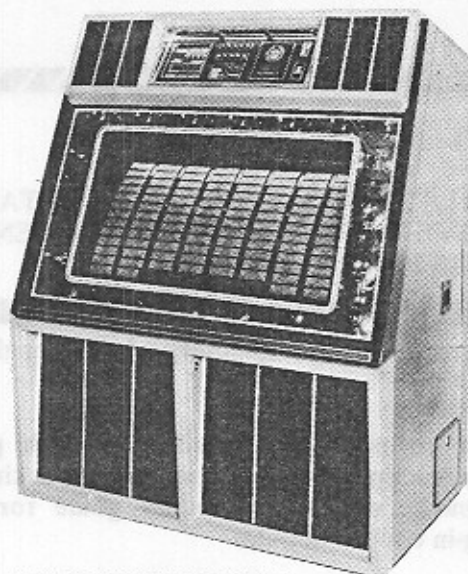


# R-86 PHONOGRAPH



## SELECTION SYSTEM

CAPACITY . . . . . 200 Selections

## TRANSFORMER PACKAGE

POWER LEVELS FOR PHONOGRAPH SPEAKERS . . . . . 1, 4, 16, 28, 64 watts  
 . . . . . PROVIDES 70-VOLT LINE FOR EXTENSION SPEAKERS

## SPEAKER SYSTEM

	LOW FREQUENCY	MID/HIGH FREQUENCY
SPEAKER DIAMETER . . . . .	10 inches	6 inches
VOICE COIL DIAMETER . . . . .	1-1/2 inches	1 inch
IMPEDANCE . . . . .	30 ohms	8,5 ohms
CROSSOVER . . . . .	400 Hz.	
SYSTEM FREQUENCY RESPONSE . . . . .	50 to 12,000 Hz.	

