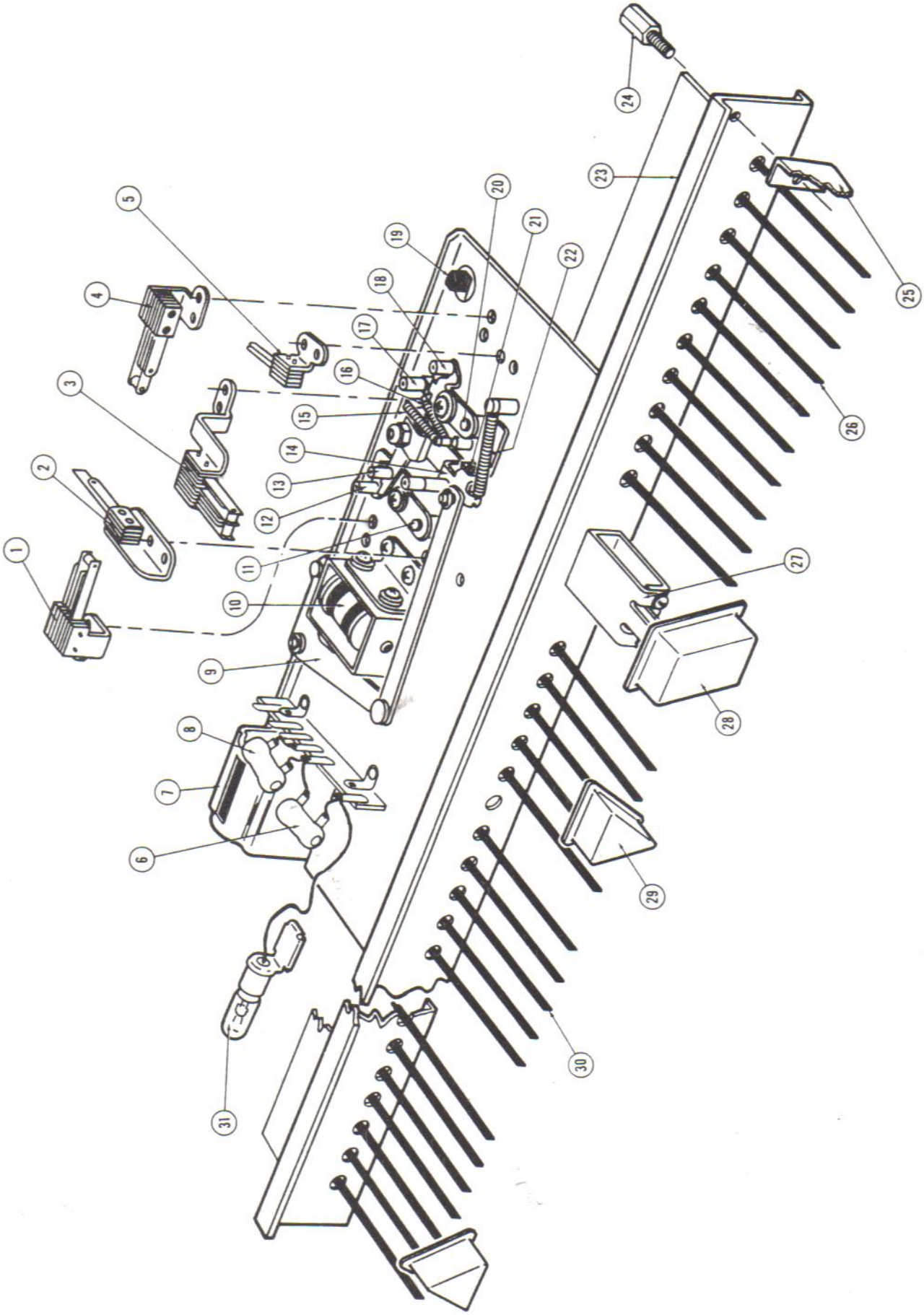


Fig. 96. SELECTOR SWITCH ASSEMBLY

Fig. 96. SELECTOR SWITCH ASSEMBLY

	2500	2504	2510
1. Switch Assembly, Latch	60518	68601	68601
2. Switch Assembly, Letter Series, L.H.	64981	64981	64981
3. Switch Assembly, Control	56704	65007	65007
4. Switch Assembly, Latch	60518	68601	68601
5. Switch Assembly, Number Series, R.H.	64982	64982	64982
6. Resistor, 150 Ohm 5 Watt	71883-2	71883-2	71883-2
7. Electric Counter	45345	45345	45345
8. Resistor, 85 Ohm 5 Watt	71886-3	71886-3	71886-3
9. Crank and Link Assembly	111720	111720	111720
Retaining Ring	73724-15	73724-15	73724-15
Retaining Ring	73724-18	73724-18	73724-18
10. Solenoid, Switch Interlock	112104	112104	112104
Plunger, Solenoid	112104-1	112104-1	112104-1
Pin, Solenoid Plunger	65947	65947	65947
11. Shaft, Link and Lever Assembly, Letters	111897	111897	111897
Taper Pin (2)	65362	65362	65362
12. Pawl, Stud and Spacer Assembly, Letters	65009	65009	65009
13. Trip Lever, Stud and Spacer Assembly, Letters	117694	117694	117694
14. Release Lever, Stud and Spacer Assembly	56713	56713	56713
15. Spring, Letter Latch	57128	57128	57128
16. Spring, Number Latch	57129	57129	57129
17. Pawl, Spring Stud and Spacer Assembly, Numbers	117691	117691	117691
18. Trip Lever and Spacer Assembly, Numbers	117695	117695	117695
19. Slide Switch, Spring Return	116723	116723	116723
20. Shaft, Link and Lever Assembly, Numbers	111898	111898	111898
21. Stop Bracket	56628	56628	56628
Rubber Bumper	117689	117689	117689
22. Spring, Solenoid Return	57130	57130	57130
23. Mounting Channel	118493	118495	118494
24. Thumb Screw, 10-32 Hex	111999	111999	111999
25. Support Bracket, Switch Mounting Channel, L.H.	118483	118483	118483
Support Bracket, Switch Mounting Channel, R.H.	118484	118484	118484
26. Selector Switch Assembly, Letters	118522	118524	118526
Connector Link, Letter Switches	116260	116251	116259
27. Switch and Bracket Assembly, Reset	118422	118422	118422
28. Reset Button Assembly	116318	116318	116318
29. Button Assembly, A	118257	118257	118257
Button Assembly, B	118258	118258	118258
Button Assembly, C	118259	118260	118259
Button Assembly, D	118262	118261	118262
Button Assembly, E Through	118263	*	118263
Button Assembly, V	118278	*	118278
Button Assembly, 1	118279	118294	118280
Button Assembly, 2	118282	118295	118281
Button Assembly, 3	118283	118296	118284
Button Assembly, 4	118286	118297	118285
Button Assembly, 5	118287	118298	118288
Button Assembly, 6	118289	118299	118289
Button Assembly, 7	118290	118300	118290
Button Assembly, 8	118291	118301	118291
Button Assembly, 9	118292	118302	118292
Button Assembly, 0	118293	118303	118293
Button Assembly, 11 Through	*	118304	*
Button Assembly, 26	*	118319	*
Complete Set of Selector Buttons	118257-A	118257-B	118257-C
30. Selector Switch Assembly, Numbers	118521	118523	118525
31. Lamp, Socket and Wire Assembly	69775	69775	69775

Note: * Not used on this model.

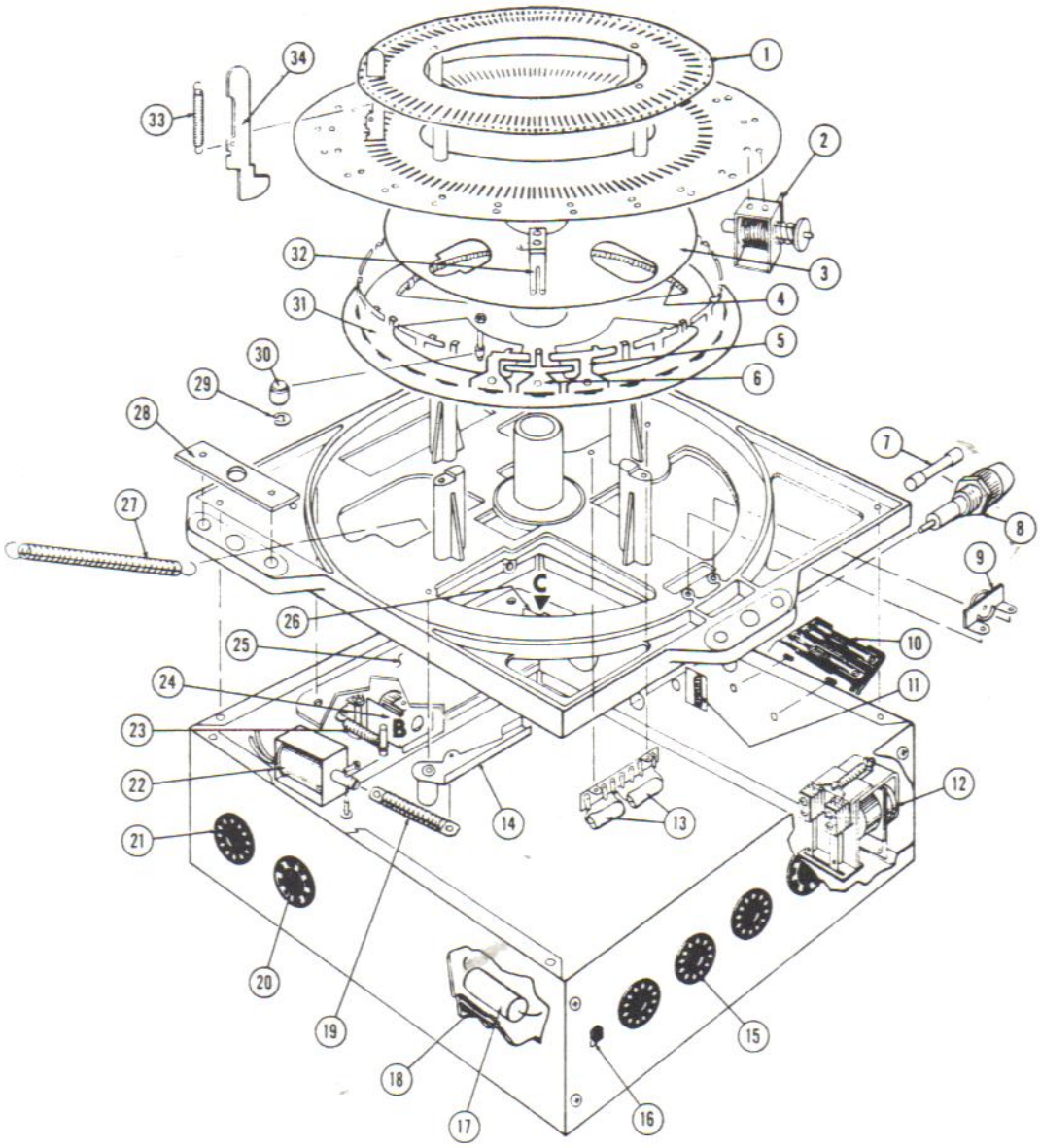


Fig. 97. ELECTRIC SELECTOR - 2504

1.	Plate and Spacer Assembly	64590	
2.	Solenoid, Selector (26)	64602	
3.	Wobble Plate	64599	
4.	Spring, Selector Rocker	53489	
5.	Rocker, Long (13) (Even)	64619	
6.	Rocker, Short (13) (Odd)	64618	
7.	Fuse, 4/10 Slow Blo	71591-5	
8.	Fuse Post	51485	
9.	Roller Assembly	64630	
10.	Micro Switch (2)	110558	
11.	Spring, Reversing Switch	61173	
12.	Relay T.R. #2	64711	
13.	Resistor, 120 Ohm 5W (2)	71885-2	
14.	Pin, Hub and Arm Assembly	64637	
	Retaining Ring	73724-18	
15.	Socket, 11 Prong	38492	
	Plug; 11 Prong	54878	
16.	Switch	116724	
17.	Capacitor, 150 Mfd. 50V	73889-620	
18.	Resistor, 50 Ohm 5W	72986-2	
19.	Spring and Plug Assembly	64783	
20.	Socket, 6 Prong	32881	
	Socket, 4 Prong	30495	
21.	Socket, 12 Prong (5)	114325	
22.	Solenoid, Driver	64722	
23.	Spring, Stop Arm (2)	64773	
24.	Magnet and Frame Assem.,R.H. (B Stop)	64650	
25.	Mounting Plate and Magnet Assembly	64645	
26.	Magnet and Frame Assem.,L.H. (C Stop)	64651	
27.	Spring, Rocker Plate Return	64781	
28.	Guide Plate (3)	61850	
29.	Retaining Ring	73724-18	
30.	Roller and Bearing Assembly	64613	
31.	Rotating Plate	64609	
32.	Contact Assembly (3)	64601	
	Insulator (3)	64595	
33.	Spring (104)	57110	
34.	Latch Pin (104)	64606	

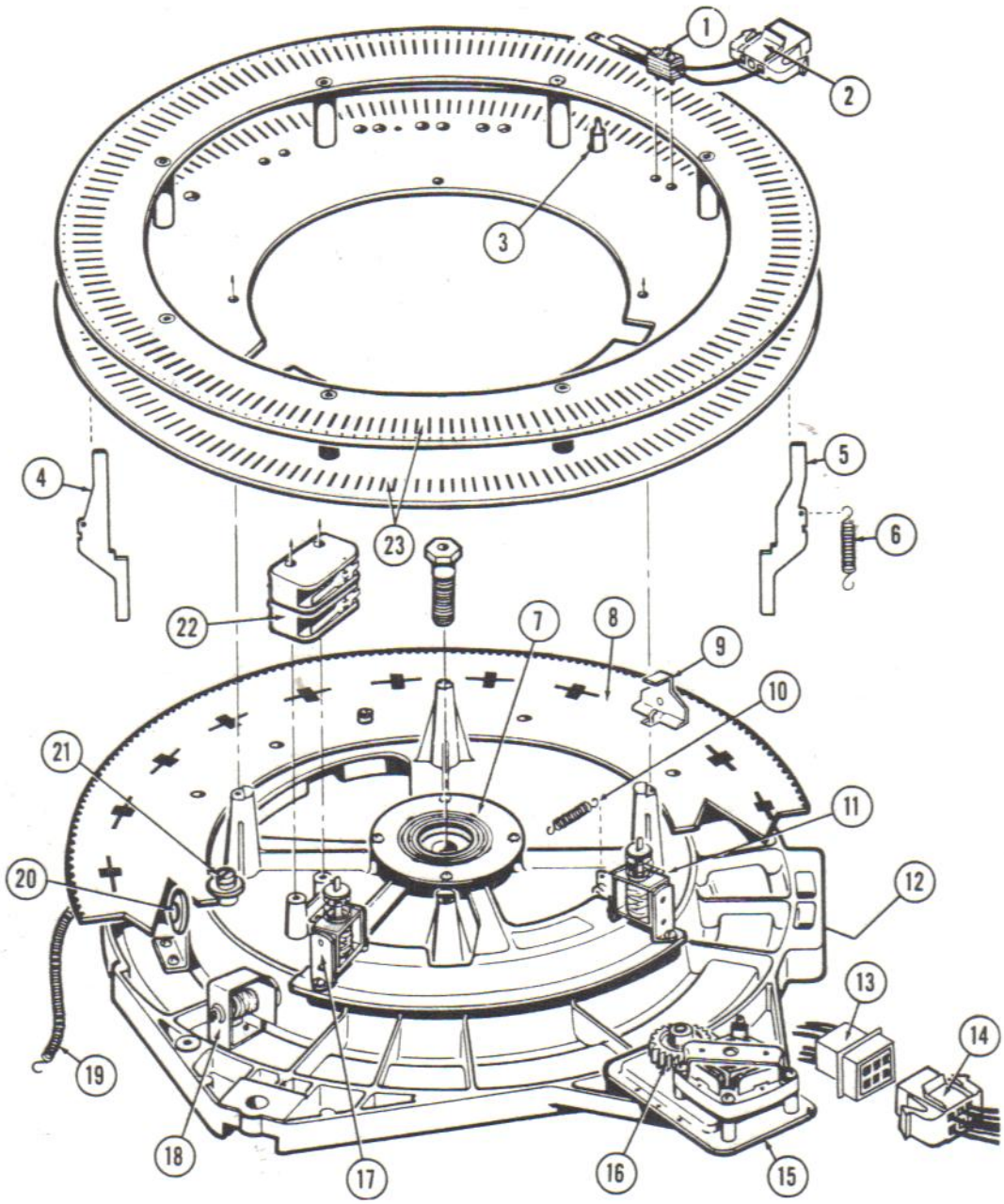


Fig. 98. ELECTRIC SELECTOR, 2500

1.	Switch Assembly, Override (4)	65952	
	Insulator, Override Switch	69839	
	Insulator, Override Switch (4)	69841	
2.	Socket, 3 Circuit	117824	
	Cap, 3 Circuit	117823	
3.	Wobble Ring	67927	
	Spacer (4)	68650	
4.	Latch Pin, Inner (100)	110941	
5.	Latch Pin, Outer (100)	110942	
6.	Spring, Latch Pin (200)	110480	
7.	Contact Plate Assembly	66186	
8.	Rotating Plate	67920	
9.	Rocker, Rotating Plate (20)	67926	
10.	Spring, Number Quadrant	62773	
11.	Solenoid, Selector Stop (1)	68804	
12.	Plug, 11 Prong	48501	
	Socket, 11 Prong (3)	38492	
13.	Cap, 6 Circuit	113527	
14.	Socket, 6 Circuit	113528	
	Contact (10)	111527	
15.	Motor and Gear Assembly	111913	
16.	Gear and Hub Assembly	68717	
	Roll Pin	73782-32	
17.	Solenoid, Selector Stop (9)	68617	
18.	Solenoid, Selector, Letter (20)	68594	
19.	Spring, Rotating Plate Assembly	68755	
20.	Bracket and Roller Assembly (3)	68651	
21.	Roller, Guide (3)	68656	
	Stud, Eccentric Guide Roller	69659	
	Stud, Guide Roller (2)	68657	
	Retaining Ring	73724-31	
22.	Micro Switch (2)	110558	
23.	Selector Plates and Spacer Assembly	111027	

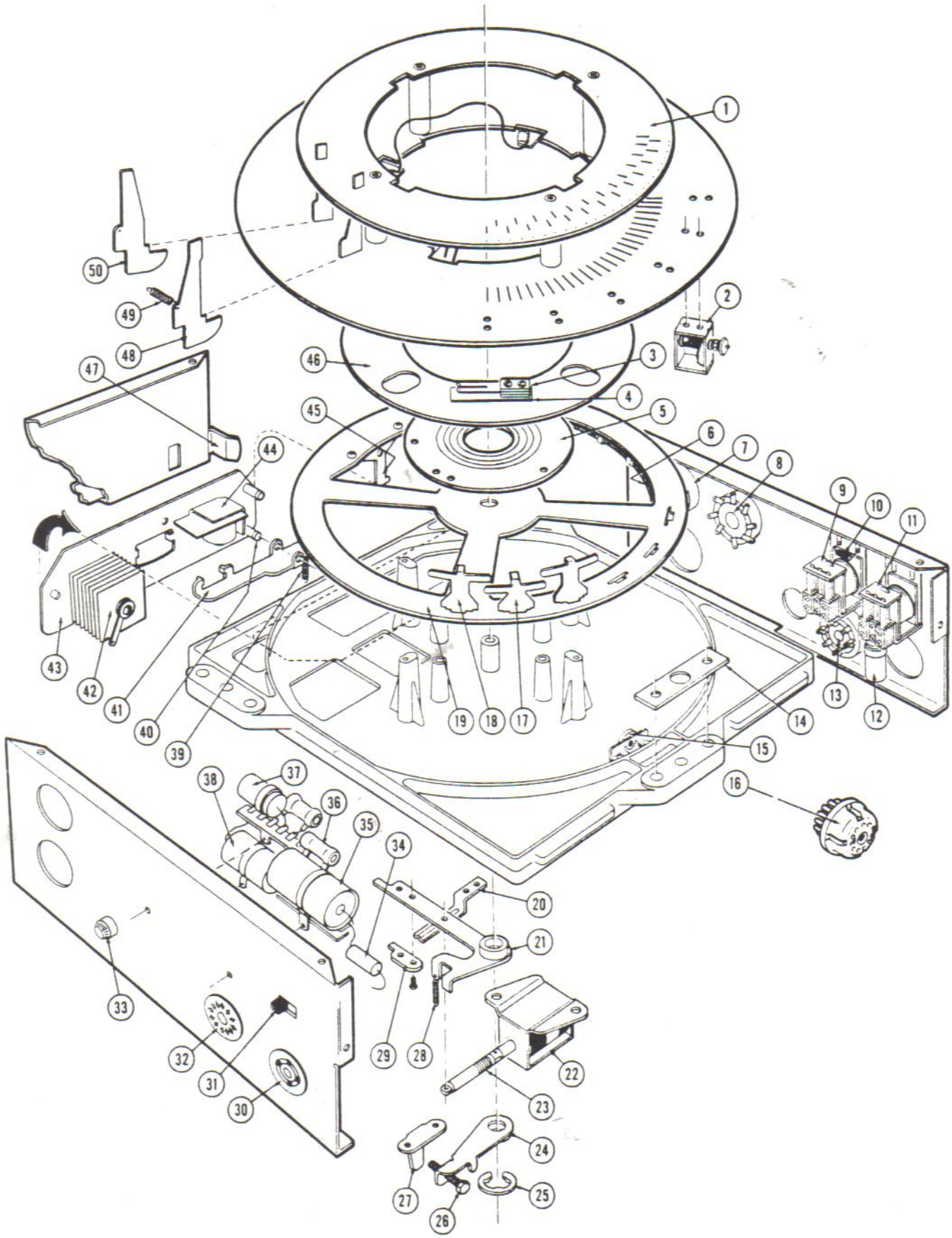

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Fig. 99. ELECTRIC SELECTOR, -2510

1. Plate and Spacer Assembly	115909
2. Solenoid, Selector (20)	64602
3. Contact Assembly (4)	115918
4. Insulator, Override Switch (4)	64595
5. Contact Plate Assembly	66186
6. Spring, Rotating Plate	115973
7. Socket, 12 Prong	114325
8. Socket, 8 Prong	10964
9. Relay, Reverse	69240
10. Resistor, 2200 Ohm, 1/2W	72200-32
11. Relay, Timing #2	64711
12. Capacitor, .1, 400V	73093-142
13. Socket, 6 Prong	32881
14. Guide, Selector Mounting Stud	61850
15. Roller, Assembly (3)	64630
16. Plug and Wire Assembly	116026
Socket, 11 Prong (5)	38492
17. Rocker, Short (10)	117692
18. Rocker, Long (10)	115788
19. Rotating Plate	115787
20. Guide, Centering Yoke	115823
21. Centering Yoke, Hub and Pin Assembly	115802
22. Solenoid, Driver (2)	115975
23. Spring and Plug Assembly	64783
24. Adjustment Bracket, Hub and Stop Nut Assembly	115798
25. Retaining Ring	73724-50
26. Screw, 8-32 x 7/8" Hex Hd.	73793-87
27. Stop, Centering Yoke	115824
28. Spring (2)	115821
29. Guide Plate, Centering Yoke	115822
30. Socket, 4 Prong	30495
31. Slide Switch	116724
32. Socket, 12 Prong (5)	114325
33. Fuse Post	51485
Fuse 8/10 Amp.	71591-10
34. Capacitor, .022 Mfd., 400V	71220-24
35. Capacitor, 150 Mfd., 50V	73889-620
36. Resistor, 50 Ohm, 5W (2)	72986-2
37. Capacitor, .1, 400V	73093-142
38. Capacitor, 100 Mfd., 50V	73862
39. Spring, Stop Arm	64773
40. Stop Pivot	64649
41. Stop Arm and Rivet Assembly	115862
42. Rectifier, Selenium	118664
43. Mounting Plate and Magnet Assembly	117985
44. Magnet and Frame Assembly	117987
45. Stop Bracket, Selector	115789
46. Wobble Plate	115796
47. Latch Bar, Junction Box	115837
48. Latch Pin, Inner (50)	115806
49. Spring (100)	57110
50. Latch Pin, Outer (50)	115807

