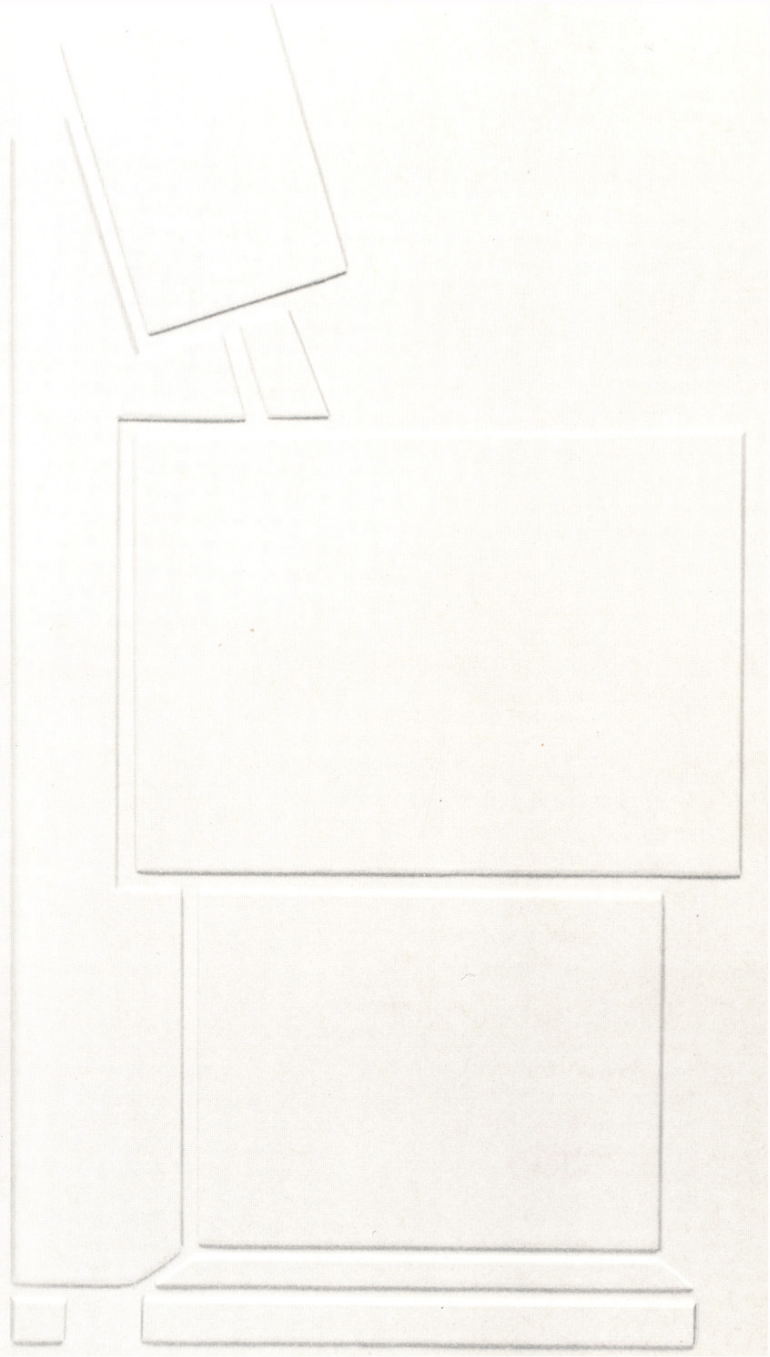
The Great Performers



The New Phonographs by Rowe AMI

Design Performance

You may not know it, but you designed the stunning Rowe AMI Phonographs. We listened to what the customer wanted in new jukebox design and gave it to you. Because you know better than any designer what will bring in the cash.

Here they are. The Classic and the Arlington combine the best of tradition and today. From the contemporary computer look above to the ageless wood below, everything about them assures, excites, reassures, delights. Quality in the fine professional attention to detail throughout. Stability in the definite horizontal thrust of the lines. Bold three dimensional thrust in the illuminated side panels. They're the only jukeboxes offering you a choice of design to suit the location.

Sound Performance

What sound. Vibrant, alive, because the full amplifier wattage is delivered to the speakers. The Classic and the Arlington literally surround you with Rowe "Stereo Round"®. Superior stereo from any listening position. And, there's a choice of amplifiers to get the most out of any location.

Unique Performance

These are the only 200 selection jukeboxes on the market. They have a solid state credit unit that permits almost infinite price and bonus capability (fully compatible with our dollar bill acceptor). They're the only ones with a 45/33 RPM AUTOMIX® mechanism as standard equipment. Optional burglar alarm and insurance program are available.

Durability and Reliability Peformance

Rowe's incomparable durability and reliability is backed by the only no-nonsense, no-doubletalk full five-year warranty in the business. Frankly, we can afford it. Our machines are built to give more trouble free performance, are easier to service and last longer than anything on the market. Seven ply glued and screwed construction. Enclosed plug-in relays, sintered gold contacts, tough Teflon and Emralon dry lubricant, silicon transistors and glass fibre reinforced plastics prevent problems from ever happening. Mechanisms are easily accessible . . . easy to work on.

No wonder we call them

The Great Performers

Classic

For the traditional interior.
Sophisticated warm woods. Soft spoken quality.
Timeless elegance that enhances
the most tasteful atmosphere.

Features:

- Warm, attention-getting appearance from back-illuminated orange-gold, krinkle glass set in woodgrain front and side frames. Silver embossed top grilles. Highly readable vertical pattern selector buttons set off in black and chrome. Contrasting color price card and instruction areas. Tempered clear title rack glass tilted slightly to eliminate glare. Traditional Rowe AMI outstanding quality and workmanship maintains "like new" appearance in any environment. Exclusive **5-Year** Warranty on all moving parts.
- Rowe AMI patented STEREO ROUND® sound, with 6 speakers (two 10" bass speakers in duct-tuned bass reflex sound chamber, two 6" mid-range and two tweeters). True stereo from any angle, in any location.
- NEW Solid State Credit Computer with unlimited pricing (single and bonus plays) accepts any combination of coins (and optional bill acceptor credit). Self-contained price programming switches allow price and bonus changes in the field without jumpers or separate programming boards.
- NEW Universal Price Card with self-adhesive numbers. Allows rapid field changing of standard and bonus price levels.
- Fast, easy location servicing. Mechanism easily slides straight out, or can be worked on inside cabinet. Side panel lighting for shadow-free accessibility. No lubrication required for FIVE YEARS.
- Full line of options, including new Solid State Print-Out Money Meter and Bill Acceptor with bill stacker feature.

(see back cover for equipment and options)

Specifications:

- *Frequency response 20 — 20,000 Hz. at—3 db.*
- *Choice of 64 watt RMS or 120 watt RMS solid state stereo amplifier.*
- *High Compliance diamond stylus cartridge.*
- *Height 50-11/16" (129 cm), Width 41-7/8" (106 cm), Depth 27-½" (70 cm).*
- *Weight 360 lbs. (163 kg).*
- *Electrical 120 VAC, 60 Hz. 490 Watts. Circuit breaker protection and 3-wire grounded electrical system for U.L. type listing world-wide.*


ARMI
STEREO
200

Arlington

For the swinging location.
A gentle balance of textures and moods.
Fresh. Bright. Pleasing. A promise of good fun.

Features:

- Vibrant blue back-illuminated front and side panels complimented by woodgrain framing for a touch of elegance. Highly visible top panel with vertical pattern selector buttons, contrasting color instruction area, and silver embossed speaker grilles. Tempered clear title rack glass tilted slightly to eliminate glare. "Human-engineered" design and quality construction materials maintain its fresh, new appearance in any environment. Exclusive **5-Year** Warranty on all moving parts.
- Rowe AMI patented STEREO ROUND®sound, with 6 speakers (two 10" bass speakers in duct-tuned bass reflex sound chamber, two 6" mid-range and two tweeters). True stereo from any angle, in any location.
- NEW Solid State Credit Computer with unlimited pricing (single and bonus plays) accepts any combination of coins (and optional bill acceptor credit). Self-contained price programming switches allow price and bonus changes in the field without jumpers or separate programming boards.
- NEW Universal Price Card with self-adhesive numbers. Allows rapid field changing of standard and bonus price levels.
- Fast, easy location servicing. Mechanism easily slides straight out, or can be worked on inside cabinet. Side panel lighting for shadow-free accessibility. No lubrication required for FIVE YEARS.
- Full line of options, including new Solid State Print-Out Money Meter and Bill Acceptor with bill stacker feature.

(see back cover for equipment and options)

Specifications:

- *Frequency response 20 — 20,000 Hz. at—3 db.*
- *Choice of 64 watt RMS or 120 watt RMS solid state stereo amplifier.*
- *High Compliance diamond stylus cartridge.*
- *Height 50-11/16" (129 cm), Width 41-7/8" (106 cm), Depth 27-½" (70 cm).*
- *Weight 360 lbs. (163 kg).*
- *Electrical 120 VAC, 60 Hz. 490 Watts. Circuit breaker protection and 3-wire grounded electrical system for U.L. type listing world-wide.*

Crestwood

A quiet, unobtrusive console that blends
into and subtly enriches the elegant atmosphere.
Low profile, rich woods. An exquisite furniture piece.

Features:

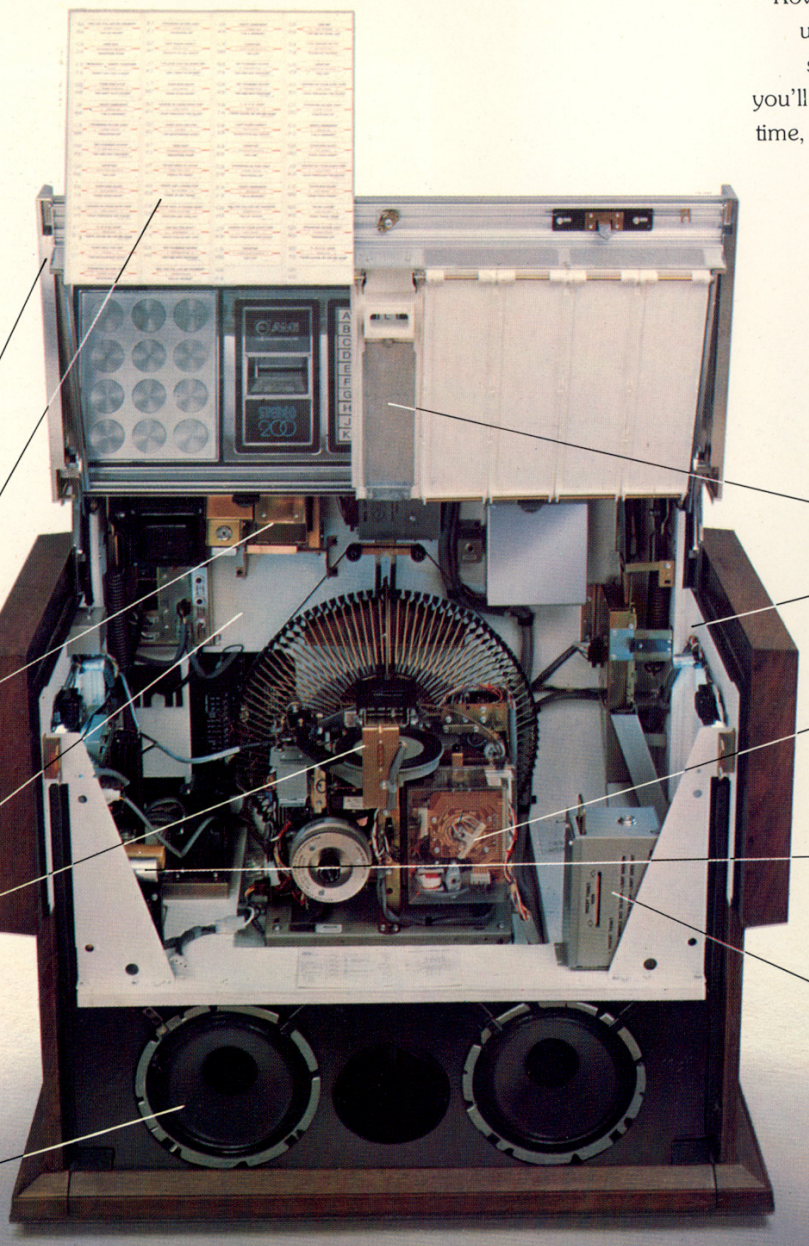
- Indirectly lit bronze finished front grille accents rich woodgrain trim and sides. Simulated slate top opens to reveal warm seaport scene framed in bronze. Tempered glass protects front-lit title rack. White pushbutton selector assembly and die cast, chrome plated coin and bill acceptor area. Illuminated customer instruction area. Exclusive **5-Year** Warranty on all moving parts.
- Full Range Stereo Sound with 5 speakers (one 10″ bass speaker in a duct-tuned bass reflex sound chamber, two 6″ mid-range and two tweeters).
- NEW Solid State Credit Computer with unlimited pricing (single and bonus plays) accepts any combination of coins (and optional bill acceptor credit). Self-contained price programming switches allow price and bonus changes in the field without jumpers or separate programming boards.
- Fast, easy location servicing. No lubrication required for **5 Years.**
- Full line of options, including new Solid State Print-Out Money Meter and Bill Acceptor with bill stacker feature.

(see back cover for equipment and options)

Specifications:

- *Frequency response 20— 20,000 Hz at—3 db.*
- *Choice of 64 watt RMS or 120 watt RMS solid state stereo amplifier.*
- *Height 32-13/16″ (83.6 cm), Width 52-3/4″ (134 cm), Depth 24″ (61 cm)*
- *Weight 345 lbs. net (156.5 kg).*
- *Electrical — 120 VAC, 60 Hz. 415 Watts. Circuit breaker protection and 3-wire grounded electrical system. Export electrical configurations available. U. L. Listed.*

Rowe AMI's beauty is not skin deep. Take a peek underneath at the most engineered and reliable system on the market. These features are what you'll live with in the way of bigger take, less service time, fewer calls and years of uncomplaining service.



NEW Solid State Credit Computer with unlimited pricing and bonus capability. Programmed by rocker switches.

Total Front Door Accessibility to all components. Mechanism easily serviced in place.

Top Door spring balanced, cannot fall on operator.

Title Racks flip up at eye level for easy title-strip label changes.

Three-wire grounded electrical system with circuit breakers.

Separate locked Bill Stacker on bill acceptor stacks and faces bills for fast removal and counting.

200 selection 33–45 RPM AUTOMIX® mechanism for "Popular" and "Little LP" selections.

Six speaker STEREO ROUND® sound with two 10" bass speakers in duct tuned bass reflex sound chamber, two 6" heavy duty midrange speakers, and two high frequency tweeters.

5-Year Warranty on all moving parts. No lubrication required for Five Years.

Identification area for operator license and card.

Side Panel lighting also provides shadow-free work light inside cabinet for serviceman.

Gold Plated circuit board in Search Unit for absolute reliability.

Choice of 64 watt RMS or 120 watt RMS solid state stereo amplifier

New Solid State Print-Out Money Meter records and totals all coins and bills from phonograph and wall boxes.

High impact kick rail and reinforced speaker grille. Heavy duty high quality construction materials used throughout.

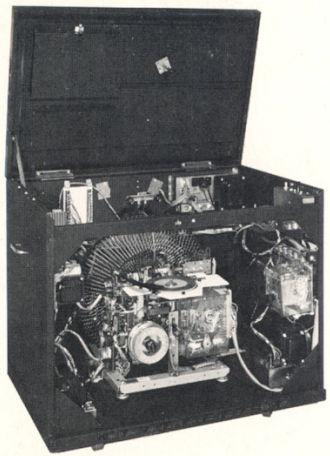
Rowe AMI Wall-Ette

Compact, attractive wallbox puts the jukebox within arm's reach for extra impulse sales. Bright graphics and two-ear, you-are-there stereo invites more play. Full 200-selection capability and choice of either 5¢ to 25¢ or 10¢ to 50¢ selection models. Twelve display panels within box for miniature album covers or local advertising. Winking waitress call light actuated by customer adds a touch of convenience for the location.

Designed from the inside out for fast, efficient servicing. Flip out title page unit facilitates label changes. Swing-out, lift-off door opened by single key provides complete access to internal components. Unitized selector and speaker assembly easily removed with two screws and two plug connections in 60 seconds, should repairs ever be necessary.

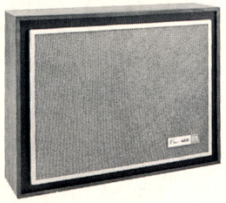
Specifications:

- *Model WRA — 5¢, 10¢, 25¢ pricing.*
- *Model WRC — 5¢, 10¢, 25¢, 50¢ pricing.*
- *Height 13-3/8" (34 cm), Width 16-1/2" (42 cm),*
- *Depth 6-1/4" (15.9 cm)*
- *Weight 50 lbs. net (22.7 kg).*



Hideaway.

Model HLJ. Up to six power supplies can be installed inside cabinet. Additional power supplies can be handled outside. Each power supply handles 6 wall boxes. 120 watt (R.M.S.) solid state amplifier standard. 200 selections.



EX-401 Extension Speaker.

Oil finished walnut cabinet and two-way speaker system with cross-over network give this system the sound and appearance to go with any location. A 10″ low frequency driver and a high frequency horn speaker matched in a duct-loaded enclosure result in a frequency response of 55 to 15K Hz., ±4 db. Level and mounting adjustments for maximum high frequency sound dispersal. 25 Watts program material from 8 ohm input, or 70 Volt line transformer tapped for 0.5, 1, 2, 4, 8, 12, 15, or 25 watts. Dimensions 24″ × 19 3/8″ × 9″ deep. Designed for wall or ceiling mounting.

Paging System.

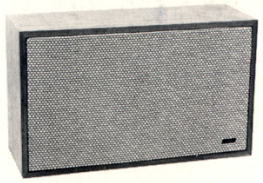
Permits paging over the phonograph speaker system. This is a plug-in unit for MM-2 through latest model phonographs.

Monitor Burglar Alarm.

Freon gas operated horn makes an exceptionally loud noise if attempts are made to open or smash the cash box door.
15 oz. freon can allows hundreds of test blasts before a replacement is needed. Install with 3 screws through cash box door.
Operates even if power is off. Automatically disarms with key.

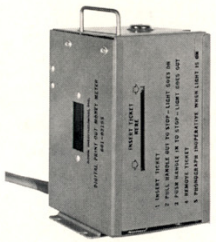
Insurance Program

Insurance Plan available covering loss of machine and contents from fire, theft, and vandalism.



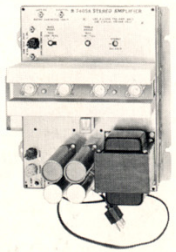
EX-301

Attractive, durable walnut vinyl exterior surrounds this two-way, high efficiency music system with 10″ low frequency and 3 1/2″ high frequency speakers. Duct-loaded enclosure results in frequency response of 60 to 12K Hz., ±5 db. 24 Watts program material from 8 ohm input to 70 Volt line transformer tapped for 0.5, 2, 4, 8, 12, or 24 watts. Dimensions 25″ × 14 3/4″ × 9 1/8″ deep. Designed for wall or ceiling mounting.



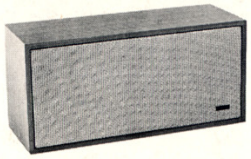
Solid State Print Out Money Meter.

Records and totals all coins and bills from phonograph and wall boxes. Print out feature is mechanical.



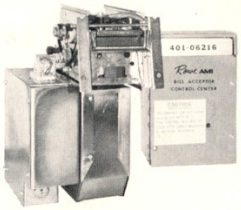
120 Watt [R.M.S.] Solid State Amplifier.

Ideal for locations that need high sound levels from extension speakers. This unit is also recommended for installations with large numbers of wall boxes.



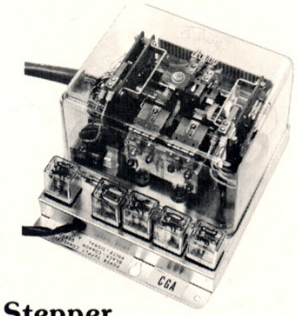
EX-201

Quality and sound appearance in a small package. Walnut vinyl exterior conceals one 8″ wide-range speaker capable of 12 watts program material. Frequency response of 75 to 10K Hz., ±5 db. Dual input impedance: 8 ohms or 70 Volt line transformer tapped for 0.5, 2.4, 4, 8, or 12 watts. Dimensions 23 3/4″ × 11″ × 9″ deep. Designed for wall or ceiling mounting.



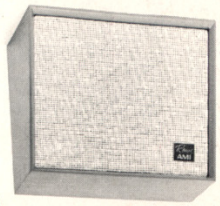
Bill Acceptor.

Allows use of dollar bill in phonograph. Comes with $400 capacity bill stacker with a separate lock for security.
Plugs into phonograph. (no added power required.)
Excellent discrimination against bogus bills. Automatic feed. Credit storage.



Stepper.

CGA model for use in installations with AMI wall boxes. CGC (160 and 200 selection wall boxes other than AMI).

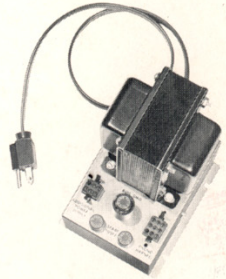


EX-700

Compact walnut vinyl finish wall mount speaker with natural cane grille. Contains one 8″ speaker with frequency response of 120 to 10K Hz., ±5 db. 70 Volt line transformer tapped for 0.3, 0.6, 1.25, 2.5, and 5 watts maximum. Dimensions 11 3/4″ × 10 1/8″ × 6 1/2″ deep.

Remote Volume Control.

Single element control usable with all MM through latest model phonographs. It is a 2-wire system for volume control, and 3-wire for volume and cancel controls.



Power Supply.

For Stepper at left. 401-5627—Plug-in power supply.
401-5678—Power supply in addition to above when more than 6 wall boxes are installed in a location.

Rowe AMi
ROWE international, inc.
A SUBSIDIARY OF TRIANGLE INDUSTRIES, INC.
75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL. (201) 887-0400, CABLE: ROVEND

Printed in U.S.A.

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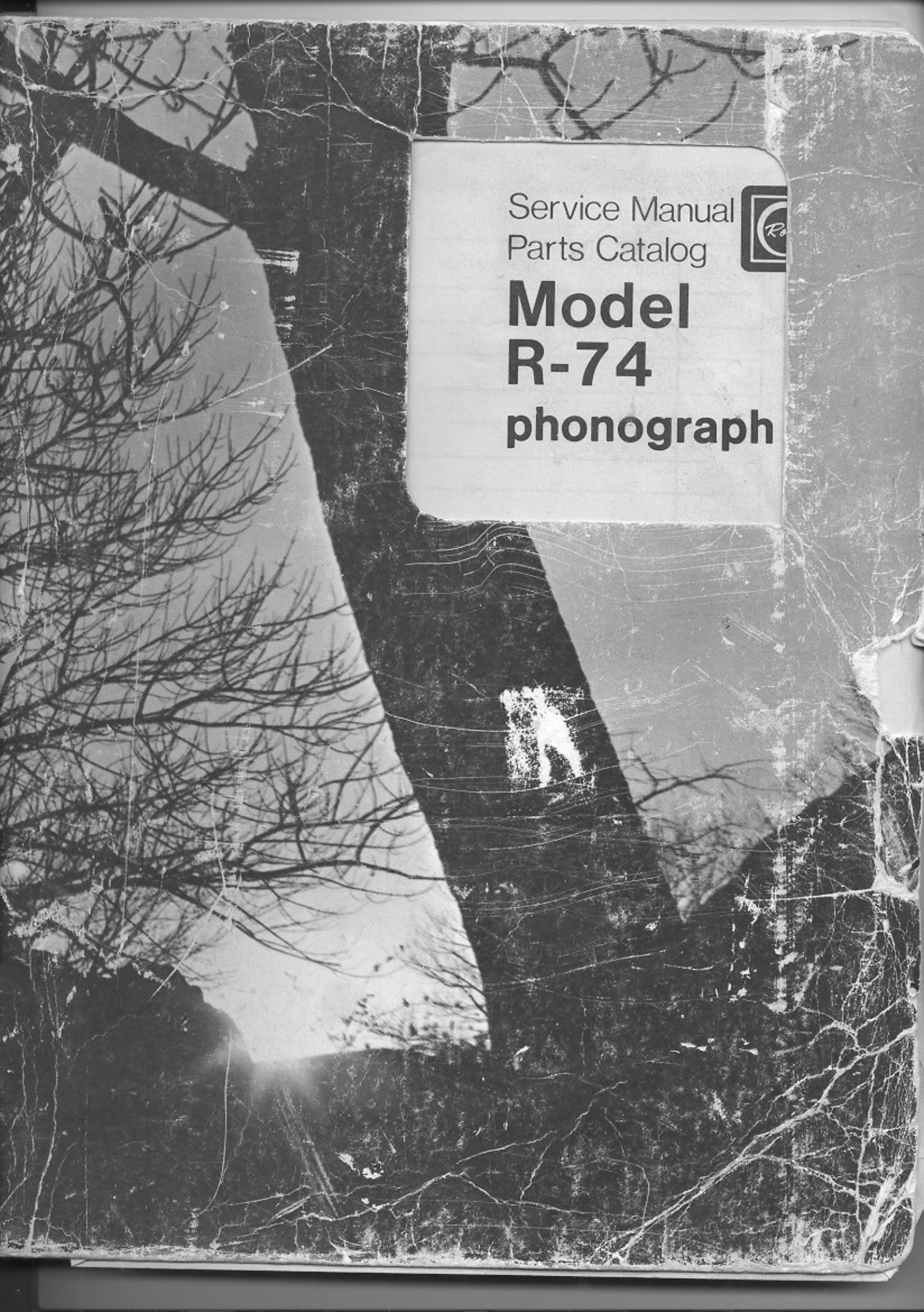
Service Manual
Parts Catalog
Model
R-74
phonograph

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SPECIFICATIONS

GENERAL

DEPTH	27-1/2 in. (70cm)
WIDTH	41-7/8 in. (106 cm)
HEIGHT	50-11/16 in (129 cm)
SHIPPING WEIGHT (DOMESTIC)	400 lbs.
SHIPPING WEIGHT (EXPORT)	415 lbs.
NET WEIGHT	360 lbs. (163 kg)
POWER REQUIREMENTS	120 vac, 50/60 Hz, 490 watts, 4.9 amps

RECORD CHANGER MECHANISM

CAPACITY	100 records
RECORD SIZE	7 inches
SPEED	33 and 45 rpm

CREDIT AND PRICING SYSTEM

ACCUMULATOR TYPE CREDIT COMPUTER - - DOLLAR BILLS OPTIONAL

COINS ACCEPTED	Nickels Dimes Quarters Half-Dollars
TOTAL CREDIT ACCUMULATIONS	255 Standard Plays
PRICING	See pricing chart

SOUND SYSTEM

CARTRIDGE

T YPE	Shure Dynetic variable reluctance
FREQUENCY RESPONSE	20 to 20,000 Hz
CHANNEL SEPARATION	25 db @ 1,000 Hz
NOMINAL COMPLIANCE	7.5×10^{-6} cm/dyne
TRACKING FORCE	4 grams
OUTPUT	7 mv.
STYLUS	0.7 mil, diamond

POWER AMPLIFIER

POWER OUTPUT PER CHANNEL, 64 WATT AMPLIFIER	32 watts rms (70-volt output)
POWER OUTPUT PER CHANNEL, 120 WATT AMPLIFIER	60 watts rms (70-volt output)

PREAMPLIFIER

AVC CONTROL RANGE	40 db
TREBLE CONTROL	12 db/octave 10,000 Hz full 6,000 Hz moderate 3,000 Hz low
BASS CONTROL	Compensates for abss loss at low volume levels 12 db per octave

R-74

ARLINGTON MODEL

CLASSIC MODEL

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	28 watts in dual channel position

SPEAKER SYSTEM

	LOW FREQUENCY	MID FREQUENCY	HIGH FREQUENCY
SPEAKER DIAMETER.	10 inches	6 inches	3 inches

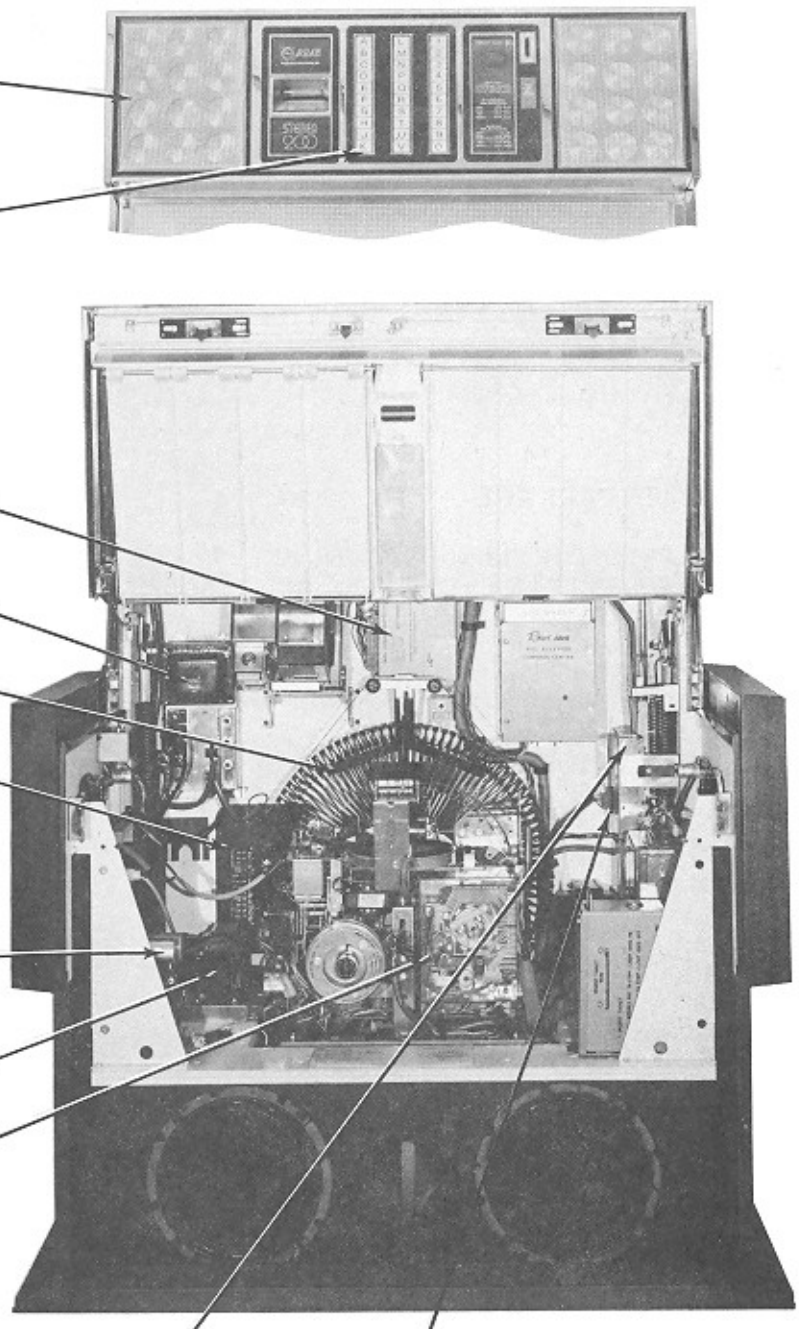
CROSSOVER	350 Hz 5,000 Hz
SYSTEM FREQUENCY RESPONSE	50 to 17,000 Hz

LIGHTING

SIDES	Fluorescent, 8 watts, 12 inches (2) 702-00601
SELECTOR AND TITLE RACK	Fluorescent, 25 watts, 33 inches, 706-00601
FRONT DOOR	Fluorescent, 25 watts, 33 inches, 706-00601
CREDIT WINDOW	Incandescent, No. 757, (2) 28 V, 200-50763

FUSES AND CIRCUIT BREAKERS

JUNCTION BOX	
120 VAC CIRCUIT	10 Amp Circuit Breaker, 725-00734
120 VAC CIRCUIT(TRANSFORMER PRIMARY ONLY).	2 Amp Circuit Breaker, 715-00733
30 VDC CIRCUIT	3 Amp Circuit Breaker, 717-00733
AMPLIFIER	
Stereo 64 W	
120 VAC CIRCUIT	1-1/2 Amp Circuit Breaker, 713-00733
DC CIRCUIT	2 Amp Fuse, 701-00720 (4)
Stereo 120 W	
120 VAC CIRCUIT	3 Amp, Circuit Breaker, 717-00733
DC CIRCUIT	5, Amp, Type MTH-5, Fuse, 710-00720 (4)
CREDIT COMPUTER	1/4 Amp, Cartridge Fuse, 707-00720



SPEAKER SYSTEM consists of two 10-inch low frequency speakers, two 6-inch speakers for mid-frequencies, and two high frequency tweeters. Crossover networks are also provided. (Bass speakers mounted in cabinet below).