## LIGHTING

FRONT DOOR (Upper) . . . . . Fluorescent, 30 watts, 36 inch (T-8), 7-00601-12

CONTROL PANEL . . . . . Fluorescent 13W, 21 inch, Part No. 7-00601-15

CREDIT WINDOW . . . . . Light Emitting Diode 7-00353-03

DISCO FLASHING LIGHTS . . . . . T-1 3/4 Sub miniature  
 14V

## FUSES AND CIRCUIT BREAKERS

### MAIN POWER SUPPLY

120 VAC CIRCUIT (Transformer  
 Primary Only) . . . . . 2 Amp Circuit Breaker, 7-00733-15

120 VAC CIRCUIT . . . . . 10 Amp Circuit Breaker, 7-00734-25

+28 VDC CIRCUIT . . . . . 5 Amp Slo-Blo Fuse 7-00721-06

+8 VDC CIRCUIT . . . . . 5 Amp Slo-Blo Fuse 7-00721-06

### AMPLIFIER

Stereo - 125 W

120 VAC CIRCUIT . . . . . 3 Amp Circuit Breaker, 7-00733-17

DC CIRCUIT . . . . . 5 Amp Fuse, Type MTH-5 (4) 7-00720-10

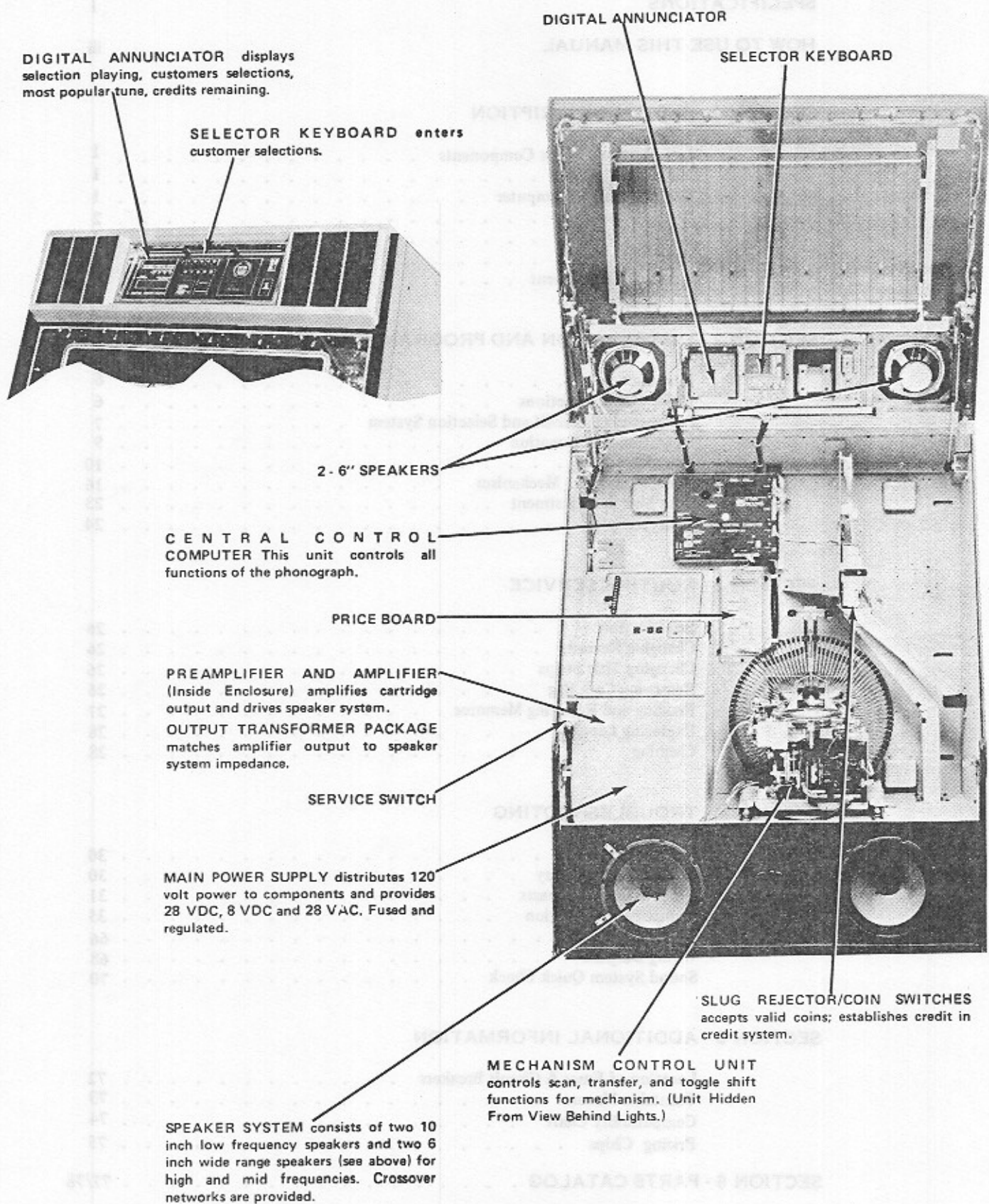


FIGURE 1. PHONOGRAPH MAJOR COMPONENTS

## MEMOREC

The Memorec function has been expanded and incorporated into the Central Control Computer. Memorec has the following features:

- Records the number of times each record side is selected. Selections made by use of the "Most Popular Record" key do not increase the count of the individual record side but are counted separately and also included in the total.
- Records the total number of selections made. Selections made by "Playmaker" are not included in the total or in the individual side counts.
- Records the total amount of money deposited in the phonograph including any WalleTTes which are connected to it.

## SOUND SYSTEM PRINCIPLES OF OPERATION

The phonograph sound system translates stylus vibration into electrical voltage, amplifies the voltage and the speaker converts it into sound. The sound system consists of a stylus and cartridge, a stereo preamplifier and amplifier unit, a speaker system, a volume control and an output transformer package. Identification and location of each major component is shown in Figure 1. The purpose and description of each major component is explained in the following paragraphs.

**STYLUS AND CARTRIDGE.** The stylus and cartridge convert mechanical movement into equivalent electrical voltage. The unit is mounted on the record changer tone arm. This output voltage is transmitted through shielded cable to the preamplifier.

**AMPLIFIER.** The amplifier unit amplifies phonograph cartridge output and drives the speaker system. The latest concepts in silicon transistor circuitry are designed into the 125 watt stereo systems. It delivers a full 62.5 watts rms power per channel. Its wide frequency response and low distortion assure good record reproduction. The unit incorporates automatic volume control (AVC).

The output stage is coupled to the speakers. Treble range and bass boost controls are provided on the preamplifier to compensate for differences in room acoustics. A mute relay silences the amplifier while a record is being transferred to or from the turntable. Circuitry is completely solid state for durability and long service life.

