



**CD-100A**

***LaserStar***<sup>®</sup>

***Compact Disc  
Phonograph***

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**Field Service Manual  
& Parts Catalog**

**Volume 2 of 2**

**OBA-2 Maintenance, Troubleshooting, Adjustments, Parts Catalog**

**PART NO. 21822615  
SECOND EDITION**

Rowe extends to the original operator of this equipment the following warranty:

All parts are guaranteed to be free of defects in material and workmanship for the specific periods which follow. Rowe agrees to repair without charge during such period any part which proves defective upon examination by Rowe. All costs of shipping an allegedly defective part to or from Rowe's offices shall be borne by the original operator.

Phono Mechanism Moving Parts	5 Years
Electronic Circuit Boards	2 Years
Electrical and Mechanical Parts	1 Year
Lamps and Styli	90 Days
CD Players, VCR's, Monitors, and CD Decks	1 Year

In the case of parts supplied to Rowe as components, Rowe extends the same warranty period as extended by the original manufacturer.

The above warranty applies provided that all parts of the machine have been serviced properly as directed in the service manual, and provided the alleged defective part, upon examination by Rowe, shall prove to be thus defective.

This warranty will not apply to any machine or any part which has been subjected to any accident, abuse, or misuse.

ROWE INTERNATIONAL, INC. EXTENDS NO WARRANTY, EXPRESSED OR IMPLIED, TO PURCHASERS OR USERS OF ITS PRODUCTS EXCEPT AS HEREIN SET FORTH, WHETHER BY OPERATION OF LAW OR OTHERWISE.



## WARNING:

When servicing, do not approach the laser exit with the eye too closely. In case it is necessary to confirm laser beam emission, be sure to observe from a distance of more than 10 inches from the surface of the objective lens on the optical pick-up block.



## WARNING:

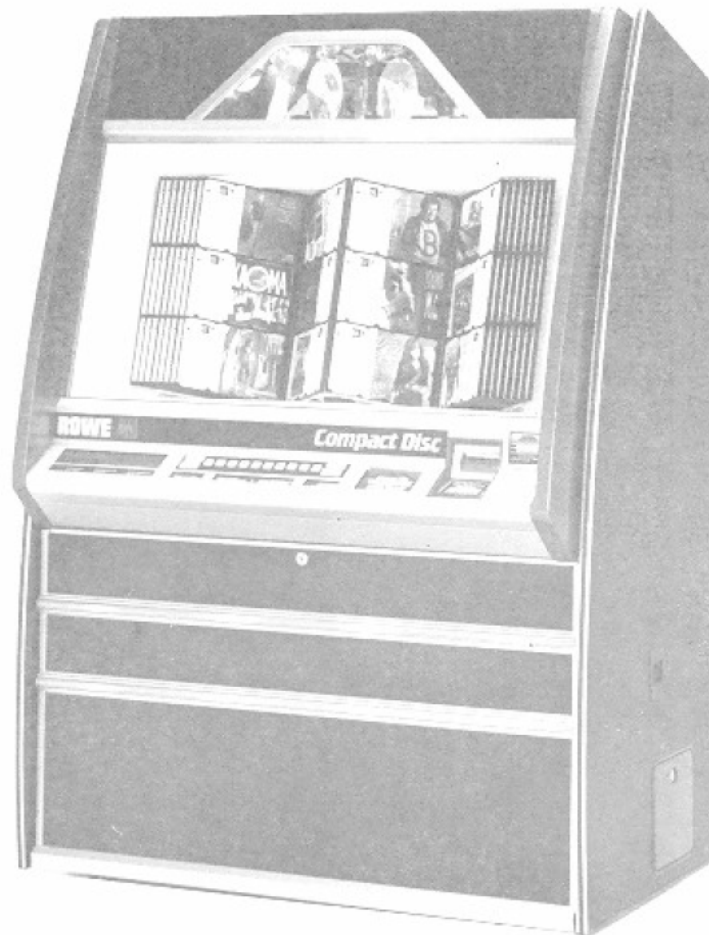
This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

# CD-100A

## **LaserStar<sup>®</sup>** *Compact Disc Phonograph*

### Field Service Manual And Parts Catalog

Volume 2



**ROWE**

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# Table of Contents

## SECTION 4 — OBA-2 MAINTENANCE

Introduction	4
<b>Physical Description</b>	4
Bill Transport Mechanism	4
Drive Belts	4
Optical Sensors	4
Magnetic Head	4
Anti-Pull-Back Lever	4
Bill Stacker	4
OBA Control Unit	4
Connectors	4
MAG Adjust	4
Test Button	4
Visual Indicators	4
RS-485 Status LED	4
BA Status LED	4
+5 VDC And +24 VDC LED'S	4
<b>Functional Description</b>	4
Bill Acceptor In Standby Mode	4
Problems That May Arise In The Standby Mode	4
Actions Taken By The Bill Acceptor To Correct These Problems	4
Bill Acceptance Mode	4
<b>Pricing</b>	4
<b>Maintenance And Adjustments</b>	4
<b>Electrical Adjustments</b>	4
<b>Routine Maintenance</b>	4
Cleaning	4
Bill Inlet And Track	4
Lubrication	4
Bill Stacker	4
Bill Transport Mechanism	4
Mechanical Adjustments	4
Bill Stacker	4
Bill Transport Mechanism	4
Drive Belt Tension Adjustment	4
Lower Belt Tension Adjustment	4
Gear Backlash Adjustment	4
Magnetic Head Alignment	4
Creasing Roller Position	4
Bill Acceptor Height And Front To Back Adjustment	4
Components List For OBA-2 Controller Circuit Board	4

## SECTION 5 — TROUBLESHOOTING

Introduction	5
Troubleshooting Aids	5
Replacing The CCC EPROM	5
Free Play	5

# Table of Contents

## SECTION 5 — TROUBLESHOOTING (Continued)

<b>Module Functions</b> .....	5-3
1 Display Module .....	5-3
Anisim Control .....	5-3
2 Control Unit .....	5-3
<b>Sequence Of Operation</b> .....	5-3
.....	5-4
Anisim Control .....	5-4
2 Control Unit .....	5-4
1 Display .....	5-4
<b>Service Lamps</b> .....	5-10
Power Supply LED's .....	5-10
Anisim Control And CD Decoder .....	5-10
Main Control Computer .....	5-11
1 Display .....	5-11
2 Control Unit .....	5-11
<b>Errors And Warnings</b> .....	5-12
Concepts .....	5-12
Errors (ERR) .....	5-12
Warnings (WARN) .....	5-12
Removing The Errors (ERR or WARN) .....	5-12
<b>Summary</b> .....	5-15
Description Of Errors And Probable Causes .....	5-16
Mailbox Errors .....	5-20
Removing Errors From Memory .....	5-21
<b>Disc Conditions</b> .....	5-22
Concepts .....	5-22
Programmable Disc Condition Logging .....	5-22
Skip Log (Service Code 35) .....	5-22
Skip Cancel (Service Code 36) .....	5-22
Time Cancel (Service Code 37) .....	5-22
Factory Settings .....	5-22
Programmable Disc Condition Logging .....	5-22
Logged Track Number Equals 00 .....	5-22
Logged Cancld And Skip Equals 99 .....	5-23
Removing Disc Conditions .....	5-23
Removing Disc Conditions From Memory .....	5-26
<b>Troubleshooting Charts</b> .....	5-27
<b>Audio System Quick Check</b> .....	5-35
Sound — Both Channels .....	5-35
Sound, Low Sound Or Distorted Sound Right Or Left Channel Only .....	5-36
Loud High Volume — Cannot Adjust .....	5-37
Excessive Hum .....	5-37
<b>Component Lists</b> .....	
Power Supply .....	5-44
Amplifier Board .....	5-50
Amplifier Driver Board .....	5-60
Cover .....	5-63
Cassette Tray Assembly .....	5-68
Main Control Computer .....	5-78
Anisim Control .....	5-94

# Table of Contents

## SECTION 6 — MECHANICAL ADJUSTMENTS

Lubrication .....	(
Unscheduled Maintenance .....	(
<b>Mechanism Maintenance And Adjustments</b> .....	(
CD Player Mechanism .....	(
CD Player Maintenance .....	(
Removing The CD Player And Mechanism Control Unit .....	(
Hold Down Assembly And Hold Down Plate Height .....	(
Service Check .....	(
Adjustment .....	(
Hold Down Lifting Cam Adjustment .....	(
Hold Down Plate Centering .....	(
Optical Switch Adjustment .....	(
Sprag Assembly .....	(
Adjustments .....	(
Sprag Assembly Removal .....	(
Disc Magazine Transfer Arm And Support .....	(
Adjustment .....	(
Cam Switch .....	(
Adjustments .....	(
Cam Switch Check And Adjustment .....	(
Magazine Belt Adjustment .....	(
Title Rack Switch Adjustment .....	6-
Title Page Re-Synchronizing .....	6-

## SECTION 7 — MISCELLANEOUS

<b>CD-100A Specifications</b> .....	7
Power Requirements .....	7
CD Player And Changer .....	7
Credit And Pricing System .....	7
Sound System .....	7
Door Lighting .....	7
<b>Fuses And Circuit Breakers</b> .....	7
<b>Resistor Code Chart</b> .....	7

## SECTION 8 — PARTS CATALOG

<b>CD-100A Code Sheet</b> .....	8
<b>Introduction</b> .....	8
Catalog Description .....	8
Parts List Description .....	8
Ordering Replacement Parts .....	8
<b>Parts Catalog</b> .....	8
<b>Accessory Equipment</b> .....	8-

## FREQUENTLY USED FIGURES AND TABLES for Volume 2

Accessory Equipment (Table 8-1) . . . . .	8-54
Block Diagram, CD-100A (Figure 5-1) . . . . .	5-9
Central Control Computer	
I/O Matrix (Table 5-3) . . . . .	5-82
Schematic (Figure 5-12A) . . . . .	5-71
Crossover Network (Figure 5-8C) . . . . .	5-62
Display Assembly Schematic (Figure 5-11) . . . . .	5-67
Harness Diagram, System (Figure 5-4) . . . . .	5-39
Main Power Supply	
Schematic (Figure 5-5B) . . . . .	5-41
Wiring Diagram (Figure 5-5A) . . . . .	5-40
Mechanism Control	
Block Diagram (Figure 5-13A) . . . . .	5-85
Connecting Diagram (Figure 6-2) . . . . .	6-3
Schematic (Figure 5-13B) . . . . .	5-87
OBA-2	
Block Diagram (Figure 4-5) . . . . .	4-5B
Circuit Board Schematic (Figure 4-12A) . . . . .	4-19
Power Amplifier Schematic (Figure 5-8A) . . . . .	5-59
Preamplifier Schematic (Figure 5-7A) . . . . .	5-47
Resistor Color Code (Figure 7-2) . . . . .	7-5
Transformer	
Output Voltages (Figure 5-9) . . . . .	5-64
Wiring Diagram (Figure 5-10) . . . . .	5-65
Troubleshooting Chart	
Modular (Table 5-2) . . . . .	5-28
OBA-2 (Table 4-1) . . . . .	4-15



## Section 4: OBA-2 Maintenance

### INTRODUCTION

This section of the service manual provides a general description of the Rowe OBA-2 Bill Acceptor (OBA) including a physical description and a functional description.

The OBA-2 Bill Acceptor accepts valid U.S. currency in \$1, \$5 denominations. The OBA-2 rejects and returns unacceptable currency to the customer.

The bill acceptor interfaces with the central control computer, which sends and receives messages concerning the acceptance, rejection, and validation of currency.

### PHYSICAL DESCRIPTION

The bill acceptor consists of three major components. These are: The bill transport mechanism, the bill stacker, and the OBA control unit (*see figure 4-1*).

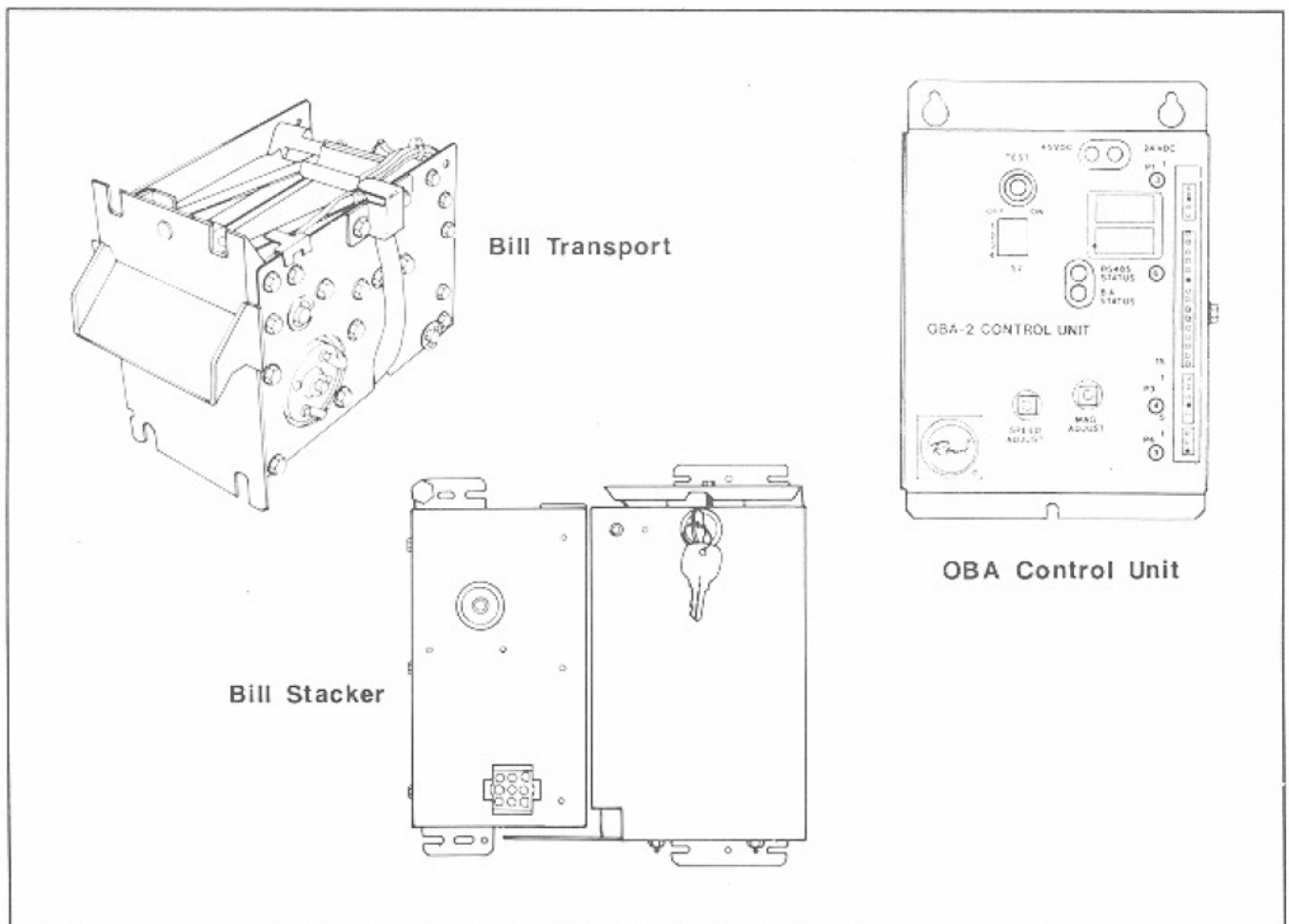


Figure 4-1. Bill Acceptor Components

## Bill Transport Mechanism

This device mechanically transports the currency from the bill acceptor opening past various sensors. These sensors scan the bill for validation information and relay it to the OBA control board (see figure 4-2 and 4-3).

### DRIVE BELTS

A D.C. motor, a series of rollers, and pulleys and belts carry the bills from the bill inlet through the bill acceptor. The drive belts provide long life and reliable operation while requiring very little maintenance.

The main drive belt and lower bill transporting belts are cogged for more reliable operation, while adjustable idle pulleys are used to maintain correct tension. Upper transporting belts are of a stretch type, which require no adjustment. As the bill moves along the path from the opening to the stacker it is trapped between the upper and lower transporting belts. This provides a sure and non-slip movement through the transport mechanism.

### OPTICAL SENSORS

Three optical sensors are used to communicate bill information to the OBA control unit while the

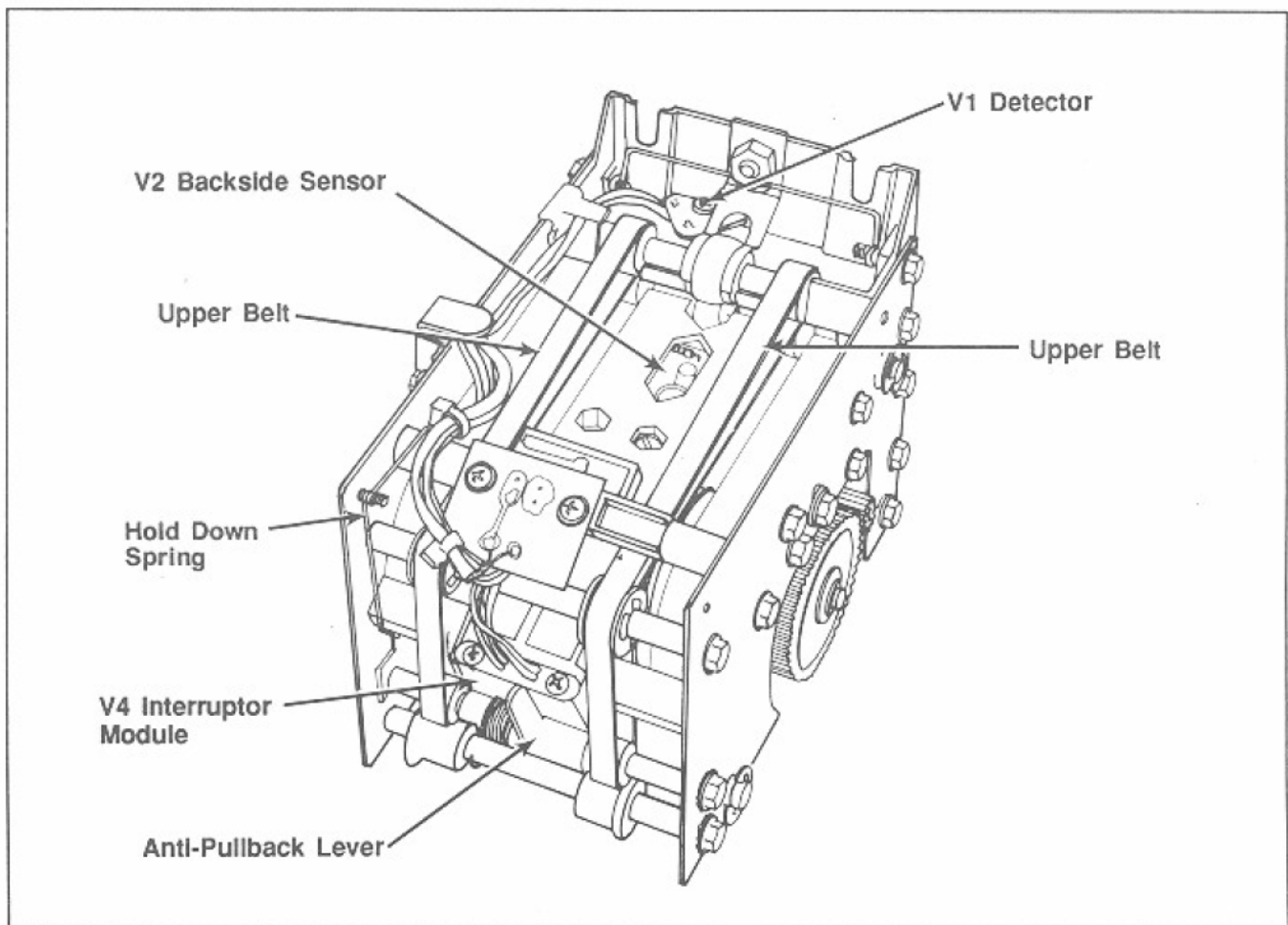


Figure 4-2. Bill Transport Unit  
Top View

bill is in the transport mechanism. Two of the three sensors used in the bill acceptor are used for establishing bill position within the transport mechanism path. The third provides validation data from the bill as it passes through the transport. These sensors, referred to hereafter as V1, V2 and V4, are arranged so that, beginning from the bill acceptor opening, the numbers ascend as the bill moves farther away from the opening.

V1 is used to sense the presence of a bill in the transport opening. V2 is used for obtaining precise information from the underside of the bill. V4 is used to make a precise determination of the bill position. All three of the optical sensors are of the infrared type.

### MAGNETIC HEAD

The magnetic head checks the magnetic properties of the incoming bill. A spring loaded pressure roller insures intimate contact between the bill and the magnetic head.

### ANTI-PULL-BACK LEVER

This lever prevents the bill from being removed by the customer after the bill has been accepted as valid. It also works in conjunction with the V4 sensor to determine the bill's position.

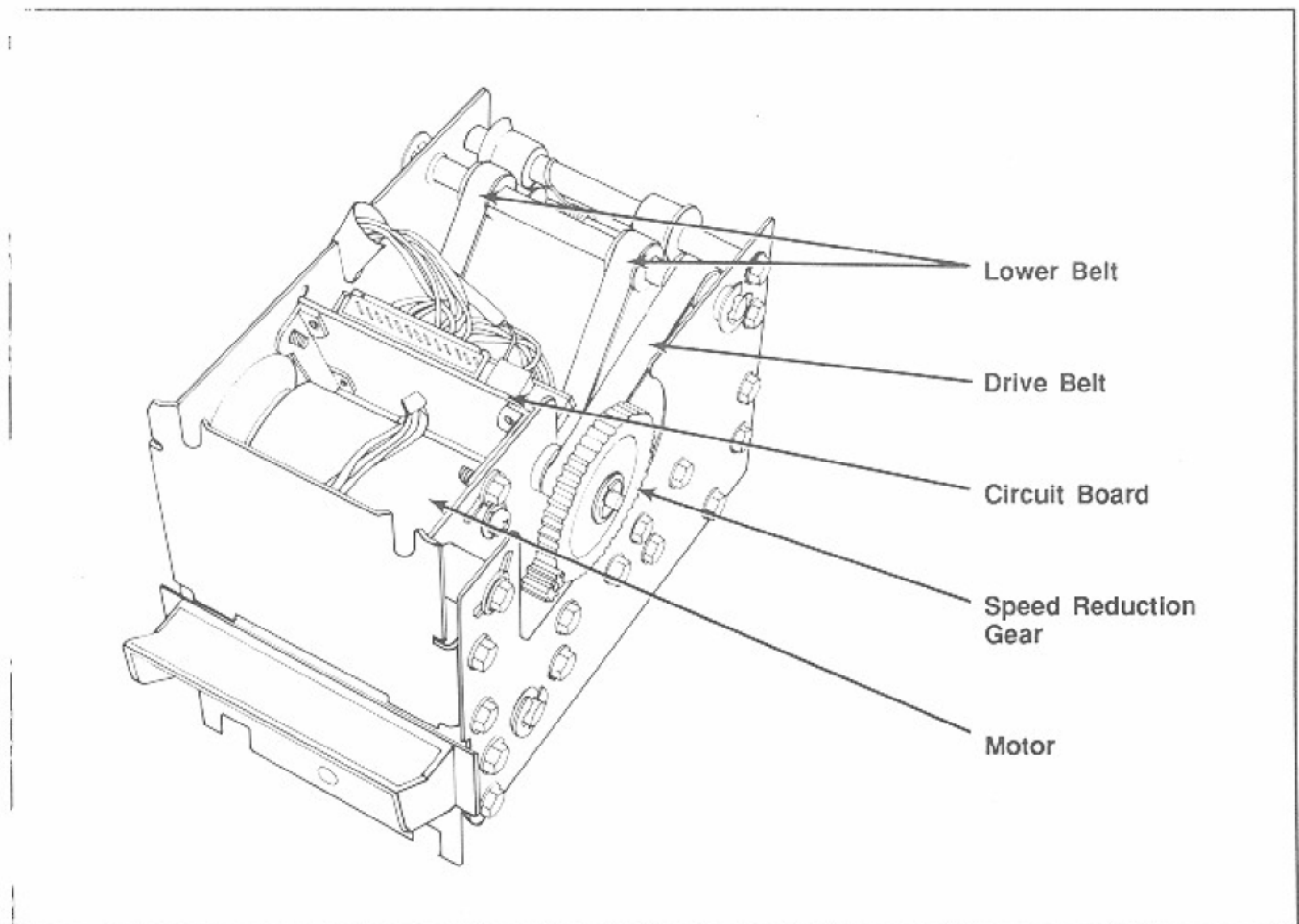


Figure 4-3. Bill Transport Unit  
Bottom View

## Bill Stacker

The stacker accepts bills from the transport mechanism and stacks them in a locked bill box. The stacker uses a D.C. motor to drive a metal platen, which via a mechanical linkage, pushes the bill into the bill box. A cam-actuated switch signals the OBA control unit as to the position of the platen. The platen may be in either the HOME or the OFF HOME position. An OFF HOME signal received by the control unit while it is in STANDBY, prompts it to reset the platen and return it to its HOME position (*See functional description in this section*).

## OBA Control Unit

This module contains the electronic circuit board and micro-computer. It directs the operations of the various parts of the bill acceptor, but it in turn is directed by the central control computer. It also contains all the necessary circuitry for connecting the bill transport to the bill stacker (*see figure 4-4*).

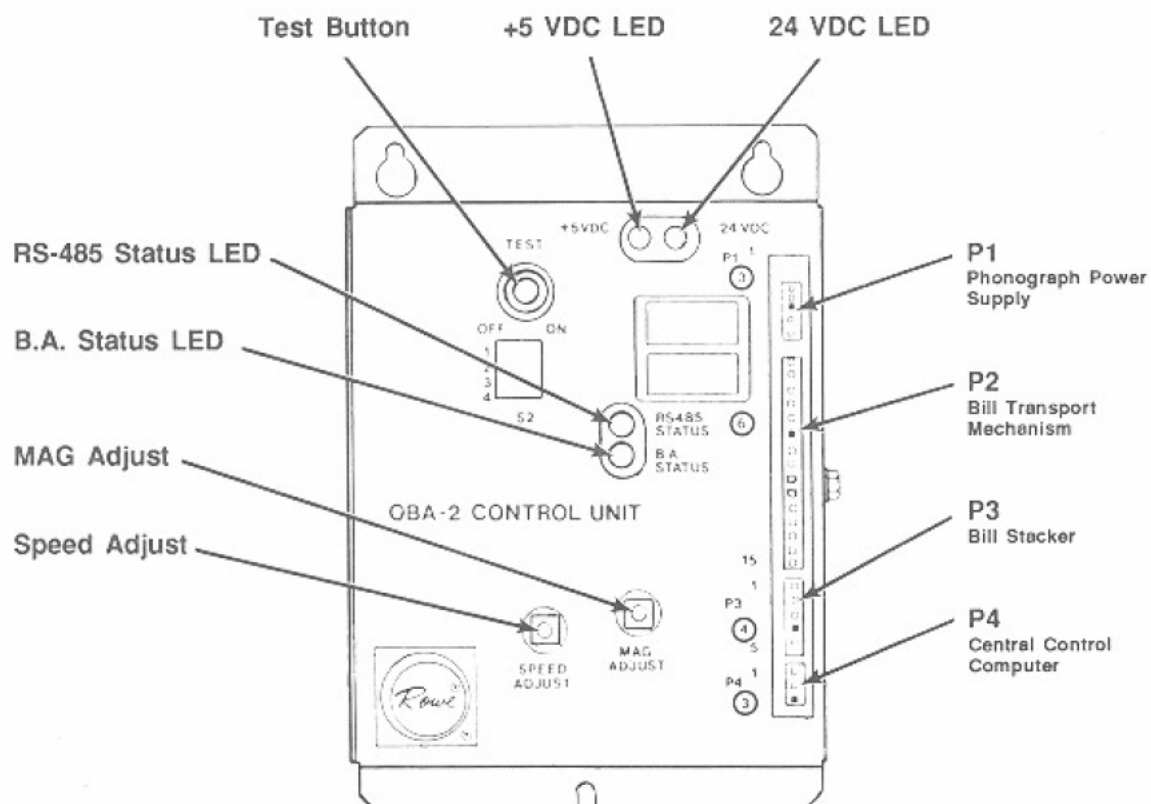


Figure 4-4. OBA Controller

## CONNECTORS

Four connectors, labelled P1, P2, P3, and P4 connect the three major modules or components of the bill acceptor to each other and to the central control computer.

P1 connects the OBA control unit to the phonograph power supply via the CCC.

P2 connects the bill transport mechanism to the OBA control unit.

P3 connects the bill stacker to the OBA control unit.

P4 connects the OBA control unit to the central control computer.

Adjustments on the OBA control unit (see *Electrical Adjustments for a detailed explanation of adjustment procedures*).

### MAG ADJUST

Allows adjustment of the magnetic amplifier circuitry for optimum performance. The amplifier is used in conjunction with the magnetic head in the bill transport mechanism for checking specific properties of the bills (see *figure 4-4*).

### TEST BUTTON

If this button (see *figure 4-4*) is depressed when the unit is in the idle (STANDBY) state it activates the motor speed adjustment mode. This allows the rate at which the bill is fed through the transport mechanism to be adjusted for optimum performance. If the bill acceptor is in the SHUTDOWN mode rather than the STANDBY mode, pushing the TEST button will reset it and put it back into STANDBY (see *Functional Description in this section*).

### VISUAL INDICATORS

Refer to *figure 4-4* for the location of these indicators.

**RS-485 STATUS LED** - This LED indicates the status of the communications link. If the LED is not on, the bill acceptor is in the RECEIVE mode, waiting for a command from the central control computer. When the LED is on, the bill acceptor is in the TRANSMIT mode and is sending information to the central control computer.

**BA STATUS LED** - This LED indicates whether the bill acceptor is in the SHUTDOWN state or is in operating condition. When not lit, the bill acceptor is in normal operating condition. When lit, the LED indicates that the unit is shutdown due to a fault. The STATUS LED is also used to indicate the correct motor speed when used in conjunction with the MOTOR SPEED ADJUST mode (TEST button depressed).

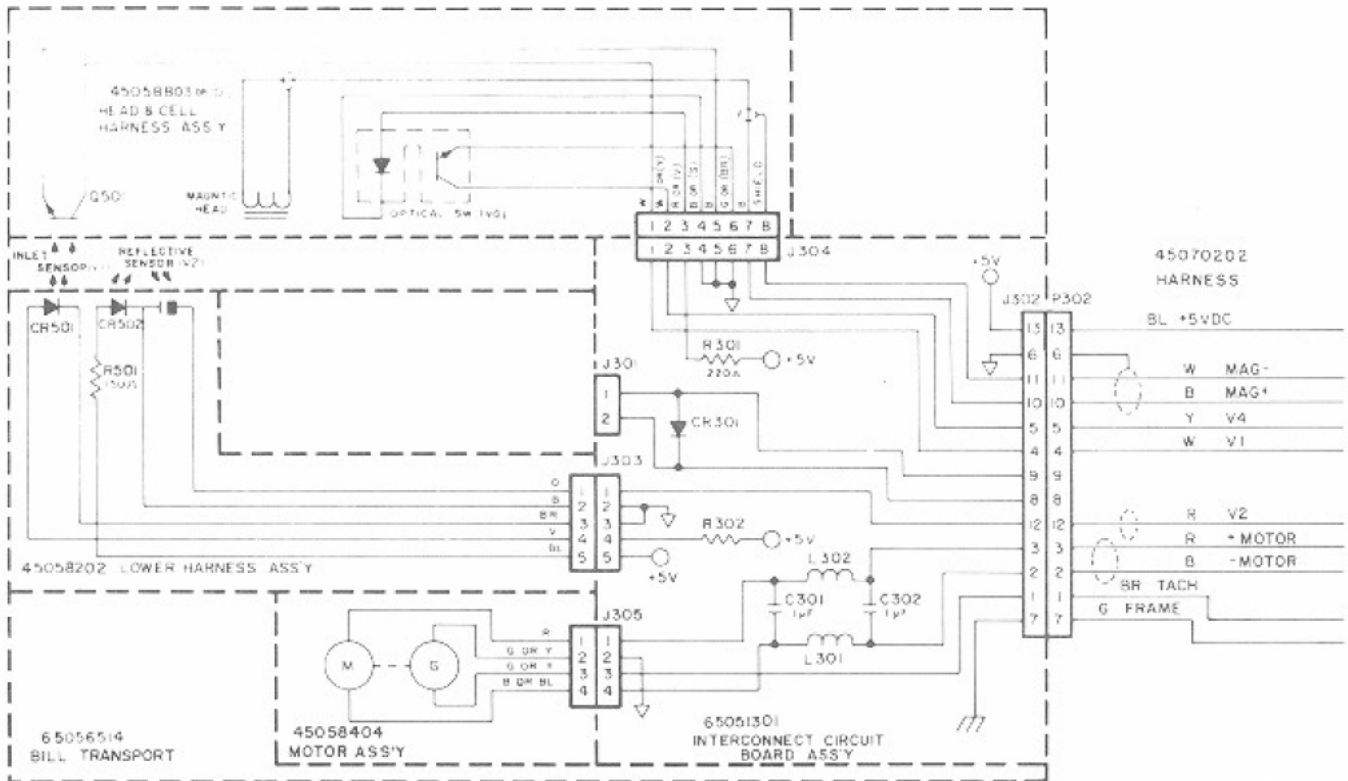
**+5VDC AND +24 VDC LED'S** - When lit, these indicate the normal presence of the system voltages.

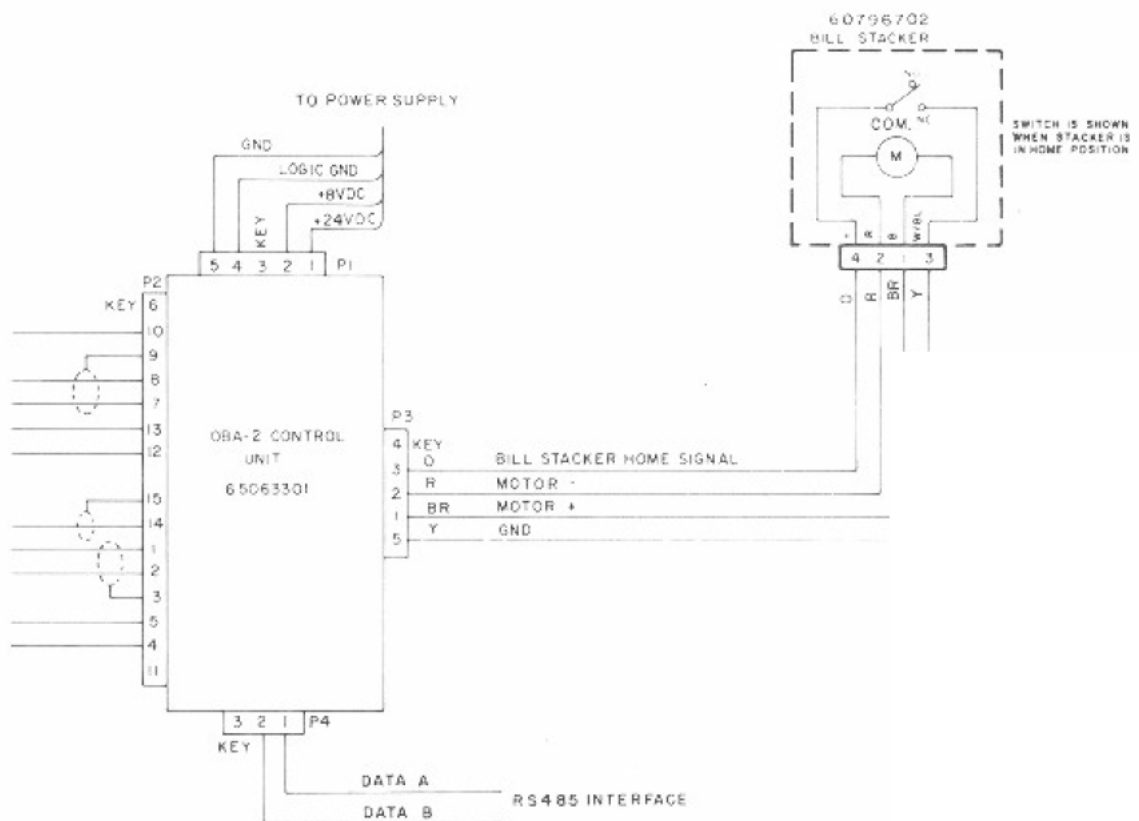
## FUNCTIONAL DESCRIPTION

The following is a sequential description of the operation of the bill acceptor. This description gives a basic understanding of how the bill acceptor normally operates and can be used as an aid in troubleshooting (see *figure 4-5, the OBA Block Diagram*).

### Bill Acceptor In Standby Mode

When the power is first supplied to the bill acceptor, in normal operation, the bill acceptor immediately assumes a passive or idle state. It will not attempt to accept bills until it receives an ENABLE command from the central control computer. Though it is not able to accept bills it is not completely idle; it is continually checking the various sensors in the bill transport and bill stacker mechanisms. If it sees an incorrect signal it takes the appropriate actions, as described in the following paragraphs:





For Equivalent Engineering Drawing See 65057024-Q2 B

Figure 4-5. OBA-2 Block Diagram

## PROBLEMS THAT MAY ARISE IN THE STANDBY MODE:

### V4 Sensor Is Active

The bill acceptor assumes that something is trapped in the bill transport path if this sensor is active while in the STANDBY mode. It then begins the reject sequence to remove the trapped object from the path (*see Reject Sequence in this section*).

### Stacker Home Switch Not Activated

The bill acceptor turns on the stacker motor and attempts to return the stacker platen to its HOME position. If successful, the bill acceptor returns to the STANDBY mode. If unsuccessful, it shuts itself down (*see Shutdown Sequence in this section for additional information on this subject*).

## ACTIONS TAKEN BY THE BILL ACCEPTOR TO CORRECT THESE PROBLEMS:

### Reject Sequence

In order to clear the bill transport mechanism and purge any objects from the path, the bill acceptor turns on its transport motor in the reverse direction. If the bill acceptor is following a normal bill rejection sequence, it will reject the bill and return it to the bill acceptor opening. It will place it so that it can be easily grasped by the customer. If the customer retrieves the bill within five seconds and all other sensors indicate that the transport path is clear, the bill acceptor returns to the STANDBY mode. A BILL REJECT message and a REJECT code is sent to the central control computer indicating the cause of the rejection (*see Troubleshooting in this section for an explanation of the REJECT codes*). If the track is not clear, the bill acceptor begins the self-clearing sequence.

### Self-Clearing Sequence

Upon failing to clear the transport path as described, the bill acceptor begins a self-clearing sequence. This consists of a series of reverse-forward-reverse cycles to dislodge any object trapped in the transport. If this procedure is successful the bill acceptor returns to the STANDBY mode. If the track is not cleared after 10 cycles the unit will shutdown.

### Shutdown Sequence

Several things may cause a shutdown of the bill acceptor. In the instance above an unsuccessful attempt by the bill acceptor to clear an object lodged in the transport path will initiate a SHUTDOWN sequence. In the event of a shutdown the bill acceptor turns everything off except the STATUS LED, which turns ON to indicate a fault condition. A SHUTDOWN message is sent to the central control computer along with an error code indicating the cause of the fault (*see Troubleshooting in this section for a complete explanation of the FAULT codes*).

## Bill Acceptance Mode

The following is a description of the operations that occur when the bill acceptor is in the BILL ACCEPTANCE mode. These are not the only operations that can occur in this mode however. The reject, self-clearing and shutdown sequences as previously described can occur as well.

An acceptance cycle starts when a bill is inserted into the transport. The transport motor starts in a forward direction and continues until the trailing edge of the bill passes the magnetic head. If the bill fails any of the required magnetic or optical checks it is immediately rejected and



returned to the customer. If the bill passes all of the checks the transport stops and the OBA then waits for a STATUS REQUEST from the central control computer and, upon receiving it, transmits a BILL IN ESCROW message containing the correct code for the bill validated. If a STATUS REQUEST is not received within two seconds, the bill is rejected. After sending the BILL IN ESCROW information, the bill acceptor waits for either the ACCEPT or REJECT command from the central control computer.

After receiving the ACCEPT command, the bill acceptor activates the transport motor and moves the bill from the transport mechanism to the bill stacker. The bill is monitored to ensure that the bill movement through the mechanism is correct. If the bill does not clear the transport mechanism within a specified time the bill is rejected and returned to the customer.

The stacker motor is now activated and the home switch monitored to ensure that the bill stacker platen leaves the home position, stacks the bill in the bill box and returns to the home position. If the stacker platen does not leave the home position within 750 milliseconds or if it does not return within 2.5 seconds, the bill acceptor begins its shutdown sequence.

Upon completion of the stacking process the bill acceptor sends a BILL ACCEPTED message to the central control computer and is then ready to begin another bill acceptance sequence.

## PRICING

For overall pricing, see *Pricing in Section 2*.

## Maintenance And Adjustments

### ELECTRICAL ADJUSTMENTS

The electrical adjustments on the bill acceptor are factory set and should not be changed under normal operating conditions. However, replacing a bill transport or control unit requires a recalibration of the system as follows:

#### Motor Speed Adjustment

Refer to *figure 4-4* for the locations of the electrical adjustments.

1. Depress the TEST button on the OBA control unit.
2. Turn the SPEED ADJUST control either clockwise or counterclockwise until the B.A. STATUS LED reaches its brightest and steadiest condition.

#### Mag Adjust

Refer to *figure 4-4* for the locations of the electrical adjustments.

1. Set the MAG ADJUST control 1/8-turn back from the full clockwise position.
2. Depress the TEST button momentarily and release.
3. If the B.A. STATUS LED blinks rapidly several times after you release the TEST button, turn the MAG ADJUST control slightly counterclockwise and repeat step 2.
4. If the B.A. STATUS LED remains OFF after releasing the TEST button, the MAG ADJUST is correct.

## **ROUTINE MAINTENANCE**

### **Cleaning**

Since environmental conditions vary considerably, no prescribed maintenance schedule is set. Instead, the following items should be inspected periodically and cleaned as necessary:

#### **BILL INLET AND TRACK**

These surfaces should be wiped with a soft, clean, lint-free cloth.

#### **V2 Sensor**

The V2 backside sensor, which includes both an emitter and a detector, should be kept clean to ensure that all valid bills will be accepted. A soft cloth or cotton swab moistened with denatured alcohol can be used for this purpose.

#### **Magnetic Head**

Due to the abrasive nature of currency, the magnetic head does not normally require cleaning. If the magnetic head does collect dirt, the dirt may be removed with a cotton swab saturated with denatured alcohol.

#### **Drive Belts**

Drive belts can be cleaned by wiping them with a clean lint-free cloth moistened with denatured alcohol. Do not soak belts in a solvent.

#### **Bill Stacker**

Use a clean cloth to remove any excess dirt from the stacker, platen, and surrounding areas.

### **Lubrication**

#### **BILL STACKER**

The bill stacker does not require lubrication.

#### **BILL TRANSPORT MECHANISM**

The bill transport mechanism does not require lubrication with normal use. If the transport mechanism is difficult to turn or if the transport mechanism is excessively noisy, apply one drop of light machine oil to each nylon bearing and to any shaft location that supports a plastic roller.

### **Mechanical Adjustments**

#### **BILL STACKER**

The bill stacker does not normally require adjustment. If the computer control unit indicates a problem involving the HOME switch while in SHUTDOWN mode (see *Troubleshooting in this section*), then the switch adjustment may be checked by performing the following procedures (see *figure 4-6*):

1. Rotate the cam so that the switch actuator rest on the high point of the stacker motor cam.
2. Place a .040-inch gauge between the cam and the actuator. The bottom of the actuator should rest against the switch case. If the adjustment is incorrect, reposition the switch by loosening its two mounting screws.

### BILL TRANSPORT MECHANISM

The transport mechanism does not require any initial set-up or routine adjustment. If any slipping or binding occurs in the mechanism, make the following adjustments:

### DRIVE BELT TENSION ADJUSTMENT

Refer to figure 4-7 before doing this adjustment.

Adjust the drive belt tension as follows:  
(For OBA transport units without an idler pulley)

1. Loosen machine screws A, B, and C to the point that the motor mounting assembly can rotate around machine screw B.

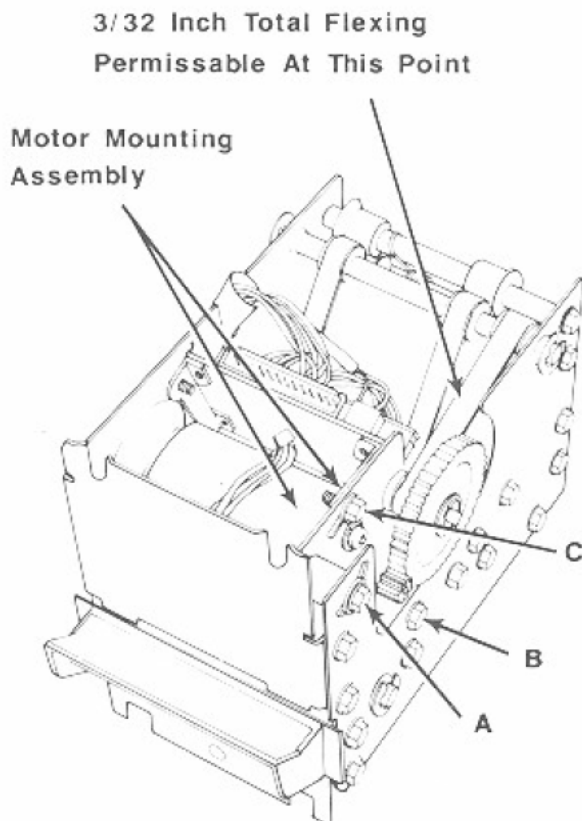


Figure 4-7. Drive Belt Tension

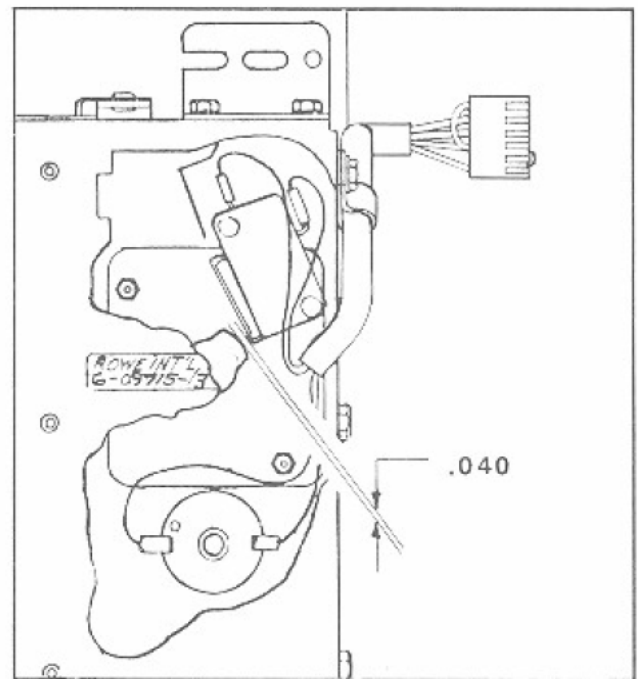


Figure 4-6. Stacker Home Switch Adjustment

2. Rotate motor mounting assembly until the drive belt flexes a total of approximately 3/32-inch in mid span between the gear pulley and the drive shaft pulley.
3. Tighten the machine screws in the following order: A, B, then C. Recheck the belt tension.
4. If machine screw A is at the end of its slot and the drive belt is still too loose, the belt has stretched and must be replaced.

### LOWER BELT TENSION ADJUSTMENT

Refer to figure 4-8 before doing this adjustment.

Adjust the lower belt tension as follows:

1. Loosen the four hex-head screws holding the ends of the idler pulley shaft and the take-up brackets.
2. Remove the circuit board by removing the three screws that hold the brackets and unplug the three connectors.
3. Push down on the idler pulleys until the belt flexes about 3/16 of an inch.

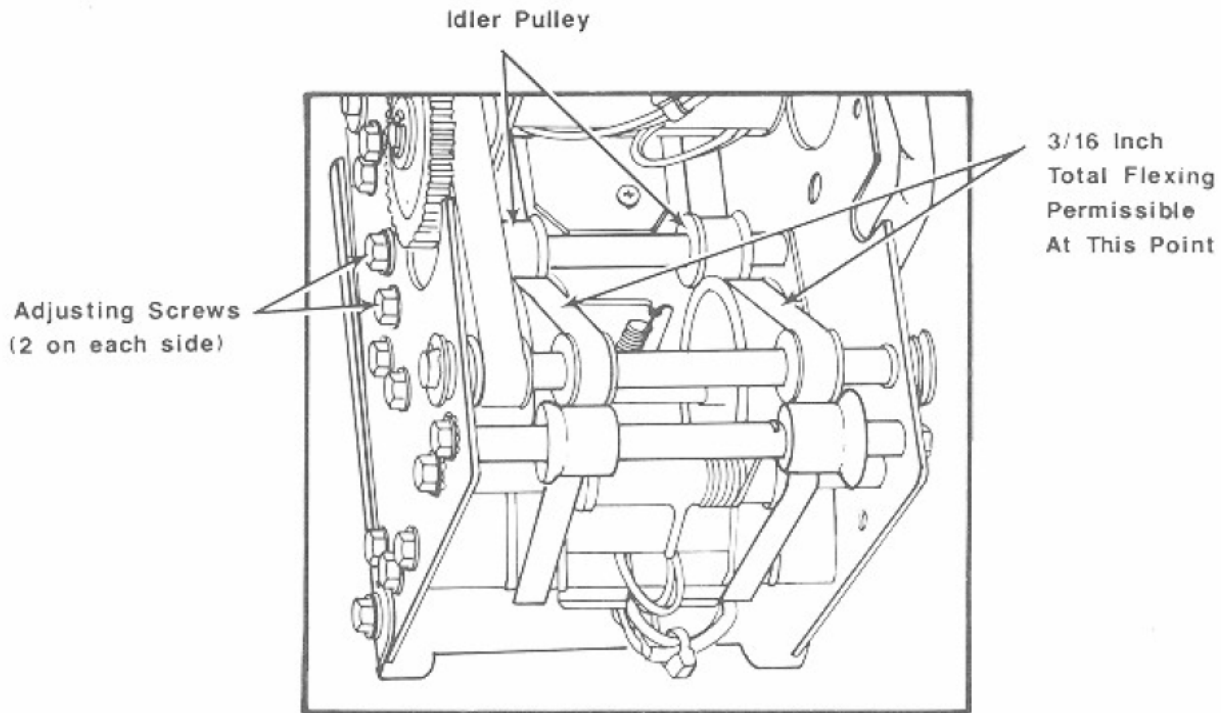


Figure 4-8. Lower Belt Tension Adjustment

4. Tighten all four screws and check the belt tension again. The tension must be equal on both belts.
5. Replace the circuit board and plug in the three connectors.
6. If the adjusting screws are against the ends of the slots and the timing belts are still loose, the transport should be returned to an authorized service center.

**GEAR BACKLASH ADJUSTMENT**

A degree of backlash should exist between the gears, as shown in figure 4-9.

To adjust the gear backlash:

1. Loosen the two Phillips-head screws holding the motor. Move the motor to give the correct backlash. This adjustment is not critical, but make sure that backlash is present at all points, as you rotate the gears.
2. Tighten the two screws and recheck the gear backlash.

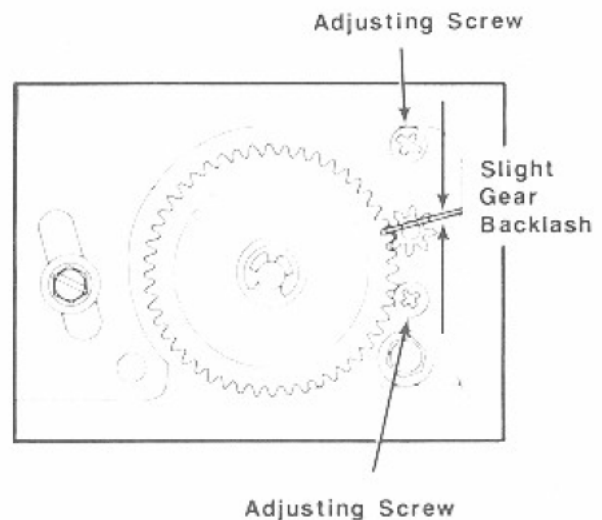


Figure 4-9. Gear Backlash Adjustment

## MAGNETIC HEAD ALIGNMENT

The magnetic head is aligned with the harness and holder assembly at the factory. If a problem with the head develops, the harness and holder assembly must be replaced. Order the Harness And Holder assembly, Part Number 45059801.

### Installing A New Harness And Holder Assembly



## WARNING:

To avoid serious eye injury, wear safety glasses or goggles while removing and installing the tension springs that hold the harness and holder assembly.

Refer to *figure 4-10A* during removal and installation of the harness and holder assembly unless you are told to refer to *figure 4-10B*.

#### REMOVING A DEFECTIVE HARNESS AND HOLDER ASSEMBLY

1. Unplug the harness from the transport circuit board.
2. Loosen both cable clamp screws, and remove one so that the harness can slip out from under the cable clamp.
3. Remove the screw from the V1 detector circuit board and pull the V1 circuit board away from the OBA casting (keep the screw, you will need it to install the new assembly).
4. While wearing eye protection: Carefully slide the tension springs off of the two cover hinge screws.
5. Remove the two screws and shoulder washers that are used as a hinge for the OBA cover.
6. Remove the screw from each end of the crowned roller shaft and slide the shaft out from under the upper belts.
7. Slide the harness and holder assembly toward the front of the OBA slightly so that you can slide one side of the holder and harness assembly out from under the upper belts. Throw this assembly away.

#### INSTALLING A REPLACEMENT HOLDER AND HARNESS ASSEMBLY

1. Slide the new harness and holder assembly under the upper belts and align the assembly with the lower track by placing the "V" on the holder over the "V" on the lower track as shown in *figure 4-10B*.
2. Slide the crowned roller shaft into position over the holder and harness assembly.
3. Insert the screws into the ends of the crowned roller shaft and tighten the screws.
4. Make sure that the "V" on the harness and holder assembly is resting over the lower track on both sides of the harness and holder assembly.
5. Attach the V1 detector to the OBA casting.

6. Route the harness under the cable clamp, attach the cable clamp screw that you removed in *Step 2*, of the removal procedure and tighten both cable clamp screws.
7. Plug the free end of the harness into the transport circuit board.
8. Re-install the OBA cover by attaching the two screws and shoulder washers that were removed in *Step 5* of the removal procedure.
9. While wearing eye protection, carefully slide the tension springs back on the two cover hinge screws (The short end of the spring wire should rest on the mag. head holder shaft).
10. Check the upper belt paths of both upper belts to make sure that the upper belts are riding on the center of all of the pulleys.