SELECTOR ASSEMBLY consists of 3 pushbutton switch banks, a latch coil, a select pulse and latch relay, and a start relay. Each pushbutton completes a circuit to a corresponding search unit commutator segment. Premium pricing switches and a test switch are included on selector.

CREDIT COMPUTER registers credit for record play when coins operate the coin switches. Credit is removed when a selection is made. Also contains price programming switches.

JUNCTION BOX distributes 120-volt power to phonograph components and provides 30-volt AC and 30-volt DC power for the selection system, incandescent lamps, relays, and solenoids.

RECORD CHANGER MECHANISM holds 100 records and plays 200 selections.

REAR ACCESS DOOR contains an amplifier volume control, a cancel pushbutton, a manual on-off toggle switch, and terminal strips for wallbox, remote volume control, external speaker connections.

PREAMPLIFIER AND AMPLIFIER amplifies phonograph cartridge output and drives the speaker system.

OUTPUT TRANSFORMER PACKAGE matches amplifier output to speaker system impedance.

SEARCH UNIT AND PINWHEEL ASSEMBLY is a component of selection system. Pushes out pins on a mechanical pinwheel memory that correspond to record selection.

SLUG REJECTOR accepts good coins and rejects slugs and bad coins. Tests coins for size, thickness, weight, metal content, and shape.

COIN SWITCHES establish credit in the credit computer. Operated by coins as they fall from slug rejector into cash bag.

FIGURE 1-1. MAJOR COMPONENTS

SECTION 1 - DESCRIPTION

GENERAL

The R-74 represents the continuing improvement in styling and sound reproduction expected of Rowe/AMI's forward looking, pace-setting phonographs. A 200 selection, high fidelity stereo phonograph, the R-74 features solid-state credit and pricing, 64 watts of honest speaker-driving power, greater sound coverage, and ease and safety in servicing.

Circuit breaker protection of electrical systems, and a fault ground system are features retained in the R-74. The time-tested record changer mechanism requires lubrication only once every five years and the entire phonograph is covered by the most liberal warranty in the music industry.

The phonograph contains a stereo sound system which starts with a 0.7 mil diamond stylus tracking at four grams pressure and ends with the biggest sound available. The 64-watt full-range, solid-state amplifier incorporates automatic volume control, automatic record quality control and automatic loudness contour. Location of middle and high frequency speakers gives the R-74 greater sound coverage. Bass power has been increased and the duct-tuned bass enclosure is larger than ever. The resulting increase in bass levels is immediately noticeable.

Each of the choices in styling offer brushed, epoxy-coated aluminum grilles, vinyl-clad steel lower sides, high-impact polystyrene and stainless steel trim, plus chrome plating over dual nickel for beauty and durability. All models provide subtly-lighted side panels, and door and side panel glass is tempered safety glass.

Included in an array of optional accessory equipment is a 120 watt solid state amplifier for those locations with heavy extension speaker requirements. This proven amplifier delivers an honest 120 watts of power (rms) to the speaker system.

ACCESSORY EQUIPMENT

Phonograph accessory equipment is listed in the following table. All accessory equipment and kits include mounting parts and installation instructions. These accessories are available from your Rowe/AMI Distributor. New accessories will be announced as they become available in service bulletins issued by Rowe International, Inc. These service bulletins are mailed to all Rowe Distributors. Blank space has been left on page 1-3 for writing in new accessories.

TABLE 1-1. ACCESSORY EQUIPMENT

PART NO.	DESCRIPTION	FUNCTION
601-07406	Optional 120-Watt (RMS) Stereo Amplifier and Output Transformer Package.	Used in locations with heavy extension speaker requirements. Plugs into phono harness. Delivers 120W (RMS) power. Includes matching output transformer package.
214-14375	Dollar Bill Acceptor	Accepts valid one dollar bills in U.S. currency and establishes one dollar's worth of credit in the phonograph credit computer.
201-66819	Digital Print Out Money Meter	Solid state device records total receipts on ticket inserted at each service call. The surest security device available. Plug in installation.
206-13723	Monitor Alarm Kit	Makes an incredibly loud noise if an attempt is made to pry open or smash in cash box door. Consists of a horn operated by a replaceable Freon aerosol can. Because the alarm is not electrically operated and is not accessible without a key, it cannot be disarmed.

PART NO.	DESCRIPTION	FUNCTION
201-66447	Phono Paging Kit	All plug-in unit, complete with microphone, preamplifier, and 50 foot microphone cable to allow use of phonograph sound system as paging system.
603-03400	WRC Wallette Wallbox	Remote control unit for phonograph. Has self-contained credit and pricing and selection system. Takes nickels, dimes quarters, half-dollars.
601-03400	WRA Wallette Wallbox	Same as WRC except that it takes nickels, dimes, and quarters only.
601-03380	CGA Stepper	Permits phonograph operation with Wallette wallboxes, Other models available for competitor wallboxes.
401-05627	Auxiliary Power Supply	Powers up to six Rowe/AMI Wallette wallboxes. Low-voltage supply separate from that required for the phonograph.
401-05678	Secondary Power Supply	Powers each additional six or more Rowe/AMI Wallette wallboxes. Other power supplies available for competitive equipment.
SPEC 5054	12-Conductor Cable	For connecting Wallette to Phonograph.
601-02187	Extension Speaker (Model EX-201)	12-watt, compact "bookshelf" speaker system contains one 8-inch full range speaker.
601-02188	Extension Speaker (Model EX-301)	25-watt, two channel system includes 3-1/2 inch tweeter and 10-inch bass speaker.
601-02105	Extension Speaker (Model EX-401)	25-watt, high efficiency, two-channel system includes horn and cone-type speaker.
402-02190	Decorator Extension Speaker (Model EX-700)	Wall-type speaker with walnut cabinet. 70.7 volts, 5 watts. Available with volume control.
301-03382	Monaural, 70 volt Line Level, Multiple Speaker Remote Volume Control (Model RC-800)	Multiple speaker control for use where it is desirable to control the volume of several speakers from a single point. Transformer-type control for use with 70. 7-volt, constant-voltage lines only. Rated at 15 watts maximum. Stainless steel mounting plate fits standard deep electrical outlet box.
301-03396	Stereo, 70-volt Line Level, Multiple Speaker Remote Volume Control (Model RC-800)	Stereo speaker line control. Similar to 301-03382 control but controls two speaker lines simultaneously. Requires double electrical switch box for mounting.

PART NO.	DESCRIPTION	FUNCTION
306-03333	Monaural Individual Speaker Remote Volume Control (Model RC-600)	Individual speaker volume control for controlling a single speaker. Contains a heavy-duty L pad control rated at 15 watts of audio power. An on-off switch allows speaker to be turned completely off.
301-03387	Monaural Individual Speaker Remote Volume Control (Model RC-700)	Individual speaker volume control for controlling a single speaker. Similar to Model RC-600 except that the L pad and switch are mounted on a stainless steel plate which fits a standard deep electrical outlet box.
301-03399	Stereo Individual Speaker Remote Volume Control (Model RC-700)	Dual speaker volume control for controlling one set of stereo speakers. Contains two ganged heavy-duty L pads rated at 15 watts of audio power each. On-off switch controls both speakers. Mounted on a stainless steel plate that fits a standard deep electrical outlet box.
301-06322	Remote Volume and Cancel Control	Remote stereo volume control and cancel button.
SPEC 5064	Remote Volume and Cancel Control Cable	For connecting remote volume and cancel control to Phonograph.
302-06322	Remote Volume and Cancel Control with Cable	Remote stereo volume and cancel control with 50 feet of cable.

COMPATIBILITY CHART

The table on the following page shows the compatibility of various component systems and accessories with various model phonographs. Use this table as an aid in determining interchangeability of accessories, for field exchange and ordering purposes.

TABLE 1-2. COMPATIBILITY CHART

PRODUCT / EQUIPMENT		TI-2 STD	TI-2 Solid State Credit Com.	R-74	RI-1	RI-1G	CTI-1	HAJ	HLJ
64 Watt Amplifier	601-02179	OK	STD	STD	OK	OK	OK	OK	OK
* 64 W Output Transformer,5 Pos.SW	401-06322	OK	STD	1&3	OK	OK	OK	OK	OK
* 64 W Output Transformer,6 Pos.SW	403-06322	2	2	STD	2	2	2	OK&3	OK&3
50 W Hybrid Amplifier W/Pre-Amp		601-04358 STD	OK	1&3	602-04572 STD	602-04572 STD	601-04358 STD		
100W Amp. with 100W Output Trans.	602-04195	OK	OK	1&3			OK	STD	STD
120W Amp. with 120W Output Trans.	601-07406	2	2	OK			2	OK&3	OK&3
Credit Computer No. 1	601-06666		STD	OK					
Credit Computer No. 2	601-07593		OK	STD					
MAF Money Meter	610-03301	STD					STD	STD	5
MBA Digital Print-Out Money Meter	200-66699	OK	STD	4			OK		STD
MBB Digital Print-Out Money Meter	201-66819			STD					4
WRA, WRC Wallbox	604-03400; 605-03400	STD	STD	STD	STD	STD	STD	STD	STD
BA-2 Bill Acceptor W/Chopper		207-14375 STD	6	7			212-14375 STD		
BA-2 Bill Acceptor W/O Chopper			210-14375 STD	216-14375 STD					
Bill Stacker	601-07660			STD					
Bill Box		STD	STD				STD		

* Dual channel possible. (Requires switch on T.A. cable for stereo records).
1. Will be mono. limited to 24W. in jukebox speakers.
2. Bass only
3. Need adaptor harness (Mate-N-Lok to Universal) if extension speakers used.
4. Need adaptor harness (Mate-N-Lok to Univ. Amp.)
5. Need adaptor harness (12 way to 15 way)(Mate-N-Lok)
6. Replace chopper with S.S. credit pulse board ass'y.
7. Note 6 plus Adaptor Kit (Stacker).

BILL ACCEPTOR INTERCHANGEABILITY

The bill acceptor used in the R-74 can be adapted for use with MM-6, TI-1, and TI-2 models. In addition bill acceptors used in MM-6, TI-1, and TI-2 models are adaptable to the R-74. Specific information for each conversion is listed in the following chart:

TABLE 1-3. BILL ACCEPTOR INTERCHANGEABILITY CHART

ADAPTATION		BILL ACCEPTOR CONTROL CENTER PART NO.	ADAPTATION INSTRUCTIONS
FROM	TO		
R-74 CREDIT COMPUTER	TI-2 CREDIT COMPUTER	607-03769	SUBSTITUTE 401-06521 CREDIT PULSE BOARD ASSEMBLY FOR 402-06521 OR CUT THE RUNNER AT PIN 5. SOME EARLY 401-06521 CIRCUIT BOARDS WERE CONVERTED TO 402-06521 BY SOLDERING A JUMPER WIRE TO PIN 5. IF YOU HAVE ONE OF THESE BOARDS, SIMPLY REMOVE THIS JUMPER
R-74 CREDIT COMPUTER	TI-2 ELECTRO-MECHANICAL CREDIT UNIT	607-03769	SUBSTITUTE 401-05730 PULSE CHOPPER FOR 402-06521 PULSE BOARD ASSEMBLY.
R-74 CREDIT COMPUTER	TI-1 OR MM-6 ELECTRO-MECHANICAL CREDIT UNIT	607-03769	SUBSTITUTE 401-05730 PULSE CHOPPER FOR 402-06521 PULSE BOARD ASSEMBLY. REMOVE AND TAPE WHITE/SLATE WIRE FROM CENTER PIN AT 7-PIN COMBO PLUG.
TI-2 CREDIT COMPUTER	R-74 CREDIT COMPUTER	606-03769	* SUBSTITUTE 402-06521 CREDIT PULSE BOARD FOR 401-06521 OR ADD A JUMPER WIRE BETWEEN PINS 5 AND 12.
TI-2, TI-1 OR MM-6 ELECTRO-MECHAN-ICAL CREDIT COMPUTER	R-74 CREDIT COMPUTER	604-03769	* SUBSTITUTE 402-06521 CREDIT PULSE BOARD FOR 401-05730 PULSE CHOPPER

* WHEN CONTROL CENTERS 604-03769 OR 606-03769 ARE USED, THE BILL ACCEPTOR WILL NOT BE LOCKED OUT DURING THE STACK CYCLE. TO ADD THIS FEATURE, REMOVE AND TAPE THE YELLOW/GREEN WIRE FROM THE CENTER POSITION OF THE 7-PIN COMBO PLUG. CONNECT A WHITE/SLATE WIRE TO THE CENTER POSITION, RUN THROUGH THE HARNESS TO THE CONTROL CENTER AND CONNECT TO THE EXISTING WHITE/SLATE WIRE ON PIN 12 OF THE LOGIC BOARD EDGE CONNECTOR.

SECTION 2 - INSTALLATION

GENERAL

This section contains instructions for unpacking the phonograph and installing it on location. The phonograph is shipped with all major components in place. Installation is quickly and easily accomplished. Save all tie-down hardware should it be necessary to move the phonograph to another location.

ACCESSORIES BAG ASSEMBLY

Included is a plastic bag containing slip-on terminals connecting accessories, a quality control card, an assortment of spare fuses and spare contacts for MATE-N-LOK connectors. It is recommended that you leave this Service Manual and the accessory bag assembly in the phonograph cabinet in case they are needed.

WARRANTY REGISTRATION CARD

A postage-paid warranty registration card is included with the phonograph. Use this card to register the phonograph for in-warranty repairs.

UNPACKING INSTRUCTIONS

The phonograph is shipped in one carton, ready for installation. The shipping carton should be opened carefully to prevent the phonograph from being damaged or scratched. Inspect the exterior and interior of the cabinet for evidence of damage.

In case of damage, please notify the delivering carrier at once to call and examine the phonograph regardless of the external condition of the boxes. Under U.S. regulations, damage claims must be collected by the consignee. Do not return shipping-damaged merchandise until after your claim has been established. Once your claim is established, damaged merchandise may be returned to the Rowe/AMI distributor for repair. The invoice for repair charges may then be collected from the carrier. Do not destroy packing material or boxes until the carrier's agent has examined them. Unpack the phonograph as follows.

REMOVE PACKING CASE AND SHIPPING CARTON

1. Carefully open packing case. Do not use shipping hooks or other sharp instruments.
2. Remove plastic bag from phonograph cabinet.

OPEN PHONOGRAPH CABINET

1. Locate red key bag and open top door.
2. Release latches and open front door.
3. Release title panel by pressing down on spring catch as shown in fig. 2-1. Swing panel up as shown. Remove tape from title panel.

REMOVE RECORD CHANGER MECHANISM TIE-DOWN BOLTS

1. Remove shipping bolt from rear of cabinet as shown in fig. 2-2.
2. Rotate record changer tie-down brackets away from mechanism support frame as shown. Lift up and remove.
3. Remove rubber bands and shipping block from tone arm and toggle shifter plunger.
4. Remove turntable hold-down clip. Replace screw.
5. Remove turntable by pulling turntable straight up. Remove rubber band and shipping block from idler wheel.

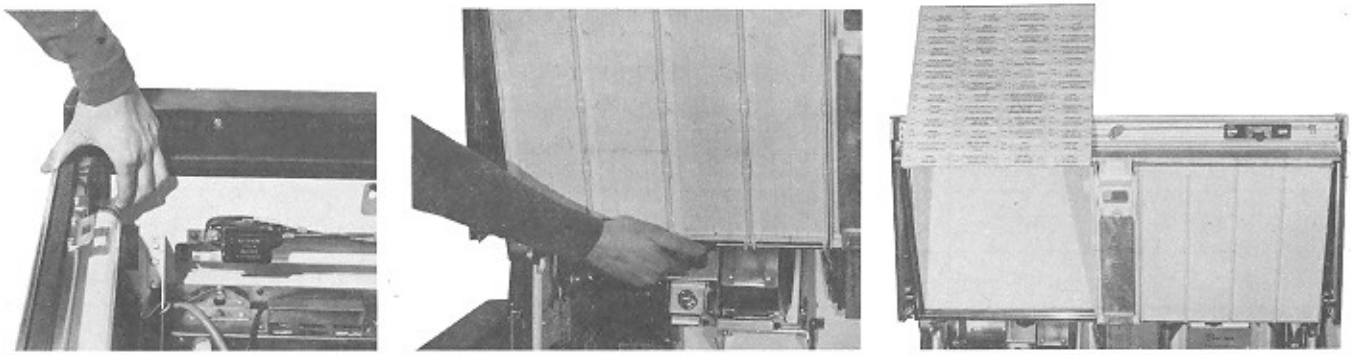


FIGURE 2-1. OPENING PHONOGRAPH CABINET

6. Replace turntable, making sure that idler wheel rides on inside of turntable rim. This is accomplished by manually rotating turntable clockwise.

7. Remove stylus cover from cartridge and stylus.

8. Save shipping hardware for future use.

9. Remove adhesive tape from search unit and other parts.

10. Check that all plugs are firmly seated in their respective receptacles

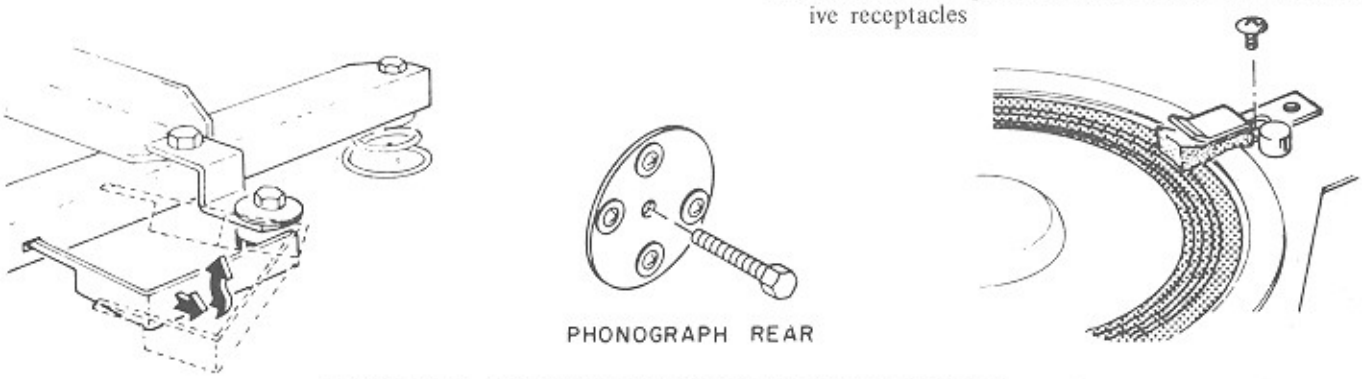


FIGURE 2-2. REMOVING MECHANISM TIE-DOWN BOLTS

INSTALL LICENSE CARD

For locations where a license must be displayed, a license card area has been provided on the top door between the title racks. To install license card, follow this procedure:

1. Looses two screws holding bottom retainer as shown in figure 2-3.

2. Loosen screw holding top retainer and turn retainer to free license card backing.

3. Remove license card backing and blank license card.

4. Insert license card, replace backing and tighten screws in place.

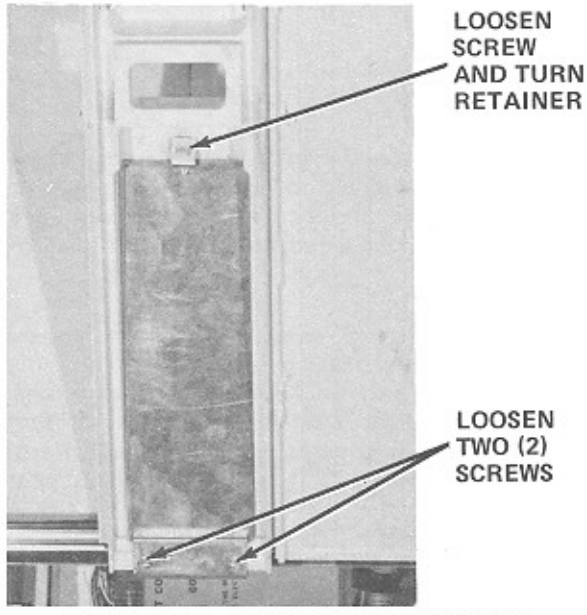


FIGURE 2-3. INSTALLATION LICENCE CARD

TABLE 2-1. USE OF AMPLIFIER CONTROLS FOR ACOUSTICAL COMPENSATION

SOUND LEVEL IN ROOM	ROOM ACOUSTICS					
	DEAD OR SOFT HIGHLY ABSORBENT		AVERAGE - MODERATELY ABSORBENT		LIVE OR HARD NON-ABSORBENT	
	SET BASS BOOST CONTROL	SET TREBLE RANGE CONTROL	SET BASS BOOST CONTROL	SET TREBLE RANGE CONTROL	SET BASS BOOST CONTROL	SET TREBLE RANGE CONTROL
LOUD	LOW	MOD/MAX	LOW	MOD/MAX	MOD	LIM
MODERATE	LOW	MAX	MOD	MOD/MAX	MAX	LIM
SOFT	MOD	MAX	MAX	MAX	MAX	MOD
NOTE: Reduce Treble Range setting as required by record noise (scratch) conditions.						

AMPLIFIER SET-UP

ACOUSTICAL COMPENSATION (BASS AND TREBLE CONTROLS)

The pre-amplifier contains treble range and bass boost controls to compensate for room acoustics in various locations. These controls are on the amplifier chassis. The sound level at which the phonograph will be operated and the room furnishings determine the settings of these controls. A room with carpeting and drapery is a soft or highly-absorbent location. A crowded room is also highly-absorbent. These locations require higher sound levels. A room with paneled walls and a bare or tiled floor is a hard non-absorbent location. Bass boost and treble range control settings are listed in table on page 2-2. Note that more bass boost is required at low volume levels. The amplifier incorporates circuitry that provides extra bass compensation at low volume levels.

STEREO BALANCE

The stereo balance control is provided to equalize left and right channel amplifier output. This control affects only the side speakers; the low-frequency speakers are not affected. This control is factory-adjusted for best performance. If adjustment is required, play a monaural selection and adjust the control for equal sound from each side speaker. When balanced, the sound will seem to come from the center of the phonograph.

AMPLIFIER OPERATION WITH HIGH LINE VOLTAGE

In locations where input line voltage to the phonograph exceeds 125 volts, use the black/red primary lead of the amplifier power transformer instead of the black/yellow lead. This results in a 10% reduction in secondary voltage.

70-VOLT CONSTANT VOLTAGE EXTENSION SPEAKER OPERATION

Where sound coverage is required in rooms or areas not covered by the phonograph, extension speakers are required. Rowe recommends using the amplifier 70-volt output with 70-volt extension speakers to provide trouble-free operation. Each Rowe/AMI 70-volt speaker has a matching transformer. The matching transformer has power taps so that power consumed by each speaker in the system can be adjusted. To obtain the total power required for the entire system, simply add the wattage settings of each extension speaker to the wattage setting of the phonograph speaker system. The total wattage must not exceed the rated wattage of the amplifier; otherwise the amplifier will be overloaded. Overloading the amplifier will result in distorted sound and reduced loudness. However, it is always advantageous to approximately match the total speaker power to the power rating of the amplifier because in low volume installations, the amplifier can be operated with a reduced volume control setting. This results in greater bass boost and a more pleasing tonal balance.

CAUTION

PHONE JACKS, ADJACENT TO VOLUME CONTROL PLUG, ARE FOR BENCH TEST PURPOSES ONLY.

NON-70-VOLT EXTENSION SPEAKER OPERATION

Though less desirable than 70-volt operation, speakers may be connected to impedance taps on the output transformer package. Speaker power ratings and impedance must be considered so that each speaker will get the proper proportion of power. Three requirements must be met:

1. The speakers must be wired so that the power consumed by the phonograph and extension speakers does not exceed the amplifier power rating.

2. Each speaker must get the right amount of audio power to have equal loudness to the other speakers in the system or have higher or lower loudness as required.

3. All speakers must be connected with the proper polarity.

REMOTE VOLUME AND CANCEL CONTROL

Connect the 301-06322 remote volume and cancel control to the Phonograph as shown below.

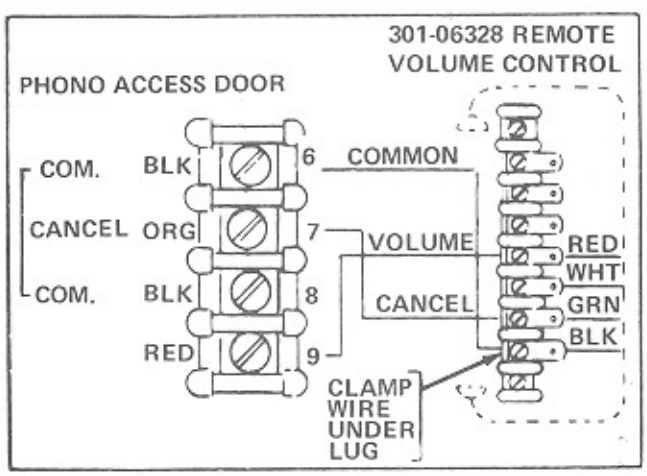


FIGURE 2-4. REMOTE VOLUME AND CANCEL CONTROL CONNECTIONS

FULL COVERAGE SOUND SYSTEM CONNECTION CHART

See figure 2-5 on next page for Stereo Sound system connection chart. Observe the following notes when making connections:

1. Connections shown for 70-volt extension speakers are for Models EX-201, EX-301, and EX-401.
2. Connections shown for 8-ohm extension speakers are for 8-watt level. See the table below for information on other power levels and for use of speakers having other impedances.
3. Polarity of connections between amplifier, wallbox speakers, and extension speakers must be observed for correct phasing of extension speakers, wallbox speakers, and Phonograph speakers.
4. Amplifier watts per channel for speakers connected across both channels (for monaural extension of sound) is one half watts per speaker power.
5. Allow 1.4 watt per channel for each Wallette wallbox connected (normal connection).
6. Connect remote volume control to carrier strip on rear access door.

CHART NO.1

SPEAKERS CONNECTED TO EITHER LEFT CHANNEL OR RIGHT CHANNEL - USED IN PAIRS FOR STEREO EXTENSION OF SOUND

	TERMINALS	WATTS PER SPEAKER
8 OHM SPEAKERS	E1 - E2 E1 - E3 E2 - E4 E1 - E4 E1 - E5 E2 - E6	0.5 2 4.5 8 14 24
16 OHM SPEAKERS	E1 - E3 E2 - E4 E1 - E4 E1 - E5 E2 - E6 E1 - E6	1 2.25 4 7 12 16
45 OHM WALL BOX SPEAKERS	E1 - E3 E1 - E4 E1 - E5	0.35 1.4 (NORMAL) 5
CONSTANT VOLTAGE SPEAKERS	A1 - A2	DETERMINED BY POWER SETTING AT EXTENSION SPEAKER

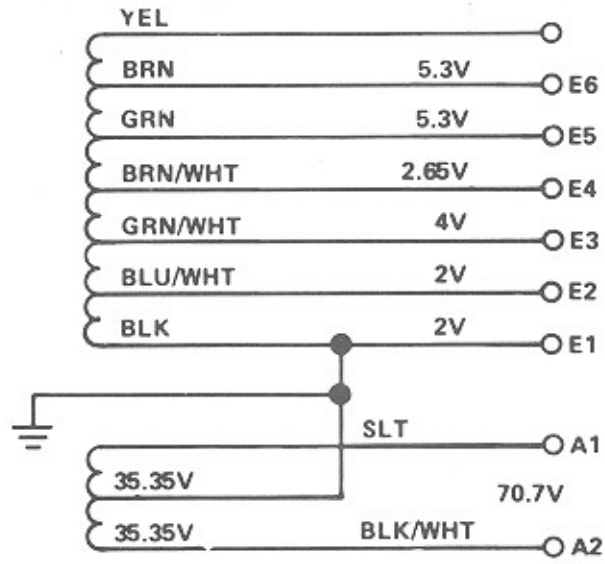
NOTE: WATTS PER CHANNEL FOR SPEAKERS CONNECTED ACROSS BOTH CHANNELS (FOR MONAURAL EXTENSION OF SOUND) IS ONE HALF OF "WATTS PER SPEAKER" INDICATED IN CHART 2.