Protection is included for voltage transients, excessive heat and accidental shorting of speaker leads.

**PREAMPLIFIER.** The preamplifier amplifies the phonograph cartridge output to drive the power amplifier. The components for both the right and left audio channels are contained in a single plug-in circuit board mounted under the amplifier chassis.

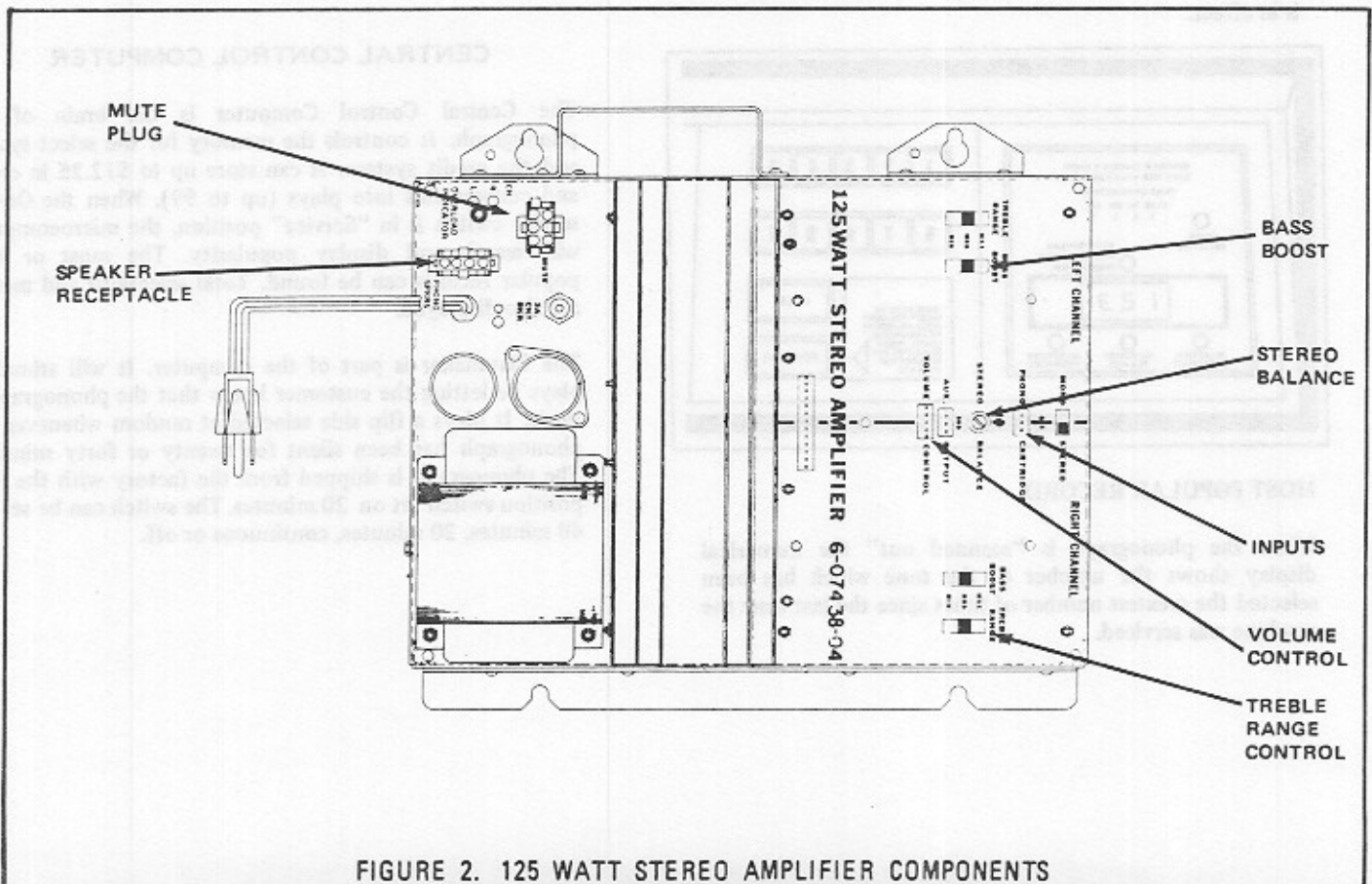


FIGURE 2. 125 WATT STEREO AMPLIFIER COMPONENTS

**OUTPUT TRANSFORMER PACKAGE** (see Figure 3). The transformer package enables the amplifier to operate 70 volt lines for extension speakers. The package also provides terminal strips for obtaining several different power levels for both phonograph and extension speakers. The unit consists of two output transformers and associated parts mounted on a single chassis. The chassis is mounted in the enclosed compartment.