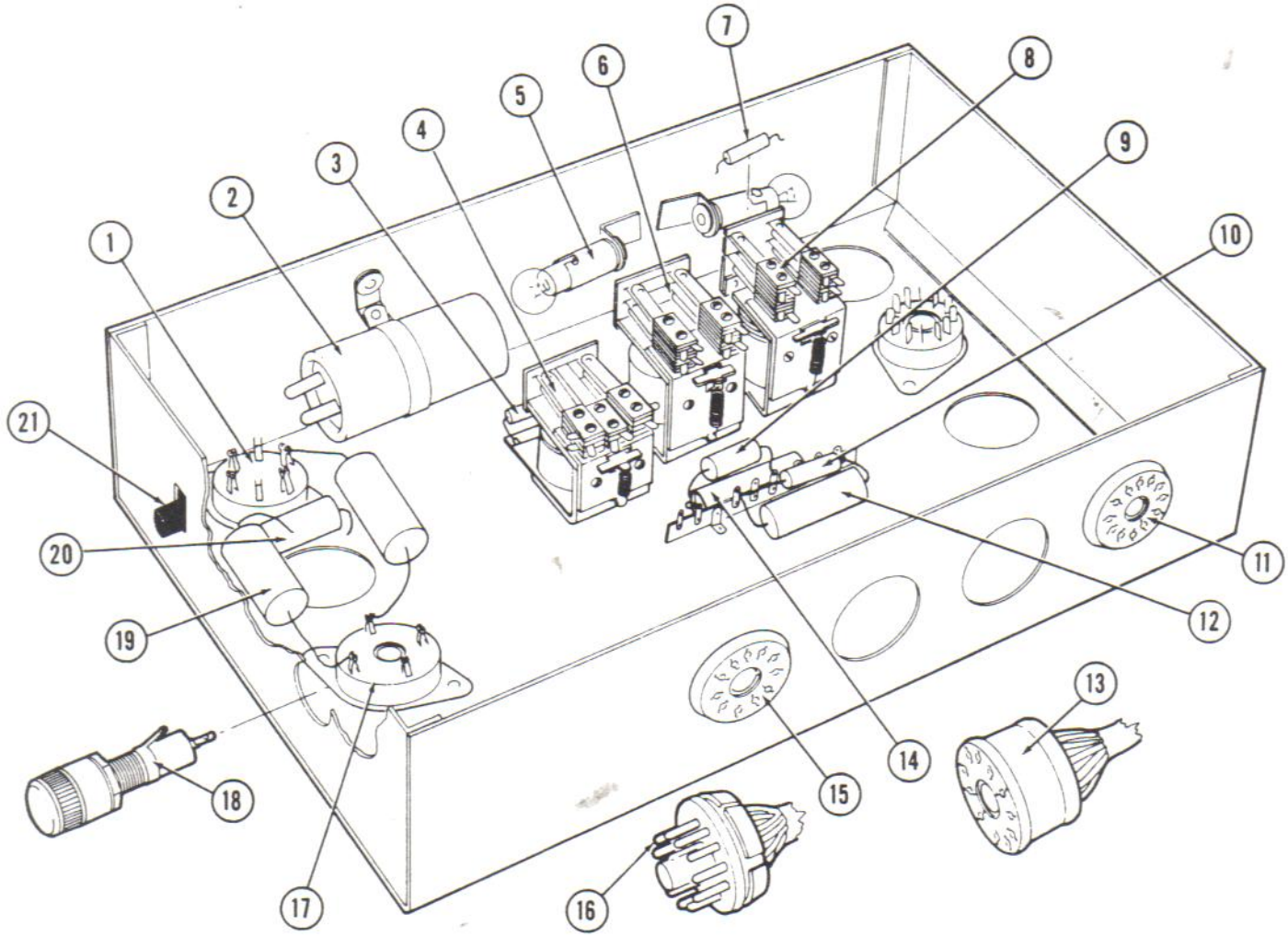

Fig. 100. JUNCTION BOX - 2500

1. Socket, 6 Prong	32881	12. Capacitor, .1 Mfd. 200V.	71227-12
2. Capacitor, 75 Mfd. A.C.	70901	13. Socket, 11 Prong	58898
3. Resistor, 2200 Ohm 1/2 Watt	72200-32	14. Capacitor, 20 Mfd. 50V.	73864
4. Relay, Reverse	65750	15. Socket, 11 Prong	38492
5. Lamp Socket Assembly (2)	110453	16. Plug, 11 Prong (4)	54878
Lamp, Number 55 (2)	67439	Plug and Wire Assembly - Shorting	116026
6. Relay, Timing, Number 3	118467	17. Socket, 4 Prong	30495
7. Resistor, 120 Ohm 1 Watt	72314-32	18. Fuse Post	51485
8. Relay, Timing, Number 2	68942	Fuse, .8 Amp. Slow Blo	71591-10
9. Resistor, 50 Ohm 5 Watt	72986-2	19. Capacitor, .1 Mfd. 400V. (2)	71227-14
10. Resistor, 27 Ohm 1 Watt	72298-32	20. Capacitor, .022 Mfd.	71220-24
11. Socket, 12 Prong (8)	114325	21. Switch, Slide Type	116724

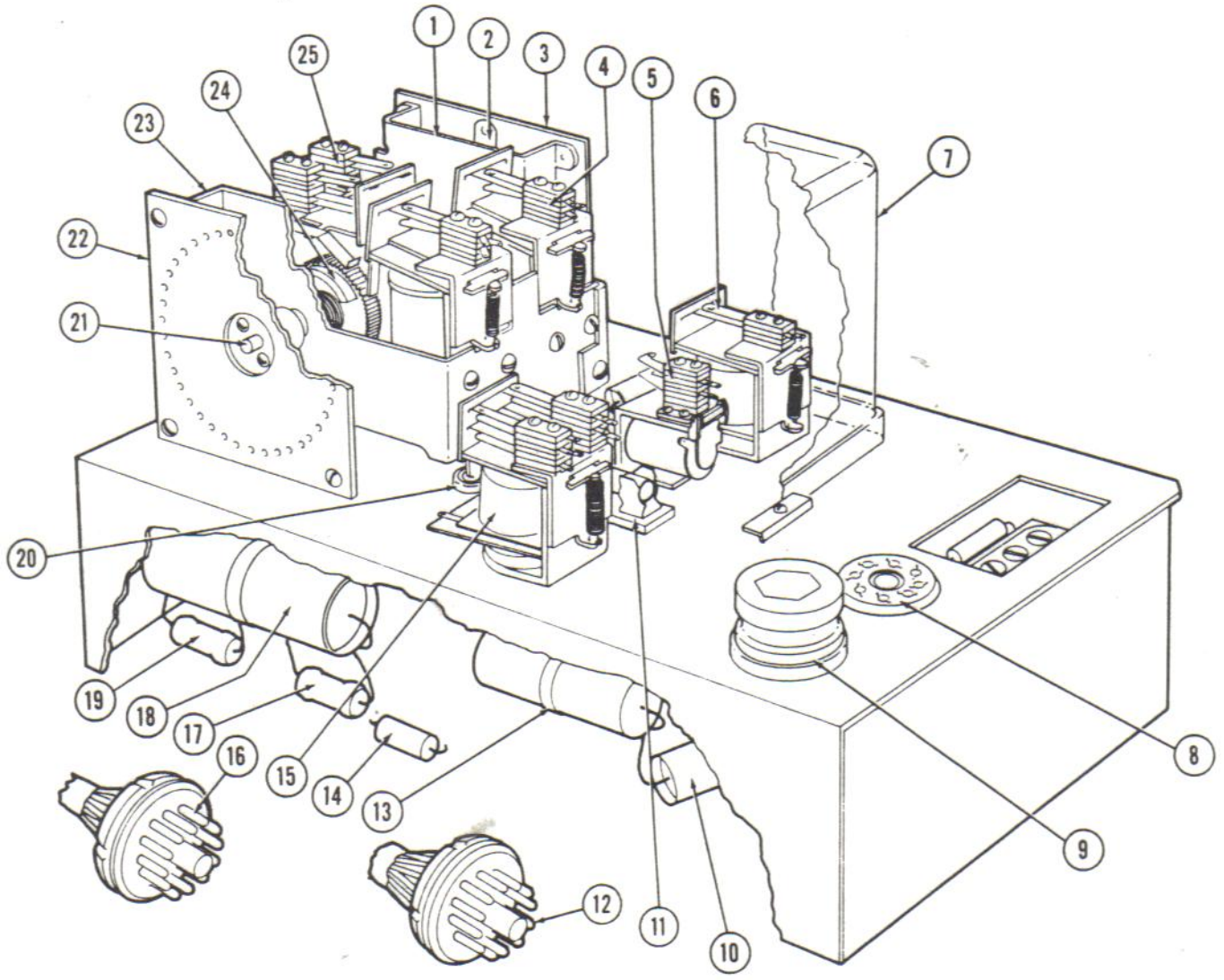

Fig. 101. MODEL 261 STEPPER

1. Frame, Number Contact Plate	114346-J	14. Resistor, 560 Ohm 2 Watt	72474-32
2. Contact Wiper Arm, Letter or Number	114346-G	15. Relay, Transfer	118551
3. Contact Plate, Number	114346-E	16. Plug, 11 Prong	54878
4. Step Magnet, Letter or Number	114346-B	17. Resistor, 85 Ohm 5 Watt	71886-3
5. Relay, Pulse	117048	18. Capacitor, 500 Mfd. 50V.	71816
6. Relay, Timing	118553	19. Resistor, 50 Ohm 5 Watt	72986-2
7. Cover, Plastic Box	65801	20. Grommet (3)	60574
8. Socket, 8 Prong	10964	Cup Washer (6)	60575
9. Socket, Fustat	61857	21. Stepper, Dual	114346
Fustat, 3 Amp.	61858	22. Contact Plate, Letter	114346-F
10. Capacitor, 4 Mfd. 250V.	73835-55	23. Frame, Letter Contact Plate	114346-K
11. Fuse Clip	46602	24. Nylon Ratchet Wheel, Letter	114346-D
Fuse .5 Amp. Slow Blo	71591-6	Nylon Ratchet Wheel, Number	114346-C
12. Plug, 12 Prong (3)	114324	Teflon Shim Washer	61004-A
13. Capacitor, .5 Mfd. 200V.	73099-240	25. Release Relay	114346-A

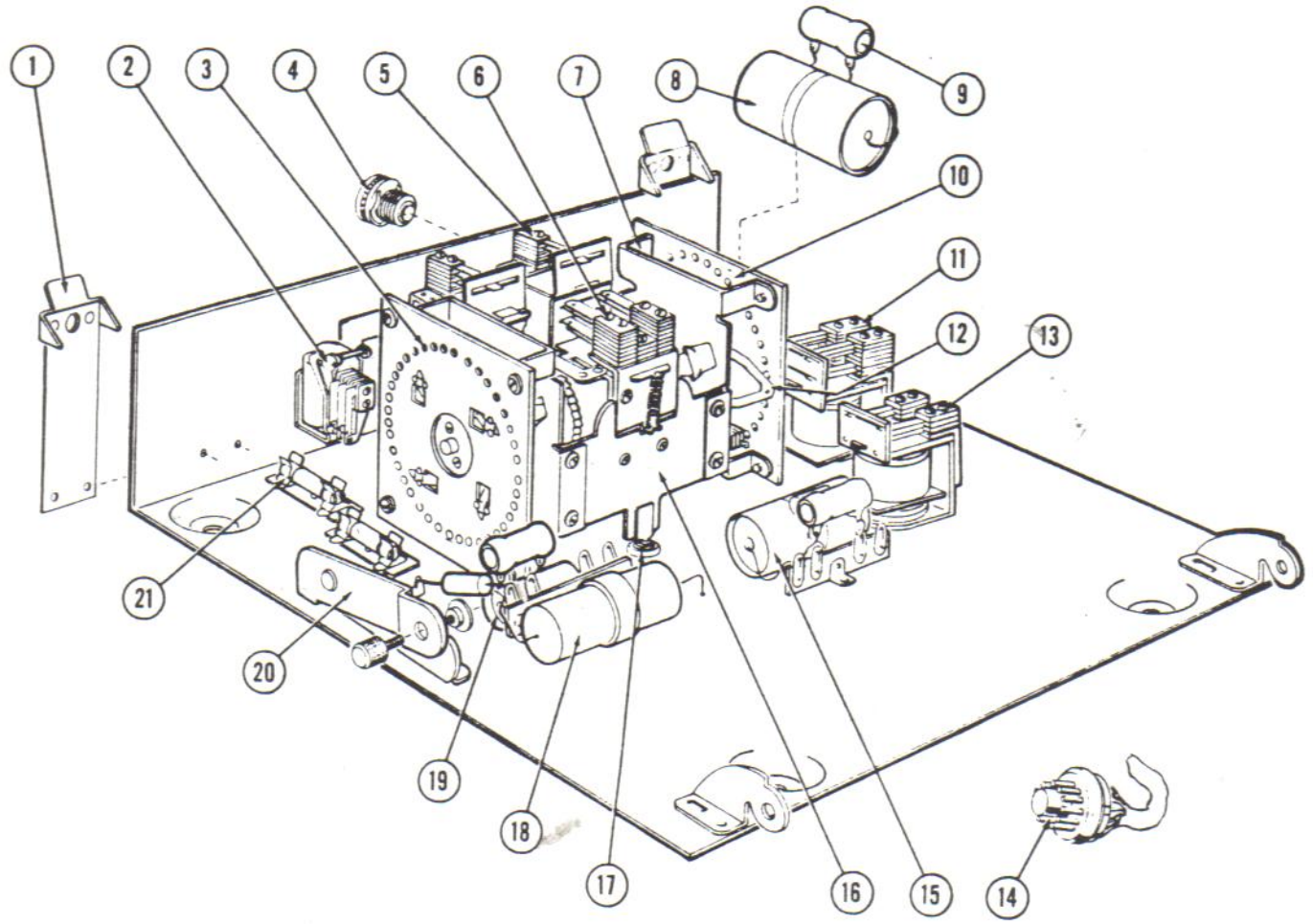

Fig. 102. 259-A STEPPER

1.	Spring and Clip Assembly (2)	115832
2.	Relay, Pulse	117048
3.	Contact Plate Assy., 4 circuit	114528-F
	Frame, Contact Plate Assy. 4 Circuit	114346-K
	Contact Arm Assy., 4 Circuit	114528-H
	Nylon Ratchet Wheel, 4 Circuit Contact Arm	114346-D
4.	Fustat, 3 Amp.	61858
	Socket, Fustat	61857
5.	Step Magnet (2)	114346-B
6.	Relay, Release Latch	114346-A
7.	Frame, Contact Plate, 2 Circuit	114346-J
8.	Capacitor, 250 Mfd., 50V	71499
9.	Resistor, 25 Ohms, 5W (2)	71887-2
10.	Contact Plate Assy., 2 Circuit	114528-E
11.	Relay, Transfer	118450
12.	Contact Arm Assy., 2 Circuit	114528-G
	Nylon Ratchet Wheel, Contact Arm, 2 Circuit	114346-C
13.	Relay, Timing	118447
14.	Plug, 11 Prong	54878
15.	Capacitor, 100 Mfd. 50V	73862
16.	Stepper, Dual	114528
17.	Grommet (3)	60574
	Cup Washer (6)	60576
18.	Capacitor .5 Mfd., 400V	73099-240
19.	Capacitor, 4 Mfd. 250V.	73835-55
20.	Fall Support Assy.	115825
	Spacer	115831
	Thumb Screw	59280
21.	Fuse Clip (2)	46602
	Fuse, .5 Amp. Slow Blo	71591-6

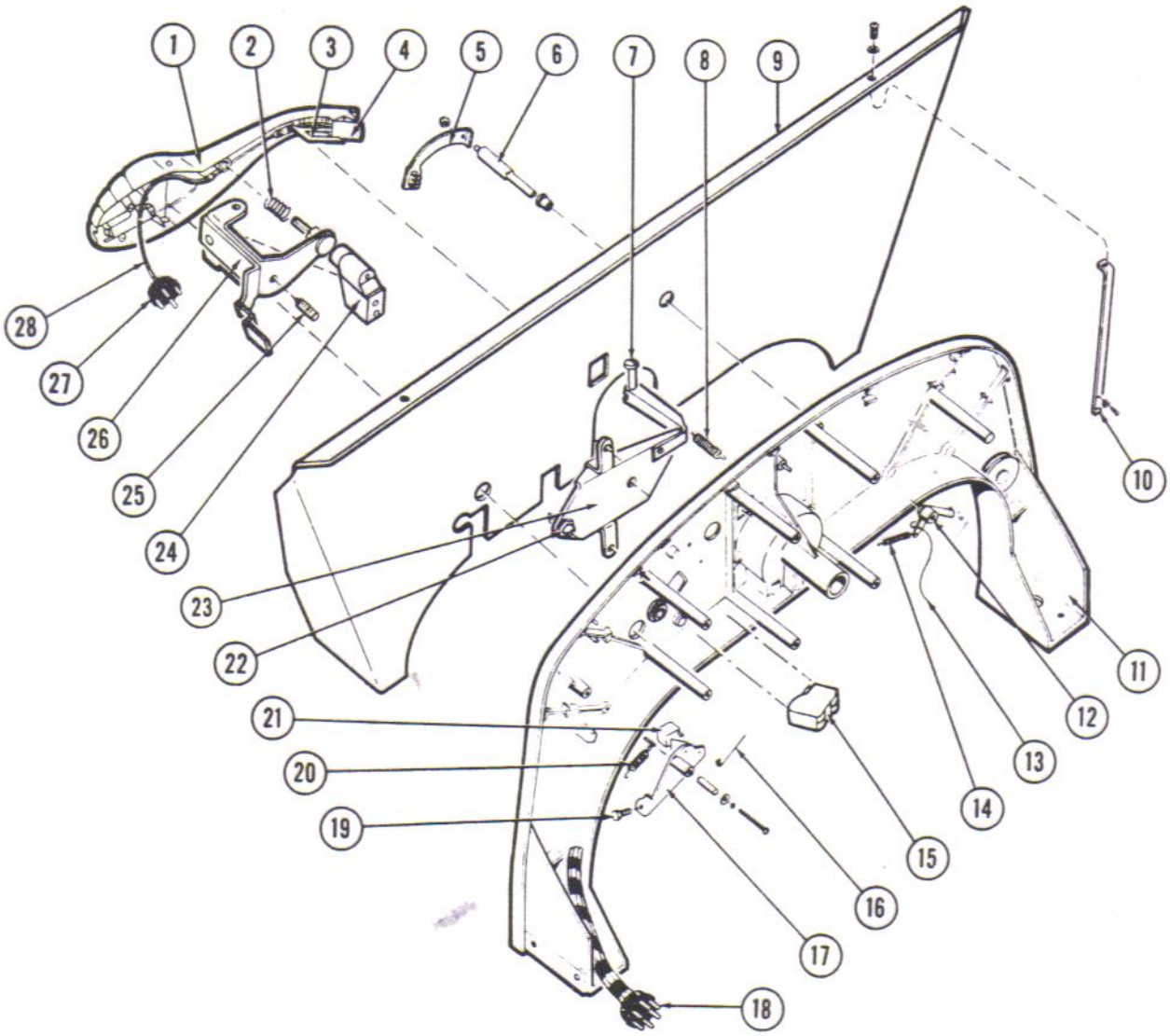

Fig. 103. TOP SUPPORT CASTING

1.	Tone Arm and Wire Assembly	118324
2.	Spring, Tone Arm Pressure	114484
	Nut, Nylock, Adjusting	73865-8
3.	Latch Bracket	64423
4.	Cartridge, Sonotone	116725
	Needle, Double Sapphire Tip	116727
	Rubber Washer (4)	59351
	Washer (2)	50494
5.	Arm, Needle Brush	118331
	Brush	119080
	Acorn Nut	50324
6.	Shaft, Needle Brush	118256
7.	Stop Pin, Tone Arm	115660
8.	Spring, Tone Arm Release Bracket	65096
9.	Decorative Background Assembly	118340
10.	Bracket, Decorative Background (2)	118342
11.	Support Casting and Bushing Assem.	113199
12.	Hub and Lever Assem., Tone Arm Brush	59483
13.	Cable, Needle Brush	59888
	Sleeve, Needle Brush Cable	59881
14.	Spring, Needle Brush	59607
15.	Safety Switch, Micro	60655
16.	Arm Trip Wire	59583
17.	Bracket and Stop Nut Assem., Trip Switch	59739
18.	Plug, 6 Prong	16607
19.	Screw, Trip Adjusting, 8-32 x 3/4" Hex Hd.	73793-86
20.	Spring, Trip Switch Bracket	59615
21.	Trip Switch	57851
22.	Adjusting Screw, Nylon, 8-32 x 3/4" R.H.	74288-26
23.	Bracket and Stop Nut Assem., Tone Arm Release	117977
24.	Mounting Casting and Pin Assem.	118328
25.	Pivot Screw	59394
26.	Gimbal and Stop Nut Assem.	118327
27.	Plug, 4 Prong	69089
28.	Wire and Plug Assembly	114323
	Connector (3)	113325

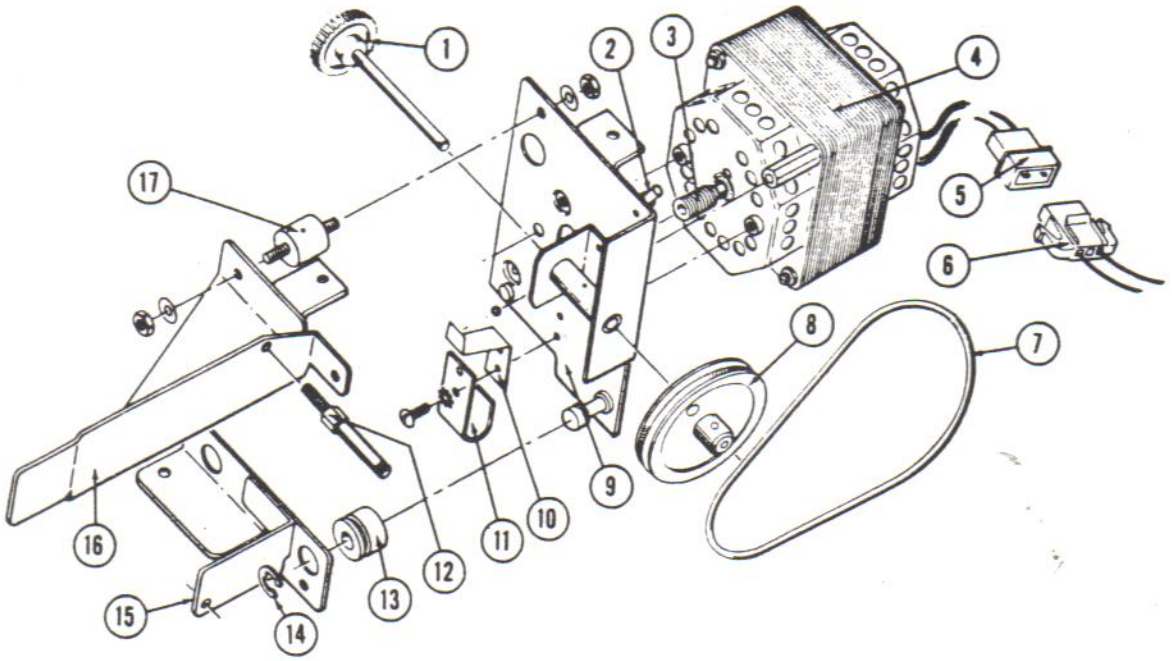

Fig. 104. TURNTABLE MOTOR AND GEAR SHAFT ASSEMBLY

1.	Gear and Shaft Assembly	65203	8.	Pulley, Turntable Drive Motor	115023
2.	Oil Tube	119051		50 Cycle	116914
3.	Worm Gear, Turntable Motor	115206		Set Screw 6-32 x 3/16"	73513-19
	Roll Pin	73782-11	9.	Plate, Pin and Bushing Assembly	60946
	Steel Ball	25202	10.	Spring Clip, Turntable Drive Motor	60893
4.	Turntable Motor and Worm Assembly	116905	11.	Support Bracket	117792
5.	Cap, 3 Circuit Amp. Lock	117823	12.	Spring Pin	61111
	Contact (4)	113789	13.	Grommet	49884
6.	Socket, 3 Circuit Amp. Lock	117824	14.	Retaining Ring	73724-25
7.	"O" Ring, Turntable Drive Motor	60881	15.	Mounting Bracket and Angle Assembly	60910
	50 Cycle	61473	16.	Mounting Bracket Assembly, Upper	117794
			17.	Rubber Mount (2)	60882