CHART NO. 2

SPEAKERS CONNECTED ACROSS BOTH CHANNELS - FOR MONAURAL EXTENSION OF SOUND

	TERMINALS	WATTS PER SPEAKER
8 OHM SPEAKERS	E2 - E2 E3 - E3 E4 - E4	2 8 32
16 OHM SPEAKERS	E2 - E2 E3 - E3 E4 - E4 E5 - E5	1 4 16 28
CONSTANT VOLTAGE SPEAKERS	A1 - A2 OR A2 - A1	DETERMINED BY POWER SETTING AT EXTENSION SPEAKER

AMPLIFIER FULL POWER OUTPUT VOLTAGES (PER CHANNEL)



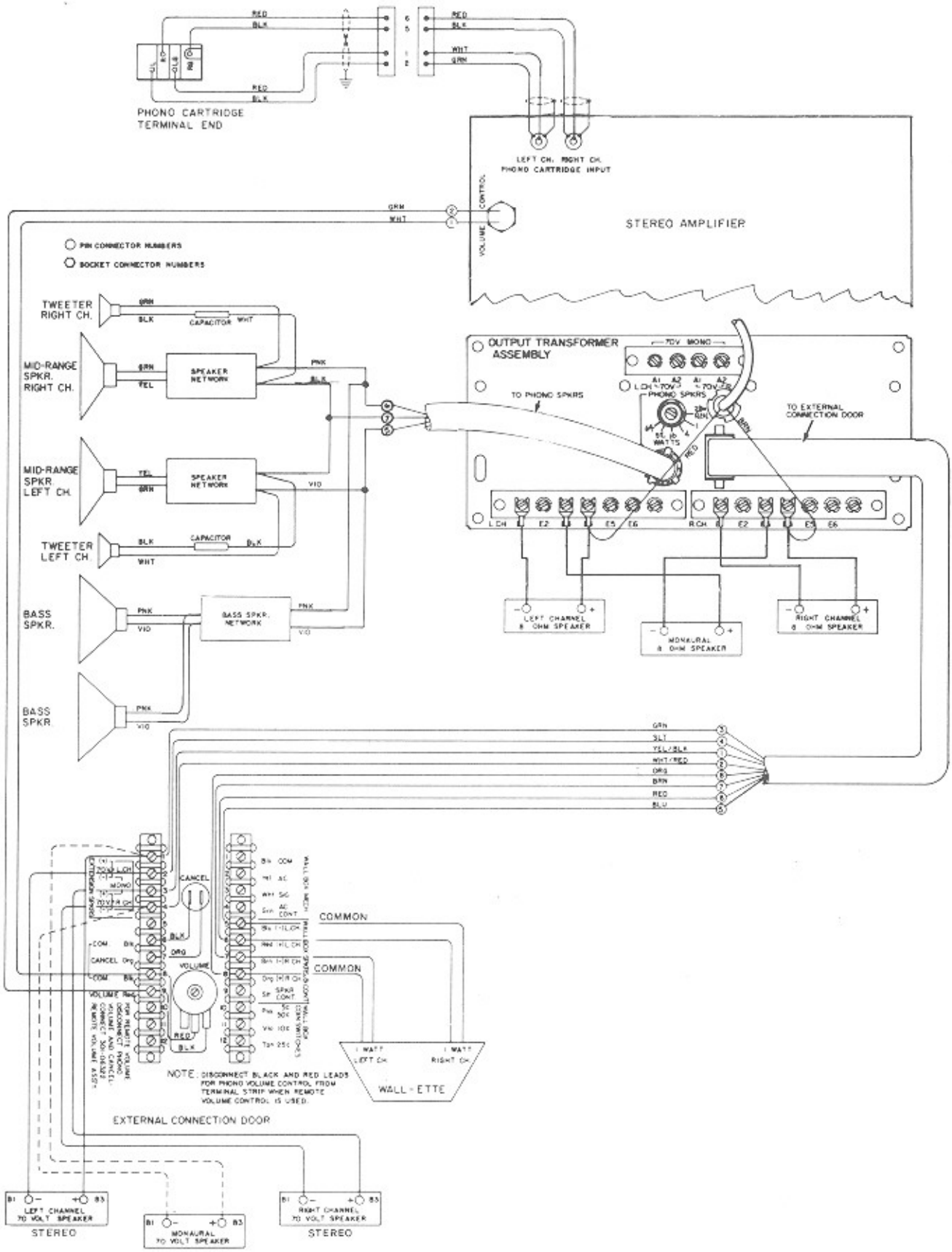
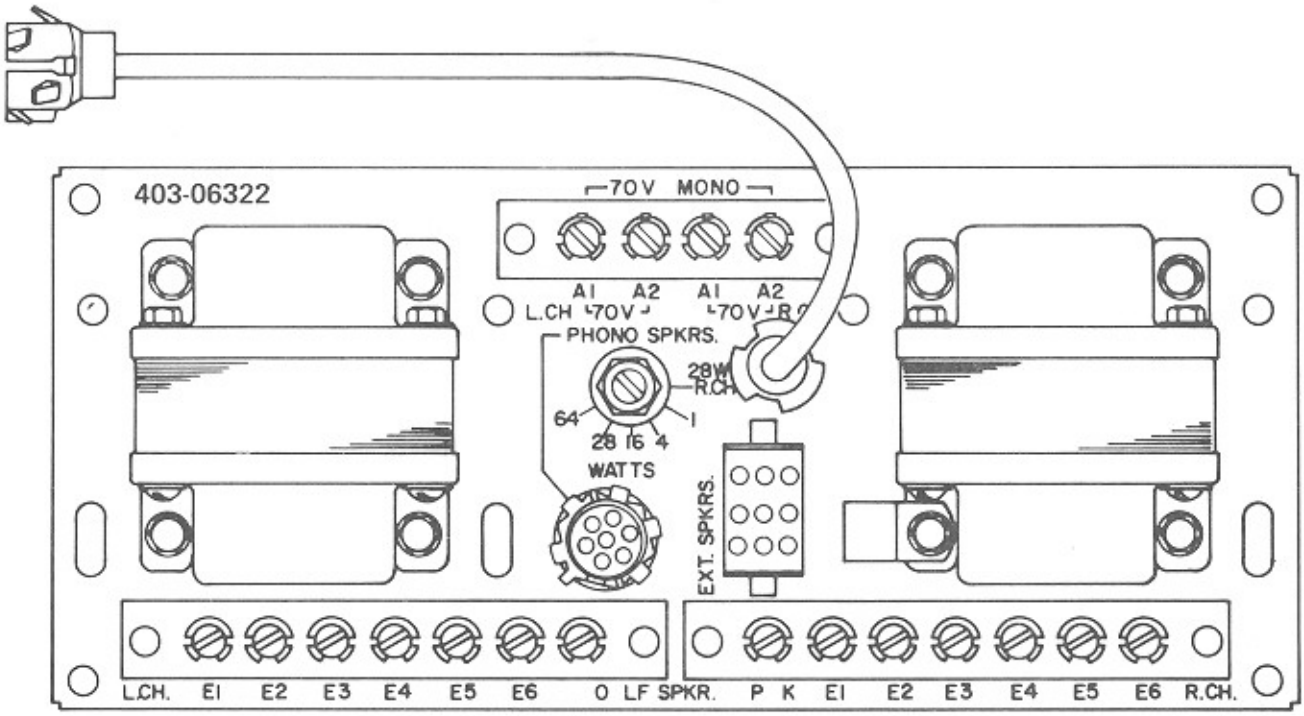


FIGURE 2-5. STEREO SOUND SYSTEM CHART
For Stereo Phonograph, Extension Speakers & Wall-Ette Speakers



PHONO SPEAKER POWER SWITCH	POWER PER CHANNEL FOR EXT. SPEAKERS	
	64 Watt Amplifier	120 Watt Amplifier
64	0	28
28	18	46
16	24	52
4	30	58
1	32	60
CAUTION: Total power rating of load must not exceed 32 watts per channel for the 64 watt amplifier and 60 watts per channel for the 120 watt amplifier.		

FIGURE 2-6. POWER LEVEL SETTINGS

POWER LEVEL SETTINGS

A power level setting switch is provided on the output transformer package to adjust output power delivered to phonograph and external extension speakers. See figure 2-6 for switch settings and associated power levels.

SPECIAL CONSIDERATIONS FOR WALLETTE INSTALLATIONS

The phonograph bass speaker can be disconnected from the power level switch and given a selected bass level regardless of switch position. This feature is especially valuable when the phonograph speakers are operated at low level to operate Wallette speakers. However, increased bass from the phonograph is desirable to balance the total sound output of the Wallettes.

To perform this change, disconnect the red and brown wires from the output terminal strips on the output transformer assembly. Reconnect these wires according to table 2-3 below to give a bass speaker wattage approximately equal to the total one-channel wattage of the Wallette speakers.

TABLE 2-3. ALTERNATE POWER LEVELS FOR WALLETTE SPEAKERS

Connections of Red Brown Leads at Terminal Strip	Watts Per Speaker
Terminal E3	0.35
Terminal E4(normal)	1.4
Terminal E5	5

LEVEL PHONOGRAPH

Level the phonograph cabinet left-to-right and front-to-back to ensure proper slug rejector operation. This is done by placing spacers under the caster wheels or installing washers on the mounting screws between the casters and the cabinet bottom.

PRICING

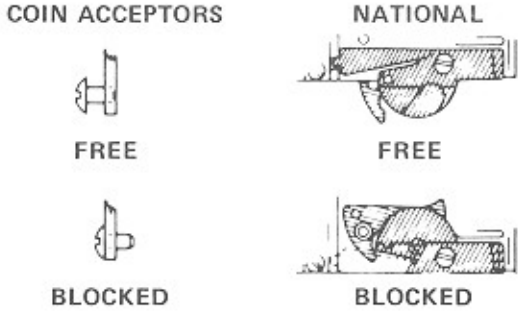
The credit and pricing system of the phonograph can be adapted to an almost unlimited variety of pricing combinations. Pricing for each phonograph as set at the factory is indicated by the price card installed in the price window. The following information is provided to facilitate price setting.

SETTING PRICES

Setting prices is accomplished by simply setting 2 banks of 9 switches each in either "ON" or "OFF" positions. A bonus relay is not required for any pricing. Although not compatible with the Model MAF Money Meter, the Credit Computer can be used with Models MBA & MBB Digital Print-Out Money Meters.

The Credit Computer will register nickels and dimes. The nickel diverter in the coin mechanism should be in blocked position as shown.

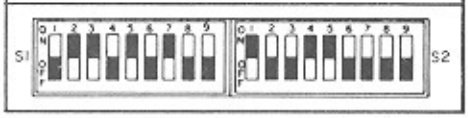
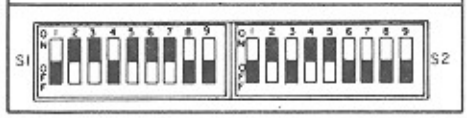
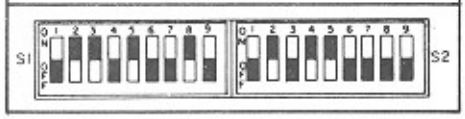
NICKEL DIVERTER POSITION



Using the following charts for reference, set prices in the following manner:

1. Select desired pricing program from chart. (If desired pricing is not shown, refer to "Making Your Own Price Combinations" on page 2-11.
2. Remove cover plate assembly from front of credit computer by turning winged fastener as shown.
3. Set switches S1 and S2 as shown under desired program
4. Replace cover plate assembly.
5. Install correct price card in phonograph. (See pricing chart for correct part number.)
6. Insert coins and make selections to check proper operation.

TABLE 2-4. PRICE OF PLAY PROGRAMMING

STANDARD SELECTIONS	STANDARD SELECTIONS	STANDARD SELECTIONS
10¢ . . . . . 1 PLAY	10¢ . . . . . 1 PLAY	10¢ . . . . . 1 PLAY
25¢ . . . . . 3 PLAYS	25¢ . . . . . 3 PLAYS	25¢ . . . . . 3 PLAYS
50¢ . . . . . 7 PLAYS	50¢ . . . . . 6 PLAYS	50¢ . . . . . 6 PLAYS
75¢ . . . . . 11 PLAYS	75¢ . . . . . 10 PLAYS	75¢ . . . . . 9 PLAYS
$1.00 . . . . . 15 PLAYS	$1.00 . . . . . 15 PLAYS	$1.00 . . . . . 13 PLAYS
ALBUM SELECTIONS	**ALBUM SELECTIONS**	**ALBUM SELECTIONS**
25¢ . . . . . 1 PLAY	25¢ . . . . . 1 PLAY	25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS	50¢ . . . . . 2 PLAYS	50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY	75¢ . . . . . 3 PLAYS	75¢ . . . . . 3 PLAYS
75¢ . . . . . 3 PLAYS	PLUS 1 STANDARD PLAY	$1.00 . . . . . 4 PLAYS
PLUS 2 STANDARD PLAYS	$1.00 . . . . . 5 PLAYS	PLUS 1 STANDARD PLAY
$1.00 . . . . . 5 PLAYS		
PRICE CARD PART NUMBER *301-07528	PRICE CARD PART NUMBER 201-66773	PRICE CARD PART NUMBER 201-66774
		

* NOTE: USE UNIVERSAL PLACE CARD KIT, PART NO. 301-07528

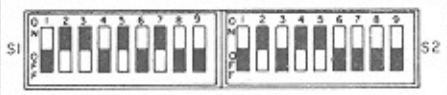
STANDARD SELECTIONS

10¢ . . . . . 1 PLAY
25¢ . . . . . 3 PLAYS
50¢ . . . . . 6 PLAYS
75¢ . . . . . 10 PLAYS
$1.00 . . . . . 14 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
75¢ . . . . . 3 PLAYS
PLUS 1 STANDARD PLAY
$1.00 . . . . . 4 PLAYS
PLUS 2 STANDARD PLAYS

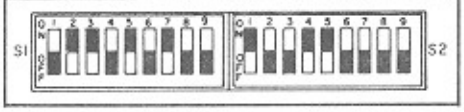
PRICE CARD PART NUMBER
201-66775



STANDARD SELECTIONS

10¢ . . . . . 1 PLAY
25¢ . . . . . 3 PLAYS
50¢ . . . . . 7 PLAYS
75¢ . . . . . 11 PLAYS
$1.00 . . . . . 15 PLAYS

PRICE CARD PART NUMBER
*301-07528



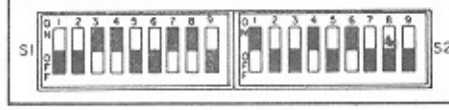
STANDARD SELECTIONS

15¢ . . . . . 1 PLAY
25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 9 PLAYS
$1.00 . . . . . 14 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 4 PLAYS
PLUS 1 STANDARD PLAY
$1.00 . . . . . 7 PLAYS

PRICE CARD PART NUMBER
*301-07528



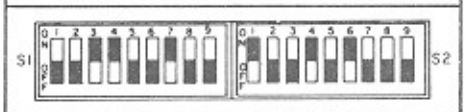
STANDARD SELECTIONS

15¢ . . . . . 1 PLAY
25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 8 PLAYS
$1.00 . . . . . 13 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 4 PLAYS
$1.00 . . . . . 6 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
*301-07528



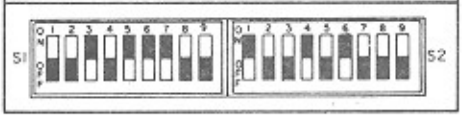
STANDARD SELECTIONS

15¢ . . . . . 1 PLAY
25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 8 PLAYS
$1.00 . . . . . 12 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
75¢ . . . . . 4 PLAYS
$1.00 . . . . . 6 PLAYS

PRICE CARD PART NUMBER
*301-07528



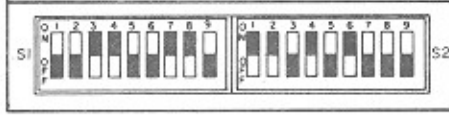
STANDARD SELECTIONS

15¢ . . . . . 1 PLAY
25¢ . . . . . 2 PLAYS
50¢ . . . . . 6 PLAYS
75¢ . . . . . 10 PLAYS
$1.00 . . . . . 15 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 3 PLAYS
75¢ . . . . . 5 PLAYS
$1.00 . . . . . 7 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
201-66776



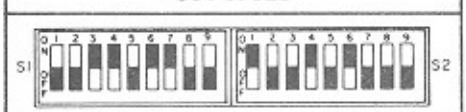
STANDARD SELECTIONS

15¢ . . . . . 1 PLAY
25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 8 PLAYS
$1.00 . . . . . 14 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 4 PLAYS
$1.00 . . . . . 7 PLAYS

PRICE CARD PART NUMBER
*301-07528



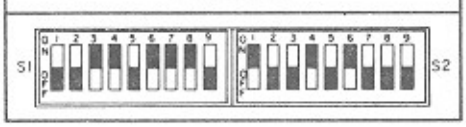
STANDARD SELECTIONS

15¢ . . . . . 1 PLAY
25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 9 PLAYS
$1.00 . . . . . 15 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 4 PLAYS
PLUS 1 STANDARD PLAY
$1.00 . . . . . 7 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
201-66777



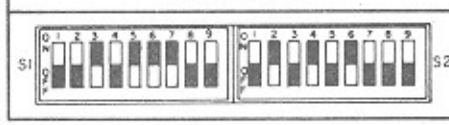
STANDARD SELECTIONS

15¢ . . . . . 1 PLAY
25¢ . . . . . 2 PLAYS
50¢ . . . . . 4 PLAYS
75¢ . . . . . 7 PLAYS
$1.00 . . . . . 11 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
75¢ . . . . . 3 PLAYS
PLUS 1 STANDARD PLAY
$1.00 . . . . . 5 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
201-66778



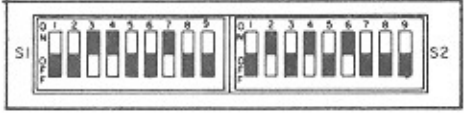
STANDARD SELECTIONS

15¢ . . . . . 1 PLAY
25¢ . . . . . 2 PLAYS
50¢ . . . . . 4 PLAYS
75¢ . . . . . 7 PLAYS
$1.00. . . . . 12 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
75¢ . . . . . 3 PLAYS
$1.00. . . . . 6 PLAYS

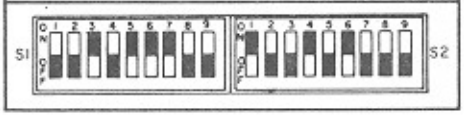
PRICE CARD PART NUMBER
*301-07528



STANDARD SELECTIONS

15¢ . . . . . 1 PLAY
25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 8 PLAYS
$1.00. . . . . 12 PLAYS

PRICE CARD PART NUMBER
*301-07528



STANDARD SELECTIONS

20¢ . . . . . 1 PLAY
50¢ . . . . . 3 PLAYS
75¢ . . . . . 5 PLAYS
$1.00. . . . . 8 PLAYS

ALBUM SELECTIONS

50¢ . . . . . 1 PLAY
PLUS 1 STANDARD PLAY
75¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
$1.00. . . . . 4 PLAYS

PRICE CARD PART NUMBER
*301-07528

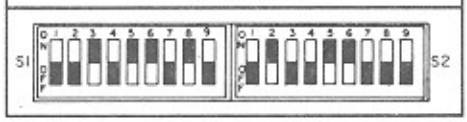
STANDARD SELECTIONS

20¢ . . . . . 1 PLAY
50¢ . . . . . 3 PLAYS
75¢ . . . . . 5 PLAYS
$1.00. . . . . 9 PLAYS

ALBUM SELECTIONS

50¢ . . . . . 1 PLAY
PLUS 1 STANDARD PLAY
75¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
$1.00. . . . . 4 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
*301-07528



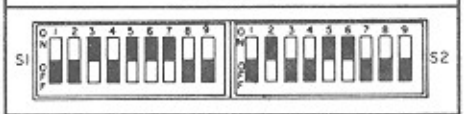
STANDARD SELECTIONS

20¢ . . . . . 1 PLAY
50¢ . . . . . 3 PLAYS
75¢ . . . . . 6 PLAYS
$1.00. . . . . 10 PLAYS

ALBUM SELECTIONS

50¢ . . . . . 1 PLAY
PLUS 1 STANDARD PLAY
75¢ . . . . . 3 PLAYS
$1.00. . . . . 5 PLAYS

PRICE CARD PART NUMBER
*301-07528



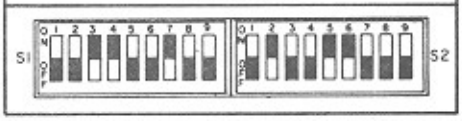
STANDARD SELECTIONS

20¢ . . . . . 1 PLAY
50¢ . . . . . 3 PLAYS
75¢ . . . . . 6 PLAYS
$1.00. . . . . 11 PLAYS

ALBUM SELECTIONS

50¢ . . . . . 1 PLAY
PLUS 1 STANDARD PLAY
75¢ . . . . . 3 PLAYS
$1.00. . . . . 5 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
*301-07528



STANDARD SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 3 PLAYS
75¢ . . . . . 4 PLAYS
$1.00. . . . . 7 PLAYS

ALBUM SELECTIONS

50¢ . . . . . 1 PLAY
PLUS 1 STANDARD PLAY
75¢ . . . . . 2 PLAYS
$1.00. . . . . 3 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
*301-07528

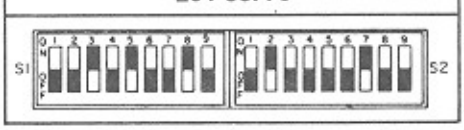
STANDARD SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 3 PLAYS
75¢ . . . . . 5 PLAYS
$1.00. . . . . 8 PLAYS

ALBUM SELECTIONS

50¢ . . . . . 1 PLAY
PLUS 1 STANDARD PLAY
75¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
$1.00. . . . . 4 PLAYS

PRICE CARD PART NUMBER
201-66779



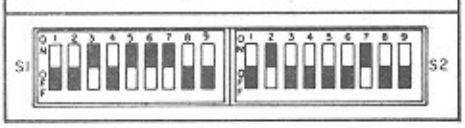
STANDARD SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 3 PLAYS
75¢ . . . . . 6 PLAYS
$1.00. . . . . 10 PLAYS

ALBUM SELECTIONS

50¢ . . . . . 1 PLAY
PLUS 1 STANDARD PLAY
75¢ . . . . . 3 PLAYS
$1.00. . . . . 5 PLAYS

PRICE CARD PART NUMBER
201-66780



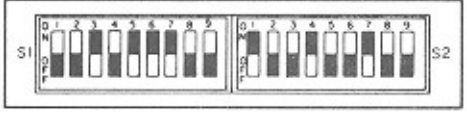
STANDARD SELECTIONS

25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 8 PLAYS
$1.00. . . . . 12 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 4 PLAYS
$1.00. . . . . 6 PLAYS

PRICE CARD PART NUMBER
201-17536



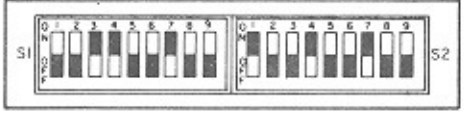
STANDARD SELECTIONS

25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 8 PLAYS
$1.00. . . . . 13 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 4 PLAYS
$1.00. . . . . 6 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
201-66781



STANDARD SELECTIONS

25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 8 PLAYS
$1.00. . . . . 14 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 4 PLAYS
$1.00. . . . . 7 PLAYS

PRICE CARD PART NUMBER
*301-07528

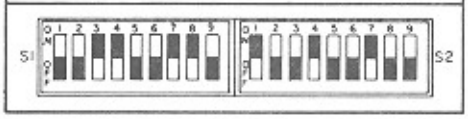
STANDARD SELECTIONS

25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 9 PLAYS
$1.00. . . . . 14 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 4 PLAYS
PLUS 1 STANDARD PLAY
$1.00. . . . . 7 PLAYS

PRICE CARD PART NUMBER
*301-07528



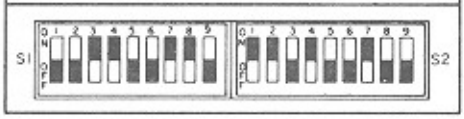
STANDARD SELECTIONS

25¢ . . . . . 2 PLAYS
50¢ . . . . . 6 PLAYS
75¢ . . . . . 10 PLAYS
$1.00. . . . . 15 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 3 PLAYS
75¢ . . . . . 5 PLAYS
$1.00. . . . . 7 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
201-66782



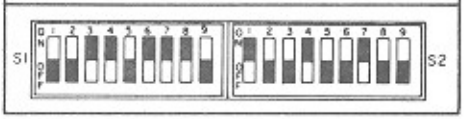
STANDARD SELECTIONS

25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 9 PLAYS
$1.00. . . . . 15 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 4 PLAYS
PLUS 1 STANDARD PLAY
$1.00. . . . . 7 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
*301-07528



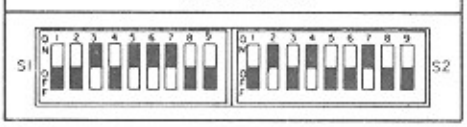
STANDARD SELECTIONS

25¢ . . . . . 2 PLAYS
50¢ . . . . . 4 PLAYS
75¢ . . . . . 7 PLAYS
$1.00. . . . . 11 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
75¢ . . . . . 3 PLAYS
PLUS 1 STANDARD PLAY
$1.00. . . . . 5 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
*301-07528



STANDARD SELECTIONS

25¢ . . . . . 2 PLAYS
50¢ . . . . . 4 PLAYS
75¢ . . . . . 7 PLAYS
$1.00. . . . . 12 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
75¢ . . . . . 3 PLAYS
PLUS 1 STANDARD PLAY
$1.00. . . . . 6 PLAYS

PRICE CARD PART NUMBER
201-66783

STANDARD SELECTIONS

25¢ . . . . . 2 PLAYS
50¢ . . . . . 5 PLAYS
75¢ . . . . . 8 PLAYS
$1.00. . . . . 12 PLAYS

PRICE CARD PART NUMBER
*301-07528

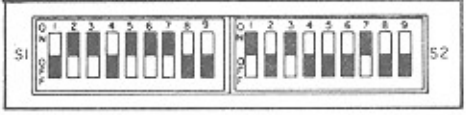
STANDARD SELECTIONS

25¢ . . . . . 3 PLAYS
50¢ . . . . . 6 PLAYS
75¢ . . . . . 9 PLAYS
$1.00. . . . . 13 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
75¢ . . . . . 3 PLAYS
$1.00. . . . . 4 PLAYS
PLUS 1 STANDARD PLAY

PRICE CARD PART NUMBER
201-66784



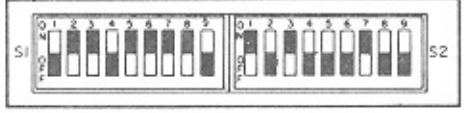
STANDARD SELECTIONS

25¢ . . . . . 3 PLAYS
50¢ . . . . . 6 PLAYS
75¢ . . . . . 10 PLAYS
$1.00. . . . . 14 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
75¢ . . . . . 3 PLAYS
PLUS 1 STANDARD PLAY
$1.00. . . . . 4 PLAYS
PLUS 2 STANDARD PLAYS

PRICE CARD PART NUMBER
201-66785



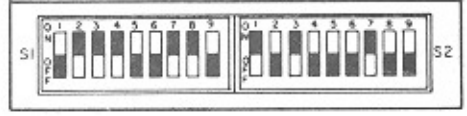
STANDARD SELECTIONS

25¢ . . . . . 3 PLAYS
50¢ . . . . . 6 PLAYS
75¢ . . . . . 10 PLAYS
$1.00. . . . . 15 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
75¢ . . . . . 3 PLAYS
PLUS 1 STANDARD PLAY
$1.00. . . . . 5 PLAYS

PRICE CARD PART NUMBER
201-66786



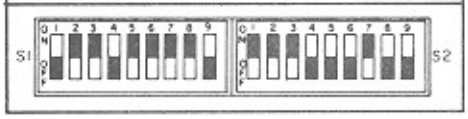
STANDARD SELECTIONS

25¢ . . . . . 3 PLAYS
50¢ . . . . . 7 PLAYS
75¢ . . . . . 11 PLAYS
$1.00. . . . . 15 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 3 PLAYS
PLUS 2 STANDARD PLAYS
$1.00. . . . . 5 PLAYS

PRICE CARD PART NUMBER
*301-07528



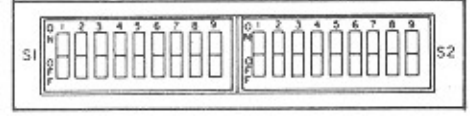
STANDARD SELECTIONS

25¢ . . . . . 3 PLAYS
50¢ . . . . . 7 PLAYS
75¢ . . . . . 11 PLAYS
$1.00. . . . . 15 PLAYS

PRICE CARD PART NUMBER
*301-07528

STANDARD SELECTIONS

PRICE CARD PART NUMBER
*301-07528



MAKING YOUR OWN PRICE COMBINATIONS

Pricing combinations other than those shown on the pricing charts are possible with the built-in flexibility of the Rowe Credit Computer. By determining five basic factors, price setting becomes a simple, logical procedure. The five factors are:

1. Minimum price of standard play desired.
2. Level at which first bonus is to be added.
3. Number of plays to be added at each bonus level.
4. Price of premium play (albums) in terms of multiples of standard play prices.
5. Ratio of acceptable coin values.