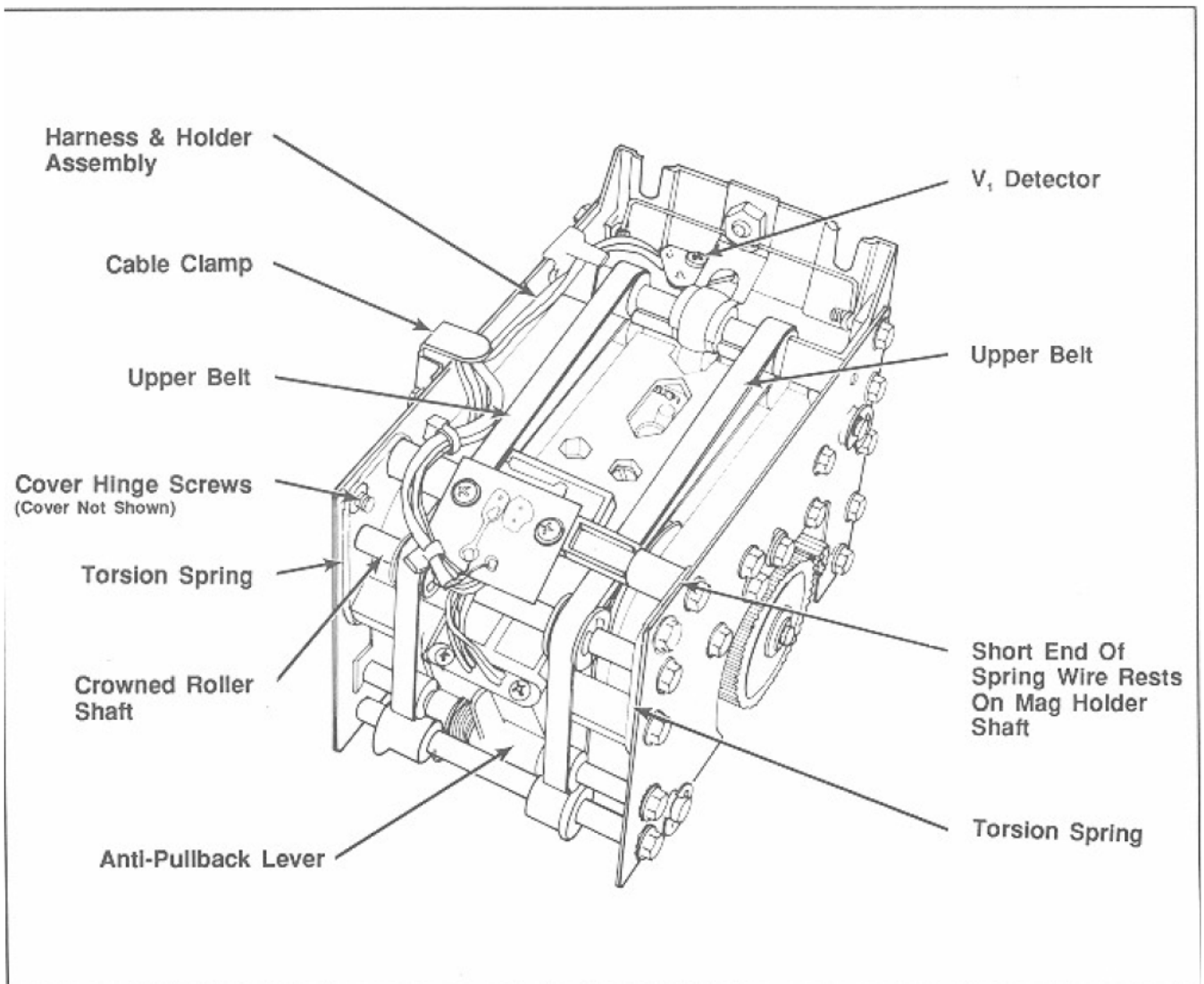


Figure 4-10A. Head And Holder Assembly Removal

The V shape on the lower track must rest over the V shape on the holder (both sides).

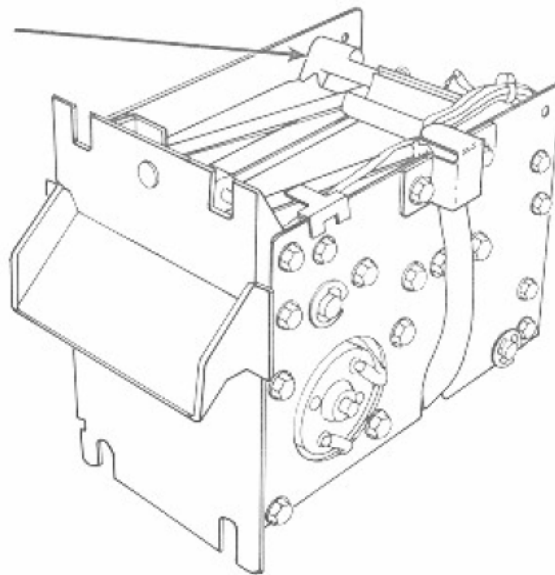


Figure 4-10B. Head And Holder Alignment

#### CREASING ROLLER POSITION

The creasing roller shaft should always be positioned so that the creasing rollers spin freely (see *figure 4-11*). They should not contact either lower timing belt. When making this adjustment, or when you are assembling the creasing roller shaft, hold the shaft away from the lower belts while tightening the two mounting screws. After tightening, always re-check to be sure that the creasing rollers spin freely.

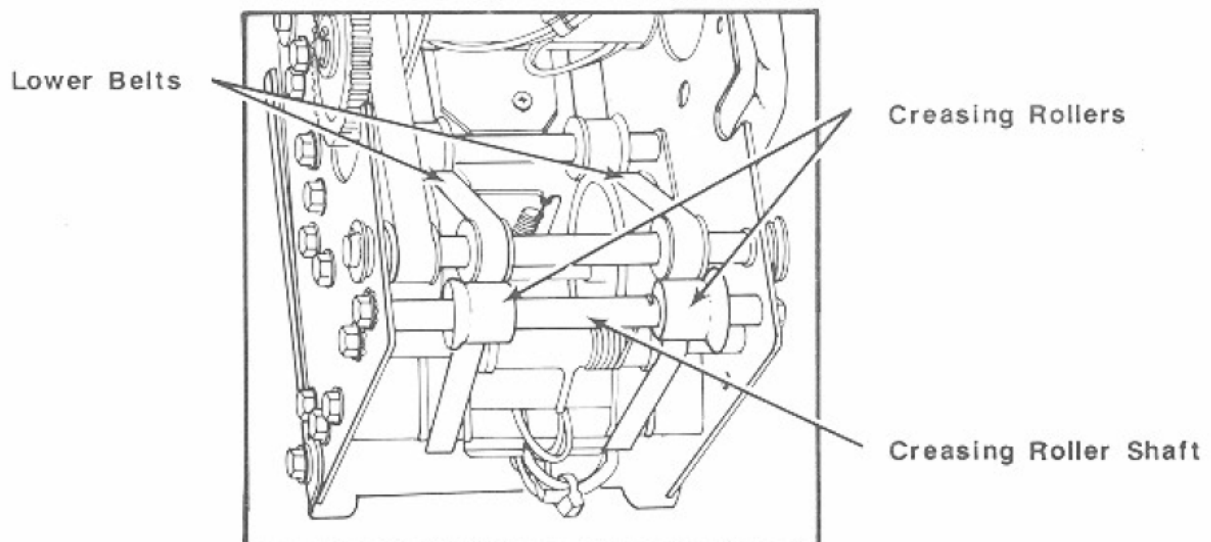


Figure 4-11. Creasing Roller Position

## **BILL ACCEPTOR HEIGHT AND FRONT TO BACK ADJUSTMENT**

These two adjustments can affect each other. If you need to make one of these adjustments, be sure to read the entire procedure to determine whether you need to do any additional steps.

### **OBA-2 Height**

Perform this procedure only if the OBA-2 height is incorrect.

1. Locate the hex-head screw in the vertical slot on the left side of the OBA-2 mounting plate and compartment divider. Tape a small piece of paper next to the slot and mark the position of the center of the screw on the paper (this will serve as a reference point).
2. Close the top door and estimate the vertical distance that the OBA-2 is high or low.
3. Loosen the hex-head screw and the three similar screws on the right side of the divider and, using the reference mark, slide the OBA-2 up or down by the amount that you estimated the OBA-2 height to be in error. Tighten one of the screws and recheck the OBA-2 height. If the height is acceptable, tighten the other three screws. If the height is not acceptable, repeat steps 2 and 3 until the height is acceptable.
4. Check the OBA-2 front-to-back clearance and make the following adjustment if necessary.

### **OBA-2/STACKER FRONT TO BACK CLEARANCE**

1. Loosen the wing nut on the left side of the OBA-2 mounting bracket and slide the OBA-2 transport out approximately 1-1/2 inches.
2. Loosen the four stacker mounting screws on the right side of the divider plate and slide the stacker toward the rear of the phonograph as far as it will go.
3. Slowly close the top door so that it pushes the OBA-2 transport back into the phonograph. Open the top door and tighten the wing nut on the transport mounting bracket.
4. Slide the stacker toward the OBA-2 transport until the stacker engages the transport and tighten the four mounting screws.
5. Check the OBA-2 height and make the adjustment if necessary.



Refer to figure 4-12, the OBA Schematic Diagram, as you troubleshoot electrical problems on the OBA control unit.

Table 4-1. OBA Troubleshooting Chart

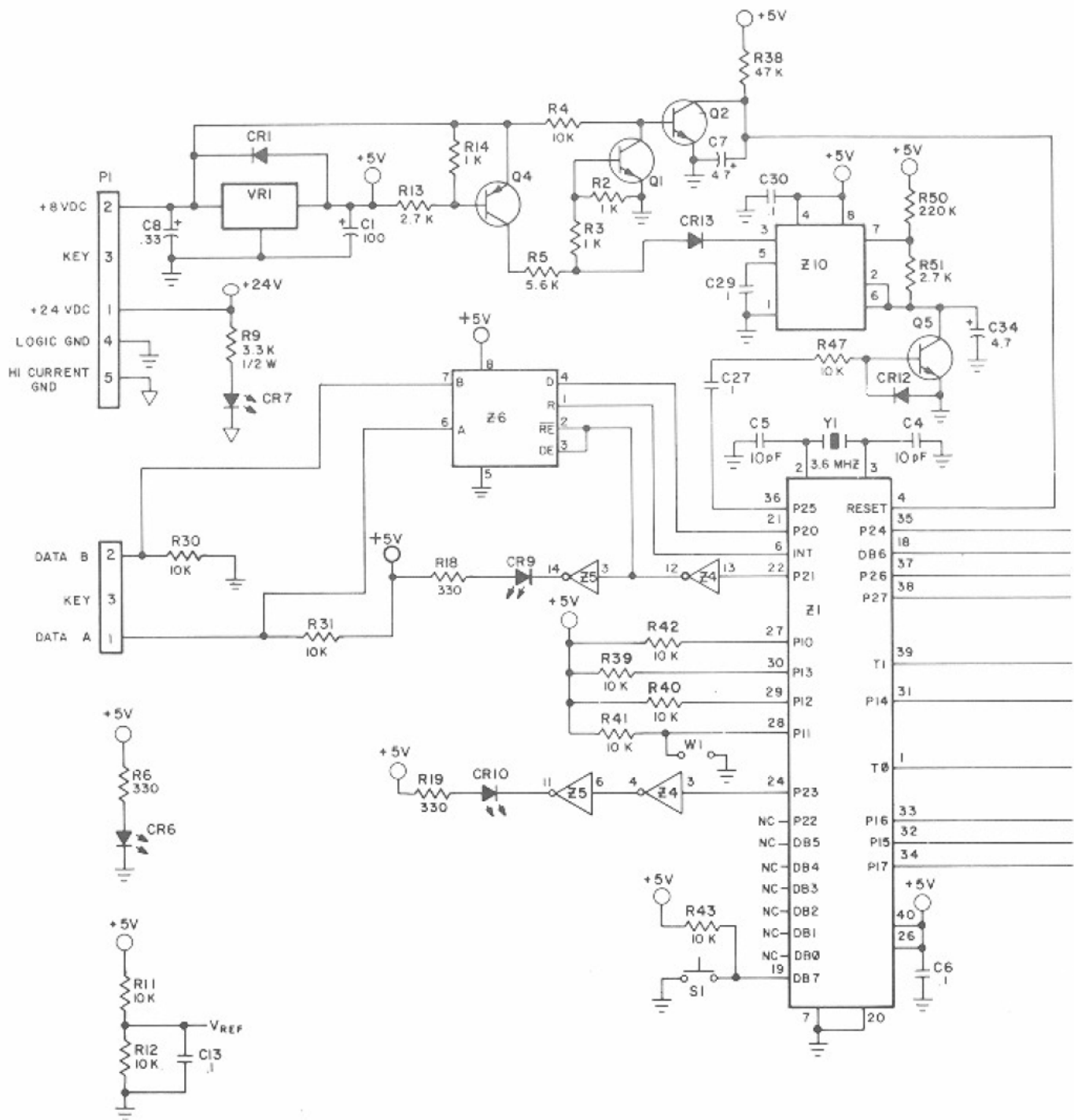
Trouble	Symptom	Probable Cause
Transport motor does not start when a bill is inserted.	The +5 V or +24 V LED on the OBA control unit is not lit.	<ol style="list-style-type: none"> <li>1. A defective power supply</li> <li>2. A defective harness to the OBA</li> <li>3. A defective OBA control unit</li> </ol>
	Transport does not start, but a clicking sound is heard in the OBA control unit	<ol style="list-style-type: none"> <li>1. An object is jammed in the transport mechanism</li> <li>2. A defective transport</li> </ol>
	No sound or other indication that the transport is trying to run	<ol style="list-style-type: none"> <li>1. A defective V1 cell in the transport</li> <li>2. A defective OBA control unit</li> <li>3. A defective CCC</li> </ol>
	The BA STATUS LED is blinking	The OBA is not operational due to a FAULT condition: See the next problem
The OBA is in SHUTDOWN mode (er 80). In this state, the BA STATUS LED will alternate between STEADY ON and FLASHING (on for 1 second and then flash one or more times). The number of flashes indicates the cause of the shutdown. Also, a SHUTDOWN message with the indicated FAULT code will be sent to the CCC.	The BA STATUS LED flashes once. The FAULT code is 41.	<ol style="list-style-type: none"> <li>1. An object is in the transport covering the V1 cell</li> <li>2. A defective transport</li> <li>3. A defective OBA control unit</li> </ol>
	The BA STATUS LED flashes 4 times. The FAULT code is 44.	<ol style="list-style-type: none"> <li>1. An object is in the transport activating the anti-pull-back lever</li> <li>2. A defective transport</li> <li>3. A defective OBA control unit</li> </ol>
	The BA STATUS LED flashes 5 times. The FAULT code is 48 or 49.	<ol style="list-style-type: none"> <li>1. The bill stacker is full</li> <li>2. The bill stacker is jammed in the OFF HOME position</li> <li>3. The bill stacker HOME switch is out of adjustment</li> <li>4. A defective bill stacker</li> <li>5. A defective OBA control unit</li> </ol>

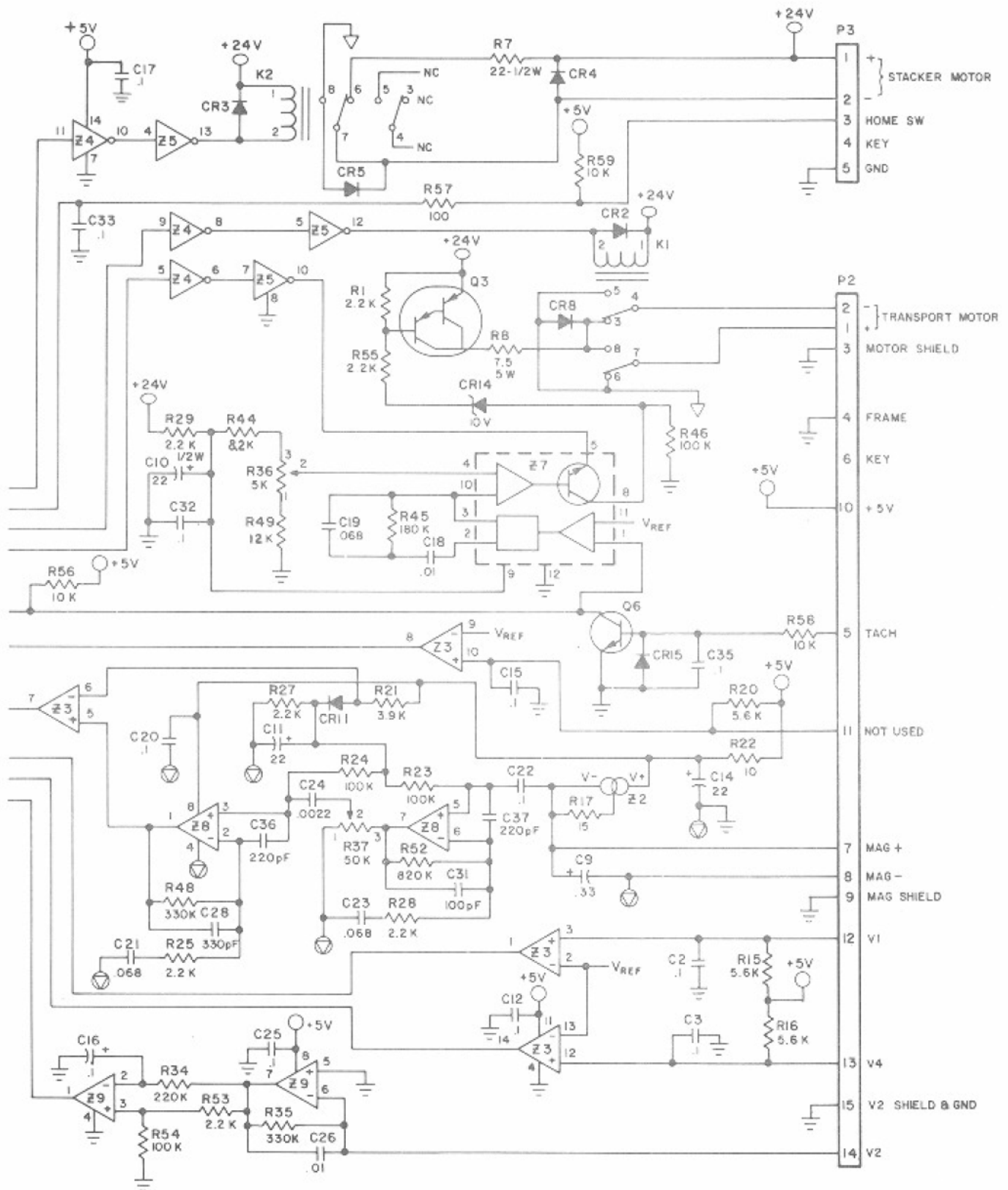
Table 4-1. OBA Troubleshooting Chart  
Continued

Trouble	Symptom	Probable Cause
The bill acceptor rejects a large number of valid bills. If the rejected bill is allowed to remain in the transport opening, the BA STATUS LED will flash one or more times to indicate the cause of the rejection.	BA STATUS LED flashes 1 time after rejecting the bill	<ol style="list-style-type: none"> <li>1. A defective V1 or V4 cell in the transport</li> <li>2. A defective OBA control unit</li> </ol>
	BA STATUS LED flashes twice after rejecting the bill	<ol style="list-style-type: none"> <li>1. A defective V2 cell in the transport</li> <li>2. A defective control unit</li> </ol>
	BA STATUS LED flashes 4 times after rejecting the bill	<ol style="list-style-type: none"> <li>1. An object is lodged in the transport</li> <li>2. A binding anti-pull-back lever</li> <li>3. A defective V4 cell in the transport</li> <li>4. A defective OBA control unit</li> </ol>
	BA STATUS LED flashes 5 times after rejecting the bill	<ol style="list-style-type: none"> <li>1. The MAG. ADJUST control is set too low</li> <li>2. The motor speed is incorrectly adjusted</li> <li>3. A defective magnetic head or transport</li> <li>4. A defective OBA control unit</li> </ol>
	BA STATUS LED flashes 6 times after rejecting the bill	<ol style="list-style-type: none"> <li>1. MAG. ADJUST may be either too low or too high (<i>see the Mag. Adjust procedure</i>)</li> <li>2. A defective harness connection at P1, Pins 3 or 4</li> <li>3. A defective motor or magnetic head in the transport</li> <li>4. A defective OBA control unit</li> <li>5. A defective power supply (+24 VDC) from the CCC</li> </ol>
	BA STATUS LED flashes 7 times after rejecting the bill	<ol style="list-style-type: none"> <li>1. The motor speed is not correct</li> <li>2. A defective transport</li> <li>3. A defective OBA control unit</li> </ol>

Table 4-1. OBA Troubleshooting Chart  
*Continued*

Trouble	Symptom	Probable Cause
Bills jam frequently	Any bill transporting failure	<ol style="list-style-type: none"><li>1. The anti-pull-back lever is not operating freely</li><li>2. The bill pressure roller is binding</li><li>3. The transport inlet or track surfaces contain projections, rough spots, or dirt</li><li>4. The transport belts are out of adjustment or dirty</li><li>5. The transport belts are not centered on the rollers</li><li>6. The transport upper input roller does not move up and down freely</li><li>7. A defective power supply (+24 VDC) from the CCC</li><li>8. Creasing rollers "tight" to timing belts.</li></ol>





- GROUNDS**
- ⏏ = LOGIC GROUND
  - ▽ = HIGH CURRENT GROUND
  - ⊕ = LOW CURRENT GROUND

For Equivalent Engineering Drawing See 65063209-Q2 C

Figure 4-12A. OBA-2 Circuit Board Schematic

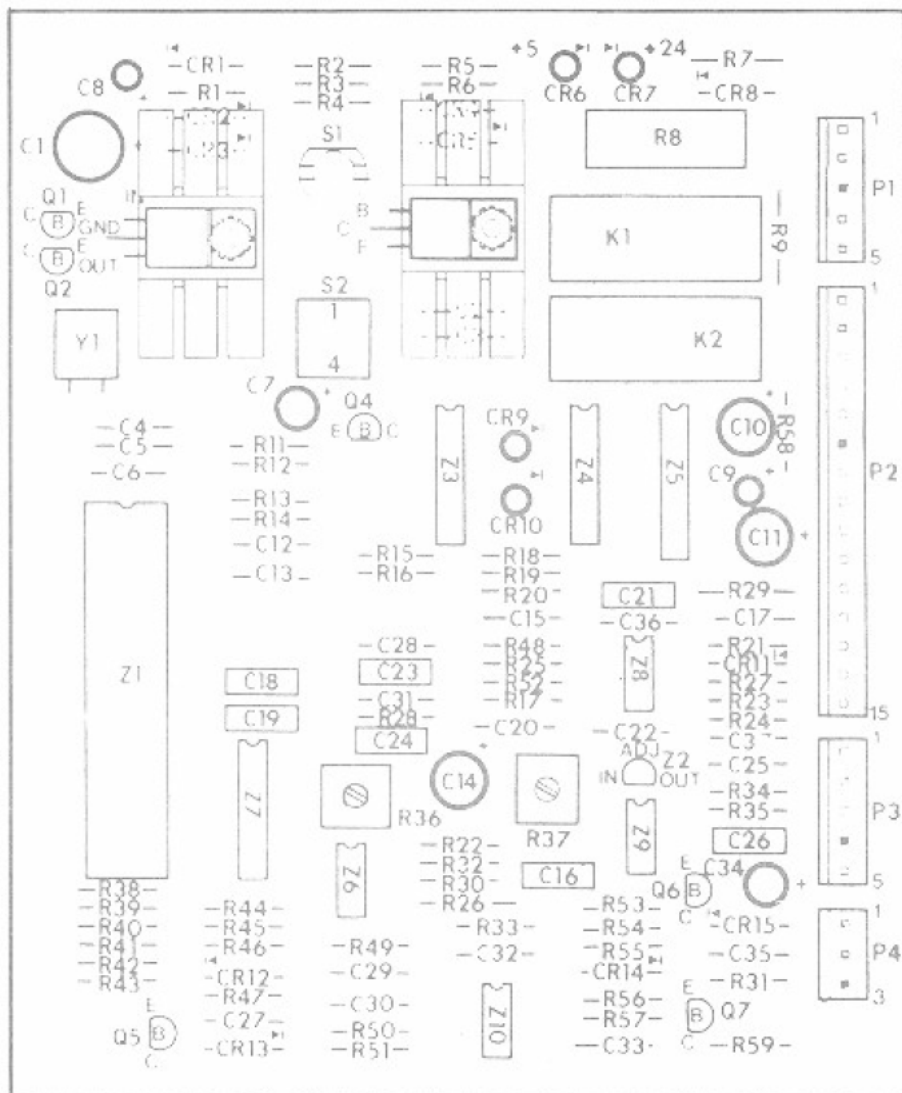


Figure 4-12B. OBA-2 Circuit Board Layout

## COMPONENTS LIST FOR OBA-2 CONTROLLER CIRCUIT BOARD 65063209

C1	Capacitor - Electrolytic	100 mf	70023814
C2	Capacitor - Monolithic	.1 mf	70028514
C3	Capacitor - Monolithic	.1 mf	70028514
C4	Capacitor - Monolithic	10 pf	70028701
C5	Capacitor - Monolithic	10 pf	70028701
C6	Capacitor - Monolithic	.1 mf	70028514
C7	Capacitor - Electrolytic	4.7 mf	70023806
C8	Capacitor - Tantalum	.33 mf	70025119
C9	Capacitor - Tantalum	.33 mf	70025119
C10	Capacitor - Electrolytic	100 mf	70023814
C11	Capacitor - Electrolytic	22 mf	70023810
C12	Capacitor - Monolithic	.1 mf	70028514
C13	Capacitor - Monolithic	.1 mf	70028514
C14	Capacitor - Electrolytic	22 mf	70023810
C15	Capacitor - Monolithic	.1 mf	70028514
C16	Capacitor - Mylar	.1 mf	70021549
C17	Capacitor - Monolithic	.1 mf	70028514
C18	Capacitor - Mylar	.01 mf	70021525
C19	Capacitor - Mylar	.068 mf	70021545
C20	Capacitor - Monolithic	.1 mf	70028514
C21	Capacitor - Mylar	.068 mf	70021545
C22	Capacitor - Monolithic	.1 mf	70028649
C23	Capacitor - Mylar	.068 mf	70021545
C24	Capacitor - Mylar	.0022 mf	70021509
C25	Capacitor - Monolithic	.1 mf	70028514
C26	Capacitor - Mylar	.01 mf	70021525
C27	Capacitor - Monolithic	.1 mf	70028514
C28	Capacitor - Monolithic	330 pf	70028719
C29	Capacitor - Monolithic	.1 mf	70028514
C30	Capacitor - Monolithic	.1 mf	70028514
C31	Capacitor - Monolithic	100 pf	70028713
C32	Capacitor - Monolithic	.1 mf	70028514
C33	Capacitor - Monolithic	.1 mf	70028514
C34	Capacitor - Electrolytic	4.7 mf	70023806
C35	Capacitor - Monolithic	.1 mf	70028514
C36	Capacitor - Monolithic	220 pf	70028606
C37	Capacitor - Monolithic	220 pf	70028606
CR1	Diode - Silicon		70035005
CR2	Diode - Silicon		70035005
CR3	Diode - Silicon		70035005
CR4	Diode - Silicon		70035005
CR5	Diode - Silicon		70035005
CR6	Diode - LED		70035303
CR7	Diode - LED		70035303
CR8	Diode - Silicon		70035005
CR9	Diode - LED		70035305
CR10	Diode - LED		70035303
CR11	Diode - Silicon		70035012
CR12	Diode - Silicon		70035012
CR13	Diode - Silicon		70035012
CR14	Diode - Zener		70035514
CR15	Diode - Silicon		70035012
K1	Relay - DPDT		25191201
K2	Relay - DPDT		25191201

**COMPONENTS LIST FOR  
OBA-2 CONTROLLER CIRCUIT BOARD 65063209**

(Continued)

P1	Polarizing Wafer	5 Circuit	70075005
P2	Polarizing Wafer	15 Circuit	70075015
P3	Polarizing Wafer	5 Circuit	70075005
P4	Polarizing Wafer	3 Circuit	70075003
Q1	Transistor - NPN Silicon		70030007
Q2	Transistor - NPN Silicon		70030007
Q3	Transistor - PNP Silicon		70030805
Q4	Transistor - PNP Silicon		70030104
Q5	Transistor - NPN Silicon		70030007
Q6	Transistor - PNP Silicon		70030007
Q7	NOT USED		

**Note: All resistors are ¼ watt 5%, unless otherwise noted.**

R1	Resistor - Carbon	2.2 K		79901222
R2	Resistor - Carbon	1 K		79901102
R3	Resistor - Carbon	1 K		79901102
R4	Resistor - Carbon	10 K		79901103
R5	Resistor - Carbon	5.6 K		79901562
R6	Resistor - Carbon	330 Ohm		79901331
R7	Resistor - Carbon	22 Ohm	(½w, 10%)	70010724
R8	Resistor - Carbon	7.5 Ohm	(5w, 10%)	70011008
R9	Resistor - Carbon	3.3 K	(½w, 5%)	79904332
R10	NOT USED			
R11	Resistor - Carbon	10 K		79901103
R12	Resistor - Carbon	10 K		79901103
R13	Resistor - Carbon	2.7 K		79901272
R14	Resistor - Carbon	1 K		79901102
R15	Resistor - Carbon	5.6 K		79901562
R16	Resistor - Carbon	5.6 K		79901562
R17	Resistor - Carbon	15 Ohm		79901150
R18	Resistor - Carbon	330 Ohm		79901331
R19	Resistor - Carbon	330 Ohm		79901331
R20	Resistor - Carbon	5.6 K		79901562
R21	Resistor - Carbon	3.9 K		79901392
R22	Resistor - Carbon	10 Ohm		79901100
R23	Resistor - Carbon	10 K		79901103
R24	Resistor - Carbon	100 K		79901104
R25	Resistor - Carbon	2.2 K		79901222
R26	NOT USED			
R27	Resistor - Carbon	2.2 K		79901222
R28	Resistor - Carbon	2.2 K		79901222
R29	Resistor - Carbon	1.5 K	(½w, 10%)	70010405
R30	Resistor - Carbon	10 K		79901103
R31	Resistor - Carbon	10 K		79901103
R32	NOT USED			
R33	NOT USED			
R34	Resistor - Carbon	220 K		79901224
R35	Resistor - Carbon	330 K		79901334
R36	Potentiometer	5 K		21520706
R37	Potentiometer	50 K		21520702
R38	Resistor - Carbon	47 K		79901473
R39	Resistor - Carbon	10 K		79901103
R40	Resistor - Carbon	10 K		79901103
R41	Resistor - Carbon	10 K		79901103



R42	Resistor - Carbon	10 K	79901103
R43	Resistor - Carbon	10 K	79901103
R44	Resistor - Carbon	8.2 K	79901822
R45	Resistor - Carbon	180 K	79901184
R46	Resistor - Carbon	100 K	79901104
R47	Resistor - Carbon	10 K	79901103
R48	Resistor - Carbon	330 K	79901334
R49	Resistor - Carbon	12 K	79901123
R50	Resistor - Carbon	220 K	79901224
R51	Resistor - Carbon	2.7 K	79901272
R52	Resistor - Carbon	820 K	79901824
R53	Resistor - Carbon	2.2 K	79901222
R54	Resistor - Carbon	100 K	79901104
R55	Resistor - Carbon	2.2 K	79901222
R56	Resistor - Carbon	10 K	79901103
R57	Resistor - Carbon	100 Ohm	79901101
R58	Resistor - Carbon	10 K	79901103
R59	Resistor - Carbon	10 K	79901103
S1	Switch - Push Button		70043502
S2	NOT USED		
VR1	IC - +5 VDC Regulator		70036506
Y1	Crystal - 3.58 MHz		25167308
Z1	IC - Microcomputer - 8 Bit	8049	70039310
Z2	IC - Current Regulator	LM334Z	70037601
Z3	IC - Quad OP Amp	LM324	30800216
Z4	IC - TTL Hex Invertor	7404	70036304
Z5	IC - Darlington Array	ULN2003	70036901
Z6	IC - RS-485 Transceiver	SN75176	70037801
Z7	IC - F/V Converter	LM2917	30800218
Z8	IC - Dual OP Amp	LM358	30800214
Z9	IC - Dual OP Amp	LM358	30800214
Z10	IC - Timer	LM555	70033801

## Section 6: Mechanical Adjustments

### LUBRICATION

Your phonograph requires no lubrication.

### UNSCHEDULED MAINTENANCE

This section contains adjustments, removal, and replacement procedures that are to be followed whenever a malfunction has occurred.

### MECHANISM MAINTENANCE AND ADJUSTMENTS



#### CAUTION:

The CD mechanism is extremely sensitive to static discharges. The photo diodes and the laser are more sensitive to discharges than MOS IC's. Careless handling may immediately destroy components within the player or cause undetectable damage that will lead to failure after several weeks or even months of use. Before you touch the player, discharge your hands and tools by touching a grounded metal part of the phonograph, such as the amplifier or power supply chassis. If you need to remove the CD player for servicing, place the CD player into the anti-static bag (shipped with the phonograph for this purpose) immediately after you remove it from the phonograph.

### CD Player Mechanism

The only maintenance required on the CD player is an occasional cleaning of the lens. If you need to clean the CD player lens, be sure to follow the procedure described in *Table 3-3, Laser Lens Cleaning*.


### CD Player Maintenance

The CD player does not contain any field adjustments or field replaceable parts. Individual parts and components are not available for distributor or field repairs. All CD players that require repair must be sent to Rowe for service.

## Removing The CD Player And Mechanism Control Unit

If you have followed the troubleshooting procedure in *Section 5*, and you have found that the CD player and the mechanism control unit needs to be removed for factory service, follow this procedure:

1. Turn the POWER switch (on the back of the phonograph) OFF, or place the POWER switch (on the left side of the phonograph) in the OFF position.
2. Remove all connectors from the mechanism control unit, loosen the two top screws (*figure 6-1, ref. A*), and remove the mechanism control unit.
3. Read the following Caution before you remove the CD player:



**CAUTION:**

The CD mechanism is extremely sensitive to static discharges. The photo diodes and the laser are more sensitive to discharges than MOS IC's. Careless handling may immediately destroy components within the player or cause undetectable damage that will lead to failure after several weeks or even months of use. Before you touch the player, discharge your hands and tools by touching a grounded metal part of the phonograph, such as the amplifier or power supply chassis. If you need to remove the CD player for servicing, place the CD player into the anti-static bag (shipped with the phonograph for this purpose) immediately after you remove it from the phonograph.

Loosen the two front mounting screws (These screws remain part of the phonograph. *See figure 6-1, ref. B* on the underside of the CD player mounting plate.

4. Slide the player approximately 1 inch toward the front of the phonograph and lift the front of the CD player up slightly and so that you can unplug the two connectors on the back side of the CD player. Remove the connectors by depressing the latches on each connector and separating the connectors from their sockets.
5. Lift the CD player up and out of its mounting bracket.
6. Remove the two rear mounting screws and grommets from the player assembly and install them on the replacement CD player.
7. Immediately place the CD player into the anti-static bag (supplied with the phonograph) and return the CD player to your distributor.

To replace the CD player, reverse the previous steps. *Refer to figure 6-2* for the mechanism control connecting diagram.

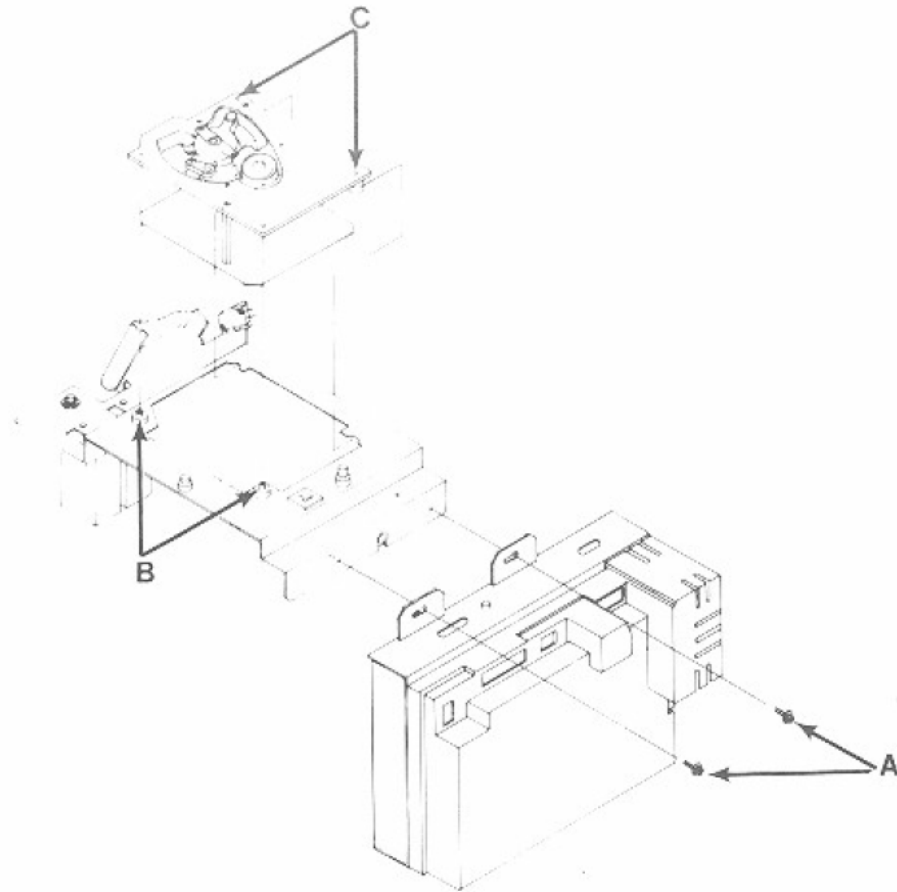


Figure 6-1. Removing the CD Player

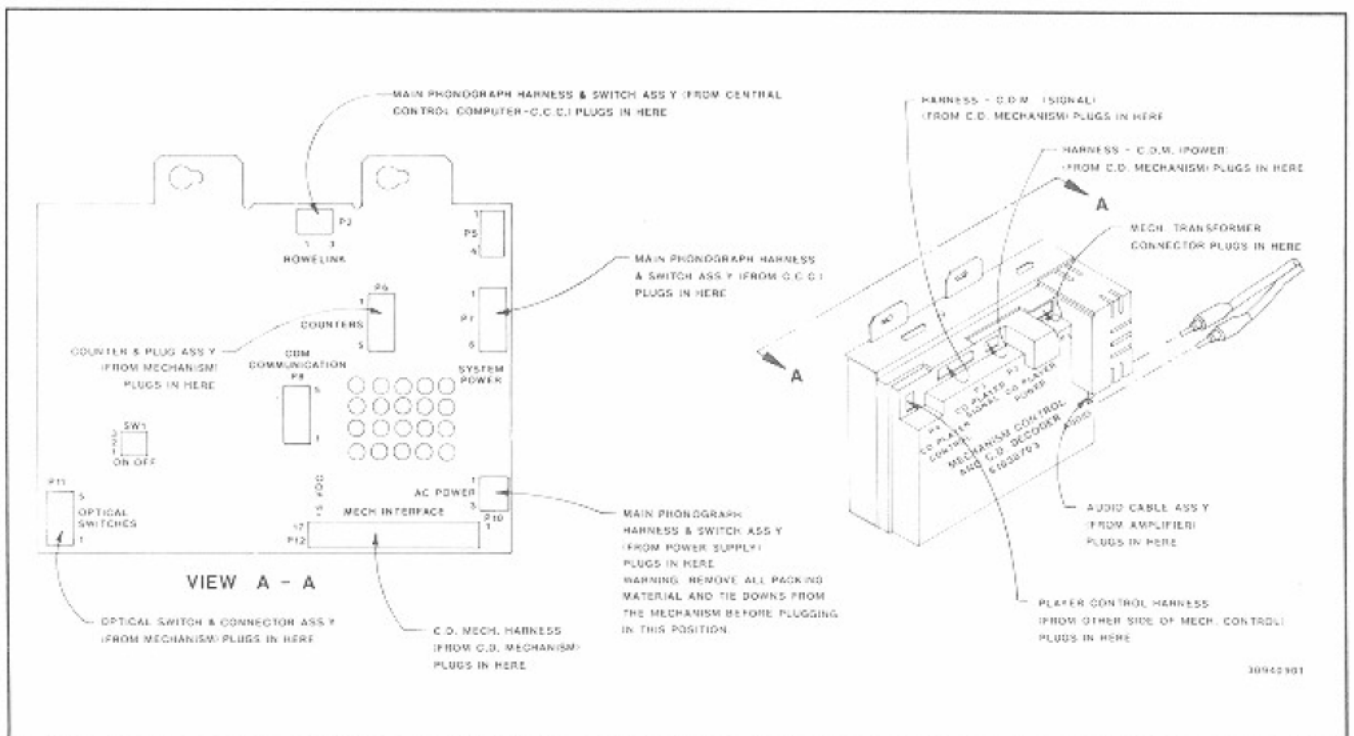


Figure 6-2. Mechanism Connecting Diagram

## Hold Down Assembly And Hold Down Plate Height

### SERVICE CHECK

With the gripper bow in the play position and the disc on the turntable (the outer cam switch is actuated), the aluminum hold down plate (figure 6-3) should be  $3/32$  to  $5/32$  inch ( $1/8 \pm 1/32$ ) under the flange of the magnetic hold down hub.

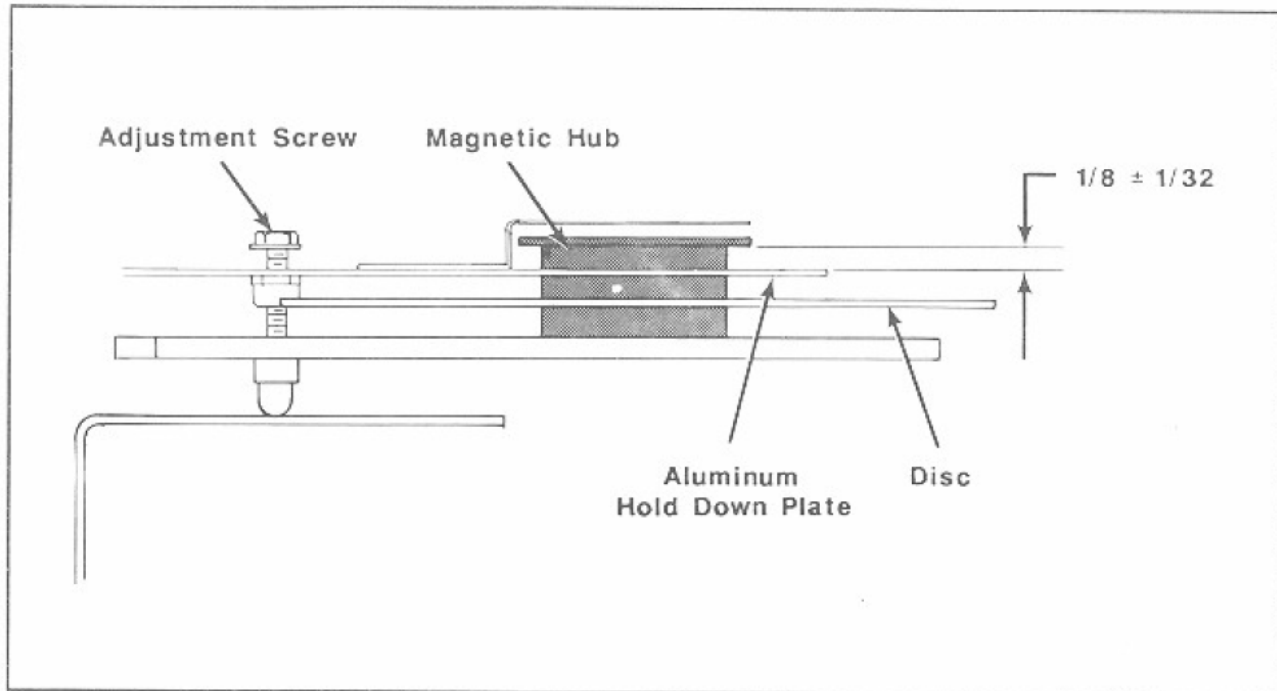


Figure 6-3. Hold Down Plate

### ADJUSTMENT

If the hold down plate height is not correct, turn the adjustment screw (figure 6-3) until the  $3/32$  to  $5/32$  ( $1/8 \pm 1/32$ ) height is attained.

### HOLD DOWN LIFTING CAM ADJUSTMENT

Refer to figure 6-4 as you make this adjustment.

1. With the gripper bow in the SCAN position over the magazine (transfer motor crank in the maximum down position), loosen one Allen-head screw in the collar.
2. Use a  $5/32$  Allen Wrench in the end of the transfer motor shaft to turn the

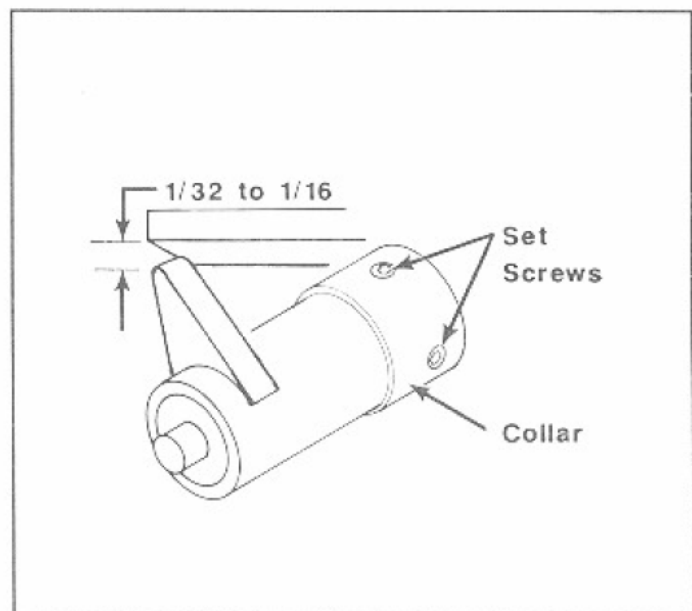


Figure 6-4. Hold Down Lifting Cam Adjustment

motor shaft clock-wise until the gripper bow is in the playing position (transfer motor crank in the up position).

4. Loosen the other Allen-head set screw in the collar.
5. Position the cam to clear the lifting surface by 1/32 to 1/16 inch.
6. Tighten the Allen-head set screws.

### HOLD DOWN PLATE CENTERING

Refer to figure 6-5 for this adjustment.

1. With the gripper bow in the PLAY position and the disc on the turntable, loosen the two centering adjustment screws slightly.
2. Look straight down on the turntable hub and shift the hold down plate until the scribed "witness" line appears to be centered around the magnetic hold down hub. Rotate the disc and turntable hub (notice that the hold down hub will not run perfectly true).
3. Shift the hold down plate until it appears to be in the best compromise position with the slightly off-center position of the hold down hub. Look for equal clearance as it rotates.
4. Tighten the two centering adjustment screws and recheck the previous adjustments.

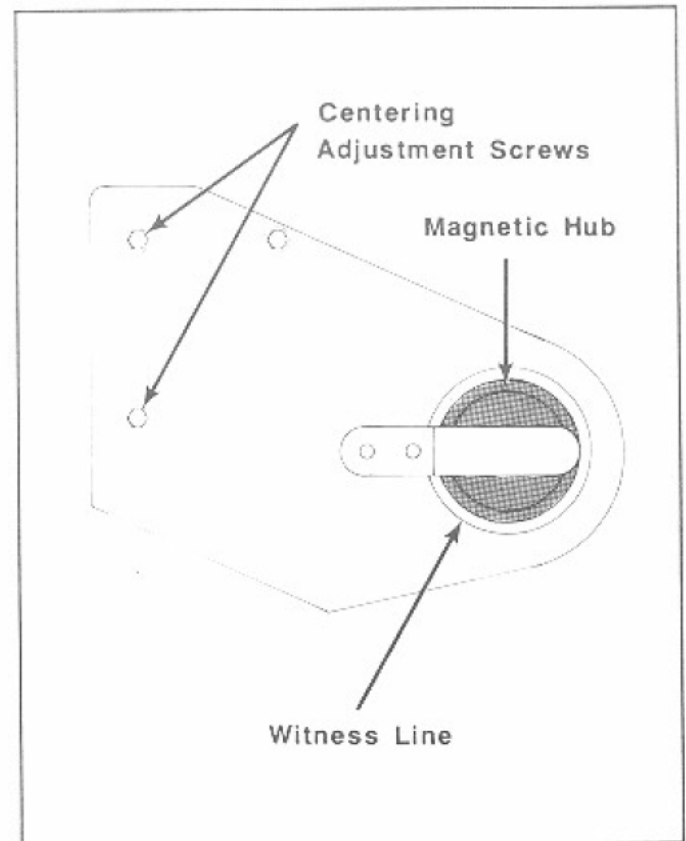


Figure 6-5. Hold Down Centering

### Optical Switch Adjustment

1. Push in the detent plunger, so that the magazine can be rotated to Position 99. Engage the detent plunger.
2. Loosen the optical switch bracket mounting screw, turn the adjustment knob counter clockwise to top of its travel, and move the bracket down to the bottom of its travel (refer to figure 6-6). Snug the optical switch mounting screw, so that the bracket can move with resistance.
3. With the detent plunger engaged, rotate the magazine counter-clockwise to remove gear backlash and maintain pressure for steps 4 and 5.
4. Turn the adjustment knob clockwise until both the INDEX and HOME LED's are ON.
5. Continue turning the adjustment knob clockwise until the INDEX LED goes OFF. The HOME LED must remain ON. Then turn the knob one full turn clockwise and tighten the mounting screw. The INDEX LED must be OFF and the HOME LED can be ON or OFF.

6. Push in the detent plunger and rotate the magazine to Position 06.
7. With the detent plunger engaged, rotate the magazine in both directions as far as you can by hand (taking up the gear backlash in both directions). The INDEX and HOME LED's will remain OFF when properly adjusted.
8. Push in the detent plunger and rotate the magazine to Positions 56, 07, and 57. Repeat step 7 at each position.

Adjusting Knob

Bracket Mounting Screw

Bracket

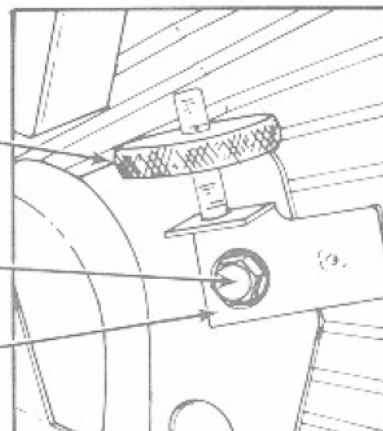


Figure 6-6. Optical Switch Adjustment

## Sprag Assembly

### ADJUSTMENTS

The following steps must be used to make sprag assembly adjustments.



## WARNING:

Turn the power OFF before servicing the sprag assembly.

1. Refer to figure 6-7. Depress solenoid plunger until the roll pin bottoms on the plunger stop (actuate by pressing on plunger).

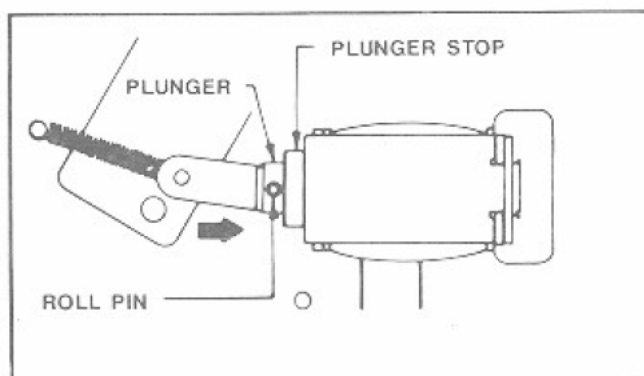


Figure 6-7. Sprag Assembly (Plunger)

2. Rotate the disc magazine and note the clearance between the sprag lever and the sprag wheel located on the backside of the sprag plate assembly.

The sprag lever must not touch the sprag wheel and the clearance must be .015 to .025 inches (see figure 6-8). It will be necessary to remove the sprag assembly if corrections are required.

### SPRAG ASSEMBLY REMOVAL

1. To remove sprag assembly, disconnect wires to the solenoid and motor, remove the three mounting screws and slide the assembly out of the right side of the mechanism (see figure 6-9).
2. Loosen the solenoid mounting screws and with the roll pin against the plunger, position the solenoid so that there is a .015 to .025-inch gap between the sprag lever and the highest point on the sprag wheel (see figure 6-10).
3. Tighten solenoid mounting screws.
4. Replace sprag assembly in mechanism with three mounting screws and replace the Black and White/Blue wires to the solenoid and the Yellow and Yellow/Black wires to the magazine motor.

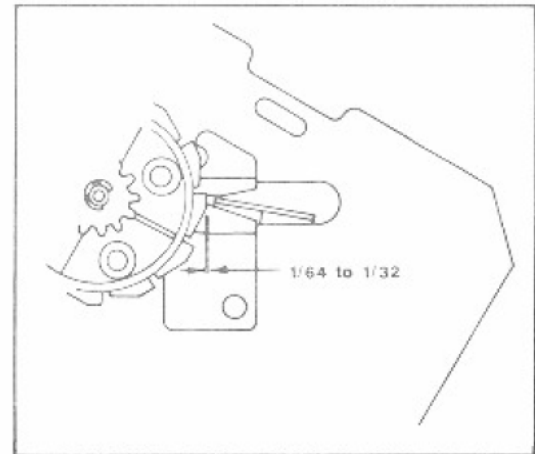


Figure 6-8. Sprag Wheel

Instructions for aligning the disc magazine are in this section under *Aligning Magazine Stopping Position With Transfer Arm*.

To readjust the optical switch, refer to *Optical Switch* in this section.

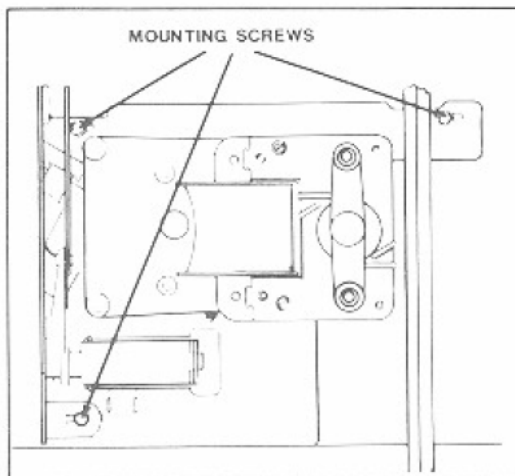


Figure 6-9. Sprag Assembly Removal

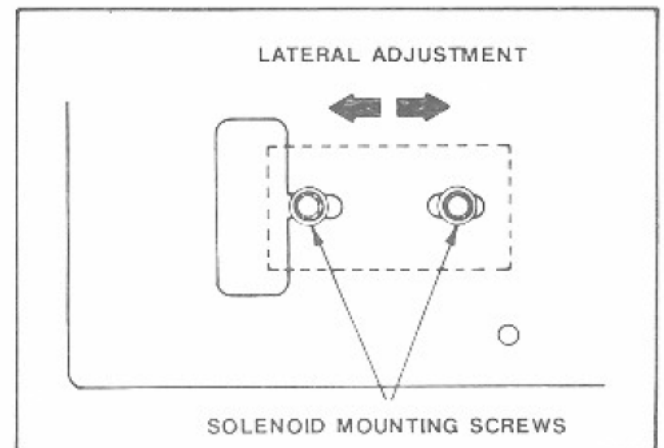


Figure 6-10. Lateral Adjustment

### Disc Magazine Transfer Arm And Support ADJUSTMENT

To eliminate magazine end play and center transfer arm support:

1. Loosen the set screws in rear magazine shaft collar. Push the collar on to magazine shaft to eliminate end play and tighten the screws.
2. Loosen the screw that holds the transfer arm support to the mechanism frame.
3. Adjust the transfer arm support so that the transfer arm is centered in the opening.
4. Tighten the mechanism frame to the transfer arm support screw.