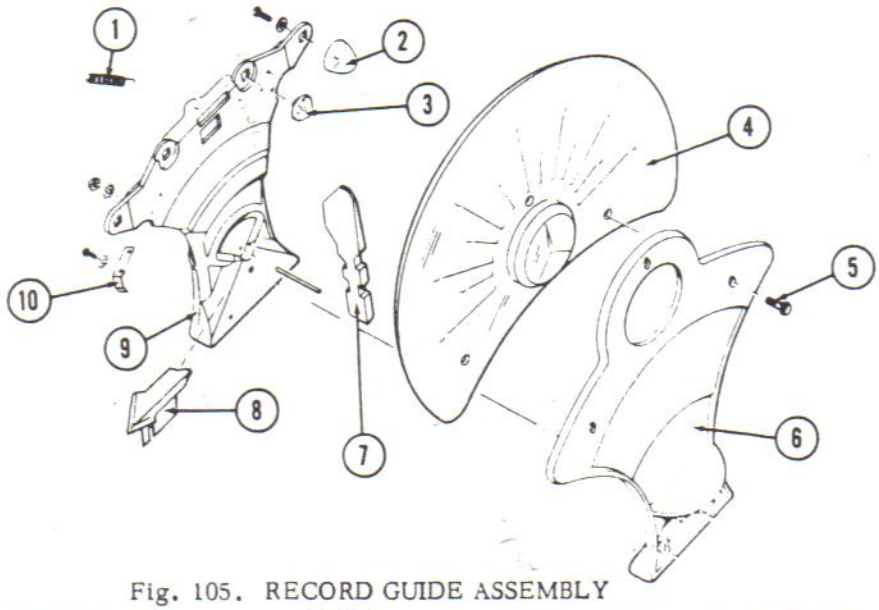

Fig. 105. RECORD GUIDE ASSEMBLY

1.	Spring, Record Guide Retracting	59606	6.	Casting, Record Guide, Front	117982
2.	Bumber, 5/8" Outer	117254	7.	Track	59425
3.	Bumper, 7/16" Inner	59396	8.	Record Guide and Bracket Assy., L.H.	68376
4.	Record Guide Plate	118332		Record Guide and Bracket Assy., R.H.	68375
5.	Screw, (3) 6-32 x 7/16" Truss Hd. Type 23	74335-22	9.	Casting, Record Guide	59467
			10.	Stop Bracket (2)	59434

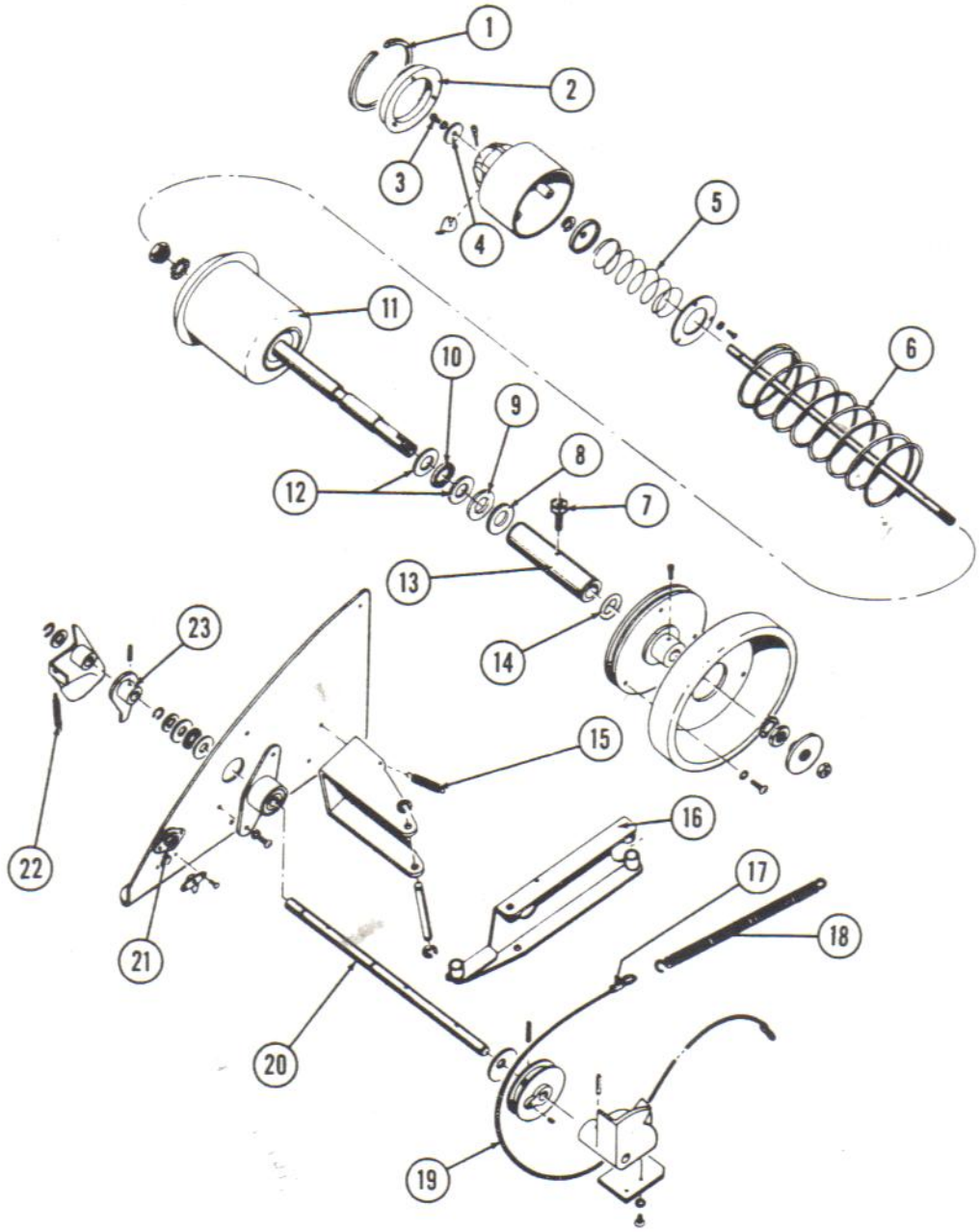

Fig. 106. TURNTABLE SHAFT, RECORD CLAMP SHAFT AND MOUNTING PLATE AND SHAFT ASSEMBLY, 2500

1. Retaining Ring	60681	14. Washer	56530
2. Pad, Turntable	60680	15. Spring, Arm and Roller Assembly	59606
3. Screw, 4-40 x 1/4" R.H.	73503-23	16. Arm and Roller Assembly	59922
4. Washer, Record Clamp	59423	17. Sleeve	59891
5. Spring, Record Clamp	59418	18. Spring, Idler Pulley	61174
6. Spring, Pilot	59424	19. Cable Turntable Actuating, with one Sleeve	59871-A
7. Screw, Turntable Sleeve	64513	20. Shaft Assembly	59457
8. Shim Washer, Metal	63731	21. Socket, 4 Prong	69090
9. Shim Washer, Fiber	63732	Cable Assembly, Input (2)	110190
10. Ball Race	59867	Plug, 4 Prong	69089
11. Turntable and Shaft Assembly	68102	22. Spring	59606
12. Washer (2)	59864	23. Arm and Hub Assembly	59406
13. Sleeve and Bushing Assembly	64520		

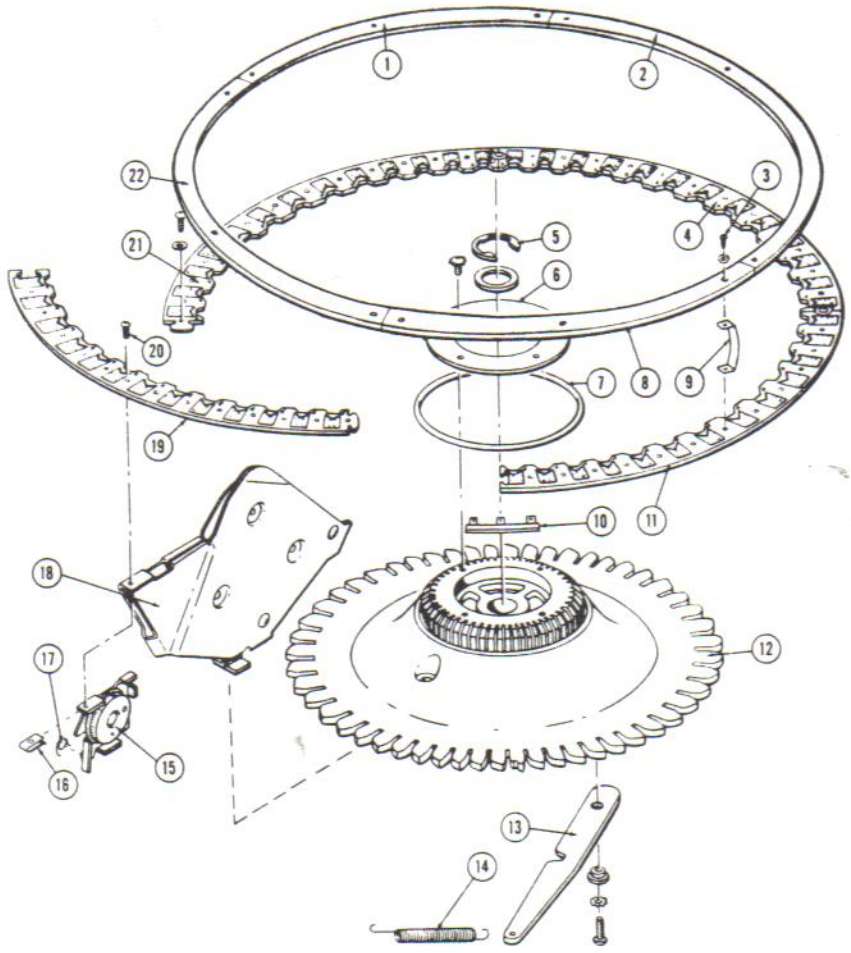

Fig. 107. RECORD CARRIER ASSEMBLY

	2510		2504	
1. Record Indicator Ring Segment	G4-J8	118202	D9-C4	118192
2. Record Indicator Ring Segment	D7-G1	118199	C3-B24	118190
3. Screw, 4-40 x 3/16" R.H. Sems		73533-1		73533-1
4. Carrier Ring and Silk Screen Assembly	F1-H5	113410	C13-C20	114062
5. Retaining Ring		73724-87		73724-87
6. Clamp, Record Holder		59734		59734
7. Ring, Rubber Gasket		59714		59714
8. Record Indicator Ring Segment	B4-D8	118201	B23-A18	118189
9. Spacer,	(10)	118936	(12)	118936
10. Connecting Bracket	(4)	113387		*
11. Carrier Ring and Silk Screen Assembly	H6-K0	113411	B7-B14	114061
12. Casting, Record Holder		115750		59573
13. Arm, Carrier Drive		*		59721
Bushing		*		59737
14. Spring		*		59709
15. Record Play Counter	(38)	59859	(52)	59859
Record Play Counter	(12)	113687		*
Torsion Spring, Play Counter		59580		59580
16. Tinnerman Nut	(38)	73637-10		73637-10
17. Pawl Spring		59901		59901
18. Record Holder Assembly (50)	(50)	59601	(52)	59601
19. Carrier Ring and Silk Screen Assembly	A1-C5	113408	A1-A8	114060
20. Screw, 4-40 x 3/8" R.H.	(40)	73503-25		73503-25
21. Carrier Ring and Silk Screen Assembly	C6-E0	113409	D19-D26	114063
22. Record Indicator Ring Segment	J7-B1	118200	A17-D10	118191

* Not used on this model.

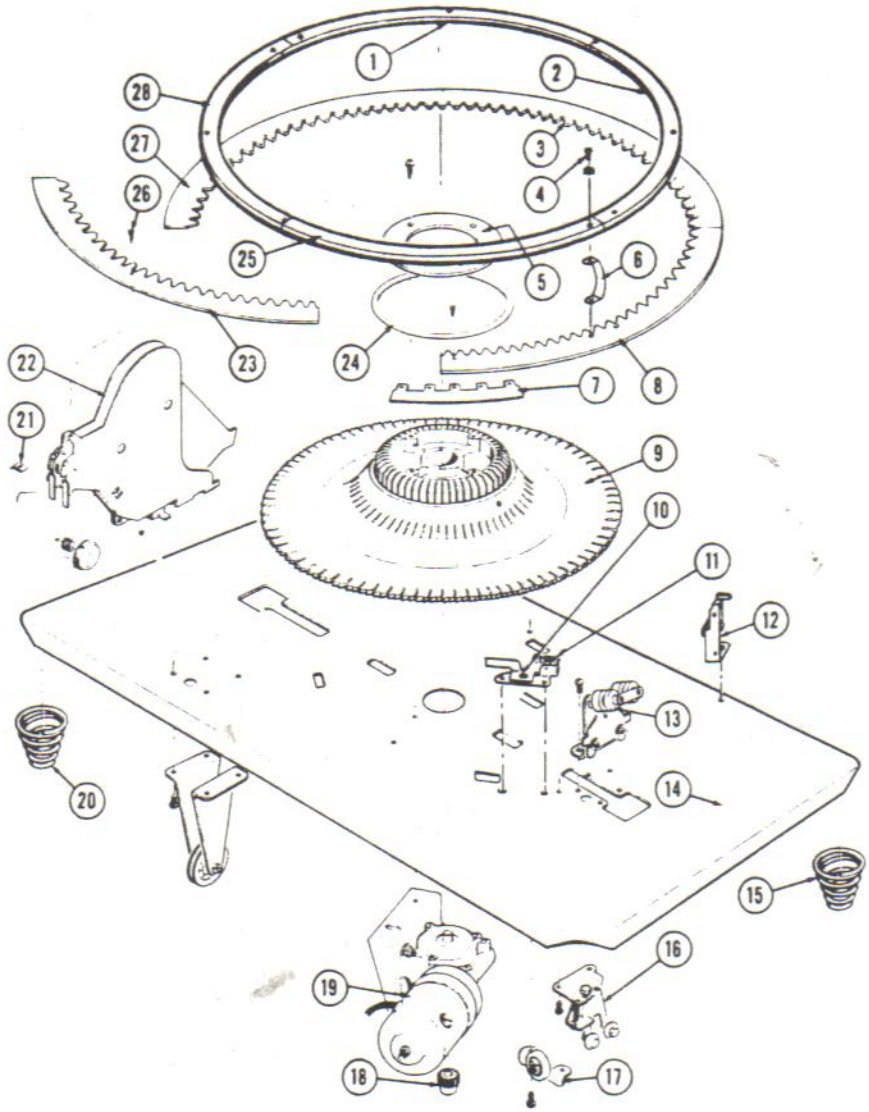

Fig. 108. RECORD CARRIER AND CHASSIS MOUNTING PLATE - 2500

1.	Segment, Record Indicator Ring, H6-N5	118183
2.	Segment, Record Indicator Ring, C6-H5	118184
3.	Carrier Ring and Silk Screen Assy., L2-R1	114066
4.	Screw, 4-40 x 3/16" R.H. Sems (20)	73533-1
5.	Clamp, Record Holder	59734
6.	Spacer (10)	118936
7.	Connecting Bracket (4)	65548
8.	Carrier Ring and Silk Screen Assy., F2-L1	114064
9.	Casting, Record Holder	115684
10.	Back Stop Pawl Assembly (2)	65890
11.	Spring, Back Stop Pawl	59710
	Bumper, Back Stop Pawl	54246
12.	Playmeter Reset Lever Assembly	113210
	Spring	59710
13.	Bracket and Roller Assembly, Lift Arm Guide (2)	116837
	Roller	116833
	Retaining Ring	73724-25
14.	Chassis Mounting Plate Assembly	59827
15.	Conical Spring, Chassis Mount, Red Dot	53774
16.	Bracket and Roller Assy., L. H.	65885
	Bracket and Roller Assy., R. H.	65886
17.	Bracket and Roller Assembly	59844
18.	Pinion Gear	116997
19.	Motor, Gear and Bracket Assembly	69066
	Roll Pin	73782-48
	Bracket, Motor Mounting	59570
	Armature Brush	57350
	Brush Cap	57349
	Steel Ball	25358
20.	Conical Spring, Chassis Mount, Yellow Dot	61059
21.	Nut, Tinnerman	73637-10
22.	Record Holder Assembly	65908
23.	Carrier Ring and Silk Screen Assy., A2-F1	114067
24.	Ring, Rubber Gasket	59714
25.	Segment, Record Indicator Ring, T6-C5	118185
26.	Screw, 4-40 x 3/8" R.H.	73503-25
27.	Carrier Ring and Silk Screen Assy., R2-A1	114065
28.	Segment, Record Indicator Ring, N6-T5	118182

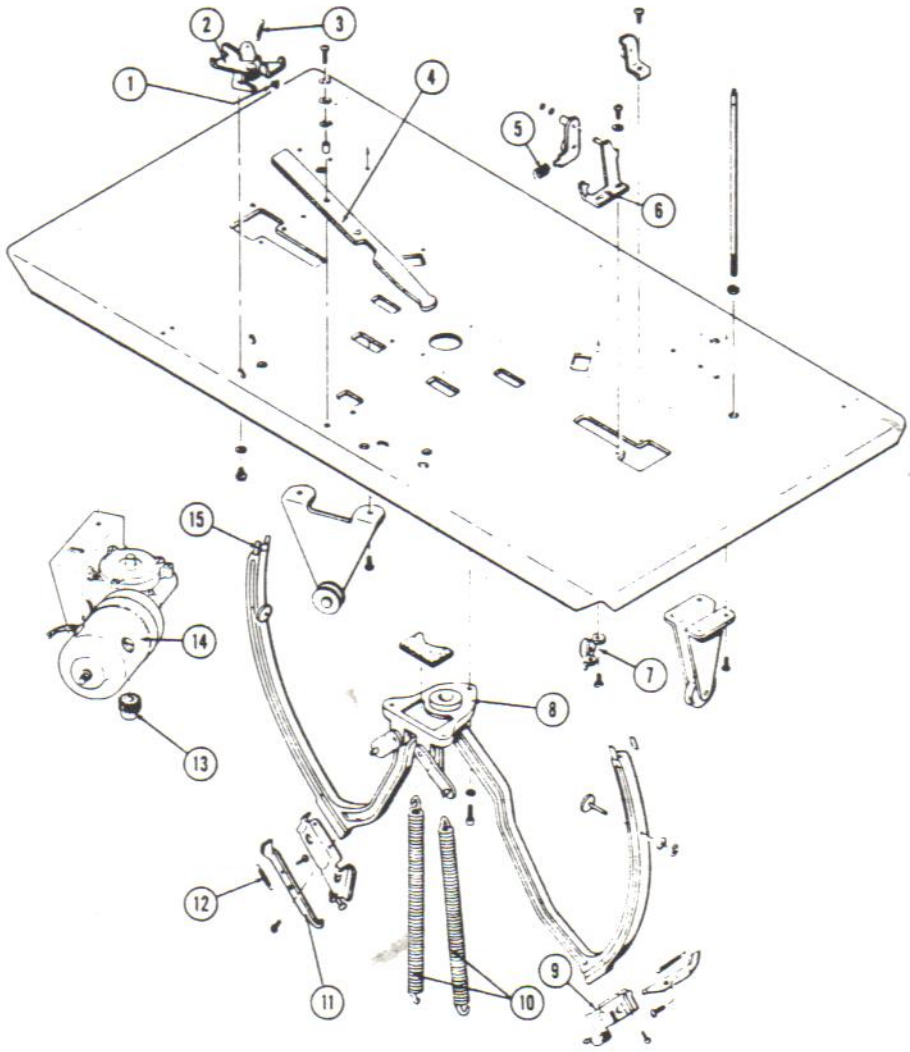

Fig. 109. CHASSIS MOUNTING PLATE, PIVOT CASTING AND ARM ASSEMBLY

	2504	2510
1. Bumper, Back Stop Pawl	54246	54246
2. Back Stop Pawl Assembly (2)	59575	65890
3. Spring, Back Stop Pawl (2)	59710	59710
4. Hub and Lever Assembly	59793	*
5. Spring, Guide Roller Bracket (2)	60677	60677
6. Mounting Bracket and Roller Assembly (2)	60658	60658
7. Bracket and Roller Assembly (3)	59844	59844
8. Pivot Casting and Arm Assembly	113215	113215
9. Bracket and Nut Assembly	113216	113216
10. Spring, Record Lift Arm	59697	59697
11. Lever, Play Counter Actuator	59706	59706
12. Spring, Play Counter Actuator	59894	59894
13. Pinion Gear	116997	116997
14. Motor, Gear and Bracket Assembly	69066	69066
15. Guide Tip, L. H. (2)	60711	60711
Guide Tip, R. H. (2)	61484	61484
Lock Washer, #2 Countersunk	73606-1	73606-1
Screw, 2-56 x 3/16" F.H.	73586-2	73586-2

Note: * Not used on this model

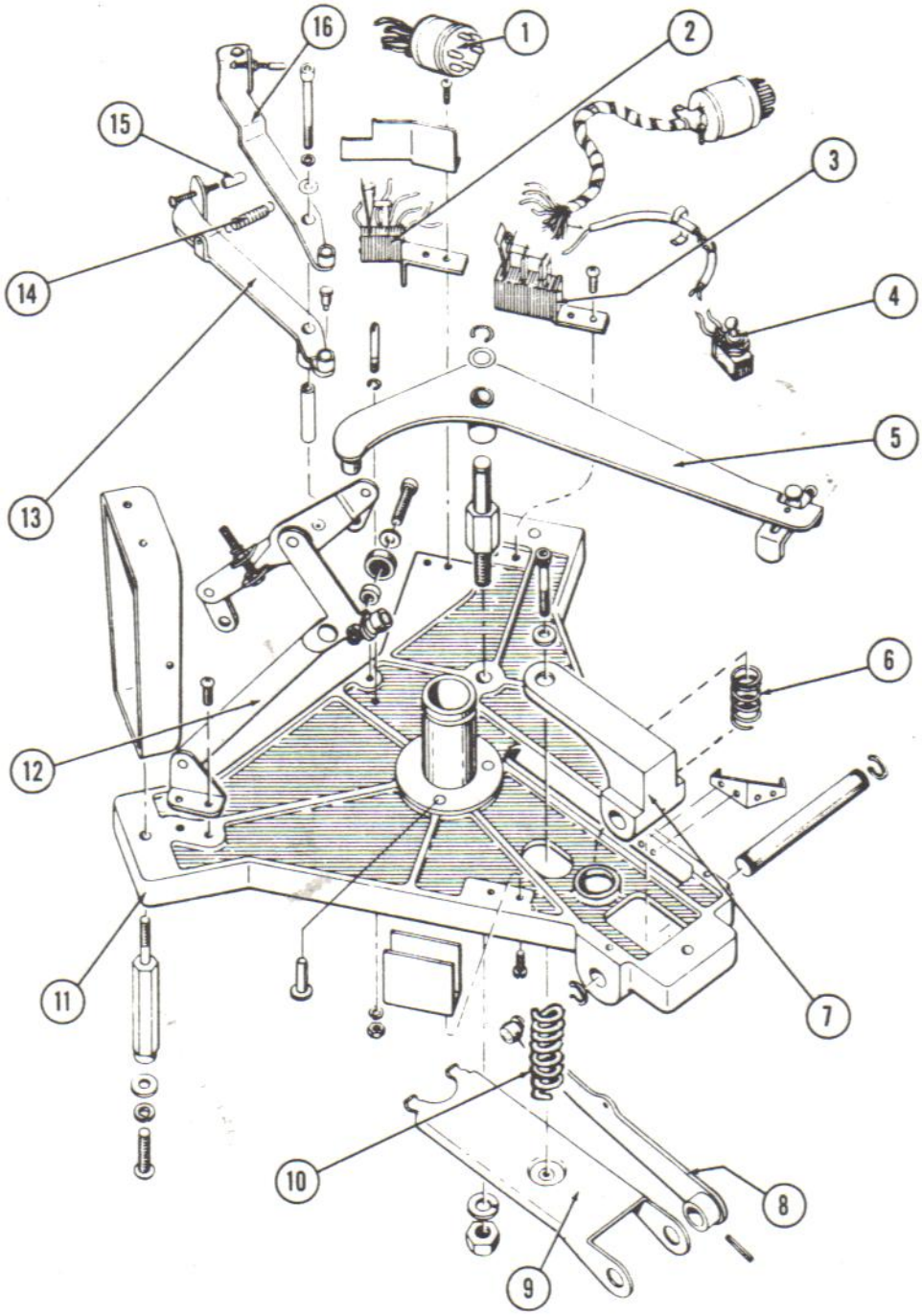

Fig. 110. CHASSIS FRAME AND CASTING ASSEMBLY, 2504

1.	Plug, 6 Prong	16607	
2.	Mute and Play Switch and Bracket Assem.	65170	
3.	Transfer Switch and Bracket Assem.	59569	
	Over Center Spring, Stainless Steel	59569-2	
4.	Toggle Switch, Record Loading, S.P.S.T.	53648	
5.	Lever Assembly, Record Clamp	59688	
6.	Spring, Cancel Arm Return	65809	
7.	Cancel Casting	59631	
8.	Cancel Lever, Hub and Roller Assembly	59513	
9.	Cancel Arm, Lower Assembly	59661	
10.	Spring, Cancel	59582	
11.	Chassis Frame Casting and Shaft Assem.	115874	
12.	Link and Lever Assembly, Record Arm	59599	
	Ball Bearing	60991	
13.	Actuator Arm Assy., Mute and Play Switch	62761	
14.	Spring	62773	
15.	Actuator	58255	
16.	Actuator Arm Assembly, Transfer Switch	113299	