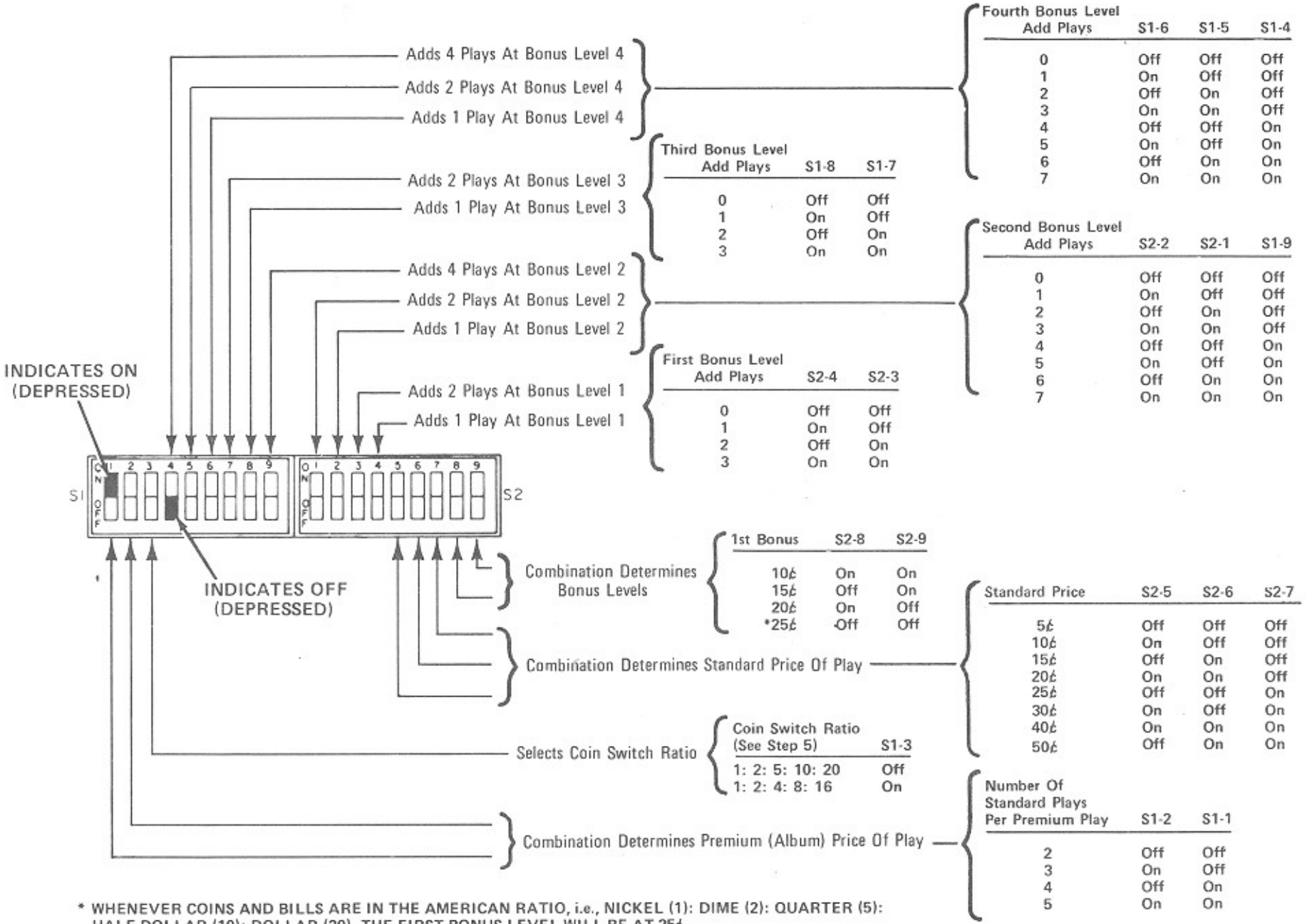
Figure 2-7 shows identification by function of each switch, along with proper settings for desired pricing conditions.

Using figure 2-7, set pricing switches as follows:

1. Set switches S2-5, S2-6 and S2-7 to desired price of standard play.
2. It is only necessary to set the level of the first bonus level. The second, third and fourth bonus levels are equal to two, three and four times the first bonus level, respectively. Set switches S2-8 and S2-9 to desired first bonus level.

NOTE

WHENEVER COINS AND BILLS ARE IN AMERICAN RATIO (SEE STEP 5), THE FIRST BONUS LEVEL WILL BE AT 25¢.



Fourth Bonus Level Add Plays

Add Plays	S1-6	S1-5	S1-4
0	Off	Off	Off
1	On	Off	Off
2	Off	On	Off
3	On	On	Off
4	Off	Off	On
5	On	Off	On
6	Off	On	On
7	On	On	On

Third Bonus Level Add Plays

Add Plays	S1-8	S1-7
0	Off	Off
1	On	Off
2	Off	On
3	On	On

Second Bonus Level Add Plays

Add Plays	S2-2	S2-1	S1-9
0	Off	Off	Off
1	On	Off	Off
2	Off	On	Off
3	On	On	Off
4	Off	Off	On
5	On	Off	On
6	Off	On	On
7	On	On	On

First Bonus Level Add Plays

Add Plays	S2-4	S2-3
0	Off	Off
1	On	Off
2	Off	On
3	On	On

1st Bonus

1st Bonus	S2-8	S2-9
10¢	On	On
15¢	Off	On
20¢	On	Off
*25¢	Off	Off

Standard Price

Standard Price	S2-5	S2-6	S2-7
5¢	Off	Off	Off
10¢	On	Off	Off
15¢	Off	On	Off
20¢	On	On	Off
25¢	Off	Off	On
30¢	On	Off	On
40¢	On	On	On
50¢	Off	On	On

Coin Switch Ratio (See Step 5)

Coin Switch Ratio (See Step 5)	S1-3
1: 2: 5: 10: 20	Off
1: 2: 4: 8: 16	On

Number Of Standard Plays Per Premium Play

Number Of Standard Plays Per Premium Play	S1-2	S1-1
2	Off	Off
3	On	Off
4	Off	On
5	On	On

* WHENEVER COINS AND BILLS ARE IN THE AMERICAN RATIO, i.e., NICKEL (1): DIME (2): QUARTER (5): HALF-DOLLAR (10): DOLLAR (20), THE FIRST BONUS LEVEL WILL BE AT 25¢.

FIGURE 2-7. CREDIT COMPUTER PRICING SWITCHES

3. Set switches S1-4 to S2-4 for the number of plays to be added at each bonus level.

4. Set switches S1-1 and S1-2 to desired price of premium play. This is set as a multiple of standard play price.

5. American currency and most foreign currency occurs in the ratio 1:2:5:10:20 (i.e., nickel, dime, quarter, half-dollar, dollar). When the currency used occurs in this ratio, switch S1-3 should be set to ON position. Often foreign currency occurs in the ratio 1:2:4:8:16. When currency occurs in this ratio, set switch S1-3 to OFF position.

For additional information, see Principles of Operation in Section 4.

PREMIUM PRICING

To set any group for premium (album) price, open the top access door to gain access to the premium pricing slide switches. Each switch represents one number selection group. Set switches for premium or regular price as desired.

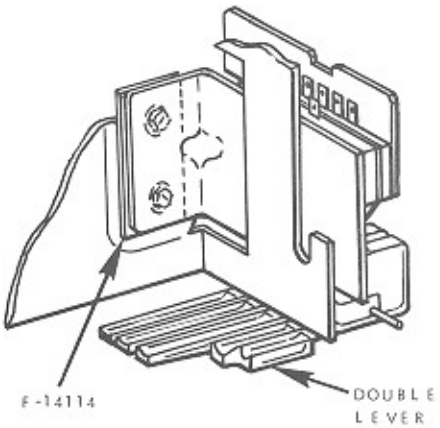
INSTALLING RECORDS AND TITLE STRIPS

The phonograph will play both 45 rpm and 33 rpm (Little LP) records. If only 45 rpm records will be played, order and install hub spacer, part no. 725-01214. This spacer is used only when the hub shift switch is bypassed, only 45 rpm records will be used.
Load records and install title strips as directed in Section 3 - Routine Service.

A FINAL CHECK

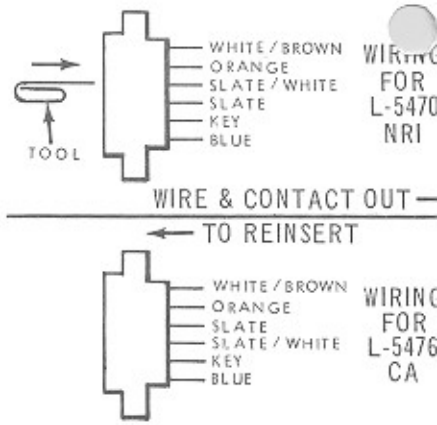
To see that the installation has been properly performed, deposit coins and make selections. Check that the record changer cycles smoothly and that sound is not distorted.

SUPPLEMENT TO:
PRICE OF PLAY PROGRAMMING PROCEDURE

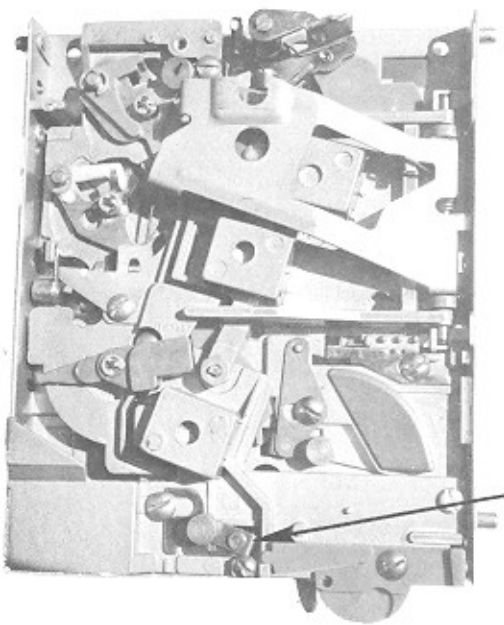


CA SLUG REJECTOR CAN BE INTERCHANGED WITH NRI SLUG REJECTOR WHEN COIN SWITCH HAS DOUBLE WIDTH NICKEL LEVER. F-14114 SPACER MUST BE ADDED FOR ALIGNMENT.

NOTE: COIN SWITCH WIRING IN EDGE CONNECTOR MUST BE CHANGED IF REJECTORS ARE CHANGED. TO INTERCHANGE SLATE & SLATE/WHITE WIRES, USE TIP OF PAPER CLIP AS TOOL. INSERT TOOL ALONG SIDE OF CONTACT TO RELEASE HOLDING TAB. WIRE & CONTACT CAN BE PULLED OUT. TAB MAY NEED REFORMING BEFORE REINSERTION INTO EDGE CONNECTOR.

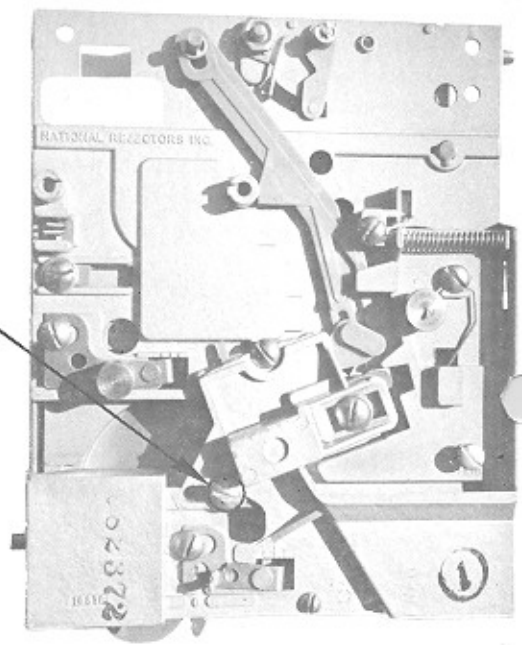


NATIONAL



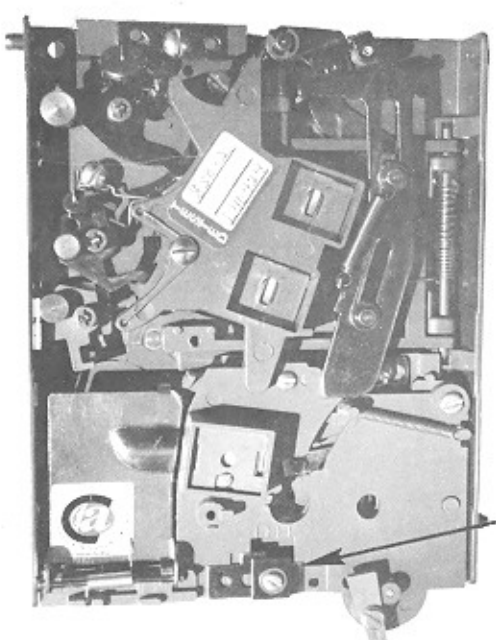
Move this screw to right to reject dimes (or just far enough to left to accept dimes).

Move this bracket to right to reject nickels (or just far enough to left to accept nickels).



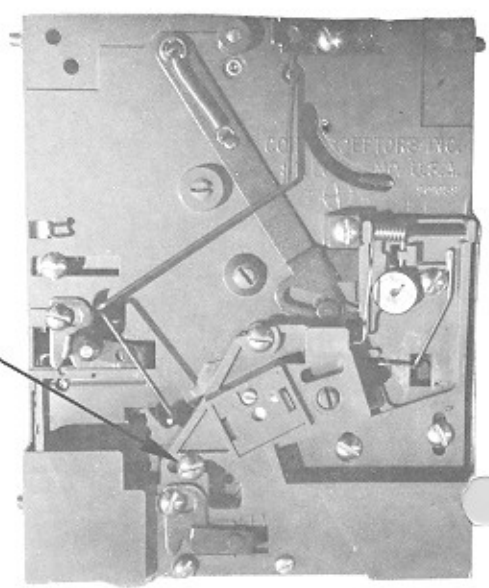
FRONT VIEW

COIN ACCEPTORS



Move this screw to right to reject dimes (or just far enough to left to accept dimes).

Move this bracket to right to reject nickels (or just far enough to left to accept nickels).



SECTION 5 - MAINTENANCE

GENERAL

This section contains cleaning, lubrication, adjustment, and repair and replacement procedures for the phonograph. Cleaning and lubrication procedures should be performed at regular intervals. Adjustment and repair and replacement procedures should be performed only when necessary.

PREVENTIVE MAINTENANCE

CLEANING

In addition to cleaning the cabinet exterior each time the location is visited, clean the cabinet interior every three to six months, as required. Keeping the cabinet interior clean reduces dust, resulting in increased record and component life. Always clean the phonograph cabinet prior to lubrication.

1. Use a vacuum cleaner, if available to remove heavy dust deposits.

WARNING

USE SOLVENTS IN A WELL–VENTILATED AREA ONLY; DO NOT USE SOLVENTS OF ANY TYPE ON PLASTIC PARTS.

2. Use a clean, lint-free cloth saturated in denatured alcohol to clean mechanical parts.
3. Clean electrical parts using a clean, dry cloth or camel's hair brush.
4. Clean the slug rejector as specified in the applicable slug rejector manual.
5. Clean the search unit commutator board with alcohol. Remove caked-on dirt using a pencil eraser or light abrasive cleaner.

FIVE-YEAR LUBRICATION

Your phonograph requires lubrication only after five years. To maintain smooth, trouble-free operation, lubricate the record changer mechanism as shown:

- One Drop F-1379 Light Machine Oil

Do Not Over - Lubricate

Do Not Use Oil or Grease on Solenoid Plungers.

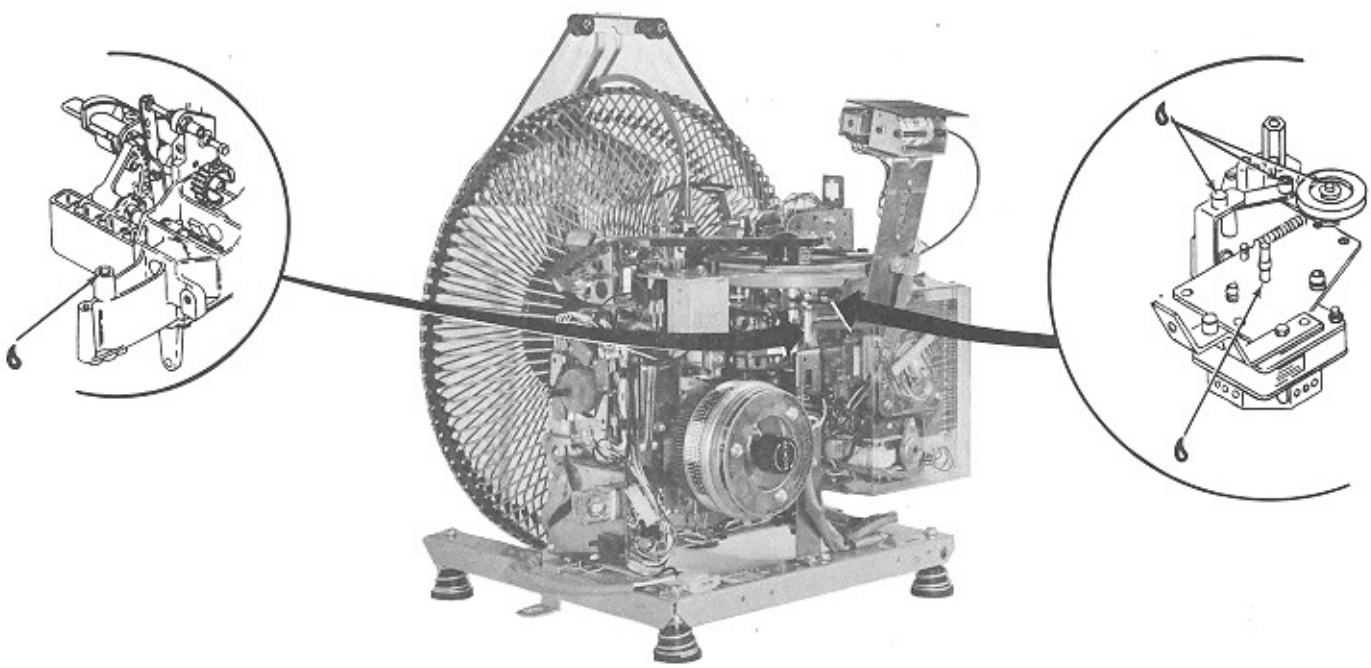


FIGURE 5-1 PHONOGRAPH LUBRICATION

ADJUSTMENTS

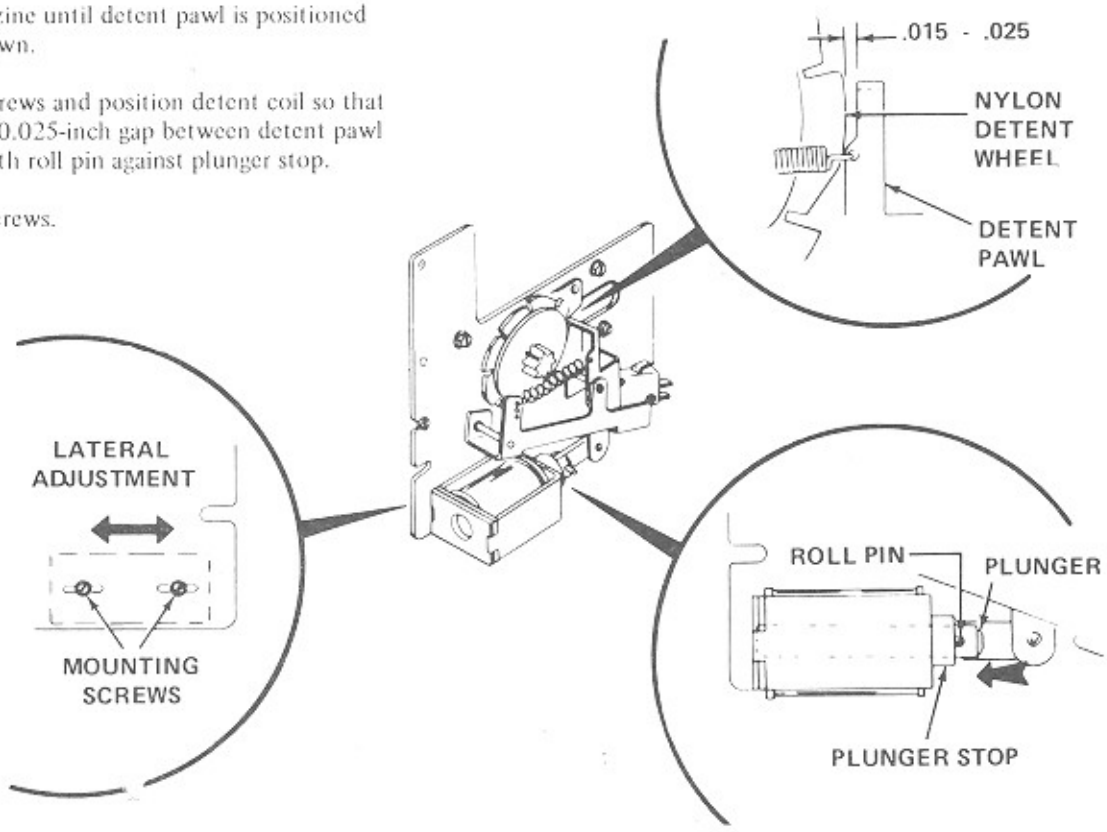
Phonograph adjustments are listed in Table 5-1. Amplifier adjustments are contained in Section 2. Perform adjustments when indicated by troubleshooting procedure, Section 4.

TABLE 5-1. PHONOGRAPH ADJUSTMENTS

MAGAZINE MOTOR AND DETENT ASSEMBLY ADJUSTMENTS

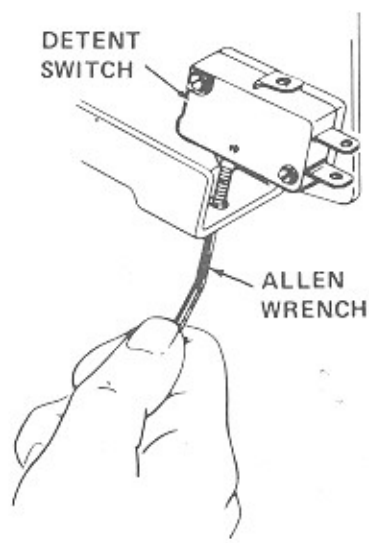
Obtain 0.015 To 0.025 – Inch Gap Between Detent Pawl And High Point Of Detent Wheel.

1. Release detent pawl from detent wheel.
2. Rotate record magazine until detent pawl is positioned on high point as shown.
3. Loosen mounting screws and position detent coil so that there is an 0.015 to 0.025-inch gap between detent pawl and detent wheel with roll pin against plunger stop.
4. Tighten mounting screws.



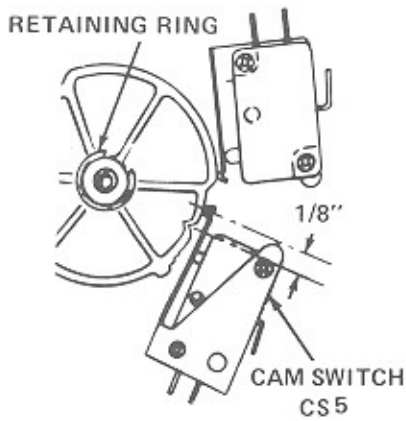
Adjust Magazine Detent Switch.

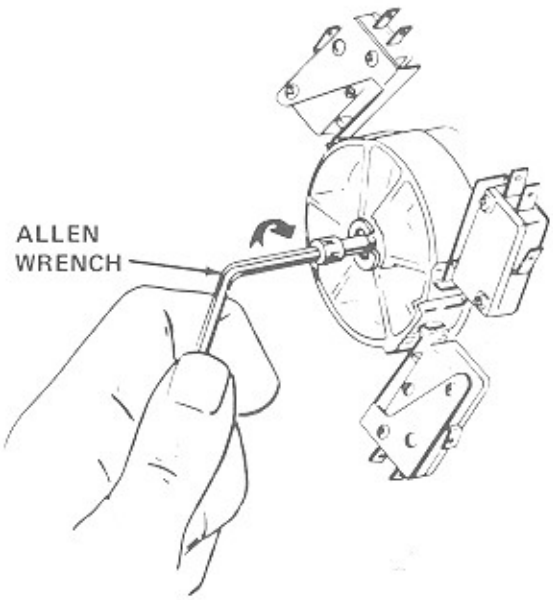
1. Rotate detent wheel until pawl is seated in notch, locking wheel in place.
2. Turn detent switch actuating screw in until switch just clicks, then turn screw in 1/2 turn more for stable adjustment.

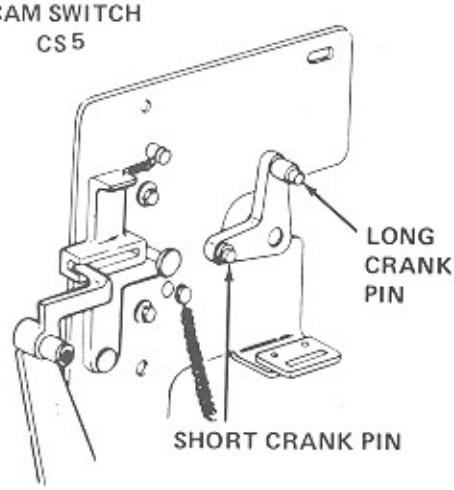


CAM SWITCH ADJUSTMENTS
Locate Cam In Proper Position

1. Using a 5/32" allen wrench, turn transfer motor clockwise until long pin arm on crank is in vertical position.
2. Remove retaining ring from cam shaft and pull cam forward.
3. Locate cam so that actuator for cam switch CS5 is 1/8-inch above cam notch as shown.
4. Push in cam and install retaining ring.

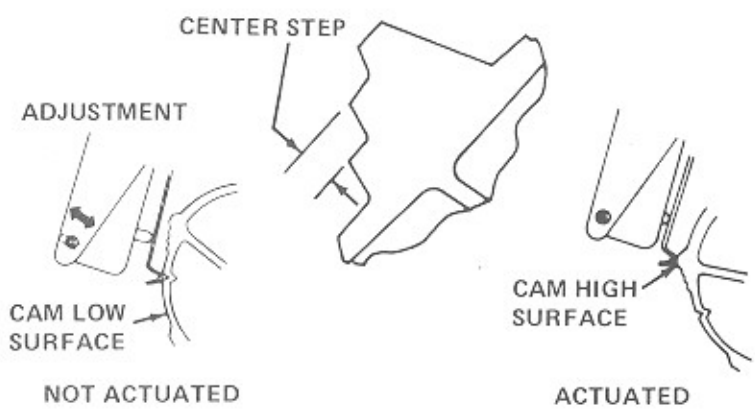






Check And Adjust Cam Switch Operation

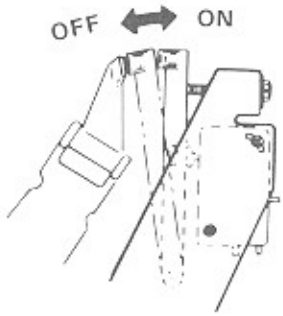
1. Check that each cam switch operates (on and off) within each cam step.
2. To adjust a switch, loosen mounting screw closest to actuator end and move switch housing accordingly.
3. Tighten mounting screw and recheck operation.



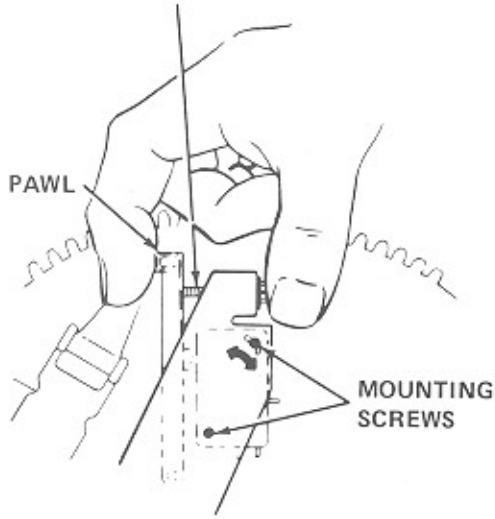
STOP SWITCH ASSEMBLY ADJUSTMENTS

Adjust Left Side Switch

1. Hold pawl against stop screw using thumb and forefinger
2. Loosen mounting screw nearest stop screw and move switch against pawl as far as it will go.
3. Tighten mounting screw.
4. Release pawl and stop screw, check that switch releases.
5. If switch does not release, loosen mounting screw and adjust switch position so that it actuates and releases as pawl is moved back and forth.

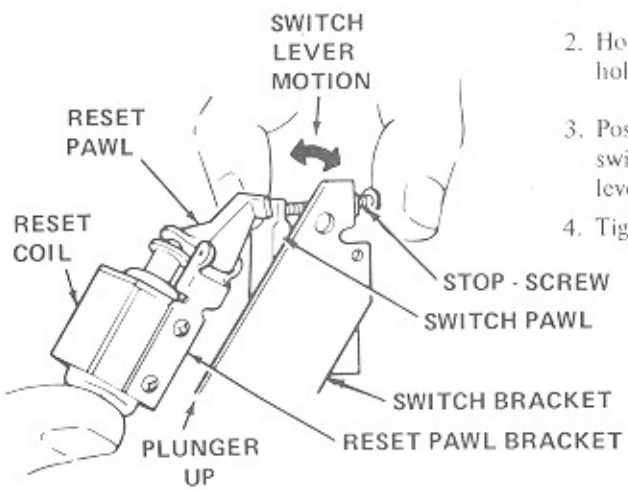


NOTE: DO NOT TRY TO ADJUST STOP-SCREW IT IS FACTORY ADJUSTED



Adjust Reset Coil.