## Cam Switch

### ADJUSTMENTS

If you need to remove the switch cam from the transfer motor, the following procedure must be followed to ensure that the cam is properly located and not 180 degrees out of position.

Locate the inner lobe so that it is pointing in the same direction as the crank. Turn cam so that neither cam lobe is on a switch before removing or installing the cam (see figure 6-11).

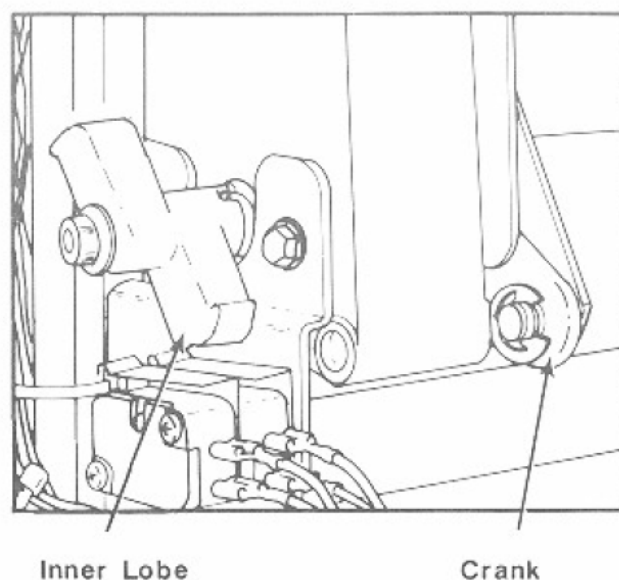


Figure 6-11. Cam Switch

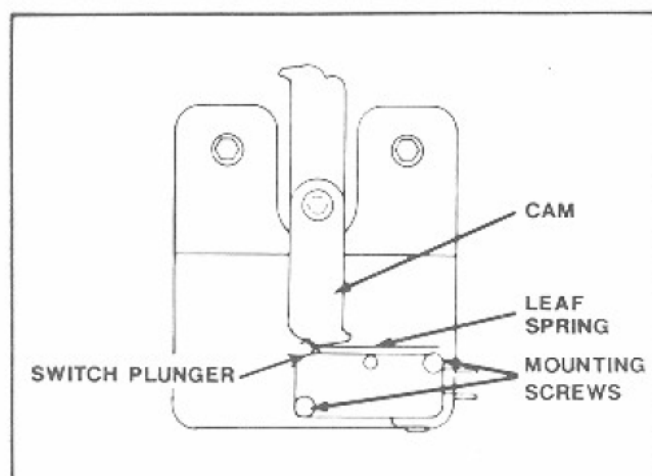


Figure 6-12. Cam Switch Adjustment

### CAM SWITCH CHECK AND ADJUSTMENT

1. Check that the plastic cam leaf spring is resting in the cam lobes and that the switch plunger just touches the bottom of the leaf spring as shown in figure 6-12.
2. To adjust the switches, loosen mounting screw under plunger end and move the switch housing as described in the previous step (see figure 6-12).
3. Tighten mounting screw and recheck operation.

## Magazine Belt Adjustment

1. Loosen the two adjustment screws shown in figure 6-13.
2. Raise the bracket to tighten the belt around the magazine.
3. Check that belt rides evenly in the center of the belt guides, all the way around the magazine.
4. Tighten the two adjustment screws.

### Aligning Magazine Stopping Position With The Transfer Arm

1. For this adjustment use a disc in good condition without warp or dish. Place this disc in any position in the disc magazine and rotate the magazine until this disc is in the top position. Allow the magazine sprag lever to engage and lock the magazine in this position.
2. Using a 5/32-inch Allen wrench in the end of transfer motor shaft, turn motor shaft clockwise until the gripper bow lifts the disc out of the magazine, and the outer shoe is approximately 3 inches from its rest position (see figure 6-14).

In this position, a center line from the inner shoe through the center of the outer shoe will pass through the back of the plastic disc guide on the magazine.

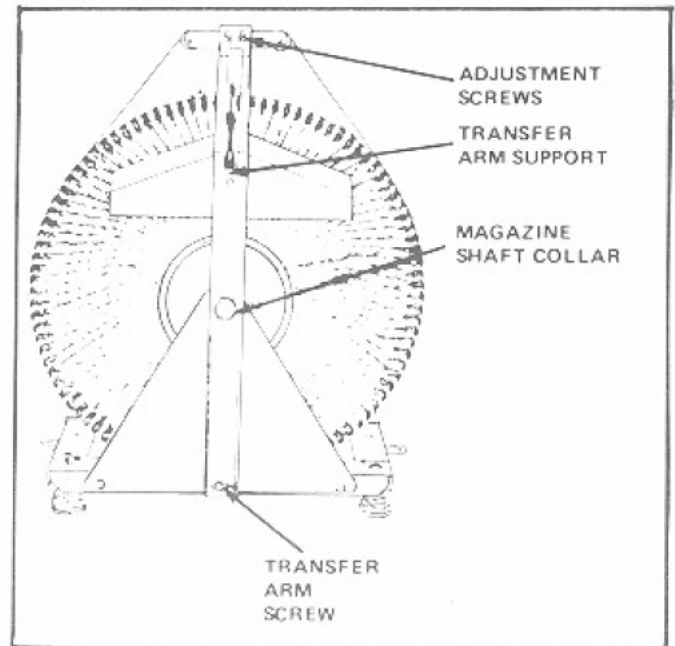


Figure 6-13. Magazine Belt Adjustment

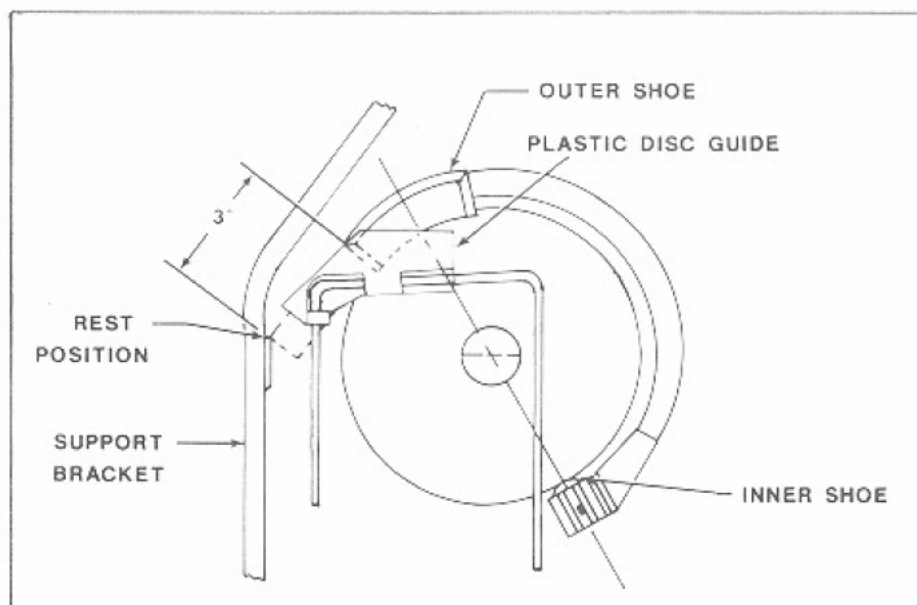


Figure 6-14. Magazine and Transfer Arm Position

3. With the disc and gripper bow in this lifted position, rock the magazine to the left and right and make sure the plastic magazine disc guides do not come in contact with the disc on either side.

If the guide makes contact with the disc on one side or magazine space does not center with the disc, the following adjustment to the magazine will be necessary:

4. Loosen three screws in the magazine motor mounting plate.
5. With sprag wheel locked, move the magazine until the disc is centered between belt guides (The adjustment screws will be approximately centered in the slots, *see figure 6-15*).
6. Tighten the three screws in the magazine motor mounting plate securely.

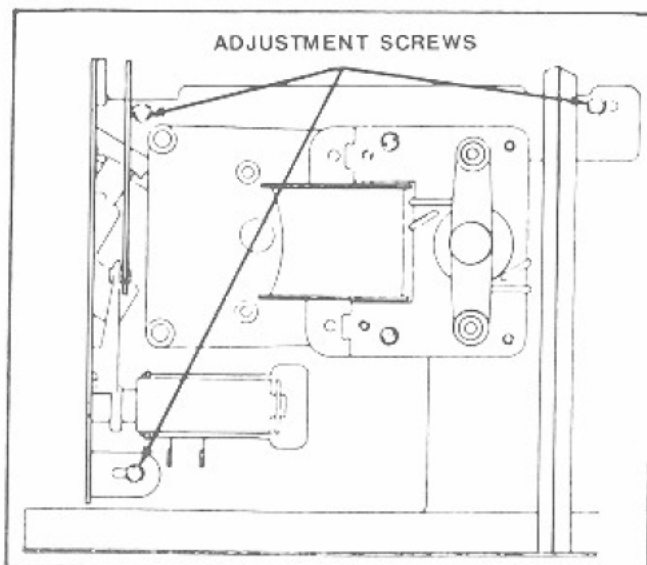


Figure 6-15. Magazine Adjustment

### Title Rack Switch Adjustment



#### CAUTION:

Do not attempt to turn the CD title pages by hand unless you use the handwheel on the back of the title rack (see figure 1-2).

Refer to figure 6-16 for illustration of the title rack adjustment.

1. Open the top door, unplug the title rack from the phonograph, and remove the title rack from the phonograph.
2. Loosen the switch mounting screw and the adjusting screw so that the switch can be rotated.
3. Use the handwheel to move the rack and pinion (and the title rack pages) so that the switch roller is directly over the top of one of the rack lobes. This will cause two of the title rack pages to point approximately straight out.
4. Insert a 0.040-inch feeler gauge between the switch body and the switch actuator arm.
5. Slowly rotate the switch downward until all clearance between the switch and the switch body is removed.

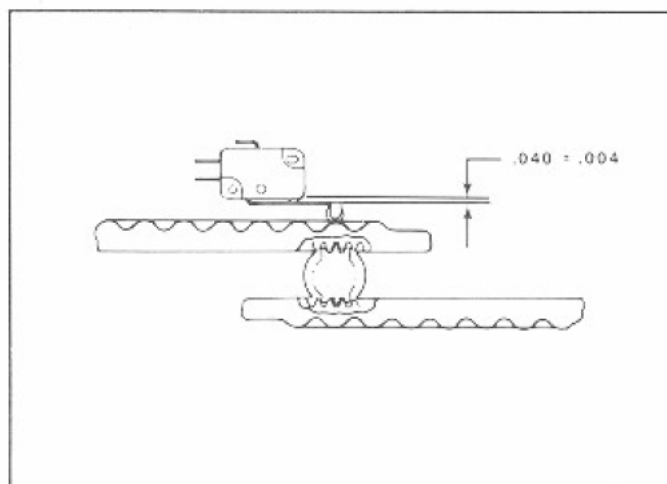


Figure 6-16. Title Rack Switch Adjustment

6. Tighten the switch mounting screw and the switch adjustment screw.
7. Turn the handwheel in both directions and verify that the switch clicks before the roller reaches the bottom of the rack (as it rolls "down hill") and before it reaches the top of the rack (as it rolls "up hill"). This distance should be approximately halfway between the peaks and the valleys of the lobes.
9. Re-install the title rack.
10. Perform *Title Page Re-Synchronizing* that follows this step.

### **Title Page Re-Synchronizing**

Title page re-synchronizing is necessary whenever power to the phonograph is interrupted or after the title pages have been changed with the handwheel.

1. Press either PAGE CHANGE button repeatedly until the pages no longer change (The pages may not advance as far as you expect them to. This is normal when the pages are being re-synchronized).
2. Press the other PAGE CHANGE button repeatedly until the pages no longer change.

## Section 8: Parts Catalog

<b>Paragraph</b>	<b>Page</b>
<b>CD-100A CODE SHEET</b> .....	8-2
<b>INTRODUCTION</b> .....	8-3
Catalog Description .....	8-3
Parts List Description .....	8-3
Ordering Replacement Parts .....	8-3
<b>PHONOGRAPH ASSEMBLY EXTERNAL VIEW</b> .....	8-5
<b>TOP DOOR ASSEMBLY</b> .....	8-9
<b>FRONT DOOR ASSEMBLY</b> .....	8-13
<b>TITLE RACK ASSEMBLY</b> .....	8-17
<b>PHONOGRAPH ASSEMBLY INTERNAL VIEW</b> .....	8-19
<b>COIN CHUTE ASSEMBLY</b> .....	8-21
<b>OBA-2 ASSEMBLY</b> .....	8-23
Transport Assembly .....	8-25
Transport Roller & Shaft Assemblies .....	8-29
Lower Harness Assembly .....	8-30
Harness & Holder Assembly .....	8-31
500 Bill Stacker Assembly .....	8-33
<b>AMPLIFIER COMPARTMENT</b> .....	8-35
Stereo Amplifier Assembly .....	8-37
Heat Sink Detail .....	8-38
Output Transformer Assembly .....	8-39
Main Power Supply .....	8-41
Central Control Computer Assembly .....	8-43
<b>MECHANISM ASSEMBLY</b> .....	8-45
Sprag Assembly .....	8-54
Cam Switch and Motor Assembly .....	8-55
<b>ACCESSORY EQUIPMENT</b> .....	8-56

COUNTRY 1st & 2nd DIGIT	PACK 3rd DIGIT	CD-100A SUB-ASSEMBLY 4th & 5th & 6th DIGIT	AMPLIFIER 7th DIGIT	BILL ACCEPTOR 8th DIGIT
01 = US	1 = DemPack = 2-19410-02	200 = Gold (60HZ) = 6-10450-01 201 = Gold (50HZ) = 6-10450-02	0 = None 1 = 2 = 3 = 3-06322-09 Remote Volume Cont. Assy 4 = 5 = 6 = 250W Amp. 6-10249-02 7 = 250W Amp. 6-10249-02 with 3-06322-09 Remote Volume Control	0 = None 1 = 2 = 3 = 4 = 5 = 6 = OBA 2-19411-01 W/Stacker 7 =
02 = Arg				
03 = Australia				
04 = Aus				
05 = Bah				
06 = Belg				
07 = Canada				
08 = Chile				
09 = Col				
10 = Costa R				
11 = Neut. Stk				
12 = Denmark				
13 = Ecuador				
14 = El Salv				
15 = England				
16 = Finland				
17 = France				
18 = Germany				
19 = Guat				
20 = Holland				
21 = Hon				
22 = Italy				
23 = Belize				
24 = Japan				
25 = Mexico				
26 = Mexco				
27 = Nic				
28 = Norway				
29 = Aruba				
30 = Panama				
31 = Curaco				
32 = Spain				
33 = Sweden				
34 = Swiss Fr				
35 = Swiss Ge				
36 = Swiss It				
37 = Trinidad				
38 = Eng Video				
39 = Venez				
40 = Zambia				
41 = Puerto R				
42 = Guyana				
43 = Brazil				
44 = Barbados				
45 = Surinam				
46 = Yuga				
47 = S. Africa				
48 = US (220V)				
49 = US (240V)				

SUB-ASSEMBLY CATEGORY	COIN ACCEPTOR 8th DIGIT
001-049 R-93	0 = None
050-088 CD-100	1 =
200-249 CD-100A	2 = Export Rej. (Special) = 7-08519-XX
	3 = 3 Coin Canadian Bdr. = 4-06962-01
	4 = Kit-Mars Slug Rej. = 2-18851-05
	5 =
	6 =
	7 =
	8 =
	9 =
	*Requires 4-07038-11

SAMPLE:

01	1	200	6	7	4
----	---	-----	---	---	---

Diagram showing connections from sample digits to sub-assembly categories:

- 01 connects to 001-049 R-93
- 1 connects to 050-088 CD-100
- 200 connects to 200-249 CD-100A
- 6 connects to 250 Watt Amplifier 6-10249-02
- 7 connects to OBA 2-19411-01 W/Stacker
- 4 connects to Canadian Border 3 Coin Acceptor 4-06962-01

CD-100A Codes

Revision D

## INTRODUCTION

This parts catalog lists procurable replacement parts for the phonograph. The purpose of this parts catalog is to locate and identify replaceable components and supply information on how to order them.

### Catalog Description

This catalog is divided into major sections labeled figures, which correspond to the illustrations used. Some assemblies require more than one illustration to identify the parts. Each page has a sheet number to identify the sheet as part of that assembly's parts list.

Since replacing parts that are welded or riveted onto an assembly is normally impractical, replacement parts are not listed for these items. The assembly that contains the welded part should be replaced.

### Parts List Description

The parts list contains four columns:

- **Figure, Sheet, and Index Number** – The first entry in this column is the figure number of the corresponding illustration. An index number, when listed, corresponds to the index number appearing on the illustration. Index numbers are not used when items are listed for reference purposes only or when the item listed is an alternate part.
- **Rowe Part Number** – This column lists the part number to use when ordering replacement parts or making inquiries.
- **Description** – This column gives a word description of each part or assembly. Each item is indented to show its relationship to the next higher assembly.
- **Qty** – This column contains the part quantity used in the assembly. When a figure describes more than one model of an assembly, the "Qty" column is divided to show each model.

### Ordering Replacement Parts

All replacement parts must be ordered directly from an authorized Rowe Distributor.

Once the replacement item has been determined, complete a Standard Parts Order Form. (available from your Rowe Distributor at no charge) Very often parts orders are delayed because of inadequate or incompletely filled out parts order forms. To enable prompt delivery, always specify the following information:

- Part Number and Description (indicate color, if applicable)
- Quantity required
- Machine Model and Serial Number
- Complete shipping address, including the ZIP code
- Shipping Instructions must be supplied. If the shipping method is Parcel Post, Air Parcel Post, United Parcel Service, or Air UPS, and the packages may exceed the size and weight limits of these services, indicate an alternate shipping method.

If the shipment must be delivered as fast as possible, specify "Fastest Way". Rowe will select the carrier for orders that justify shipment by truck.

# Figure 8-1. CD-100A Phonograph External View

Sheet 1

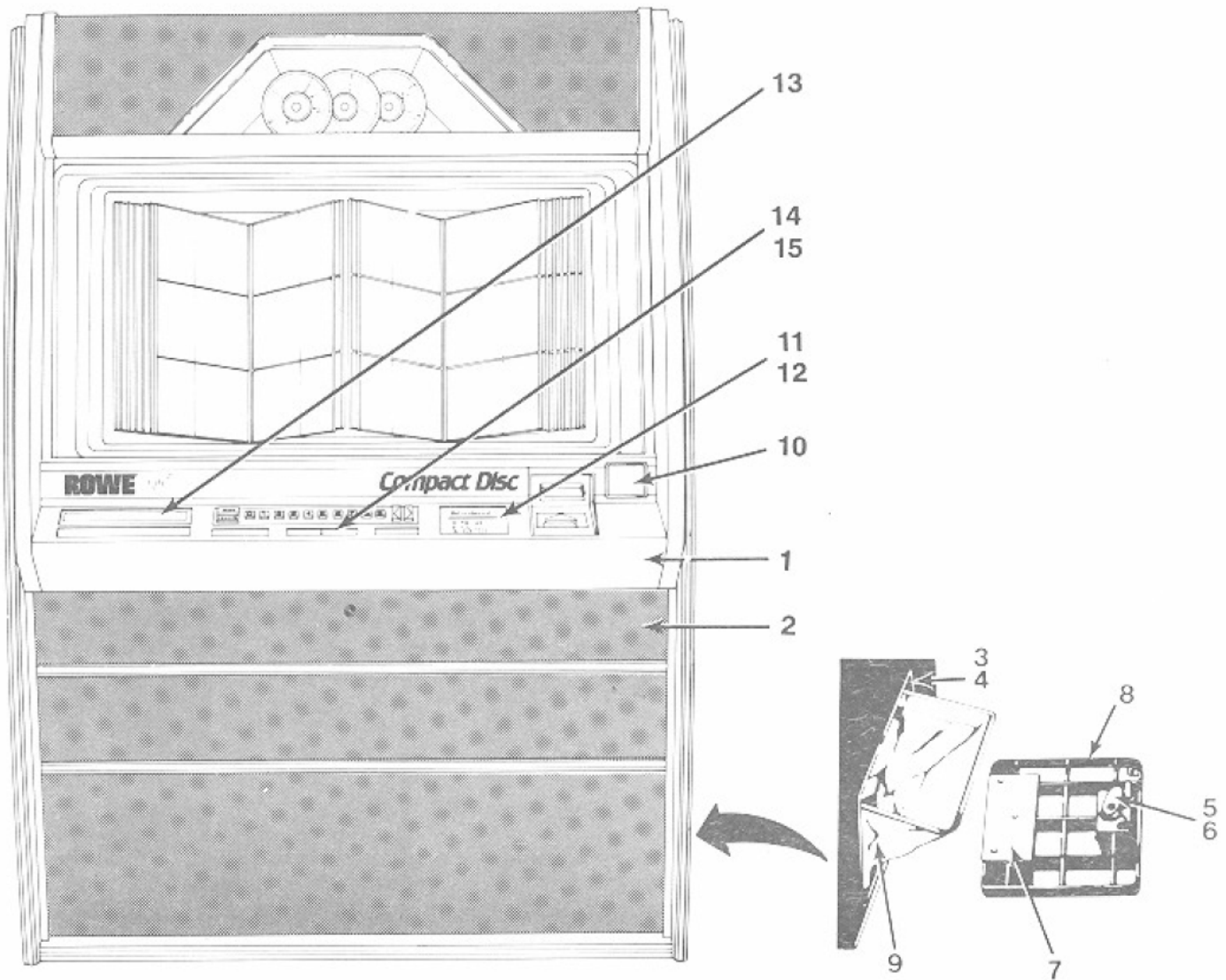




Figure 8-1 CD-100A Phonograph External View (Sheet 1)

Ref.	Part No.	Description	Qty
	61045001/02	CD-100A Phonograph Assembly (60/50 Hz)	Ref.
1	61034002	Top Door Assembly (see figure 8-2)	1
2	61034502	Front Door Assembly (see figure 8-3)	1
3	40527605	• Cash Box Door Frame	1
4	21776005	• "U" Type Speed Clip	1
	21186605	• Cash Box Door Assembly	1
5	70162004	• • Cylinder Lock	1
6	20669501	• • Lock Support	1
7	20770301	• • Catch Bracket	1
8	60326705	• • Cash Box Door	1
9	30702601	• Cash Bag	1
	70212507	• • Felt Adhesive Tape	1
	70166008	• • Lock Bolt-Straight	1
10	30939001	• Blockout-Coin Inlet	1
11	21845612	• Window - Price Card	1
12	Ref.	• Price Card (see the table on the following page)	1
13	Ref.	• Card Readout (see the table on the following page)	1
14	21845611	• Window - Selector	1
15	Ref.	• Card-Selector Graphics (see the table on the following page)	1

Price Card Part Numbers			
Price Card Language	Alternate Price Card	Card Readout	Card-Selector Graphics
Spanish	30952901	30953001	30953101
German	30952902	30953002	30953102
French	30952902	30953003	30953103
England	30952906		
England	30952916		

# Figure 8-1. CD-100A Phonograph External View

Sheet 2

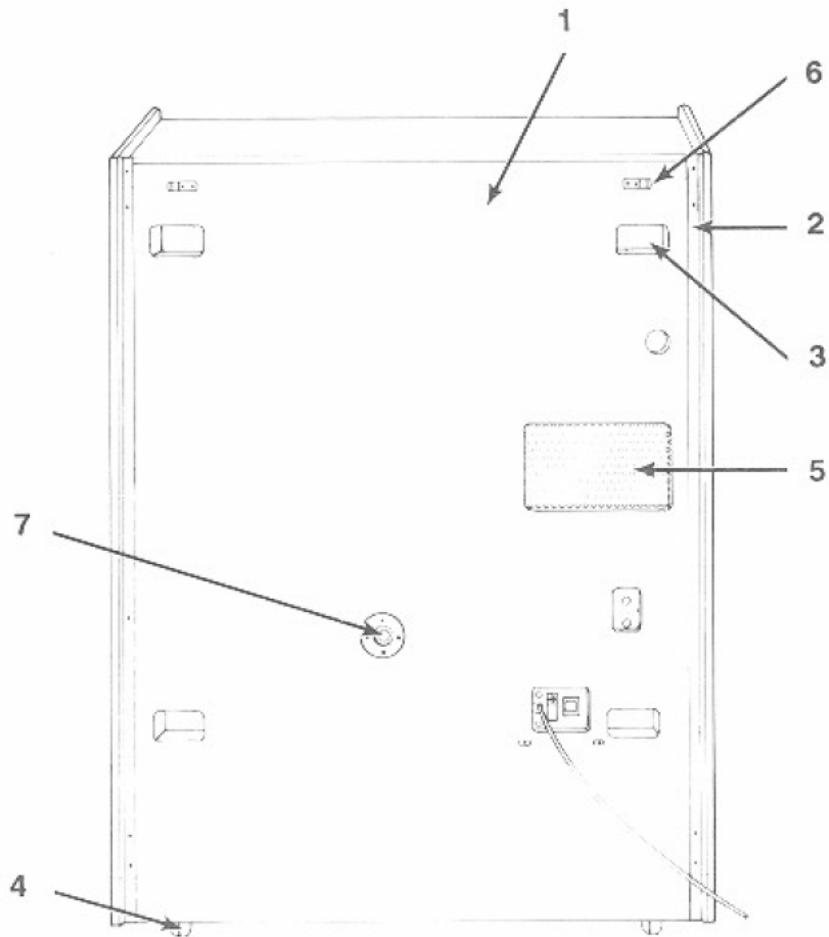
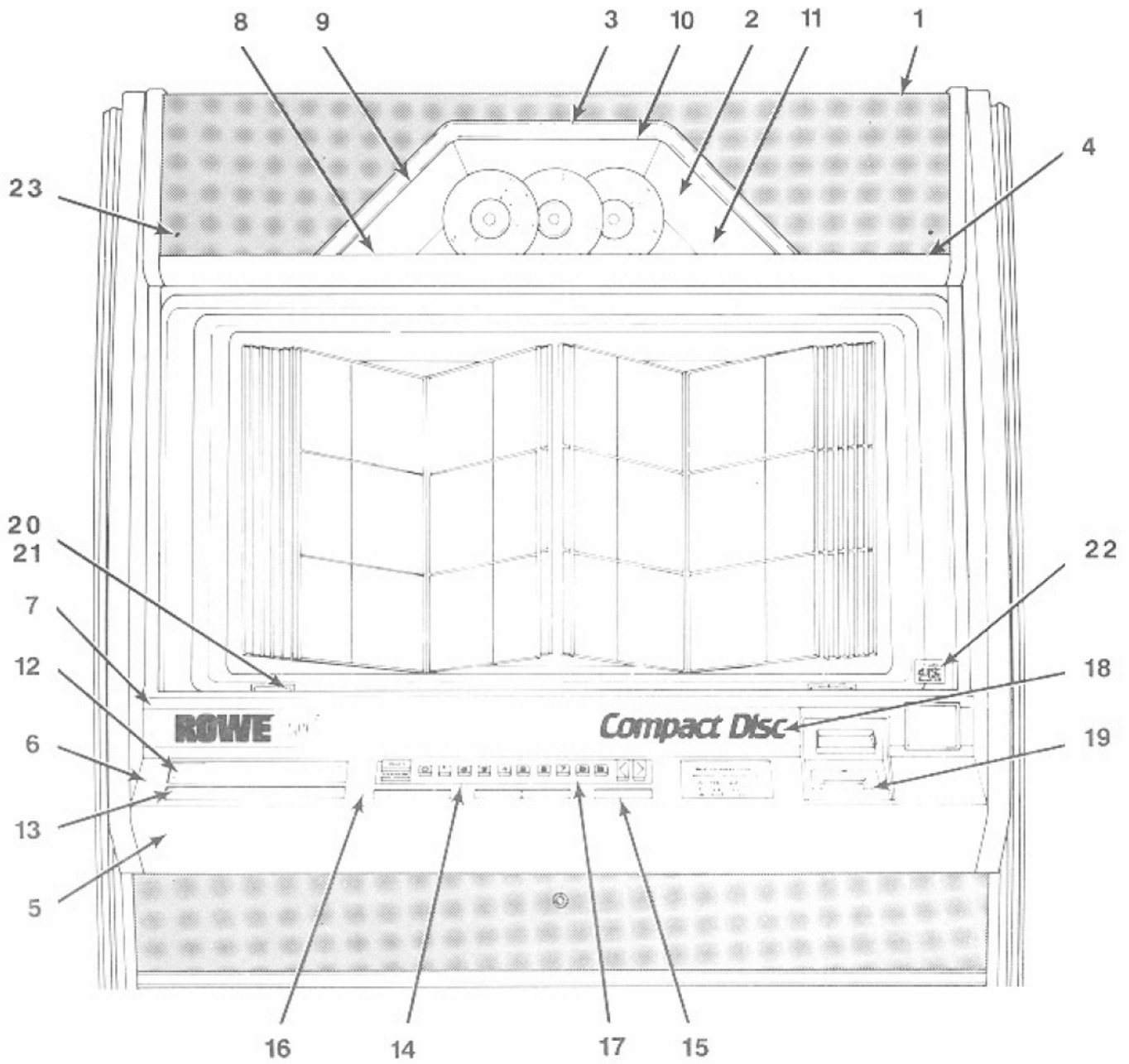


Figure 8-1 CD-100A Phonograph External View (Sheet 2)

Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz)	Ref.
1	61035002	• Shell Assembly	1
	60927901	• Bracket-Cash Bag	1
	21451801	• Lock Spring	1
	30866905	• Protective Strap	2
	70240126	• Screen-Wire Mesh	1
	21537203	• Tee Nut	2
	20932601	• Tee Nut	6
	21750618	• Vent Tube	1
	21750616	• Vent Tube	1
2	40702808	• Skid Rail	2
3	30625701	• Hand Hold Cover	4
4	30634001	• Caster and Cup Assembly	4
5	30868402	• Enclosure Screen	1
6	20879501	• Power Cord Holder	2
7	21265203	• Tie Down Plate Assembly	1

# Figure 8-2. CD-100A Phonograph Top Door Assembly

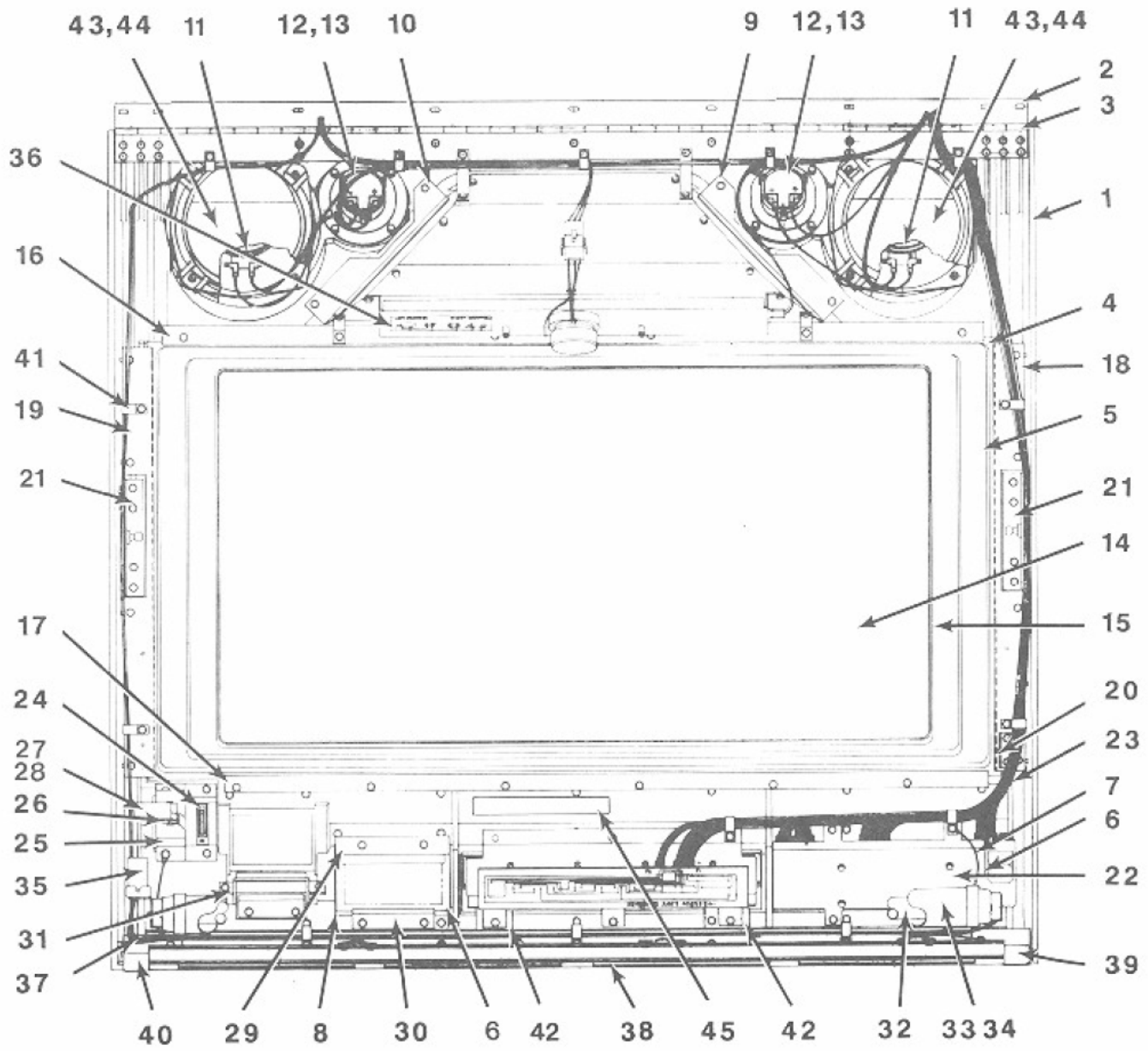
Sheet 1



Ref.	Part No.	Description	Qty
	61034002	Top Door Assembly . . . . .	Ref.
1	61034102	• Grille - Upper . . . . .	1
2	61036002	• Animation Assembly . . . . .	1
	61037001	• • Housing - Animation . . . . .	1
	61037101	• • Housing - Side (LH) . . . . .	1
	61037201	• • Housing - Side (RH) . . . . .	1
	30936901	• • Plate Assembly - Animation Drive . . . . .	1
	30937201	• • Bracket - Animation Mounting (Upper) . . . . .	2
	30937301	• • Bracket - Animation Mounting (Lower) . . . . .	2
	40824302	• • Motor & Harness Assembly . . . . .	1
	30936701	• • Shaft . . . . .	2
	70143001	• • Ring - External Retaining . . . . .	4
	21110001	• • Washer - Thrust . . . . .	2
	40834901	• • Gear . . . . .	3
	21532801	• • Speednut - Push On . . . . .	3
	61037402	• • Printed Wiring Board - CD Animation . . . . .	1
	21862201	• • Lamp & Socket Assembly . . . . .	8
	30866501	• • Lens - Brown . . . . .	4
	30866504	• • Lens - Magenta . . . . .	2
	30866503	• • Lens - Clear . . . . .	2
	40834801	• • Support - Disc . . . . .	3
	21922201	• • Ring - Compression . . . . .	3
	30926903	• • Disc - Animation . . . . .	3
	21922602	• • Label - Copyright . . . . .	1
	21955701	• • Label-Animation Removal (After 5-31-90) . . . . .	1
	79920100	• Resistor - Wire Wound (10 Ohm, 2 Watt) . . . . .	1
3	61033404	• Trim - Animation Box . . . . .	1
4	61033503	• Trim - Speaker Panel . . . . .	1
5	40837102	• Trim & Strike Assembly . . . . .	1
6	61033202	• Trim - Control Panel . . . . .	1
7	61033102	• Trim - Control Panel (Upper) . . . . .	1
8	70212213	• Sponge Rubber - Closed Cell . . . . .	1
9	70212214	• Sponge Rubber - Closed Cell . . . . .	2
10	70212215	• Sponge Rubber - Closed Cell . . . . .	1
11	40834101	• Window - Animation . . . . .	1
12	21845610	• Window - Digital Display . . . . .	1
13	61033801	• Trim - Keyboard . . . . .	1
14	30934804	• Card - Readout . . . . .	1
15	70212230	• Sponge Rubber - Closed Cell . . . . .	2
16	70212231	• Sponge Rubber - Closed Cell . . . . .	4
17	40833501	• Keyboard Assembly . . . . .	1
	21949601	• Keyboard Key Kit - Complete Set Of Numbers . . . . .	1 Set
	21949701	• Keyboard Key Kit - Four Button Set (POPULAR, <<, >>, RESET) . . . . .	1 Set
18	61036202	• Decal - Compact Disc . . . . .	1
19	30935102	• Decal - B.A. Inlet . . . . .	1
20	30921502	• Frame - License (White) . . . . .	2
21	21921001	• Retainer - License . . . . .	2
22	21922001	• Sticker - CD . . . . .	1
23	70136508	• Brad - Cohered . . . . .	2
	21955701	• • Label - Flag . . . . .	1

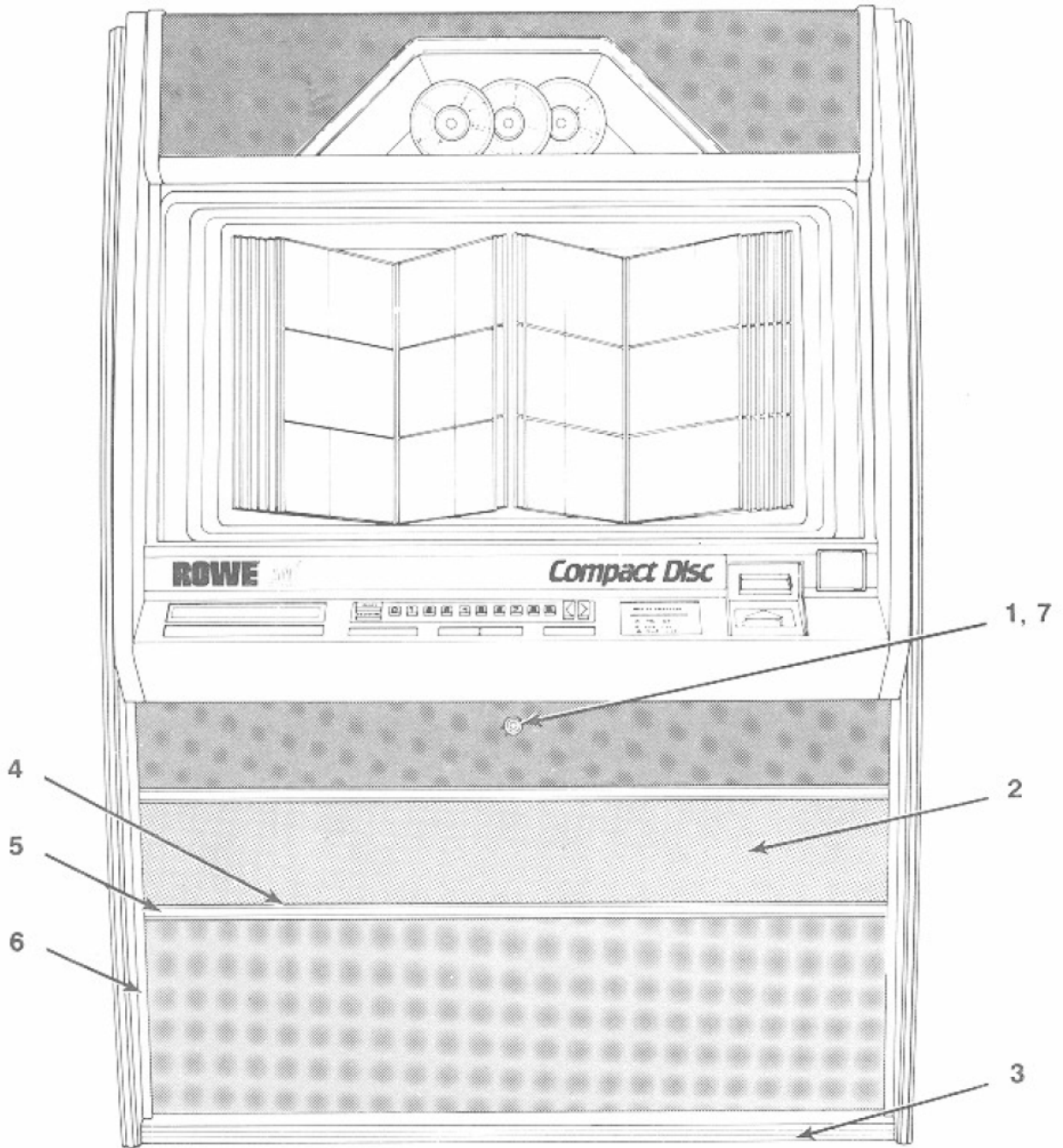
# Figure 8-2. CD-100A Phonograph Top Door Assembly

Sheet 2



Ref.	Part No.	Description	Qty
	61034002	Top Door Assembly	Ref.
1	61033602	• Frame - Top Door (CD-100A)	1
2	61035801	• Hinge - Top Door	1
3	70220485	• Foamed Tape	1
4	70212211	• Sponge Rubber - Closed Cell	2
5	70212212	• Sponge Rubber - Closed Cell	2
6	70212227	• Sponge Rubber - Closed Cell	4
7	70212228	• Sponge Rubber - Closed Cell	3
8	70212229	• Sponge Rubber - Closed Cell	2
9	30934301	• Bracket - Mounting (Animation Window) LH	1
10	30934401	• Bracket - Mounting (Animation Window) RH	1
11	40830801	• Speaker - Mid Range (6")	2
12	40830901	• Speaker - Tweeter (3")	2
13	21944401	• Spacer - Speaker	8
14	21845609	• Window - Top Door	1
15	61036101	• Housing - Title Rack	1
16	30934501	• Bracket - Mounting (Window - Upper)	1
17	30934601	• Bracket - Mounting (Window - Lower)	1
18	40834301	• Bracket - Mounting (Window LH)	1
19	40834401	• Bracket - Mounting (Window RH)	1
20	21941901	• Actuator - Reset	1
21	30934701	• Pivot Assembly - Gas Spring	2
22	40832301	• Digital Display Assembly	1
23	40833402	• Harness Assembly - Digital Display	1
24	40831802	• Inlet - Coin	1
25	30931601	• Bracket - Guide (Reject)	1
26	21834801	• Channel	2
27	21822901	• Spring - Compression	1
28	21942302	• Button & Shaft Assembly - Reject	1
29	40831701	• Holder - Price Card	1
30	21942401	• Bracket - Holder (Price Card)	1
31	30931401	• Insert - B.A. Inlet	1
	40836303	• Blockout - Bill Acceptor (Models without bill acceptor. Blockout not shown)	1
	30939402	• Decal - Coin Blockout (Models without coin acceptor. Decal not shown)	1
32	70060112	• Lamp - Fluorescent (30 W T-8)	1
33	61036501	• Tube - Color	1
34	61037602	• Filter - Color	1
35	70080004	• Starter - Fluorescent (FS-4)	1
36	30935301	• Label - Speaker Harness	1
37	40834501	• Harness Assembly - Top Door Light	1
38	30935601	• Diffuser - Light	1
39	30939701	• Bracket - Light Block (LH)	1
40	30939801	• Bracket - Light Block (RH)	1
41	70093401	• Clamp - Cable (17/32)	14
42	30941401	• Bracket - Hold Down (Graphics)	2
43	30951201	• Pad - Acoustical (Speaker Cover)	4
44	61042801	• Housing - Speaker	2
45	21948801	• Label - Warning	1
	30935601	• Diffuser - Light	1
	25240601	• Jumper Assembly	2

Figure 8-3 CD-100A Front Door Assembly  
Sheet 1

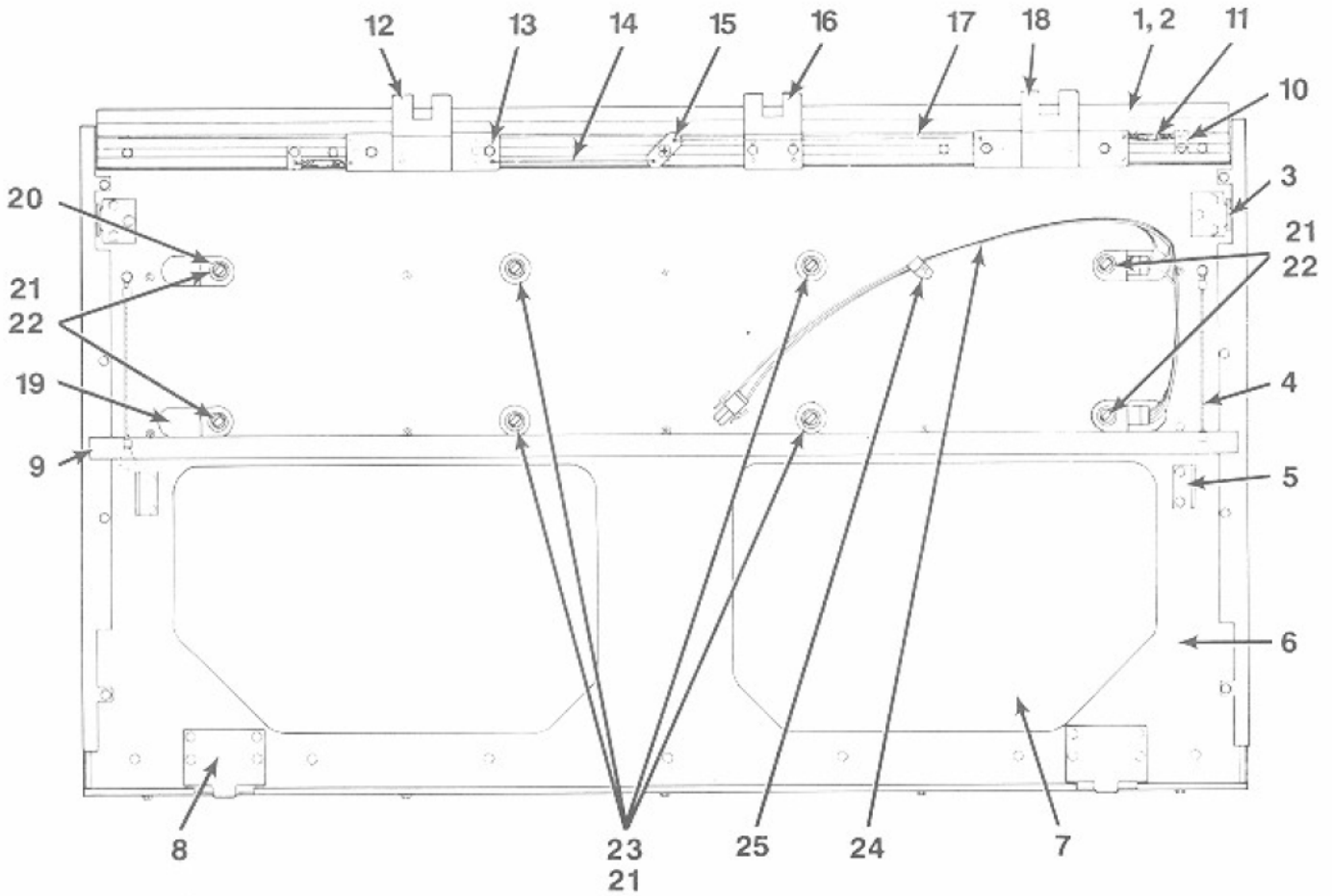




Ref.	Part No.	Description	Qty
	61034502	Front Door Assembly	Ref.
1	70163211	• Cylinder - Lock (Common Key)	1
2	61034302	• Grille - Lower	1
3	61033702	• Trim - Bottom	1
4	30950501	• Trim - Grille	2
5	30898401	• Diffuser - Trim	2
6	40831302	• Trim - Side	2
7	21795305	• Bezel - Lock	1

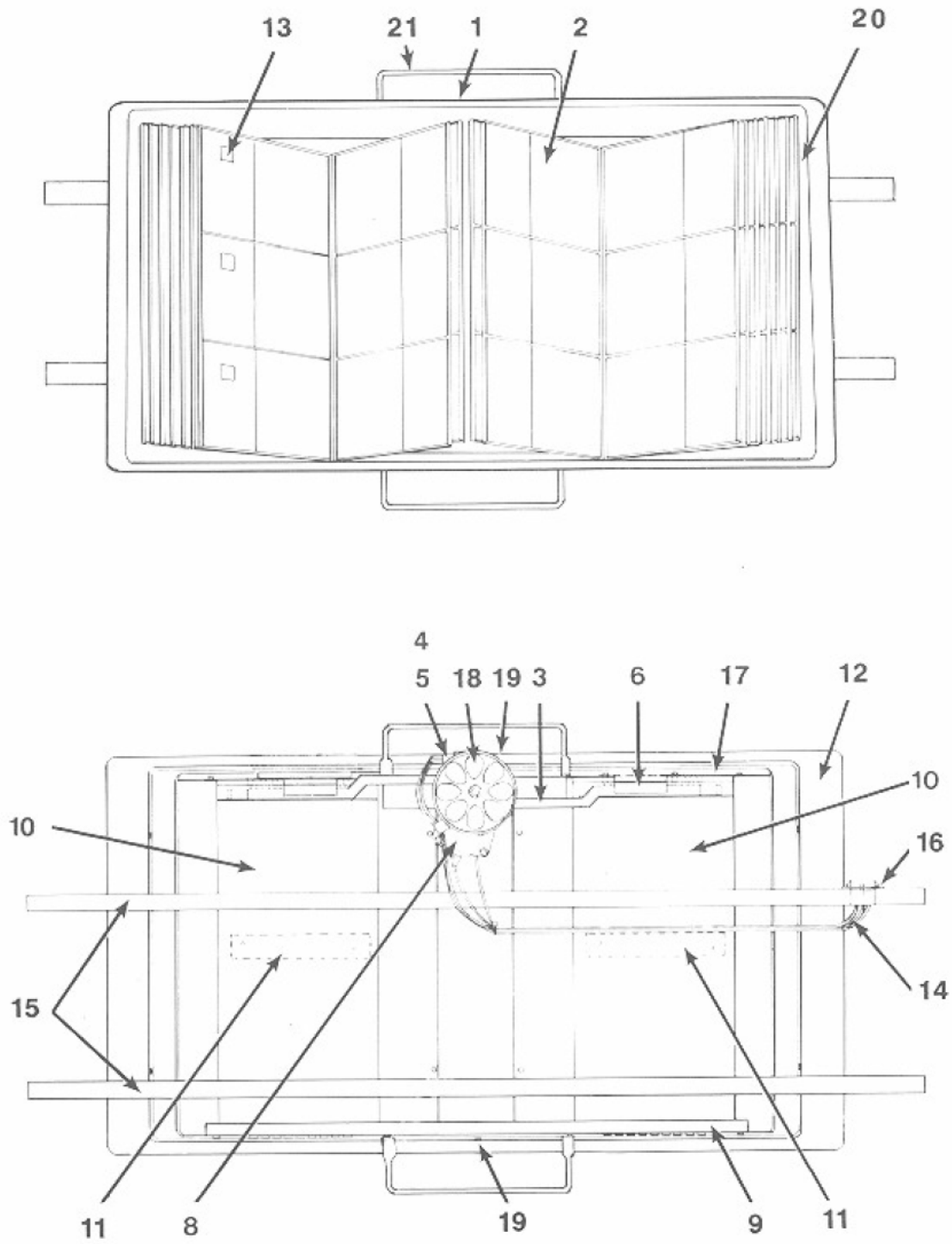
# Figure 8-3 CD-100A Front Door Assembly

(Sheet 2)



Ref.	Part No.	Description	Qty
	61034502	Front Door Assembly	Ref.
1	61034402	• Lockbar	1
2	70220488	• Foamed Tape	1
3	21883504	• Strike	2
4	21572601	• Cable - Fall Stop	2
5	21920101	• Bracket - Upstop	2
6	61034202	• Panel - Door (Lower)	1
7	40833602	• Scrim - Front Door	1
8	21940801	• Strap - Hinge	2
9	70220486	• Foamed Tape (3/4 x 1/2 x 39)	1
10	21567401	• Retainer - Spring	2
11	21256201	• Spring - Tension	2
12	21941801	• Lockbar Assembly (RH)	1
13	20922502	• Spacer	4
14	21724905	• Link - Lockbar	1
15	21425601	• Bolt - Lock	1
16	21941301	• Catch	1
17	21724902	• Link - Lockbar	1
18	21941701	• Lockbar Assembly (LH)	1
19	40844901	• Insulator	2
20	40845501	• Printed Wiring Board	2
21	21862201	• Lamp and Socket Assembly	8
22	30866504	• Lens - Magenta	4
23	30866501	• Lens - Brown	4
24	30951701	• Harness - Front Door Harness	1
25	70093101	• Cable Clamp	1
	70212219	• Sponge Rubber - Closed Cell	1

Figure 8-4 Title Rack Assembly



Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz)	Ref.
1	61035701	• Title Rack Assembly	1
2	30933901	•• Page & Clip Assembly	18
3	40833802	•• Rack CD Title Page	2
4	21942201	•• Switch - Micro	2
5	21083001	•• Nut - Twin	1
6	30935501	•• Guide - Side (CD Page Assembly)	2
7	30935001	•• Guide - Center, CD Page Assembly (Not Shown)	1
8	30936301	•• Motor & Gear Assembly	1
9	61036801	•• Plate - Bottom (CD Page Assembly)	1
10	61036902	•• Support - Vertical (CD Page Assembly)	1
11	40834701	•• Guide - Center (CD Page)	2
12	61036601	•• Shroud	1
13	40835401	•• Strip - Numbers (Page)	1
14	30938501	•• Harness Assembly - Interconnect	1
15	40835301	•• Brace - Mounting	2
16	30938301	•• Plate - Connector	1
17	61036701	•• Plate - Top (CD Page Assembly)	1
18	40836201	•• Knob	1
19	30940701	•• Label - Warning	2
20	30940801	•• Bumper - Page	4
21	30941801	•• Handle	2
	30941101	•• Bracket - Light Block	2
	21944401	•• Spacer - Speaker	4
	70134129	•• Screw - Special (#8-18 Griplock)	33
	70800106	•• Cable Tie	2