The output transformer secondary connections are available at three terminal strips. Phonograph speaker power is selected by connecting the violet and pink leads according to Table 3. Extension speakers can be connected as directed in Table 5 of speaker connection chart.

**SPEAKER SYSTEM.** The speaker system consists of two 10 inch low frequency speakers, two 6 inch wide range speakers.

The 10 inch, heavy duty speakers are mounted in the cabinet. The 6 inch speakers are mounted in the lid.

**TWO WIRE VOLUME CONTROL.** A Rowe exclusive, the two wire volume control simplifies large, complex installations and leaves no extra disconnected preamplifier circuitry.

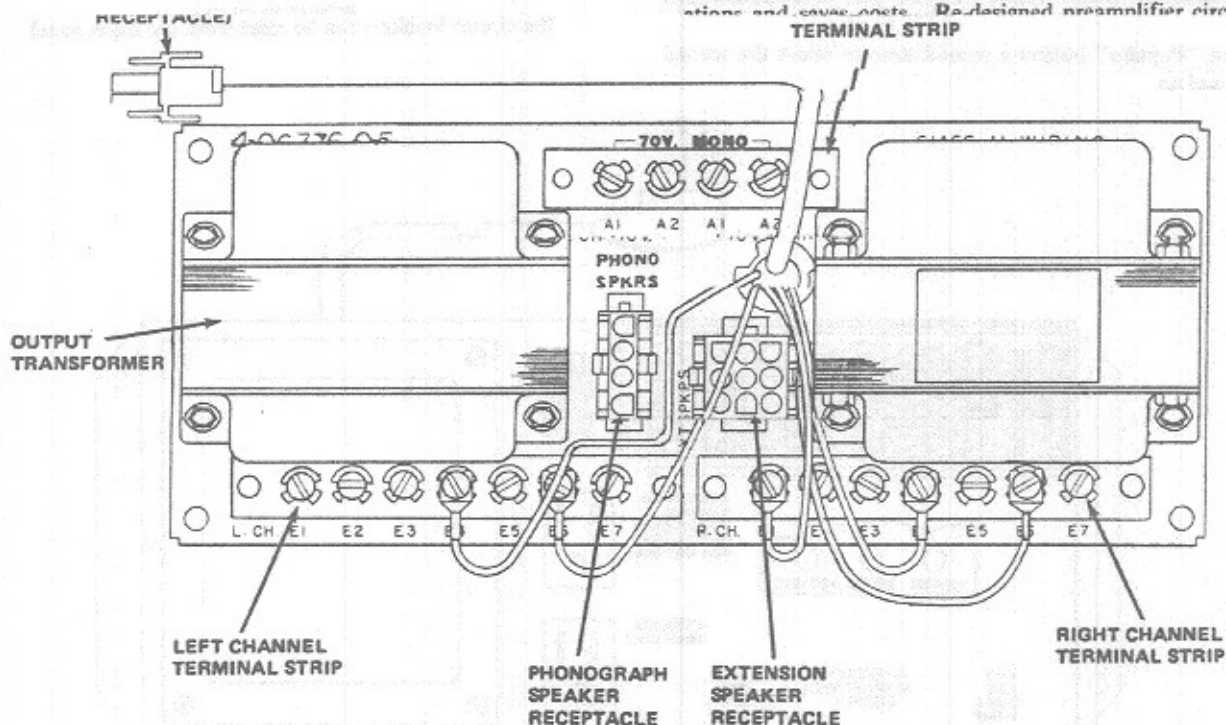


FIGURE 3. OUTPUT TRANSFORMER PACKAGE COMPONENTS

## SELECTION SYSTEM

The selection keyboard has ten numbered areas plus two which are marked "Reset" and "Most Popular Records".