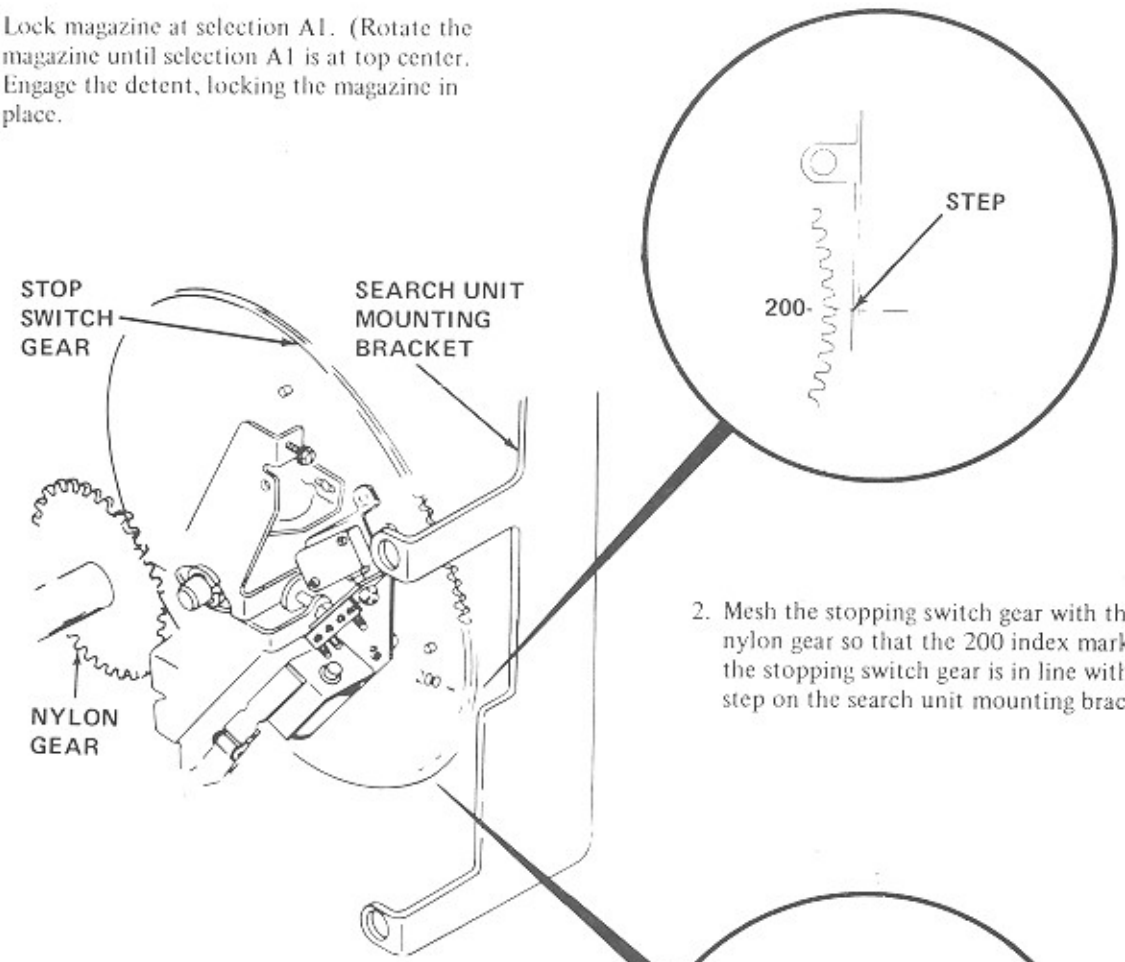
1. Loosen screws holding reset pawl bracket.
2. Hold reset coil plunger flush with bottom of coil, and hold left side switch pawl against stop screw.
3. Position reset pawl bracket so tips of reset pawl and switch pawl will just miss each other as stopping switch lever is pivoted through its entire range of motion.
4. Tighten screws and recheck switch operation.



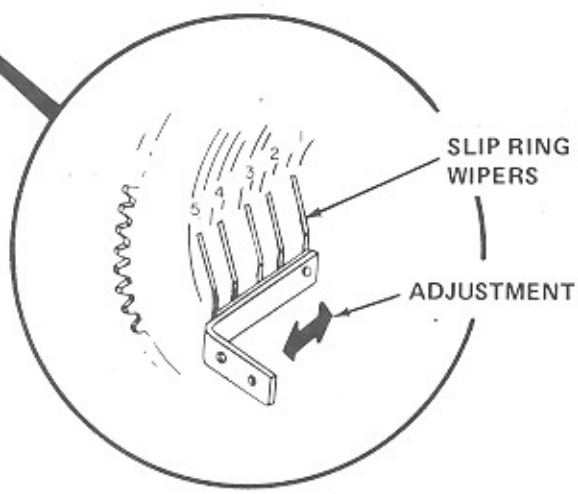
S TOP SWITCH ASSEMBLY ADJUSTMENTS (CONTINUED)

Align Stop Switch

1. Lock magazine at selection A1. (Rotate the magazine until selection A1 is at top center. Engage the detent, locking the magazine in place.



2. Mesh the stopping switch gear with the large nylon gear so that the 200 index mark on the stopping switch gear is in line with the step on the search unit mounting bracket.



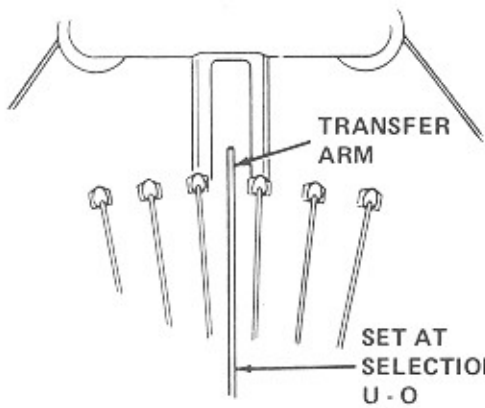
3. Check to see that the slip ring wipers are properly aligned with their respective slip rings. If necessary loosen the slip ring wiper assembly horizontally until the ends of the wipers are tracking in the center of the rings.

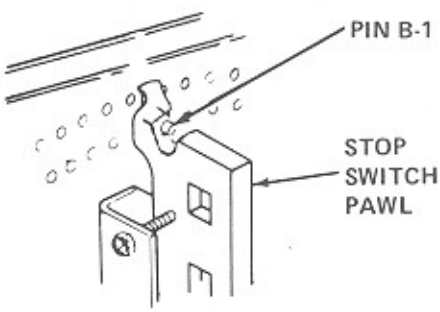
NOTE: WHEN INSTALLING A REPLACEMENT STOP SWITCH BE SURE TO PERFORM THE PROCEDURES ON THE FOLLOWING PAGE.

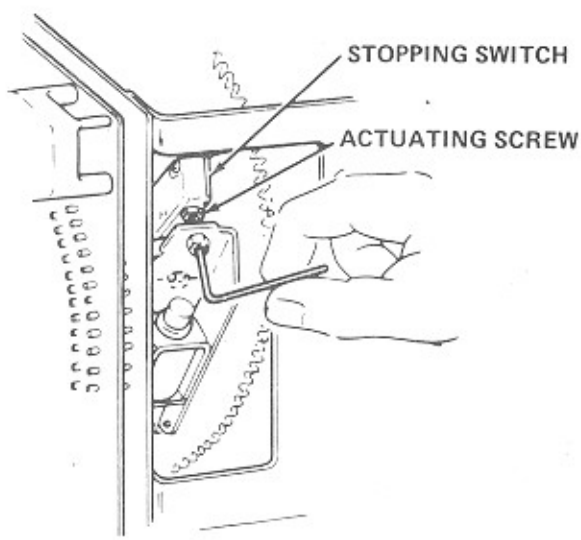
STOP SWITCH ASSEMBLY ADJUSTMENTS (CONTINUED)
Adjust Stop Switch Actuating Screw

NOTE: THIS ADJUSTMENT REQUIRES THAT THE SEARCH UNIT IS PROPERLY ADJUSTED

1. Manually rotate record magazine and lock in position at selection U-O.
2. Manually set search unit at pin B1.
3. Locate stop switch pawl on pin B1 as shown.
4. Back stopping switch actuating screw out past the point where switch clicks (releases).
5. Turn stopping switch actuating screw in until switch just clicks (actuates); then turn screw in 1-2/3 turn further.
6. Turn on mechanism service switch and cycle record changer at least twice to check stopping switch adjustment.







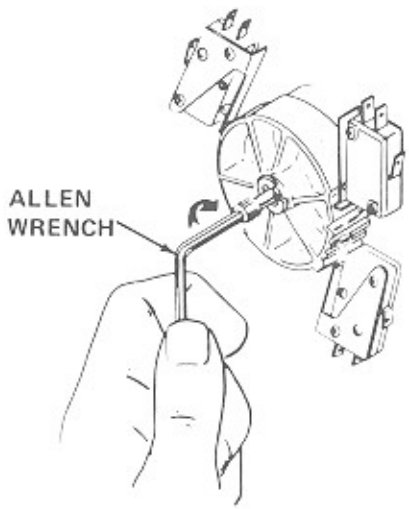
SECTOR GEAR ADJUSTMENTS

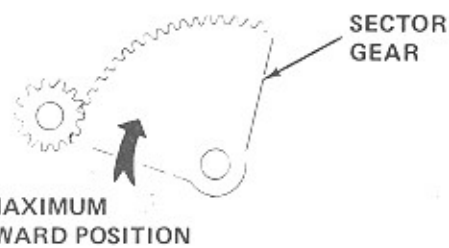
Adjust The Sector Gear Retaining Collar

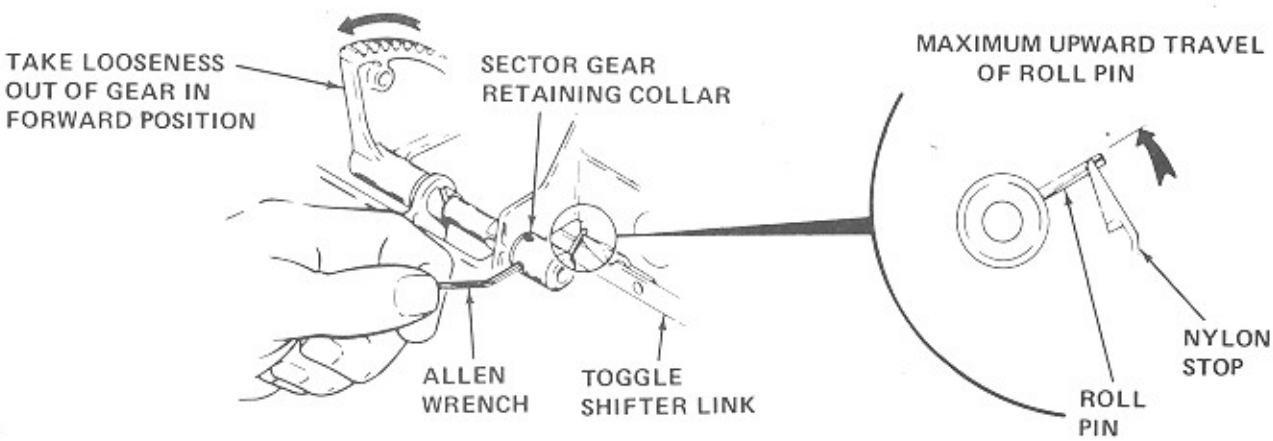
1. Using a 5/32-inch allen wrench, turn transfer motor shaft clockwise until sector gear is in maximum up, or forward position.

2. Set retaining collar so that roll pin is flush with top surface of toggle shifter link nylon stop. Take all looseness out of sector gear in forward direction.

3. Check that there is no end play in sector gear shaft.



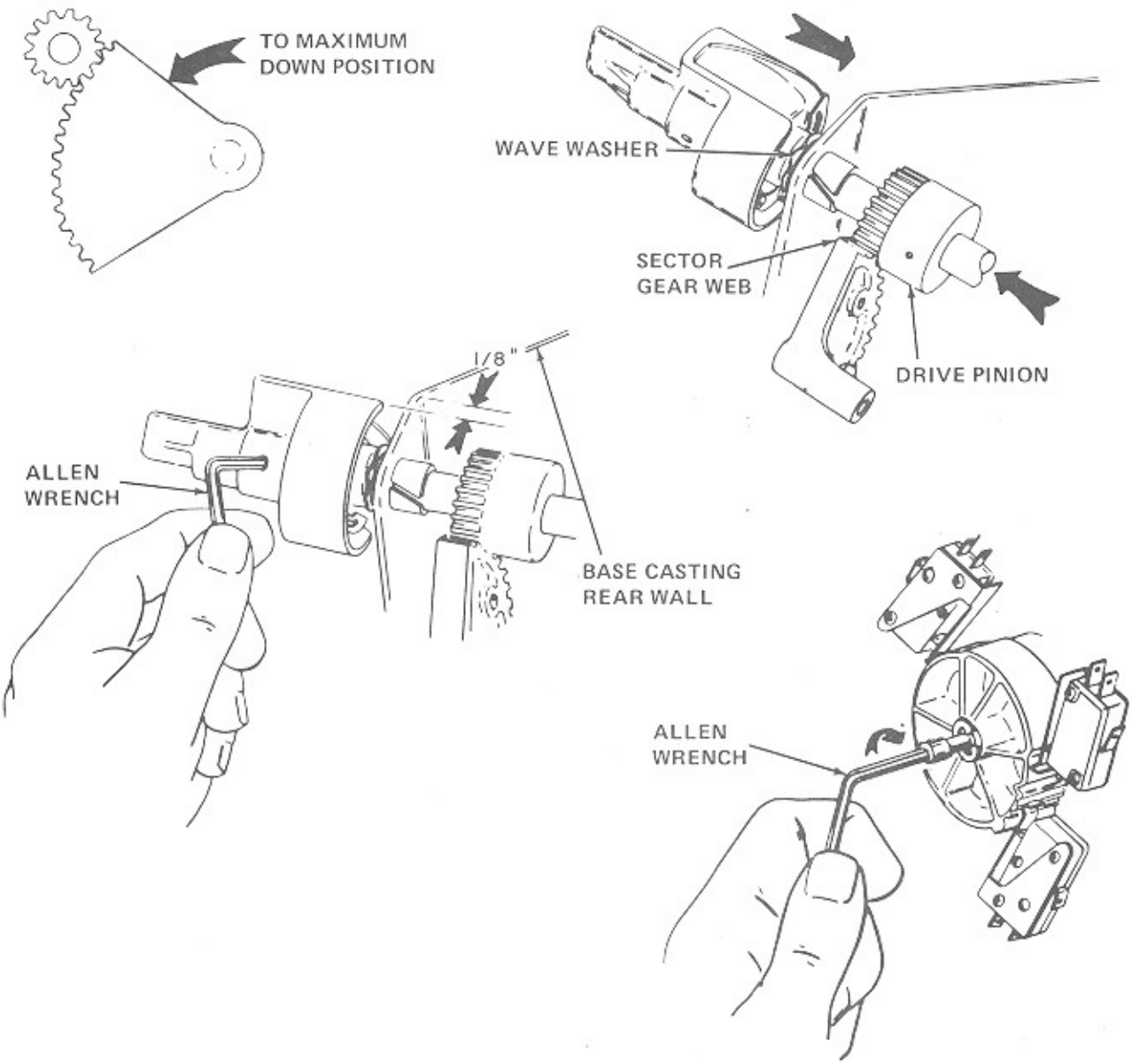




TONE ARM CAM ADJUSTMENTS
Adjust Tone Arm Cam

1. Using a 5/32-inch allen wrench, turn transfer motor shaft clockwise
2. Loosen allen screws and position tone arm cam so straight cutout in cam surface is 1/8-inch from base casting rear wall front surface plane. Use a 1/8-inch allen wrench to gauge this distance.
3. Remove end play from shaft and tighten allen screws.

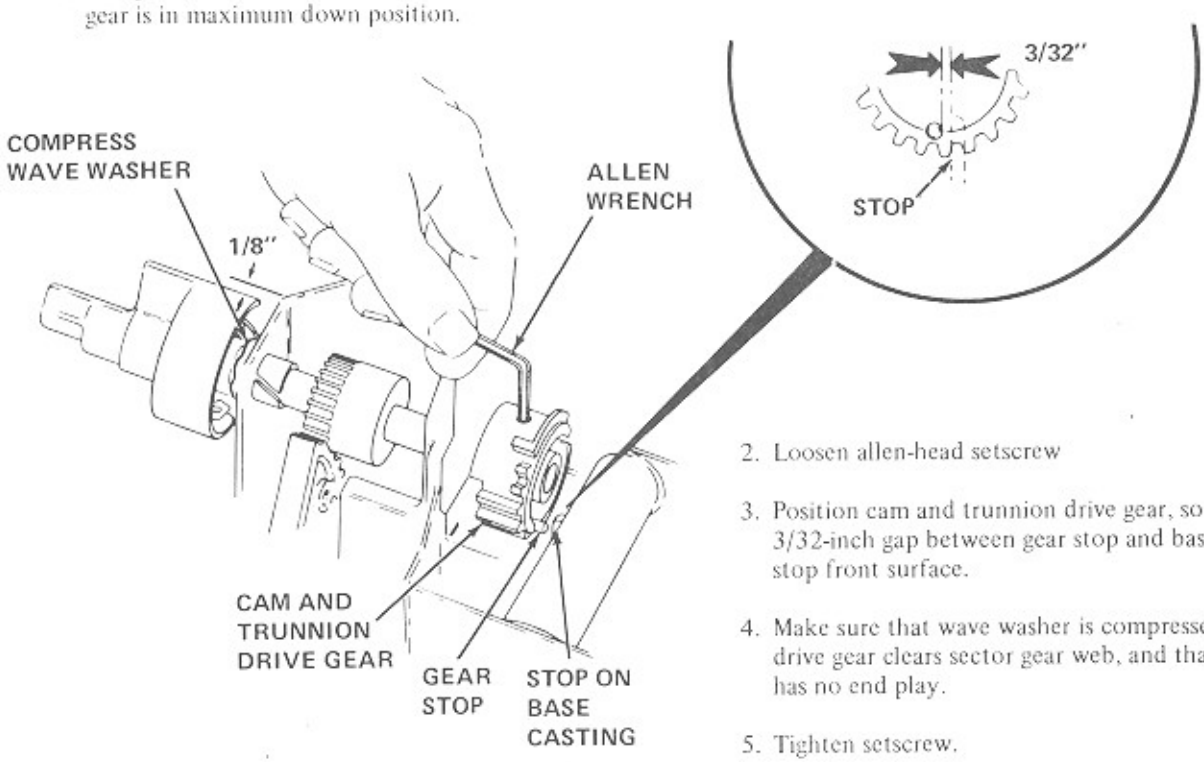
NOTE: PINION GEAR TEETH MUST NOT RIDE ON SECTOR GEAR WEB.



CAM AND TRUNNION DRIVE GEAR ADJUSTMENT

Adjust Cam And Trunnion Drive Gear

1. Using a 5/32-inch allen wrench, turn transfer motor shaft clockwise until sector gear is in maximum down position.



2. Loosen allen-head setscrew

3. Position cam and trunnion drive gear, so there is a 3/32-inch gap between gear stop and base casting stop front surface.

4. Make sure that wave washer is compressed, that drive gear clears sector gear web, and that shaft has no end play.

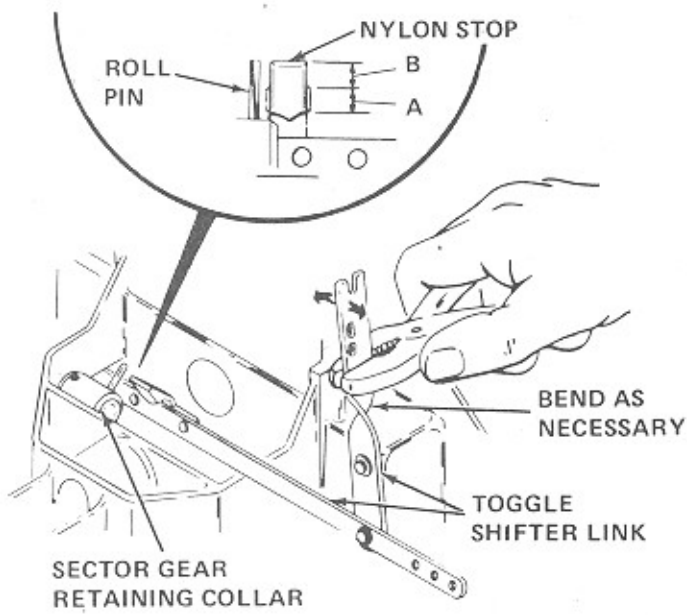
5. Tighten setscrew.

TOGGLE SHIFTER LINK ADJUSTMENT

Adjust Toggle Shifter Link

1. Bend toggle shifter link vertical member so sector gear retaining collar roll pin will contact nylon stop in area "A", but not area "B" as transfer motor cycles.

2. Check adjustment with toggle shifter pins in both positions.



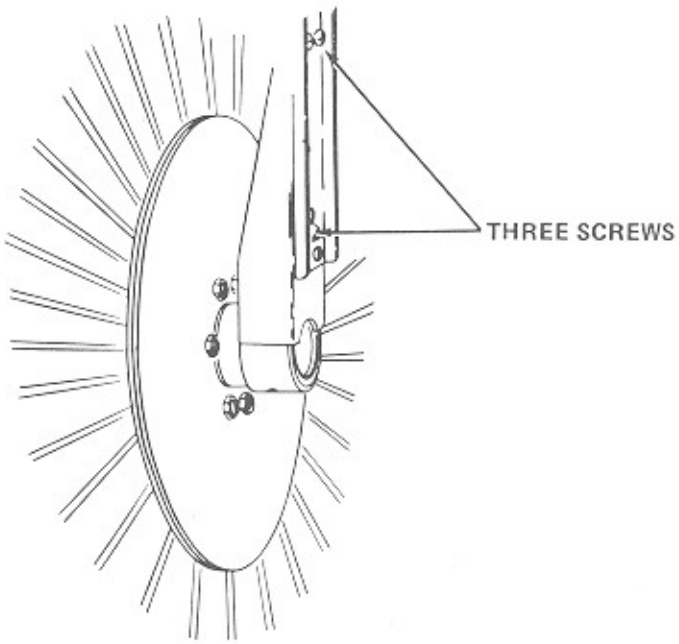
RECORD MAGAZINE TRANSFER ARM SUPPORT ADJUSTMENT
Eliminate Magazine End Play And Center Transfer Arm Support

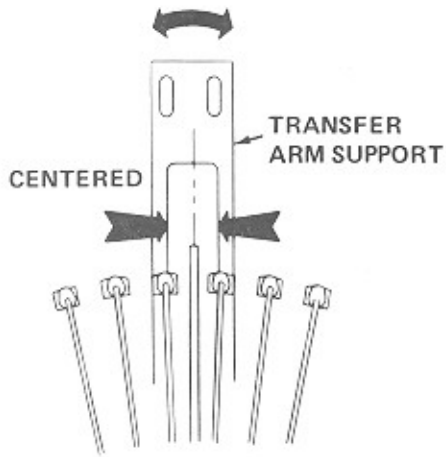
1. Loosen setscrews in transfer arm support.

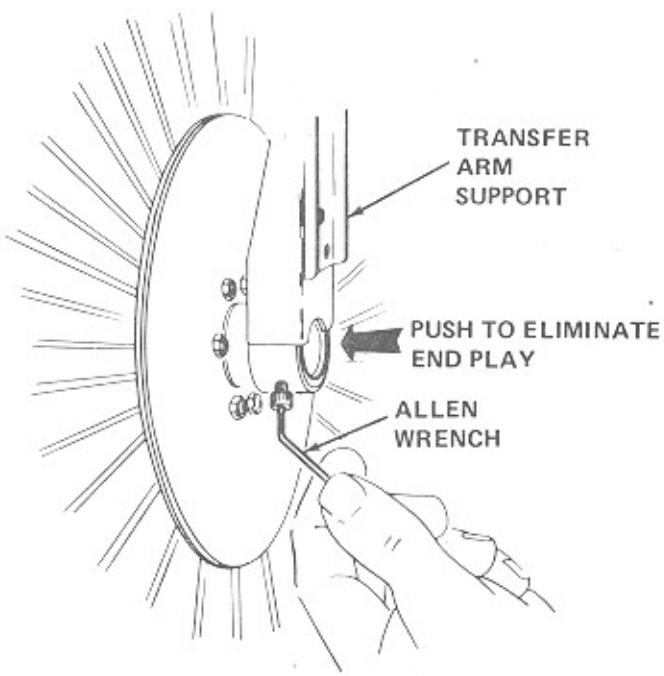
2. Push transfer arm support onto magazine shaft to eliminate end play and adjust it so transfer arm will not rub on either side of opening.

3. Tighten screws.

4. If slight adjustment is necessary after setscrews are seated, loosen three screws on rear of transfer arm support, adjust, and tighten screws.





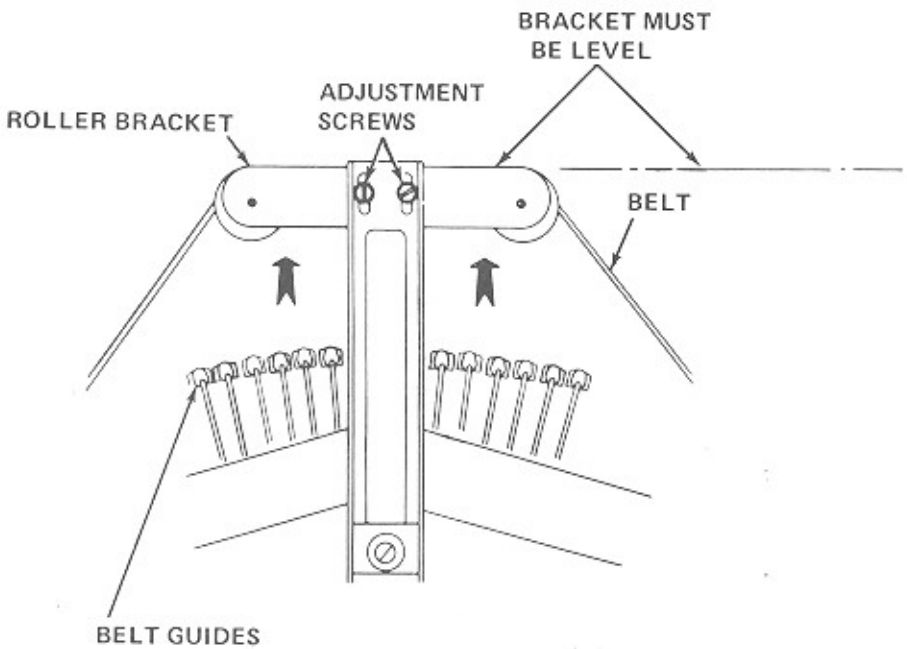


MAGAZINE BELT ADJUSTMENT
Tighten Magazine Belt

1. Loosen two adjustment screws shown.

2. Raise bracket to tighten belt around magazine.

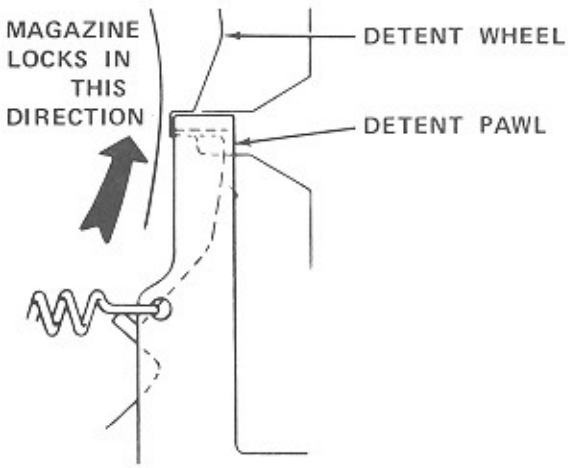
3. Check that belt rides evenly in center of belt guides, all the way around the magazine.

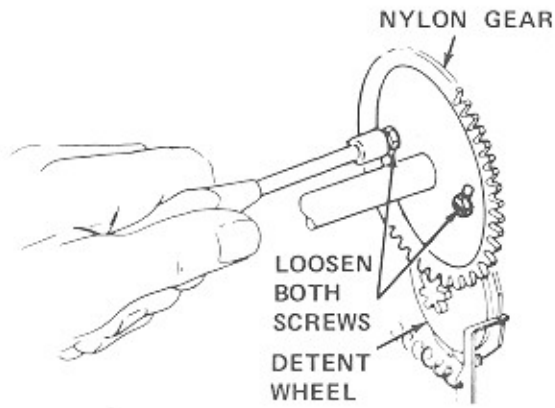


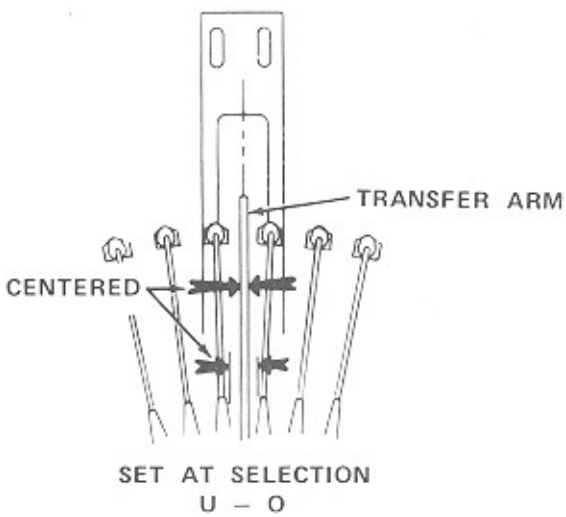
ALIGNING MAGAZINE STOPPING POSITION WITH TRANSFER ARM

Align Stopping Position Of Magazine With Transfer Arm

1. Rotate magazine until selection is at top center. Allow magazine detent to engage and lock magazine in place.
2. Loosen two screws in large nylon gear.
3. With detent wheel locked, move magazine until transfer arm is centered in record slot.
4. Tighten two screws in large nylon gear securely.