Figure 8-5. CD-100A Phonograph Internal View

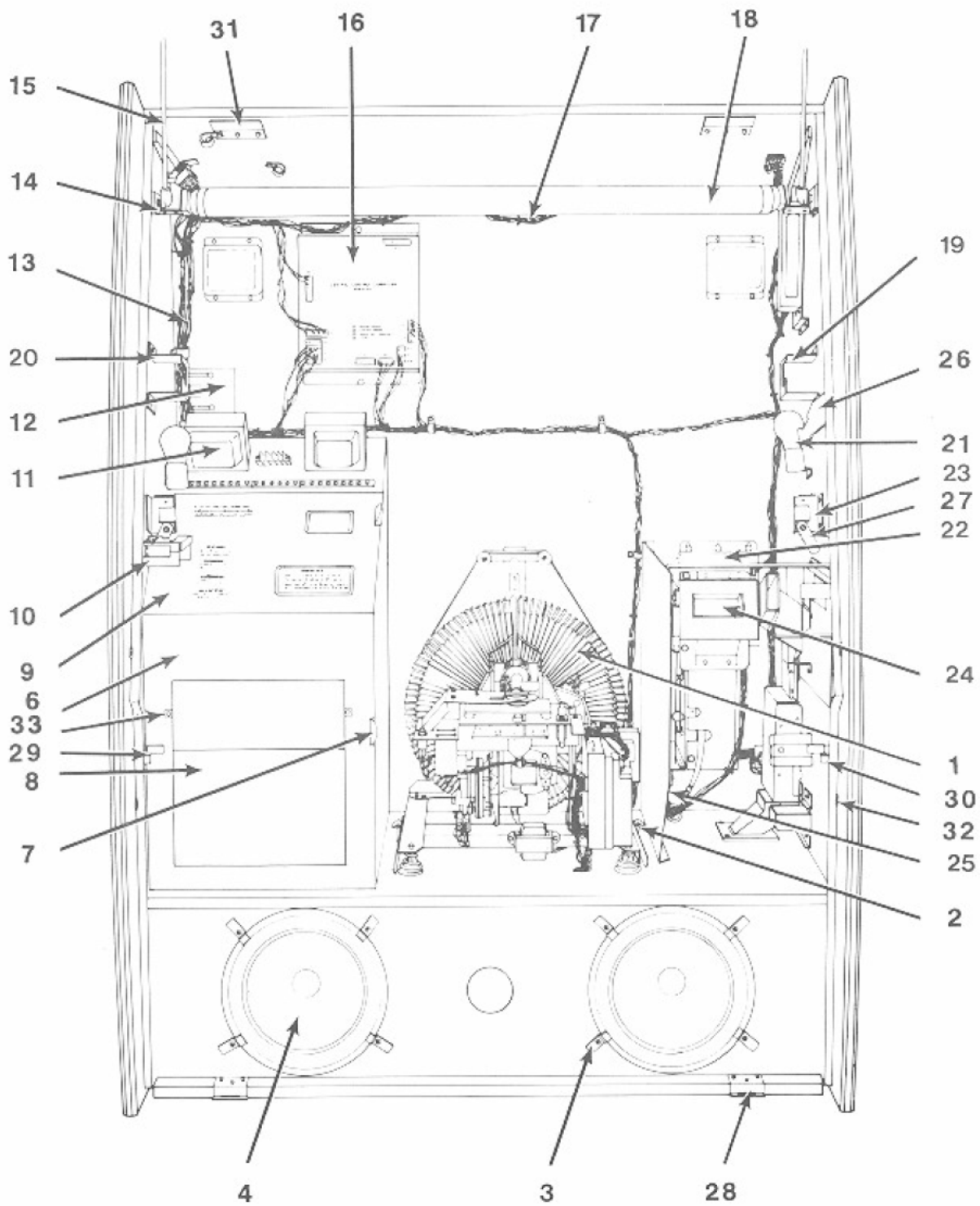
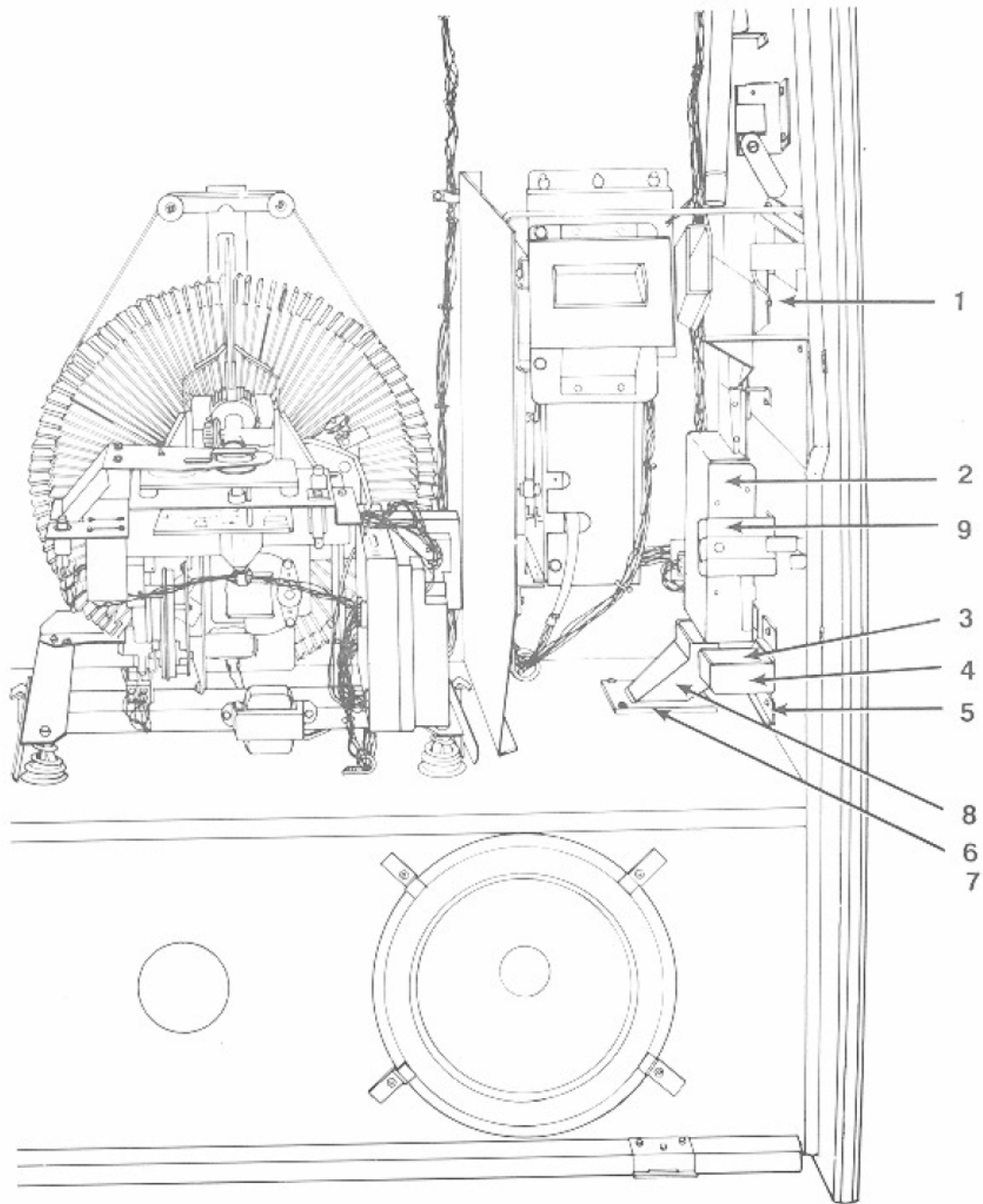


Figure 8-5 CD-100A Phonograph Internal View

Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz)	Ref.
1	61033001	• Mechanism Assembly - CD ( <i>see figure 8-19</i> )	1
2	30932101	• Bracket - Mech Tie Down	2
3	21780701	• Bracket - Retainer, Speaker	8
4	40830703	• Speaker - Woofer 10 Inch	2
5	21780609	• Pad - Acoustical (Not Shown)	1
6	30934101	• Panel Assembly - Amplifier	1
7	21751804	• Spring Catch	1
8	30869801	• Handy Case	1
	21730516	• • Accessories Bag Assembly	1
	21827201	• • • Bag - Zip Lock	1
	70097501	• • • • Contact - Univ Conn (Pin)	6
	70097502	• • • • Contact - Univ Conn (Socket)	6
	70075601	• • • • Contact - Post	10
	70091012	• • • • Terminal Lug - Spade	10
	70072002	• • • • Fuse Cartridge (8 amp.)	2
	70072106	• • • • Fuse Cartridge (5 amp.)	2
	26676802	• • • • Quality Card - Phonograph	1
	21822616	• • • Manual - Service (CD-100A, Volume I.)	1
	21822615	• • • Manual - Service (CD-100A, Volume II.)	1
	21888604	• • • Programming Reference Guide	1
	21957001	• • • Routine Service Guide	1
	30931304	• • • Alternate Price Card	1
	61031402	• • • Universal Price Sheet	1
	30935903	• • • Blank Title Strip With Numbers	15
	30940601	• • • Title Page Filler	8
	30935904	• • • Blank Title Strip (Without Numbers)	15
9	40836101	• Panel Assembly - Amp (Top)	1
10	40835601	• Switch Assembly - Service	1
11	40832101	• Output Transformer Assembly ( <i>see figure 8-16</i> )	1
12	21759301	• Cover - Cord Hole	1
13	61035502	• Harness & Switch Assembly	1
14	30936501	• Bracket - Ball Stud	2
	21797601	• Stud - Ball	2
15	40714908	• Spring - Pneumatic	2
16	40832201	• Central Control Computer	1
17		• Harness, 110 Volt	1
	40832901	• • (60 Hz)	
	40832902	• • (50 Hz)	
18	70060112	• Fluorescent Lamp (30 watt, T-8)	1
	70080004	• Starter - Fluorescent Lamp	1
19	30938201	• Mounting Bracket - Title Rack Upper (RH)	1
20	30938101	• Mounting Bracket - Title Rack Upper (LH)	1
21	70060410	• Lamp - Incandescent	2
22	61038903	• Control Unit - OBA ( <i>see figure 8-7</i> )	1
23	30938401	• Catch - Title Rack	2
24	65056511	• Bill Acceptor transport ( <i>see figure 8-7</i> )	1
25	61034801	• Bill Acceptor Mounting Plate ( <i>see figure 8-7</i> )	Ref.
26	30938601	• Support Bracket Assembly	1
27	30938001	• Latch Pivot	1
28	30932801	• Door Mounting Bracket	2
29	21712701	• Latch Assembly (L.H.)	1
30	21712702	• Latch Assembly (R.H.)	1
31	30936601	• Bracket - Guide (Hinge)	2
32	21491301	• Door Guide	4
33	21870001	• Snap-In Fastener	2
	30932201	• Lever - Mech Release	2

Figure 8-6. Coin Chute Assembly





Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz)	Ref.
1	40832701	• Support & Coin Chute Assembly	1
	40831201	• • Support - Coin Chute and Reject Mechanism	1
	40833701	• • • Chute Assembly - Coin (Upper)	1
	30930901	• • Pivot - Scavenge	1
	30931101	• • Link - Scavenge	1
	30931901	• • Actuator - Slug Rejector	1
	21940601	• • Link - Scavenge (Pivot)	1
	21256201	• • Spring - Tension	1
	21765601	• • Spring - Compression	1
	25156904	• • Washer - Shoulder	1
	20922502	• • Spacer	6
	70120010	• • Washer	1
	25155901	• • Bumper - Split Stem	1
	70091702	• • Solder Lug	1
2	40703811	• Mounting Bracket & Coin Switch Assembly	1
	40579302	• • Mounting Bracket Assembly	1
	30578702	• • Switch Assembly - Coin	1
	21790201	• • Hinge - Rejector	1
	21411401	• • Spacer	1
	20636801	• • Stud (#8-32)	1
3	21792901	• Door - Slug Cup	1
4	30781702	• Cup - Slug - (Black)	1
5	21793001	• Bracket - Slug Cup	2
6	30743701	• Collar - Coin Chute	1
7	21754401	• Gasket - Coin Chute	1
8	61034701	• Chute - Lower (Coin)	1
9	21429501	• Rejector Catch Assembly	1
10	21153701	• Spring Support - Lower	4
	21730001	• Hook - Fall Stop	2
	21790102	• Support - Hinge	1
	70093401	• Cable Clamp (17/32)	15
	70093402	• Cable Clamp (13/16)	20
	21797502	• Screw - Tie Down	1
	21943501	• Blockout Retainer Bracket (C.I.)	1
	30939502	• Decal - Coin Inlet	1
	30939601	• Decal - Crest (BA Blockout, 50 Hz Only)	1
	40833001	• Door Support - L.H. (Upper)	1
	40833101	• Door Support - R.H. (Upper)	1
	30951501	• Door Support - L.H. (Lower)	1
	30951601	• Door Support - R.H. (Lower)	1
	70220487	• Foamed Tape	2
	21865301	• Link - Pivot	3
	61036501	• Tube - Color	1
	61037602	• Filter - Color	1
	25142281	• Jumper Assembly	1
	25142281	• Jumper Assembly	1

Figure 8-7. OBA-2 Bill Acceptor Assembly

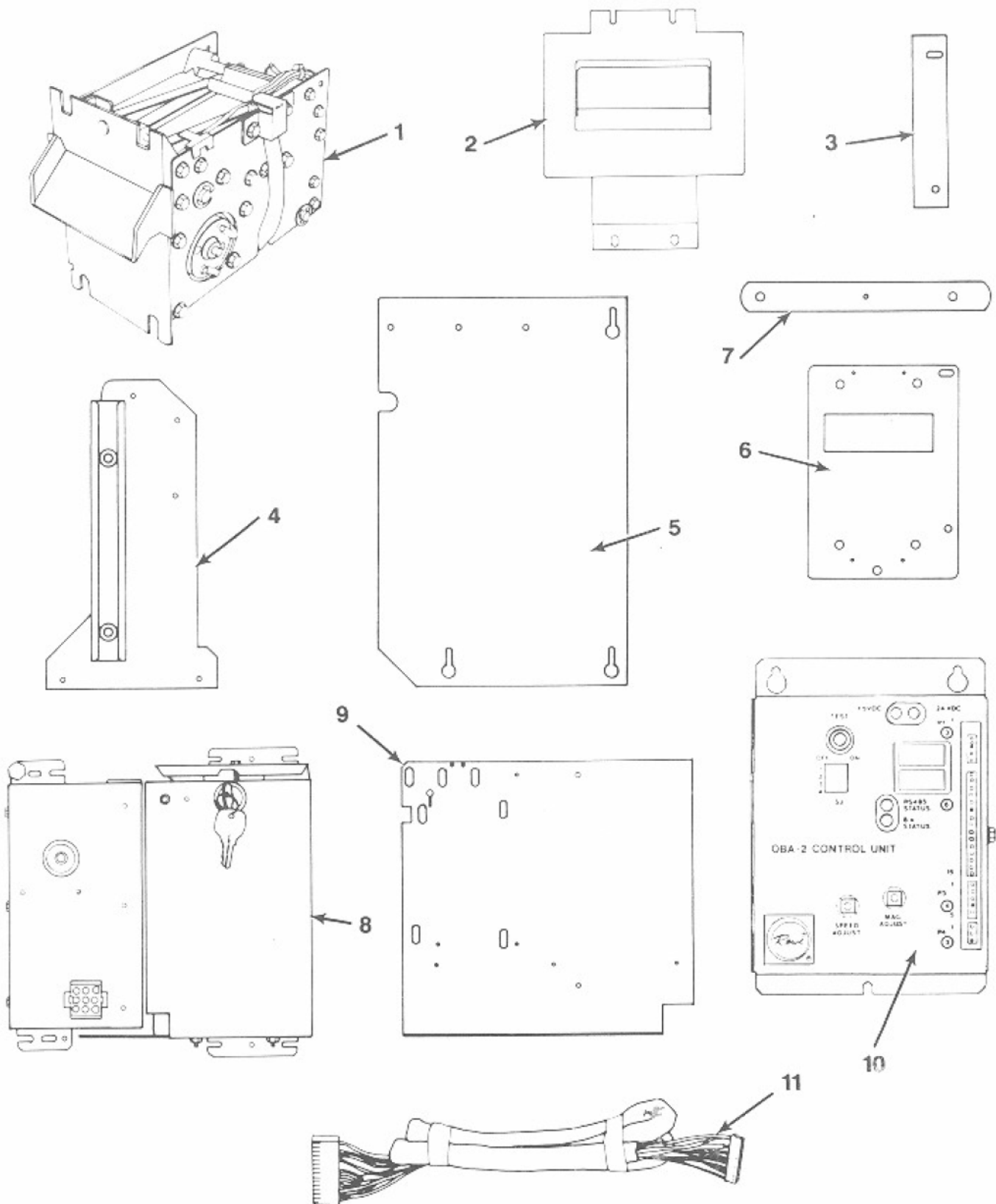
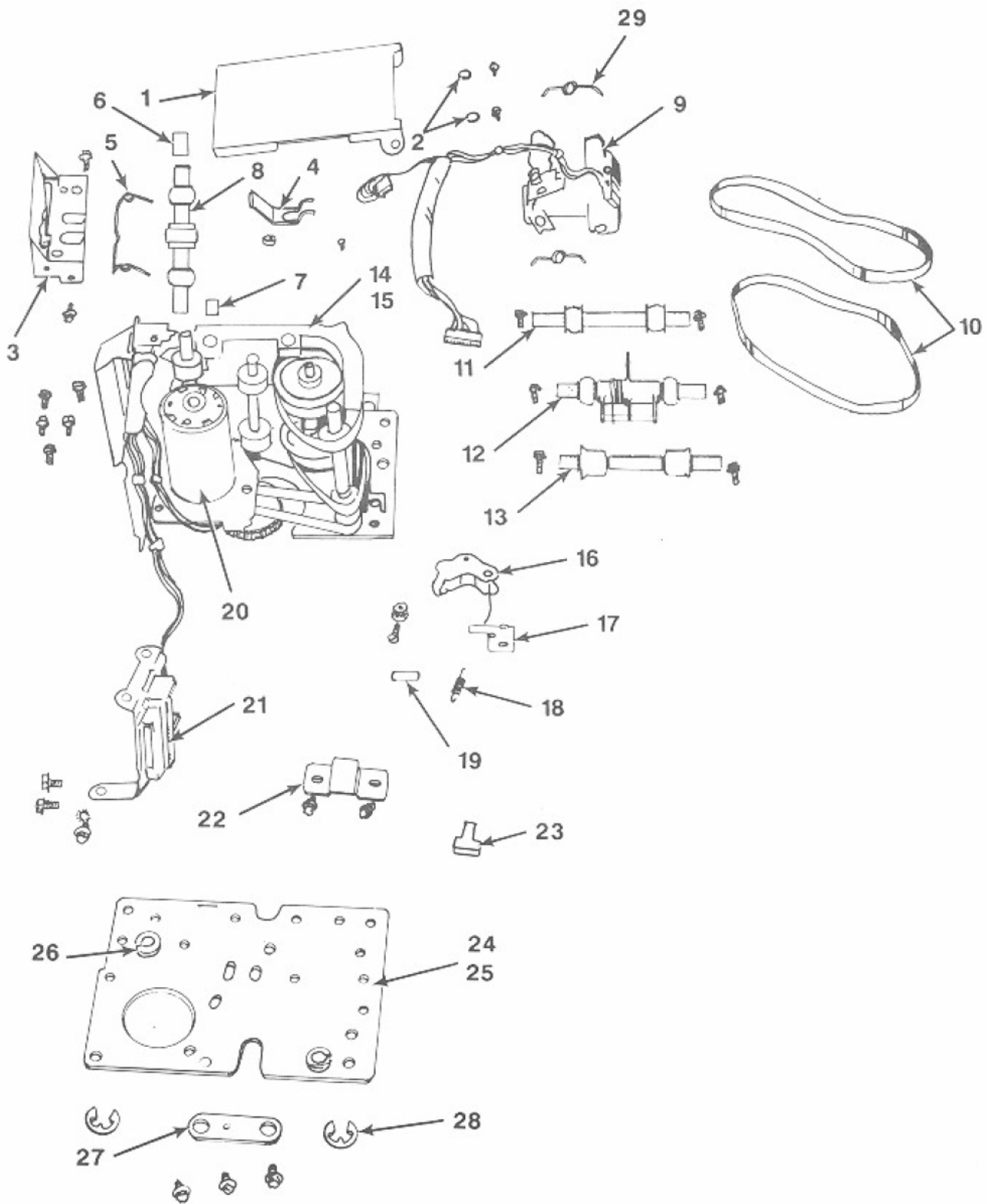


Figure 8-7 Bill Acceptor Assembly

Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
1	65056511	• Transport Assembly OBA 1&5 (see figure 8-8)	Ref.
2	61033901	• Trim - Bill Acceptor	1
3	30857901	• Bracket - Adjustment	1
4	30858402	• Slide Assembly - Support	1
5	61034801	• Plate - Mounting (BA)	Ref.
6	30858005	• Support Assembly - Front Plate	1
7	30858801	• Bar Assembly - Slide	1
8	60971516	• Bill Stacker Assembly (500 Bill Left-Hand Opening)	1
9	61035601	• Panel - Mounting (BA)	1
10	61038903	• Control Unit (To 1-17-91)	1
	61038904	• Control Unit (From 1-17-91)	1
	65063401	• • Base and Stud Assembly	1
	65063209	• • Circuit Board Assembly	1
	65063509	• • Control Unit Cover	1
11	45070203	• Interconnect Harness Assembly	1
	21875001	• Spacer - Rear (Not Shown)	1
	70093402	• Cable Clamp (Not Shown)	6
	70121211	• Spacer (Not Shown)	2
	21828201	• Spacer - Roller (Not Shown)	1
	20554502	• Clip - Cable (Not Shown)	1

# Figure 8-8. OBA-2 Transport Assembly

Sheet 1



Ref.	Part No.	Description	Qty
	65056511	• Standard OBA Transport Assembly	Ref.
1	35083801	• Light Block	1
2	20922503	• Spacer	2
3	35082904	• Inlet and Stud Assembly	1
4	35082601	• Pressure Roller Spring	1
5	25213601	• Spring	1
6	25213501	• Long Sleeve Spacer	1
7	25213502	• Short Sleeve Spacer	1
8	35097801	• Pressure and Crowned Roller Shaft Assembly (see figure 8-9, E)	1
9	45059801	• Harness and Holder Assembly (see figure 8-11)	1
10	35118601	• Drive Belt	2
11	35097501	• Crowned Roller Shaft Assembly (see figure 8-10, C)	1
12	35097402	• Anti Cheat Lever Shaft Assembly (see figure 8-10, B)	1
13	35097601	• Creasing Roller Shaft Assembly (see figure 8-10, D)	1
14	35099403	• Track and Pressure Roller Assembly	1
15	35083004	• • Lower Track	1
16	35080603	• • Pressure Roller Assembly	1
17	25224601	• • Pressure Roller Spring Bracket	1
18	25225003	• • Tension Spring	1
19	25191701	• • Pivot Pin	1
20	45058404	• Motor Assembly (With Shield)	1
21	35080701	• Circuit Board and Bracket Assembly	1
22	35083701	• Wire Holding Bracket	1
23	21776009	• U-Type Speed Clip Fastener	1
24	35098001	• Side Plate Assembly (RH)	1
25	45057801	• • Side Plate (RH)	1
26	70146004	• • Nyliner Bearing	2
27	25194101	• • Take-up Shaft Bracket	1
28	70143004	• External Retaining Ring	2
29	35112301	• Retainer - Mag. Head Holder	2
	70122009	• Washer - Internal Lock	1
	25223101	• Label - Flag	1
	25023902	• Wire - Tie	2

# Figure 8-8. Transport Assembly

## Sheet 2

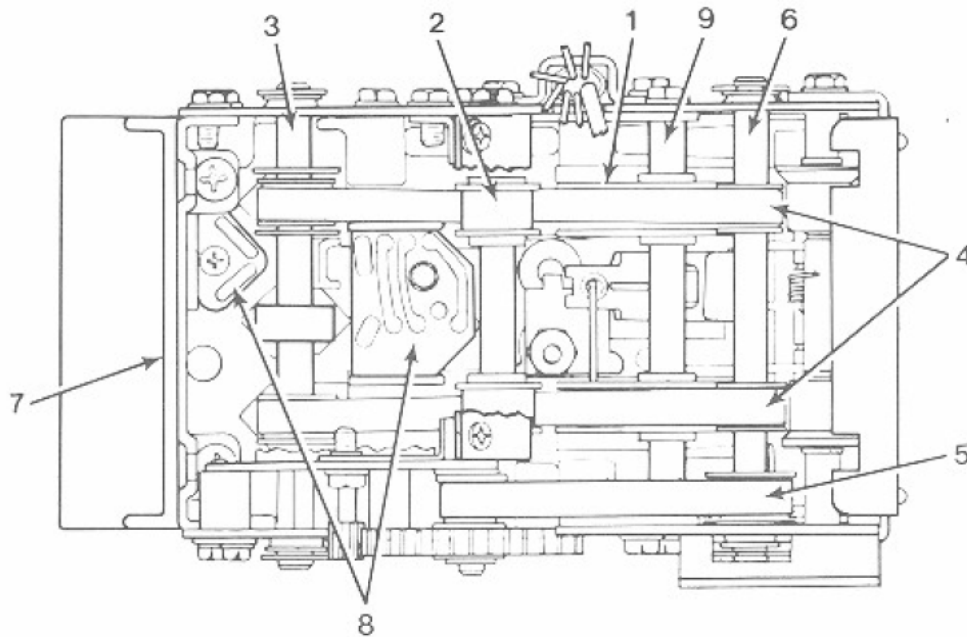


Figure 8-8. OBA-2 Transport Assembly (Sheet 2)

Ref.	Part No.	Description	Qty
	65056511	OBA-2 Transport Assembly	Ref.
1	35080101	• Drum Pulley	2
2	35098101	• Take-up Roller Shaft Assembly (see figure 8-9, F)	1
3	35080501	• Lower Input Roller Assembly (see figure 8-9, A)	1
4	45077201	• Timing Belt (140 Tooth)	2
5	35082001	• Timing Belt (70 Tooth)	1
6	35080801	• Drive Shaft Assembly (see figure 8-9, G)	1
7	35090604	• Casting, Plate and Harness Assembly	1
	45064201	• • Front Plate	1
8	45058202	• • Harness Assembly - Lower (see figure 8-10)	1
9	35097701	• Ring Shaft Assembly	1
	35080001	• • Drum Pulley Shaft	1
	70143004	• • External Retaining Ring	2
	65056801	• • Track - Inlet	1

# Figure 8-8. Transport Assembly

## Sheet 3

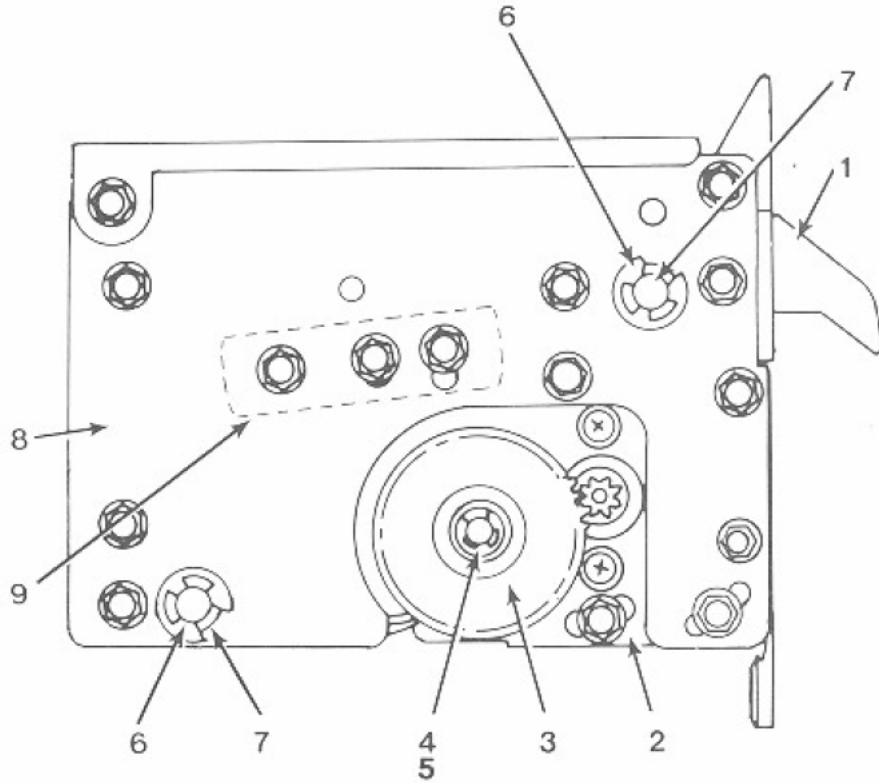


Figure 8--8. OBA-2 Transport Assembly (Sheet 3)

Ref.	Part No.	Description	Qty
	65056511	OBA-2 Transport Assembly . . . . .	Ref.
1	65056801	• Inlet Track (see figure 8-8, sheet 2) . . . . .	Ref.
2	35090701	• Bracket & Reduction Gear Assembly . . . . .	1
	35090501	• • Bracket, Spacer And Pin Assembly . . . . .	1
3	45058501	• • Reduction Gear . . . . .	1
4	70120501	• • Washer . . . . .	1
5	70143003	• • External Retaining Ring (3/16) . . . . .	1
6	70143004	• External Retaining Ring . . . . .	2
7	70146004	• Bearing (Nyliner) . . . . .	2
8	35097901	• Side Plate Assembly - LH . . . . .	1
	45057702	• • Side Plate - LH . . . . .	1
	70146004	• • Nyliner Bearing . . . . .	2
9	25194101	• • Take-up Shaft Bracket . . . . .	1

Figure 8-9. OBA-2 Transport Roller and Shaft Assemblies

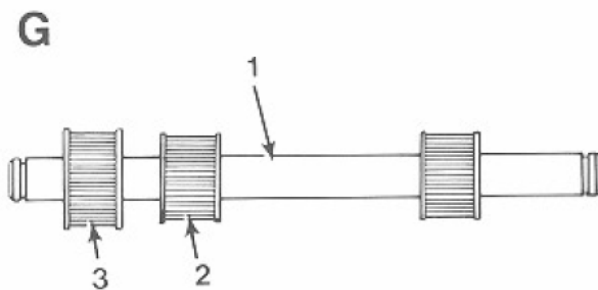
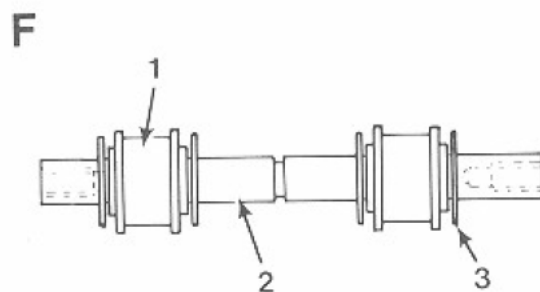
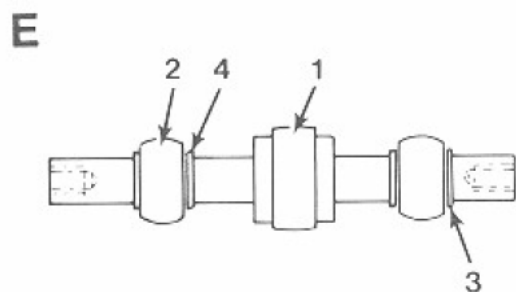
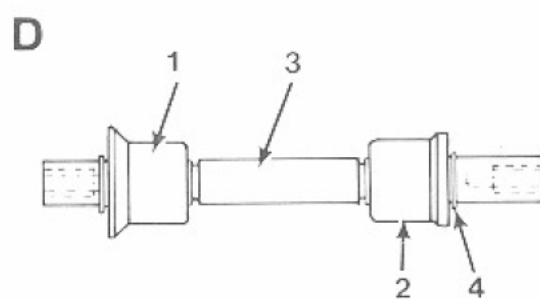
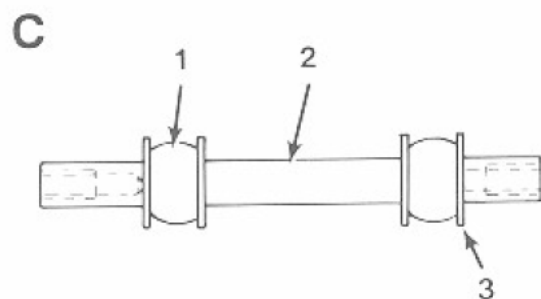
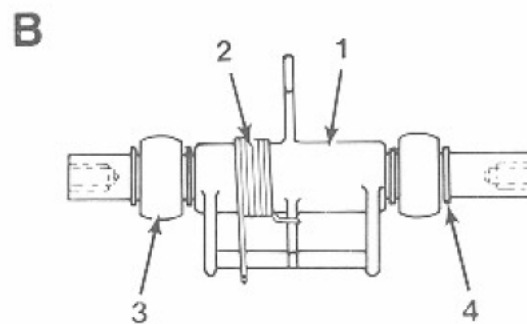
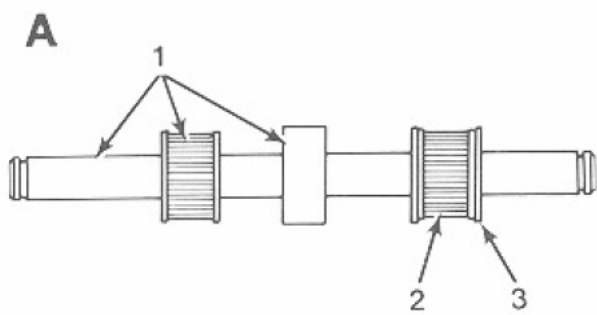




Figure 8-9. OBA—4 Transport Roller And Shaft Assemblies

Ref.	Part No.	Description	Qty
<b>A</b>	<b>35080501</b>	<b>Lower Input Roller Assembly</b>	
1	25227601	• Lower Input Shaft Assembly	1
2	25192902	• 22 Tooth Pulley	1
3	70143004	• External Retaining Ring	2
<b>B</b>	<b>35097402</b>	<b>Anti-Cheat Lever Shaft Assembly</b>	
1	35096402	• Anti-Cheat Lever	1
2	35081602	• Spring	1
3	25193301	• Crowned Roller	2
4	70143301	• External Retaining Ring	4
5	25193401	• Crowned Roller - Shaft	1
<b>C</b>	<b>35097501</b>	<b>Crowned Roller Shaft Assembly</b>	
1	25193301	• Crowned Roller	2
2	25193401	• Crowned Roller Shaft	1
3	70143004	• External Retaining Ring	4
<b>D</b>	<b>35097601</b>	<b>Creasing Roller Shaft Assembly</b>	
1	25193601	• Creasing Roller	1
2	25193602	• Small Creasing Roller	1
3	35080001	• Drum Pulley Shaft	1
4	70143301	• External Retaining Ring	2
<b>E</b>	<b>35097801</b>	<b>Pressure and Crowned Roller Shaft Assembly</b>	
1	25193901	• Pressure Roller (Upper)	1
2	25193301	• Crowned Roller	2
3	35082301	• Top Shaft	1
4	70143301	• External Retaining Ring	4
<b>F</b>	<b>35098101</b>	<b>Take-up Roller Shaft Assembly</b>	
1	35080301	• Take-up Roller	2
2	35080002	• Take-up Shaft	1
3	70143004	• External Retaining Ring	4
<b>G</b>	<b>35080801</b>	<b>Drive Shaft Assembly</b>	
1	25192801	• Drive Shaft	1
2	25192401	• 20 Tooth Pulley (Drive Belt)	2
3	25192902	• 22 Tooth Pulley	1

## Figure 8-10. Lower Harness Assembly

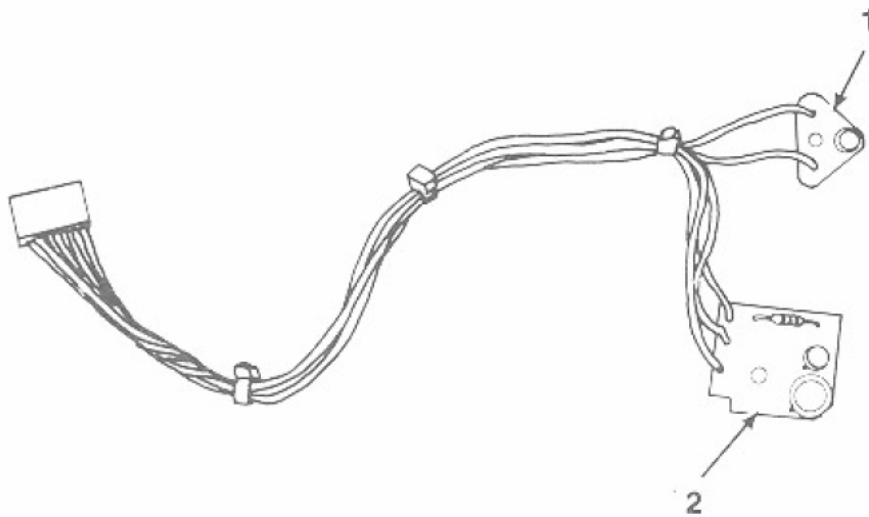


Figure 8-10. Lower Harness Assembly

Ref.	Part No.	Description	Qty
	65056511	OBA-2 Transport Assembly . . . . .	Ref.
1	45058202	• Lower Harness Assembly ( <i>see figure 8-8, sheet 2, item 8</i> ) . . . . .	Ref.
2	21313002	• • Terminal Board - V1 Emitter . . . . .	1
	70035308	• • • Light Emitting Diode . . . . .	1
	45063301	• • • Diode Spacer . . . . .	1
3	35079902	• • Reflective Sensor Board - V2 . . . . .	1
	21339701	• • • Photovoltaic Cell . . . . .	1
	79901151	• • • Resistor - Carbon (1/4 W 5%) 150 Ohm . . . . .	1
	70035308	• • • Light Emitting Diode . . . . .	1

Figure 8-11. Harness & Holder Assembly

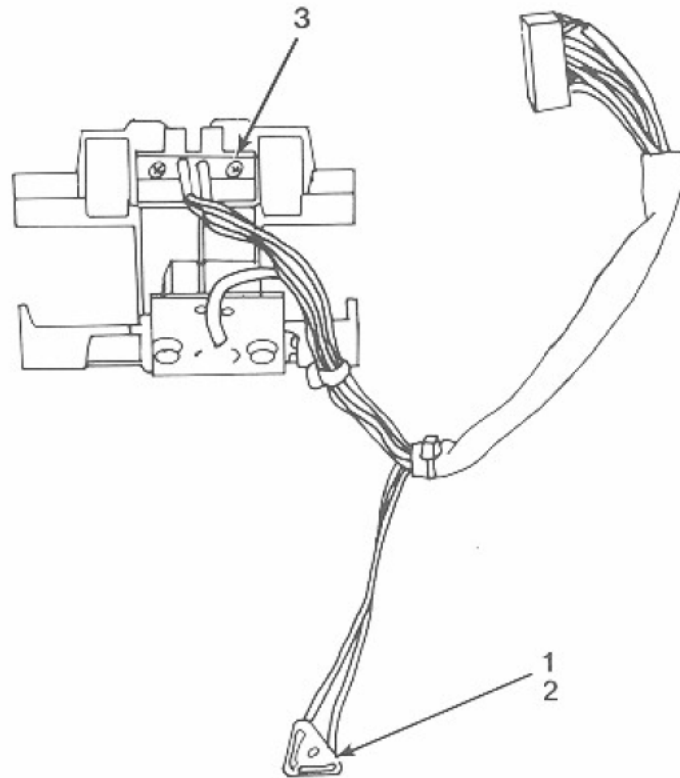


Figure 8-11. Harness & Holder Assembly

Ref.	Part No.	Description	Qty
	65056511	OBA-2 Transport Assembly	Ref.
1	45059801	• Harness And Holder Assembly (see figure 8-8, sheet 1, item 9) <sup>1</sup>	Ref.
2	21313002	• • Terminal Board	1
3	70033204	• • • Phototransistor	1
4	35082402	• • • Switch - Optical	1
5	70075808	• • • Terminal Housing (8 Circuit)	1
6	70219286	• • • Insulated Tubing	1
7	70800101	• • • Cable Tie	1

<sup>1</sup>The magnetic head must be factory aligned to holder and insert assembly. If a new head is needed, order the harness and holder assembly (Part Number 45059801).

Figure 8-12. 500 Bill Stacker Assembly

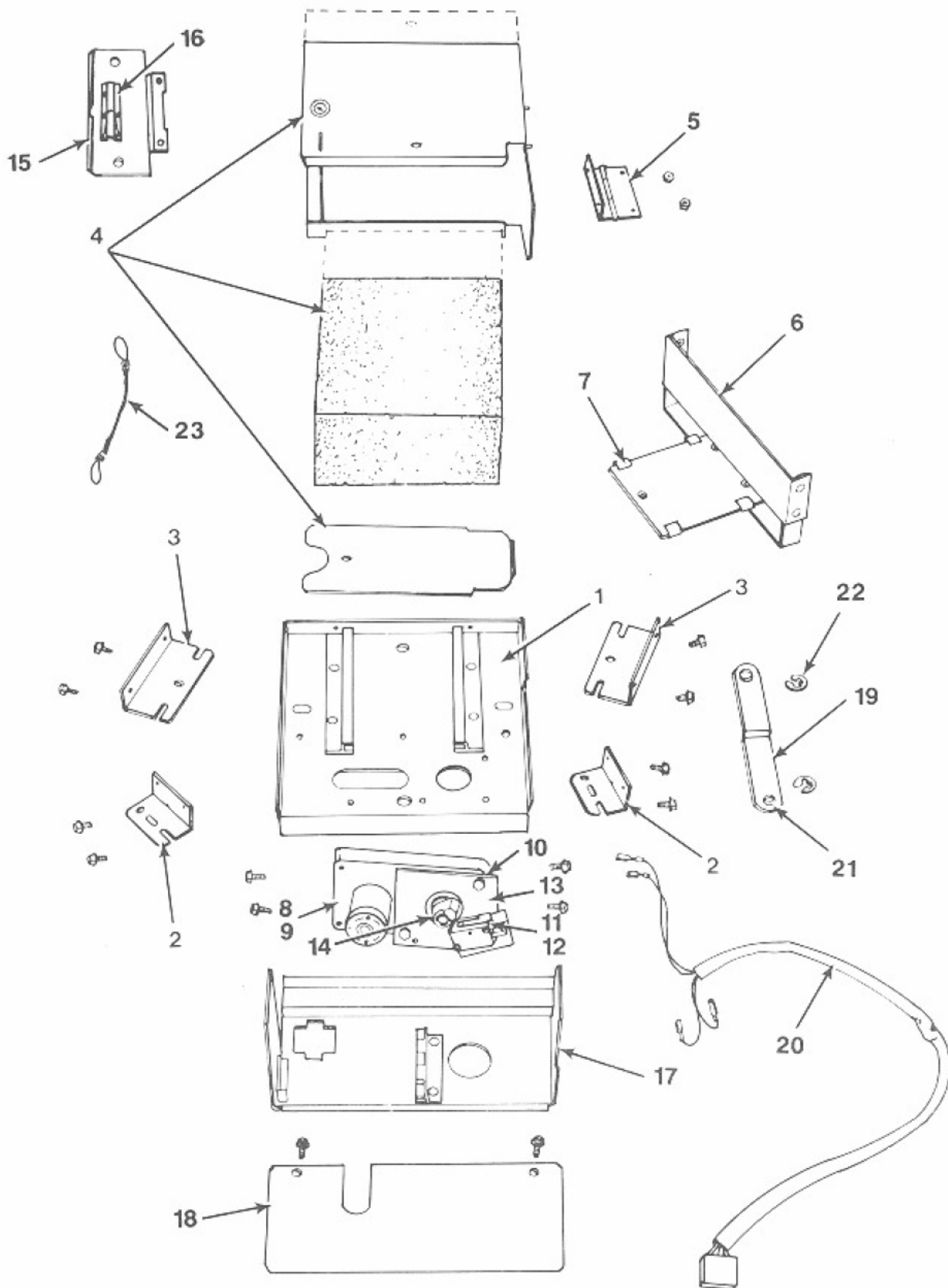
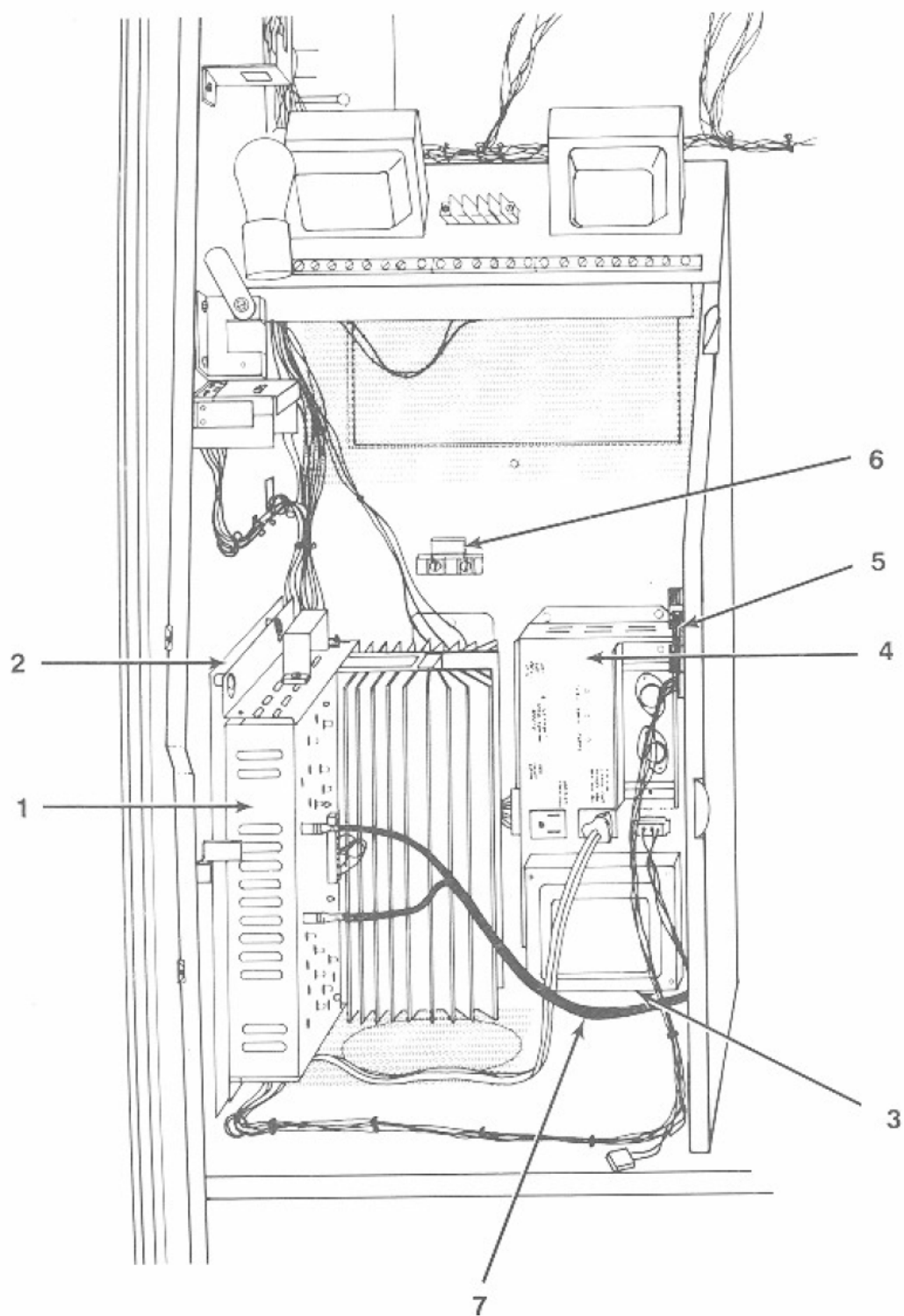


Figure 8-12. 500 Bill Stacker Assembly

Ref.	Part No.	Description	Qty
	60971516	• Bill Stacker Assembly (500 Bill)	Ref.
1	40712402	• • Mounting Plate Assembly	1
2	21874603	• Bill Stacker Support	2
3	35084201	• Stacker Rear Support	2
4	40777008	• Cash Box Assembly (500 Bill)	1
	35039204	• • Pressure Plate	1
	21757901	• • Foam Block	1
	70162008	• • Cylinder Lock	1
	70166011	• • Lock Bolt	1
5	30783202	• Hinge - Cashbox	1
6	40712604	• • Carriage Assembly	1
7	21757701	• Guide	4
8	35087801	• Motor & Switch Assembly	1
9	35087701	• • Motor Assembly With Crank	1
10	70121706	• • • Spacer	2
	21894203	• • • Switch and Plate Assembly	1
	25054801	• • • • Insulator - Switch	1
	21083001	• • • • Nut - Twin	1
	70143010	• • • External Retaining Ring	1
	20922502	• Spacer	2
	70093103	• Cable Clamp	1
11	21073102	• • • Switch	1
12	21082901	• • • Switch Actuator	1
13	21795801	• • • Switch Bracket	1
14	30781802	• • • Switch Cam	1
15	30785602	• Bill Box Cover	1
16	35084301	• Lock Bracket	1
17	40712703	• • Rear Cover Assembly	1
18	30859002	• Cover Plate	1
19	21792403	• Carriage Link	1
20	45062308	• DC Bill Stacker Harness Assembly	1
	70075505	• • Connector Housing (5 Circuit)	1
	70075701	• • Keying Plug	1
	70219228	• • Insulated Tubing	1
	70075601	• • Contact	1
	70091304	• • Terminal Lug - Slip On	4
	70800101	• • Cable Tie	10
21	70146006	• Nyliner Bearing	2
22	70143004	• External Retaining Ring	2
23	21572605	• Fall Stop Cable	1

Figure 8-13. CD-100A Amplifier Compartment



Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz) . . . . .	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz) . . . . .	Ref.
1	61024902	• 250 Watt Stereo Amplifier ( <i>see figure 8-14</i> ) . . . . .	1
2	40242601	• • Amplifier Mounting Bracket Assembly . . . . .	1
3	20925601	• Main Power Supply Mounting Bracket . . . . .	1
4	40770607	• Main Power Supply ( <i>see figure 8-17</i> ) . . . . .	1
5	61052701	• Crossover Circuit Board Assembly . . . . .	1
6	21955901	• Resistor Assembly . . . . .	1
7	30934201	• • Cable Assembly - Audio . . . . .	1

Figure 8-14. Stereo Amplifier Assembly

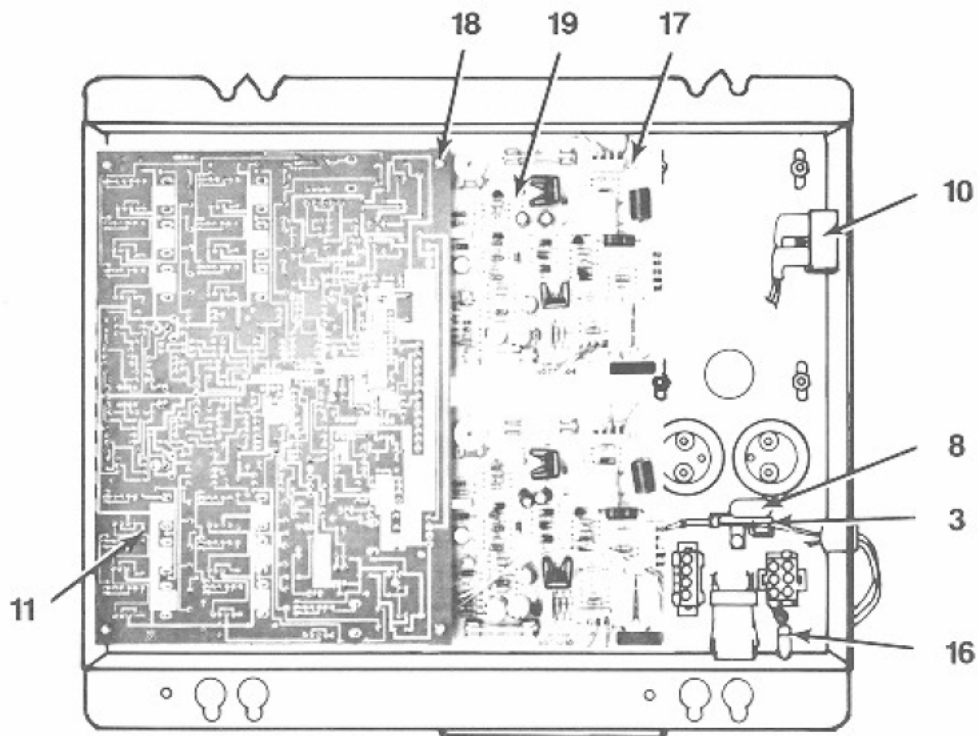
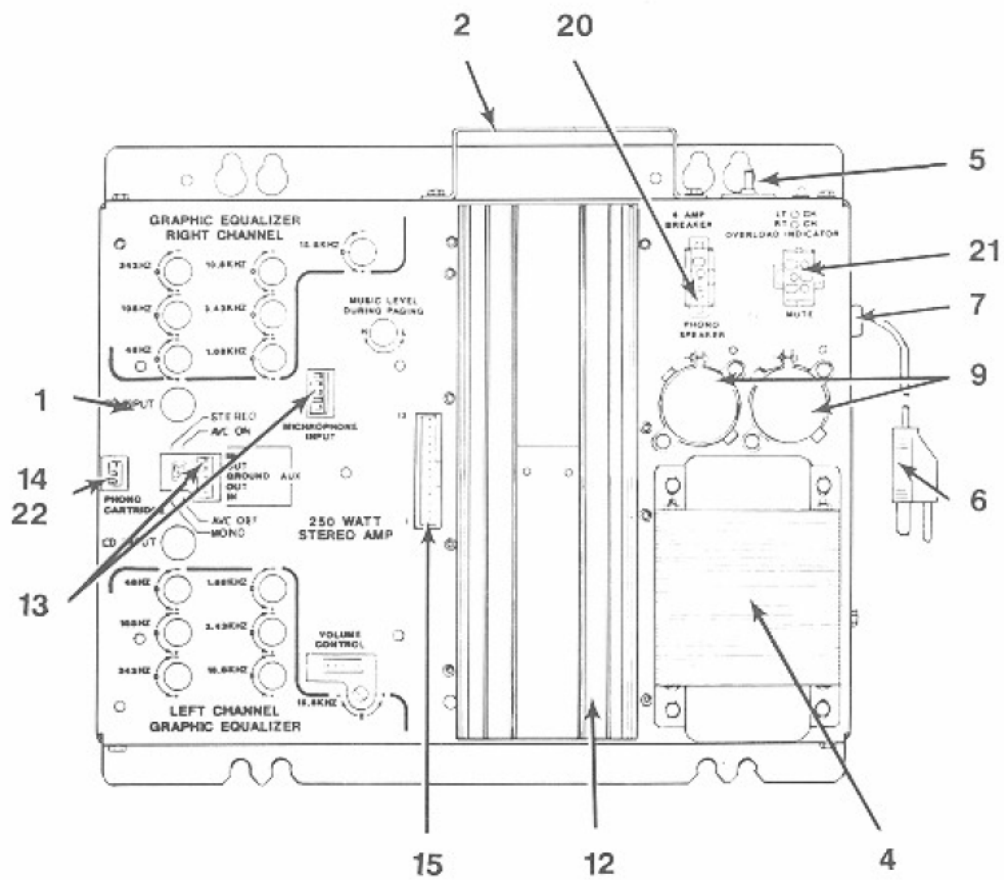