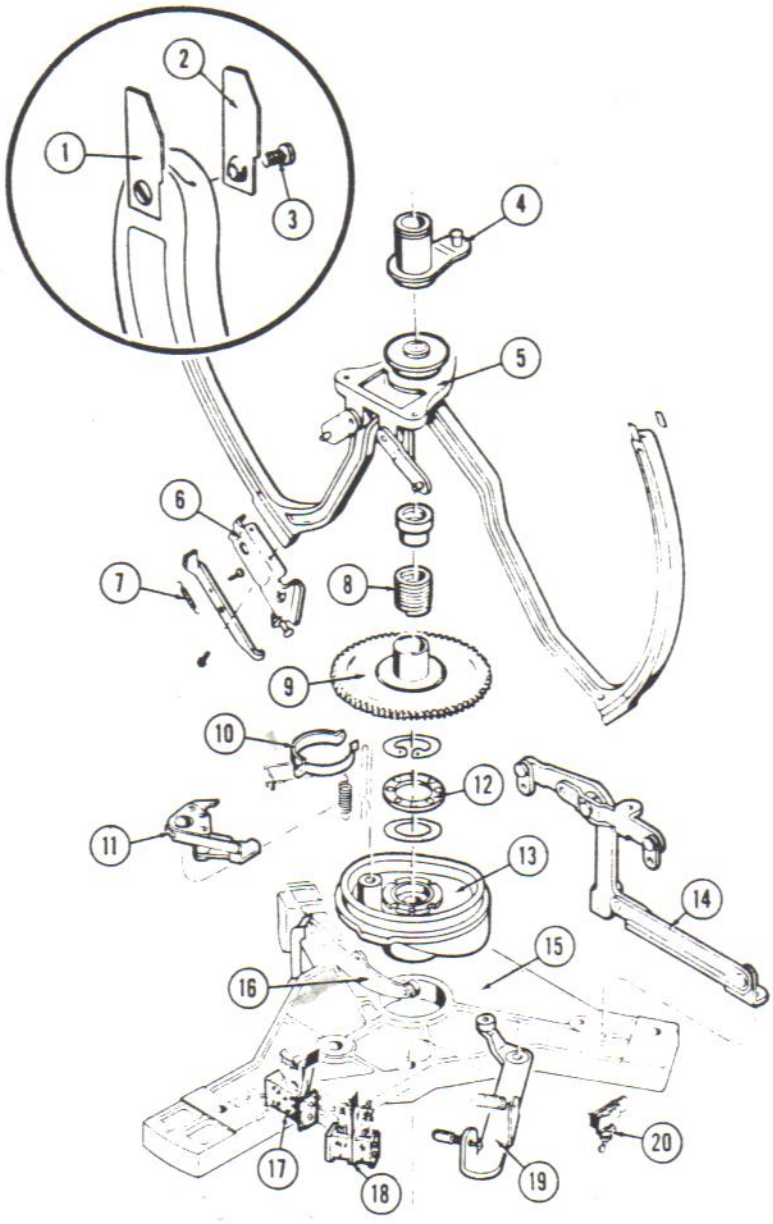

Fig. 111. RECORD CHANGER, 2510

1.	Guide Tip, L.H.	60711	
2.	Guide Tip, R.H.	61484	
3.	Screw, 2-56 x 3/16" F.H.	73586-2	
	Lock Washer #2, Counter Sunk	73606-1	
4.	Arm and Rivet Assembly	115668	
5.	Pivot Casting and Arm Assembly	113212	
	Ball Bearing	59654	
6.	Bracket and Nut Assembly	113216	
7.	Spring	59894	
8.	Spring, Drive Clutch	59584	
9.	Gear and Ratchet Wheel Assembly	116986	
10.	Strap and Spring Assem., Friction Drive Pawl	59626	
	Spring, Strap and Spring Assem.	59612	
11.	Pawl Assembly	59537	
12.	Ball Race	59637	
	Washer, Thrust (2)	59641	
	Retaining Ring	73727-112	
13.	Main Cam and Bushing Assembly	62792	
14.	Link and Lever Assem., Record Arm	59599	
15.	Chassis Frame Casting and Shaft Assem.	115856	
16.	Cancel Lever, Hub and Roller Assem.	59513	
	Spring, Cancel Arm Return	65809	
	Spring, Cancel	110934	
17.	Transfer Switch and Bracket Assem.	59569	
	Over Center Spring, Stainless Steel	59569-2	
18.	Mute and Play Switch and Bracket Assem.	65170	
	Over Center Spring	65170-1	
	Fiber	65170-A	
19.	Actuator Arm Assem., Mute and Play Switch	62761	
	Actuator	58255	
20.	Toggle Switch, Record Loading, S.P.S.T.	53648	

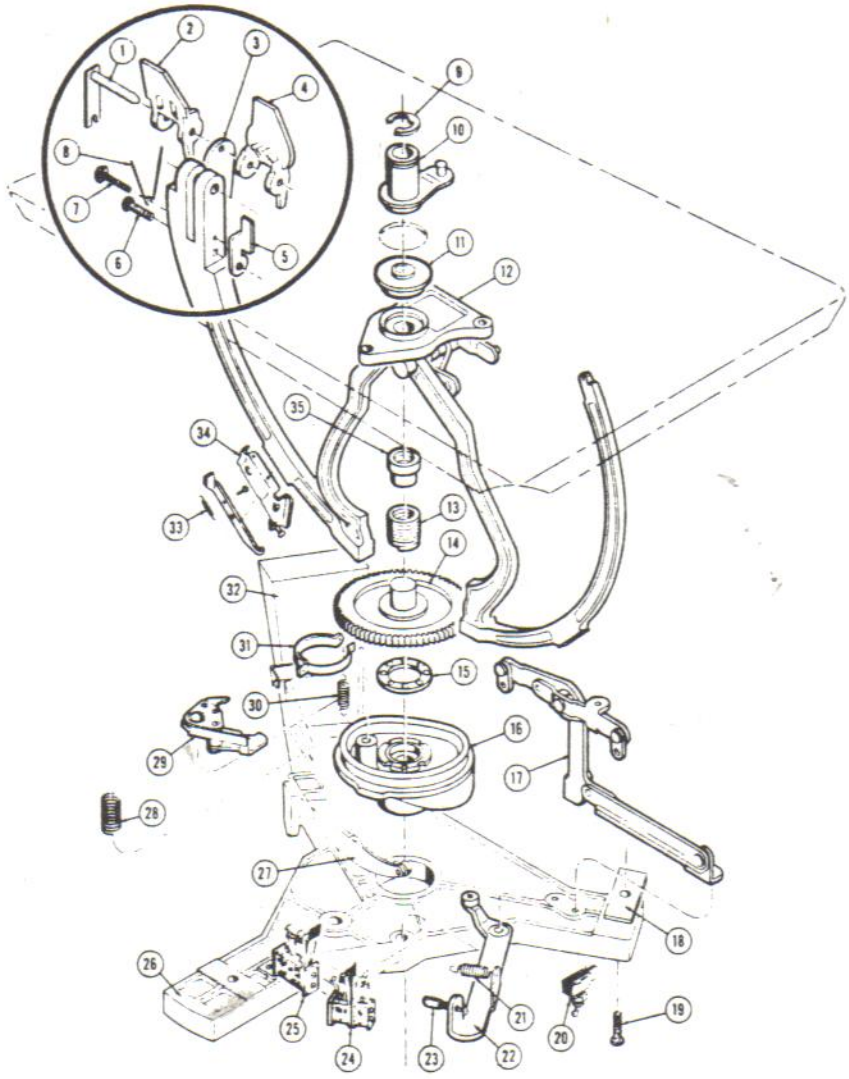

Fig. 112. RECORD LIFT ARM, MAIN CAM AND CHASSIS FRAME GROUPS, 2500

1.	Plate and Pin Assembly	117252
2.	Guide Tip, L.H.	65731
3.	Guide Plate	68290
4.	Guide Tip, R.H.	65730
5.	Stop, Guide Tip	65526
6.	Screw, 4-40 x 5/8 R.H. Sems	73533-7
7.	Screw, 3-48 x 7/16 R.H. Sems	73533-105
8.	Spring, Guide Tips	65812
9.	Retaining Ring	73724-87
10.	Arm and Rivet Assembly	115668
	Roll Pin	73782-85
11.	Ball Bearing	59654
12.	Pivot Casting and Arm Assembly	113204
13.	Spring, Drive Clutch	59584
	Washer, Guard	110077
	Felt Washer (2)	59655
	Washer (2)	59647
14.	Gear and Ratchet Wheel Assembly	116986
15.	Ball Race	59637
	Washer	59641
	Retaining Ring	73727-112
	Oil Guard	66580
16.	Main Cam and Bushing Assembly	62792
17.	Link and Lever Assem., Record Arm	59599
18.	Tapping Plate (2)	68521
19.	Screw, 1/4-20 x 1-1/2 Hex Hd.	73793-151
20.	Toggle Switch, Record Loading, S.P.S.T.	53648
21.	Spring, Mute and Play Switch Actuator	62773
22.	Actuator Arm Assembly, Mute and Play Switch	62761
23.	Actuator (2)	58255
24.	Mute and Play Switch and Bracket Assem.	65170
	Over Center Spring	65170-1
25.	Transfer Switch and Bracket Assembly	59569
	Over Center Spring, Stainless Steel	59569-2
26.	Chassis Frame and Shaft Assembly	116023
27.	Cancel Lever, Hub and Roller Assem.	59513
	Spring, Cancel	110934
28.	Spring, Cancel Arm Return	65809
29.	Pawl Assembly	59537
30.	Spring, Strap and Spring Assembly	59612
31.	Strap and Spring Assem., Friction Drive Pawl	59626
32.	Support Casting, R.H.	67928
	Support Casting, L.H.	68700
33.	Spring, Play Meter Actuating Arm	59894
34.	Bracket and Stop Nut Assembly	113205
35.	Hub, Selector Drive Clutch	118254

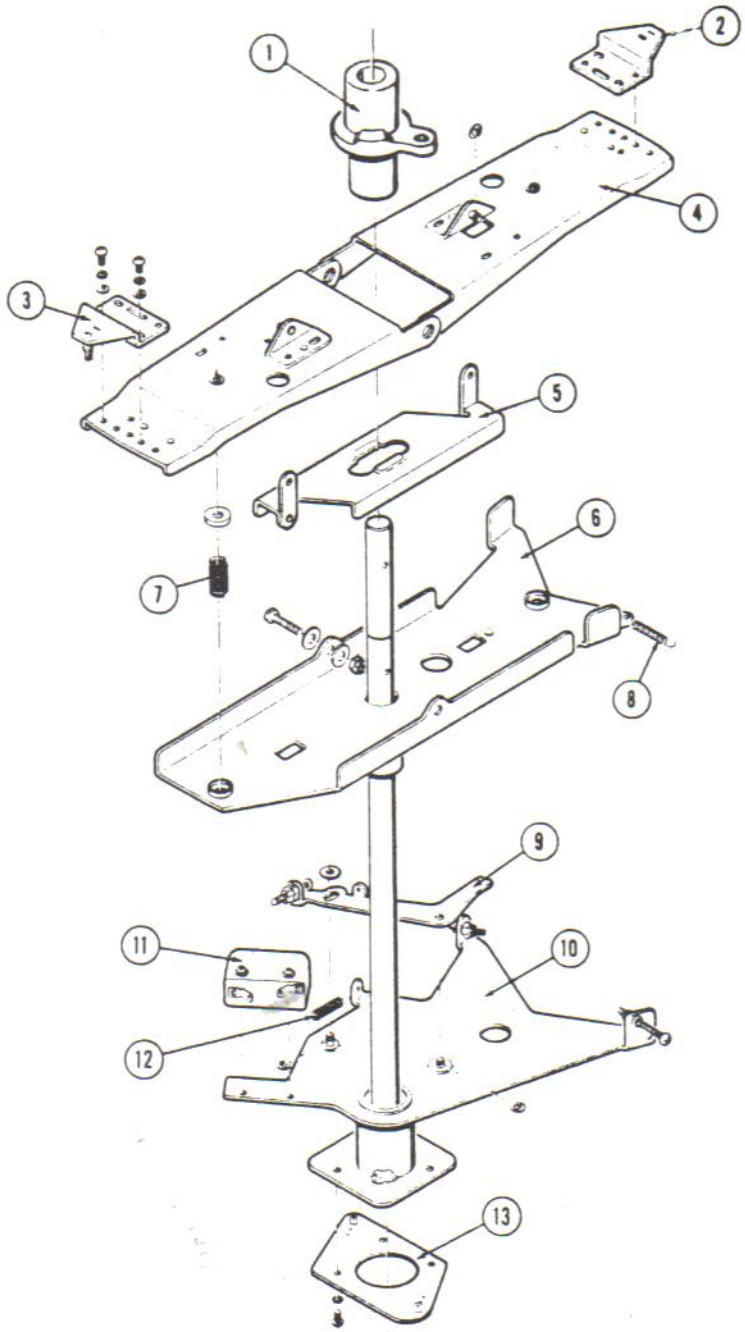

Fig. 113. SELECTOR CRANK AND SHAFT ASSEMBLY

	2500	2510
1. Sleeve and Bushing Assembly	68483	115772
2. Tip and Mounting Bracket Assembly, Inner	110936	116733
3. Tip and Mounting Bracket Assembly, Outer	110930	116732
4. Selector Crank and Stop Nut Assembly (2)	110944	115770
5. Actuator Arm and Link Assembly	110939	115767
6. Mounting Plate and Bushing Assembly	110946	115761
7. Spring, Selector Crank (2)	65809	65809
8. Spring, Kickoff	110480	59613
9. Switch Lever and Stop Nut Assembly	110937	115765
10. Selector Shaft Assembly	115669	115752
11. Micro Switch	60655	60655
12. Spring, Switch Lever	68774	68744
13. Contact Plate Assembly	68582	115769

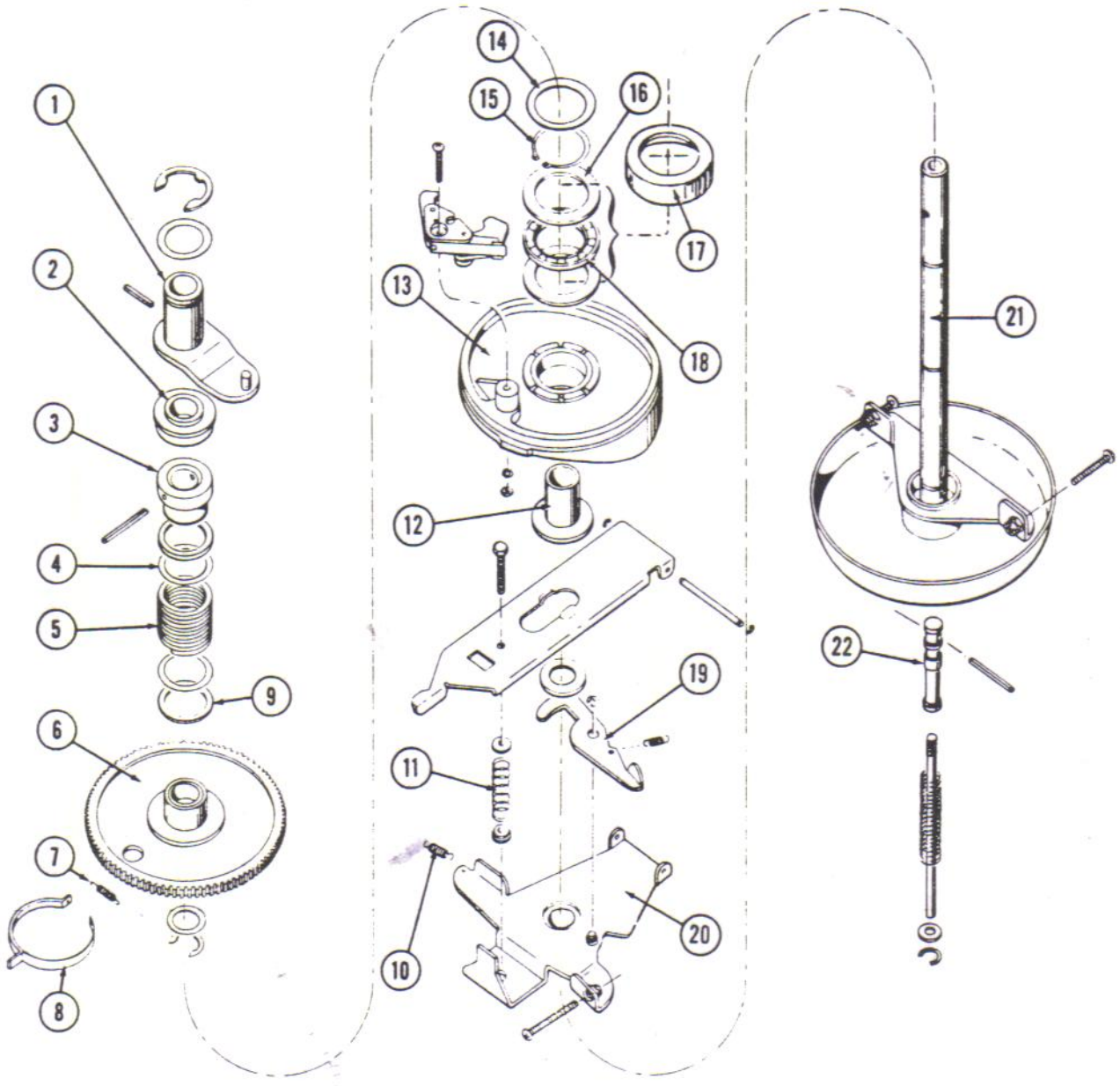

Fig. 114. SELECTOR SHAFT ASSEMBLY AND MAIN CAM AND BUSHING ASSEMBLY, 2504

1. Arm and Rivet Assembly	59651	13. Main Cam and Bushing Assembly	62792
Retaining Ring	73724-87	Pawl Assembly	59537
Roll Pin	73782-85	14. Washer	110077
2. Ball Bearing, Selector Shaft	59654	15. Retaining Ring	73727-112
3. Hub, Selector Drive Clutch	118254	16. Washer (2)	59641
Roll Pin	73782-88	17. Oil Guard	66580
4. Washer, Metal (2)	59647	18. Ball Race	59637
5. Spring, Selector Drive Clutch	59584	19. Release Arm, Switch Plunger	59572
6. Gear and Ratchet Wheel Assembly	116986	Spring, Release Arm	59613
7. Spring, Strap and Spring Assembly	59612	20. Mounting Plate Assem., Selector	59516
8. Strap and Spring Assem., Friction Drive Pawl	59626	21. Selector Shaft and Clutch Assembly	59666
9. Washer, Felt (2)	59655	22. Plunger, Selector Shaft	59642
10. Spring, Kick-off	59614	Actuator, Reverse Switch	115143
11. Spring, Selector Crank	57107	Spring, Selector Shaft Plunger	59609
12. Sleeve, Cancel Arm	59657	Washer	59659
		Washer, C, Internal	73783-37

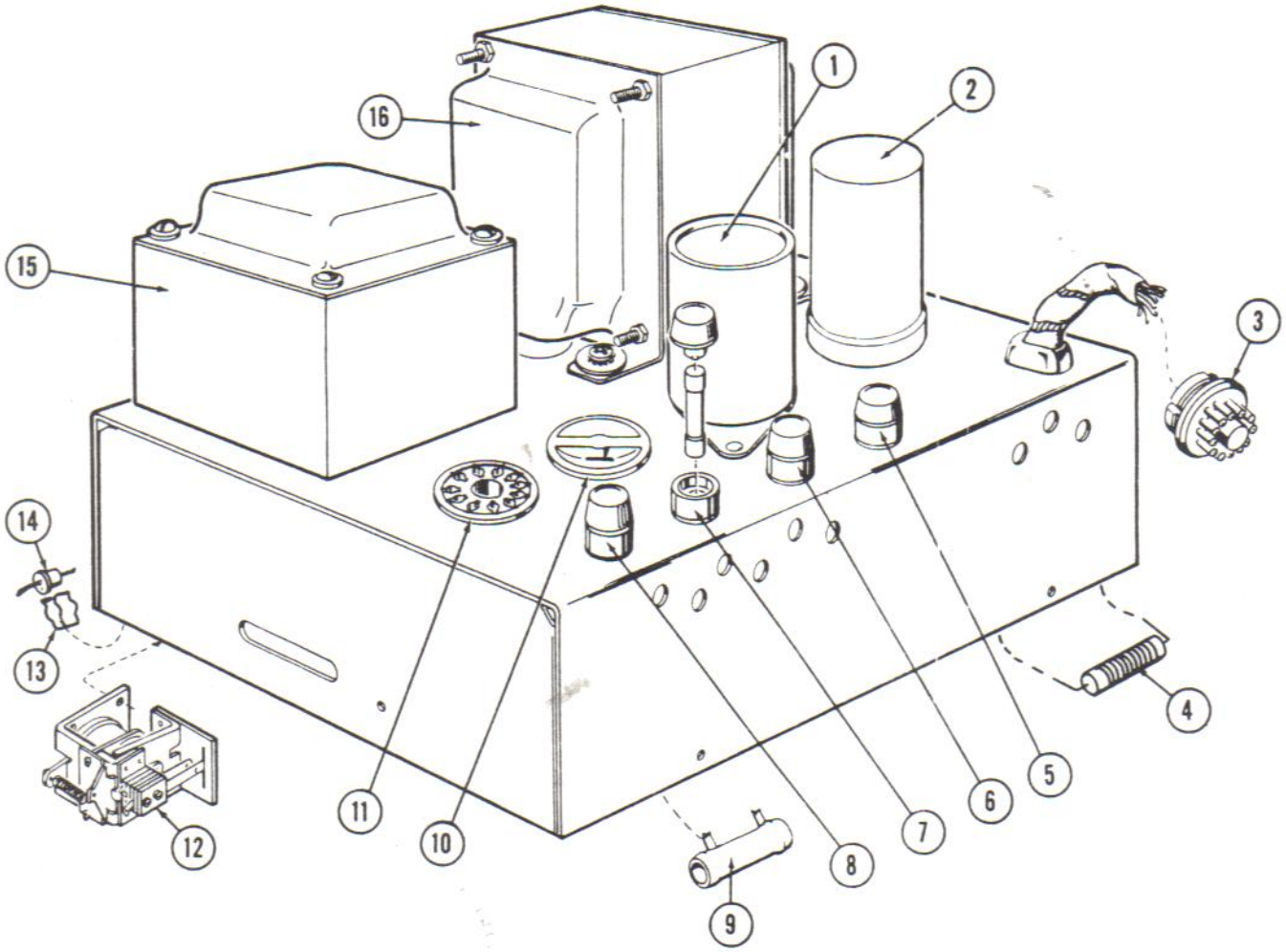

Fig. 115 . STEREO POWER SUPPLY

1.	Capacitor, Electrolytic 100 Mfd. 250V	71595	
2.	Capacitor, Electrolytic 100-20 Mfd.	71594	
3.	Plug, 12 Prong	114324	
4.	Choke Coil	119114	
5.	Fuse Post (4)	51485	
	Fuse, 1.6 Amp., Slow Blo	71591-15	
6.	Fuse, 8 Ampere	71590-33	
7.	Fuse, 3 Ampere	71590-22	
8.	Fuse, 2 Ampere, Slow Blo (Littel Fuse only)	71591-19	
9.	Resistor, 8 Ohm 10W	73476-2	
	Resistor, 1.8 Ohm 10W	73480-2	
10.	Socket, 2 Prong	13037	
11.	Socket, 11 Prong	38492	
12.	Relay Override	56321	
13.	Fuse Clip (2)	69250	
14.	Rectifier, Silicon Diode (2) 200 piv.	71588-7	
	Rectifier, Silicon Diode (3) 500 piv.	71588-6	
15.	Transformer, Amplifier Power	116645	
16.	Transformer, Low Voltage	119018	