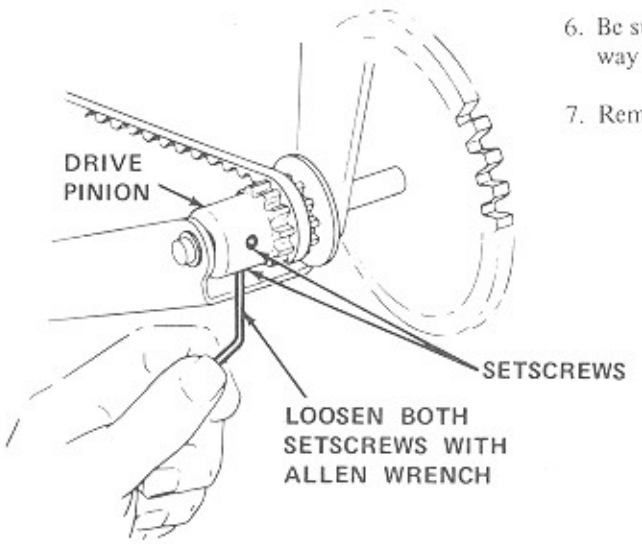




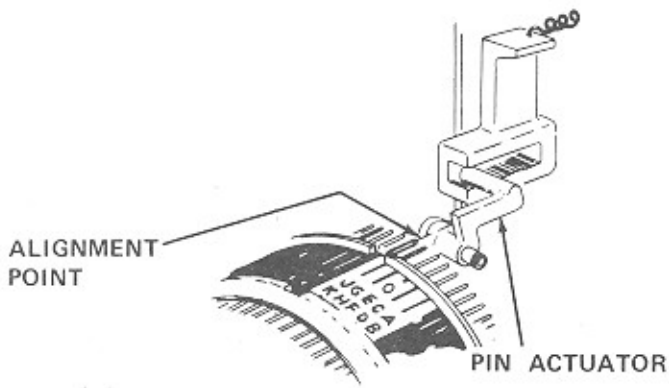


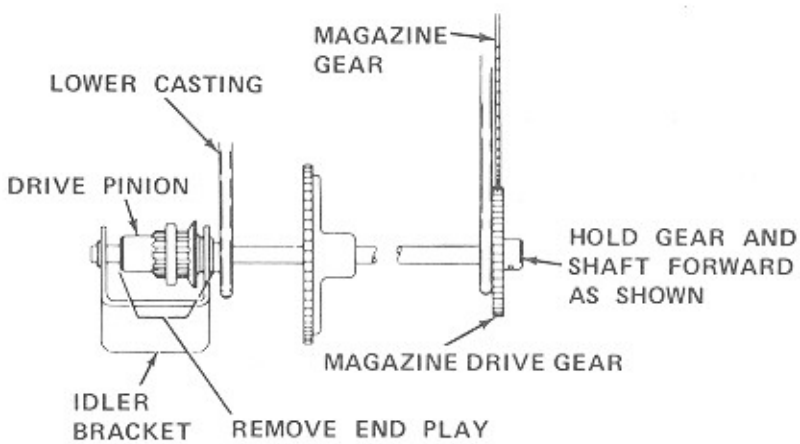
POPULARITY METER ALIGNMENT
Align Popularity Meter

1. Remove popularity meter.
2. Loosen setscrews in popularity meter drive pinion.
3. Release magazine detent. Rotate magazine until selection U-O is at top center.
4. Allow detent to engage, locking magazine in place.
5. Install popularity meter and rotate until pin marked U-O is centered over pin actuator.



6. Be sure that crank is properly aligned and that popularity meter is all the way on the shaft.
7. Remove all end play. Tighten two setscrews.

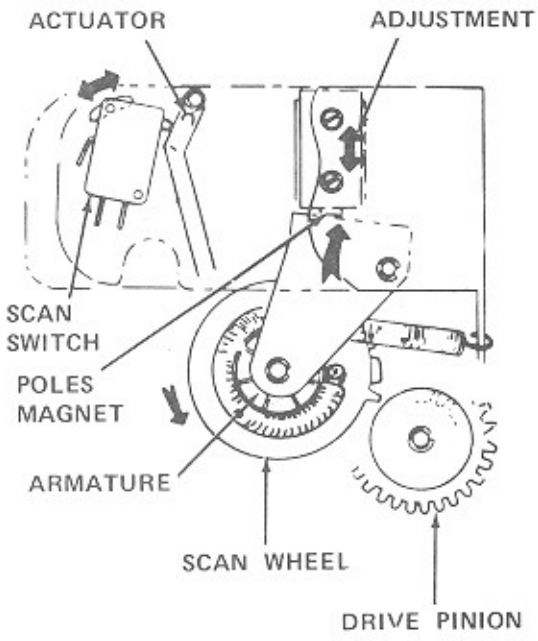




SCAN CONTROL ADJUSTMENTS

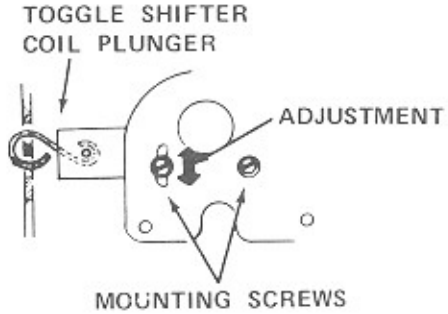
Adjust Scan Control

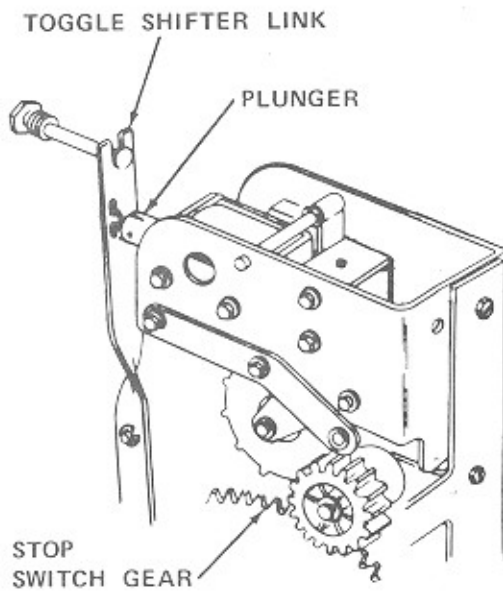
1. Rotate magazine until scan wheel is in maximum counterclockwise position as shown.
2. Loosen scan switch top mounting screw.
3. Move switch against actuator until switch has operated, and switch button is almost bottomed.
4. Tighten top mounting screw.
5. With armature held against magnet pole pieces, scan wheel should barely clear drive pinion. Rotate scan wheel one full turn to check this adjustment.



Adjust Toggle Shifter Coil

1. Loosen two mounting screws for toggle shifter coil.
2. Adjust coil until it is level and plunger mover freely in and out.
3. Make sure that drive pinion is meshed properly with stop switch gear.
4. Tighten two screws.

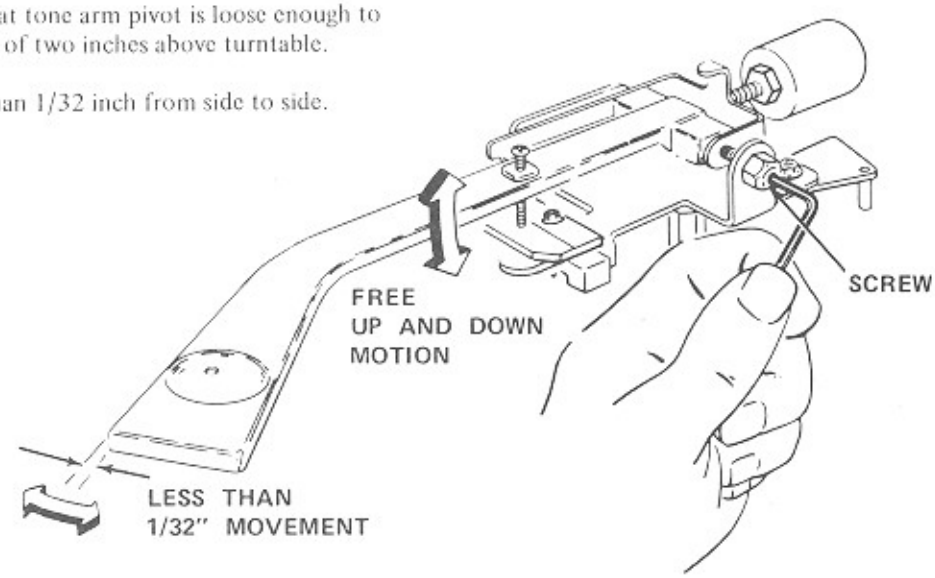




TONE ARM ADJUSTMENTS
Adjust Vertical Pivot

1. Adjust tone arm pivot screw so that tone arm pivot is loose enough to move free vertically for a distance of two inches above turntable.

2. Check that tone arm moves less than 1/32 inch from side to side.

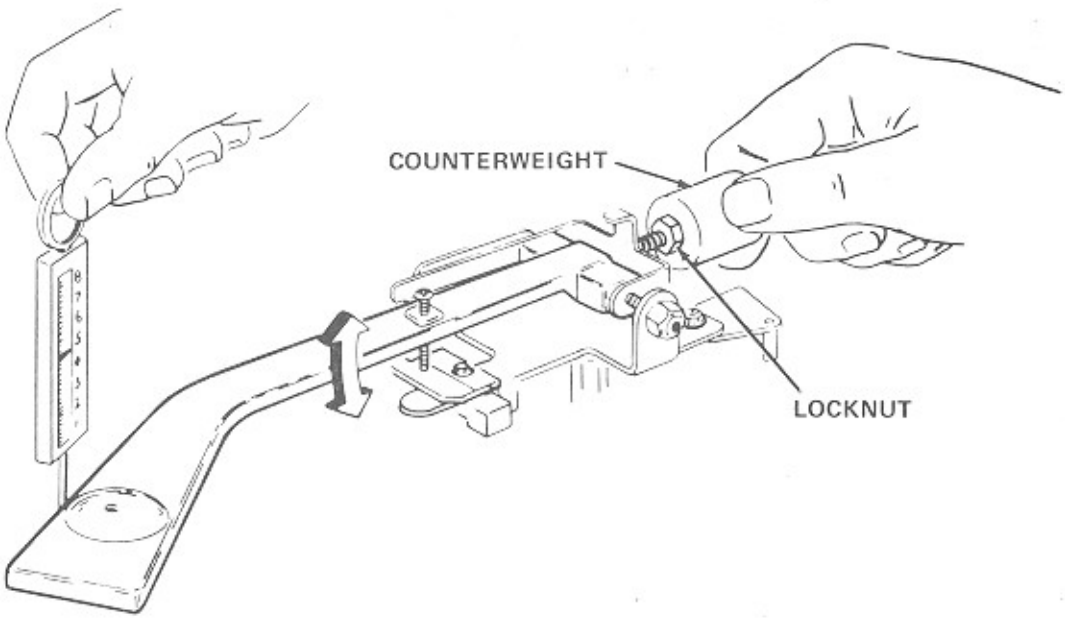


Set Stylus Force

1. Loosen lock nut.

2. Attach a suitable gram gauge to tone arm as shown. Adjust counterweight for 4 to 5 grams pressure.

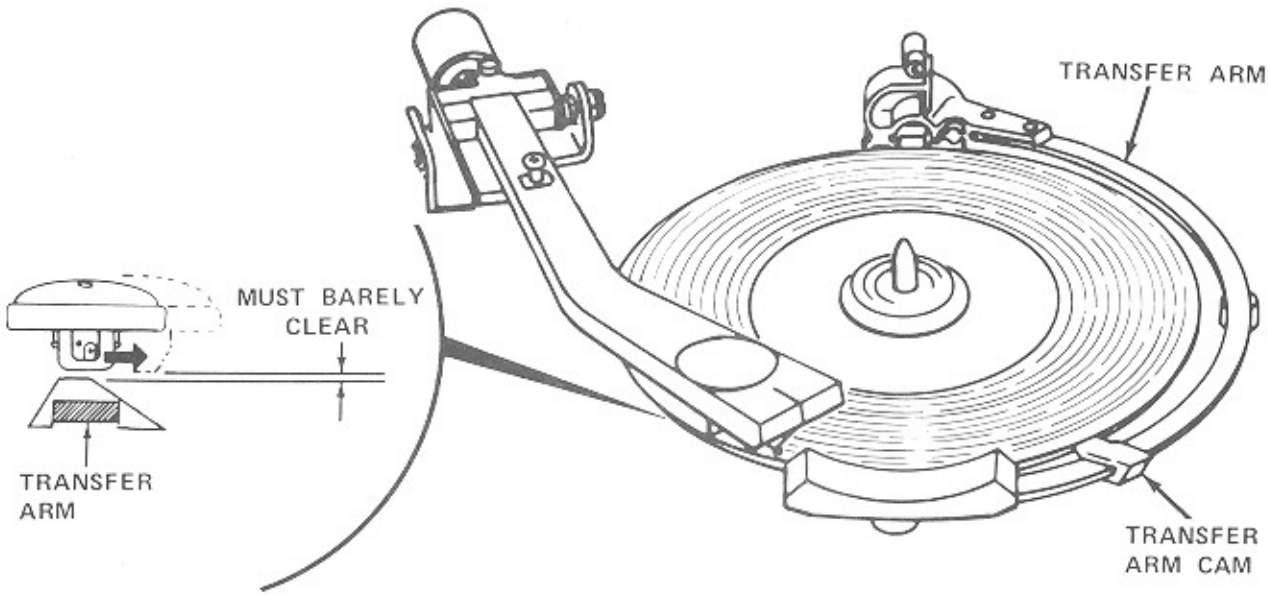
3. Tighten lock nut against counterweight and recheck adjustment.

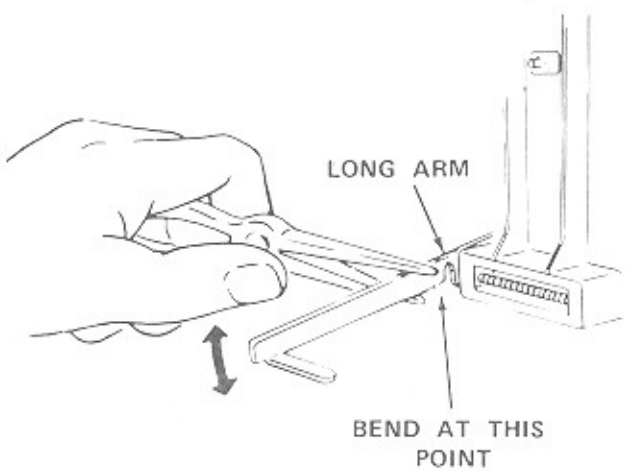


TONE ARM ADJUSTMENTS (CONTINUED)
Set Stylus Clearance

1. Operate transfer assembly to place transfer arm next to tone arm.

2. Stylus must barely clear transfer arm as tone arm swings over it. Adjust clearance by bending long arm of tone arm rest, as necessary, at point shown.



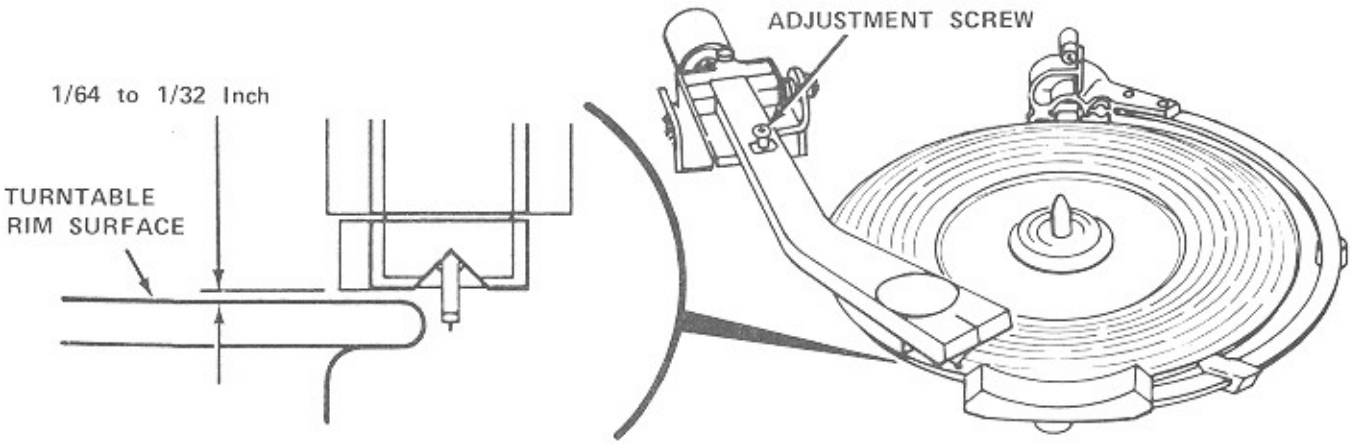


TONE ARM ADJUSTMENTS (CONTINUED)

Set Stylus Height

1. Operate transfer assembly to position tone arm over turntable rim.

2. Turn adjustment screw until stylus tip is 1/32 inch below rim surface with tone arm in play position.



Set Stylus Setdown Position And Tone Arm Cutoff Switch

1. Place undersize (6-13/16-inch diameter) record on turntable.

2. Operate transfer assembly to bring tone arm to play position.

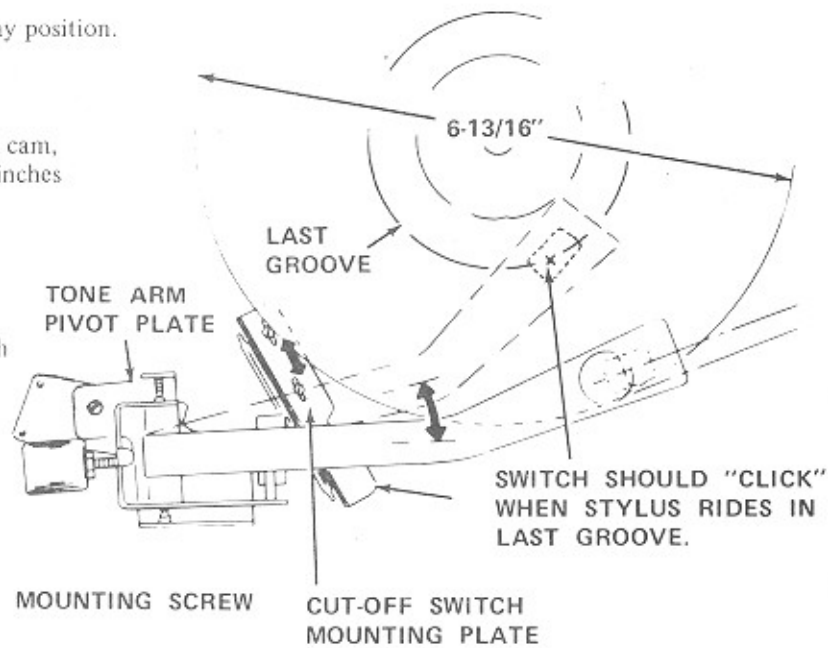
3. Loosen mounting screw.

4. While holding cam follower plate against tone arm cam, move tone arm, as required, until stylus is 2-9/16 inches from the turntable hub.
5. Tighten mounting screw and check adjustment.

6. Locate tone arm stylus in record cutout groove.

7. Loosen two mounting screws on cutoff reed switch mounting plate.

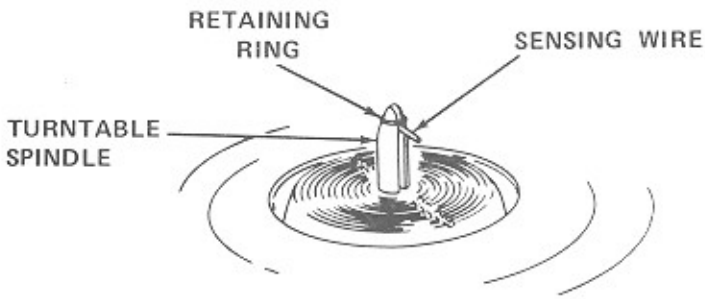
8. Position mounting plate, as necessary until reed switch is closed. The magnet on the under side of the tone arm operates before stylus enter "closed" record groove.

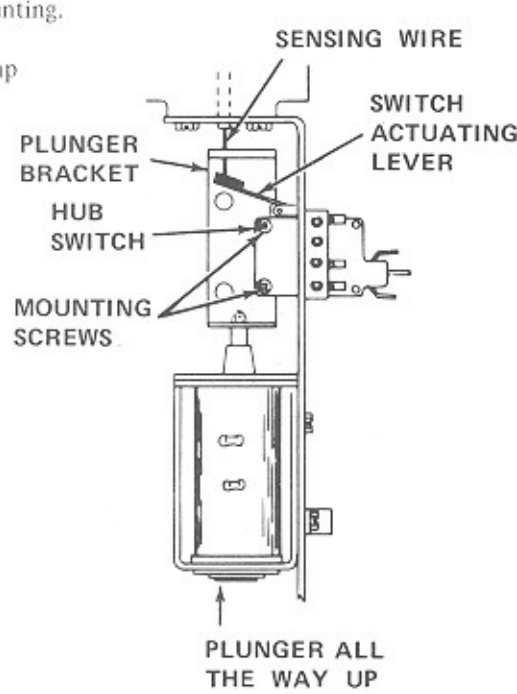


AUTOMIX ADJUSTMENTS

Obtain 1/32-inch Gap Between Sensing Wire And Turntable Spindle Retaining Ring

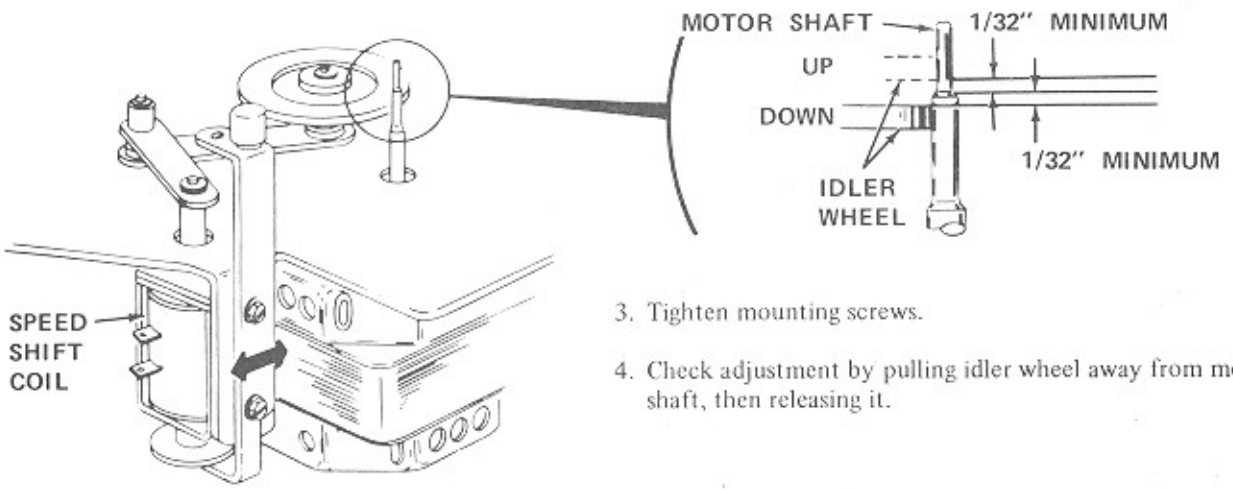
1. Loosen mounting screws and move hub switch down as far as slotted mounting.
2. While holding plunger all the way up, raise hub switch until a 1/32-inch gap exists between sensing wire and turntable spindle retaining ring.
3. Tighten switch mounting screws.





Adjust Speed Shift Coil So That Idler Wheel Rim Clears Motor Shaft Step By At Least 1/32 Inch

1. Loosen speed shift coil mounting screws.
2. Adjust speed shift coil so that idler wheel ring clears motor shaft step by at least 1/32 inch in both full up and full down coil plunger position. The coil frame will pivot slightly about the top mounting screw hole, just enough to allow up and down adjustment of the idler linkage.

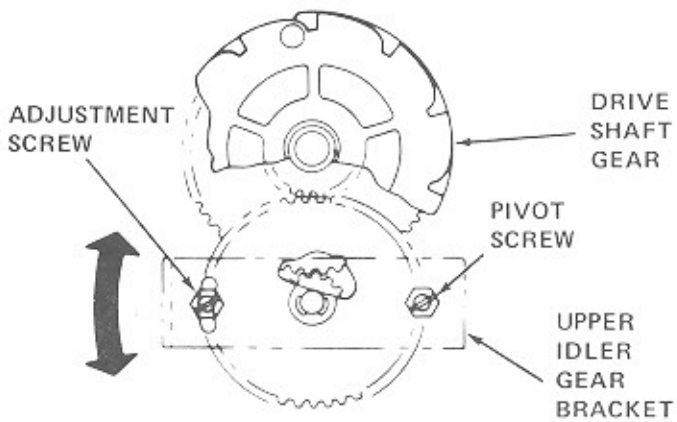


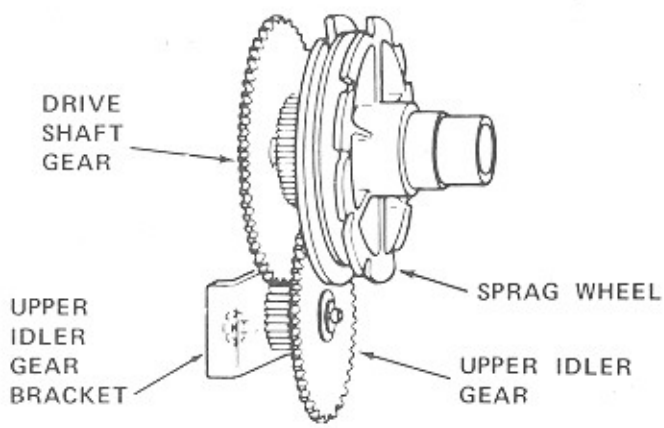
3. Tighten mounting screws.
4. Check adjustment by pulling idler wheel away from motor shaft, then releasing it.

SEARCH UNIT GEAR ADJUSTMENT

Mesh Drive Shaft Gear, Upper Idler Gear, And Sprag Wheel Pinion

1. Loosen upper idler gear bracket pivot screw and adjustment screw.
2. Pivot bracket, as shown, until all gears move freely with a minimum of backlash.
3. Tighten screws and recheck adjustment.





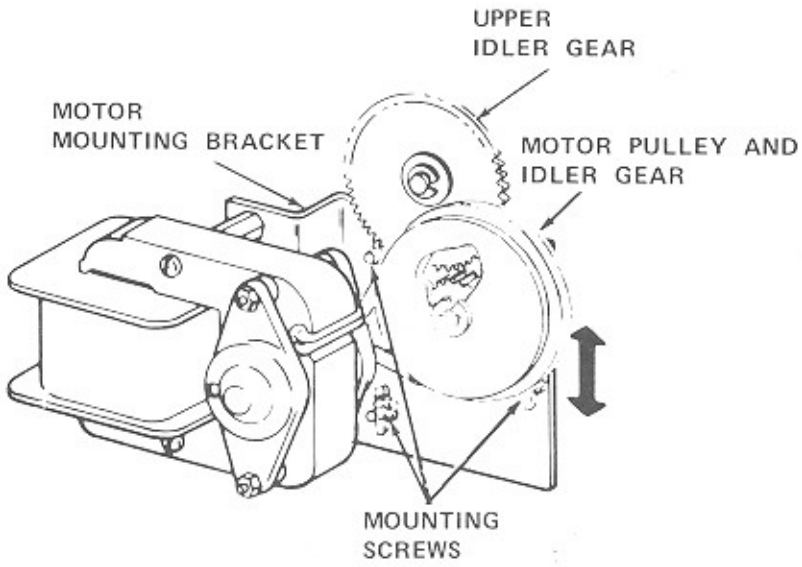
SEARCH UNIT GEAR ADJUSTMENTS (CONTINUED)

Align Motor Idler Gear To Upper Idler Gear

1. Loosen three motor mounting screws in motor mounting bracket.

2. Move motor assembly as shown until motor meshes with upper idler gear without binding and with minimum backlash.

3. Tighten screws and recheck adjustment.



SPRAG RELAY ADJUSTMENT
Adjust Sprag Relay Core Gap

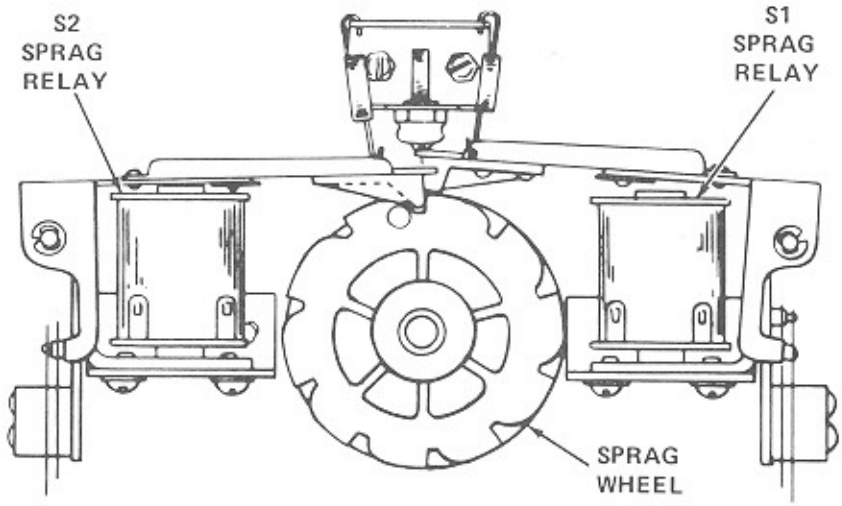
1. Bottom sprag relay S2 tooth in any one sprag wheel notch.

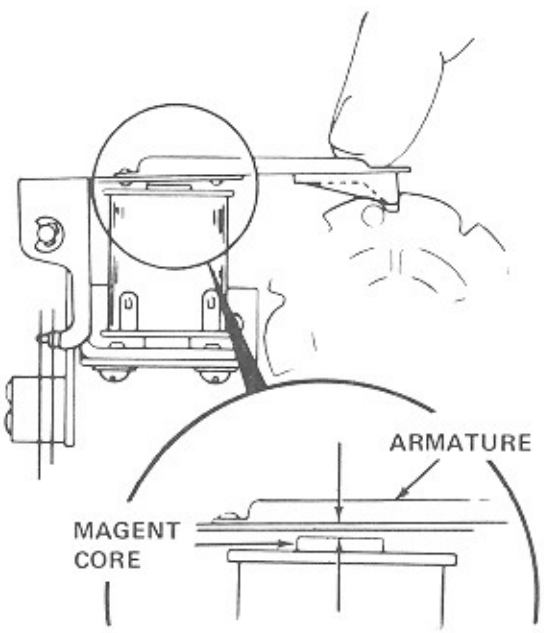
2. While holding tooth in notch, check clearance between sprag relay armature and magnet core. A piece of ordinary bond paper should just pass through this gap.

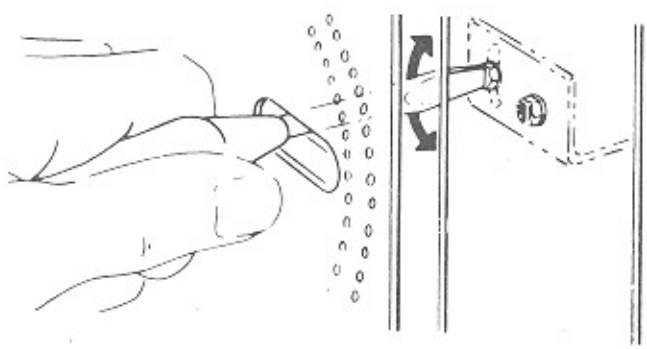
3. To adjust clearance, loosen sprag relay mounting and pivot screws and move relay as required.