Figure 8-14. Stereo Amplifier Assembly

Ref.	Part No.	Description	Qty
	61024902	Stereo Amplifier Assembly ( <i>see figure 8-13, item 1</i> )	Ref.
1	61024602	• Chassis Assembly	1
2	21488101	• Handle	1
3	21724102	• Terminal Strip	1
4	40737805	• Power Transformer	1
5	70078956	• Circuit Breaker	1
6	25218603	• 3 Conductor Cord and Plug	1
7	70232205	• Strain Relief	1
8	70021305	• Mylar Capacitor (.1 Mfd)	1
9	21823102	• Electrolytic Capacitor (10,000 Mfd)	2
10	21822501	• Bridge Rectifier	1
11	61023702	• Stereo Preamp. Assembly ( <i>see schematic for parts list</i> )	1
12	40710303	• Heat Sink Detail ( <i>see figure 8-15</i> )	1
13	70075505	• Connector Housing (5 Circuit)	2
14	70075503	• Connector Housing (3 Circuit)	1
15	21620703	• Amplifier Jumper Plug Assembly	1
16	21893401	• Speaker Overload Indicator (Left Channel)	1
	21893402	• Speaker Overload Indicator (Right Channel)	1
17	70500006	• Circuit Board Support	8
18	70500018	• Circuit Board Support	5
19	40710104	• Driver Circuit Board Assembly ( <i>see power amplifier schematic for components list</i> )	2
20	30749003	• Cap Housing (4 Circuit)	1
21	30749004	• Cap Housing (6 Circuit)	1
	70097502	• • Contacts	6
22	21620704	• Shorting Plug	1
	70099201	• • Self - Stripping Terminal	1
	21943301	• • Capacitor Clamp	2
	70091706	• • Solder Lug	1
	70075505	• • Connector Housing (5 Circuit)	2
	70075502	• • Connector Housing (2 Circuit)	2
	70800101	• • Cable Tie	4
	70075601	• • Contact	9
	70091308	• • Terminal Lug - Slip On	2

### Figure 8-15. Heat Sink Detail

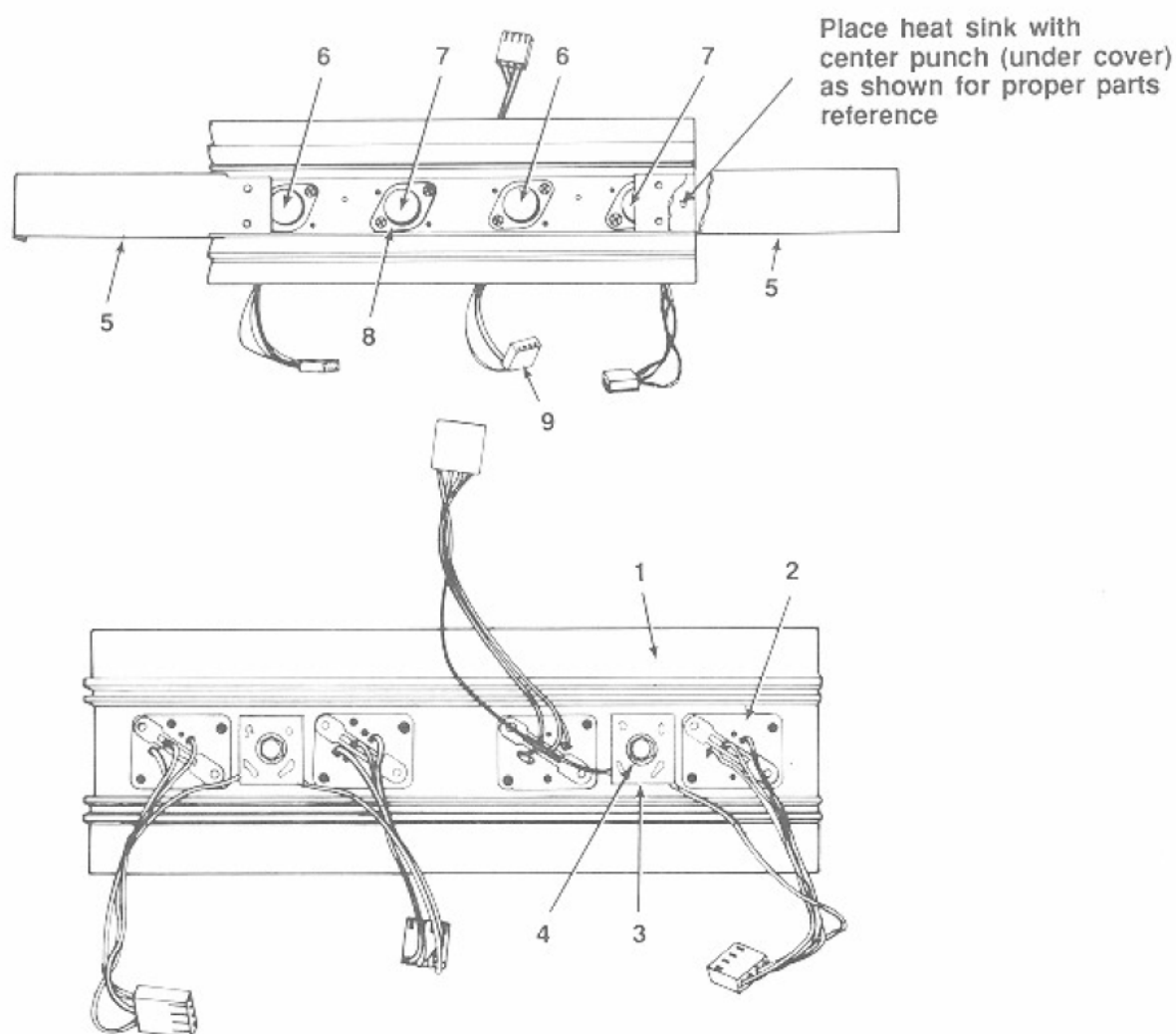


Figure 8-15. Heat Sink Detail

Ref.	Part No.	Description	Qty
1	40710303	• Heat Sink (see figure 8-14, item 12)	Ref.
2	21547301	• Power Transistor Socket	4
3	40837401	• Circuit Board Assembly - Bias Diode	2
4	21840201	• Compression Spring	2
5	21798001	• Cover	2
6	70030206	• Transistor (Darlington Amp, RCA- 2N6284) (NPN, Q101, 2 places)	2
7	70030207	• Transistor (Darlington Amp, RCA-2N6287) (PNP, Q102, 2 places)	2
8	21318902	• Precoated-Insulator	4
9	70075504	• Connector Housing	4

Figure 8-16. Output Transformer Assembly

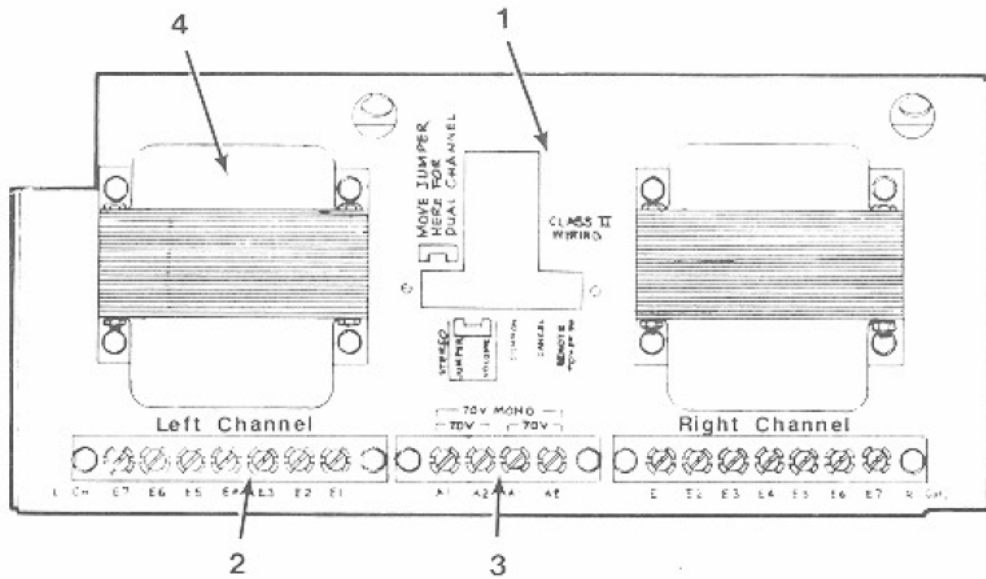


Figure 8-16. Output Transformer Assembly

Ref.	Part No.	Description	Qty
	40832101	Output Transformer Assembly (see figure 8-5, item 11) (See also figure 5-10, the Wiring Diagram)	
1	40832001	• Chassis With Lettering	1
2	30426707	• Terminal Strip	2
3	30426706	• Terminal Strip	1
4	40633502	• Output Transformer	2
5	21537401	• Label - Speaker Power	1

# Figure 8-17. Main Power Supply

(120 Volt, 60 Hz Model)

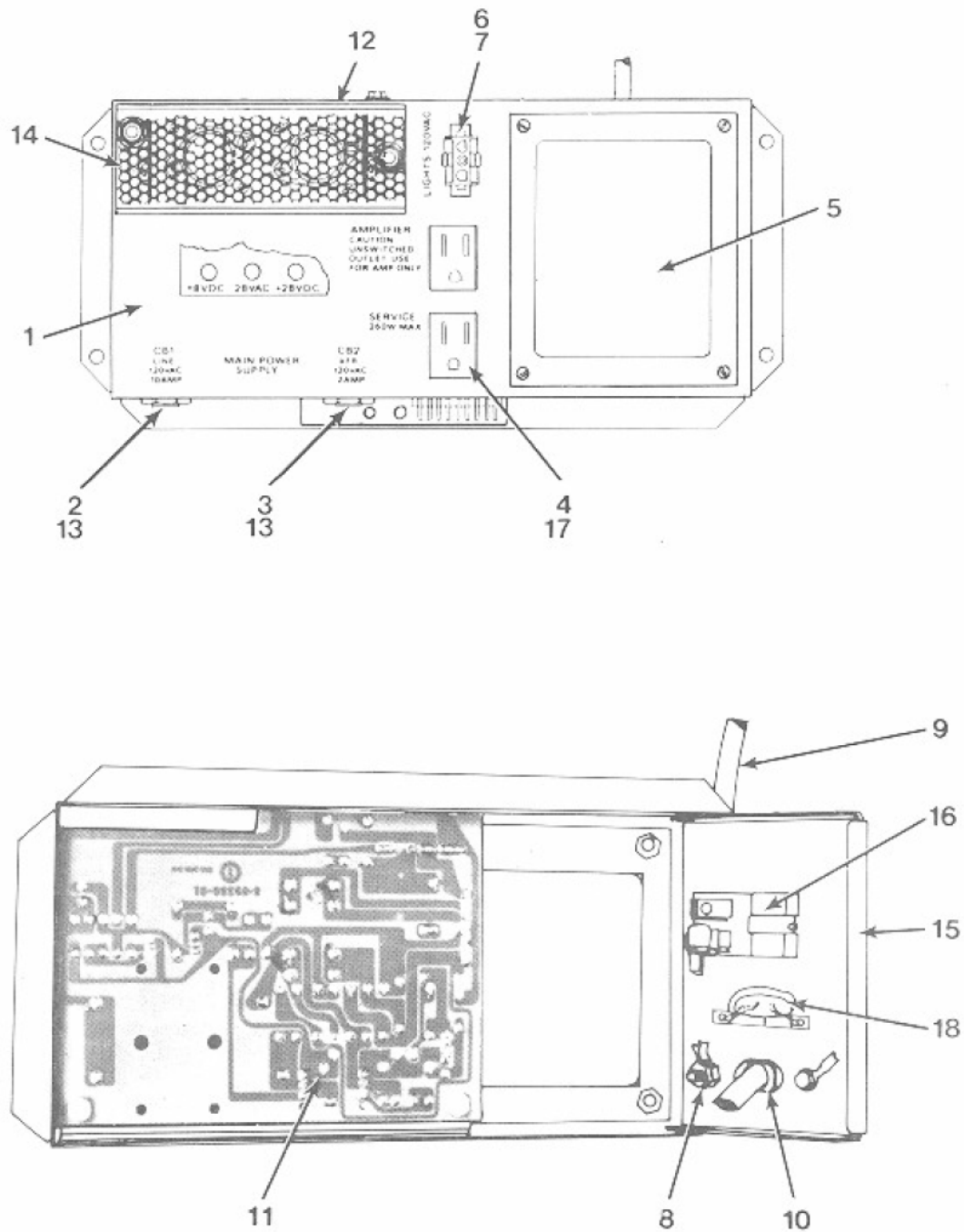


Figure 8-17. Main Power Supply

Ref.	Part No.	Description	Qty
	40770608	Main Power Supply (120 V) Canada	Ref.
	46509207	Main Power Supply (100 V)	Ref.
	40770607	Main Power Supply (120 V) (see figure 8-13, item 4)	Ref.
	46509212	Main Power Supply (220 V)	Ref.
	46509213	Main Power Supply (240 V)	Ref.
1	40771904	• Chassis Assembly	1
2	70073613	• 10 Amp Circuit Breaker (120 V)	1
3	70073605	• 2 Amp Circuit Breaker (120 V)	1
4	21375901	• 3 Wire Convenience Outlet	2
5	40772001	• Transformer - Power (120 V)	1
	46509302	• • Transformer - Power (100/220/240 V)	1
	70075601	• • Post Contact (120 V)	6
	70075601	• • Post Contact (100/220/240 V)	5
	70097504	• • Contact	1
	70091308	• • Terminal Lug (120 V)	1
	70091308	• • Terminal Lug (100/220/240 V)	4
6	30749002	• Cap Housing	1
	70097504	• • Contact (100/220/240 V)	3
7	70097504	• Contact (120 V)	2
	70091308	• • Terminal Lug (120 V)	2
	70091308	• • Terminal Lug (100/220/240 V)	4
8	70091511	• Ring Terminal (120)	2
9	30834506	• Power Cord Assembly (120 V)	1
	36536501	• Power Cord Assembly (100/220 V/240 V)	1
10	70232104	• Strain Relief	1
11	60935703	• Circuit Board Assembly - Main Power Supply	1
12	40733102	• Heat Sink and Power Transistor Assembly	1
	30834301	• • Power Supply Heat Sink	1
	70030807	• • Transistor (Darlington) (2N6055) (Motorola, RCA)	2
	21318902	• • Insulator	2
	21834201	• • Power Transistor Socket	2
	70075504	• • Connector Housing	2
	70075601	• • Post Contact	6
	70075702	• • Keying Post	2
13	21408602	• Straight Receptacle (120 V)	4
	21408602	• Straight Receptacle (100/220/240 V)	8
	70073608	• Breaker 100/220/240 V (5A) (Not Shown)	2
	70073610	• Breaker 100/220/240 V (7A) (Not Shown)	1
14	21828101	• Heat Sink Cover	1
15	30867301	• Switch Panel	1
	30867302	• Switch Panel (Canada)	1
	21870501	• Base - Switch Cover (Canada)	1
	21870601	• Switch Cover (Canada)	1
	25077201	• Toggle Switch - SPST (Canada)	1
	21724101	• Terminal Strip (100/220/240 V)	1
16	30785701	• Rocker Switch - SPST (120 V)	1
	30785702	• Rocker Switch - SPST (100/220/240 V)	1
17	70096701	• Insulated Faston (120 V)	1
	70096701	• Insulated (220/240 V)	1
	70099201	• Self Stripping Terminal	7
	70099101	• Self Stripping Terminal	1
	70075508	• Connector Housing	1
	70075702	• Keying Plug	1
	70075601	• Post Contact (120 V)	4
	70075601	• Post Contact (220/240 V)	5
18	21943801	• MOV Assembly (100/120 V)	1
	21943701	• MOV Assembly (220/240 V)	1

Figure 8-18. Central Control Computer

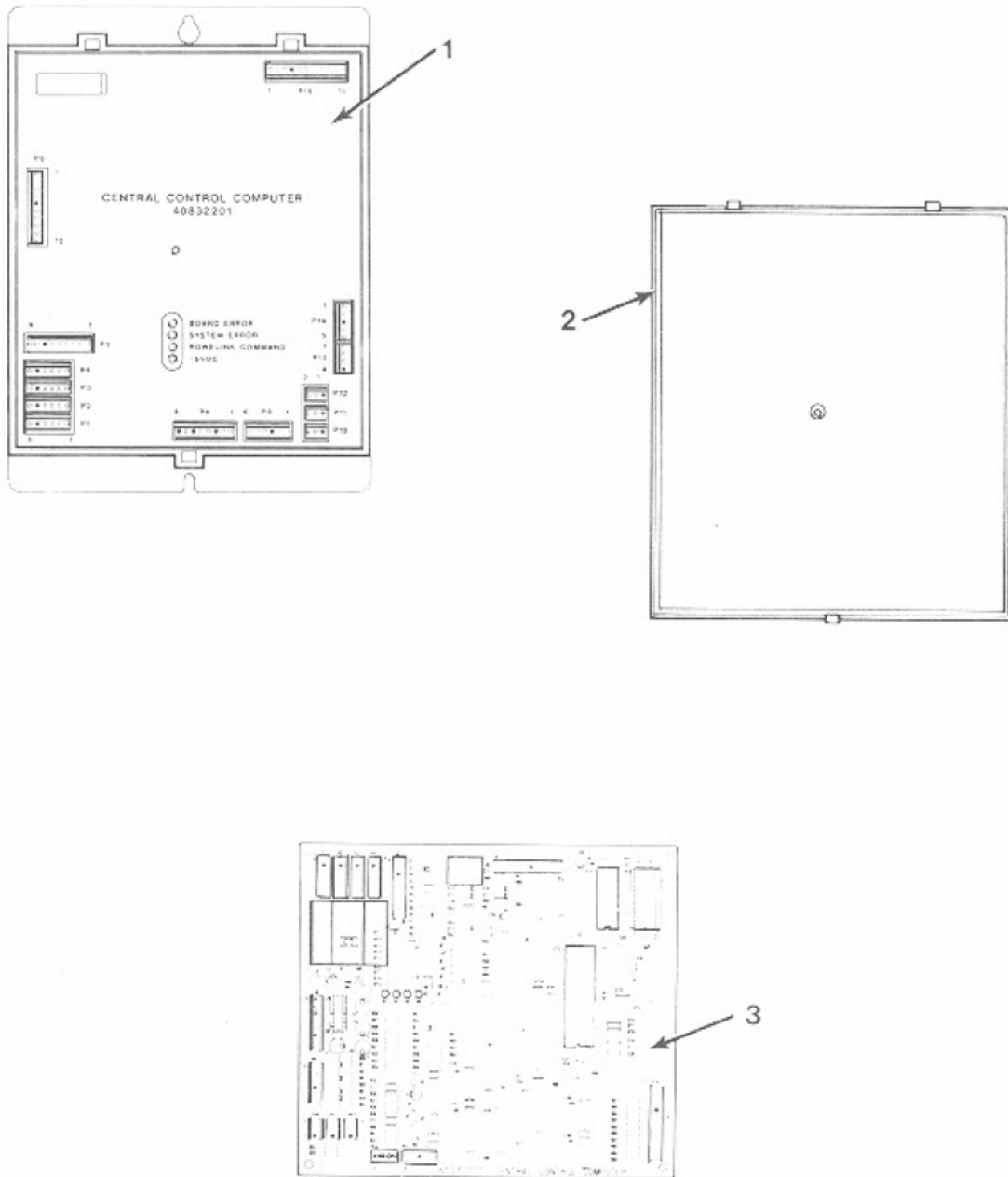
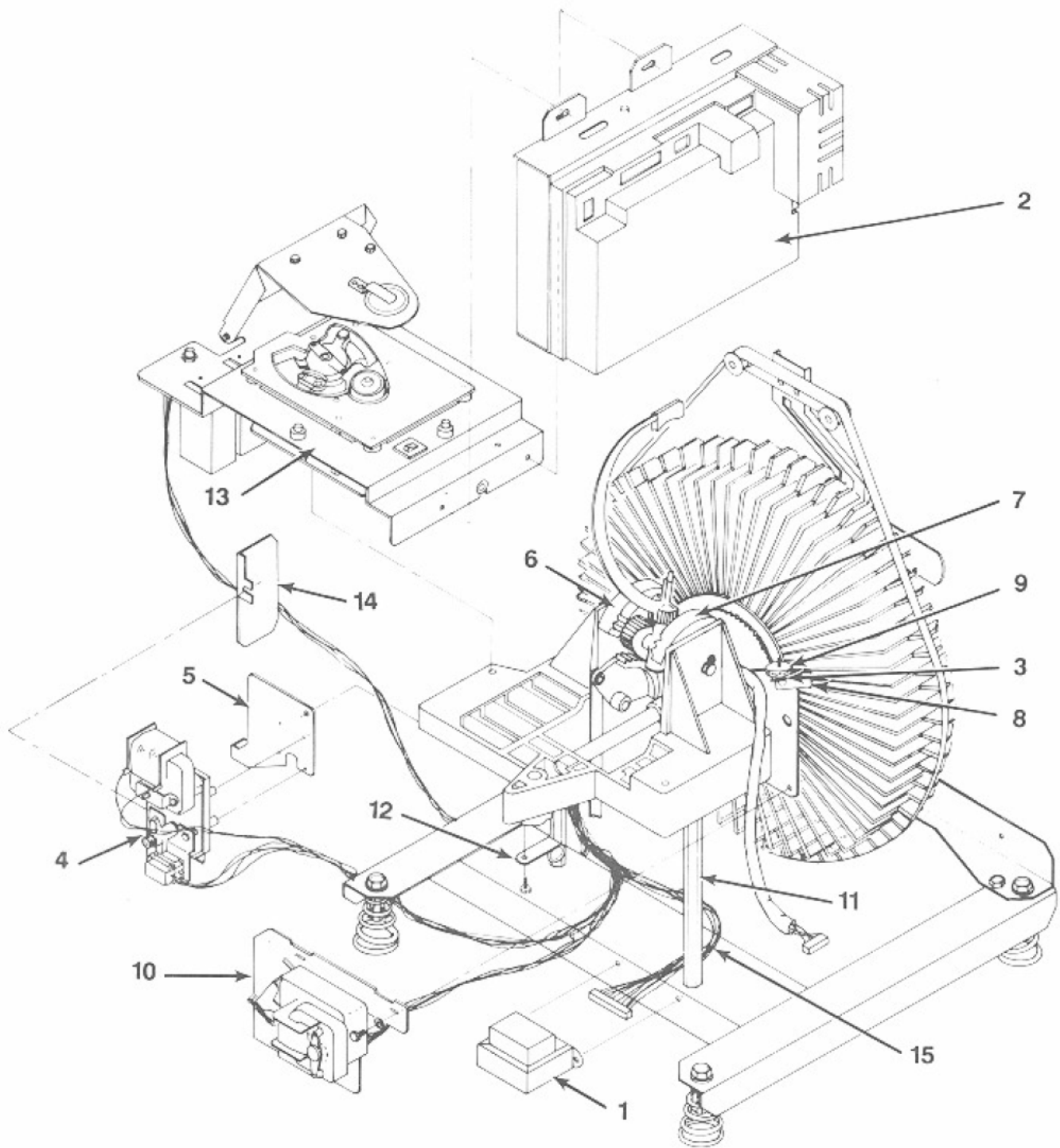


Figure 8-18. Central Control Computer Assembly

Ref.	Part No.	Description	Qty
	40832201	Central Control Computer Assembly (see figure 8-5, item 16) . . . . .	Ref.
1	61031201	• Central Control Computer Cover . . . . .	1
2	61031301	• Central Control Computer Base . . . . .	1
3	61031101	• Central Computer Circuit Board Assembly . . . . . (see figure 5-12 for the schematic and components list)	1

# Figure 8-19. Mechanism Assembly

Sheet 1

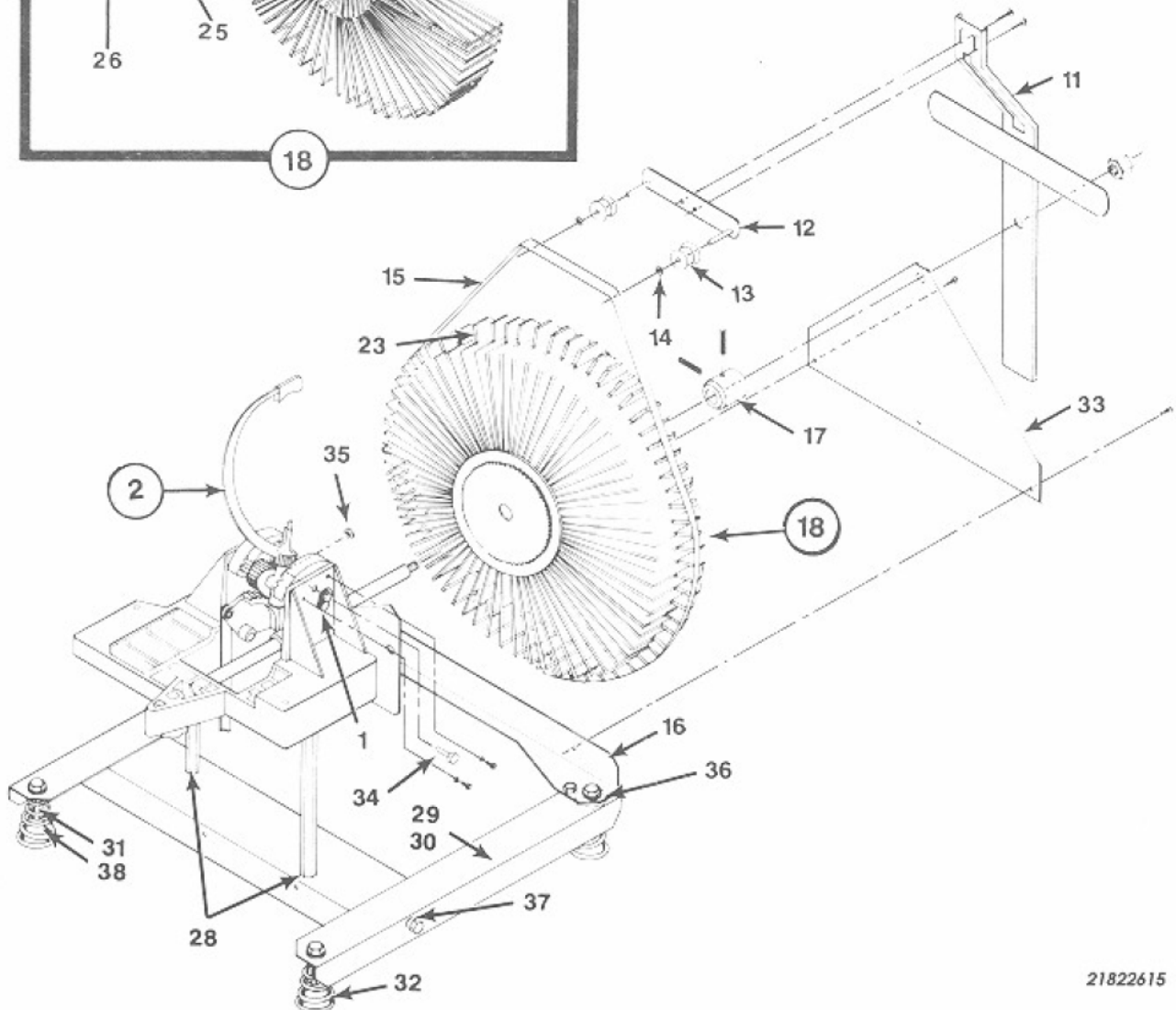
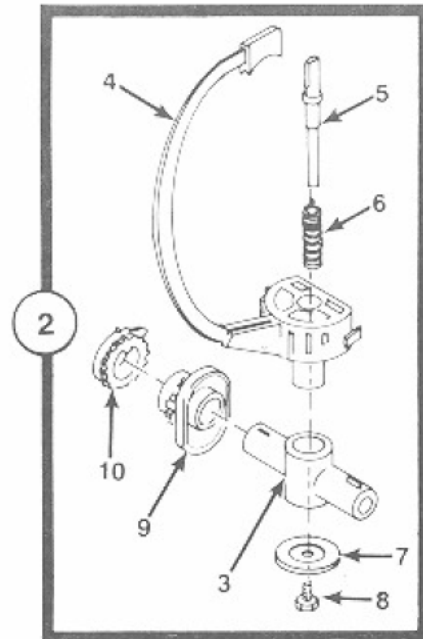
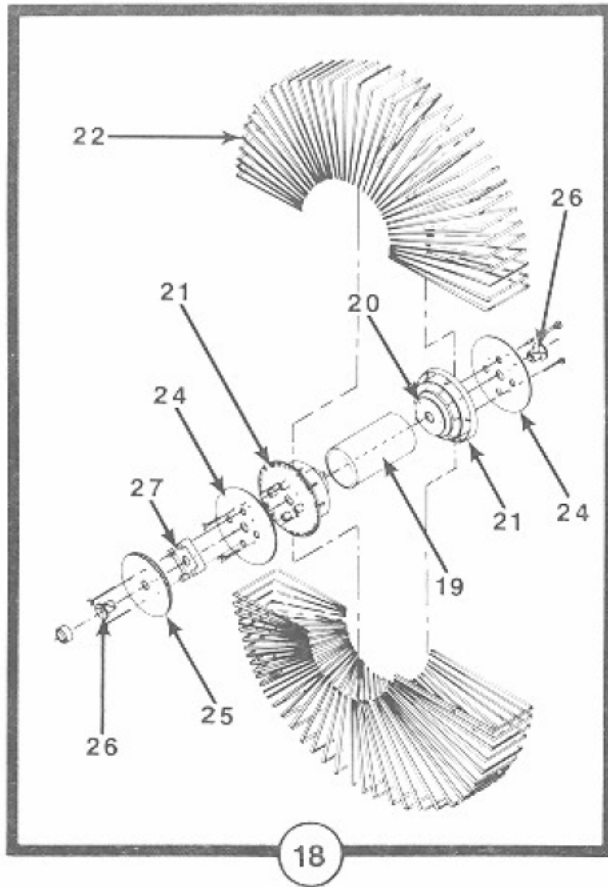




Ref.	Part No.	Description	Qty
	61033001	Mechanism Assembly ( <i>see figure 8-5, item 1</i> ) (60 Hz) . . . . .	Ref.
1	40830401	• CD Player Transformer . . . . .	1
2	61030703	• Mechanism Control & Decoder Assembly ( <i>see figure 8-19, sheet 3</i> ) . . . . .	1
3	30906801	• Optical Switch Assembly . . . . .	1
	30794501	• • Mounting Bracket . . . . .	1
	30905901	• • • Optical Switch and Connector Assembly . . . . .	1
	40803701	• • • Optical Switch . . . . .	1
	70075565	• • • Connector Housing (Red) . . . . .	1
	70075702	• • • Keying Plug . . . . .	1
	70075601	• • • Contact Post . . . . .	4
	70219201	• • • Insulated Tubing . . . . .	1
	70134111	• • • Screw - Special . . . . .	2
	70800101	• • Cable Tie . . . . .	2
4	40720802	• Cam Switch & Motor Assembly ( <i>see figure 8-21</i> ) . . . . .	1
5	30790701	• Motor Mounting Plate . . . . .	1
6	30790502	• Rotator Assembly (LH) . . . . .	1
7	30790602	• Rotator Assembly (RH) . . . . .	1
8	21818601	• Adjusting Bracket Assembly . . . . .	1
9	21818401	• Adjusting Knob . . . . .	1
10	40721901	• Sprag Assembly ( <i>see figure 8-21</i> ) . . . . .	1
11	21812502	• Mechanism Support . . . . .	2
12	70093401	• Cable Clamp (17/32) . . . . .	1
13	Ref.	• Base and CD Player ( <i>see figure 8-19, sheet 5</i> ) . . . . .	1
14	30946901	• Oil Spray Shield . . . . .	1
15	40830002	• Mechanism Harness . . . . .	1
	70075517	• • Connector Housing (17 Circuit) . . . . .	1
	70075601	• • Contact . . . . .	11
	70075701	• • Keying Plug . . . . .	1
	21408602	• • Straight Receptacle . . . . .	1
	70091308	• • Terminal Lug - Slip On . . . . .	3
	70091512	• • Terminal Lug - Slip On . . . . .	1
	70091314	• • Terminal Lug - Slip On . . . . .	5
	70091306	• • Terminal Lug - Slip On . . . . .	2
	70091302	• • Terminal Lug - Slip . . . . .	4
	30930501	• Harness - CDM (Player) . . . . .	1
	70075505	• • Connector Housing (5 Circuit) . . . . .	1
	70075601	• • Contact . . . . .	4
	70075701	• • Keying Plug . . . . .	1
	70077803	• • Connector - Insulation Displacement . . . . .	1
	70800101	• • Cable Tie . . . . .	2
	30930601	• • Harness - Cam (Power) . . . . .	1
	70077803	• • Connector - Insulation Displacement . . . . .	2
	70800101	• • Cable Tie . . . . .	2
	30930701	• • Harness - CDM (Signal) . . . . .	1
	70077810	• • Connector - Insulation Displacement . . . . .	2
	70800101	• • Cable Tie . . . . .	2

Figure 8-19. Mechanism Assembly

Sheet 2

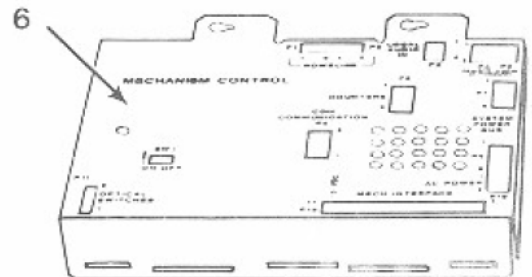
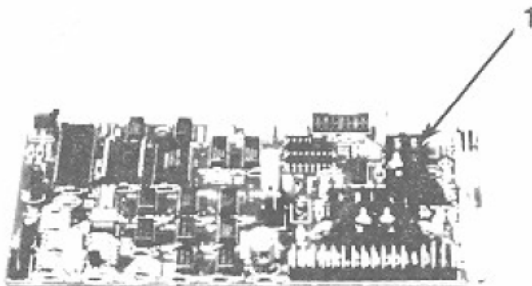
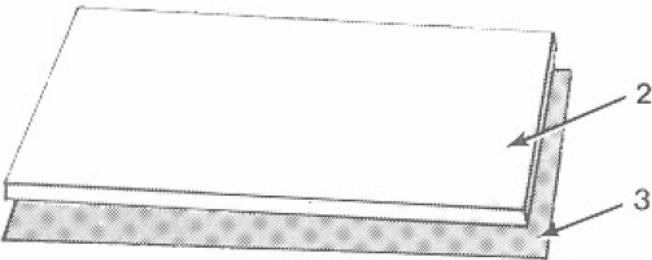
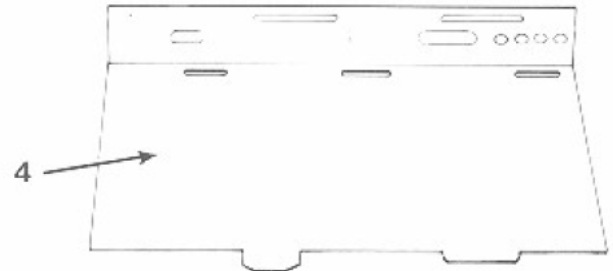
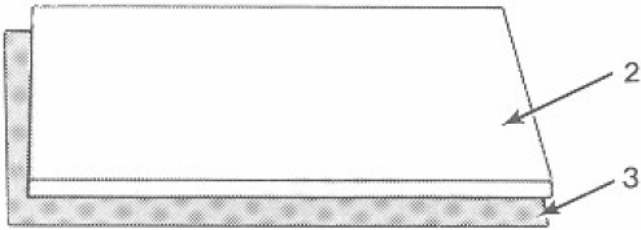
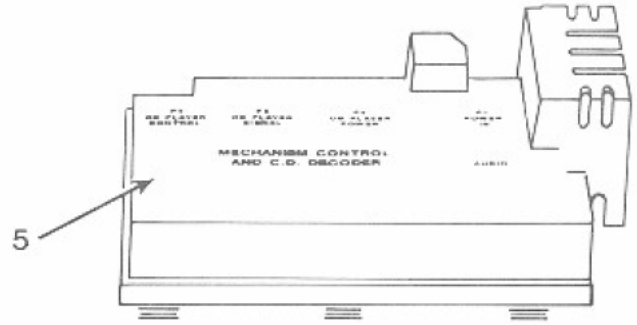
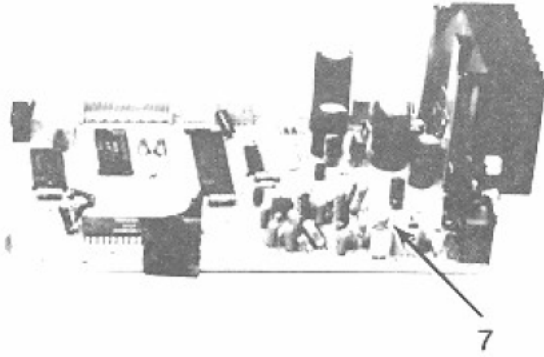


Ref.	Part No.	Description	Qty
	61033001	Mechanism Assembly . . . . .	Ref.
1	21079202	• Trunnion Pin . . . . .	2
	70120010	• Washer . . . . .	2
2	40720702	• Gripper Bow and Trunnion Assembly . . . . .	1
3	30791001	• • Trunnion . . . . .	1
4	30519703	• • Gripper Bow and Hub Assembly . . . . .	1
5	21080804	• • Inner Shoe Assembly . . . . .	1
6	21081101	• • Compression Spring . . . . .	1
7	21811501	• • Cam Follower . . . . .	1
8	21811701	• • Lock Screw . . . . .	1
9	40720401	• • Cam Gear . . . . .	1
10	40720601	• • Trunnion Gear . . . . .	1
11	40721302	• • Gripper Bow Guide Assembly . . . . .	1
12	21089401	• • Roller Bracket Assembly . . . . .	1
	21090701	• • Bracket - Roller . . . . .	1
	21091001	• • Roll Pin . . . . .	2
13	20384301	• • Belt Roller . . . . .	2
14	70143003	• • Retaining Ring . . . . .	2
15	21813802	• • Belt . . . . .	1
16	30792501	• • Support Frame Rear Angle . . . . .	1
17	21812601	• • Collar . . . . .	1
18	60870303	• Magazine Assembly . . . . .	1
19	40720002	• • Hub Spacer . . . . .	1
20	30790201	• • Hub Anchor Plate . . . . .	2
21	60870201	• • Magazine Hub . . . . .	2
22	40720102	• • Record Magazine Separator . . . . .	100
23	40720202	• • Belt Guide <sup>1</sup> . . . . .	100
24	30790301	• • Cover Plate . . . . .	2
25	30790401	• • Magazine Gear . . . . .	1
26	70146001	• • Nyliner Bearing . . . . .	2
27	30930801	• • Gear Spacer . . . . .	2
	70134128	• • Special Screw (#8-32 X 1 3/4 SF) . . . . .	4
28	21101301	• Lock Nut . . . . .	2
29	30791402	• Mechanism Support and Spring Assembly . . . . .	1
30	30791502	• • Mechanism Support Assembly . . . . .	1
31	20627202	• • Spring Support (Upper) . . . . .	4
32	20612804	• • Mechanism Mounting Spring (20612803 before 8-22-90) . . . . .	4
33	40723202	• Magazine Support . . . . .	1
34	21940302	• Rotator Pin . . . . .	1
35	70143005	• External Retaining Ring . . . . .	1
36	70121738	• Spacer . . . . .	2
37	70121517	• Spacer . . . . .	2
38	21153701	• Spring Support . . . . .	4
	20554502	• Cable Clip . . . . .	1

<sup>1</sup>Belt guides are supplied without disc numbers. For a complete set of belt guides with disc numbers, order Kit # 26711901.

# Figure 8-19. Mechanism Assembly

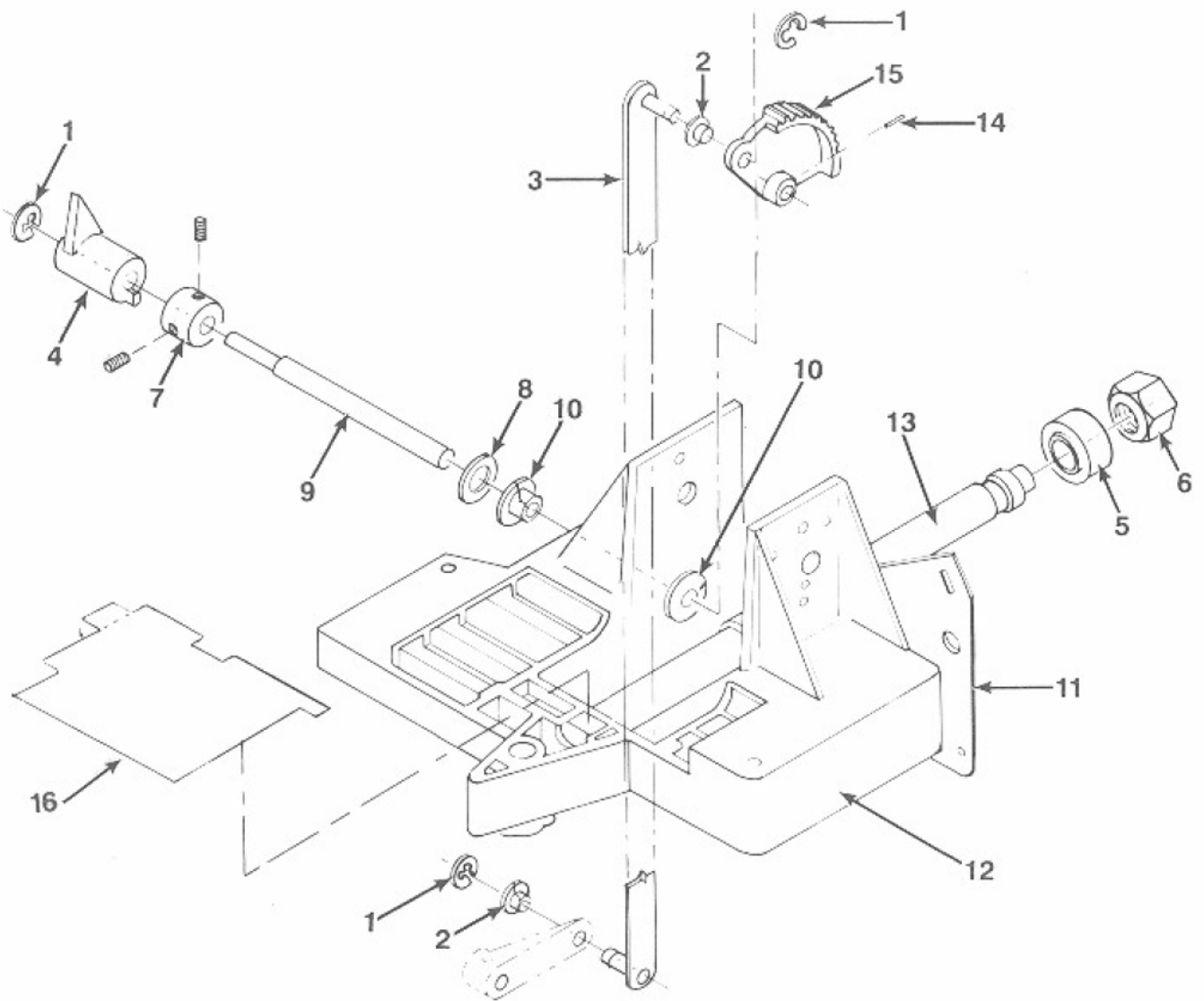
Sheet 3



Ref.	Part No.	Description	Qty
	61030703	Mechanism Control and Decoder Assembly (see figure 8-19, sheet 1) . . . . .	1
1	61030603	• Mechanism Control Circuit Board Assembly (see schematic for parts list) . . . . .	1
2	21771016	• Insulating Pad . . . . .	2
3	21771113	• Insulating Base . . . . .	2
4	40830201	• Decoder Base . . . . .	1
5	61032703	• Decoder Cover . . . . .	1
6	40830302	• Mechanism Control Cover . . . . .	1
7	61032602	• Decoder Circuit Board Assembly (no parts list or schematic available) . . . . .	1
	25142297	• • Jumper Assembly . . . . .	2
	21944701	• Label - CD Player . . . . .	1

# Figure 8-19. Mechanism Assembly

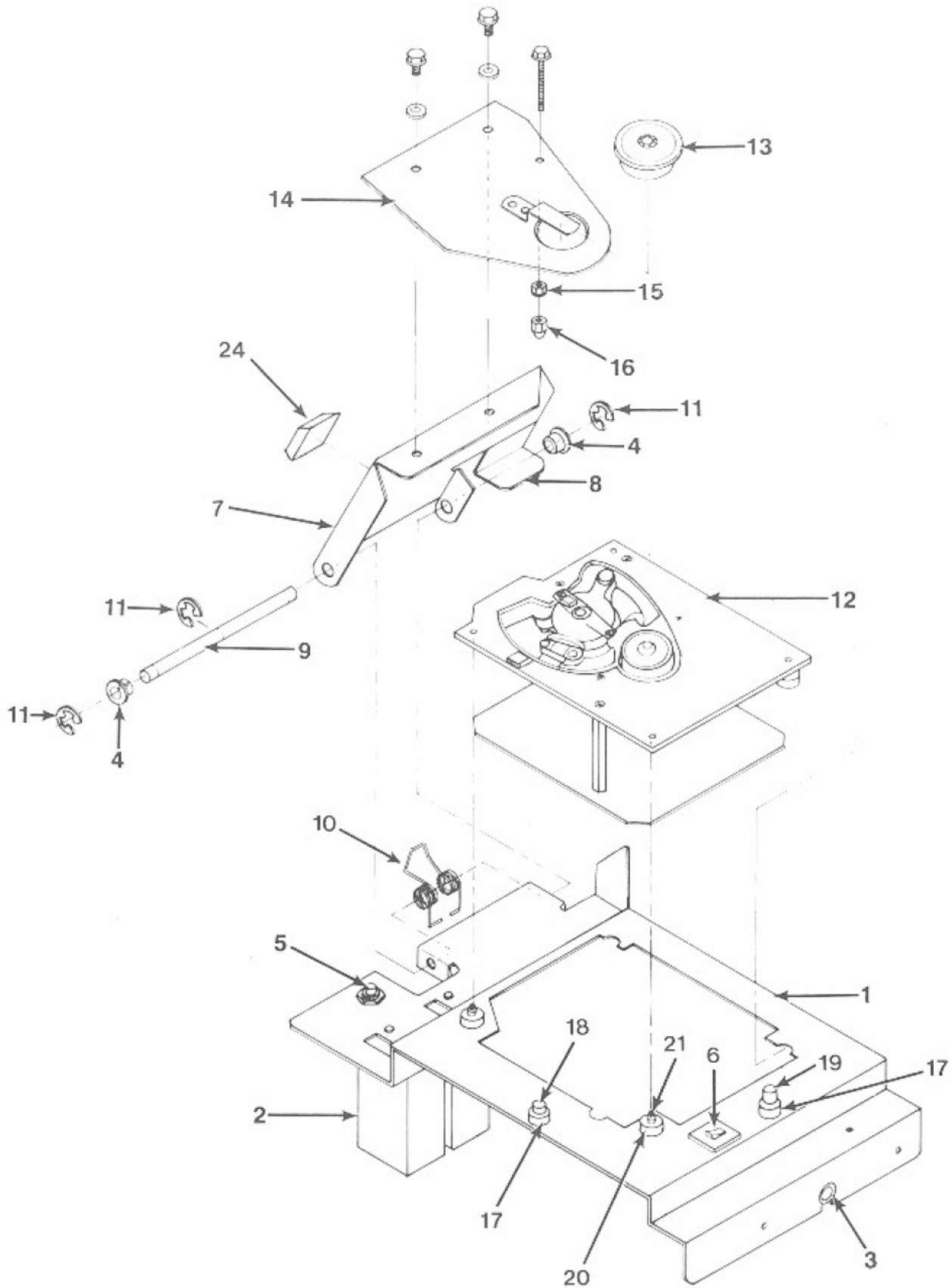
Sheet 4



Ref.	Part No.	Description	Qty
	40723402	Base and Motor Assembly . . . . .	Ref.
1	70143004	• Retaining Ring . . . . .	3
2	70146004	• Bearing . . . . .	2
3	21810201	• Transfer Link Assembly . . . . .	1
4	30930001	• Hold Down Cam . . . . .	1
5	25156906	• Shoulder Washer . . . . .	1
6	70130109	• 9/16 x 18 Jam Nut . . . . .	1
7	21813302	• Cam Collar . . . . .	1
8	70122533	• Bowed Washer . . . . .	1
9	21813201	• Cam Drive Shaft . . . . .	1
10	70146005	• Bearing . . . . .	2
11	40721801	• Intermediate Mounting Plate . . . . .	1
12	60870702	• Mechanism Base . . . . .	1
13	30791302	• Magazine Support Shaft . . . . .	1
14	70113019	• Roll Pin . . . . .	1
15	40720501	• Sector Gear . . . . .	1
16	21952801	• CD Board Guard . . . . .	1

Figure 8-19. Mechanism Assembly

Sheet 5





Ref.	Part No.	Description	Qty
	61033001	Mechanism Assembly . . . . .	Ref.
1	61032901	• Mounting Plate . . . . .	1
2	30933301	• Counter & Plug Assembly . . . . .	1
	21538302	• • Counter - Money . . . . .	1
	21441802	• • Electric Counter . . . . .	1
	70075505	• • Connector Housing (5 Pin) . . . . .	1
	70075601	• • Post Contact . . . . .	4
	70075701	• • Keying Plug . . . . .	1
3	70233202	• Snap Bushing (Split) . . . . .	1
4	70146008	• Nyliner Bearing . . . . .	2
5	21581801	• Pushbutton Switch (Momentary) . . . . .	1
6	70073604	• Circuit Breaker (1 Amp) . . . . .	1
7	40830101	• Hold Down Bracket . . . . .	1
8	21942101	• Cam Bracket . . . . .	1
9	21534709	• Pivot Pin . . . . .	1
10	30941001	• Hold Down Spring . . . . .	1
11	70143004	• External Retaining Ring . . . . .	3
12	30933702	• Player - CDM-3 With Guide Pin . . . . .	1
	21954601	• • Guide Pin . . . . .	1
	30930401	• • Magnet - Ring (Hold Down) . . . . .	1
	21954901	• • Disc - Traction . . . . .	1
	70120019	• • Washer . . . . .	2
	30933702	• • Player - CDM-3 . . . . .	1
13	26711502	• Hub Assembly . . . . .	1
	21954901	• • Traction Washer . . . . .	1
	30930401	• • Magnetic Hub . . . . .	1
14	30930201	• Hold Down Assembly . . . . .	1
15	21814001	• Hex Lock Nut (#4-40) . . . . .	1
16	21813901	• Grommet . . . . .	2
17	21941401	• Rest Rivet - Short (Front) . . . . .	1
18	21941402	• Rest Rivet - Long (Side) . . . . .	1
19	21940101	• Grommet . . . . .	4
20	21940201	• Spacer . . . . .	4
21	21377801	• Bumper . . . . .	1

**NOTE:** The 30933702 CDM-3 Player With Center Pin replaces the 30933701 player without a center pin. To use the 30933702 player with the original 26711501 hub, knock out the aluminum insert with a point of a #2 Phillips screw driver, or use a 26711502 hub.