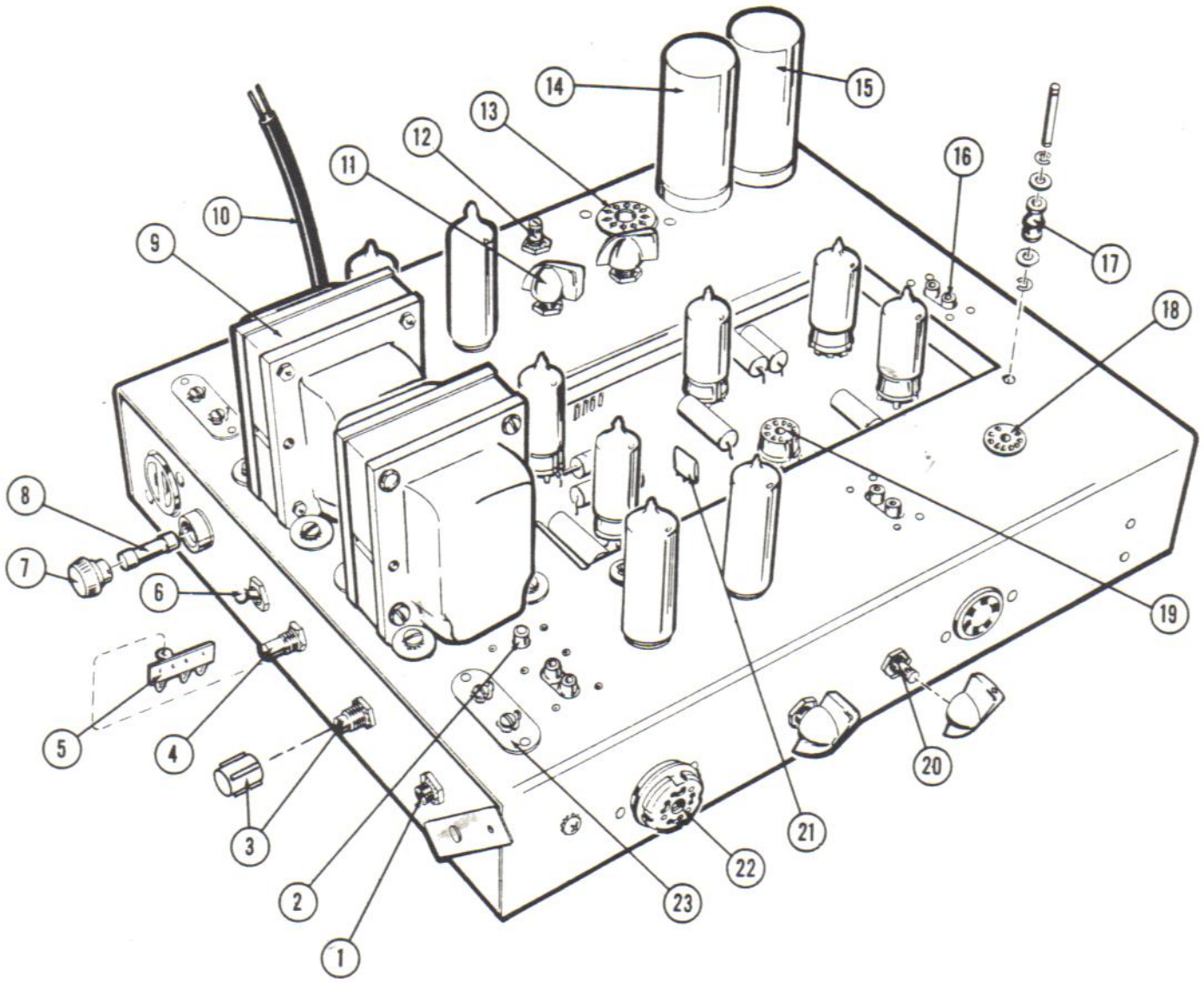

Fig. 116. MODEL 542 STEREO AMPLIFIER

1.	Loudness Control	114264
2.	Socket, Single Prong	43341
3.	Fader Switch	118688
	Seal Cap	115866
4.	Cancel Switch	68770
5.	Insulated Mounting Strip, 3 Terminals	20812
6.	Line Switch	53648
7.	Fuse Post	51485
8.	Fuse, 15 Amp.	71590-48
9.	Transformer, Audio Output (2)	114259
10.	Line Cord Cable Assembly	67464
11.	Switch, Bass or Treble Tone Control	64857
12.	Balance Control, Potentiometer	114463
13.	Socket, 12 Prong	114325
14.	Capacitor, Electrolytic, 30-20-20-25 Mfd.	73475
15.	Capacitor, Electrolytic, 20-20-150 Mfd.	74150
16.	Receptacle, Dual Single Prong	113420
	Plug, Single Prong	55391
17.	Isolator	15137
	Stud	66378
	Washer	53638
	Retaining Ring	73724-18
18.	Socket, 9 Prong	58425
19.	Socket - 9 Prong	64920
20.	Switch, Bass or Treble Tone Control	64857
	Knob, Black	20263
	Knob, Red	114527
21	Printed Board Assembly	116479
22.	Socket, 11 Prong	38492
	Plug and Wire Assembly, Shorting	114489
23.	Insulated Terminal Strip	18831

TUBE LIST

7025 (2)	114046
12AU7 (2)	58420
12AX7 (3)	58427
6973 (4)	114048

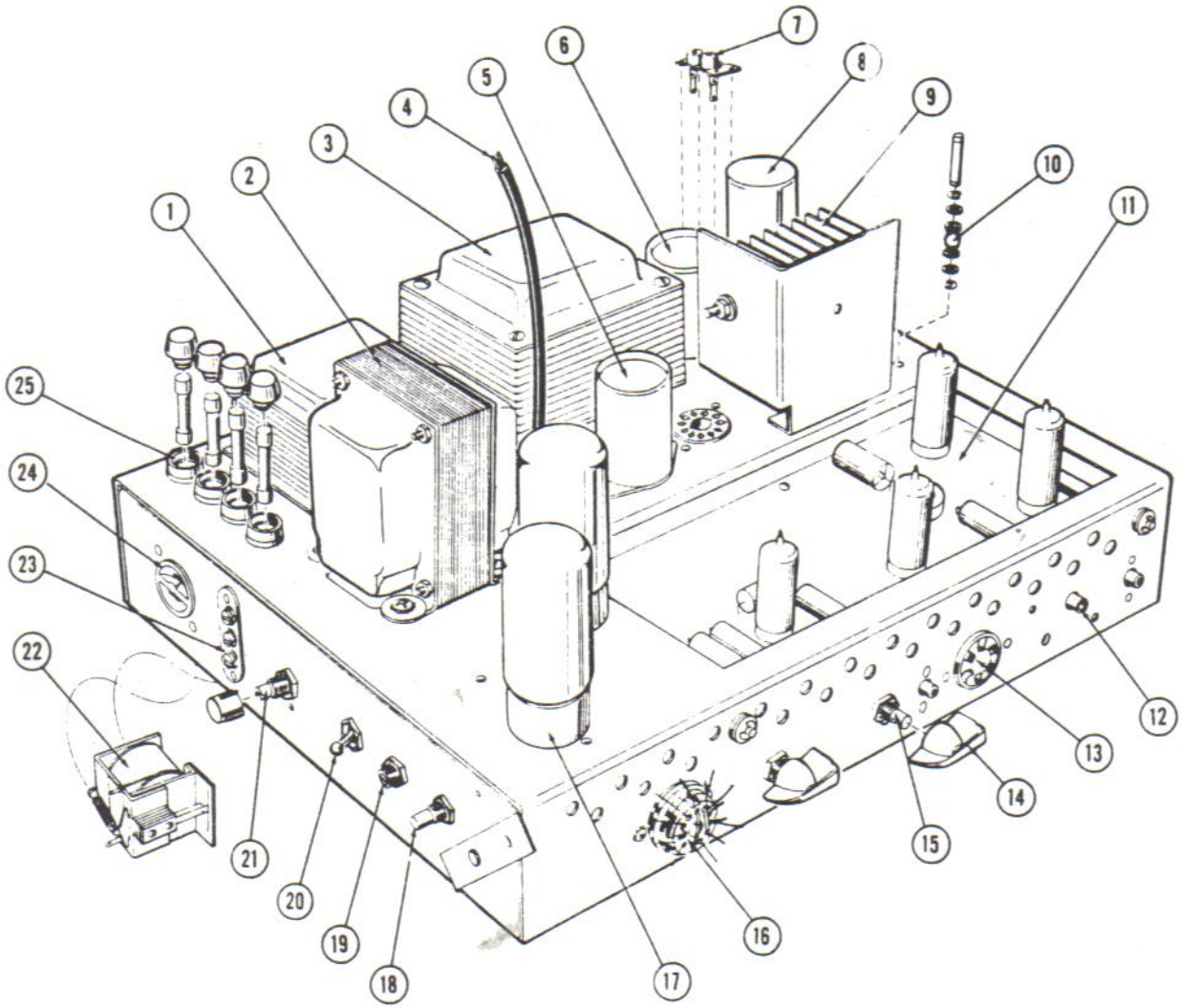

Fig. 117. 540 AMPLIFIER

1.	Transformer, Amplifier Power	118579
2.	Transformer, Audio Output	62430
3.	Transformer, Low Voltage	112632
4.	Line Cord	67464
5.	Capacitor, 100 Mfd. 250V	71595
6.	Capacitor, 100 Mfd. 250V	71595
7.	Receptacle, Dual Single Prong	113420
8.	Capacitor, 30-20-20-25 Mfd.	73475
9.	Rectifier, Selenium	115209
10.	Isolator (4)	15137
	Stud	66378
	Washer	53638
	Retaining Ring	73724-18
11.	Printed Board Assembly	118583
12.	Socket, Single Prong	43341
	Plug, Single Prong	55391
13.	Socket, 6 Prong	32881
14.	Knob	20263
15.	Switch, Bass and Treble	64857
16.	Socket, 11 Prong (2)	38492
	Plug and Wire Assem., Shorting	65462
17.	Socket, 8 Prong (2)	10964
18.	Cancel Switch	68770
19.	Loudness Control	118592
20.	Line Switch, S.P.S.T.	48836
21.	Fader Switch	62507
	Seal Cap	115866
22.	Relay, Override	56321
23.	Terminal Strip	62496
24.	Receptacle, 2 pole	13037
25.	Fuse Post (4)	51485
	Fuse, 1.6 Amp., Slow Blo	71591-15
	Fuse, 2 Amp., Slow Blo	71591-19
	Fuse, 15 Amp.	71590-48
	Fuse, 8 Amp.	71590-33

TUBE LIST

7025	114046
12AU7	58420
12AX7 (2)	58427
6L6GC (2)	28157

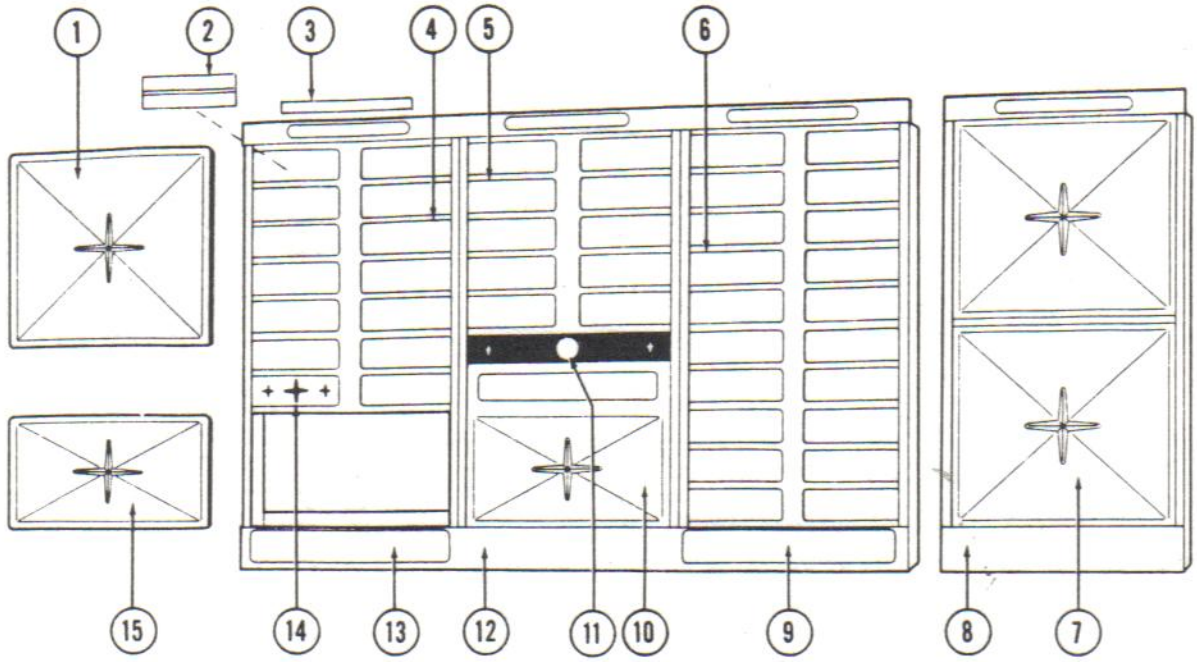

Fig. 118. PROGRAM HOLDER AND FRAME ASSEMBLY

	2500	2504	2510
1. Decorative Panel	*	118700	*
2. Program Cards, Double Title Strips	62604	62604	62604
3. Classification Slips			
Wurlitzer Music	118741	118741	118741
Todays Top Tunes	118742	118742	118742
Country and Western	118743	118743	118743
Rhythm and Blues	118744	118744	118744
Rock and Roll	118745	118745	118745
New Pop Records	118646	118746	118746
E. P. Show Albums	118747	118747	118747
Stereo and E. P.	118748	118748	118748
Classical and Old Favorites	118749	118749	118749
Jazz and Novelty	118750	118750	118750
Polkas and Waltzes	118751	118751	118751
Stereophonic Music	118752	118752	118752
4. Program Holder and Silk Screen Assy., A1-A26	*	118689	*
Program Holder and Silk Screen Assy., B1-B26	*	118690	*
Program Holder and Silk Screen Assy., C1-C26	*	118691	*
Program Holder and Silk Screen Assy., D1-D26	*	118692	*
5. Program Holder and Mounting Bracket Assy., J1-K0	118714	*	*
6. Program Holder and Silk Screen, A1-D0	118679	*	118679
Program Holder and Silk Screen, E1-H0	118680	*	*
Program Holder and Silk Screen, N1-R0	118681	*	*
Program Holder and Silk Screen, S1-V0	118682	*	*
Program Holder and Silk Screen, L1-M0	118687	*	*
Program Holder and Silk Screen, G1-K0	*	*	118683
Program Holder and Silk Screen, E1-F0	*	*	118685
7. Decorative Panel	*	*	118671
8. Program Holder Frame and Extrusion Assy., R.H. Side	118640	118640	118642
Program Holder Frame and Extrusion Assy., L.H. Side	118643	118643	118644
9. Label, Press A Letter and A Number Button	118800	*	*
10. Decorative Panel	*	119049	119049
11. Record Indicator Panel	118458	118458	118458
12. Program Holder Frame and Extrusion Assy., Center	118638	118637	118634
13. Label, 200 Selections	118801	*	*
14. Escutcheon	*	118678	*
15. Decorative Panel	*	*	118699

Note: * Not used on this model.

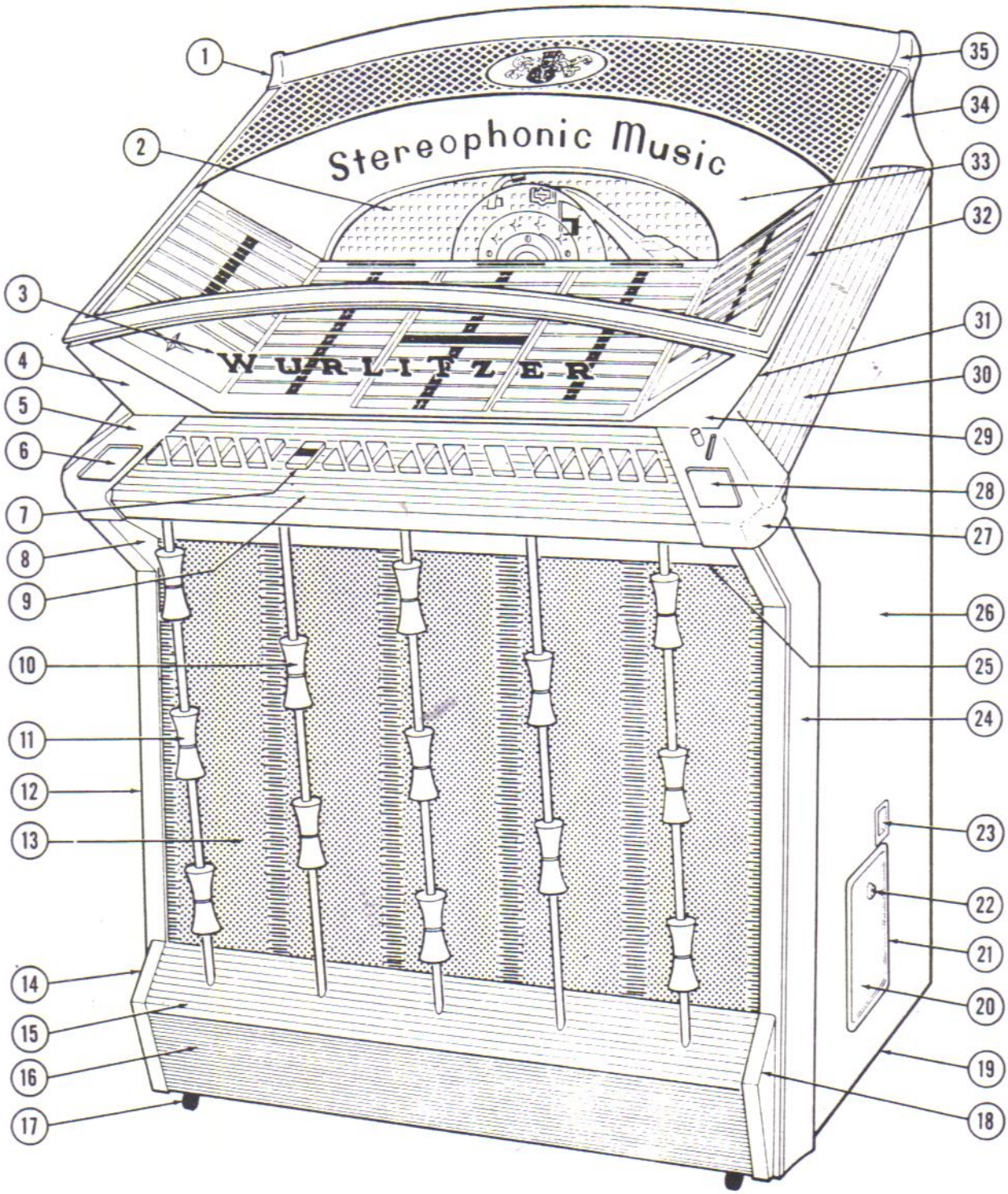

Fig. 119. TRIM AND MOUNTING - FRONT VIEW

Fig. 119. TRIM AND MOUNTING - FRONT VIEW

1.	Dome Casting, L.H.	118320
2.	Door Glass, Dome	118620
	Gasket, Door Glass, Top and Bottom	118760
	Gasket, Door Glass, Sides	118759
3.	Glass, "Wurlitzer"	118533
	Gasket, Front Glass	118762
	Channel, Retainer	118614
4.	Upper Cheek Casting, L.H.	118350
5.	Cheek Casting, L.H.	118392
6.	Coin Instruction Plate and Silk Screen Insert Half Dollars, Quarters, Dimes, Nickels	118020
	Insert Quarters, Dimes, Nickels	118021
	Window Blank, Even Glo (2)	116257
	Window Blank, Clear (2)	116258
7.	Select Button	116317
	Select Blank and Silk Screen Assy.	116314
	Shield, Select Blank	116315
	Light Clip and Bracket Assy.	118506
8.	Filler Angle, Upper Grille, L.H.	118536
	Filler Angle, Upper Grille, R.H.	118535
9.	Extrusion, Selector Panel, 2500	118389
	Extrusion, Selector Panel, 2510	118391
	Extrusion, Selector Panel, 2504	118390
10.	Rod and Ornament Assy. (2)	118396
11.	Rod and Ornament Assy. (3)	118736
12.	Extrusion Assy., Left Side	118515
13.	Grille Screen	118456
14.	Casting, Left Lower Moulding	118395
15.	Extrusion, Front	117998
16.	Kick Plate	118457
17.	Caster (4)	118616
	Socket, Caster	118617
18.	Casting, Right Lower Moulding	118394
19.	Extrusion, Bottom, R.H.	118508
	Extrusion, Bottom, L.H.	118509
20.	Cash Box Door	118411
21.	Frame, Cash Box Door	118413
22.	Lock and Key Assy., Cash Box Door	118412
23.	Coin Return Cup	68192
	Guard and Bracket Assy. Anti-Cheat	118405
24.	Extrusion Assy., Right Side	118514
25.	Grille Plate and Stud Assy.	118615
	Light Diffuser Assy., Red	118758
	Light Diffuser Assy., Blue	119031
	Light Diffuser Assy., Amber	119032
26.	Decorative Side, Dinoc (2)	118619
	Welding Solution, ½ pt. can	69753-A
27.	Cheek Casting, R.H.	118393
28.	Coin Denomination Plate and Silk Screen Assembly	118365
	7 Plays Half Dollar	
	3 Plays Quarter	
	1 Play 10 Cents	
	Coin Denomination Plate and Silk Screen Assy.	118366
	5 Plays Quarter	
	2 Plays Dime	
	1 Play Nickel	
	Coin Denomination Plate and Silk Screen Assy.	
	9/Half-4/Quarter 1/Dime	118363-S
	10/Half-4/Quarter-1/Dime	118364-S
	10/Half-5/Quarter-1/Dime	118362-S
29.	Upper Cheek Casting, R.H.	118351
30.	Extrusion, Side Wing, R.H.	118500
	Extrusion, Side Wing, L.H.	118501
31.	Lock Assembly, Dome (2)	118621
	Lock Strike Assembly, R.	118624
	Lock Strike Assembly, L.	118817
	Bracket and Pin Assy., Lock Strike, R.	118627
	Bracket and Pin Assy., Lock Strike, L.	118654
32.	Extrusion, Dome Frame	118354
33.	Light Diffuser Assy., Stereophonic Music	119242
	Light Diffuser Assy., High Fidelity Music	119241
	Trimount Stud (4)	73866-1
34.	Casting, Wing Filler, R.H.	118399
	Casting, Wing Filler, L.H.	118400
35.	Dome Casting, R.H.	118321

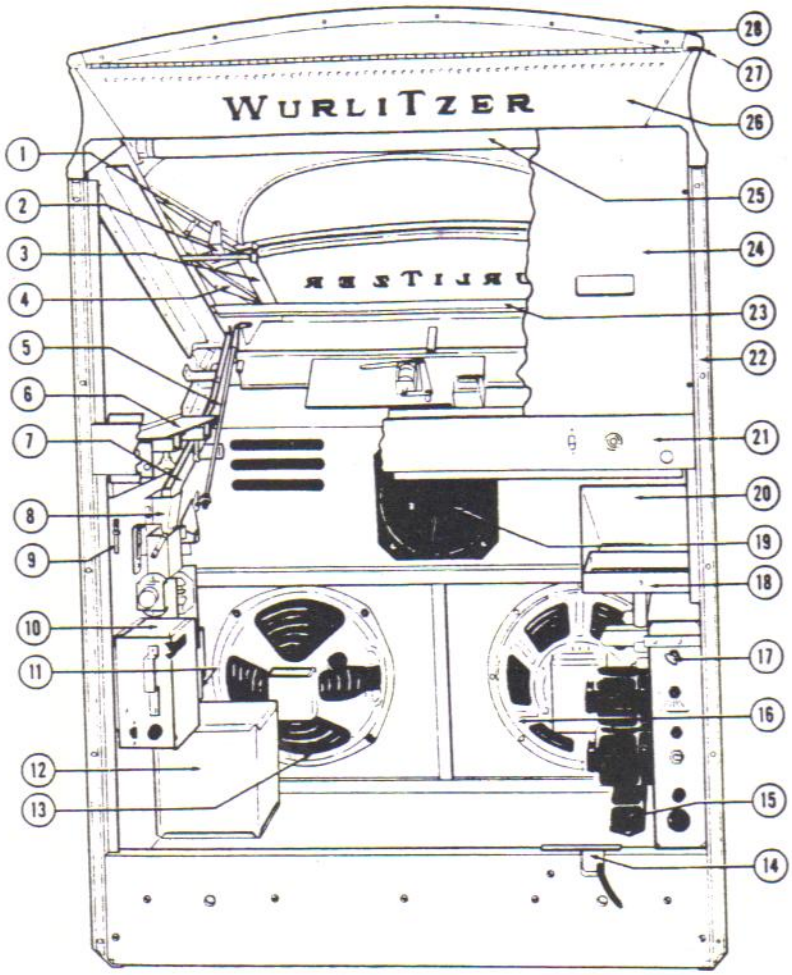

Fig. 120. TRIM AND MOUNTING - BACK VIEW - 2500

1.	Mounting Bracket and Clip Assy., L.H. (2)	118651
2.	Support Bracket and Clip Assy., R.H.	118648
	Support Bracket and Clip Assy., L.H.	118649
3.	Pivot Support, Program Holder, R.H.	118565
	Pivot Support, Program Holder, L.H.	118570
4.	Mounting Bracket and Clip Assy., R.H. (2)	118650
5.	Reject Rod and Button Assembly	119249
	Lever and Bracket Assembly	68546
6.	Mounting Rail and Bracket Assy., R.H.	116329
	Mounting Rail and Bracket Assy., L.H.	116330
7.	Coin Chute and Bracket Assembly	118518
8.	Lower Coin Chute Assembly	68552
9.	Centering Shaft	69247
10.	Cover Assembly, Coin Register Mechanism	112070
11.	Coin Hopper Assembly	118406
12.	Coin Bag Housing Assembly	113285
	Coin Bag	62670
13.	Speaker, 12", 16 Ohm, Red Dot for Identification	65192
14.	Cable Retainer	118645
15.	Light Ballast, Dual 25 Watt	111566
16.	Speaker, 12", 8 Ohm	117754
17.	Key, Volume Control	984
18.	Support Bracket Assembly	116740
19.	Speaker, 7"	114054
	Mounting Plate and Weld Screw Assy., 7" Speaker	114094
	Cover, 7" Speaker	114058
20.	Heat Shield	118529
21.	Back Rail Assembly	118498
22.	Extrusion, Rub Rail, L.H.	118427
	Extrusion, Rub Rail, R.H.	118428
23.	Mounting Channel, Program Holder	118571
24.	Upper Back Assembly	118602
	Screw, 1-8, Parker Kalon, R.H. (4)	73592-24
	Lower Back Assembly	118601
	Lock Assy., Lower Back Door	118629
	Key, R.W. 95	118633
25.	Fluorescent Lamp, 30" 25 Watt (2)	110965
	Socket, Fluorescent Lamp	53673
	Starter Switch, FS-25	57365
	Socket, Starter Switch	53674
	Plug	53672
	Shell, Plug	53671
26.	Cross Rail and Silk Screen Assembly	118972
27.	Bracket and Channel Assy., Fall Support	118667
	Pin, Fall Support	118668
	Retaining Ring	73724-15
	Spring, Fall Support	118900
28.	Extrusion and Top Plate Assembly	118647

WARRANTY

The component parts of automatic phonographs and accessory equipment manufactured by the Wurlitzer Company are warranted to be free from defects in material and workmanship and to operate properly under normal use and conditions, as follows:

(A) Mechanical parts (Excluding coin equipment) for a period of one year from date of delivery by the Distributor to his customer.