To make a selection deposit money to establish credit. The numbered display will show the number of selections available. Press the numbered buttons on the keyboard in order corresponding to the desired selection number as shown on the title rack. As the digits of the selection number are pressed, they will appear on the numerical display. Only legal selection numbers will be accepted. For example if any number other than a 1 or 2 is pressed as a first digit, it will be ignored. Nothing will happen. It is not necessary to press "Reset". Merely press the correct first digit.

If you change your mind after beginning to make a selection pressing "Reset" will erase the partial selection number and also allow you to enter a new number. "Reset" is not effective after the third digit has been entered.

Press "Popular" button to select the tune which has been selected the greatest number of times since this phonograph was serviced last.

Press "Popular" button a second time to select the second most popular tune. This process may continue until credit is used up.

## NOTE

*If selections are made manually before "Most Popular Record" is used, no selections are repeated even if the manual selections are most popular. Thus the customer is not "cheated".*

The most popular selection sequence is reset when credit is exhausted.

## POWER SUPPLY

The main power supply distributes unregulated +28 VDC and 28 VAC, and regulated +8 VDC to the phonograph components. Power is controlled by a rocker switch located on the back of the chassis. 120 volt AC receptacles are provided for the amplifier, lights, accessories and service equipment. The AC receptacles and transformer primary are protected by 10 amp circuit breaker CB2 while circuit breaker CB1 protects the transformer primary only. Both the circuit breakers can be reset from the front panel.