Figure 8-20. Sprag Assembly

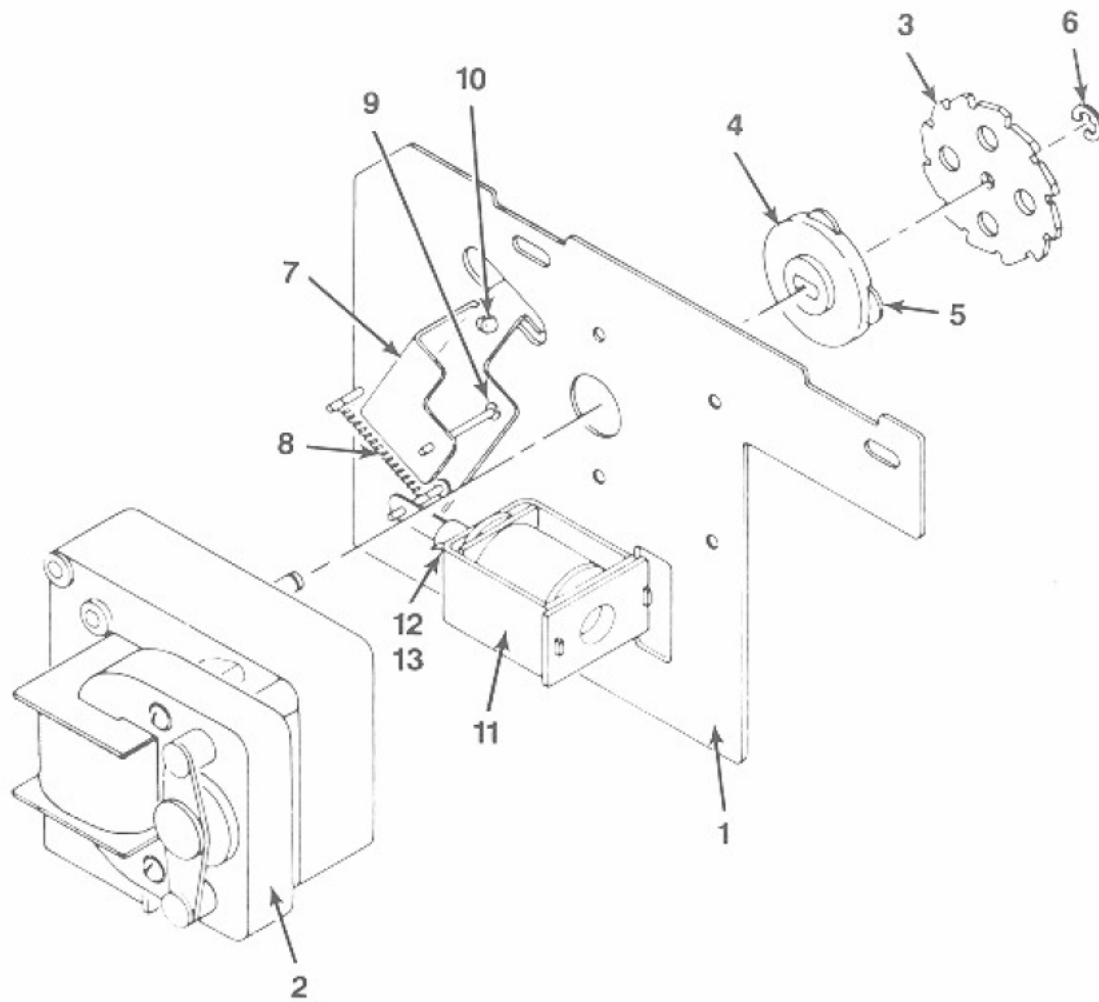


Figure 8-20. Sprag Assembly

Ref.	Part No.	Description	Qty
	40721901	Sprag Assembly (see figure 8-19, sheet 2, item 12)	Ref.
1	30793901	• Sprag Plate Assembly	1
2	40722701	• • Magazine Motor	1
3	40722301	• • Sprag Wheel	1
4	30793301	• • Sprag Wheel Hub	1
5	21816103	• Stem Bushing (Rubber)	4
6	70143003	• Retaining Ring	1
7	21816001	• • Sprag Lever Assembly	1
8	21256201	• Tension Spring	1
9	70143005	• Retaining Ring	1
10	25155901	• Split Stem Bumper	2
11	21150510	• • Solenoid Assembly	1
12	21085701	• • Plunger Assembly	1
13	21084902	• Plunger Stop	1

Figure 8-21. Cam Switch and Motor Assembly

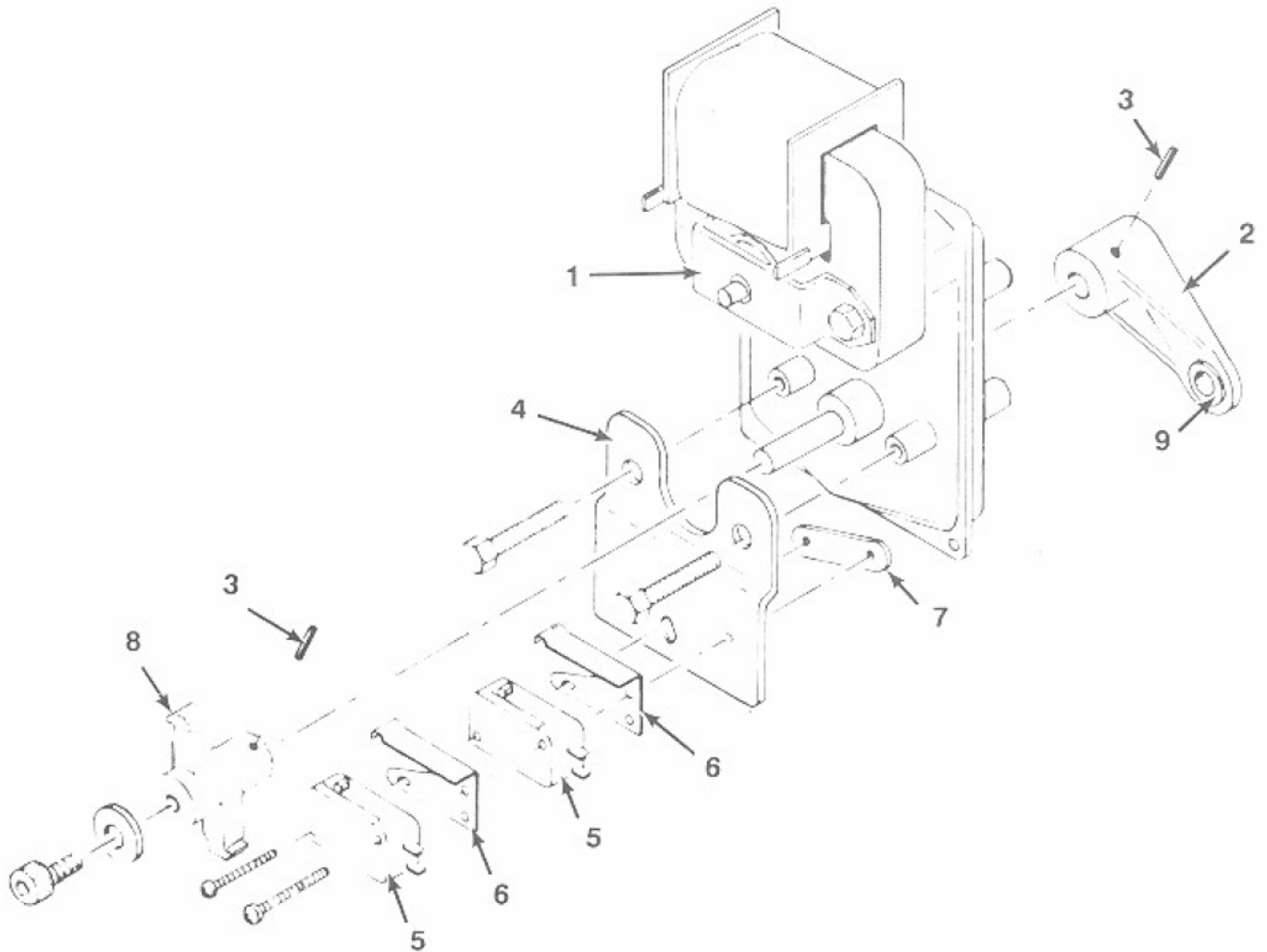


Figure 8-21. Cam Switch and Motor Assembly

Ref.	Part No.	Description	Qty
	40720802	Cam Switch and Motor Assembly (see figure 8-19, sheet 1, item 4)	Ref.
1	40720901	• Cam Motor	1
2	21810401	• Trunnion Crank	1
3	70113116	• Roll Pin	2
4	30790901	• Switch Plate	1
5	21073101	• Switch	2
6	21082901	• Switch Actuator	2
7	21083001	• Twin Nut	1
8	30793402	• Switch Cam	1
9	70146004	• Bearing	1

Table 8-1. Accessory Equipment

Part No.	Description	Function
26704401	Phono paging system With tabletop microphone	Paging system not affected by A.V.C. All plug-in unit, complete with microphone and 50 foot microphone cable.
26704402	Phonograph Paging System With hand-held microphone	Paging system not affected by A.V.C. All plug-in unit, complete with microphone and 50 foot microphone cable.
26694703	Amplifier Accessory Kit (Note: This kit will work with all 607925XX and 610237XX preamp-lifiers)	Provides access to auxiliary inputs and outputs of the preamplifier. Inputs will accept signals from most background music sources, such as tape players and AM/FM radios. Outputs are available to drive slave amplifiers before or after volume control.
21639701	Background Music Kit	Allows the phonograph to play Autoplay and customer selected music at different levels. Music can be played at different volumes in two different rooms or music can be switched to different rooms during either Autoplay or customer selections.
30632201	Remote volume and cancel control	The remote stereo volume control includes a cancel button. This kit does not include cable. A 3-conductor cable is required.
60898004	Remote volume power switch and cancel control	In addition to volume and cancel functions, the phonograph can be turned OFF and ON from a remote position. The CD currently playing is automatically canceled when the phonograph is turned OFF. The amplifier remains ON so that paging is possible. For domestic 120 volt phonographs only. Cable is not included. A four conductor cable is required.
30632209	Dual remote volume control	Controls volume of each channel separately. Does not include cable. A 4-conductor cable is required.
20819907	Remote volume and cancel control cable	This 3-conductor 50 foot cable connects a remote volume control to a phonograph.
20819908	Remote volume and cancel control cable	This 4-conductor 50 foot cable connects a remote volume control to a phonograph.
66505901	Service Kit	Includes central computer, digital display, power supply board, optical switch, power supply heat sink, blank titles, micro switches, peanut lamps, and fuses.

Part No.	Description	Function
66505902	Service Kit	This kit includes: Mechanism controller and decoder assembly, CD player with mounting accessories.
26711401	Amplifier Adapter Harness	Allows a 130 watt amplifier to be connected to a CD-100A as a replacement amplifier (the total amplifier output will be limited to 130 watts in this configuration).
26699503	Security Bar Kit	Heavy steel bar locks in place over cash box door. A padlock is required (not supplied by Rowe).
26711201 26712901	Pewter Touch-Up Paint Brown Metallic Touch-Up Paint	
21945601	Printer Interface Kit	Allows you to connect a serial RS-232 printer to a CD-100A. The printer must be at least a 40-column printer.
40846001	Keyboard Cover	Provides a flexible shield that protects the selection keyboard (POPULAR, RESET, 0-9, <, >) from water and other fluid spills.

## Section 8: Parts Catalog

<b>Paragraph</b>	<b>Page</b>
<b>CD-100A CODE SHEET</b> .....	8-2
<b>INTRODUCTION</b> .....	8-3
Catalog Description .....	8-3
Parts List Description .....	8-3
Ordering Replacement Parts .....	8-3
<b>PHONOGRAPH ASSEMBLY EXTERNAL VIEW</b> .....	8-5
<b>TOP DOOR ASSEMBLY</b> .....	8-9
<b>FRONT DOOR ASSEMBLY</b> .....	8-13
<b>TITLE RACK ASSEMBLY</b> .....	8-17
<b>PHONOGRAPH ASSEMBLY INTERNAL VIEW</b> .....	8-19
<b>COIN CHUTE ASSEMBLY</b> .....	8-21
<b>OBA-2 ASSEMBLY</b> .....	8-23
Transport Assembly .....	8-25
Transport Roller & Shaft Assemblies .....	8-29
Lower Harness Assembly .....	8-30
Harness & Holder Assembly .....	8-31
500 Bill Stacker Assembly .....	8-33
<b>AMPLIFIER COMPARTMENT</b> .....	8-35
Stereo Amplifier Assembly .....	8-37
Heat Sink Detail .....	8-38
Output Transformer Assembly .....	8-39
Main Power Supply .....	8-41
Central Control Computer Assembly .....	8-43
<b>MECHANISM ASSEMBLY</b> .....	8-45
Sprag Assembly .....	8-54
Cam Switch and Motor Assembly .....	8-55
<b>ACCESSORY EQUIPMENT</b> .....	8-56

COUNTRY 1st & 2nd DIGIT	PACK 3rd DIGIT	CD-100A SUB-ASSEMBLY 4th & 5th & 6th DIGIT	AMPLIFIER 7th DIGIT	BILL ACCEPTOR 8th DIGIT
01 = US	1 = DemPack = 2-19410-02	200 = Gold (60HZ) = 6-10450-01 201 = Gold (50HZ) = 6-10450-02	0 = None 1 = 2 = 3 = 3-06322-09 Remote Volume Cont. Assy 4 = 5 = 6 = 250W Amp. 6-10249-02 7 = 250W Amp. 6-10249-02 with 3-06322-09 Remote Volume Control	0 = None 1 = 2 = 3 = 4 = 5 = 6 = OBA 2-19411-01 W/Stacker 7 =
02 = Arg				
03 = Australia				
04 = Aus				
05 = Bah				
06 = Belg				
07 = Canada				
08 = Chile				
09 = Col				
10 = Costa R				
11 = Neut. Stk				
12 = Denmark				
13 = Ecuador				
14 = El Salv				
15 = England				
16 = Finland				
17 = France				
18 = Germany				
19 = Guat				
20 = Guat				
21 = Holland				
22 = Hon				
23 = Italy				
24 = Belize				
25 = Japan				
26 = Mexico				
27 = Nic				
28 = Norway				
29 = Aruba				
30 = Panama				
31 = Curaco				
32 = Spain				
33 = Sweden				
34 = Swiss Fr				
35 = Swiss Ge				
36 = Swiss It				
37 = Trinidad				
38 = Eng Video				
39 = Venez				
40 = Zambia				
41 = Puerto R				
42 = Guyana				
43 = Brazil				
44 = Barbados				
45 = Surinam				
46 = Yuga				
47 = S. Africa				
48 = US (220v)				
49 = US (240v)				

COIN ACCEPTOR 8th DIGIT
0 = None
1 =
2 =
3 = Export Rej. (Special)
4 = 3 Coin Canadian Bdr.
5 = Kit-Mars Slug Rej.
6 =
7 =
8 =
9 =

\* Requires 4-07038-11

SUB-ASSEMBLY CATEGORY
001-049 R-93
050-088 CD-100
200-249 CD-100A

SAMPLE:

01	1	200	6	7	4
----	---	-----	---	---	---

Canadian Border 3 Coin Acceptor  
4-06862-01

OBA 2-19411-01 W/Stacker

250 Watt Amplifier 6-10249-02

Black CD-100A 6-10450-01

Domestic Pack 2-19410-02

United States 6-10451-01

CD-100A Codes

Revision D

## INTRODUCTION

This parts catalog lists procurable replacement parts for the phonograph. The purpose of this parts catalog is to locate and identify replaceable components and supply information on how to order them.

### Catalog Description

This catalog is divided into major sections labeled figures, which correspond to the illustrations used. Some assemblies require more than one illustration to identify the parts. Each page has a sheet number to identify the sheet as part of that assembly's parts list.

Since replacing parts that are welded or riveted onto an assembly is normally impractical, replacement parts are not listed for these items. The assembly that contains the welded part should be replaced.

### Parts List Description

The parts list contains four columns:

- **Figure, Sheet, and Index Number** – The first entry in this column is the figure number of the corresponding illustration. An index number, when listed, corresponds to the index number appearing on the illustration. Index numbers are not used when items are listed for reference purposes only or when the item listed is an alternate part.
- **Rowe Part Number** – This column lists the part number to use when ordering replacement parts or making inquiries.
- **Description** – This column gives a word description of each part or assembly. Each item is indented to show its relationship to the next higher assembly.
- **Qty** – This column contains the part quantity used in the assembly. When a figure describes more than one model of an assembly, the "Qty" column is divided to show each model.

### Ordering Replacement Parts

All replacement parts must be ordered directly from an authorized Rowe Distributor.

Once the replacement item has been determined, complete a Standard Parts Order Form. (available from your Rowe Distributor at no charge) Very often parts orders are delayed because of inadequate or incompletely filled out parts order forms. To enable prompt delivery, always specify the following information:

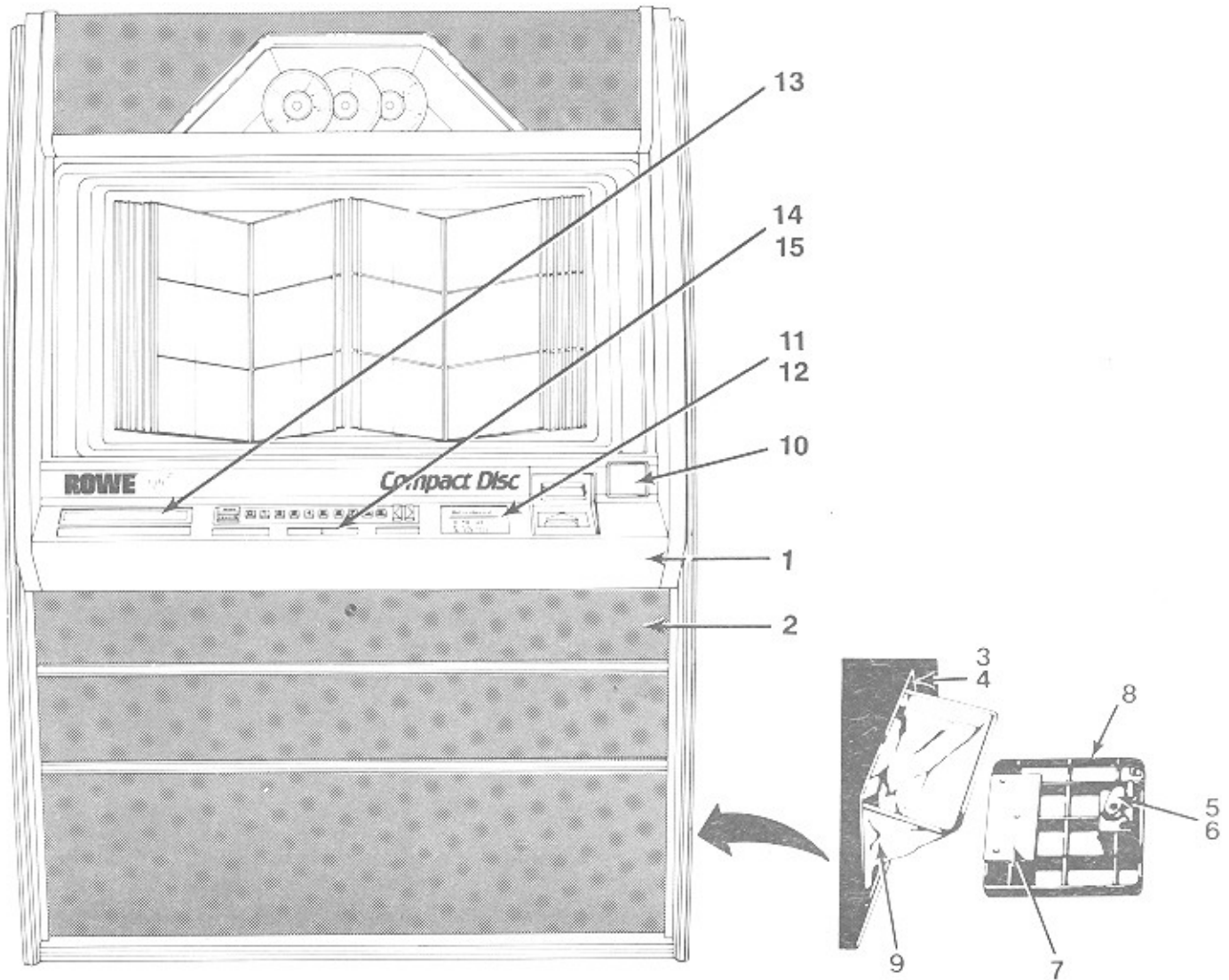
- Part Number and Description (indicate color, if applicable)
- Quantity required
- Machine Model and Serial Number
- Complete shipping address, including the ZIP code
- Shipping Instructions must be supplied. If the shipping method is Parcel Post, Air Parcel Post, United Parcel Service, or Air UPS, and the packages may exceed the size and weight limits of these services, indicate an alternate shipping method.

If the shipment must be delivered as fast as possible, specify "Fastest Way". Rowe will select the carrier for orders that justify shipment by truck.



# Figure 8-1. CD-100A Phonograph External View

Sheet 1



Ref.	Part No.	Description	Qty
	61045001/02	CD-100A Phonograph Assembly (60/50 Hz)	Ref.
1	61034002	Top Door Assembly (see figure 8-2)	1
2	61034502	Front Door Assembly (see figure 8-3)	1
3	40527605	• Cash Box Door Frame	1
4	21776005	• "U" Type Speed Clip	1
	21186605	• Cash Box Door Assembly	1
5	70162004	• • Cylinder Lock	1
6	20669501	• • Lock Support	1
7	20770301	• • Catch Bracket	1
8	60326705	• • Cash Box Door	1
9	30702601	• Cash Bag	1
	70212507	• • Felt Adhesive Tape	1
	70166008	• • Lock Bolt-Straight	1
10	30939001	• Blockout-Coin Inlet	1
11	21845612	• Window - Price Card	1
12	Ref.	• Price Card (see the table on the following page)	1
13	Ref.	• Card Readout (see the table on the following page)	1
14	21845611	• Window - Selector	1
15	Ref.	• Card-Selector Graphics (see the table on the following page)	1

Price Card Part Numbers			
Price Card Language	Alternate Price Card	Card Readout	Card-Selector Graphics
Spanish	30952901	30953001	30953101
German	30952902	30953002	30953102
French	30952902	30953003	30953103
England	30952906		
England	30952916		

# Figure 8-1. CD-100A Phonograph External View

Sheet 2

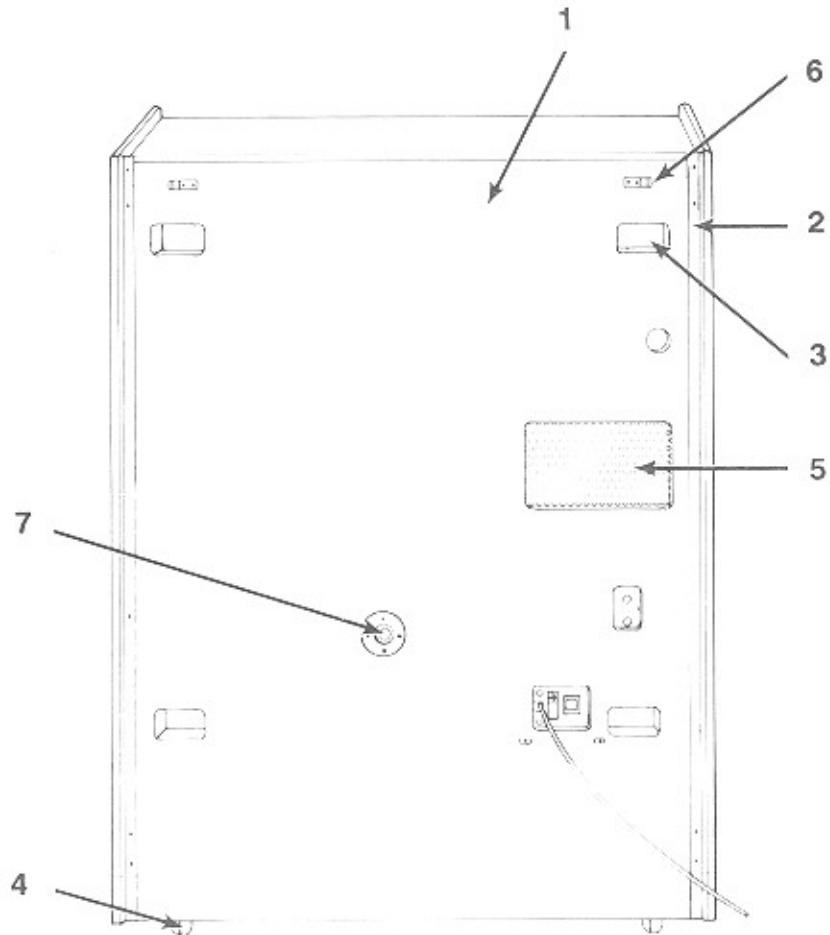
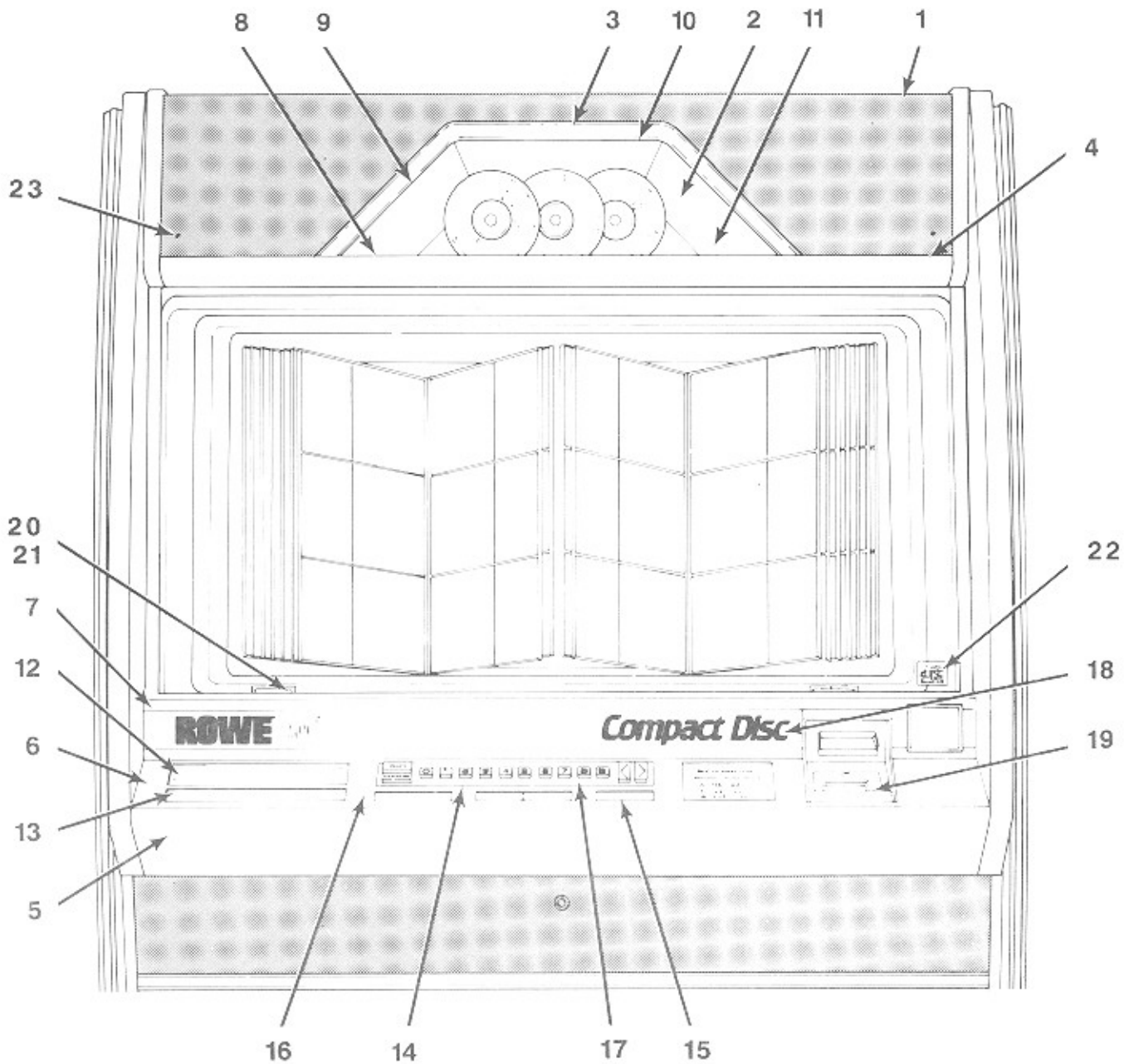


Figure 8-1 CD-100A Phonograph External View (Sheet 2)

Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz)	Ref.
1	61035002	• Shell Assembly	1
	60927901	• • Bracket-Cash Bag	1
	21451801	• • Lock Spring	1
	30866905	• • Protective Strap	2
	70240126	• • Screen-Wire Mesh	1
	21537203	• • Tee Nut	2
	20932601	• • Tee Nut	6
	21750618	• • Vent Tube	1
	21750616	• • Vent Tube	1
2	40702808	• • Skid Rail	2
3	30625701	• • Hand Hold Cover	4
4	30634001	• • Caster and Cup Assembly	4
5	30868402	• Enclosure Screen	1
6	20879501	• Power Cord Holder	2
7	21265203	• Tie Down Plate Assembly	1

# Figure 8-2. CD-100A Phonograph Top Door Assembly

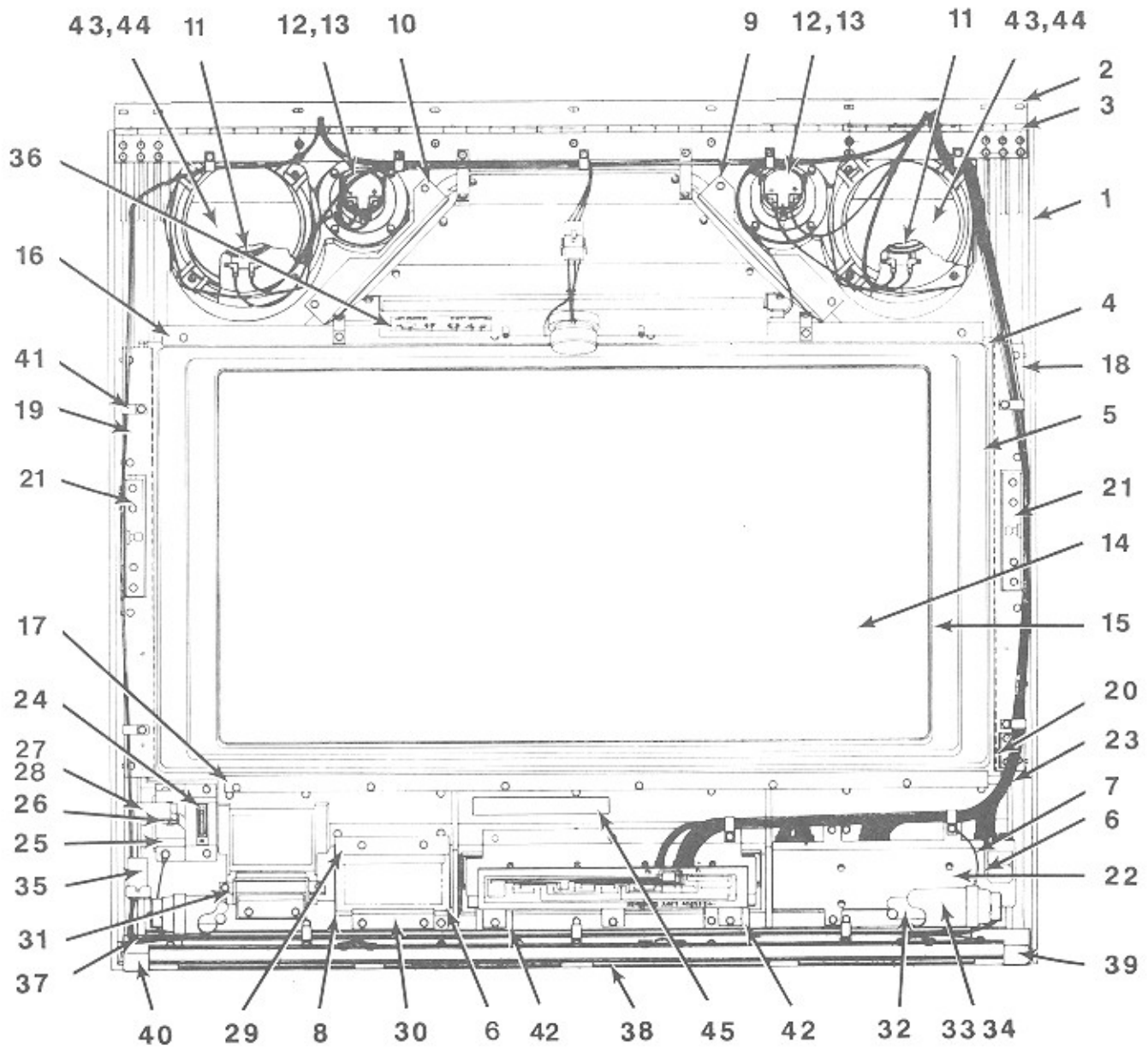
Sheet 1



Ref.	Part No.	Description	Qty
	61034002	Top Door Assembly	Ref.
1	61034102	• Grille - Upper	1
2	61036002	• Animation Assembly	1
	61037001	• • Housing - Animation	1
	61037101	• • Housing - Side (LH)	1
	61037201	• • Housing - Side (RH)	1
	30936901	• • Plate Assembly - Animation Drive	1
	30937201	• • Bracket - Animation Mounting (Upper)	2
	30937301	• • Bracket - Animation Mounting (Lower)	2
	40824302	• • Motor & Harness Assembly	1
	30936701	• • Shaft	2
	70143001	• • Ring - External Retaining	4
	21110001	• • Washer - Thrust	2
	40834901	• • Gear	3
	21532801	• • Speednut - Push On	3
	61037402	• • Printed Wiring Board - CD Animation	1
	21862201	• • Lamp & Socket Assembly	8
	30866501	• • Lens - Brown	4
	30866504	• • Lens - Magenta	2
	30866503	• • Lens - Clear	2
	40834801	• • Support - Disc	3
	21922201	• • Ring - Compression	3
	30926903	• • Disc - Animation	3
	21922602	• • Label - Copyright	1
	21955701	• • Label-Animation Removal (After 5-31-90)	1
	79920100	• Resistor - Wire Wound (10 Ohm, 2 Watt)	1
3	61033404	• Trim - Animation Box	1
4	61033503	• Trim - Speaker Panel	1
5	40837102	• Trim & Strike Assembly	1
6	61033202	• Trim - Control Panel	1
7	61033102	• Trim - Control Panel (Upper)	1
8	70212213	• Sponge Rubber - Closed Cell	1
9	70212214	• Sponge Rubber - Closed Cell	2
10	70212215	• Sponge Rubber - Closed Cell	1
11	40834101	• Window - Animation	1
12	21845610	• Window - Digital Display	1
13	61033801	• Trim - Keyboard	1
14	30934804	• Card - Readout	1
15	70212230	• Sponge Rubber - Closed Cell	2
16	70212231	• Sponge Rubber - Closed Cell	4
17	40833501	• Keyboard Assembly	1
	21949601	• Keyboard Key Kit - Complete Set Of Numbers	1 Set
	21949701	• Keyboard Key Kit - Four Button Set (POPULAR, <<, >>, RESET)	1 Set
18	61036202	• Decal - Compact Disc	1
19	30935102	• Decal - B.A. Inlet	1
20	30921502	• Frame - License (White)	2
21	21921001	• Retainer - License	2
22	21922001	• Sticker - CD	1
23	70136508	• Brad - Cohered	2
	21955701	• • Label - Flag	1

# Figure 8-2. CD-100A Phonograph Top Door Assembly

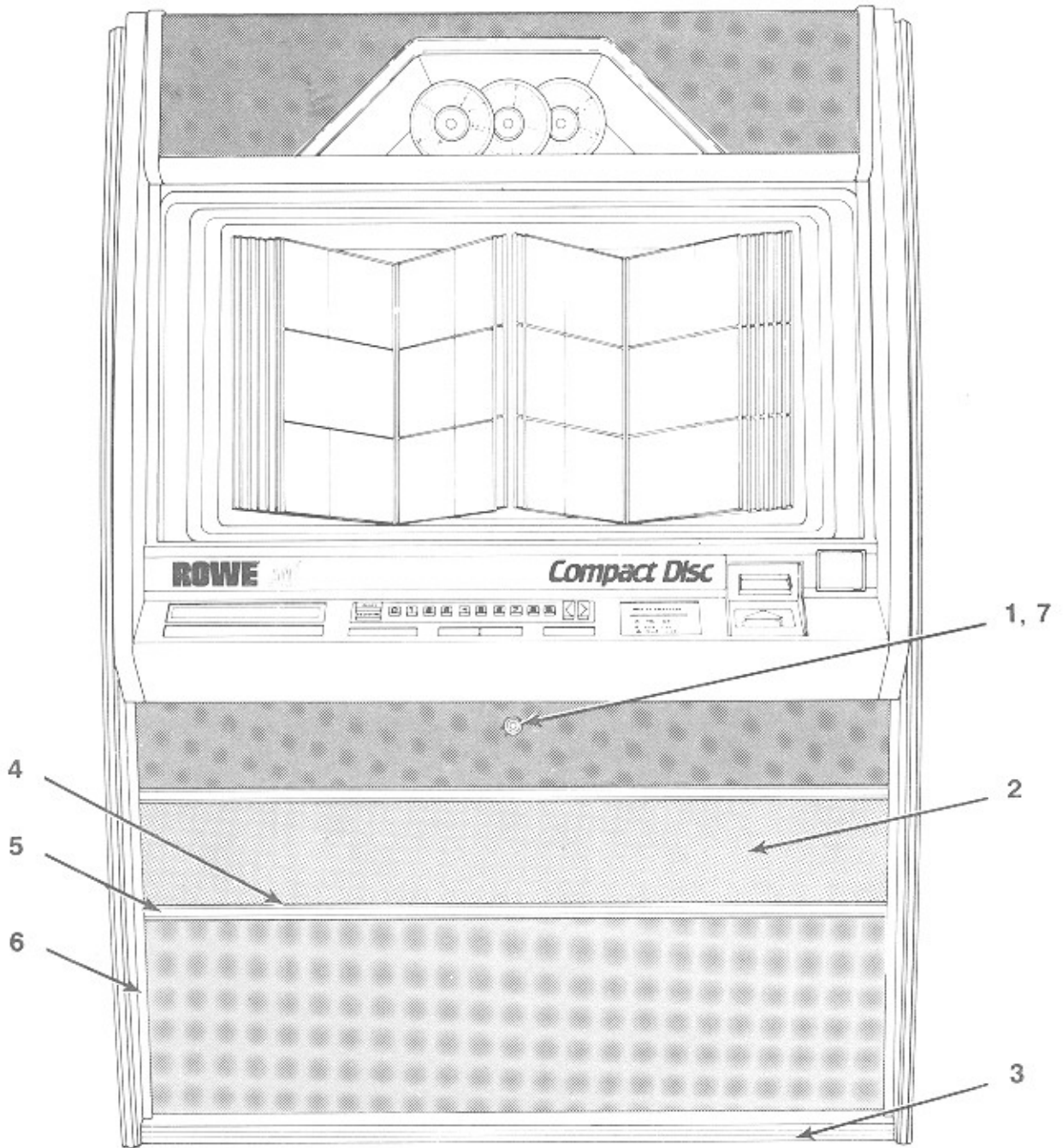
Sheet 2



Ref.	Part No.	Description	Qty
	61034002	Top Door Assembly	Ref.
1	61033602	• Frame - Top Door (CD-100A)	1
2	61035801	• Hinge - Top Door	1
3	70220485	• Foamed Tape	1
4	70212211	• Sponge Rubber - Closed Cell	2
5	70212212	• Sponge Rubber - Closed Cell	2
6	70212227	• Sponge Rubber - Closed Cell	4
7	70212228	• Sponge Rubber - Closed Cell	3
8	70212229	• Sponge Rubber - Closed Cell	2
9	30934301	• Bracket - Mounting (Animation Window) LH	1
10	30934401	• Bracket - Mounting (Animation Window) RH	1
11	40830801	• Speaker - Mid Range (6")	2
12	40830901	• Speaker - Tweeter (3")	2
13	21944401	• Spacer - Speaker	8
14	21845609	• Window - Top Door	1
15	61036101	• Housing - Title Rack	1
16	30934501	• Bracket - Mounting (Window - Upper)	1
17	30934601	• Bracket - Mounting (Window - Lower)	1
18	40834301	• Bracket - Mounting (Window LH)	1
19	40834401	• Bracket - Mounting (Window RH)	1
20	21941901	• Actuator - Reset	1
21	30934701	• Pivot Assembly - Gas Spring	2
22	40832301	• Digital Display Assembly	1
23	40833402	• Harness Assembly - Digital Display	1
24	40831802	• Inlet - Coin	1
25	30931601	• Bracket - Guide (Reject)	1
26	21834801	• Channel	2
27	21822901	• Spring - Compression	1
28	21942302	• Button & Shaft Assembly - Reject	1
29	40831701	• Holder - Price Card	1
30	21942401	• Bracket - Holder (Price Card)	1
31	30931401	• Insert - B.A. Inlet	1
	40836303	• Blockout - Bill Acceptor (Models without bill acceptor. Blockout not shown)	1
	30939402	• Decal - Coin Blockout (Models without coin acceptor. Decal not shown)	1
32	70060112	• Lamp - Fluorescent (30 W T-8)	1
33	61036501	• Tube - Color	1
34	61037602	• Filter - Color	1
35	70080004	• Starter - Fluorescent (FS-4)	1
36	30935301	• Label - Speaker Harness	1
37	40834501	• Harness Assembly - Top Door Light	1
38	30935601	• Diffuser - Light	1
39	30939701	• Bracket - Light Block (LH)	1
40	30939801	• Bracket - Light Block (RH)	1
41	70093401	• Clamp - Cable (17/32)	14
42	30941401	• Bracket - Hold Down (Graphics)	2
43	30951201	• Pad - Acoustical (Speaker Cover)	4
44	61042801	• Housing - Speaker	2
45	21948801	• Label - Warning	1
	30935601	• Diffuser - Light	1
	25240601	• Jumper Assembly	2



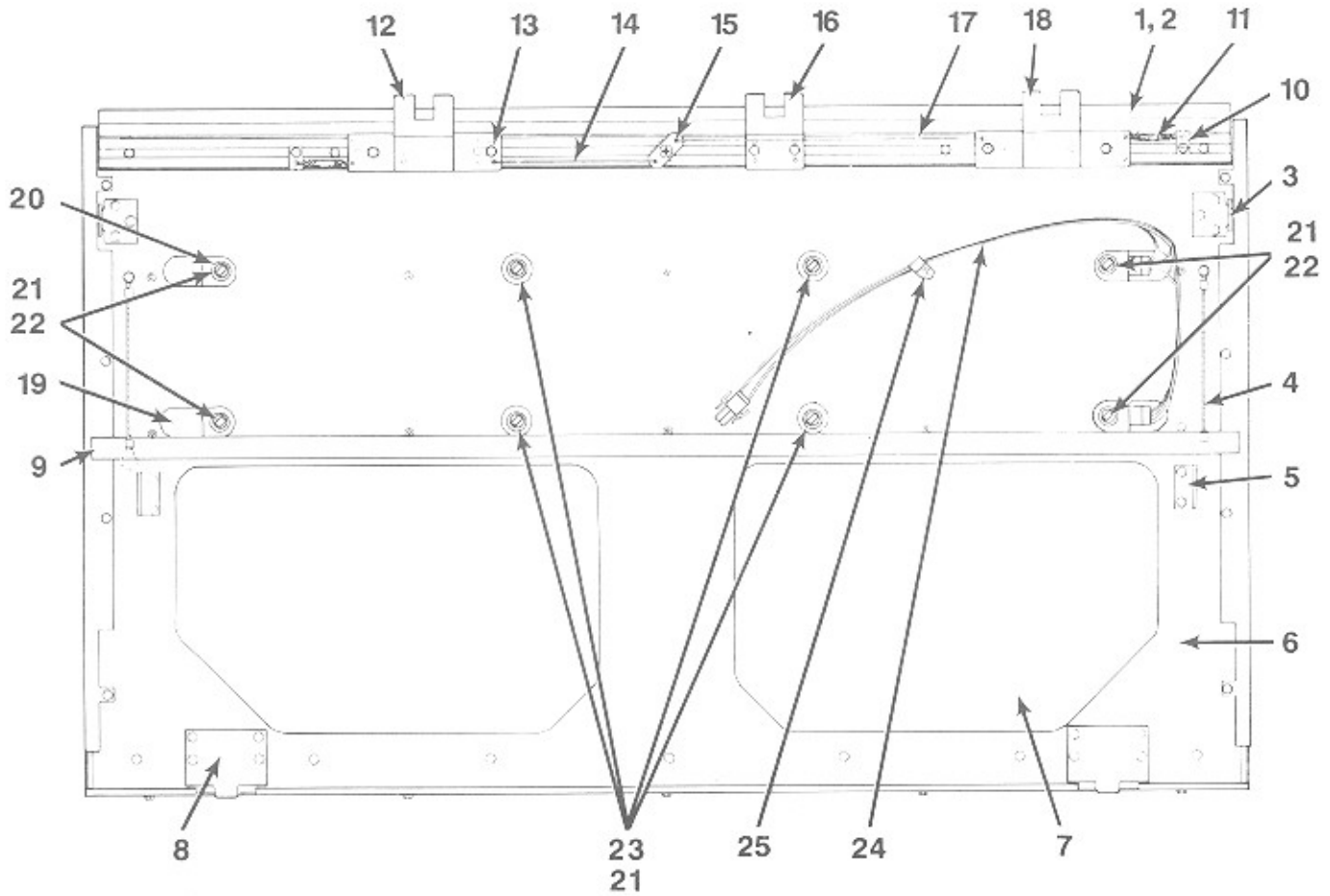
Figure 8-3 CD-100A Front Door Assembly  
Sheet 1



Ref.	Part No.	Description	Qty
	61034502	Front Door Assembly	Ref.
1	70163211	• Cylinder - Lock (Common Key)	1
2	61034302	• Grille - Lower	1
3	61033702	• Trim - Bottom	1
4	30950501	• Trim - Grille	2
5	30898401	• Diffuser - Trim	2
6	40831302	• Trim - Side	2
7	21795305	• Bezel - Lock	1

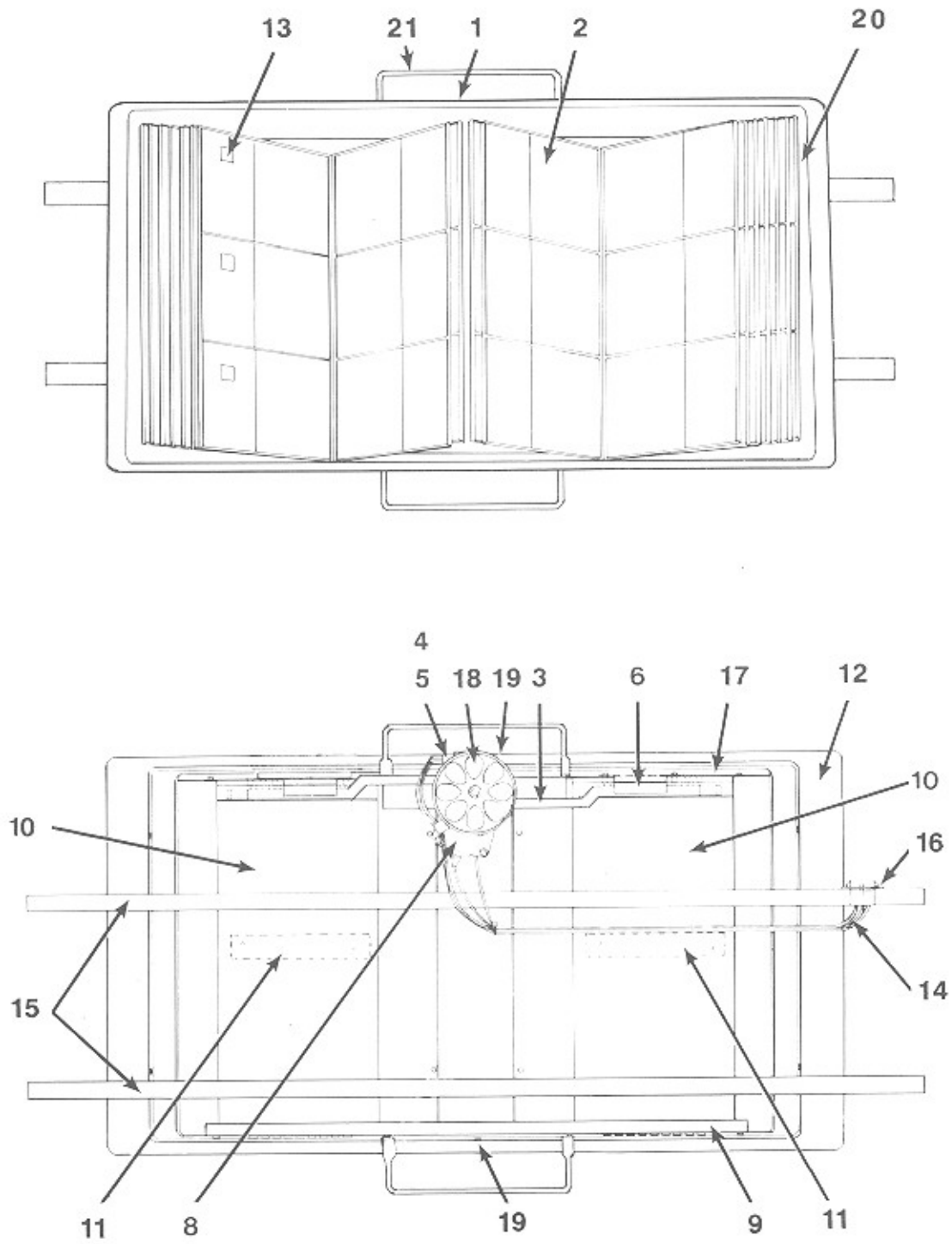
# Figure 8-3 CD-100A Front Door Assembly

(Sheet 2)



Ref.	Part No.	Description	Qty
	61034502	Front Door Assembly	Ref.
1	61034402	• Lockbar	1
2	70220488	• Foamed Tape	1
3	21883504	• Strike	2
4	21572601	• Cable - Fall Stop	2
5	21920101	• Bracket - Upstop	2
6	61034202	• Panel - Door (Lower)	1
7	40833602	• Scrim - Front Door	1
8	21940801	• Strap - Hinge	2
9	70220486	• Foamed Tape (3/4 x 1/2 x 39)	1
10	21567401	• Retainer - Spring	2
11	21256201	• Spring - Tension	2
12	21941801	• Lockbar Assembly (RH)	1
13	20922502	• Spacer	4
14	21724905	• Link - Lockbar	1
15	21425601	• Bolt - Lock	1
16	21941301	• Catch	1
17	21724902	• Link - Lockbar	1
18	21941701	• Lockbar Assembly (LH)	1
19	40844901	• Insulator	2
20	40845501	• Printed Wiring Board	2
21	21862201	• Lamp and Socket Assembly	8
22	30866504	• Lens - Magenta	4
23	30866501	• Lens - Brown	4
24	30951701	• Harness - Front Door Harness	1
25	70093101	• Cable Clamp	1
	70212219	• Sponge Rubber - Closed Cell	1

Figure 8-4 Title Rack Assembly



Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz)	Ref.
1	61035701	• Title Rack Assembly	1
2	30933901	•• Page & Clip Assembly	18
3	40833802	•• Rack CD Title Page	2
4	21942201	•• Switch - Micro	2
5	21083001	•• Nut - Twin	1
6	30935501	•• Guide - Side (CD Page Assembly)	2
7	30935001	•• Guide - Center, CD Page Assembly (Not Shown)	1
8	30936301	•• Motor & Gear Assembly	1
9	61036801	•• Plate - Bottom (CD Page Assembly)	1
10	61036902	•• Support - Vertical (CD Page Assembly)	1
11	40834701	•• Guide - Center (CD Page)	2
12	61036601	•• Shroud	1
13	40835401	•• Strip - Numbers (Page)	1
14	30938501	•• Harness Assembly - Interconnect	1
15	40835301	•• Brace - Mounting	2
16	30938301	•• Plate - Connector	1
17	61036701	•• Plate - Top (CD Page Assembly)	1
18	40836201	•• Knob	1
19	30940701	•• Label - Warning	2
20	30940801	•• Bumper - Page	4
21	30941801	•• Handle	2
	30941101	•• Bracket - Light Block	2
	21944401	•• Spacer - Speaker	4
	70134129	•• Screw - Special (#8-18 Griplock)	33
	70800106	•• Cable Tie	2

Figure 8-5. CD-100A Phonograph Internal View

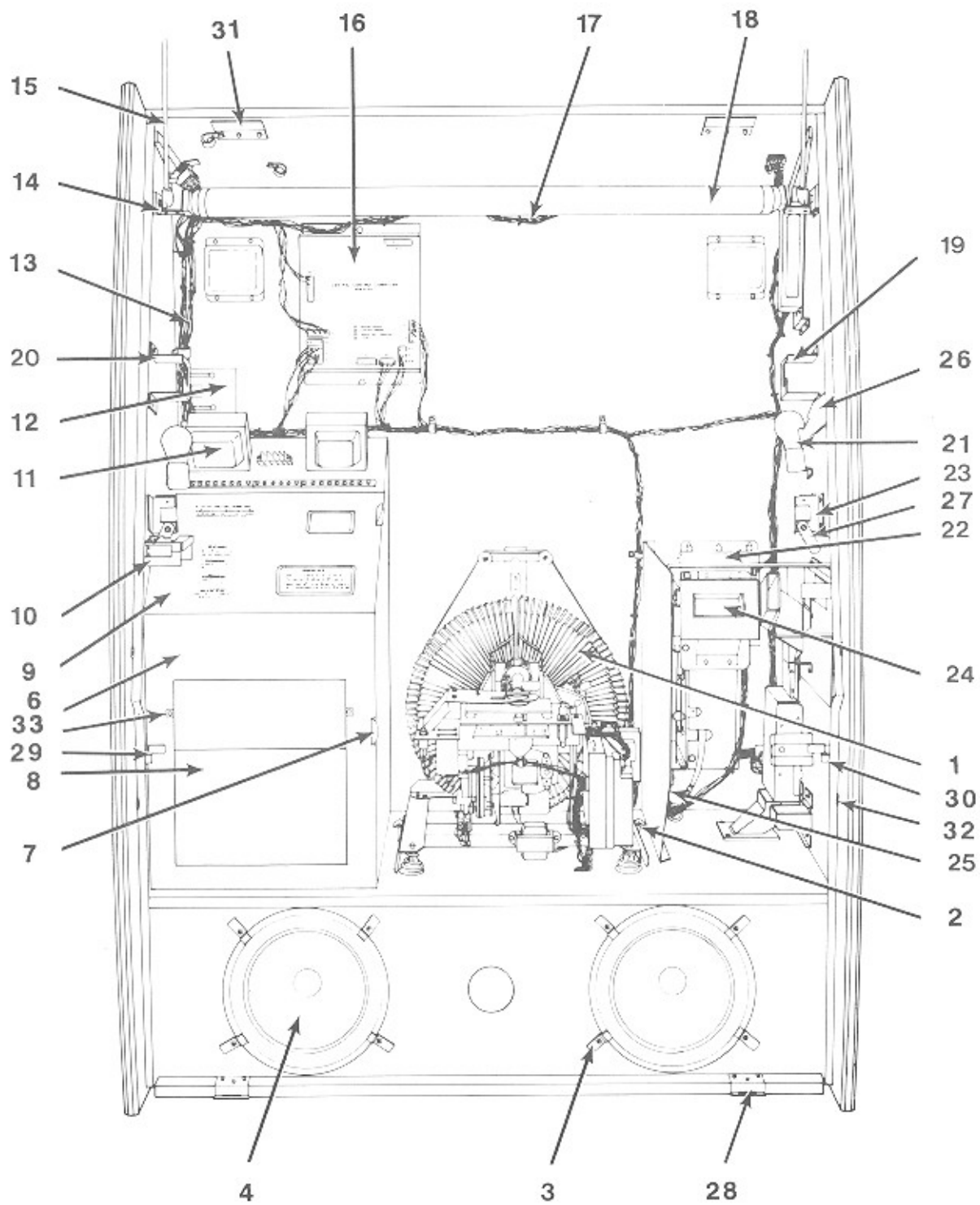
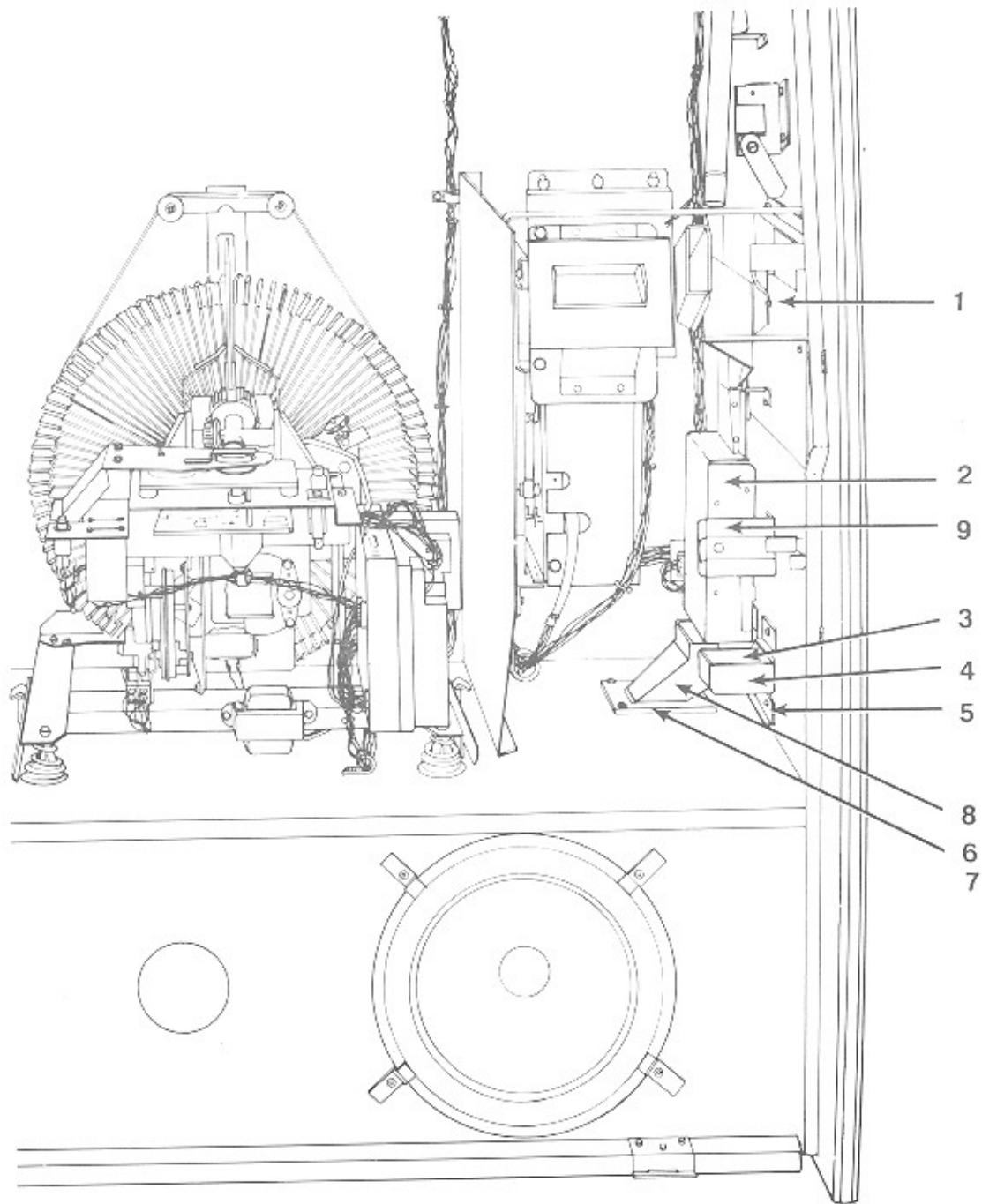