(B) Coin equipment and electrical parts (Including such parts as tubes, speakers, volume control assemblies, pick-up assemblies, amplifiers, motors, junction box assemblies, and all wiring) for a period of three months from date of delivery by the Distributor to his customer.

(C) Cabinets (Subject to the Company's inspection and determination as to defect) for a period of three months from date of delivery by the Distributor to his customer.

The company's liability under this warranty is limited to replacement, free of charge, F.O.B. North Tonawanda, New York, of any part or parts which prove defective within the limitations of said warranty. The Company shall not be liable for damages of any nature due to delayed shipment, or defective parts.

THE WURLITZER COMPANY
NORTH TONAWANDA, N. Y.

COMBINED NUMERICAL PARTS LIST

Part No.	Description	Page No.	2500	2504	2510
984	Key, Volume Control	78	x	x	x
10964	Socket, 8 Prong	59	x	x	x
13037	Receptacle, 2 Pole	72	x	x	x
13089	Plug, 5 Prong	51	x	x	x
15137	Isolator	74	x	x	x
16607	Plug, 6 Prong	61	x	x	x
16617	Plug, Female, 5 Prong	51	x	x	x
18831	Insulated Mounting Strip, Screw Terminal	73	x	x	x
20263	Knob, Black	74	x	x	x
20812	Insulated Mounting Lug, 3 Terminals	73	x	x	x
25202	Steel Ball, 3/16" Diameter	62	x	x	x
25358	Steel Ball Bearing, 1/8" Diameter	65	x	x	x
28157	Tube, Type 6L6GC	32	x	x	x
30495	Socket, 4 Prong	58	x	x	x
32881	Socket, 6 Prong	58	x	x	x
38492	Socket, 11 Prong	58	x	x	x
X42226	Stroboscope Disc	27	x	x	x
42868	Adjusting Cam, Eccentric, Hex Hd.	5	x	x	x
43341	Socket, Single Prong	74	x	x	x
45345	Electric Counter	52-53	x	x	x
46602	Fuse Mounting Strip	59	x		x
48501	Plug, 11 Prong	55	x	x	x
48836	Toggle Switch, SPST	74	x	x	x
49884	Grommet, Vibration Absorbtion	62	x	x	x
50324	Cap Nut, Tone Arm Brush	61	x	x	x
50494	Washer, No. 4	61	x	x	x
51485	Fuse Post	2	x	x	x
53489	Spring, Selector Rockers	54		x	
53638	Washer	74	x	x	x
53648	Switch, Toggle, S.P.S.T.	15	x		x
53671	Shell	78	x	x	x
53672	Plug, 2 Prong	78	x	x	x
53673	Socket, Fluorescent Lamp	78	x	x	x
53674	Socket, Starter	78	x	x	x
53774	Conical Spring	65	x	x	x
54246	Bumper	66	x	x	x
54878	Plug, 11 Prong	58	x	x	x
55391	Connector, Single Prong Plug	74	x	x	x
56321	Relay, Override	72	x	x	x
56530	Washer, Thrust Bearing	31	x	x	x
56628	Stop Bracket, Latch Solenoid Plunger	7	x	x	x
56704	Switch	52-53	x		
56713	Release Lever, Stud and Spacer Assembly	7	x	x	x
57107	Spring, Selector Crank	71		x	
57110	Spring, Selector Latch Pin	54		x	x
57128	Spring, Letter Latch	52-53	x	x	x
57129	Spring, Number Latch	52-53	x	x	x
57130	Spring, Solenoid Return	52-53	x	x	x
57349	Brush Cap	65	x	x	x
57350	Motor Brush	65	x	x	x
57365	Fluorescent Starting Switch, 25W	78	x	x	x
57851	Trip Switch	29	x	x	x
58255	Actuator	67	x	x	x
58420	Tube, 12AU7A	32	x	x	x
58425	Socket, 9 Pin, Miniature	73	x	x	x

Part No.	Description	Page No.	2500	2504	2510
58427	Tube, 12AX7	32	x	x	x
58781	Cancel Spring	51	x	x	x
58898	Socket, 11 Prong	58	x		
59280	Thumb Screw	60			x
59351	Rubber Washer, .092" x .218" x 1/16"	61	x	x	x
59394	Pivot Screw, Tone Arm	61	x	x	x
59396	Bumper, Record Guide	62	x	x	x
59399	Screw, Special, 8/32"	31	x	x	x
59406	Arm and Hub Assembly, Tone Arm Release	63	x	x	x
59415	Drive Pulley, Turntable Clamp	30	x	x	x
59418	Spring, Record Clamp	63	x	x	x
59423	Washer, Shaft, Record Clamp	63	x	x	x
59424	Spring, Record Pilot	63	x	x	x
59425	Track, Record Guide	19	x	x	x
59432	Adjusting Bracket, Trip Switch	29	x	x	x
59434	Stop Bracket, Record Track	19	x	x	x
59449	Pilot, Turntable	26	x	x	x
59456	Fly Wheel, Turntable	31	x	x	x
59457	Shaft Assembly, Tone Arm	63	x	x	x
59464	Cam, Record Clamp	26	x	x	x
59467	Casting, Record Guide, Rear	62	x	x	x
59470	Hex Nut, Turntable Shaft, 7/16 - 20	31	x	x	x
59483	Hub and Lever Assembly, Tone Arm Brush	61	x	x	x
59513	Cancel Lever, Hub and Roller Assembly	16	x	x	x
59516	Mounting Plate Assembly, Selector	21		x	
59519	Crank - Selector	15		x	
59521	Adjusting Bracket and Stop Nut Assembly	21		x	
59537	Pawl Assembly	68	x	x	x
59569	Transfer Switch and Bracket Assembly	24	x	x	x
59569-2	Over Center Spring, Stainless Steel	24	x	x	x
59570	Mounting Bracket, Motor	65	x	x	x
59571	Oil Slinger	31	x	x	x
59572	Release Arm, Reversing Switch Plunger	21		x	
59573	Casting, Record Holder	64		x	
59575	Back Stop Pawl Assembly	66		x	
59580	Torsion Spring, Record Play Counter	64		x	x
59582	Spring, Cancel Arms	67		x	
59583	Arm, Trip Switch	29	x	x	x
59584	Spring, Selector Drive Clutch	68	x	x	x
59599	Link and Lever Assembly, Record Lift	17	x	x	x
59601	Record Holder Assembly	64		x	x
59606	Spring, Return	63	x	x	x
59607	Spring, Tone Arm Brush	61	x	x	x
59609	Spring, Selector Shaft Plunger	71		x	
59612	Spring, Friction Drive	68	x	x	x
59613	Spring, Release Arm	70		x	x
59614	Spring, Kickoff	21		x	
59615	Spring, Trip Switch	29	x	x	x
59626	Strap and Spring Assembly, Friction Drive	68	x	x	x
59631	Cancel Casting	16	x	x	x
59637	Ball Race, Main Cam Shaft	68	x	x	x
59641	Washer, Thrust Bearing, Main Cam	68	x	x	x
59642	Plunger, Selector Shaft	71		x	
59647	Washer	71	x	x	x
59651	Arm and Rivet Assembly	71		x	
59654	Ball Bearing, Selector Shaft	68	x	x	x

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59655	Felt Washer	71	x	x	x
59657	Cancel Sleeve	17		x	
59659	Washer, Plunger Shaft	71		x	
59661	Cancel Arm Assembly, Lower	16	x	x	x
59666	Selector Shaft Assembly	71		x	
59688	Lever Assembly, Record Clamp	24	x	x	x
59697	Spring, Record Lift Arm	66	x	x	x
59704	Mounting Bracket and Roller Assembly	18		x	x
59706	Lever, Record Play Counter	66		x	x
59709	Spring, Carrier Drive Pawl	64		x	
59710	Spring, Back Stop Pawl	66	x	x	x
59714	Ring, Rubber Gasket	64	x	x	x
59717	Idler Pulley and Bracket Assembly, Tone Arm Brush	29	x	x	x
59721	Arm, Carrier Drive	64		x	
59734	Clamp, Record Holder	64	x	x	x
59737	Bushing, Carrier Drive Pawl	64		x	
59739	Bracket and Stop Nut Assembly	61	x	x	x
59793	Hub and Lever Assembly	66		x	
59827	Chassis Mounting Plate, Sub-Assembly	65	x	x	x
59844	Bracket and Roller Assembly	66	x	x	x
59859	Record Play Counter	64		x	x
59864	Washer, Turntable Shaft	31	x	x	x
59867	Ball Race, Turntable Shaft	31	x	x	x
59871-A	Cable and Sleeve	30	x	x	x
59881	Sleeve for Brush Cable	29	x	x	x
59888	Cable, Tone Arm Brush	29	x	x	x
59891	Sleeve, Record Clamp Cable	30	x	x	x
59894	Spring, Play Meter Actuating Arm	68	x	x	x
59901	Spring, Pawl, Record Play Counter	64	x	x	x
59922	Arm and Roller Assembly, Record Clamp	26	x	x	x
60518	Switch Assembly	52-53	x		
60574	Grommet	59	x		x
60575	Cup Washer	59	x		x
60599	Stop Plate, Turntable Cam	30	x	x	x
60655	Micro Switch, Safety	61	x	x	x
60658	Mounting Bracket Roller Assembly	18		x	x
60677	Spring, Roller Arm	18		x	x
60680	Pad, Turntable	63	x	x	x
60681	Retaining Ring, Turntable Pilot	63	x	x	x
60711	Guide Tip, L.H., Record Lift Arm	68		x	x
60881	"O" Ring, Turntable Drive	62	x	x	x
60882	Rubber Mount, Turntable Drive Motor	62	x	x	x
60893	Spring Clip, Turntable Drive Motor	27	x	x	x
60910	Bracket and Angle Assembly Turntable Drive Motor	62	x	x	x
60946	Plate, Pin and Bushing Assembly, Turntable Drive Motor	62	x	x	x
60991	Ball Bearing	67	x	x	x
61004-A	Teflon Shim Washer, Stepper Ratchet Shaft	59	x		x
61059	Spring, Conical, Chassis Mount Yellow Dot, Rear	65	x	x	x
61111	Spring Pin	27	x	x	x
61173	Spring, Reversing Switch	54		x	
61174	Spring, Turntable Cam	30	x	x	x
61473	"O" Ring, Turntable Drive Belt 25-50 Cycle	62	x	x	x
61484	Guide Tip, R.H.	68		x	x
61672-6	Centering Attachment	15		x	
61850	Guide, Selector Mounting Stud	14		x	x
61857	Socket, Fustat	59	x		x

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61858	Fustat, 3 Ampere	59	x		x
62145	Spring, Coin Selector	51	x	x	x
62430	Transformer, Hi-Fi Output	74	x	x	x
62496	Terminal Strip, 3 Screw	74	x	x	x
62507	Switch, Fader Control	74	x	x	x
62604	Program Cards, Double Title Strips	75	x	x	x
62670	Coin Bag Assembly	78	x	x	x
62761	Actuating Arm Assembly, Mute and Play Switch	25	x	x	x
62768	Cam Lobe, Mute and Play Switch	24	x	x	x
62769	Stop Plate, Mute and Play Switch Actuator Arm	25	x	x	x
62773	Spring	9	x	x	x
62792	Main Cam and Bushing Assembly	16	x	x	x
62886	Slide Switch	2	x	x	x
63205	Record Clamp Plate	26	x	x	x
63623	Pivot Pin, Pawl	51	x	x	x
63731	Shim, Metal, Turntable Shaft	31	x	x	x
63732	Washer, Fiber, Turntable Shaft	31	x	x	x
64190	Pulley, Turntable	31	x	x	x
64423	Latch Bracket, Tone Arm	27	x	x	x
64513	Screw, Turntable Sleeve	63	x	x	x
64520	Sleeve and Bushing Assembly	31	x	x	x
64543	Mounting Stud	14		x	
64590	Plate and Spacer Assembly	54		x	
64595	Insulator	54		x	x
64599	Wobble Plate, Selector	54		x	
64601	Contact Assembly, Override Switches	54		x	
64602	Solenoid, Selector	11		x	x
64606	Latch Pin, Selector	16		x	
64609	Rotating Plate	54		x	
64613	Bushing and Roller Assembly, Drive Plate	54		x	
64618	Rocker, Short	54		x	
64619	Rocker, Long	54		x	
64630	Roller Assembly	54		x	x
64637	Pin, Hub and Arm Assembly, Selector	12		x	
64645	Mounting Plate and Magnet Assembly	12		x	
64649	Stop Pivot	57		x	x
64650	Magnet and Frame Assembly, R.H., "B"	54		x	
64651	Magnet and Frame Assembly, L.H., "C"	54		x	
64653	Stop Arm, "C" R.H.	12		x	
64654	Stop Arm, "B" L.H.	12		x	
64663	Hub and Lever Assembly, Reversing Switch	22		x	
64711	Timing Relay No. 2	54		x	x
64722	Solenoid, Driver	12		x	
64773	Spring, Stop Arms	54		x	x
64781	Spring, Return, Rotating Plate	12		x	
64783	Spring and Plug Assembly	11		x	x
64857	Switch, Tone Control	74	x	x	x
64920	Socket, Miniature, 9 Pin	73	x	x	x
64981	Switch Assembly, L.H.	52-53	x	x	x
64982	Switch Assembly, R.H.	52-53	x	x	x
65007	Switch Assembly, Solenoid	52-53		x	x
65009	Pawl, Stud and Spacer Assembly, Letters	7	x	x	x
65069	Cancel Solenoid	51	x	x	x
65096	Spring, Turntable Release Lever	61	x	x	x
65170	Mute and Play Switch and Bracket Assembly	25	x	x	x
65170-1	Toggle Spring, Mute and Play Switch	68	x	x	x

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65170-A	Fiber, Mute and Play Switch	68	x	x	x
65192	Speaker, 12" 16 Ohm, Red Dot	32	x	x	x
65203	Gear and Shaft Assembly, Turntable Drive Motor	27	x	x	x
65362	Taper Pin, 6/0 x 7/16"	52-53	x	x	x
65462	Plug and Wire Assembly, Shorting	74	x	x	x
65516	Pin, Release Lever Stop	15	x		x
65526	Stop, Guide Tips	18	x		
65548	Connector Bracket, Carrier	65	x		
65728	Mounting Bracket	15	x		
65730	Guide Tip, R.H.	18	x		
65731	Guide Tip, L.H.	18	x		
65744	Release Lever and Hub Assembly	15	x		x
65750	Relay, Reverse	58	x		x
65801	Plastic Cover, Stepper	59	x		
65809	Spring, Selector Crank	16	x	x	x
65812	Spring, Guide Tips	69	x		
65885	Bracket and Roller Assembly, L.H.	18	x		
65886	Bracket and Roller Assembly, R.H.	65	x		
65890	Back Stop Pawl and Bracket Assembly	20	x		x
65908	Record Holder Assembly	65	x		
65947	Pin, Solenoid Shaft	51	x	x	x
65952	Switch, Override	10	x		
65958	Spring, Record Lift Arm Centering Bracket	18	x		
65986	Stud, Eccentric	18	x		
65989	Roller, Lift Arm Guide	18	x		
66049	Mounting Stud, Lock-out Lever	51	x	x	x
66065	Link, Solenoid	51	x	x	x
66069	Stop Bracket, Cancel Pawl	5	x	x	x
66071	Spring, Cancel	51	x	x	x
66072	Spring, Solenoid Return	51	x	x	x
66074	Spring, Accumulator Wheel	51	x	x	x
66082	Switch Assembly, Key	4	x	x	x
66122	Front Plate and Shaft Assembly	2	x	x	x
66124	Cancel Wheel Assembly	3	x	x	x
66125	Pivot Arm and Pawl Assembly	5	x	x	x
66127	Pin and Pawl Assembly	5	x	x	x
66128	Coin Magnet and Bracket Assembly	3	x	x	x
66129	Lever, Hub and Stud Assembly	3	x	x	x
66130	Hub and Lever Assembly, Lock-out	51	x	x	x
66131	Accumulator Wheel and Hub Assembly	3	x	x	x
66132	Stop Lever and Spring Assembly	2	x	x	x
66133	Silk Screen and Indexing Strip, Quarter	51	x	x	x
66135	Silk Screen and Indexing Strip, Dime or Half Dollar	51	x	x	x
66182	Plate, Adjusting, Lift Arm Guide	17	x		
66186	Contact Plate Assembly	9	x		x
66378	Stud, Shock Mount	74	x	x	x
66445	Pin, Hinge	2	x	x	x
66580	Flanged Washer, Main Cam Shaft	71	x	x	x
66989	Stop Bracket, Drive Arm	12		x	
67439	Lamp, Mazda No. 55	58	x		
67464	Line Cord Assembly	74	x	x	x
67920	Rotating Plate, Selector	55	x		
67926	Rocker, Rotating Plate	9	x		
67927	Wobble Ring	10	x		
67928	Support Casting, R.H.	69	x		
68102	Turntable and Shaft Assembly	31	x	x	x
68192	Coin Return Cup Casting	76-77	x	x	x

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68290	Guide Plate, Record Lift Arm	69	x		
68375	Record Guide and Bracket Assembly, R.H.	62	x	x	x
68376	Record Guide and Bracket Assembly, L.H.	62	x	x	x
68483	Sleeve and Bushing Assembly	15	x		
68491	Pin, Actuator Arm	15	x		x
68521	Tapping Plate	69	x		
68526	Stop Lever, Selector Crank Cancel Sleeve	15	x		
68545	Pin and Actuator Assembly	2	x	x	x
68546	Reject Lever and Bracket Assembly	2	x	x	x
68552	Lower Coin Chute Assembly	2	x	x	x
68558	Shaft, Release Lever	15	x		
68559	Actuator Arm and Hub Assembly, Loading	15	x		
68567	Link, Release Lever	15	x		
68582	Contact Plate Assembly	70	x		
68594	Solenoid, Selector, Letters	9	x		
68601	Switch Assembly, Latch	52-53		x	x
68617	Solenoid, Selector Stop, No. 2 to 0	9	x		
68649	Shoulder Screw, Selector	9	x		
68650	Spacer, Wobble Ring	10	x		
68651	Bracket and Roller Assembly	55	x		
68656	Plastic Roller, Rotating Plate	55	x		
68657	Stud, Guide Roller	9	x		
68700	Support Casting, L.H.	69	x		
68717	Gear and Hub Assembly, Selector	10	x		
68755	Spring, Selector Rocker	55	x		
68757	Guide Bracket, L.H. Selector Support Casting	13	x		
68758	Guide Bracket, R.H. Selector Support Casting	13	x		
68759	Guide Bracket, L.H. Selector Casting	13	x		
68760	Guide Bracket, R.H. Selector Casting	13	x		
68770	Cancel Switch, Oak Type 175	74	x	x	x
68774	Spring, Switch Lever	70	x		x
68782	Spring, Release Lever Linkage	15	x		
68799	Silk Screen and Support Plate Assembly	10	x		
68804	Solenoid, Selector Stop No. 1	9	x		
68942	Timing Relay No. 2	58	x		
69066	Motor, Gear and Bracket Assembly	30	x	x	x
69089	Plug, 4 Prong, Tone Arm	61	x	x	x
69090	Socket, 4 Prong	63	x	x	x
69240	Relay, Reverse	57	x		x
69244	Relay, Pulse	51	x	x	x
69247	Centering Shaft, Selector Shaft	13	x		x
69250	Clip, Centering Tool	72	x	x	x
69659	Stud, Eccentric, Guide Roller	9	x		
69753-A	Welding Solution 1-Pint Can, for Dinoc Transfer	76-77	x	x	x
69775	Light Socket and Wire Assembly	52-53	x	x	x
69839	Insulator, Switch	55	x		
69841	Insulator, Switch	55	x		
70901	Capacitor 65 to 93 Mfd., 50V	58	x		
71220-24	Capacitor, .022 Mfd., 400V	58	x	x	x
71227-12	Capacitor, 0.1 Mfd., 200V	58	x	x	x
71227-14	Capacitor, .1 Mfd., 400V	58	x	x	x
71499	Capacitor, 250 Mfd., 50V	60			x
71588-6	Silicon Rectifier, 500 P.I.V	72	x	x	x
71588-7	Silicon Rectifier, 200 P.I.V	72	x	x	x
71590-22	Fuse, 3 Amp	72	x	x	x
71590-33	Fuse, 8 Amp	72	x	x	x
71590-48	Fuse, 15 Amp	74	x	x	x

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71591-5	Fuse, 4/10 Amp. Fusetron	54		x	
71591-6	Fuse, Slow Blo .5 Amp.	59	x		x
71591-10	Fuse, Slow Blo .8 Amp.	58	x	x	x
71591-15	Fuse, 1.6 Amp. Slow Blo.	72	x	x	x
71591-19	Fuse, 2 Amp. Slow Blo	72	x	x	x
71594	Capacitor, 20 Mfd., 400V., 100 Mfd., 250V.	72	x	x	x
71595	Capacitor, 100 Mfd., 250V.	72	x	x	x
71816	Capacitor, 500 Mfd., 50V.	59	x		
71883-2	Resistor, 150 Ohm, 5 Watt.	52-53	x	x	x
71885-2	Resistor, 120 Ohm, 5 Watt.	54		x	
71886-3	Resistor, 85 Ohm, 5 Watt	59	x	x	x
71887-2	Resistor, 25 Ohm, 5 Watt	60			x
72200-32	Resistor, 2200 Ohm, 1/2 Watt	58	x		x
72298-32	Resistor, 27 Ohm, 1 Watt	58	x		
72314-32	Resistor, 120 Ohm, 1 Watt.	58	x		
72474-32	Resistor, 560 Ohm, 2 Watt.	59	x		x
72986-2	Resistor, 50 Ohm, 5 Watt	58	x	x	x
73093-142	Capacitor, .1 Mfd., 400V.	57	x	x	x
73099-240	Capacitor, 0.5 Mfd., 400V.	59	x		x
73475	Capacitor, Electrolytic, 30-20-20-25 Mfd.	74	x	x	x
73476-2	Resistor, 8 Ohm, 10 Watt	72	x	x	x
73480-2	Resistor, Wire Wound, Vitreous Enamel, 1.8 Ohm, 10W	72	x	x	x
73502-95	Screw, 10-32 x 1" R.H.	21	x	x	
73502-97	Screw, 10-32 x 1-1/4" R.H.	21		x	
73502-99	Screw, 10-32 x 1-3/4" R.H.	30	x	x	x
73503-23	Screw, 4-40 x 1-1/4" R.H.	63	x	x	x
73503-25	Screw, 4-40 x 3/8"	64	x	x	x
73503-29	Screw, 4-40 x 3/4" R.H.	29	x	x	x
73503-73	Adjusting Screws 6-32 x 7/8" R.H.	22		x	
73503-91	Screw, 8-32 x 3/4" R.H.	18	x	x	x
73503-95	Screw, 8-32 x 1-1/4" R.H.	23	x		x
73511-29	Set Screw, 8-32 x 3/16".	15	x	x	x
73513-19	Screw, Socket Head, 6-32 x 3/16".	27	x	x	x
73533-1	Screw, 4-40 x 3/16' R.H. Sems	4	x	x	x
73533-3	Screw, 4-40 x 5/16" R.H. Sems.	19	x	x	x
73533-7	Screw, 4-40 x 5/8", R.H. Sems.	69	x		
73533-21	Screw, 6-32 x 3/16", R.H. Sems	5	x	x	x
73533-22	Screw, 6-32 x 1/4", R.H. Sems.	4	x	x	x
73533-23	Screw, 6-32 x 5/16", R.H. Sems	27	x	x	x
73533-33	Screw, 8-32 x 3/16", R.H. Sems	11			x
73533-34	Screw, 8-32 x 1/4", R.H. Sems.	5	x	x	x
73533-35	Screw, 8-32 x 5/16", R.H. Sems	11	x	x	x
73533-38	Screw, 8-32 x 1/2", R.H. Sems.	27	x	x	x
73533-39	Screw, 8-32 x 5/8", R.H. Sems.	5	x	x	x
73533-40	Screw, 8-32 x 3/4", R.H. Sems.	14		x	x
73533-44	Screw, 8-32 x 1-1/4", R.H. Sems.	5	x	x	x
73533-105	Screw, 3-48 x 7/16", R.H. Sems	69	x		
73534-14	Screw, 5-40 x 3/8", R.H. Sems.	24	x	x	x
73568-106	Adjusting Screw, 10-32 x 5/16", R.H., Thread Cutting	18	x	x	x
73574-31	Screw, 4-40 x 1", R.H.	24	x	x	x
73574-33	Screw, 4-40 x 1-1/4", R.H.	25	x	x	x
73575-100	Adjusting Screw, 10-32 x 2", R.H.	28	x	x	x
73586-2	Screw, 2-56 x 3/16", F.H.	68		x	x
73592-24	Screw, 1-8, Parker Kalon R.H.	78	x	x	x
73601-7	Nut, 8-32 Hex Hd.	27	x	x	x
73601-10	Lock Nut, Hex, 1/4-20	26	x	x	x
73606-1	Lock Washer, #2 Countersunk	68		x	x