4. Tighten screws and recheck adjustment.

5. Repeat steps a through d to adjust sprag relay S1.



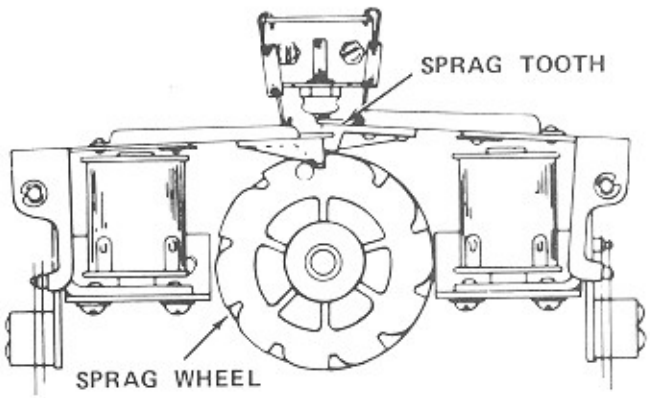




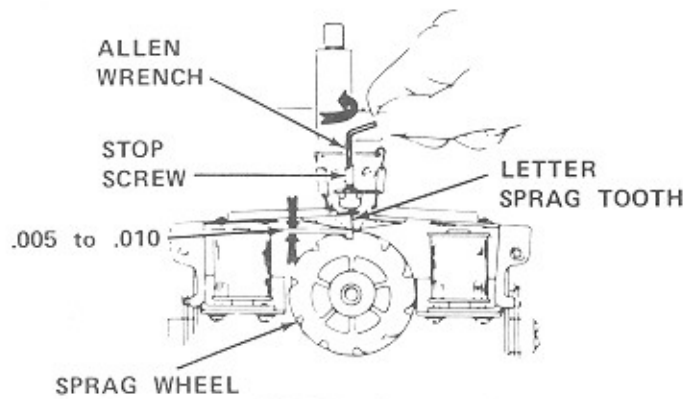
SPRAG RELAY ADJUSTMENTS (CONTINUED)

Adjust Sprag Tooth-To-Wheel Clearance

1. Align sprag relay S2 tooth with high point on sprag wheel.
2. Turn in stop screw until sprag relay tooth binds against sprag wheel. Do not force sprag wheel around when checking binding.
3. Back stop screw off 1/4-turn for 0.005- to 0.010- inch clearance as shown.
4. Repeat steps a through c to adjust sprag relay D1 for 0.018- to 0.030-inch clearance.



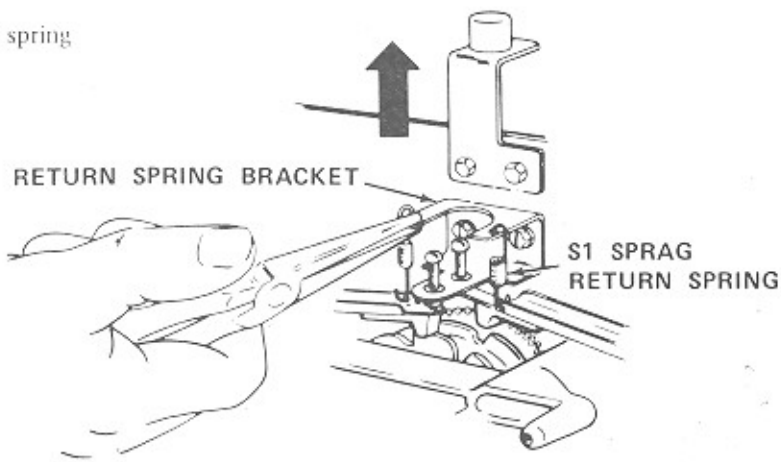
S2 SPRAG RELAY



S1 SPRAG RELAY

Adjust Return Spring Force

1. Check that return springs have enough tension to return sprag relay armatures to rest position when relay magnets are de-energized.
2. Bend return spring bracket, as shown, to increase spring tension. Do not ben S1 arm more than 1/16 inch; do not bend S2 arm more than 1/64 inch.
3. If proper tension cannot be obtained, replace return spring.



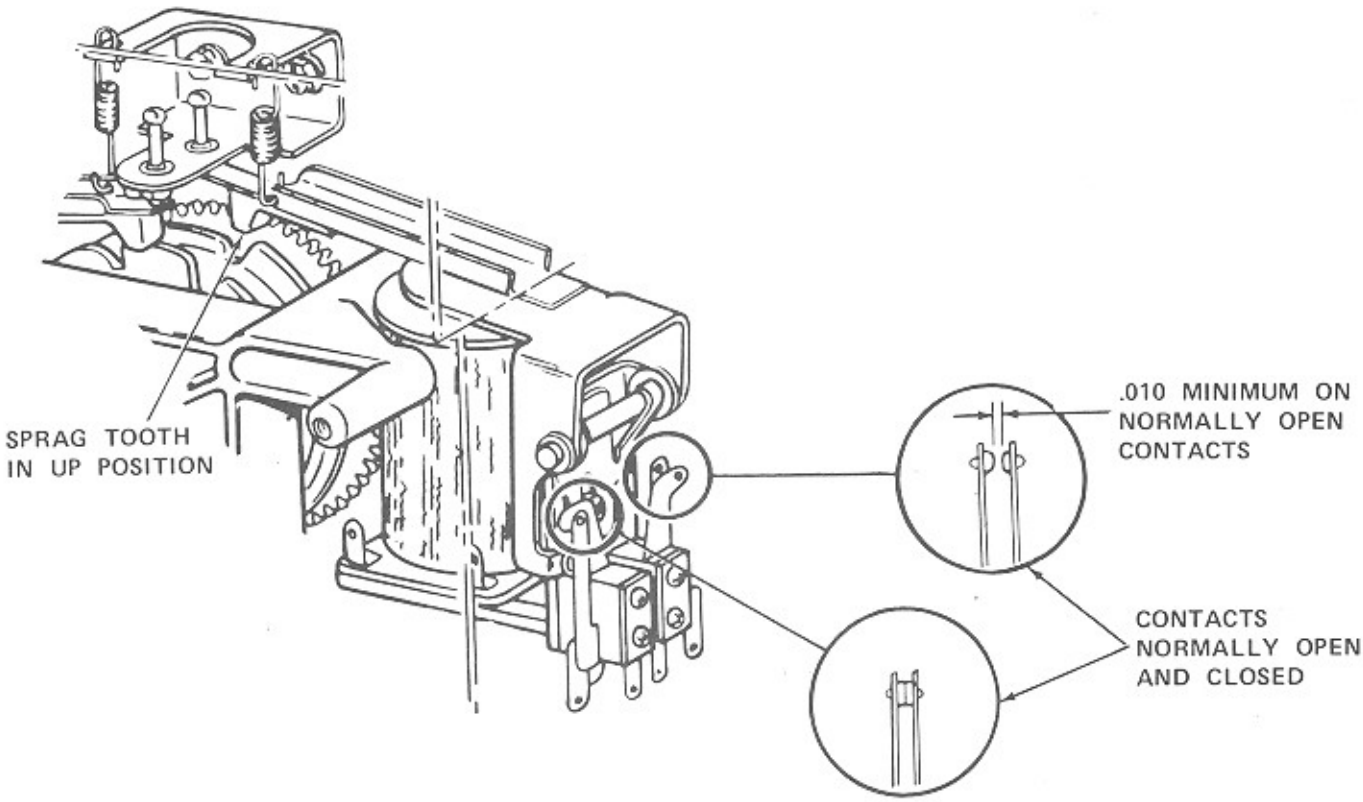
SPRAG RELAY ADJUSTMENTS (CONTINUED)

Adjust Relay Contact Make and Break Position

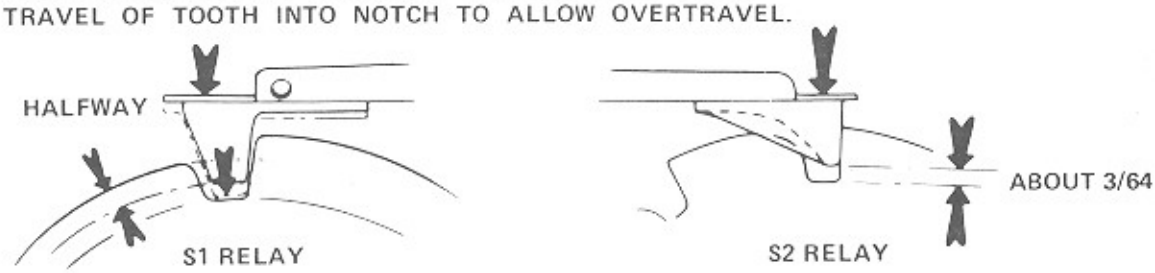
1. Slowly bottom sprag relay S1 tooth in a sprag wheel detent while observing relay contacts.

2. Check that contacts make before break halfway down into detent. Bend contact arms as required.

3. Repeat steps a and b for sprag relay S2. The contacts should make and break about 3/64 inch from detent bottom.



CONTACT SHOULD MAKE OR BREAK AT THIS POINT OF DOWN-WARD TRAVEL OF TOOTH INTO NOTCH TO ALLOW OVERTRAVEL.

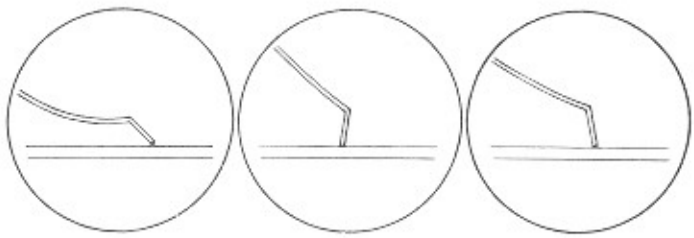


SEARCH WIPER ADJUSTMENTS
Adjust Wiper Blade Contact Force

1. Loosen wiper arm hub setscrew and back wiper arm assembly away from commutator board.

2. Move wiper arm assembly toward board until blades just touch segments, then move wiper arm assembly toward circuit board 1/16- to 1/32-inch. The blades should be formed as shown.

3. Check wiper position on segments, then tighten hub setscrew.



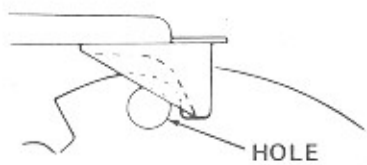
Position Inside (Letter) Wiper On Commutator Board

1. Bottom sprag relay S2 tooth in sprag wheel notch closest to sprag wheel hole.

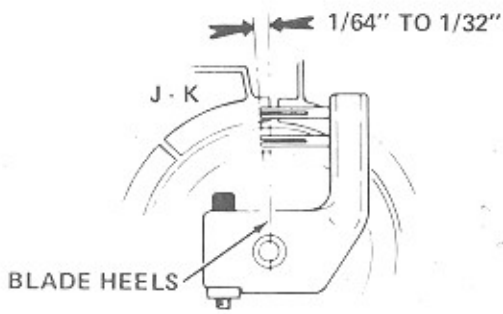
2. Check that outer wiper on inside circuit board is positioned on segment J-K. Segment J-K is located o the left of the board top center (facing the circuit board back side).

3. If wiper arm and wipers of inside circuit board are not properly aligned as shown, loosen hub setscrew, and while holding sprag relay S2 tooth in position as in step a, rotate wiper arm assembly to align wipers.

4. Tighten setscrew.



NOTE: WHEN CHANGING POSITION OF WIPER ARM ASSEMBLY BE SURE TO MAINTAIN PROPER CONTACT PRESSURE

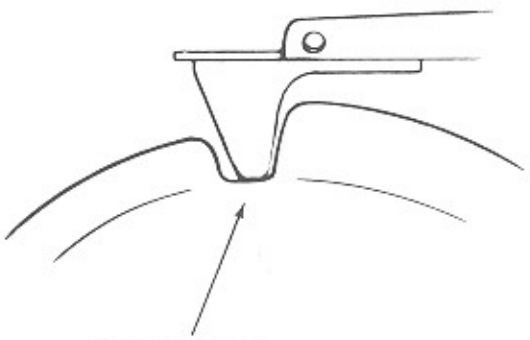


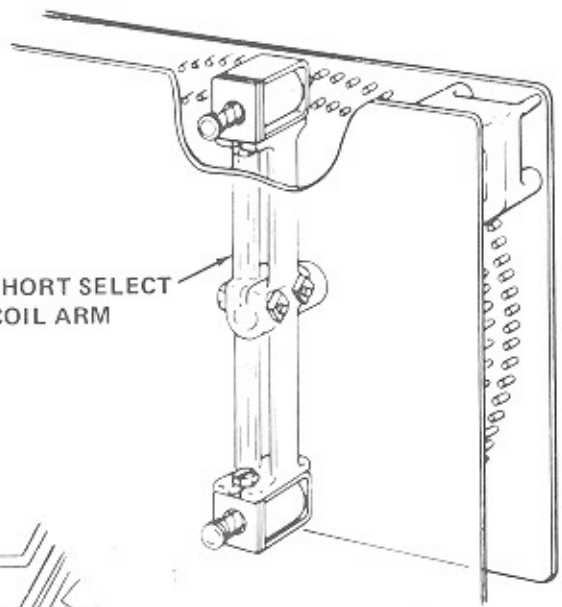
SEARCH WIPER ADJUSTMENTS (CONTINUED)

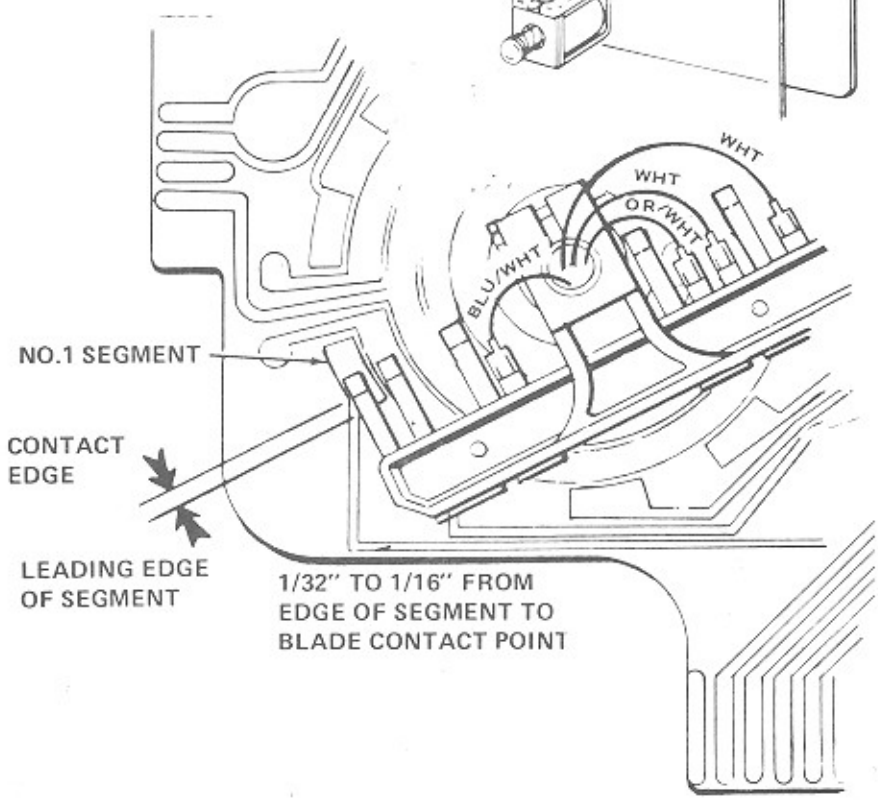
Position Outside (Number) On Commutator Board.

1. Bottom sprag relay S1 tooth in sprag wheel notch. Check that short select coil arm is up.
2. Check that wiper arm side with three blades on it is positioned on segment 1, as shown.
3. If adjustment is necessary, loosen the hub setscrew and, while holding sprag relay S1 tooth in position as in step 1, rotate wiper arm assembly to align wipers.
4. Tighten setscrews.

NOTE: WHEN CHANGING POSITION OF WIPER ARM ASSEMBLY, BE SURE TO MAINTAIN PROPER CONTACT PRESSURE.







SELECT COIL ADJUSTMENTS
Plunger-To-Pin Alignment

1. Bottom sprag relay S1 (numbers) tooth in any number detent.

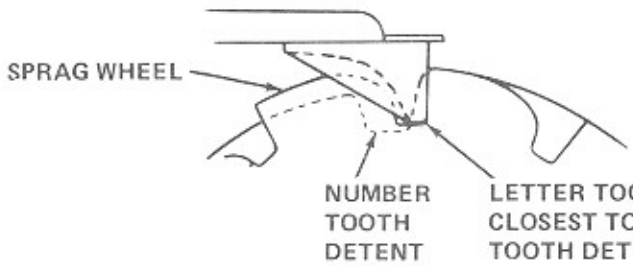
2. Bottom sprag relay S2 (letters) tooth in sprag wheel detent closest to the chosen number detent.

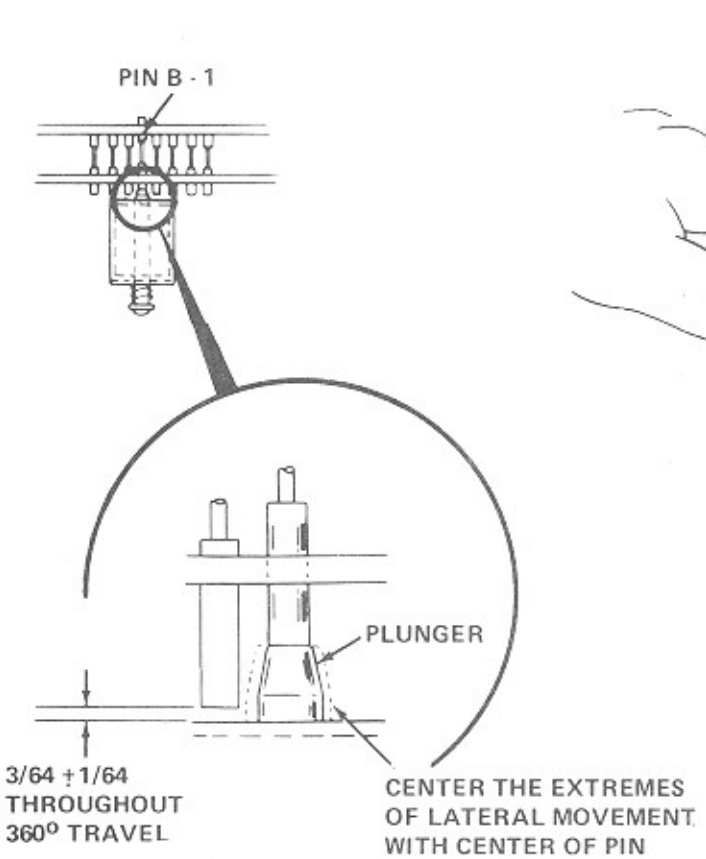
3. Push out the pins above B-1 to facilitate viewing.

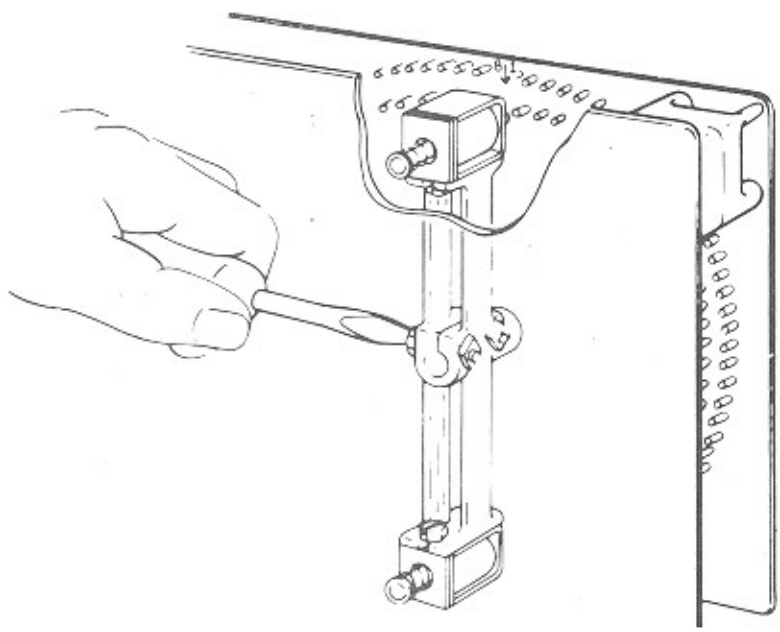
4. Check that select coil plunger on short select coil arm is aligned with pin B-1 on pinwheel assembly.

5. If adjustment is required, loosen select coil arm assembly mounting screws just enough to center plunger over pin B-1 without moving forward or back along drive shaft.

6. Check for a clearance of 3/64 ± 1/64 inch between the coil frames and pins for 360-degree select coil arm travel.

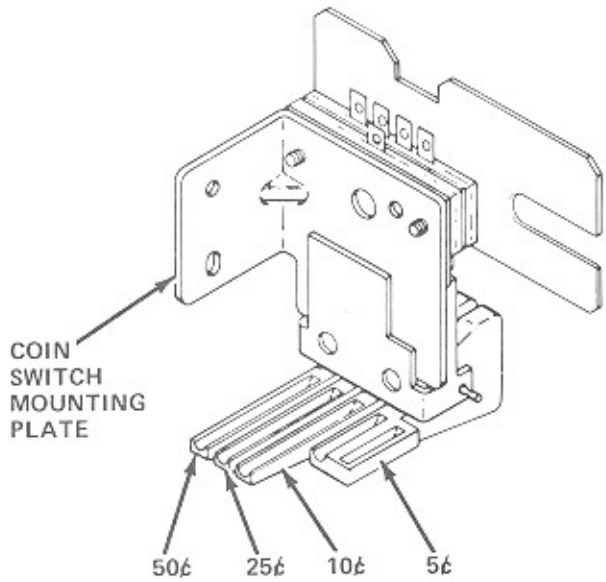






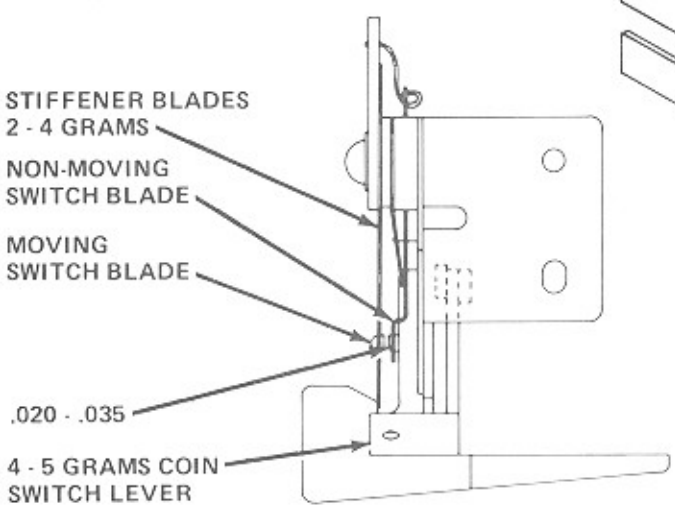
COIN SWITCH ADJUSTMENTS
Operational Check

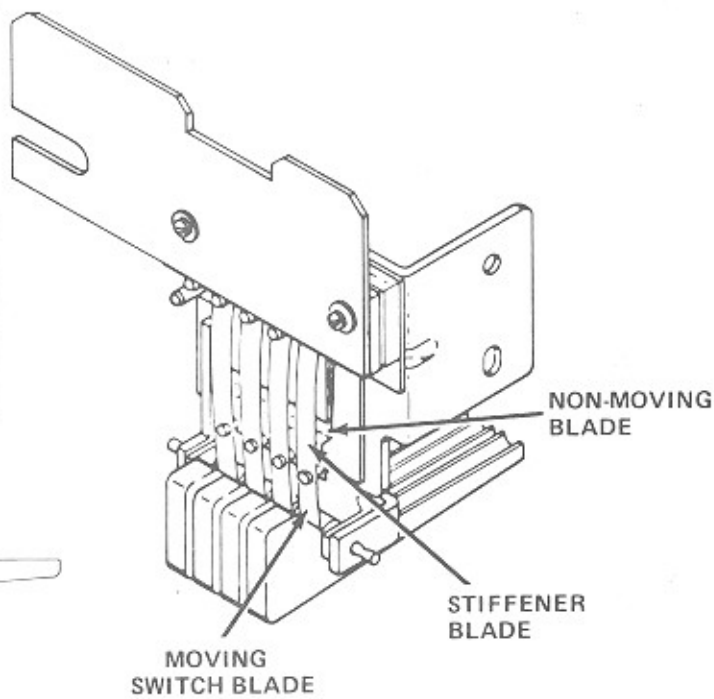
1. Hold plastic coin switch lever in normal position and drop a coin through slug rejector.
2. When the coin comes to rest on the lever, release the lever slowly.
3. Check that the weight of the coin operates the lever enough to close the coin switch and allow the coin to fall free.
4. Repeat steps a, b, and c for other three levers.



Contact Pressure And Gap

1. Check that each moving switch blade pushes against its lever with 4- to 5-grams force to hold lever against cushion.
2. Check that each non-moving blade pushes against its stiffener blade with 2- to 4-grams force.
3. Adjust contact pressure by bending contact blade near fibre insulator.
4. Check that gap between contacts at each switch is 0.020 to 0.035-inch (about 1/32).
5. Adjust gap by bending stiffener blade.





REPAIR AND REPLACEMENT

Most of the repair and replacement procedures for the phonograph are of an obvious nature and may be performed without the use of special tools and techniques. Before attempting to perform any repair or replacement of parts, check for obvious faults as described on page 4-1.

When replacing a part, use only the correct ROWE part. Refer to the Parts Catalog section manual for correct ROWE part number and description. Order all parts from your authorized ROWE Distributor.

TESTING TRANSISTORS

Test transistors using a volt-ohm-milliameter as follows:

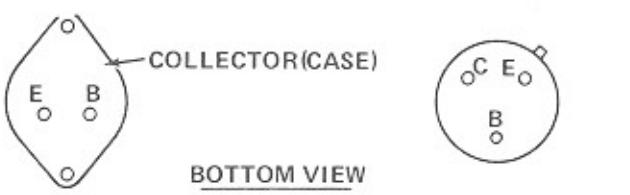
1. Set the meter function switch to OHMS and the range switch to a medium scale (such as X10 on Simpson 260).

2. Connect ohmmeter to transistor leads to check NPN silicon transistors as follows:

NOTE

SOME METERS USE THE BLACK OR NEGATIVE LEAD AS THE POSITIVE LEAD FOR OHMS SCALE, TRIPLET BEING ONE OF THESE.

+ to emitter - to collector	- no reading
+ to collector - to emitter	- no reading
+ to base - to collector	- low reading (about 500 ohms)
+ to collector - to base	- no reading
+ to emitter - to base	- no reading
+ to base - to emitter	- low reading (about 500 ohms)



TO3
POWER TRANSISTOR

TO5
DRIVER TRANSISTOR

TRANSISTOR LEAD LOCATION

3. With positive meter lead on collector and negative lead on emitter, touch base to collector. Check that the meter shows a low reading to indicate that the transistor is conducting.

4. All previous tests indicate a good transistor Any deviation from these conditions indicates a defective transistor.

5. For PNP transistors, reverse the polarities and proceed as in the previous steps.

TESTING DARLINGTON POWER TRANSISTORS

Test Darlington transistors using a volt-ohm-milliameter as follows:

1. Set the meter function switch to ohms, and the range switch to X1 (on Simpson 260) for scale.

2. Connect ohmmeter to transistor leads to check NPN silicon Darlington power transistors as follows:

NOTE

SOME METERS USE THE BLACK OR NEGATIVE LEAD AS THE POSITIVE LEAD FOR OHMS SCALE, TRIPLET BEING ONE OF THESE.

+ to emitter - to collector	- Low reading
+ to collector - to emitter	- No reading
+ to base - to collector	- Low reading
+ to collector - to base	- No reading
+ to emitter - to base	- No reading
+ to base - to emitter	- Low reading

3. With positive meter lead on the collector and negative lead on emitter, touch the base to the collector. Check that the meter shows a low reading to indicate that the transistor is conducting.

4. For PNP transistors, reverse the polarities and proceed as in the previous steps.

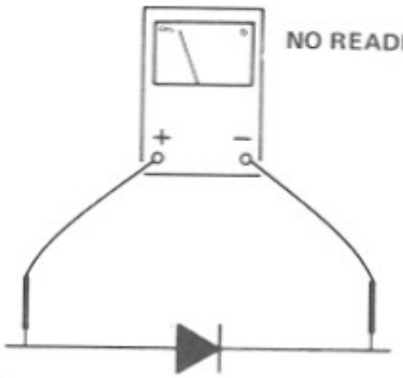
Test silicon diodes as follows:

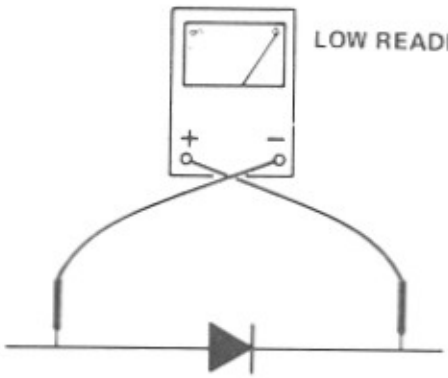
1. Set the meter function switch to OHMS and the range switch to a medium scale.

2. Connect the diode as shown.

NOTE

CONNECTIONS MAY VARY WITH VARIOUS TYPES OF METERS. THE IMPORTANT THING TO REMEMBER IS THAT THE DIODE SHOULD INDICATE NO READING WITH THE LEADS CONNECTED ONE WAY AND A LOW READING WHEN CONNECTED IN THE OPPOSITE POLARITY.