Figure 8-5 CD-100A Phonograph Internal View

Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz)	Ref.
1	61033001	• Mechanism Assembly - CD (see figure 8-19)	1
2	30932101	• Bracket - Mech Tie Down	2
3	21780701	• Bracket - Retainer, Speaker	8
4	40830703	• Speaker - Woofer 10 Inch	2
5	21780609	• Pad - Acoustical (Not Shown)	1
6	30934101	• Panel Assembly - Amplifier	1
7	21751804	• Spring Catch	1
8	30869801	• Handy Case	1
	21730516	• • Accessories Bag Assembly	1
	21827201	• • • Bag - Zip Lock	1
	70097501	• • • • Contact - Univ Conn (Pin)	6
	70097502	• • • • Contact - Univ Conn (Socket)	6
	70075601	• • • • Contact - Post	10
	70091012	• • • • Terminal Lug - Spade	10
	70072002	• • • • Fuse Cartridge (8 amp.)	2
	70072106	• • • • Fuse Cartridge (5 amp.)	2
	26676802	• • • • Quality Card - Phonograph	1
	21822616	• • • Manual - Service (CD-100A, Volume I.)	1
	21822615	• • • Manual - Service (CD-100A, Volume II.)	1
	21888604	• • • Programming Reference Guide	1
	21957001	• • • Routine Service Guide	1
	30931304	• • • Alternate Price Card	1
	61031402	• • • Universal Price Sheet	1
	30935903	• • • Blank Title Strip With Numbers	15
	30940601	• • • Title Page Filler	8
	30935904	• • • Blank Title Strip (Without Numbers)	15
9	40836101	• Panel Assembly - Amp (Top)	1
10	40835601	• Switch Assembly - Service	1
11	40832101	• Output Transformer Assembly (see figure 8-16)	1
12	21759301	• Cover - Cord Hole	1
13	61035502	• Harness & Switch Assembly	1
14	30936501	• Bracket - Ball Stud	2
	21797601	• Stud - Ball	2
15	40714908	• Spring - Pneumatic	2
16	40832201	• Central Control Computer	1
17		• Harness, 110 Volt	1
	40832901	• • (60 Hz)	
	40832902	• • (50 Hz)	
18	70060112	• Fluorescent Lamp (30 watt, T-8)	1
	70080004	• Starter - Fluorescent Lamp	1
19	30938201	• Mounting Bracket - Title Rack Upper (RH)	1
20	30938101	• Mounting Bracket - Title Rack Upper (LH)	1
21	70060410	• Lamp - Incandescent	2
22	61038903	• Control Unit - OBA (see figure 8-7)	1
23	30938401	• Catch - Title Rack	2
24	65056511	• Bill Acceptor transport (see figure 8-7)	1
25	61034801	• Bill Acceptor Mounting Plate (see figure 8-7)	Ref.
26	30938601	• Support Bracket Assembly	1
27	30938001	• Latch Pivot	1
28	30932801	• Door Mounting Bracket	2
29	21712701	• Latch Assembly (L.H.)	1
30	21712702	• Latch Assembly (R.H.)	1
31	30936601	• Bracket - Guide (Hinge)	2
32	21491301	• Door Guide	4
33	21870001	• Snap-In Fastener	2
	30932201	• Lever - Mech Release	2

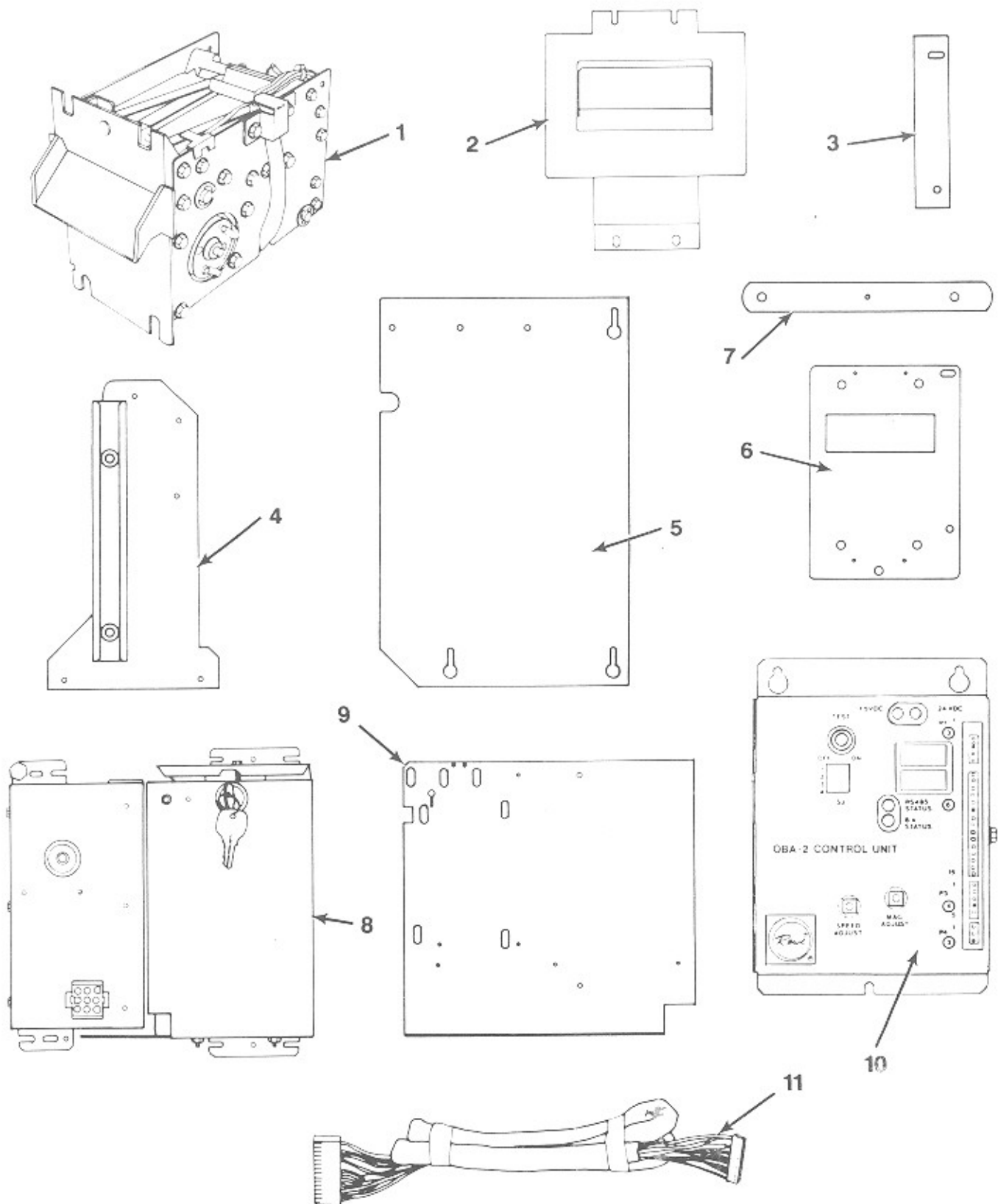


Figure 8-6. Coin Chute Assembly



Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz)	Ref.
1	40832701	• Support & Coin Chute Assembly	1
	40831201	• • Support - Coin Chute and Reject Mechanism	1
	40833701	• • • Chute Assembly - Coin (Upper)	1
	30930901	• • Pivot - Scavenge	1
	30931101	• • Link - Scavenge	1
	30931901	• • Actuator - Slug Rejector	1
	21940601	• • Link - Scavenge (Pivot)	1
	21256201	• • Spring - Tension	1
	21765601	• • Spring - Compression	1
	25156904	• • Washer - Shoulder	1
	20922502	• • Spacer	6
	70120010	• • Washer	1
	25155901	• • Bumper - Split Stem	1
	70091702	• • Solder Lug	1
2	40703811	• Mounting Bracket & Coin Switch Assembly	1
	40579302	• • Mounting Bracket Assembly	1
	30578702	• • Switch Assembly - Coin	1
	21790201	• • Hinge - Rejector	1
	21411401	• • Spacer	1
	20636801	• • Stud (#8-32)	1
3	21792901	• Door - Slug Cup	1
4	30781702	• Cup - Slug - (Black)	1
5	21793001	• Bracket - Slug Cup	2
6	30743701	• Collar - Coin Chute	1
7	21754401	• Gasket - Coin Chute	1
8	61034701	• Chute - Lower (Coin)	1
9	21429501	• Rejector Catch Assembly	1
10	21153701	• Spring Support - Lower	4
	21730001	• Hook - Fall Stop	2
	21790102	• Support - Hinge	1
	70093401	• Cable Clamp (17/32)	15
	70093402	• Cable Clamp (13/16)	20
	21797502	• Screw - Tie Down	1
	21943501	• Blockout Retainer Bracket (C.I.)	1
	30939502	• Decal - Coin Inlet	1
	30939601	• Decal - Crest (BA Blockout, 50 Hz Only)	1
	40833001	• Door Support - L.H. (Upper)	1
	40833101	• Door Support - R.H. (Upper)	1
	30951501	• Door Support - L.H. (Lower)	1
	30951601	• Door Support - R.H. (Lower)	1
	70220487	• Foamed Tape	2
	21865301	• Link - Pivot	3
	61036501	• Tube - Color	1
	61037602	• Filter - Color	1
	25142281	• Jumper Assembly	1
	25142281	• Jumper Assembly	1

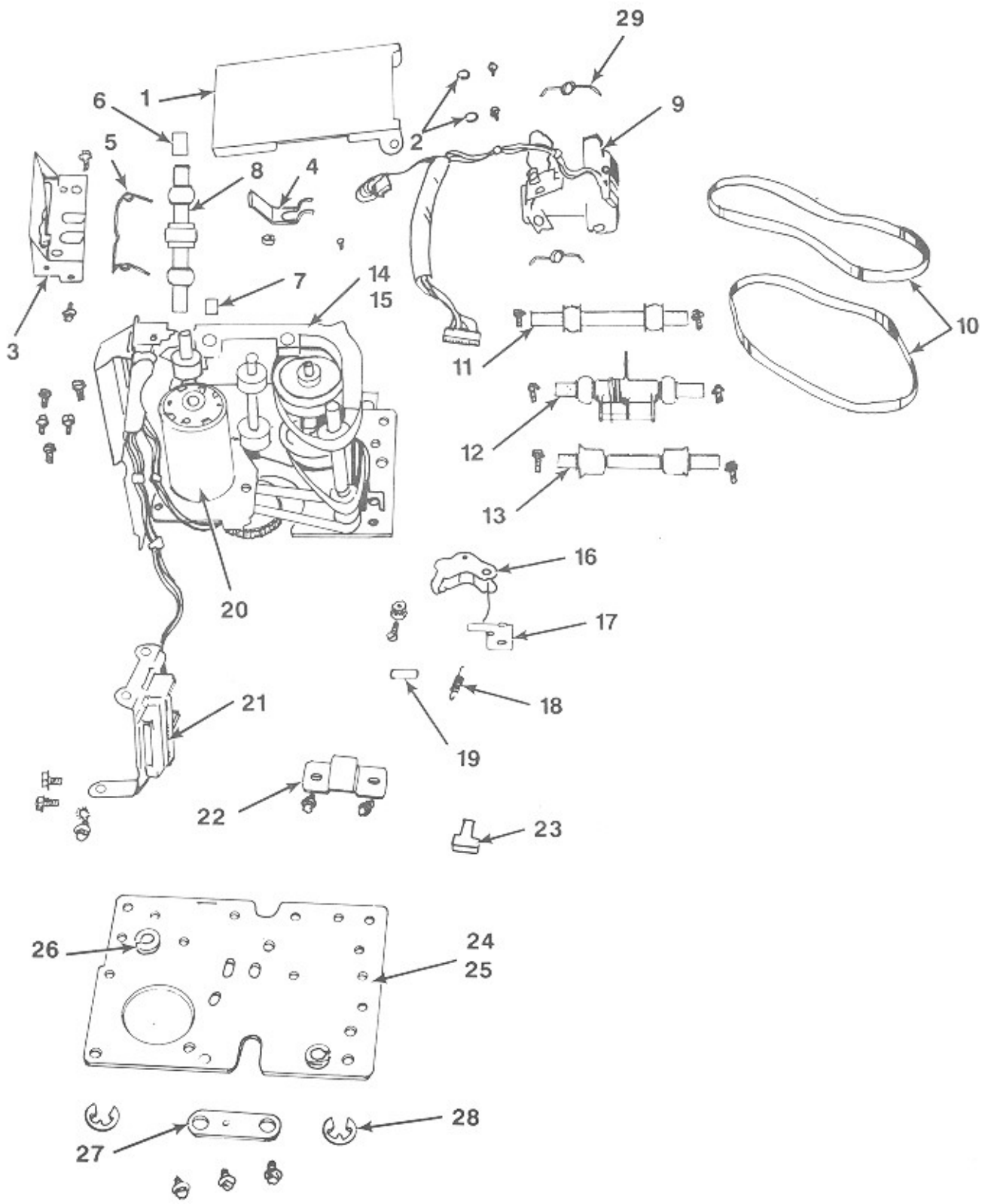
Figure 8-7. OBA-2 Bill Acceptor Assembly



Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz)	Ref.
1	65056511	• Transport Assembly OBA 1&5 (see figure 8-8)	Ref.
2	61033901	• Trim - Bill Acceptor	1
3	30857901	• Bracket - Adjustment	1
4	30858402	• Slide Assembly - Support	1
5	61034801	• Plate - Mounting (BA)	Ref.
6	30858005	• Support Assembly - Front Plate	1
7	30858801	• Bar Assembly - Slide	1
8	60971516	• Bill Stacker Assembly (500 Bill Left-Hand Opening)	1
9	61035601	• Panel - Mounting (BA)	1
10	61038903	• Control Unit (To 1-17-91)	1
	61038904	• Control Unit (From 1-17-91)	1
	65063401	• • Base and Stud Assembly	1
	65063209	• • Circuit Board Assembly	1
	65063509	• • Control Unit Cover	1
11	45070203	• Interconnect Harness Assembly	1
	21875001	• Spacer - Rear (Not Shown)	1
	70093402	• Cable Clamp (Not Shown)	6
	70121211	• Spacer (Not Shown)	2
	21828201	• Spacer - Roller (Not Shown)	1
	20554502	• Clip - Cable (Not Shown)	1

# Figure 8-8. OBA-2 Transport Assembly

Sheet 1



Ref.	Part No.	Description	Qty
	65056511	• Standard OBA Transport Assembly	Ref.
1	35083801	• Light Block	1
2	20922503	• Spacer	2
3	35082904	• Inlet and Stud Assembly	1
4	35082601	• Pressure Roller Spring	1
5	25213601	• Spring	1
6	25213501	• Long Sleeve Spacer	1
7	25213502	• Short Sleeve Spacer	1
8	35097801	• Pressure and Crowned Roller Shaft Assembly (see figure 8-9, E)	1
9	45059801	• Harness and Holder Assembly (see figure 8-11)	1
10	35118601	• Drive Belt	2
11	35097501	• Crowned Roller Shaft Assembly (see figure 8-10, C)	1
12	35097402	• Anti Cheat Lever Shaft Assembly (see figure 8-10, B)	1
13	35097601	• Creasing Roller Shaft Assembly (see figure 8-10, D)	1
14	35099403	• Track and Pressure Roller Assembly	1
15	35083004	• • Lower Track	1
16	35080603	• • Pressure Roller Assembly	1
17	25224601	• • Pressure Roller Spring Bracket	1
18	25225003	• • Tension Spring	1
19	25191701	• • Pivot Pin	1
20	45058404	• Motor Assembly (With Shield)	1
21	35080701	• Circuit Board and Bracket Assembly	1
22	35083701	• Wire Holding Bracket	1
23	21776009	• U-Type Speed Clip Fastener	1
24	35098001	• Side Plate Assembly (RH)	1
25	45057801	• • Side Plate (RH)	1
26	70146004	• • Nyliner Bearing	2
27	25194101	• • Take-up Shaft Bracket	1
28	70143004	• External Retaining Ring	2
29	35112301	• Retainer - Mag. Head Holder	2
	70122009	• Washer - Internal Lock	1
	25223101	• Label - Flag	1
	25023902	• Wire - Tie	2

# Figure 8-8. Transport Assembly

## Sheet 2

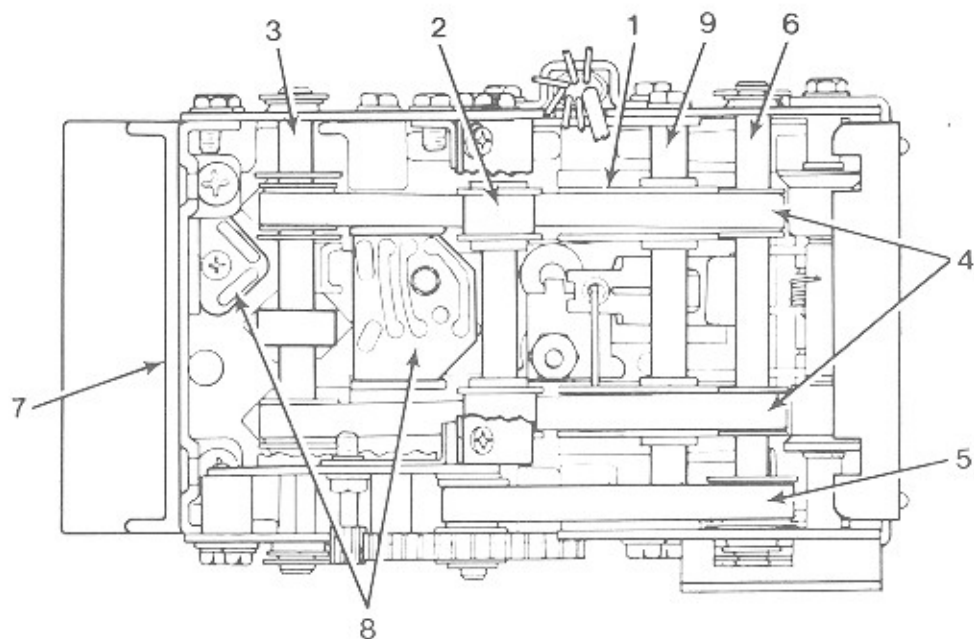


Figure 8-8. OBA-2 Transport Assembly (Sheet 2)

Ref.	Part No.	Description	Qty
	65056511	OBA-2 Transport Assembly	Ref.
1	35080101	• Drum Pulley	2
2	35098101	• Take-up Roller Shaft Assembly (see figure 8-9, F)	1
3	35080501	• Lower Input Roller Assembly (see figure 8-9, A)	1
4	45077201	• Timing Belt (140 Tooth)	2
5	35082001	• Timing Belt (70 Tooth)	1
6	35080801	• Drive Shaft Assembly (see figure 8-9, G)	1
7	35090604	• Casting, Plate and Harness Assembly	1
	45064201	• • Front Plate	1
8	45058202	• • Harness Assembly - Lower (see figure 8-10)	1
9	35097701	• Ring Shaft Assembly	1
	35080001	• • Drum Pulley Shaft	1
	70143004	• • External Retaining Ring	2
	65056801	• • Track - Inlet	1

# Figure 8-8. Transport Assembly

Sheet 3

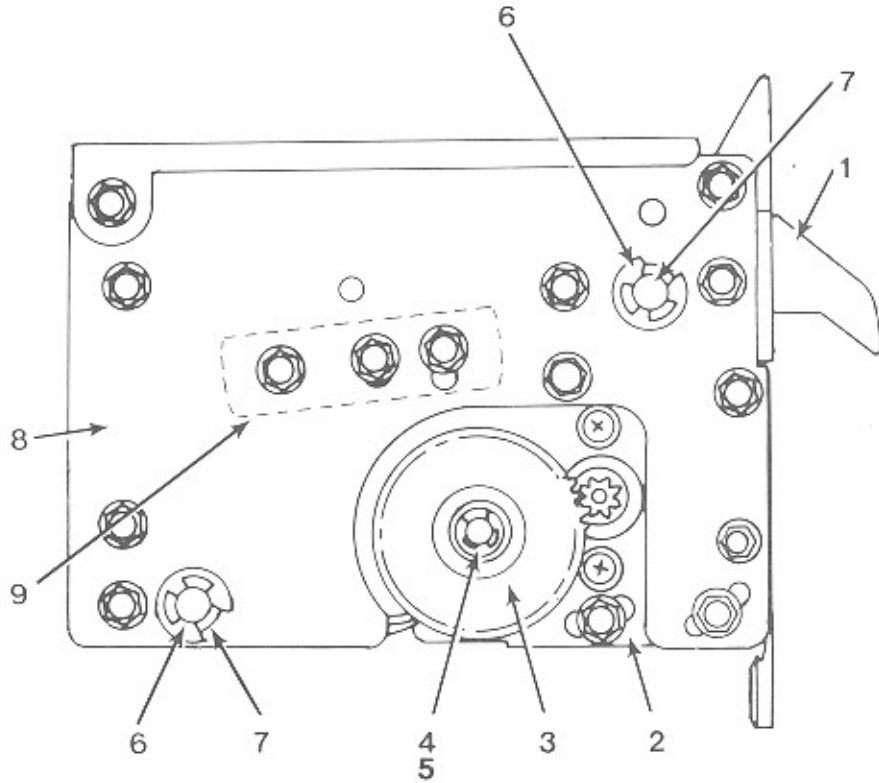


Figure 8--8. OBA-2 Transport Assembly (Sheet 3)

Ref.	Part No.	Description	Qty
	65056511	OBA-2 Transport Assembly	Ref.
1	65056801	• Inlet Track (see figure 8-8, sheet 2)	Ref.
2	35090701	• Bracket & Reduction Gear Assembly	1
	35090501	• • Bracket, Spacer And Pin Assembly	1
3	45058501	• • Reduction Gear	1
4	70120501	• • Washer	1
5	70143003	• • External Retaining Ring (3/16)	1
6	70143004	• External Retaining Ring	2
7	70146004	• Bearing (Nyliner)	2
8	35097901	• Side Plate Assembly - LH	1
	45057702	• • Side Plate - LH	1
	70146004	• • Nyliner Bearing	2
9	25194101	• • Take-up Shaft Bracket	1



Figure 8-9. OBA-2 Transport Roller and Shaft Assemblies

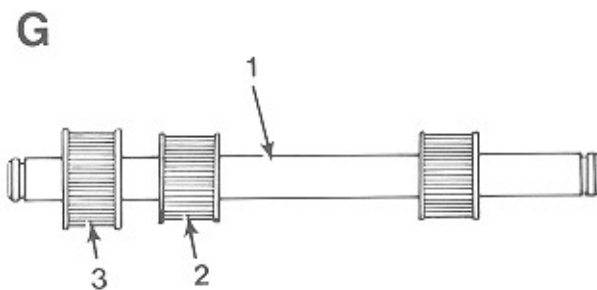
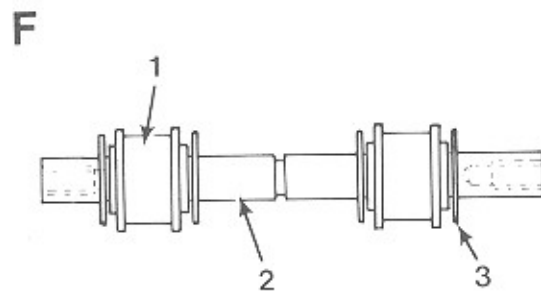
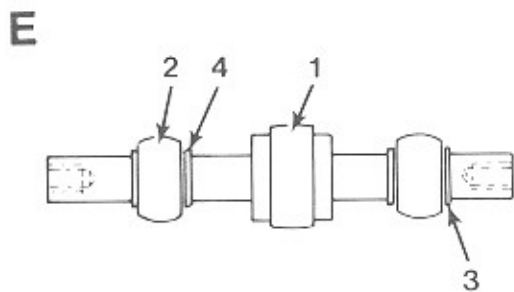
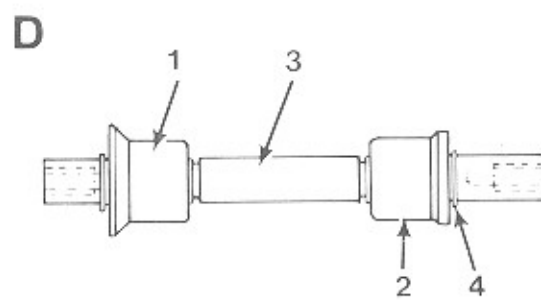
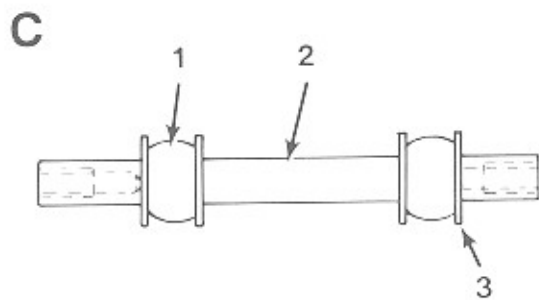
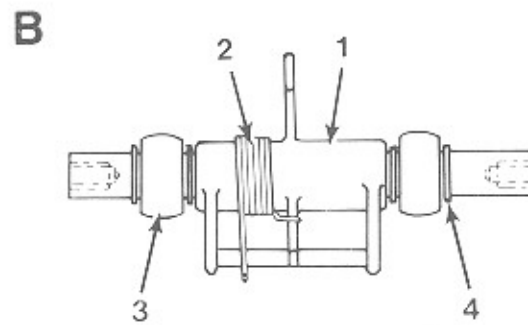
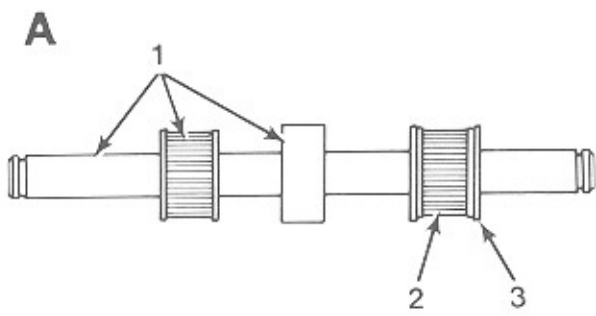


Figure 8-9. OBA—4 Transport Roller And Shaft Assemblies

Ref.	Part No.	Description	Qty
<b>A 35080501 Lower Input Roller Assembly</b>			
1	25227601	• Lower Input Shaft Assembly	1
2	25192902	• 22 Tooth Pulley	1
3	70143004	• External Retaining Ring	2
<b>B 35097402 Anti-Cheat Lever Shaft Assembly</b>			
1	35096402	• Anti-Cheat Lever	1
2	35081602	• Spring	1
3	25193301	• Crowned Roller	2
4	70143301	• External Retaining Ring	4
5	25193401	• Crowned Roller - Shaft	1
<b>C 35097501 Crowned Roller Shaft Assembly</b>			
1	25193301	• Crowned Roller	2
2	25193401	• Crowned Roller Shaft	1
3	70143004	• External Retaining Ring	4
<b>D 35097601 Creasing Roller Shaft Assembly</b>			
1	25193601	• Creasing Roller	1
2	25193602	• Small Creasing Roller	1
3	35080001	• Drum Pulley Shaft	1
4	70143301	• External Retaining Ring	2
<b>E 35097801 Pressure and Crowned Roller Shaft Assembly</b>			
1	25193901	• Pressure Roller (Upper)	1
2	25193301	• Crowned Roller	2
3	35082301	• Top Shaft	1
4	70143301	• External Retaining Ring	4
<b>F 35098101 Take-up Roller Shaft Assembly</b>			
1	35080301	• Take-up Roller	2
2	35080002	• Take-up Shaft	1
3	70143004	• External Retaining Ring	4
<b>G 35080801 Drive Shaft Assembly</b>			
1	25192801	• Drive Shaft	1
2	25192401	• 20 Tooth Pulley (Drive Belt)	2
3	25192902	• 22 Tooth Pulley	1

Figure 8-10. Lower Harness Assembly

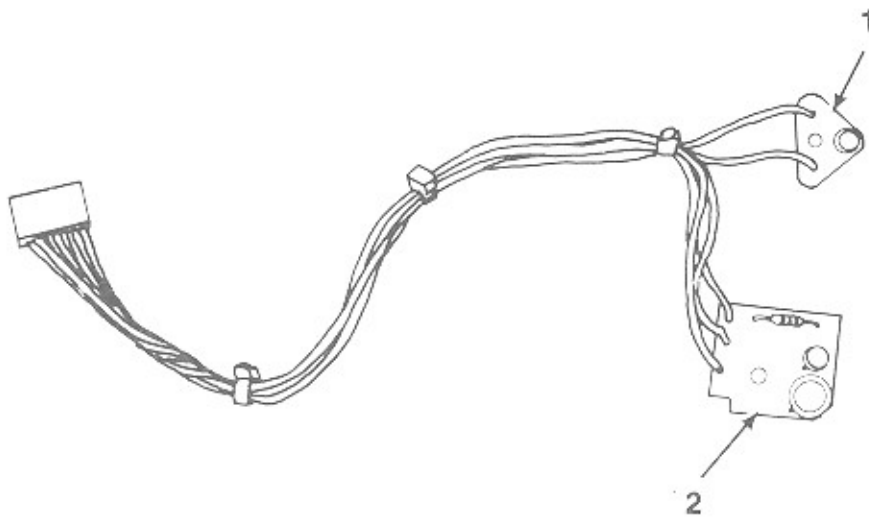


Figure 8-10. Lower Harness Assembly

Ref.	Part No.	Description	Qty
	65056511	OBA-2 Transport Assembly . . . . .	Ref.
1	45058202	• Lower Harness Assembly ( <i>see figure 8-8, sheet 2, item 8</i> ) . . . . .	Ref.
2	21313002	• • Terminal Board - V1 Emitter . . . . .	1
	70035308	• • • Light Emitting Diode . . . . .	1
	45063301	• • • Diode Spacer . . . . .	1
3	35079902	• • Reflective Sensor Board - V2 . . . . .	1
	21339701	• • • Photovoltaic Cell . . . . .	1
	79901151	• • • Resistor - Carbon (1/4 W 5%) 150 Ohm . . . . .	1
	70035308	• • • Light Emitting Diode . . . . .	1

Figure 8-11. Harness & Holder Assembly

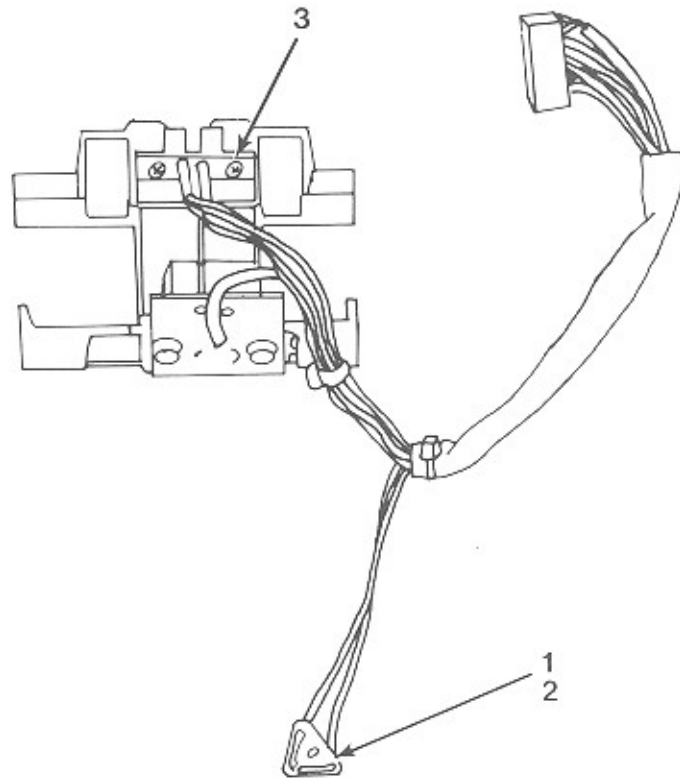
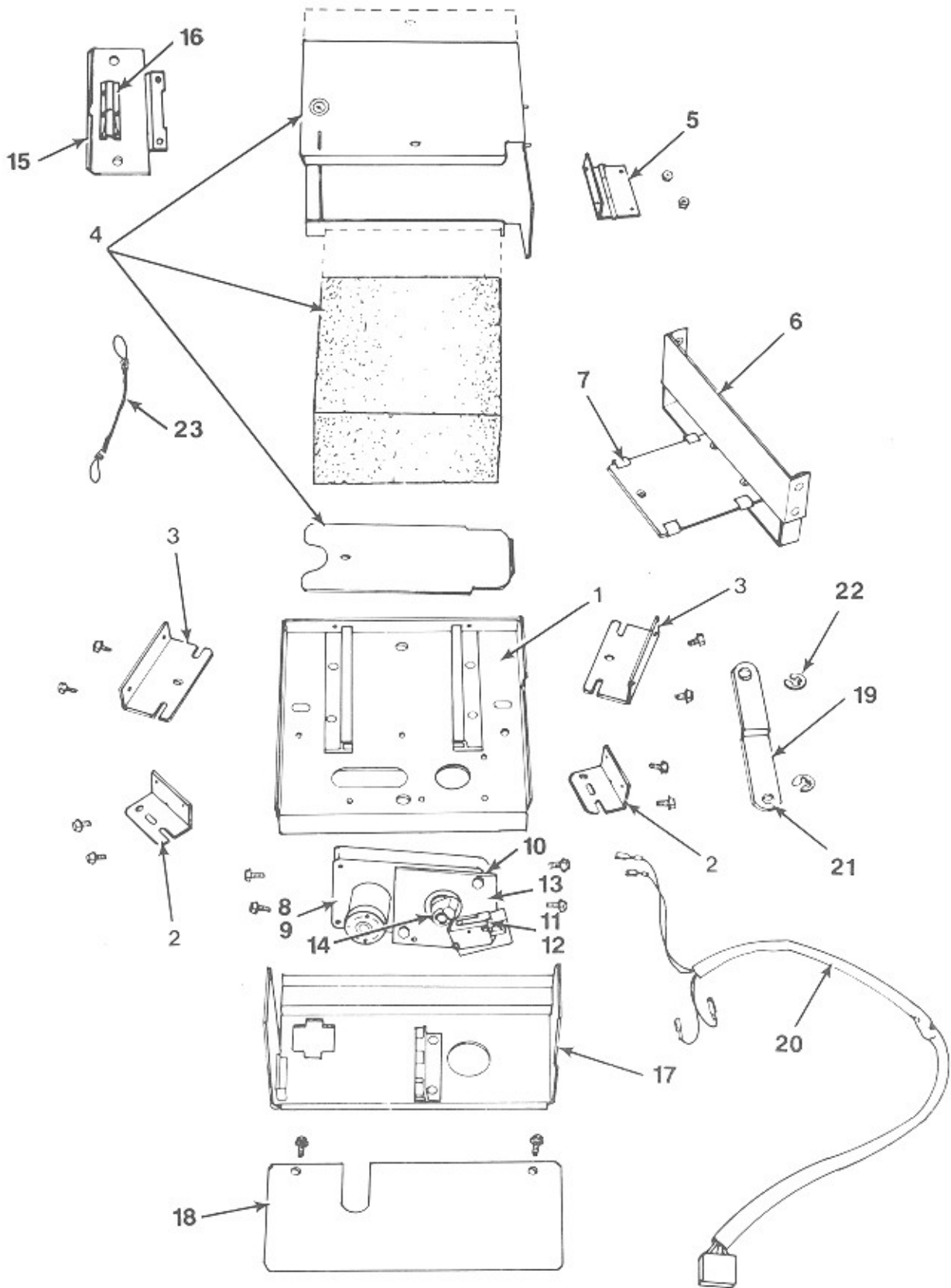


Figure 8-11. Harness & Holder Assembly

Ref.	Part No.	Description	Qty
	65056511	OBA-2 Transport Assembly	Ref.
1	45059801	• Harness And Holder Assembly (see figure 8-8, sheet 1, item 9) <sup>1</sup>	Ref.
2	21313002	• • Terminal Board	1
3	70033204	• • • Phototransistor	1
4	35082402	• • • Switch - Optical	1
5	70075808	• • • Terminal Housing (8 Circuit)	1
6	70219286	• • • Insulated Tubing	1
7	70800101	• • • Cable Tie	1

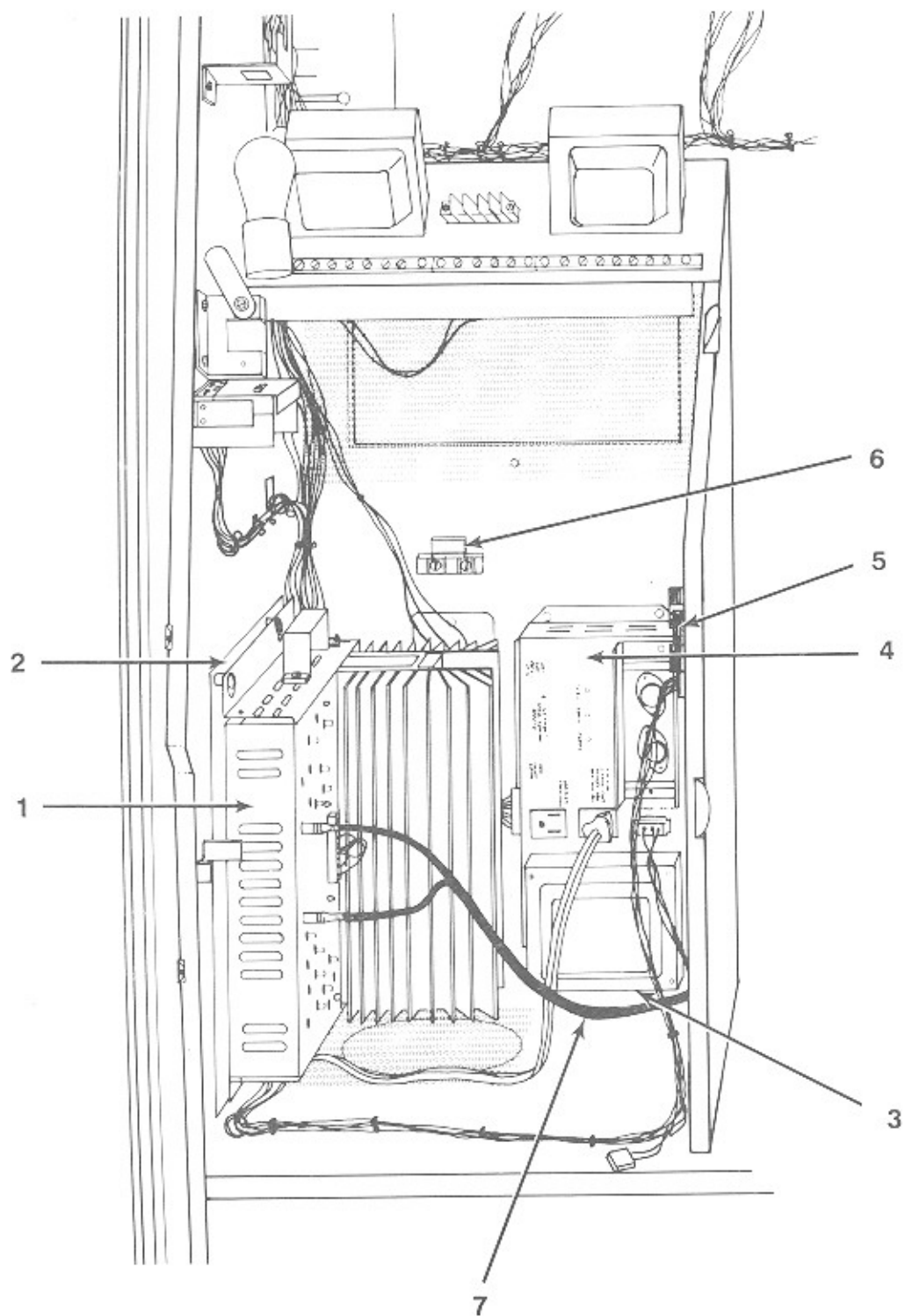
<sup>1</sup>The magnetic head must be factory aligned to holder and insert assembly. If a new head is needed, order the harness and holder assembly (Part Number 45059801).

Figure 8-12. 500 Bill Stacker Assembly



Ref.	Part No.	Description	Qty
	60971516	• Bill Stacker Assembly (500 Bill)	Ref.
1	40712402	• • Mounting Plate Assembly	1
2	21874603	• Bill Stacker Support	2
3	35084201	• Stacker Rear Support	2
4	40777008	• Cash Box Assembly (500 Bill)	1
	35039204	• • Pressure Plate	1
	21757901	• • Foam Block	1
	70162008	• • Cylinder Lock	1
	70166011	• • Lock Bolt	1
5	30783202	• Hinge - Cashbox	1
6	40712604	• • Carriage Assembly	1
7	21757701	• Guide	4
8	35087801	• Motor & Switch Assembly	1
9	35087701	• • Motor Assembly With Crank	1
10	70121706	• • • Spacer	2
	21894203	• • • Switch and Plate Assembly	1
	25054801	• • • • Insulator - Switch	1
	21083001	• • • • Nut - Twin	1
	70143010	• • • External Retaining Ring	1
	20922502	• Spacer	2
	70093103	• Cable Clamp	1
11	21073102	• • • Switch	1
12	21082901	• • • Switch Actuator	1
13	21795801	• • • Switch Bracket	1
14	30781802	• • • Switch Cam	1
15	30785602	• Bill Box Cover	1
16	35084301	• Lock Bracket	1
17	40712703	• • Rear Cover Assembly	1
18	30859002	• Cover Plate	1
19	21792403	• Carriage Link	1
20	45062308	• DC Bill Stacker Harness Assembly	1
	70075505	• • Connector Housing (5 Circuit)	1
	70075701	• • Keying Plug	1
	70219228	• • Insulated Tubing	1
	70075601	• • Contact	1
	70091304	• • Terminal Lug - Slip On	4
	70800101	• • Cable Tie	10
21	70146006	• Nyliner Bearing	2
22	70143004	• External Retaining Ring	2
23	21572605	• Fall Stop Cable	1

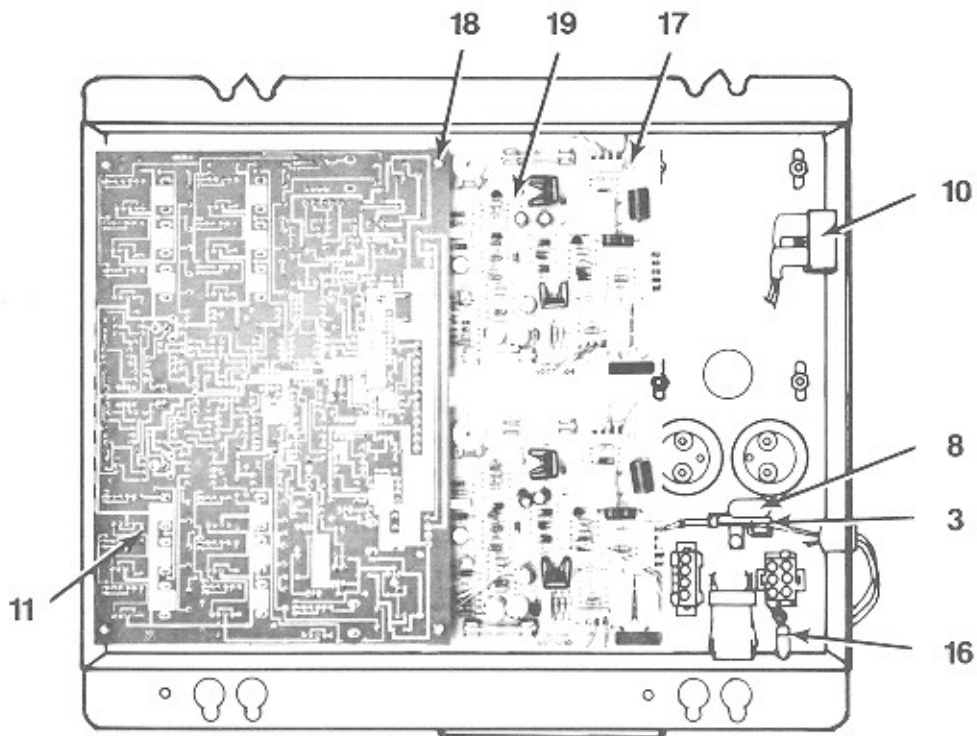
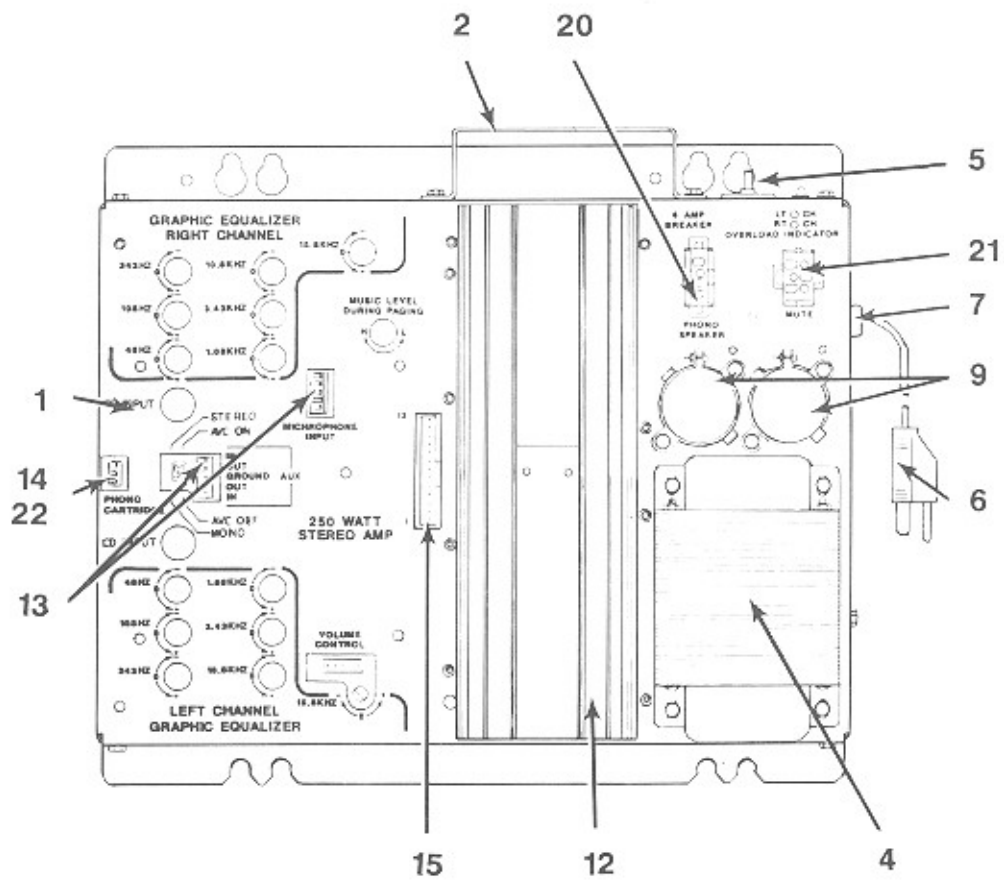
Figure 8-13. CD-100A Amplifier Compartment



Ref.	Part No.	Description	Qty
	61045001	CD-100A Phonograph Assembly (60 Hz) . . . . .	Ref.
	61045002	CD-100A Phonograph Assembly (50 Hz) . . . . .	Ref.
1	61024902	• 250 Watt Stereo Amplifier ( <i>see figure 8-14</i> ) . . . . .	1
2	40242601	• • Amplifier Mounting Bracket Assembly . . . . .	1
3	20925601	• Main Power Supply Mounting Bracket . . . . .	1
4	40770607	• Main Power Supply ( <i>see figure 8-17</i> ) . . . . .	1
5	61052701	• Crossover Circuit Board Assembly . . . . .	1
6	21955901	• Resistor Assembly . . . . .	1
7	30934201	• • Cable Assembly - Audio . . . . .	1



Figure 8-14. Stereo Amplifier Assembly



Ref.	Part No.	Description	Qty
	61024902	Stereo Amplifier Assembly ( <i>see figure 8-13, item 1</i> )	Ref.
1	61024602	• Chassis Assembly	1
2	21488101	• Handle	1
3	21724102	• Terminal Strip	1
4	40737805	• Power Transformer	1
5	70078956	• Circuit Breaker	1
6	25218603	• 3 Conductor Cord and Plug	1
7	70232205	• Strain Relief	1
8	70021305	• Mylar Capacitor (.1 Mfd)	1
9	21823102	• Electrolytic Capacitor (10,000 Mfd)	2
10	21822501	• Bridge Rectifier	1
11	61023702	• Stereo Preamp. Assembly ( <i>see schematic for parts list</i> )	1
12	40710303	• Heat Sink Detail ( <i>see figure 8-15</i> )	1
13	70075505	• Connector Housing (5 Circuit)	2
14	70075503	• Connector Housing (3 Circuit)	1
15	21620703	• Amplifier Jumper Plug Assembly	1
16	21893401	• Speaker Overload Indicator (Left Channel)	1
	21893402	• Speaker Overload Indicator (Right Channel)	1
17	70500006	• Circuit Board Support	8
18	70500018	• Circuit Board Support	5
19	40710104	• Driver Circuit Board Assembly ( <i>see power amplifier schematic for components list</i> )	2
20	30749003	• Cap Housing (4 Circuit)	1
21	30749004	• Cap Housing (6 Circuit)	1
	70097502	• • Contacts	6
22	21620704	• Shorting Plug	1
	70099201	• • Self - Stripping Terminal	1
	21943301	• • Capacitor Clamp	2
	70091706	• • Solder Lug	1
	70075505	• • Connector Housing (5 Circuit)	2
	70075502	• • Connector Housing (2 Circuit)	2
	70800101	• • Cable Tie	4
	70075601	• • Contact	9
	70091308	• • Terminal Lug - Slip On	2

### Figure 8-15. Heat Sink Detail

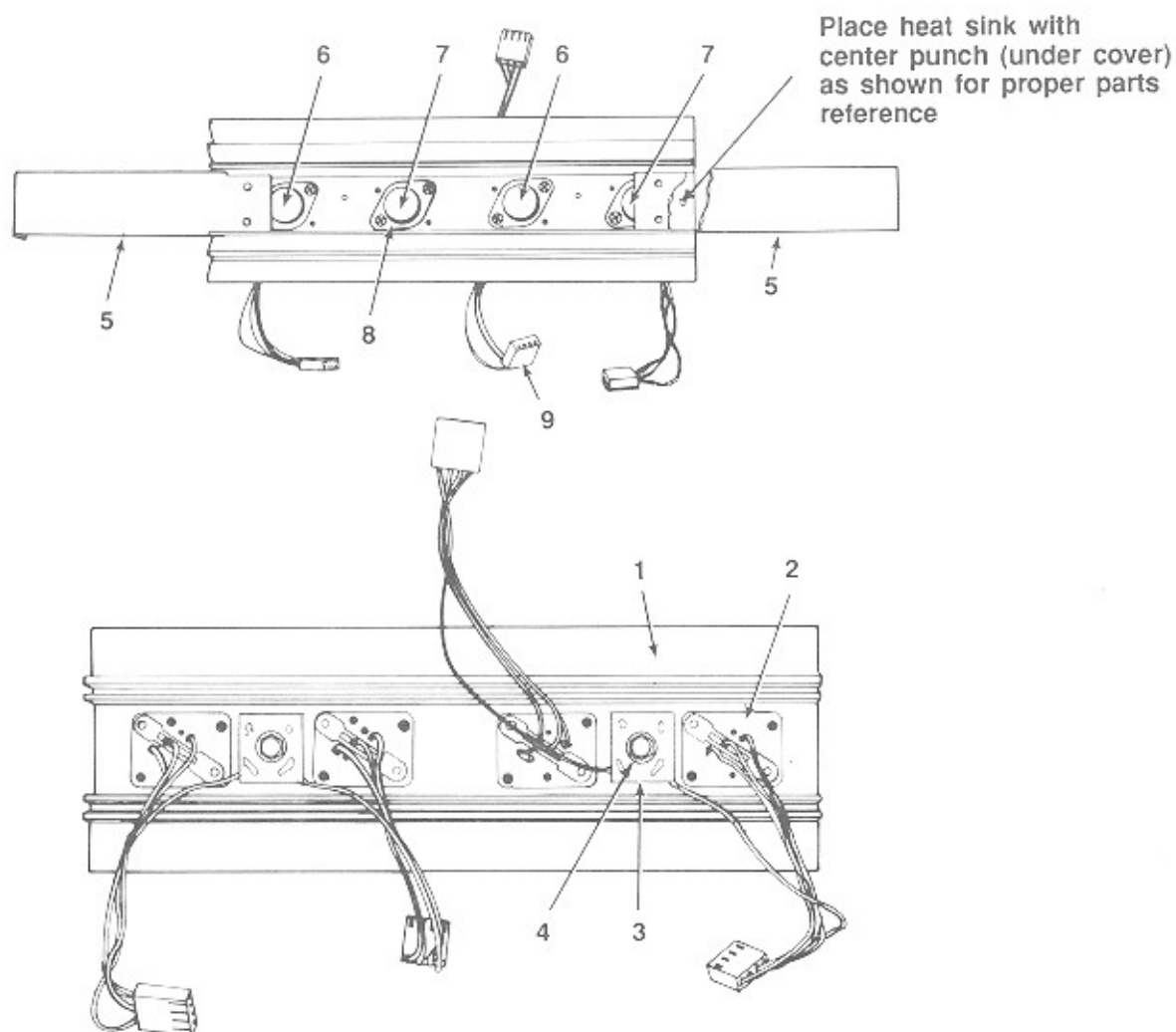


Figure 8-15. Heat Sink Detail

Ref.	Part No.	Description	Qty
1	40710303	• Heat Sink (see figure 8-14, item 12)	Ref.
2	21547301	• Power Transistor Socket	4
3	40837401	• Circuit Board Assembly - Bias Diode	2
4	21840201	• Compression Spring	2
5	21798001	• Cover	2
6	70030206	• Transistor (Darlington Amp, RCA- 2N6284) (NPN, Q101, 2 places)	2
7	70030207	• Transistor (Darlington Amp, RCA-2N6287) (PNP, Q102, 2 places)	2
8	21318902	• Precoated-Insulator	4
9	70075504	• Connector Housing	4