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73607-12	Lock Washer, Internal, 7/16"	31	x	x	x
73637-10	Nut, Tinnerman	64	x	x	x
73656-74	Screw, 6-32 x 1", R.H.	25	x	x	x
73660-161	Adjusting Screw, Hex Hd., 10-32 x 1-1/4"	17	x	x	x
73676-47	Adjusting Screw, 10-32 x 5/16", R.H.	20	x	x	x
73692-49	Screw, 10-32 x 7/16", R.H. Sems	11		x	x
73724-15	Retaining Ring	51	x	x	x
73724-18	Retaining Ring	54	x	x	x
73724-21	Retaining Ring, Truarc No. 21	51	x	x	x
73724-25	Retaining Ring	27	x	x	x
73724-31	Retaining Ring	9	x		
73724-50	Retaining Ring	57			x
73724-87	Retaining Ring	64	x	x	x
73727-112	Retaining Ring	68	x	x	x
73782-11	Roll Pin.	62	x	x	x
73782-32	Roll Pin.	55	x		
73782-48	Roll Pin.	15	x	x	x
73782-85	Roll Pin.	71	x	x	x
73782-88	Roll Pin.	71	x	x	x
73783-37	Tru Arc Retaining Ring, Internal	71		x	
73785	Lock Nut 10-32 Hex, Special	17	x	x	x
73793-86	Adjusting Screw, Trip Switch, 8-32 x 3/4" Hex Hd.	29	x	x	x
73793-87	Screw, 8-32 x 7/8" Hex Hd.	11			x
73793-88	8-32 x 1" Hex Hd. Screw.	9	x		
73793-118	Cap Screw, 10-32 x 1/2" Hex Hd.	13	x	x	x
73793-122	Cap Screw, Hex Hd., 10-32 x 1"	9	x		
73793-124	Cap Screw, Hex Hd., 10-32 x 1-1/2"	15	x		
73793-125	Cap Screw, Hex Hd., 10-32 x 1-3/4"	15	x	x	x
73793-150	Cap Screw, Hex Hd., 1/4"-20 x 1"	13	x		
73793-151	Cap Screw, Hex Hd., 1/4-20 x 1-1/4"	69	x		
73793-152	Cap Screw, Hex Hd., 1/4-20 x 1-1/2"	14		x	x
73793-270	Cap Screw, Hex Hd., 8-32 x 1-3/8".	16		x	
73800	Screw, 6-32 x 1-3/8", R.H.	25	x	x	x
73835-55	Capacitor, 4 Mfd., 250V.	59	x		x
73862	Capacitor, 100 Mfd., 50V.	60			x
73864	Capacitor, 20 Mfd., 50V.	58	x		
73865-8	Stop Nut, Nylock, 10/32	28	x	x	x
73866-1	Trimount Stud	76-77	x	x	x
73889-620	Capacitor, 150 Mfd., 50V.	54		x	x
74150	Capacitor, Electrolytic, 20-20-150 450V.-450V.-50V.	73	x	x	x
74288-6	Screw, 4-40 x 1/2", R.H. Nylon	4	x	x	x
74288-26	Adjusting Screw, 8-32 x 3/4 R.H. Nylon	27	x	x	x
74335-22	Screw, 6-32 x 7/16" Truss Hd., Type 23	62	x	x	x
110077	Washer	71	x	x	x
110190	Input Cable Assembly	32	x	x	x
110453	Lamp Socket Assembly	58	x		
110480	Spring, Latch Pins.	10	x		
110557	Switch, Carriage.	23	x		
110558	Switch, Reversing and Start	9	x	x	
110930	Tip and Mounting Bracket Assembly, Outer	15	x		
110934	Spring, Cancel Arms	68	x		x
110936	Tip and Mounting Bracket Assembly, Inner	14	x		
110937	Switch Lever and Stop Nut Assembly.	23	x		
110939	Actuator Arm and Link Assembly	16	x		
110941	Latch Pin, Inner	9	x		
110942	Selector Latch Pin, Outer.	10	x		
110944	Selector Crank and Bracket Assembly	16	x		

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110946	Mounting Plate and Bushing Assembly	70	x		
110965	Fluorescent Lamp, 25W., 30"	78	x	x	x
111027	Selector Plates and Spacer Assembly	10	x		
111481	Rotating Plate and Rocker Assembly	9	x		
111527	Contact, "Amplock"	55	x		
111566	Ballast, Fluorescent, 25W. Dual	78	x	x	x
111720	Crank and Link Assembly, Solenoid	52-53	x	x	x
111897	Shaft, Link and Lever Assembly, Letters	5	x	x	x
111898	Shaft, Link and Lever Assembly, Numbers	5	x	x	x
111913	Motor and Gear Assembly, Selector	9	x		
111999	Thumb Screw, Selector Casting	52-53	x	x	x
112070	Cover Assembly, Coin Register Mechanism	2	x	x	x
112104	Solenoid Assembly, Latch	52-53	x	x	x
112104-1	Plunger, Latch Solenoid	7	x	x	x
112417	Adjusting Clip, Link, Selector Switch	5	x	x	x
112494	Relay, Timing No. 1	51	x	x	x
112632	Transformer, Low Voltage	74	x	x	x
113199	Support Casting and Bushing Assembly	61	x	x	x
113204	Pivot Casting and Arm Assembly	69	x		
113205	Bracket and Stop Nut Assembly	69	x		
113210	Reset Lever Assembly, Play Meter	65	x	x	x
113215	Pivot Casting and Arm Assembly	68		x	x
113216	Bracket and Nut Assembly	68		x	x
113285	Coin Bag Housing Assembly	78	x	x	x
113299	Actuating Arm, Transfer Switch	24	x	x	x
113325	Connector, Sonotone Cartridge	61	x	x	x
113387	Connecting Bracket, Carrier Ring	64			x
113408	Carrier Ring and Silk Screen Assembly, A1-C5	64			x
113409	Carrier Ring and Silk Screen Assembly, C6-E0	64			x
113410	Carrier Ring and Silk Screen Assembly, F1-H5	64			x
113411	Carrier Ring and Silk Screen Assembly, H6-K0	64			x
113420	Receptacle, Dual, Single Prong	74	x	x	x
113527	Cap, 6 Circuit	55	x		
113528	Socket, 6 Circuit	9	x		
113687	Record Play Counter	64			x
113789	Contact, #20 to #15 Wire	62	x	x	x
114046	Tube, 7025	74	x	x	x
114048	Tube, 6973	35	x	x	x
114054	Speaker, 7" P.M.	32	x	x	x
114058	Cover, 7" Speaker	32	x	x	x
114060	Carrier Ring and Silk Screen Assembly, A1-A8	64		x	
114061	Carrier Ring and Silk Screen Assembly, B7-B14	64		x	
114062	Carrier Ring and Silk Screen Assembly, C13-C20	64		x	
114063	Carrier Ring and Silk Screen Assembly, D19-D26	64		x	
114064	Carrier Ring and Silk Screen Assembly, F2-L1	65	x		
114065	Carrier Ring and Silk Screen Assembly, A1-R2	65	x		
114066	Carrier Ring and Silk Screen Assembly, L2-R1	65	x		
114067	Carrier Ring and Silk Screen Assembly, A2-F1	65	x		
114094	Mounting Plate and Weld Screw Assembly	78	x	x	x
114259	Transformer, High Fidelity Output, Stereo	73	x	x	x
114264	Dual Volume Control	73	x	x	x
114323	Wire and Plug Assembly, Tone Arm	61	x	x	x
114324	Plug, 12 Prong, Amphenol	59	x	x	x
114325	Socket, 12 Prong	58	x	x	x
114346	Stepper Switch Assembly	59	x		
114346-A	Release Latch Relay	59	x		x
114346-B	Step Magnet	59	x		x

Part No.	Description	Page No.	2500	2504	2510
114346-C	Nylon Ratchet Wheel, Numbers	59	x		x
114346-D	Nylon Ratchet Wheel, Letters	59	x		x
114346-E	Contact Plate Assembly, Numbers	59	x		x
114346-F	Contact Plate Assembly, Letters	59	x		
114346-G	Contact Arm, Numbers or Letters	59	x		
114346-J	Frame, Contact Plate, Number	59	x		x
114346-K	Frame, Contact Plate, Letter	59	x		x
114463	Potentiometer, Balance Control	73	x	x	x
114478	Plug and Wire Assembly, Speakers	32	x	x	x
114484	Spring, Tone Arm Pressure	61	x	x	x
114489	Plug and Wire Assembly, Stereo	73	x	x	x
114527	Knob, A Channel, Red	73	x	x	x
114528	Stepper Switch Assembly	60			x
114528-E	Contact Plate Assembly, 2 Circuit	60			x
114528-F	Contact Plate Assembly, 4 Circuit	60			x
114528-G	Contact Arm Assembly, 2 Circuit	60			x
114528-H	Contact Arm Assembly, 4 Circuit	60			x
115023	Pulley, Turntable Drive Motor	27	x	x	x
115143	Actuator, Reversing Switch	71		x	
115144	Actuator and Plunger Assembly	22		x	
115206	Worm Gear	27	x	x	x
115209	Rectifier, Selenium	74	x	x	x
115411	Stop Pin, Rotating Plate	9	x		
115660	Tone Arm Stop Pin Assembly	27	x	x	x
115668	Arm and Rivet Assembly, Selector Shaft	68	x		x
115669	Selector Shaft and Adjusting Plate Assembly	23	x		
115684	Casting, Record Holder	65	x		
115750	Casting, Record Holder	64			x
115752	Selector Shaft Assembly	70			x
115761	Mounting Plate and Bushing Assembly	70			x
115765	Switch Lever and Stop Nut Assembly	70			x
115767	Actuator Arm and Link Assembly	70			x
115769	Contact Plate Assembly	70			x
115770	Selector Crank and Bracket Assembly	70			x
115772	Sleeve and Bushing Assembly	70			x
115782	Stud, Selector Mounting	14			x
115787	Rotating Plate	57			x
115788	Rocker - Long	11			x
115789	Stop Bracket, Selector	11			x
115796	Wobble Plate - Selector	11			x
115798	Adjusting Bracket, Hub and Stop Nut Assembly	57			x
115802	Centering Yoke, Hub and Pin Assembly	57			x
115806	Latch Pin - Selector - Inner	57			x
115807	Latch Pin - Selector - Outer	57			x
115812	Centering Shaft and Plate Assembly	11			x
115821	Spring, Centering Yoke	57			x
115822	Guide Plate, Centering Yoke	57			x
115823	Guide, Centering Yoke	57			x
118524	Stop - Centering Yoke	57			x
115825	Fall Support Assembly	60			x
115831	Spacer, Fall Support	60			x
115832	Spring and Clip Assembly	60			x
115837	Latch Bar, Junction Box	57			x
115851	Coin Register Mechanism-Playrak	2	x	x	x
115856	Chassis Frame Casting and Plate Assembly	68			x
115862	Stop Arm and Rivet Assembly	11			x
115866	Plastic Cap, Fader Switch	74	x	x	x

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115874	Chassis Frame Casting and Shaft Assembly	67		x	
115909	Plate and Spacer Assembly	57			x
115915	Mounting Casting Assembly, Electric Selector	9	x		
115918	Contact Assembly, Electric Selector	57			x
115973	Spring, Selector	57			x
115975	Solenoid, Driver	57			x
116023	Chassis Frame Casting and Plate Assembly	69	x		
116026	Plug and Wire Assembly	58	x		x
116251	Connector Link, Letter Switch	6		x	
116252	Connector Link, Number Switch	6			x
116255	Connector Link, Numbers Switch	5	x		
116257	Window Blank, Coin Denomination, Even-Glo	76-77	x	x	x
116258	Window Blank, Coin Denomination, Clear	76-77	x	x	x
116259	Connector Link, Letters	6			x
116260	Connector Link - Letter Switch	52-53	x		
116314	Select Blank and Silk Screen Assembly	76-77	x	x	x
116315	Shield, Select Blank	76-77	x	x	x
116317	Select Button	76-77	x	x	x
116318	Reset Button	52-53	x	x	x
116329	Mounting Rail and Bracket Assembly, Chassis Mounting, R.H.	78	x	x	x
116330	Mounting Rail and Bracket Assembly, Chassis Mounting, L.H.	78	x	x	x
116369	Adjusting Clip, Link, Selector Switch	5	x	x	x
116479	Printed Board Assembly, Stereo	73	x	x	x
116645	Power Transformer, 50-60 Cycle, Amplifier	72	x	x	x
116723	Slide Switch - Spring Return	52-53	x	x	x
116724	Slide Switch	58	x	x	x
116725	Cartridge, Sonotone, Stereo	27	x	x	x
116727	Needle, Double Sapphire, .7 Mil.	27	x	x	x
116732	Tip and Mounting Bracket Assembly, Outer	70			x
116733	Tip and Mounting Bracket Assembly, Inner	70			x
116740	Support Bracket Assembly, Heat Shield	78	x	x	x
116831	Stud, Eccentric, Lift Arm Guide	17	x		
116833	Roller - Lift Arm Guide	65	x		
116837	Bracket and Roller Assembly, Lift Arm Guide	17	x		
116905	Turntable Motor and Worm Assembly	62	x	x	x
116914	Pulley, Turntable Drive Motor, 50 Cycle	62	x	x	x
116986	Gear and Ratchet Wheel Assembly	30	x	x	x
116997	Drive Pinion	30	x	x	x
117048	Pulse Relay, Stepper Assembly	59	x		x
117242	Bracket, Support Plate	13	x		
117243	Tapping Plate	13	x		
117252	Plate and Pin Assembly	69	x		
117254	Bumper, Record Guide	62	x	x	x
117689	Rubber Grommet	52-53	x	x	x
117691	Pawl, Spring Stud and Spacer Assembly, Switch Interlock	7	x	x	x
117692	Rocker, Short	11			x
117694	Trip Lever, Stud and Spacer Assembly, Switch Interlock	7	x	x	x
117695	Trip Lever and Spacer Assembly, Numbers	7	x	x	x
117754	Speaker, 12" Heavy Duty	32	x	x	x
117792	Support Bracket, Motor Mount	27	x	x	x
117794	Mounting Bracket Assembly	27	x	x	x
117823	Cap, 3 Circuit, Amp Lock	9	x	x	x
117824	Socket, 3 Circuit	10	x	x	x
117977	Bracket and Stop Nut Assembly	27	x	x	x
117982	Casting, Record Guide Front	62	x	x	x
117985	Mounting Plate and Magnet Assembly	57			x
117986	Mounting Plate and Spring Stud Assembly	11			x

Part No.	Description	Page No.	2500	2504	2510
117987	Magnet and Frame Assembly	57			x
117998	Extrusion, Front	76-77	x	x	x
118020	Coin Instruction Plate and Silk Screen, Insert - Half Dollars, Quarters, Dimes, Nickels	76-77	x	x	x
118021	Coin Instruction Plate and Silk Screen, Insert Quarters, Dimes, Nickels	76-77	x	x	x
118135	Amplifier, Model 540, Less Tubes	32	x	x	x
118145	Amplifier, Model 542, Less Tubes	34	x	x	x
118182	Segment, Record Indicator Ring, N6-T5	65	x		
118183	Segment, Record Indicator Ring, H6-N5	65	x		
118184	Segment, Record Indicator Ring, C6-H5	65	x		
118185	Segment, Record Indicator Ring, C5-T6	65	x		
118189	Segment, Record Indicator Ring, B23-A18	64		x	
118190	Segment, Record Indicator Ring, C3-B24	64		x	
118191	Segment, Record Indicator Ring, A17-D10	64		x	
118192	Segment, Record Indicator Ring, D9-C4	64		x	
118199	Segment, Record Indicator Ring, D7-G1	64			x
118200	Segment, Record Indicator Ring, B1-J7	64			x
118201	Segment, Record Indicator Ring, B4-D8	64			x
118202	Segment, Record Indicator Ring, G4-J8	64			x
118254	Hub, Selector Drive Clutch	71	x	x	x
118256	Shaft, Tone Arm Brush	61	x	x	x
118257	Button Assembly, A	52-53	x	x	x
118257-A	Complete Set of Selector Buttons	52-53	x		
118257-B	Complete Set of Selector Buttons	52-53		x	
118257-C	Complete Set of Selector Buttons	52-53			x
118258	Button Assembly, B	52-53	x	x	x
118259	Button Assembly, C	52-53	x		x
118260	Button Assembly, C	52-53		x	
118261	Button Assembly, D	52-53		x	
118262	Button Assembly, D	52-53	x		x
118263 to 118278	Button Assembly, E through K	52-53	x		x
118279	Selector Button Assembly, 1	52-53	x		
118280	Selector Button Assembly, 1	52-53			x
118281	Selector Button Assembly, 2	52-53			x
118282	Selector Button Assembly, 2	52-53	x		
118283	Selector Button Assembly, 3	52-53	x		
118284	Selector Button Assembly, 3	52-53			x
118285	Selector Button Assembly, 4	52-53			x
118286	Selector Button Assembly, 4	52-53	x		
118287	Selector Button Assembly, 5	52-53	x		
118288	Selector Button Assembly, 5	52-53			x
118289	Selector Button Assembly, 6	52-53	x		x
118290	Selector Button Assembly, 7	52-53	x		x
118291	Selector Button Assembly, 8	52-53	x		x
118292	Selector Button Assembly, 9	52-53	x		x
118293	Selector Button Assembly, 0	52-53	x		x
118294	Selector Button Assembly, 1	52-53		x	
118295	Selector Button Assembly, 2	52-53		x	
118296	Selector Button Assembly, 3	52-53		x	
118297	Selector Button Assembly, 4	52-53		x	
118298	Selector Button Assembly, 5	52-53		x	
118299	Selector Button Assembly, 6	52-53		x	
118300	Selector Button Assembly, 7	52-53		x	
118301	Selector Button Assembly, 8	52-53		x	
118302	Selector Button Assembly, 9	52-53		x	

Part No.	Description	Page No.	2500	2504	2510
118303	Selector Button Assembly, 10	52-53		x	
118304 to					
118319	Selector Button Assembly, 11 through 26	52-53		x	
118320	Dome Casting, L.H.	76-77	x	x	x
118321	Dome Casting, R.H.	76-77	x	x	x
118324	Tone Arm and Wire Assembly	61	x	x	x
118327	Gimbal and Stop Nut Assembly	29	x	x	x
118328	Mounting Casting and Pin Assembly	61	x	x	x
118331	Arm, Tone Arm Brush	61	x	x	x
118332	Record Guide Plate	62	x	x	x
118338	Record Guide Assembly	25	x	x	x
118340	Decorative Background Assembly	61	x	x	x
118342	Support Bracket, Upper Decorative Background	61	x	x	x
118350	Upper Cheek, L.H.	76-77	x	x	x
118351	Upper Cheek, R.H.	76-77	x	x	x
118354	Dome Frame Extrusion	76-77	x	x	x
118362-S	Coin Denomination Plate and Silk Screen - 10 Plays Half Dollar, 5 Plays Quarter, 1 Play Dime	76-77	x	x	x
118363-S	Coin Denomination Plate and Silk Screen Assembly - 9 Plays Half Dollar, 4 Plays Quarter, 1 Play Dime	76-77	x	x	x
118364-S	Coin Denomination Plate and Silk Screen - 10 Plays Half Dollar, 4 Plays Quarter, 1 Play Dime	76-77	x	x	x
118365	Coin Denomination Plate and Silk Screen - 7 Plays Half Dollar, 3 Plays Quarter, 1 Play 10¢	76-77	x	x	x
118366	Coin Denomination Plate and Silk Screen - 5 Plays Quarter, 2 Plays Dime, 1 Play Nickel	76-77	x	x	x
118389	Extrusion, Selector Panel	76-77	x		
118390	Extrusion, Selector Panel	76-77		x	
118391	Extrusion, Selector Panel	76-77			x
118392	Cheek Casting, L.H.	76-77	x	x	x
118393	Cheek Casting, R.H.	76-77	x	x	x
118394	Casting, R.H. Lower Moulding	76-77	x	x	x
118395	Casting, L.H. Lower Moulding	76-77	x	x	x
118396	Rod and Ornament Assembly	76-77	x	x	x
118399	Casting, Wing Filler, R.H.	76-77	x	x	x
118400	Casting, Wing Filler, L.H.	76-77	x	x	x
118405	Anti-Cheat Guard and Bracket Assembly	76-77	x	x	x
118406	Coin Hopper Assembly	78	x	x	x
118411	Coin Box Door	76-77	x	x	x
118412	Lock and Key Assembly	76-77	x	x	x
118413	Frame, Cash Box Door	76-77	x	x	x
118422	Switch and Bracket Assembly	52-53	x	x	x
118427	Extrusion, Back, L.H. Rub Rail	78	x	x	x
118428	Extrusion, Back, R.H. Rub Rail	78	x	x	x
118447	Timing Relay	60			x
118450	Transfer Relay	60			x
118456	Grille Screen	76-77	x	x	x
118457	Kick Plate	76-77	x	x	x
118458	Record Indicator Panel	75	x	x	x
118467	Timing Relay	58	x		
118483	Support Bracket, Switch Mounting Channel, L.H.	52-53	x	x	x
118484	Support Bracket, Switch Mounting Channel, R.H.	52-53	x	x	x
118493	Mounting Channel, Selector Switches	52-53	x		
118494	Mounting Channel, Selector Switches	52-53			x
118495	Mounting Channel, Selector Switches	52-53		x	
118498	Back Rail Assembly	78	x	x	x
118500	Extrusion, Wing, R.H.	76-77	x	x	x

Part No.	Description	Page No.	2500	2504	2510
118501	Extrusion, Wing, L.H.	76-77	x	x	x
118506	Light Clip and Bracket Assembly	76-77	x	x	x
118508	Extrusion, Bottom, R.H.	76-77	x	x	x
118509	Extrusion, Bottom, L.H.	76-77	x	x	x
118514	Extrusion Assembly, R.H. Side	76-77	x	x	x
118515	Extrusion Assembly, L.H. Side	76-77	x	x	x
118518	Coin Chute and Bracket Assembly	2	x	x	x
118521	Selector Switch, Numbers	52-53	x		
118522	Selector Switch, Letters	52-53	x		
118523	Selector Switch, Numbers	52-53		x	
118524	Selector Switch, Letters	52-53		x	
118525	Selector Switch, Numbers	52-53			x
118526	Selector Switch, Letters	52-53			x
118529	Heat Shield	78	x	x	x
118533	Front Glass, "Wurlitzer"	76-77	x	x	x
118535	Filler Angle, R.H., Upper Grille	76-77	x	x	x
118536	Filler Angle, L.H., Upper Grille	76-77	x	x	x
118551	Transfer Relay	59	x		
118553	Timing Relay	59	x		
118565	Pivot Support, Program Holder, R.H.	78	x	x	x
118570	Pivot Support, Program Holder, L.H.	78	x	x	x
118571	Mounting Channel, Program Holder	78	x	x	x
118579	Power Transformer	74	x	x	x
118583	Printed Board Assembly, Monophonic	74	x	x	x
118592	Loudness Control 540 Amplifier	74	x	x	x
118601	Lower Back Door Assembly	78	x	x	x
118602	Upper Back Door Assembly	78	x	x	x
118614	Channel Retainer, Front Glass	76-77	x	x	x
118615	Grille Plate and Stud Assembly	76-77	x	x	x
118616	Caster Assembly	76-77	x	x	x
118617	Caster Socket	76-77	x	x	x
118619	Di-Noc, Side	76-77	x	x	x
118620	Door Glass, Dome	76-77	x	x	x
118621	Lock Assembly, Dome	76-77	x	x	x
118624	Lock Strike Assembly, R.H.	76-77	x	x	x
118627	Bracket and Pin Assembly, Lock Strike, Right	76-77	x	x	x
118629	Lock Assembly, Back Door	78	x	x	x
118633	Key, RW95	78	x	x	x
118634	Program Holder Frame and Extrusion Assembly, Center.	75			x
118637	Program Holder Frame and Extrusion Assembly, Center.	75		x	
118638	Program Holder Frame and Extrusion Assembly, Center.	75	x		
118640	Program Holder Frame and Extrusion Assembly, R.H. Side	75	x	x	
118642	Program Holder Frame and Extrusion Assembly, R.H. Side	75			x
118643	Program Holder Frame and Extrusion Assembly, L.H. Side	75	x	x	
118644	Program Holder Frame and Extrusion Assembly, L.H. Side	75			x
118645	Cable Retainer	78	x	x	x
118647	Extrusion and Top Plate Assembly	78	x	x	x
118648	Support Bracket and Clip Assembly, R.H.	78	x	x	x
118649	Support Bracket and Clip Assembly, L.H.	78	x	x	x
118650	Mounting Bracket and Clip Assembly, R.H.	78	x	x	x
118651	Mounting Bracket and Clip Assembly, L.H.	78	x	x	x
118654	Bracket and Pin Assembly, Lock Strike, Left.	76-77	x	x	x
118664	Rectifier, Selenium	57			x