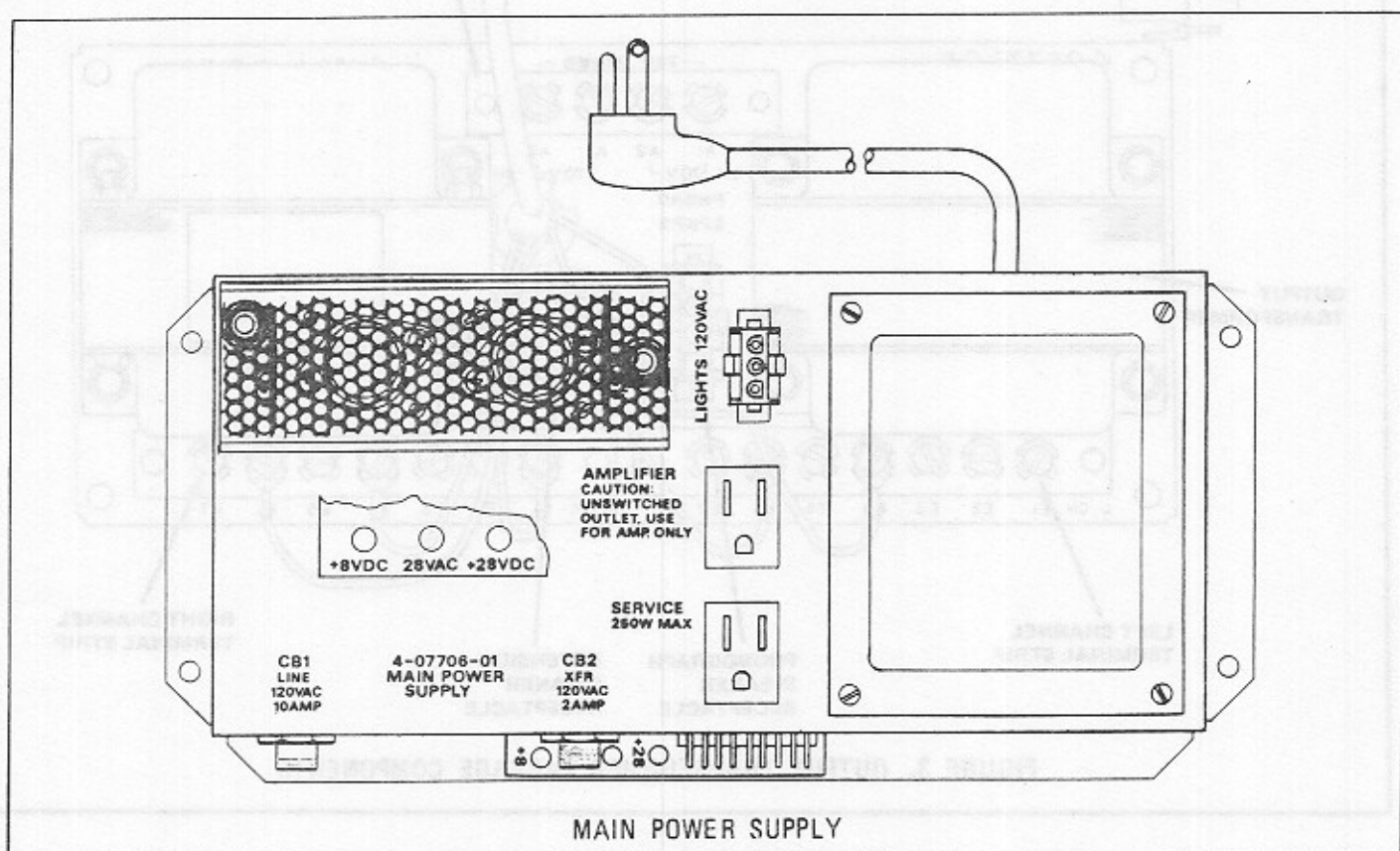


TABLE 1. ACCESSORY EQUIPMENT

PART NO.	FUNCTION	DESCRIPTION
2-66971-10	Dollar Bill Acceptor Kit (Includes Bill Stacker)	Accepts valid one dollar bills in U.S. currency and establishes one dollar's worth of credit in the phono
2-66971-12	Five Dollar Bill Acceptor Kit (Includes Bill Stacker)	Accepts valid one & five dollar bills.
2-66681-06 2-66681-09	Automix Kit (60 Hz.) Automix Kit (50 Hz.)	Enables phonograph to play 33 and 45 RPM records interchangeably.
2-66946-01	Phono Paging System Amp Accessory Kit (Includes 2-66947-01)	New improved Paging System, not affected by A.V.C. All Plug-in unit, complete with microphone and 50 feet of microphone cable. Allows use of phono sound system for paging.
2-66947-01	Amplifier Accessory Kit	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 or FM radios. Outputs available to drive slave amplifiers before or after volume control.
6-09001-01	WRE Walleto Wallbox (4 Coin)	Remote control unit for solid state phonograph. Takes nickels, dimes, quarters and dollar coins.
2-66995-02	Security Bar Kit	Heavy steel bar locks in place over cash box door.
2-66989-01	Wallbox Adaptor Harness Kit (WRE)	For making internal connections in phonograph to allow installation of WRE Wallbox.
4-06891-01	Auxiliary Power Supply	Permits operation with WRA, WRB, WRC, WRD & WRE Wallboxes.
0-05081-00 Belden No. 8447 Columbia No. 4082	7 Conductor Cable	For connecting WRE to phonograph. (Not supplied by Rowe)
4-05678-01	Secondary Power Supply	Powers each additional six or more Rowe WRA or WRC Walleto wallboxes.
2-66965-02	Wallbox Interface Kit	Permits operation with WRA, WRC and Seeburg wallboxes.
2-66965-01	Wallbox Interface Kit	Permits operation with WRD Wallbox.
0-05076-00 Belden No. 8449 Columbia No. 4084	9 Conductor Cable	For connecting WRD Walleto to phonograph. (Not supplied by Rowe)
6-02187-01	Extension Speaker (Model EX201)	12 watt, compact "bookshelf" speaker contains one 8 inch full range speaker.
6-07447-01	Extension Speaker (Model EX 350)	32 watt, two channel system includes 3-1/2 inch tweeter and 10 inch bass speaker.
2-67003-01	125 Watt Amplifier Harness Kit	Three Adapter Cables to interchange combo line plugs with Universal plugs.
3-06322-01	Remote Volume & Cancel Control	Remote stereo volume control and cancel button. Does not include cable.
6-65047-05	Service Kit	Includes Central Computer, Mech Control, Power Supply Board and Fuses.
6-08980-04	Remote Volume Power Switch, & Cancel Control	Volume Control incorporates on-off switch. 115V only.
3-06322-09	Dual Remote Volume Control	Controls volume of each channel separately. Does not include cable.
2-08199-07	Remote Volume and Cancel Control Cable	For connecting remote volume control to phonograph 3-conductor cable, 50 ft. length.
2-08199-08	Remote Volume and Cancel Control Cable	For connecting remote volume control to phonograph 4-conductor cable, 50 ft. length.
2-67009-01	InterROWEgator	Portable Print Out Device to interrogate Juke Box Data.