Figure 8-16. Output Transformer Assembly

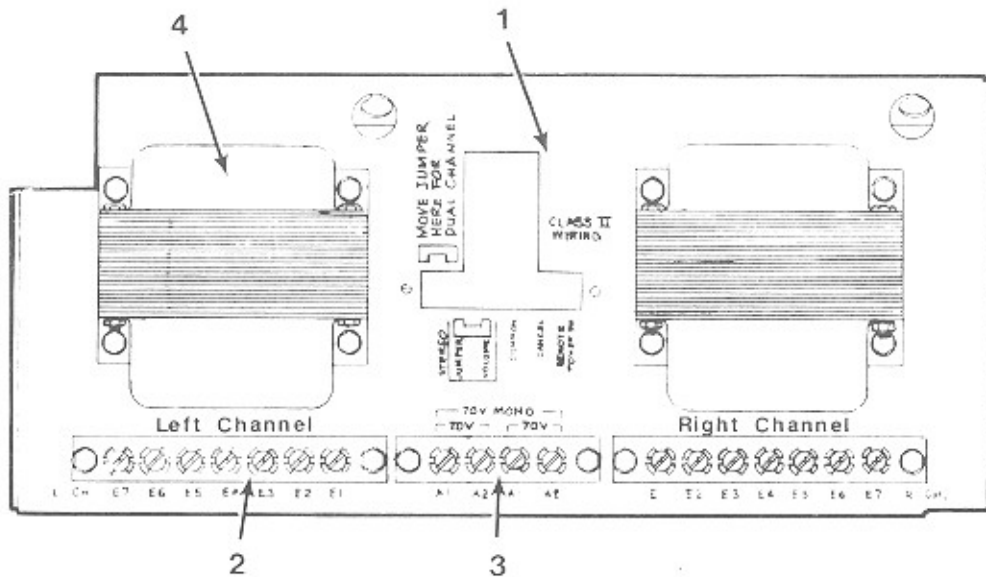


Figure 8-16. Output Transformer Assembly

Ref.	Part No.	Description	Qty
	40832101	Output Transformer Assembly (see figure 8-5, item 11) (See also figure 5-10, the Wiring Diagram)	
1	40832001	• Chassis With Lettering	1
2	30426707	• Terminal Strip	2
3	30426706	• Terminal Strip	1
4	40633502	• Output Transformer	2
5	21537401	• Label - Speaker Power	1

# Figure 8-17. Main Power Supply

(120 Volt, 60 Hz Model)

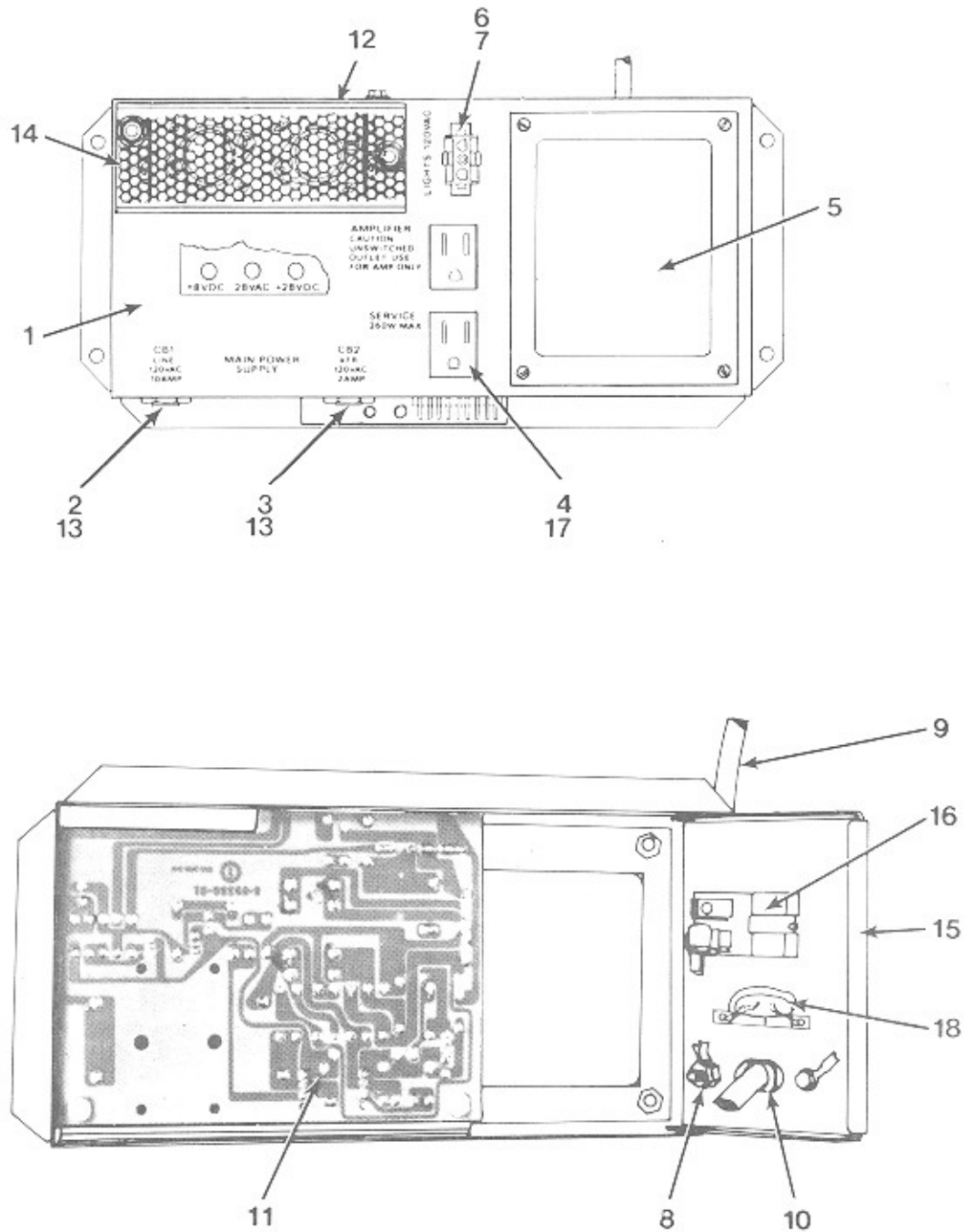


Figure 8-17. Main Power Supply

Ref.	Part No.	Description	Qty
	40770608	Main Power Supply (120 V) Canada	Ref.
	46509207	Main Power Supply (100 V)	Ref.
	40770607	Main Power Supply (120 V) (see figure 8-13, item 4)	Ref.
	46509212	Main Power Supply (220 V)	Ref.
	46509213	Main Power Supply (240 V)	Ref.
1	40771904	• Chassis Assembly	1
2	70073613	• 10 Amp Circuit Breaker (120 V)	1
3	70073605	• 2 Amp Circuit Breaker (120 V)	1
4	21375901	• 3 Wire Convenience Outlet	2
5	40772001	• Transformer - Power (120 V)	1
	46509302	• • Transformer - Power (100/220/240 V)	1
	70075601	• • Post Contact (120 V)	6
	70075601	• • Post Contact (100/220/240 V)	5
	70097504	• • Contact	1
	70091308	• • Terminal Lug (120 V)	1
	70091308	• • Terminal Lug (100/220/240 V)	4
6	30749002	• Cap Housing	1
	70097504	• • Contact (100/220/240 V)	3
7	70097504	• Contact (120 V)	2
	70091308	• • Terminal Lug (120 V)	2
	70091308	• • Terminal Lug (100/220/240 V)	4
8	70091511	• Ring Terminal (120)	2
9	30834506	• Power Cord Assembly (120 V)	1
	36536501	• Power Cord Assembly (100/220 V/240 V)	1
10	70232104	• Strain Relief	1
11	60935703	• Circuit Board Assembly - Main Power Supply	1
12	40733102	• Heat Sink and Power Transistor Assembly	1
	30834301	• • Power Supply Heat Sink	1
	70030807	• • Transistor (Darlington) (2N6055) (Motorola, RCA)	2
	21318902	• • Insulator	2
	21834201	• • Power Transistor Socket	2
	70075504	• • Connector Housing	2
	70075601	• • Post Contact	6
	70075702	• • Keying Post	2
13	21408602	• Straight Receptacle (120 V)	4
	21408602	• Straight Receptacle (100/220/240 V)	8
	70073608	• Breaker 100/220/240 V (5A) (Not Shown)	2
	70073610	• Breaker 100/220/240 V (7A) (Not Shown)	1
14	21828101	• Heat Sink Cover	1
15	30867301	• Switch Panel	1
	30867302	• Switch Panel (Canada)	1
	21870501	• Base - Switch Cover (Canada)	1
	21870601	• Switch Cover (Canada)	1
	25077201	• Toggle Switch - SPST (Canada)	1
	21724101	• Terminal Strip (100/220/240 V)	1
16	30785701	• Rocker Switch - SPST (120 V)	1
	30785702	• Rocker Switch - SPST (100/220/240 V)	1
17	70096701	• Insulated Faston (120 V)	1
	70096701	• Insulated (220/240 V)	1
	70099201	• Self Stripping Terminal	7
	70099101	• Self Stripping Terminal	1
	70075508	• Connector Housing	1
	70075702	• Keying Plug	1
	70075601	• Post Contact (120 V)	4
	70075601	• Post Contact (220/240 V)	5
18	21943801	• MOV Assembly (100/120 V)	1
	21943701	• MOV Assembly (220/240 V)	1

Figure 8-18. Central Control Computer

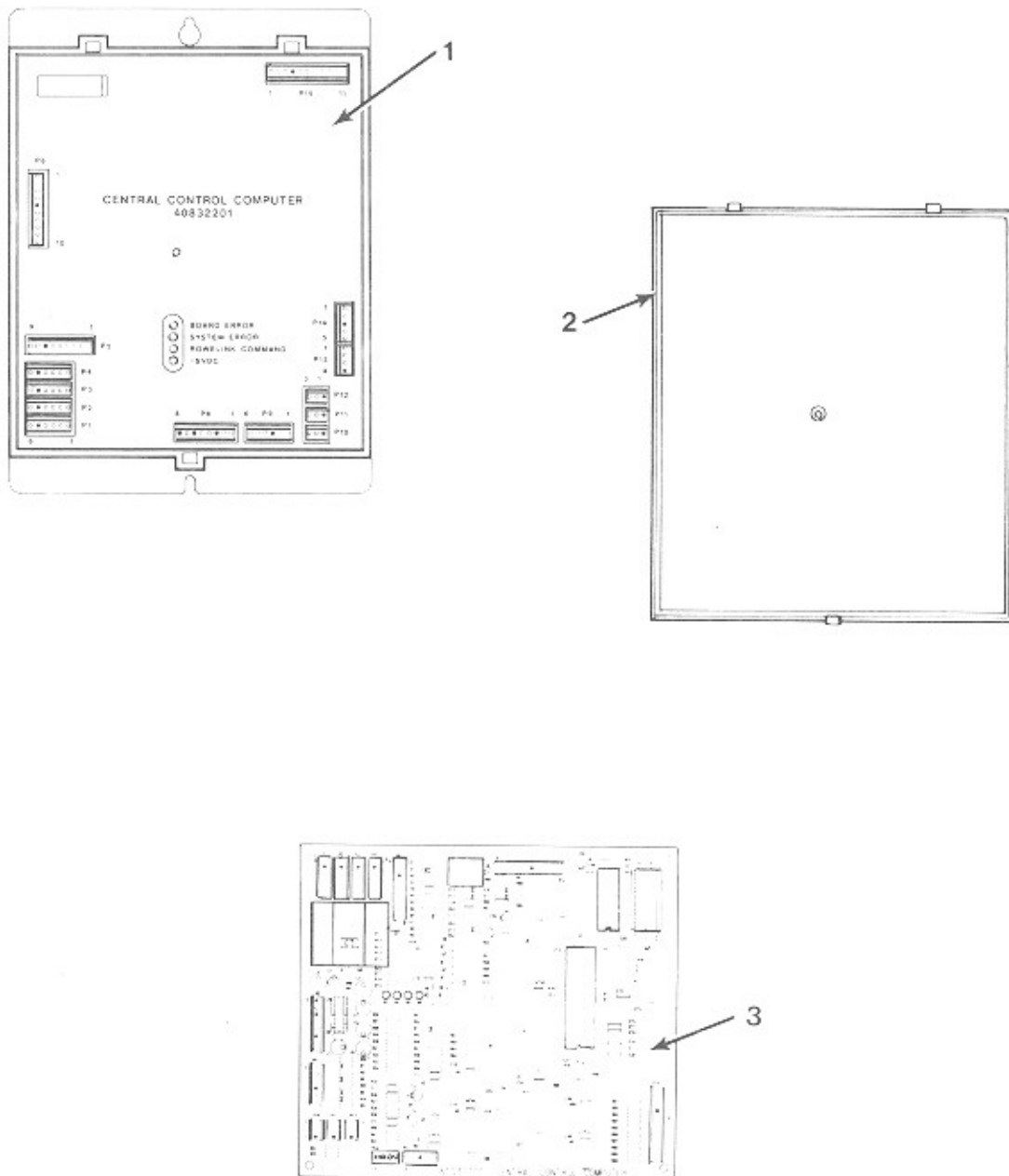


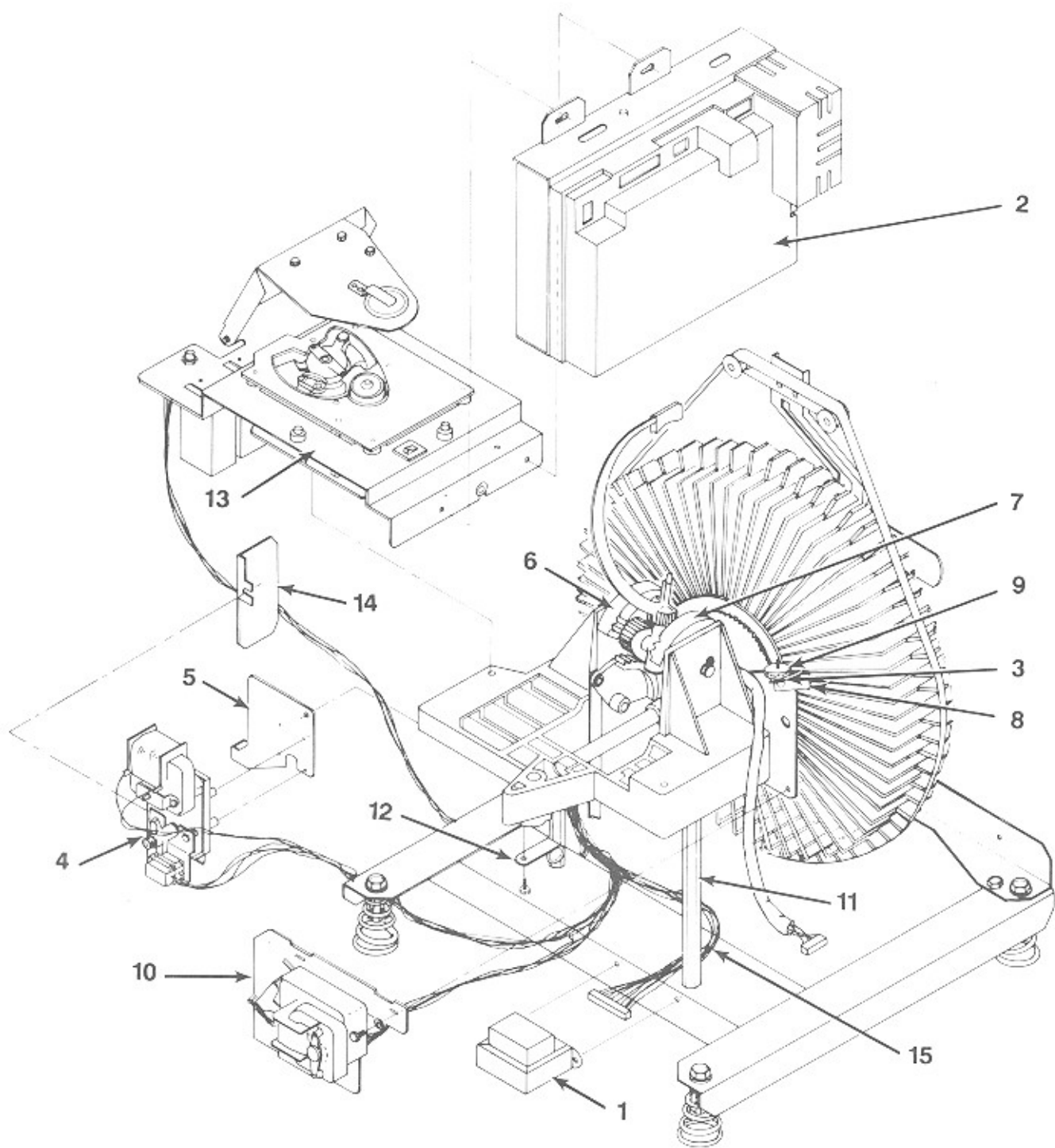
Figure 8-18. Central Control Computer Assembly

Ref.	Part No.	Description	Qty
	40832201	Central Control Computer Assembly (see figure 8-5, item 16) . . . . .	Ref.
1	61031201	• Central Control Computer Cover . . . . .	1
2	61031301	• Central Control Computer Base . . . . .	1
3	61031101	• Central Computer Circuit Board Assembly . . . . . (see figure 5-12 for the schematic and components list)	1



# Figure 8-19. Mechanism Assembly

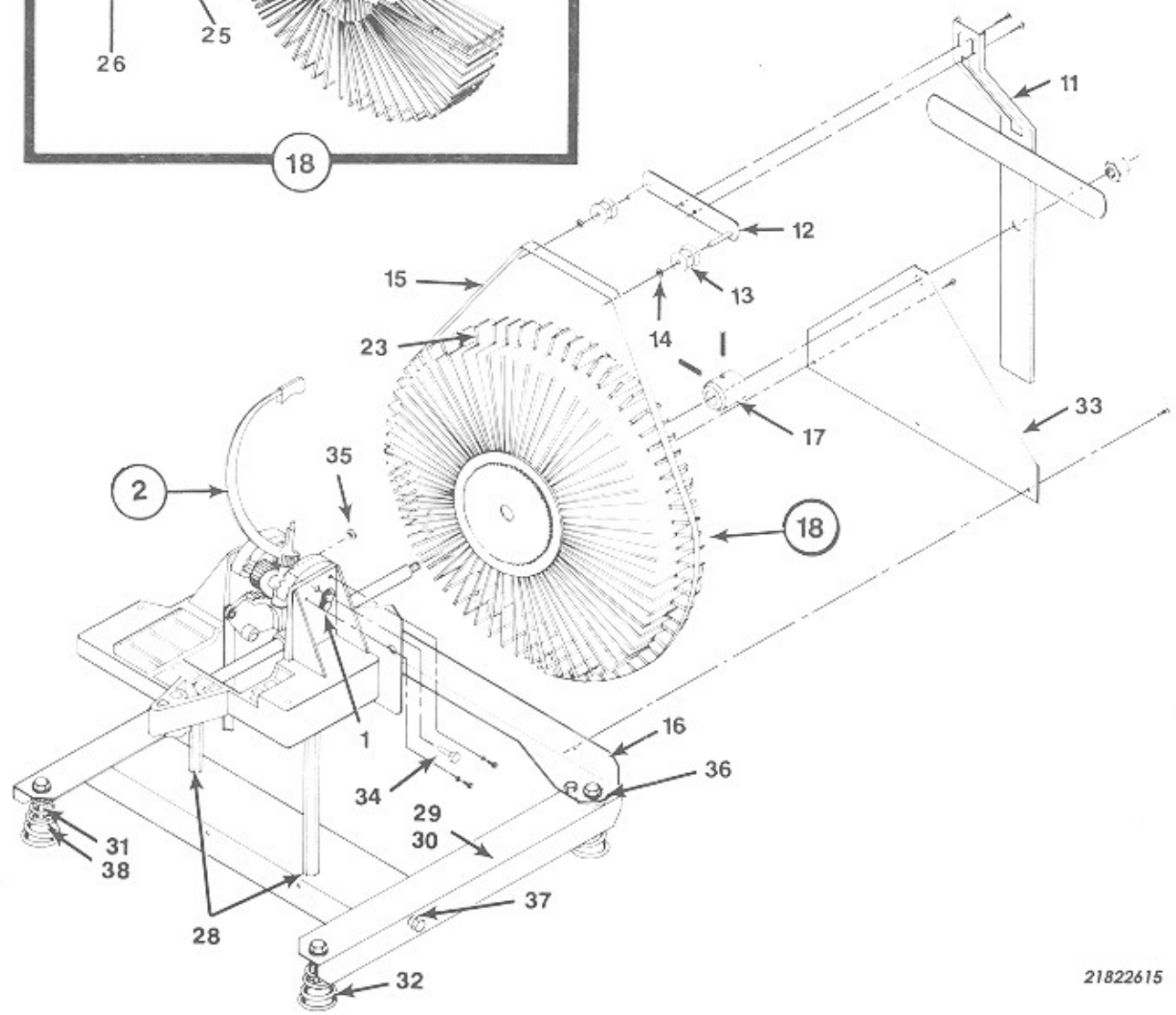
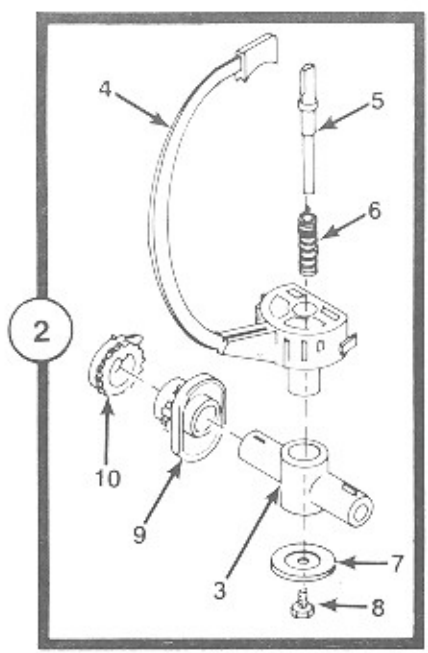
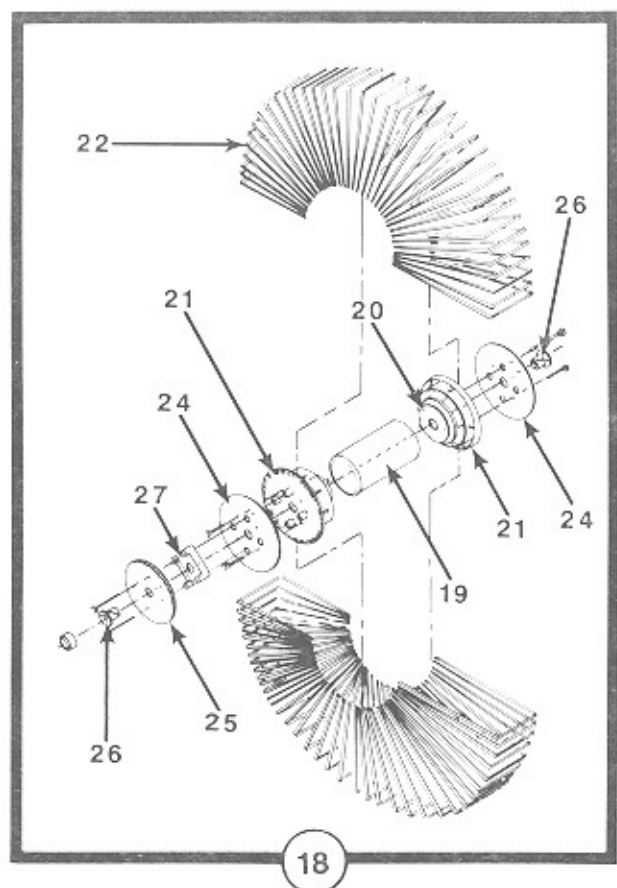
Sheet 1



Ref.	Part No.	Description	Qty
	61033001	Mechanism Assembly ( <i>see figure 8-5, item 1</i> ) (60 Hz) . . . . .	Ref.
1	40830401	• CD Player Transformer . . . . .	1
2	61030703	• Mechanism Control & Decoder Assembly ( <i>see figure 8-19, sheet 3</i> ) . . . . .	1
3	30906801	• Optical Switch Assembly . . . . .	1
	30794501	• • Mounting Bracket . . . . .	1
	30905901	• • • Optical Switch and Connector Assembly . . . . .	1
	40803701	• • • Optical Switch . . . . .	1
	70075565	• • • Connector Housing (Red) . . . . .	1
	70075702	• • • Keying Plug . . . . .	1
	70075601	• • • Contact Post . . . . .	4
	70219201	• • • Insulated Tubing . . . . .	1
	70134111	• • • Screw - Special . . . . .	2
	70800101	• • Cable Tie . . . . .	2
4	40720802	• Cam Switch & Motor Assembly ( <i>see figure 8-21</i> ) . . . . .	1
5	30790701	• Motor Mounting Plate . . . . .	1
6	30790502	• Rotator Assembly (LH) . . . . .	1
7	30790602	• Rotator Assembly (RH) . . . . .	1
8	21818601	• Adjusting Bracket Assembly . . . . .	1
9	21818401	• Adjusting Knob . . . . .	1
10	40721901	• Sprag Assembly ( <i>see figure 8-21</i> ) . . . . .	1
11	21812502	• Mechanism Support . . . . .	2
12	70093401	• Cable Clamp (17/32) . . . . .	1
13	Ref.	• Base and CD Player ( <i>see figure 8-19, sheet 5</i> ) . . . . .	1
14	30946901	• Oil Spray Shield . . . . .	1
15	40830002	• Mechanism Harness . . . . .	1
	70075517	• • Connector Housing (17 Circuit) . . . . .	1
	70075601	• • Contact . . . . .	11
	70075701	• • Keying Plug . . . . .	1
	21408602	• • Straight Receptacle . . . . .	1
	70091308	• • Terminal Lug - Slip On . . . . .	3
	70091512	• • Terminal Lug - Slip On . . . . .	1
	70091314	• • Terminal Lug - Slip On . . . . .	5
	70091306	• • Terminal Lug - Slip On . . . . .	2
	70091302	• • Terminal Lug - Slip . . . . .	4
	30930501	• Harness - CDM (Player) . . . . .	1
	70075505	• • Connector Housing (5 Circuit) . . . . .	1
	70075601	• • Contact . . . . .	4
	70075701	• • Keying Plug . . . . .	1
	70077803	• • Connector - Insulation Displacement . . . . .	1
	70800101	• • Cable Tie . . . . .	2
	30930601	• • Harness - Cam (Power) . . . . .	1
	70077803	• • Connector - Insulation Displacement . . . . .	2
	70800101	• • Cable Tie . . . . .	2
	30930701	• • Harness - CDM (Signal) . . . . .	1
	70077810	• • Connector - Insulation Displacement . . . . .	2
	70800101	• • Cable Tie . . . . .	2

# Figure 8-19. Mechanism Assembly

Sheet 2

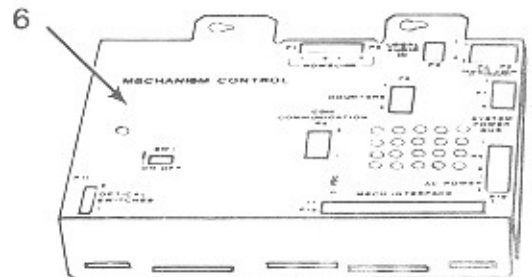
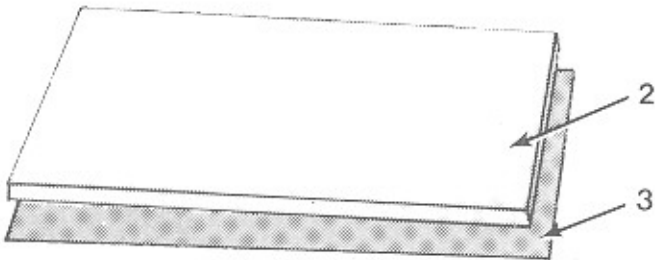
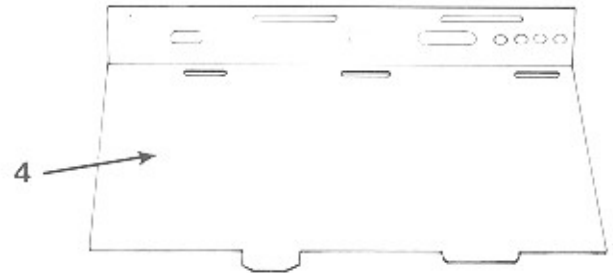
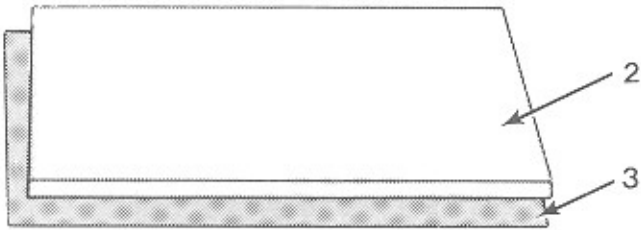
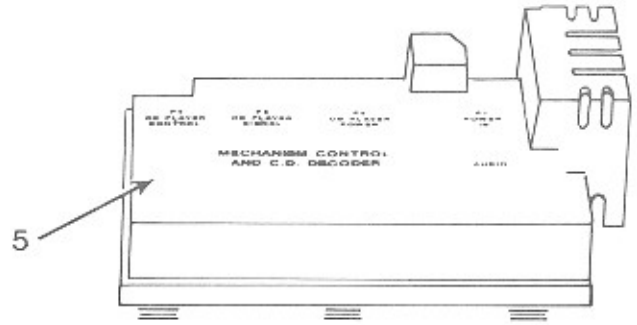
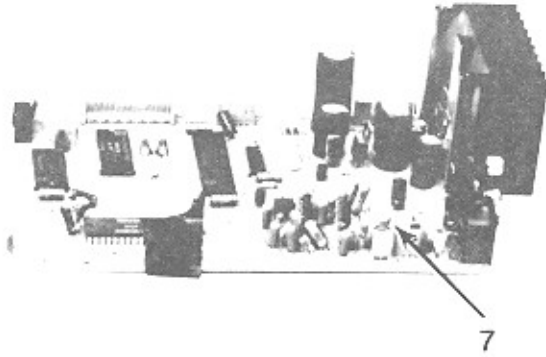


Ref.	Part No.	Description	Qty
	61033001	Mechanism Assembly . . . . .	Ref.
1	21079202	• Trunnion Pin . . . . .	2
	70120010	• Washer . . . . .	2
2	40720702	• Gripper Bow and Trunnion Assembly . . . . .	1
3	30791001	• • Trunnion . . . . .	1
4	30519703	• • Gripper Bow and Hub Assembly . . . . .	1
5	21080804	• • Inner Shoe Assembly . . . . .	1
6	21081101	• • Compression Spring . . . . .	1
7	21811501	• • Cam Follower . . . . .	1
8	21811701	• • Lock Screw . . . . .	1
9	40720401	• • Cam Gear . . . . .	1
10	40720601	• • Trunnion Gear . . . . .	1
11	40721302	• • Gripper Bow Guide Assembly . . . . .	1
12	21089401	• • Roller Bracket Assembly . . . . .	1
	21090701	• • Bracket - Roller . . . . .	1
	21091001	• • Roll Pin . . . . .	2
13	20384301	• • Belt Roller . . . . .	2
14	70143003	• • Retaining Ring . . . . .	2
15	21813802	• • Belt . . . . .	1
16	30792501	• • Support Frame Rear Angle . . . . .	1
17	21812601	• • Collar . . . . .	1
18	60870303	• Magazine Assembly . . . . .	1
19	40720002	• • Hub Spacer . . . . .	1
20	30790201	• • Hub Anchor Plate . . . . .	2
21	60870201	• • Magazine Hub . . . . .	2
22	40720102	• • Record Magazine Separator . . . . .	100
23	40720202	• • Belt Guide <sup>1</sup> . . . . .	100
24	30790301	• • Cover Plate . . . . .	2
25	30790401	• • Magazine Gear . . . . .	1
26	70146001	• • Nyliner Bearing . . . . .	2
27	30930801	• • Gear Spacer . . . . .	2
	70134128	• • Special Screw (#8-32 X 1 3/4 SF) . . . . .	4
28	21101301	• Lock Nut . . . . .	2
29	30791402	• Mechanism Support and Spring Assembly . . . . .	1
30	30791502	• • Mechanism Support Assembly . . . . .	1
31	20627202	• • Spring Support (Upper) . . . . .	4
32	20612804	• • Mechanism Mounting Spring (20612803 before 8-22-90) . . . . .	4
33	40723202	• Magazine Support . . . . .	1
34	21940302	• Rotator Pin . . . . .	1
35	70143005	• External Retaining Ring . . . . .	1
36	70121738	• Spacer . . . . .	2
37	70121517	• Spacer . . . . .	2
38	21153701	• Spring Support . . . . .	4
	20554502	• Cable Clip . . . . .	1

<sup>1</sup>Belt guides are supplied without disc numbers. For a complete set of belt guides with disc numbers, order Kit # 26711901.

# Figure 8-19. Mechanism Assembly

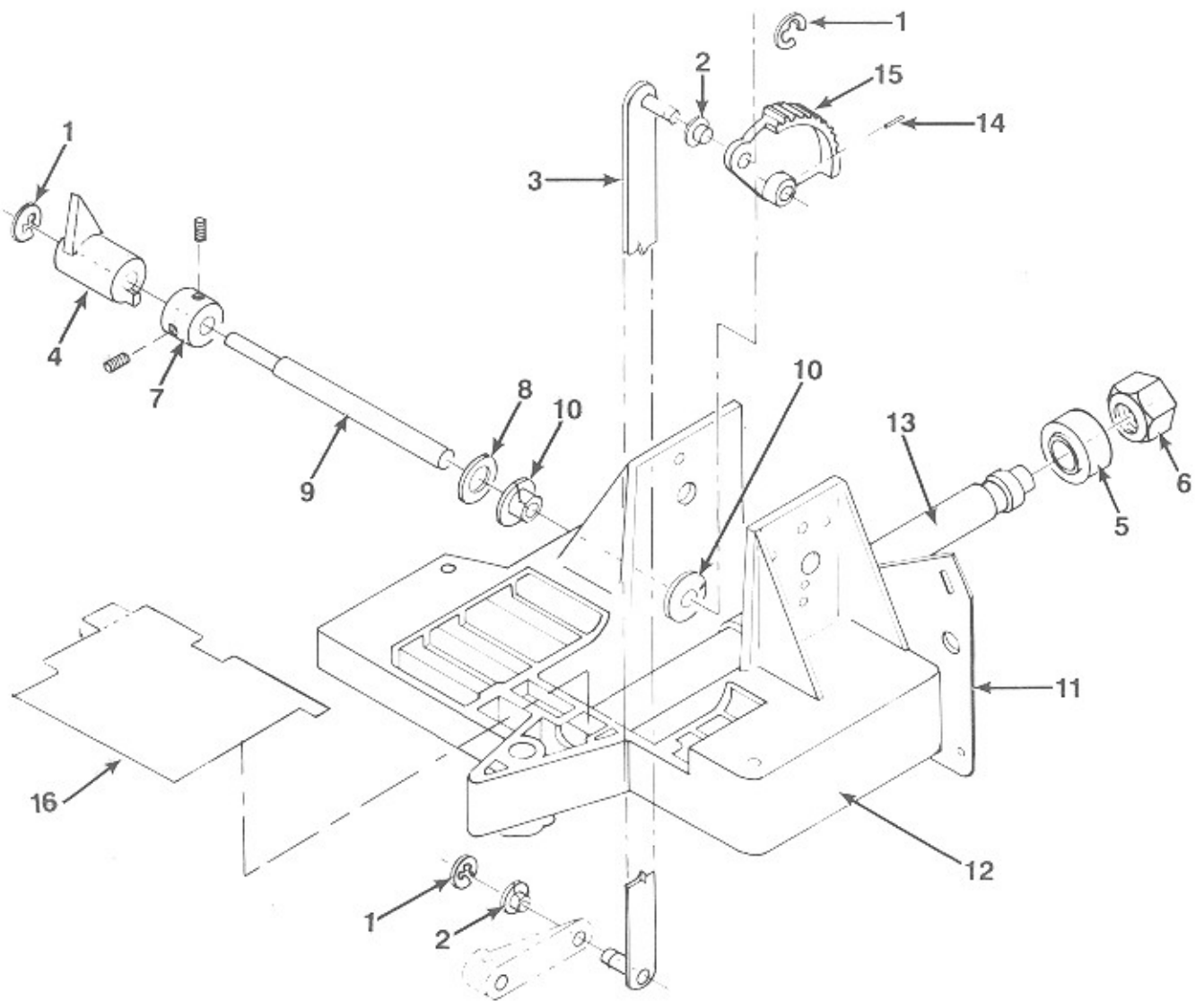
Sheet 3



Ref.	Part No.	Description	Qty
	61030703	Mechanism Control and Decoder Assembly (see figure 8-19, sheet 1) . . . . .	1
1	61030603	• Mechanism Control Circuit Board Assembly (see schematic for parts list) . . . . .	1
2	21771016	• Insulating Pad . . . . .	2
3	21771113	• Insulating Base . . . . .	2
4	40830201	• Decoder Base . . . . .	1
5	61032703	• Decoder Cover . . . . .	1
6	40830302	• Mechanism Control Cover . . . . .	1
7	61032602	• Decoder Circuit Board Assembly (no parts list or schematic available) . . . . .	1
	25142297	• Jumper Assembly . . . . .	2
	21944701	• Label - CD Player . . . . .	1

# Figure 8-19. Mechanism Assembly

Sheet 4

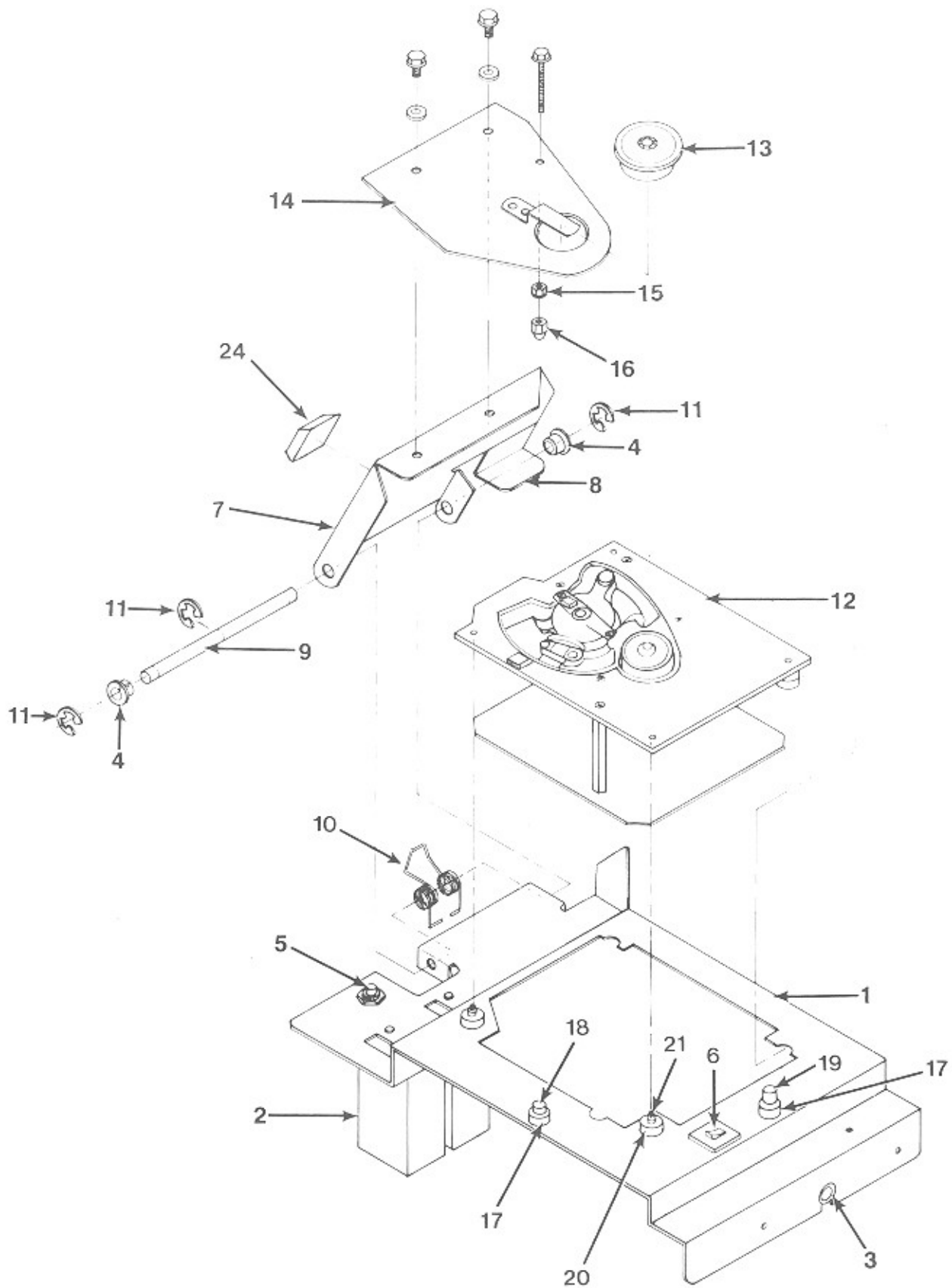


Ref.	Part No.	Description	Qty
	40723402	Base and Motor Assembly . . . . .	Ref.
1	70143004	• Retaining Ring . . . . .	3
2	70146004	• Bearing . . . . .	2
3	21810201	• Transfer Link Assembly . . . . .	1
4	30930001	• Hold Down Cam . . . . .	1
5	25156906	• Shoulder Washer . . . . .	1
6	70130109	• 9/16 x 18 Jam Nut . . . . .	1
7	21813302	• Cam Collar . . . . .	1
8	70122533	• Bowed Washer . . . . .	1
9	21813201	• Cam Drive Shaft . . . . .	1
10	70146005	• Bearing . . . . .	2
11	40721801	• Intermediate Mounting Plate . . . . .	1
12	60870702	• Mechanism Base . . . . .	1
13	30791302	• Magazine Support Shaft . . . . .	1
14	70113019	• Roll Pin . . . . .	1
15	40720501	• Sector Gear . . . . .	1
16	21952801	• CD Board Guard . . . . .	1



Figure 8-19. Mechanism Assembly

Sheet 5



Ref.	Part No.	Description	Qty
	61033001	Mechanism Assembly	Ref.
1	61032901	• Mounting Plate	1
2	30933301	• Counter & Plug Assembly	1
	21538302	• • Counter - Money	1
	21441802	• • Electric Counter	1
	70075505	• • Connector Housing (5 Pin)	1
	70075601	• • Post Contact	4
	70075701	• • Keying Plug	1
3	70233202	• Snap Bushing (Split)	1
4	70146008	• Nyliner Bearing	2
5	21581801	• Pushbutton Switch (Momentary)	1
6	70073604	• Circuit Breaker (1 Amp)	1
7	40830101	• Hold Down Bracket	1
8	21942101	• Cam Bracket	1
9	21534709	• Pivot Pin	1
10	30941001	• Hold Down Spring	1
11	70143004	• External Retaining Ring	3
12	30933702	• Player - CDM-3 With Guide Pin	1
	21954601	• • Guide Pin	1
	30930401	• • Magnet - Ring (Hold Down)	1
	21954901	• • Disc - Traction	1
	70120019	• • Washer	2
	30933702	• • Player - CDM-3	1
13	26711502	• Hub Assembly	1
	21954901	• • Traction Washer	1
	30930401	• • Magnetic Hub	1
14	30930201	• Hold Down Assembly	1
15	21814001	• Hex Lock Nut (#4-40)	1
16	21813901	• Grommet	2
17	21941401	• Rest Rivet - Short (Front)	1
18	21941402	• Rest Rivet - Long (Side)	1
19	21940101	• Grommet	4
20	21940201	• Spacer	4
21	21377801	• Bumper	1

**NOTE:** The 30933702 CDM-3 Player With Center Pin replaces the 30933701 player without a center pin. To use the 30933702 player with the original 26711501 hub, knock out the aluminum insert with a point of a #2 Phillips screw driver, or use a 26711502 hub.

Figure 8-20. Sprag Assembly

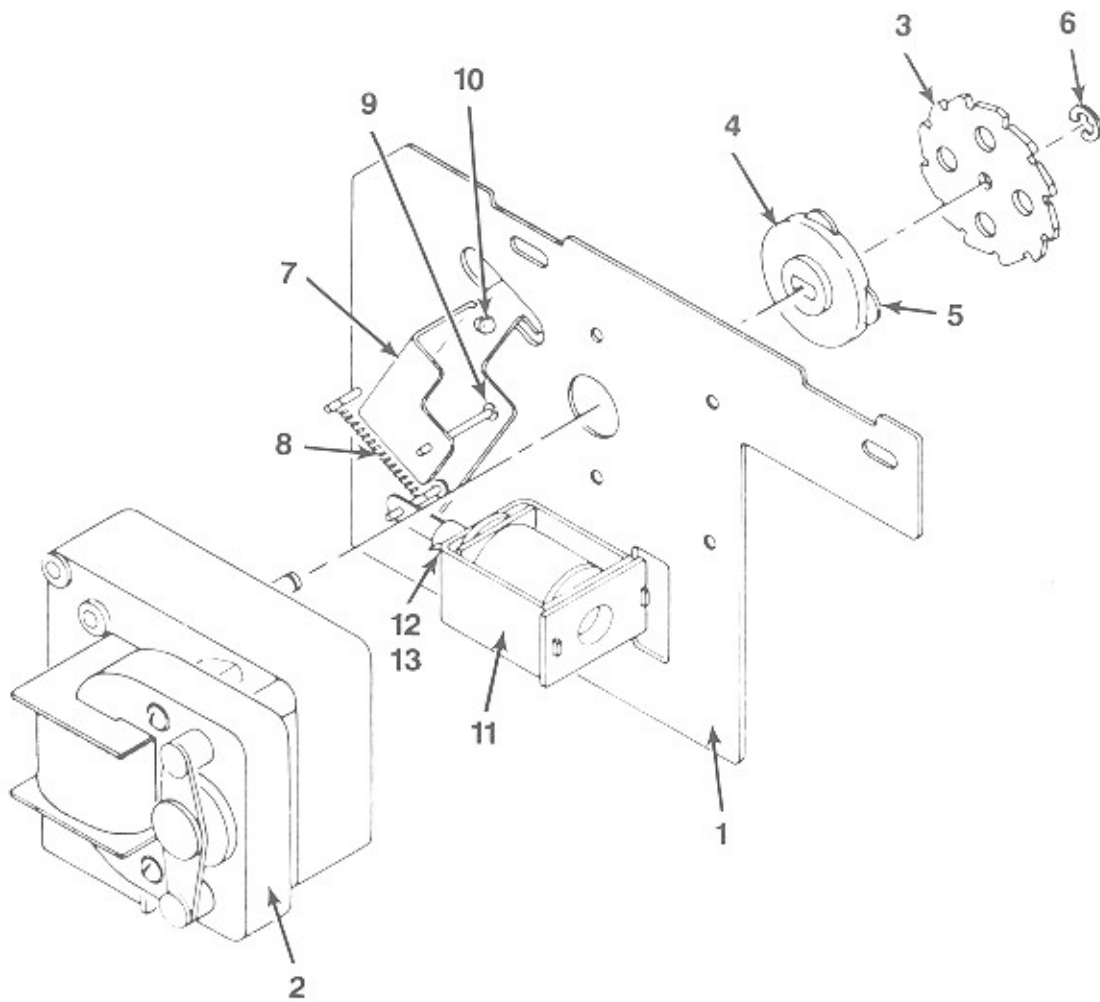


Figure 8-20. Sprag Assembly

Ref.	Part No.	Description	Qty
	40721901	Sprag Assembly (see figure 8-19, sheet 2, item 12)	Ref.
1	30793901	• Sprag Plate Assembly	1
2	40722701	• • Magazine Motor	1
3	40722301	• • Sprag Wheel	1
4	30793301	• • Sprag Wheel Hub	1
5	21816103	• Stem Bushing (Rubber)	4
6	70143003	• Retaining Ring	1
7	21816001	• • Sprag Lever Assembly	1
8	21256201	• Tension Spring	1
9	70143005	• Retaining Ring	1
10	25155901	• Split Stem Bumper	2
11	21150510	• • Solenoid Assembly	1
12	21085701	• • Plunger Assembly	1
13	21084902	• Plunger Stop	1

Figure 8-21. Cam Switch and Motor Assembly

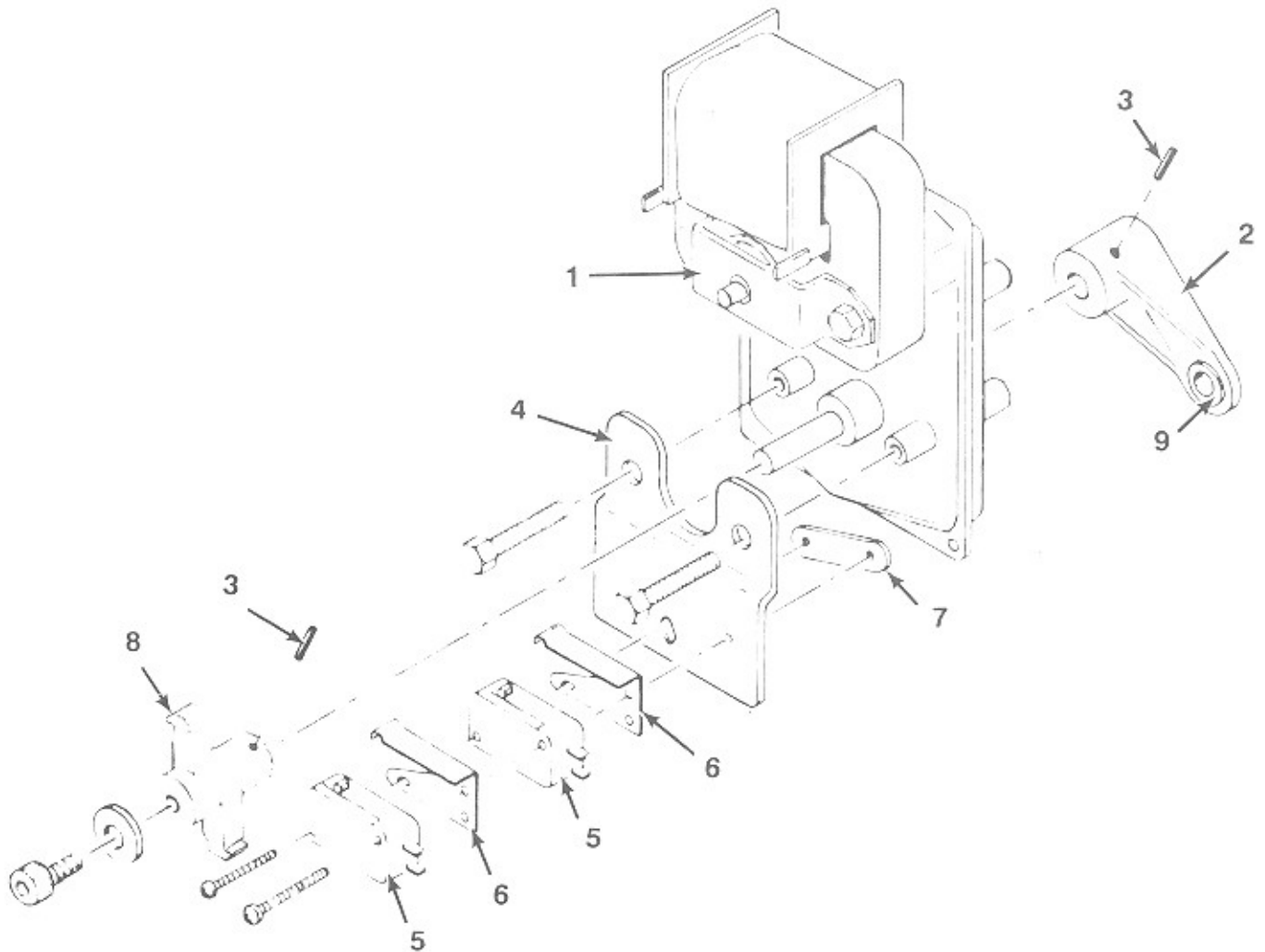


Figure 8-21. Cam Switch and Motor Assembly

Ref.	Part No.	Description	Qty
	40720802	Cam Switch and Motor Assembly (see figure 8-19, sheet 1, item 4)	Ref.
1	40720901	• Cam Motor	1
2	21810401	• Trunnion Crank	1
3	70113116	• Roll Pin	2
4	30790901	• Switch Plate	1
5	21073101	• Switch	2
6	21082901	• Switch Actuator	2
7	21083001	• Twin Nut	1
8	30793402	• Switch Cam	1
9	70146004	• Bearing	1

Table 8-1. Accessory Equipment

Part No.	Description	Function
26704401	Phono paging system With tabletop microphone	Paging system not affected by A.V.C. All plug-in unit, complete with microphone and 50 foot microphone cable.
26704402	Phonograph Paging System With hand-held microphone	Paging system not affected by A.V.C. All plug-in unit, complete with microphone and 50 foot microphone cable.
26694703	Amplifier Accessory Kit (Note: This kit will work with all 607925XX and 610237XX preamplifiers)	Provides access to auxiliary inputs and outputs of the preamplifier. Inputs will accept signals from most background music sources, such as tape players and AM/FM radios. Outputs are available to drive slave amplifiers before or after volume control.
21639701	Background Music Kit	Allows the phonograph to play Autoplay and customer selected music at different levels. Music can be played at different volumes in two different rooms or music can be switched to different rooms during either Autoplay or customer selections.
30632201	Remote volume and cancel control	The remote stereo volume control includes a cancel button. This kit does not include cable. A 3-conductor cable is required.
60898004	Remote volume power switch and cancel control	In addition to volume and cancel functions, the phonograph can be turned OFF and ON from a remote position. The CD currently playing is automatically canceled when the phonograph is turned OFF. The amplifier remains ON so that paging is possible. For domestic 120 volt phonographs only. Cable is not included. A four conductor cable is required.
30632209	Dual remote volume control	Controls volume of each channel separately. Does not include cable. A 4-conductor cable is required.
20819907	Remote volume and cancel control cable	This 3-conductor 50 foot cable connects a remote volume control to a phonograph.
20819908	Remote volume and cancel control cable	This 4-conductor 50 foot cable connects a remote volume control to a phonograph.
66505901	Service Kit	Includes central computer, digital display, power supply board, optical switch, power supply heat sink, blank titles, micro switches, peanut lamps, and fuses.

Part No.	Description	Function
66505902	Service Kit	This kit includes: Mechanism controller and decoder assembly, CD player with mounting accessories.
26711401	Amplifier Adapter Harness	Allows a 130 watt amplifier to be connected to a CD-100A as a replacement amplifier (the total amplifier output will be limited to 130 watts in this configuration).
26699503	Security Bar Kit	Heavy steel bar locks in place over cash box door. A padlock is required (not supplied by Rowe).
26711201 26712901	Pewter Touch-Up Paint Brown Metallic Touch-Up Paint	
21945601	Printer Interface Kit	Allows you to connect a serial RS-232 printer to a CD-100A. The printer must be at least a 40-column printer.
40846001	Keyboard Cover	Provides a flexible shield that protects the selection keyboard (POPULAR, RESET, 0-9, <, >) from water and other fluid spills.