Part No.	Description	Page No.	2500	2504	2510
118667	Bracket and Channel Assembly, Fall Support	78	x	x	x
118668	Pin, Fall Support	78	x	x	x
118671	Decorative Panel, Programs.	75			x
118678	Escutcheon Plate - Program Holder	75		x	
118679	Program Holder and Silk Screen Assembly, A1-D0.	75	x		x
118680	Program Holder and Silk Screen Assembly, E1-H0.	75	x		
118681	Program Holder and Silk Screen Assembly, N1-R0.	75	x		
118682	Program Holder and Silk Screen Assembly, S1-V0	75	x		
118683	Program Holder and Silk Screen Assembly, G1-K0.	75			x
118685	Program Holder and Silk Screen Assembly, E1-F0.	75			x
118687	Program Holder and Silk Screen Assembly, L1-M0	75	x		
118688	Fader Switch, Stereo	73	x	x	x
118689	Program Holder and Silk Screen Assembly, A1-A26	75		x	
118690	Program Holder and Silk Screen Assembly, B1-B26	75		x	
118691	Program Holder and Silk Screen Assembly, C1-C26	75		x	
118692	Program Holder and Silk Screen Assembly, D1-D26	75		x	
118699	Decorative Panel, Programs	75		x	
118700	Decorative Panel, Programs	75		x	
118714	Program Holder and Bracket Assembly, J1-K0	75	x		
118736	Rod and Ornament Assembly	76-77	x	x	x
118741	Classification Slip, "Wurlitzer Music".	75	x	x	x
118742	Classification Slip, "Today's Top Tunes"	75	x	x	x
118743	Classification Slip, "Country and Western"	75	x	x	x
118744	Classification Slip, "Rhythm and Blues".	75	x	x	x
118745	Classification Slip, "Rock and Roll".	75	x	x	x
118746	Classification Slip, "New Pop Records".	75	x	x	x
118747	Classification Slip, "E.P. Show Albums"	75	x	x	x
118748	Classification Slip, "Stereo and E.P.".	75	x	x	x
118749	Classification Slip, "Classical and Old Favorites"	75	x	x	x
118750	Classification Slip, "Jazz and Novelty".	75	x	x	x
118751	Classification Slip, "Polkas and Waltzes"	75	x	x	x
118752	Classification Slip, "Stereophonic Music"	75	x	x	x
118758	Light Diffuser and Paint Assembly, Red.	76-77	x	x	x
118759	Gasket, Door Glass, Sides	76-77	x	x	x
118760	Gasket, Door Glass, Top and Bottom	76-77	x	x	x
118762	Gasket, Front Glass "Wurlitzer".	76-77	x	x	x
118800	Label, "Press A Letter and A Number Button".	75	x	x	x
118801	Label, "200 Selections".	75	x		
118817	Lock Strike Assembly, L.H.	76-77	x	x	x
118900	Spring, Fall Support.	78	x	x	x
118936	Spacer, Record Indicator Ring	64	x	x	x
118972	Cross Rail and Silk Screen	78	x	x	x
119018	Transformer, Low Voltage	72	x	x	x
119031	Light Diffuser and Paint Assembly, Blue.	76-77	x	x	x
119032	Light Diffuser and Paint Assembly, Amber	76-77	x	x	x
119049	Decorative Panel, Programs.	75		x	x
119051	Oil Tube	62	x	x	x
119080	Brush	29	x	x	x
119107	Coin Switch Assembly, 5-10-25-50¢	51	x	x	x
119114	Choke Coil	72	x	x	x
119241	Light Diffuser Assembly, "High Fidelity Music"	76-77	x	x	x
119242	Light Diffuser Assembly, "Stereophonic Music"	76-77	x	x	x
119249	Reject Rod and Button Assembly	2	x	x	x

INDEX TO ADJUSTMENTS

2500 SERIES

TROUBLE SHOOTING CHART

BLUE PAGES - ➤➤➤➤

TROUBLE SHOOTING CHART

POWER AND LIGHT FAILURE

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
1. No power to phonograph.	Fluorescent lamps fail to light Phonograph fails to operate.	(a) Line cord plug not making contact in outlet.	Repair or replace plug or outlet.
		(b) Line cord broken.	Repair or replace cord.
		(c) 15 ampere main fuse blown.	Check for shorts in phonograph wiring. Replace fuse.
		(d) "House" fuse blown.	Check for overload. Replace fuse.
		(e) Main switch broken.	Replace main switch in amplifier.
2. Fluorescent lamp fails to light.	Phonograph operates normally. No fluorescent lights available for program and cabinet.	(a) Defective lamp.	Replace lamp.
		(b) Defective starter.	Replace starter.
		(c) Faulty ballast.	Replace ballast.
		(d) Open circuit in lamp or ballast wiring.	Trace and repair. See Wiring Diagram Pages 39 and 40.
		(e) Lamp loose in socket.	Seat lamp firmly in socket.
3. Fluorescent lamps light. Select lamp fails to light.	Phonograph operates normally.	(a) Lamp burned out.	Replace with No. 44 Mazda Lamp.
		(b) 150 ohm resistor open on selector switch assembly.	Replace resistor. See Schematic Pages 39 and 40.
		(c) Open circuit to select lamp.	Trace and repair. See Schematic Wiring Diagram.
	Phonograph fails to select or operate.	(a) Safety switch open.	Adjust safety switch. See Page 25.
		(b) Warped record jammed between record carrier and record guide casting.	Remove Warped record.
4. Select lamp lights, Phonograph fails to operate.	Phonograph selection circuit operates. Mechanism fails to operate.	(a) Record loading switch turned off or fails to operate.	Turn on record loading switch. See Page 15 or 16.
		(b) Service switch turned off.	Turn service switch on.
		(c) Defective service switch.	Replace switch.
		(d) Transfer switch contacts fail to make in at rest position.	Clean and adjust contacts. See Page 24.
		(e) Reverse relay N. C. contacts fail to make in at rest position.	Clean and adjust contacts. See Page 22.
		(f) Play switch contacts fail to make in at rest position.	Clean and adjust contacts. See Page 24.
		(g) Over-ride switches fail to close.	Clean and adjust switches. See Page 10.
		(h) Defective micro reversing switch on 104 selector.	Replace micro switch.
		(i) Defective changer motor.	Clean and inspect motor. Lubricate bearings.

COIN AND CREDIT FAILURE

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
1. Rejects coins.	Coins are returned or hang up in rejector.	(a) Bind in scavenger rod holding reject gate open.	Remove bind in scavenger rod linkage.
		(b) Incorrect adjustment in rejector.	Adjust rejectors in accordance to National Rejectors bulletin.
		(c) Rejector needs cleaning.	Clean dirt and foreign matter from rejectors.
2. Quarter and half dollar coins drop through to cash bag. No credits.	Quarters and half dollars fail to establish credits. Nickels and dimes establish credits.	(a) 8/10 amp. fuse blown in playrak. 25¢ and/or 50¢ coins hang on coin paddles.	Adjust coin switches. See Page 3. Replace fuse.
		(b) Open or burnt coin magnet coils.	Replace coin magnet coils in playrak. See Page 3, Fig. 4.
		(c) Incorrect alignment of rejector and coin switch levers.	Seat rejector fully into mounting frame. Align coin switch levers as shown on Page 3, Fig. 3.
		(d) Dirty or incorrectly adjusted key switch.	Clean and adjust key switch as shown on Pages 3 and 4, Fig. 5.
		(e) Excessive spring pressure or poor contact on coin switches.	Clean and adjust coin switches.
		(f) Open series switch. Letter or number.	Clean and adjust series switches on selector switch assembly. See Page 8, Fig. 19.
3. All coins drop through to cash bag. No credits. "Select" light fails to come on.	All coins fail to establish credits.	(a) Coin switch plug not seated in slug rejector socket.	Seat plug firmly in socket.
		(b) Open ground connection at coin switch assembly.	Check common circuit feeding all coin switches. See Diagram 118788, 118775 or 118797.
		(c) Open circuit or faulty solder connection in coin mechanism.	Check wiring and connections. See Diagram 118788, 118775 or 118797.
		(d) 2 ampere fuse blown in D.C. circuit or 8 amp. fuse blown in A.C. circuit or 3 amp. fuse blown in A.C. circuit. (Stereo only).	Check for short circuit. Check fuses for right size.
		(e) Open contact No. 3 and 4 (normally closed) on pulse relay.	Clean and adjust contacts.
4. Free credits on nickel or dime deposit only.	Continuous free credits on nickels or dimes. Quarters and half dollars establish correct credits.	(a) Nickel or dime coins hang on coin switch.	Adjust and check coin switch as shown on Page 3.
		(b) Nickel or dime coins hang at bottom of rejector, holds coin switch closed.	Check coin exits of rejector with coins. Remove burrs or obstruction causing coins to hang.
		(c) Nickel or dime coin switch incorrectly adjusted - contacts stay closed.	Adjust and check contact clearance and pressure as shown on Page 3.
5. Occasional extra credits on quarter and half dollar coins.	More than normal number of credits for coin deposited.	(a) Cancel pawl occasionally fails to engage next ratchet tooth of cancel wheel.	Adjust cancel solenoid, stop bracket and eccentric cam for correct cancel action as shown on Pages 4 and 5.

COIN AND CREDIT FAILURE CONT'D.

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
		(b) Accumulator wheels bounce when cancel solenoid operates.	Same as above. See Pages 4 and 5.
		(c) Key switch occasionally fails to open.	Adjust key switch. See Page 3.
		(d) Burrs on rest position of accumulator ratchets.	Remove any burrs at first tooth on accumulator ratchets.
6. Occasionally fails to give the right amount of plays for coins deposited.	Occasionally selector latch pin fails to release.	(a) TR-1 releases too early. Caused by defective capacitor or open resistor across winding of relay.	Replace capacitor or resistor across winding of TR-1 used for time delay.
	Fails to establish correct amount of credits for coin deposited.	(a) Accumulator ratchet wheels fail to register proper credits.	Check setting of stop levers. See Page 4, Fig. 8. Check lock-out levers for missing spring.

SELECTION CIRCUIT

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
1. Selector buttons lock in, fail to release. Select light on.	Selection circuit and mechanism fails to operate. Buttons lock in.	(a) Burnt out No. 55 lamp in bottom of junction box.	Replace No. 55 lamp.
		(b) Latch switches fail to close.	Clean and adjust number and letter latch switches. See Page 8.
		(c) Start switch fails to make contact.	Check start switch adjustment. See Page 9.
		(d) Open contacts 3 and 4 or 5 and 6 on TR-2 relay.	Clean and adjust contacts on TR-2.
		(e) Open contacts, phonograph hold-out circuit. No. 3 and 4 on hold relay of 257 Stepper, 3 and 4, 9 and 10 on latch relay of 261 Stepper or 259A Stepper.	Clean and adjust contacts. May also be short on wall box ling holding relays energized.
		(f) Jumper plug out.	Jumper plug must be in correct socket when stepper is not used.
		(g) Number 3 plug out or loose on 2500 Electric Selector.	Replace Plug.
		(h) Letter coil plunger caught between rocker arms.	See instructions on adjustment of start switch and number quadrant on Pages 8 through 12.
2. Selector buttons fail to latch in.	Select light on, latch solenoid fails to energize.	(a) N. C. control contacts of latch solenoid dirty or fail to make.	Clean and adjust N. C. control contacts as shown on Page 8.
		(b) Open circuit to latch solenoid coil.	Check wiring. See Schematic No. 118788, 118775 or 118797.
		(c) Reset button N. C. switch held open.	Check for bind in rod or button. Check contacts.
	No select light. Latch solenoid fails to energize.	(a) TR-1 relay fails to energize. Relay coil open.	Check TR-1 relay coil in coin register mechanism.
		(b) N.C. contacts 3 and 4 on pulse relay open.	Clean and adjust N.C.3 and 4 contacts on pulse relay in coin register mech.

SELECTION CIRCUIT CONT'D.

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
3. Select light on. Electric selector operates. Phonograph fails to operate.	Selector pins fail to release.	(c) Contacts 5 and 6 on TR-1 relay dirty.	Clean and adjust contacts on TR-1 in playrak.
		(d) Contacts 1 and 2 on TR-2 of 2510 fail or contacts 5 and 6 on TR-2 of 2504.	Clean and adjust TR-2 contacts in junction box.
		(a) 8/10 ampere fuserron blown in letter coil circuit (4/10 ampere in 2504).	Check for grounded coils, repair and replace with correct fuse.
		(b) Dirty contacts 5 and 6 on pulse relay or N. O. selection contact at latch solenoid on 2500.	Clean and adjust contacts.
		(c) Dirty contacts 3 and 4 on TR-1 or 1 and 2 on TR-2 2504.	Clean and adjust contacts.
		(d) Dirty contacts 3 and 4 on TR-1 or 3 and 4 on TR-2 or open circuit in number or letter selector switch 2510.	Clean and adjust relay contacts. See Schematic 118797 for complete circuit.
	Selector pins released. Changer motor, turntable motor and amplifier fail to turn on.	(a) Bind in wobble ring or over-ride switches not making contact.	Check wobble plate for freedom of action and check over-ride switch contacts. See Page 10.
4. Plays extra records when a certain selection is made.	Two or more selector pins release when one selection is made.	(a) Selector coil selected shorted to adjacent coil or coils.	Check for shorts and repair.
		(b) Short between selection circuits in selector button switches, cables or plugs and sockets.	Check for shorts and repair. Refer to wiring diagram 118788, 118775 or 118797.
		(c) Selector crank kickoff screw not properly adjusted.	See Pages 22 and 23 for correct adjustment.

MECHANICAL AND ELECTRICAL FAILURES

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
1. Selects, but fails to start mechanism.	Fails to release selector pins.	(a) Letter or number selector button backs out too far after a selection is made opening the selector circuit to the number or letter coils.	Take up lost motion in the selector button switch connector link. Check selector switch latch adjustment for minimum overtravel. See Pages 5 and 8.
		(b) 8/10 amp. fuse blown in letter coil circuit.	Check for right size fuse. Replace fuse.
		(c) Open letter coil.	Replace letter coil.
	Selector pins release. Mechanism fails to start.	(a) Open over-ride switch.	Clean and adjust switch. Page 10.
		(b) Open contact on reverse relay or micro reversing switch open on 2504	Clean and adjust switches.
		(c) Open contact on transfer switch.	Clean and adjust switches. Page 24.
		(d) Open record loading switch.	Replace switch.
		(e) Open service switch.	Replace switch.
		(f) Changer motor trouble.	Clean commutator or replace motor.

MECHANICAL AND ELECTRICAL FAILURES CONT'D.

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
2. Selects, searches, lifts record, then blows 2 ampere D.C. fuse.	Changer motor is jammed in search position with record lift arm in carrier.	(a) Transfer switch failed to actuate in reverse cycle of Changer motor.	Adjust transfer switch actuator screw. Clean contacts. See Page 24.
3. Plays wrong selections.	Occasionally repeats same selection.	(a) Not cancelling selector pin.	See instructions for proper adjustment. See Pages 16 and 17.
		(b) Improper adjustment of carriage switch or stop screw.	
		(c) Selector pin assembly not properly centered.	See Pages 13 and 14.
		(d) Carriage switch circuit shorted or micro reverse switches do not latch on 104.	Check contact plate and wipers for shorts. Check latch lever on 104.
	Gives wrong selections.	(a) 2510 or 2504 driver solenoid linkage loose or disconnected.	Repair and readjust driver linkage and rocker plate. See Page 12.
		(b) 2500 - Number stop coil burned or jammed.	Replace number stop coil.
		(c) Rocker arm jammed between selector pins.	See Pages 8, 11 or 12 for adjustment of rocker plate.
		(d) Letter coil plunger jammed between rocker arms.	See Pages 8, 11 or 12 for adjustment of rocker plate.
		(e) Transfer switch fails to actuate to rest position.	Broken over-center spring on transfer switch. Wrong size over-center spring on transfer switch. Switch not properly adjusted. See Page 24.
4. Fails to bring up record.	Main cam motor turns in reverse direction but does not drive main cam.	(a) Drive pawl spring weak or broken. Strap and spring assembly lacks tension to engage drive pawl.	Turn mechanism manually until hole in main gear is over drive pawl mounting screw. Remove nut and screw and replace drive pawl. Strap and spring assembly may be adjusted or replaced at this time.
5. Repeats same selection occasionally.	Selector crank jammed against cancelled selector pin.	(a) Wrong holding pawl engaged tooth on record carrier casting.	Check adjustment of actuating screw and stop screw. See Pages 21, 22, and 23.
		(b) Cancelled selector pin fails to latch.	Check selector pin cancelling adjustment. Pages 16 and 17.
6. Some records fail to play.	Record fails to clamp on turntable.	(a) Record hole off center.	Remove bad record.
		(b) Worn turntable clamp washer.	Replace worn clamp washer.
		(c) Record guide track stop brackets not properly adjusted.	See instructions for adjustments, Page 19.
		(d) Record lift arm up position not properly adjusted.	See instructions for adjustments, Page 18.

MECHANICAL AND ELECTRICAL FAILURES CONT'D.

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
7. Turntable turns, no music.	Tone arm misses record.	(a) Undersize record.	Remove undersize record.
		(b) Tone arm feed-in start position not properly adjusted.	Adjust tone arm start position. See Page 27, z (1).
		(c) No record in carrier selected space.	Place record in empty space. Check record lift arms for freedom of action. Check record guide assembly for burrs on casting steps-rear section. Check back stop pawl setting. See Pages 19 and 20.
8. Turntable fails to run.	Amplifier dead.	(a) Over-ride relay fails to energize.	Check Schematic for model in question.
		(b) Dirty contact on over-ride relay.	Clean and check contacts for proper action.
	Amplifier on.	(a) Loose drive pulley.	Tighten Allen set screw in pulley.
		(b) Defective turntable motor.	Repair or replace motor.
		(c) Turntable belt broken ("O" ring).	Check alignment of pulleys and align if necessary. Replace belt.
9. Record fails to cancel.	Record fails to return to carrier after playing.	(a) Trip switch not operating.	Adjust trip switch. Page 28 (5).
		(b) Defective trip switch.	Replace defective switch.
		(c) Open contact in play switch.	Clean and adjust contacts.
		(d) Open in reject button.	Repair or replace reject button.
		(e) Open contact on remote cancel relay if used.	Clean and adjust relay contacts.
10. Mechanism runs slow.	Changer motor slow.	(a) Defective selenium rectifier on monophonic models.	Replace defective rectifier.
		(b) Dirty commutator on changer motor.	Clean changer motor commutator
11. Record comes up. Returns without playing.	Puts record back without playing.	(a) Open contact on play switch.	Clean and adjust play switch contacts. Refer to Schematic 118778, 118766 or 118772 for other switches in circuit
		(b) Dynamic brake circuit not working.	Check schematic circuit at play switch, trip switch, reject button, transfer switch.
		(c) Defective trip switch.	Replace trip switch.
		(d) Reject button sticking.	Repair reject switch.
12. Throws records.	Throws records.	(a) Bind in record lift arm guide rollers.	Adjust guide rollers. See Pages 17 and 18.
		(b) Guide tips on record lift arms not properly aligned.	Straighten guide tips. See Page 17 h.
		(c) Bent record separators.	Straighten record separators.
		(d) Carrier not properly indexed.	See Page 19 and 20 for back stop pawl adjustment.

MECHANICAL AND ELECTRICAL FAILURES CONT'D.

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
13. One side of record okay. The other side distorted tone.	One side of record turns at 45 RPM. The other side does not.	(a) Record track stop brackets not adjusted properly, causing record to drag.	Adjust record stop bracket. See Page 19.
		(b) Record lift arm coming up too high.	Adjust record lift arm stop. See Page 18.
14. Music skips.	Tone arm jumps one or two grooves, giving a thumping sound while record is playing.	(a) Worn needle.	Replace needle or turn over other tip.
		(b) Too much end play in turntable shaft.	Shim between turntable pulley and bushing. Pages 25 and 31.
		(c) Tone arm not balanced properly.	Check tone arm balance. See Page 28 (4).
		(d) Tracking pressure of tone arm too light	Check tone arm gram pressure. See Page 28 (3).
15. Excessive record wear.	Record wear faster than normal.	(a) Worn or chipped needle.	Replace needle. Replace worn record.
		(b) Bind in tone arm.	Examine Gimbal bearings for binds and adjust for freedom of action.
		(c) Incorrect needle pressure.	Adjust to 5 to 7 grams pressure. See Page 28 (3).
		(d) Poor material in records.	Replace worn records. Check needle wear.
16. Excessive lint accumulation on needle.	Needle skips, sound distorted.	(a) Excessive lint and dust on stylus.	Remove lint from needle and brush with small brush. Spray needle, cartridge and brush with Anti-Static Cleaner.
		(b) Tone arm brush incorrectly adjusted.	Adjust tone arm brush. See page 29 (6).

SOUND FAILURE

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
1. No sound.	Turntable turning. No sound from record.	(a) Pick up cartridge open or shorted.	Check contacts on cartridge for shorts and check cartridge. Replace if defective.
		(b) Pick up cable open or shorted or plug disconnected.	Check pick up cable for open and shorts.
		(c) Blown 2 amp. amplifier fuse.	Check for short circuit. Replace with correct size fuse.
		(d) Defective tube.	Replace defective tube.
		(e) Volume control turned off.	Turn up volume control.
		(f) Remote volume control jumper plug out.	Replace jumper plug.
		(g) Mute switch shorted.	Clean and adjust mute and play switch contacts. Page 24.
		(h) Open speaker circuit.	Check and repair open speaker circuit.

SOUND FAILURE CONT'D.

SERVICE CALL	SYMPTOMS	CAUSE	CORRECTIONS
2. Sound blasts in at start of record.	Automatic level control not squelched.	(a) Mute and squelch switch not connected.	Insert mute and squelch plug.
		(b) Open contact on squelch switch.	Adjust play switch to operate squelch circuit. Check contacts.
		(c) Defective 7025,12AX7 or 12AU7	Replace defective tubes.
		(d) Selector pins released before phonograph is connected to line.	Selector pins should all be down before line cord is connected.
3. Poor tone quality.	Tone distortion.	(a) Remote speakers mismatched.	Check remote speakers for proper phasing.
		(b) Wrong remote volume control used.	Check model of remote volume control.
		(c) Remote volume control not properly connected.	Check wiring of volume control.
		(d) Worn or defective cartridge.	Replace defective cartridge.
		(e) Defective tubes.	Replace bad tubes.
		(f) Chassis not floating on mounting springs.	Completely unscrew chassis hold-down thumb screws.
		(g) Stereo cartridge not properly connected.	Refer to Schematic 118771 or 118777 for cartridge connections.
		(h) Fader Switch not properly set.	If no remote speakers are used be sure Fader Switch is set on "phono only."
	Waver in music.	(a) Drag in turntable assembly.	Check record clamp setting. See Pages 25 and 26.
		(b) Bind in turntable drive gear.	Check adjustment on Pages 26 and 27.
		(c) Loose drive pulley or flywheel.	Tighten pulley. Check for proper clearance. See Page 26 (4). Tighten flywheel.
		(d) Too much end play in turntable shaft.	Add shim between turntable bushing and pulley. See Page 31.
		(e) Warped record.	Replace record.
		(f) Eccentric record.	Replace record.
4. Hum or other noise	Noise from speakers when mechanism is changing records.	(a) Mute switch not connected.	Check mute and play switch socket and plug on amplifier.
		(b) Mute switch fails to close.	Clean and adjust mute, play and squelch switches.
	Noise from speakers while record is playing.	(a) Defective filter capacitor in amplifier.	Replace defective capacitor.
		(b) Defective tube.	Replace defective tube.
		(c) Remote volume control or speaker cables near neon lamps, transformers or wiring.	Use only closely woven shielded cable. Reroute shielded cable.
		(d) Open ground on shielded cable of remote volume controls.	Check for open ground on shield. Repair.
		(e) Tone arm wire too close to safety and trip switch cable.	Reroute tone arm cable.
		(f) Open or poor connection in relay box or remote volume control box or at socket.	Check for loose connections and repair.