DIODE TEST HOOKUP

REPLACING DARLINGTON POWER TRANSISTORS

Fuses mounted on driver boards on underside of amplifier serve a diagnostic function; an open fuse indicates a foiled darlington power transistor, Q1 or Q2. Replace only the transistor adjacent to the open fuse. Using the following procedure:

64 Watt Amplifier

1. Remove open fuse.

2. Remove phillips head screw and nut holding transistor to heat sink.

3. Pull transistor from socket, being sure to retain mica insulator under transistor.

4. Apply Thermal Joint Compound (Rowe Spec 53) to BOTH sides of mica insulator and place insulator against heat sink.

5. Plug new transistor into socket and replace screw and nut. Do not overtighten.

CAUTION

DIRECT CONTACT BETWEEN OUTPUT TRANSISTOR AND HEAT SINK WILL DESTROY TRANSISTOR. INSULATE AS DIRECTED.

6. Install new 2 amp fuse.

120 Watt Amplifier

1. Remove open fuse.

2. Locate correct transistor to be replaced. This will be transistor on top of heat sink assembly directly above the open fuse.

3. Remove two phillips head screws holding transistor. Be sure to retain mica insulator under transistor.

4. Apply Thermal Joint Compound to BOTH sides of mica insulator and place insulator in position on heat sink.

5. Install new transistor with 2 screws. Tighten firmly but do not overtighten. Note Caution above.

6. Install new 5 amp fuse.

SECTION 3 - ROUTINE SERVICE

GENERAL

This section contains instructions to enable to route man to perform routine service tasks such as changing records, making collections, and cabinet cleaning.

CHANGING RECORDS

The phonograph will play both 45 rpm and 33 rpm (Little LP) records. If only 45 rpm records will be played, order and install hub spacer, part no. 725-01214. Load records as follows:

1. Unlock and open top door.
2. Use scan switch to position magazine slot to the left or right of the transfer arm.
3. Install record in magazine as shown.

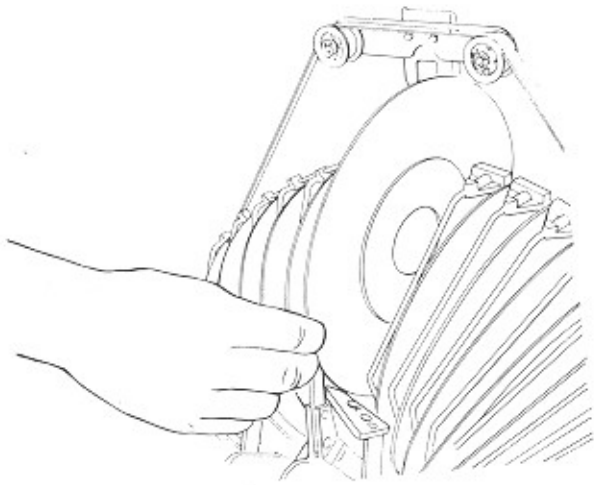


FIGURE 3-1 CHANGING RECORDS

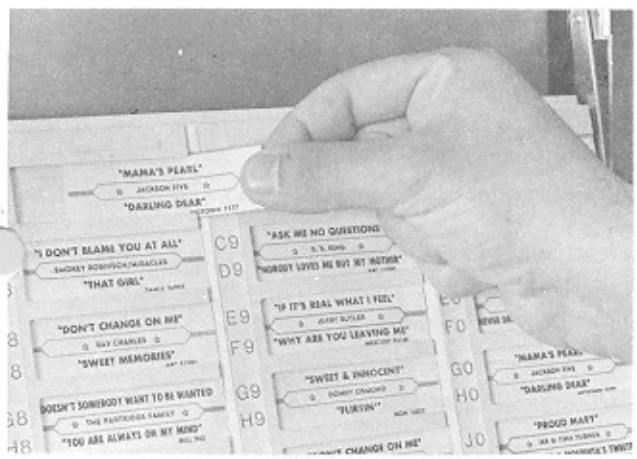


FIGURE 3-2 CHANGING TITLE STRIPS

REMOVING CASH BAG

Remove the cash bag from the bottom right hand side of the cabinet in the following manner:

1. Unlock cash bag door and pull door away from cabinet.
2. Slide cash bag straight out on its runners.

CHANGING TITLE STRIPS

Each time new records are installed, corresponding title strips must also be installed. Install the title strips as follows:

1. Open top door and swing up title panel as shown on page 2-1, figure 2-1.
2. Install new title strips by sliding the strips into the open right ends of the racks as shown.
3. Check to make sure that each title strip corresponds to the correct record.

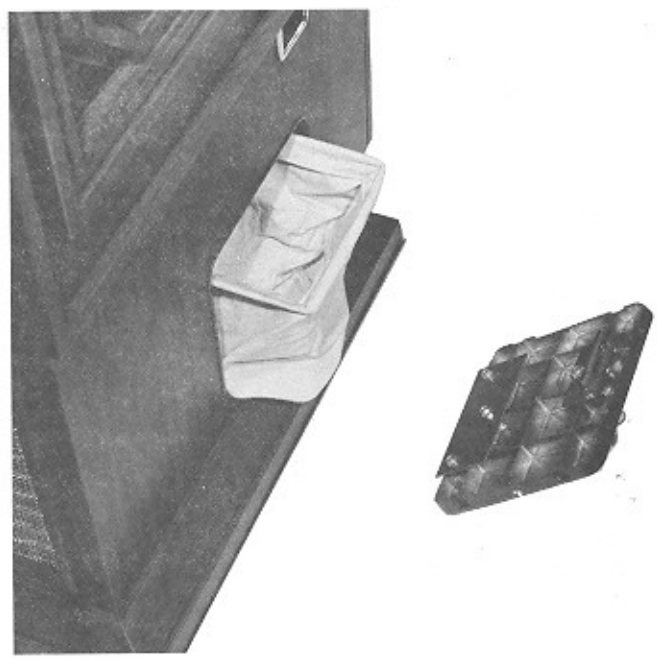


FIGURE 3-3 REMOVING CASH BAG

READING AND RESETTING POPULARITY METER

The popularity meter keeps a tally on the number of times each record is played. Reading the popularity meter is the best way to tell which records are played most often or which records should be changed.

Read and reset the popularity meter as follows:

1. Determine which records have been played most by observing the popularity meter pins. The pins nearest the reset plate have been played most often. Each pin registers a maximum of thirty plays. Each play moves the pin 1/32-inch toward the reset plate.

2. Reset the popularity meter by pushing the reset plate against the play meter.

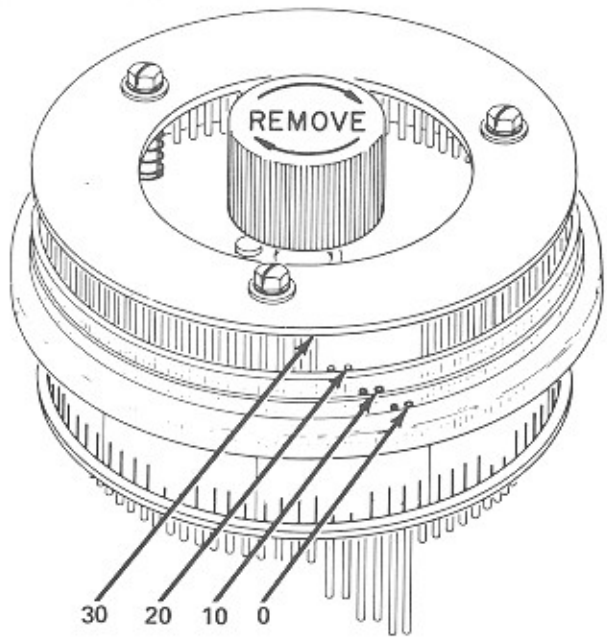


FIGURE 3-4 READING POPULARITY METER

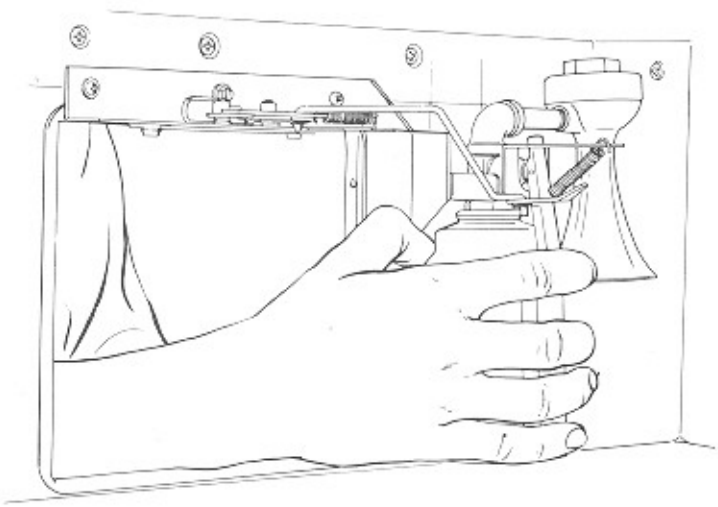


FIGURE 3-5 INSTALLING NEW FREON CAN

REARMING BURGLAR ALARM

1. Open cash box door and remove cash bag.

2. Unscrew used Freon can. Avoid Freon contact with skin and eyes.

WARNING

KEEP CAN POINTED AWAY FROM YOU
DO NOT SHAKE FROZEN CANS

3. Reset valve lever down until it clicks into place as shown.

4. Install new Freon can and screw firmly into place.

REPLACING LAMPS

Replacing cabinet lamps immediately if they burn out helps to maintain the attractive appearance of the phonograph. Fluorescent tubes, starters and incandescent lamps are all easily accessible within the cabinet, with two 25 watt fluorescent tubes on the front door, two 8 watt fluorescents tubes, one on each side of the cabinet, and the incandescent lamps inside the top access door.

Remove fluorescent lamps as follows:

1. Press tab on one lamp socket.
2. Push lamp against opposite socket and swing lamp out.

LAMP SOCKETS ARE QUICK RELEASE TYPE - DO NOT ROTATE LAMP IN SOCKET.

To gain access to credit lamps (incandescents), open top access door. (This lock uses same key as top door lock so only one key is required.) Credit lamps are located immediately behind the credit window.

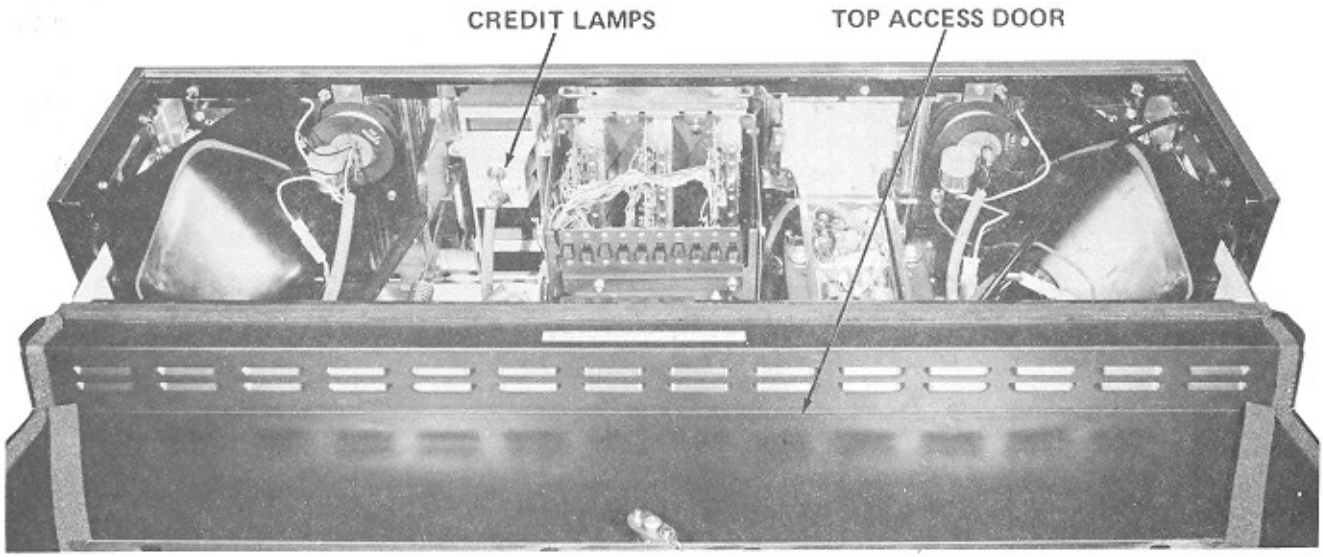
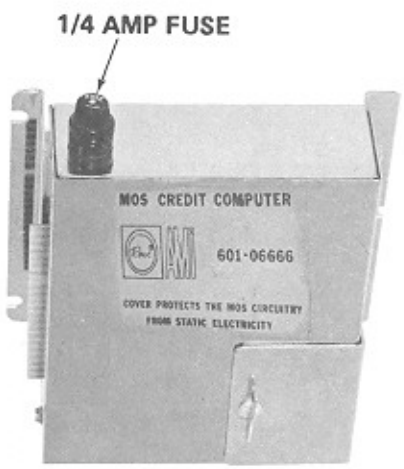


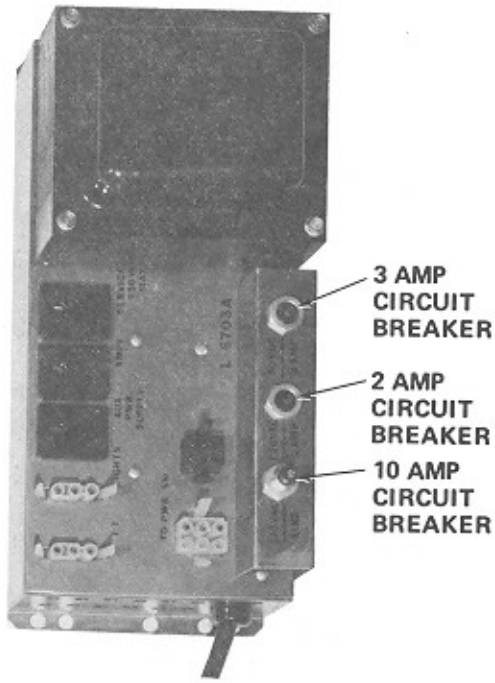
FIGURE 3-6 LOCATION OF CREDIT LAMPS

CABINET CLEANING

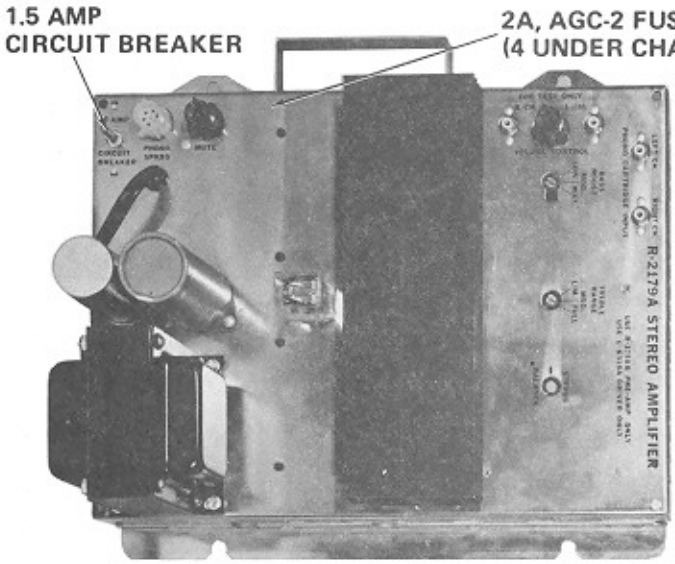
ACTION REQUIRED	PROCEDURE
1. Clean Glass	1. a. Clean all glass with a paper towel and a glass cleaner such as Windex. b. Dry with a clean, lint-free cloth.
2. Clean painted wood and metal surfaces	2. a. Clean all painted wood and metal surfaces with mild soap and water. DO NOT USE SOLVENTS. b. Apply a good quality auto or furniture wax to protect the finish.
3. Clean chrome trim	3. a. Use a damp or dry cloth to remove any dust or dirt. b. Use mild soap and water to remove stubborn deposits. Do not use strong detergents or abrasives of any kind.
4. Clean plastic trim	4. a. Wipe all plastic surfaces with a damp or dry cloth only. DO NOT USE SOLVENTS.
5. Clean electrical components	5. a. Clean all electrical components with a clean, dry, lint-free cloth or a soft bristled brush only.



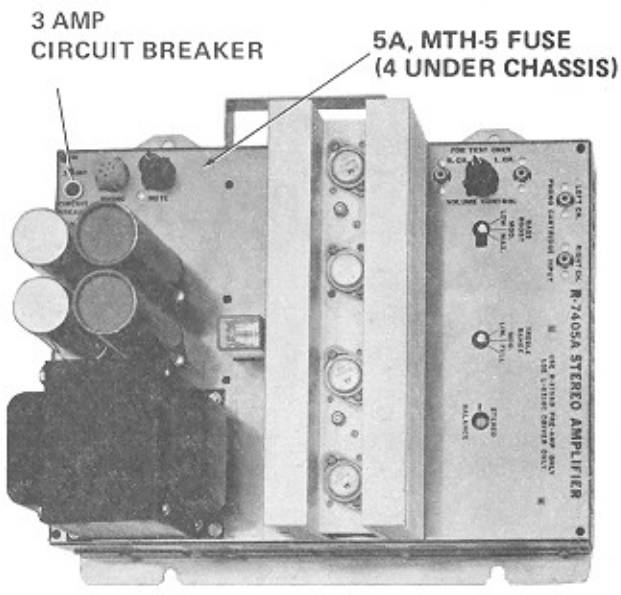
CREDIT COMPUTER



JUNCTION BOX



64 WATT AMPLIFIER



120 WATT AMPLIFIER

FIGURE 3-7. LOCATION OF FUSES AND CIRCUIT BREAKERS

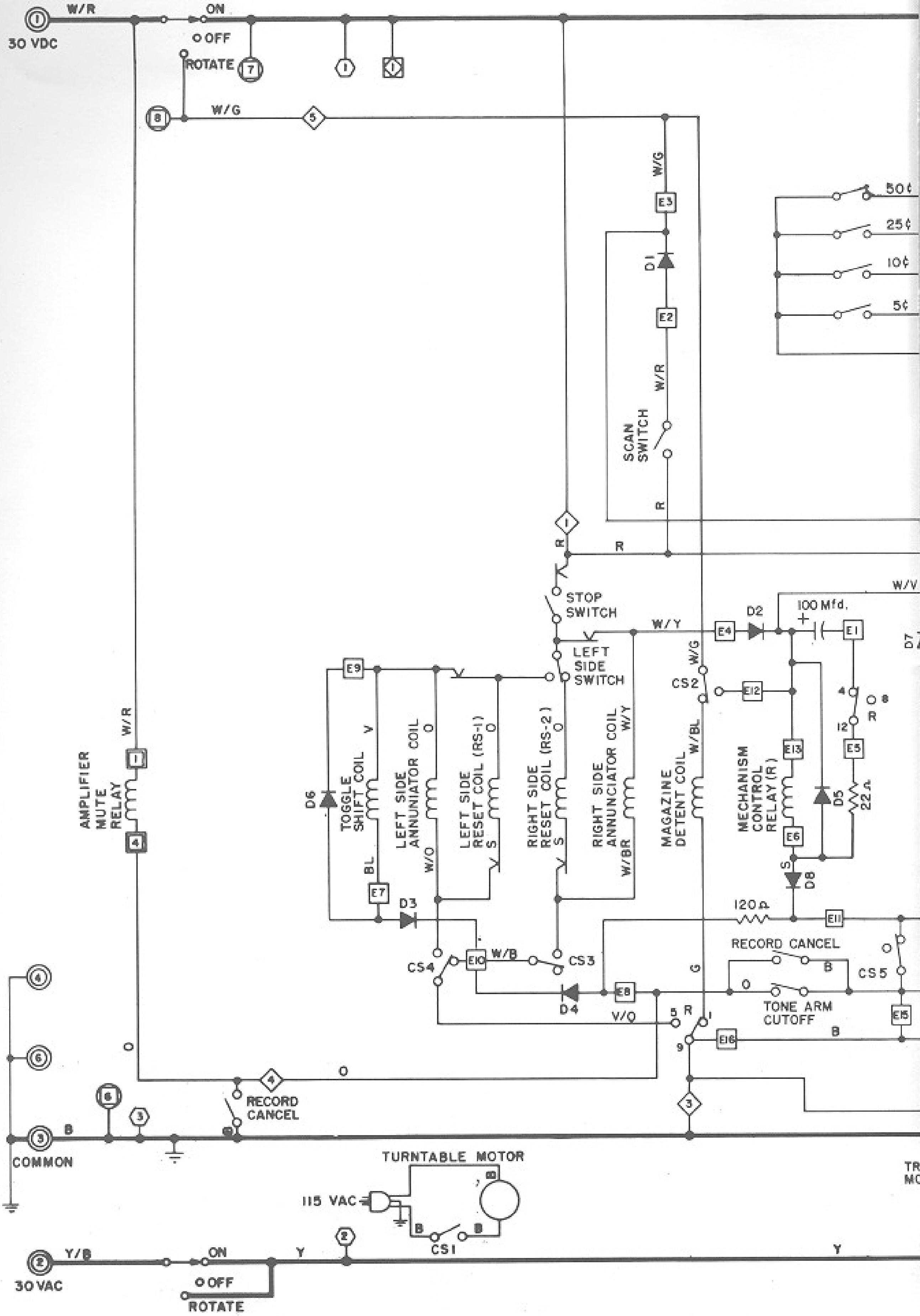
FOR THIS SECTION, SELECT **VIEW**(TOP TOOL BAR),THEN CLICK ON **PAGE LAYOUT**,THEN **FACING**

SECTION 6-SCHEMATIC & WIRING DIAGRAMS

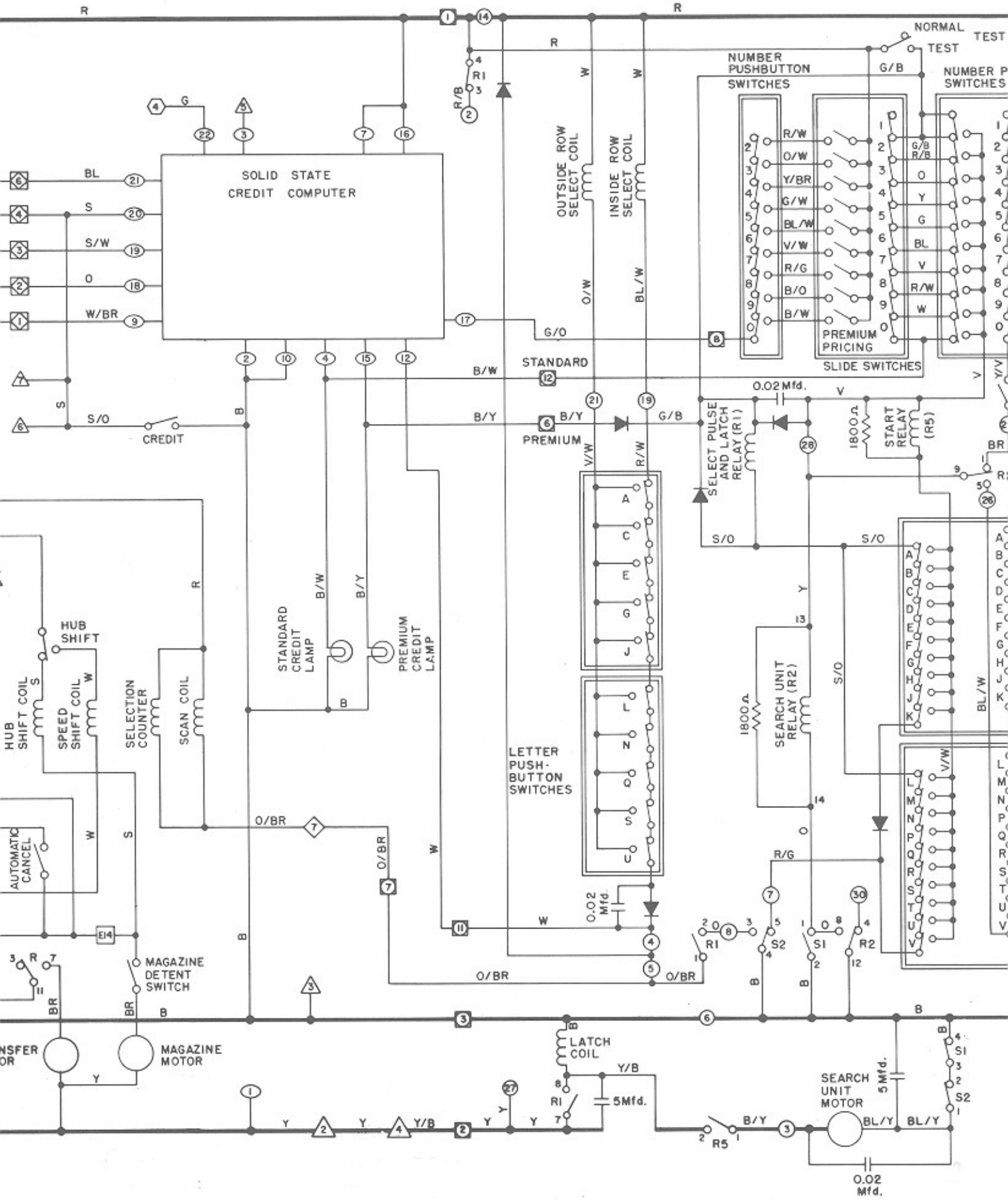
GENERAL

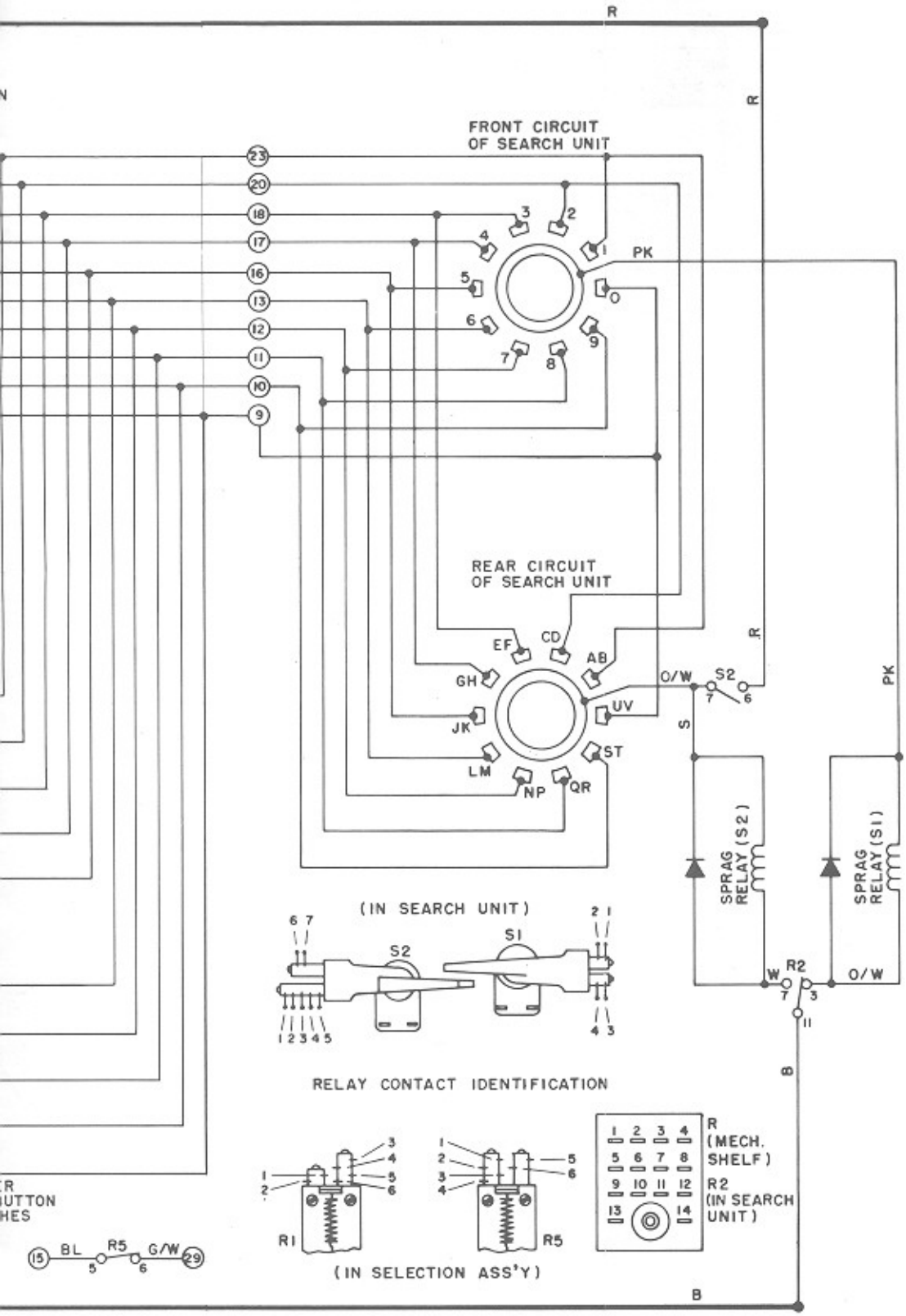
This section contains complete schematic and wiring diagrams for the phonograph and its major components and systems. Use this section in conjunction with Section 4 - Troubleshooting to isolate and correct phonograph malfunctions.

TABLE OF CONTENTS



30 VDC
W/R
ON
OFF
ROTATE
W/G
50¢
25¢
10¢
5¢
E3
D1
E2
W/R
SCAN SWITCH
R
STOP SWITCH
W/Y
E4
D2
100 Mfd.
E1
D7
W/V
LEFT SIDE SWITCH
CS2
E12
E9
TOGGLE SHIFT COIL
LEFT SIDE ANNUNIATOR COIL
LEFT SIDE RESET COIL (RS-1)
RIGHT SIDE RESET COIL (RS-2)
RIGHT SIDE ANNUNCIATOR COIL
MAGAZINE DETENT COIL
MECHANISM CONTROL RELAY (R)
E13
E5
D5
22 Ω
E6
D8
D6
E7
D3
AMPLIFIER MUTE RELAY
120 Ω
E11
RECORD CANCEL
CS5
CS4
E10
W/B
CS3
E8
D4
TONE ARM CUTOFF
E15
V/O
E16
RECORD CANCEL
COMMON
TURNTABLE MOTOR
115 VAC
CS1
30 VAC
Y/B
Y


SOLID STATE
CREDIT COMPUTER
NORMAL
TEST
NUMBER
PUSHBUTTON
SWITCHES
OUTSIDE ROW
SELECT COIL
INSIDE ROW
SELECT COIL
PREMIUM
PRICING
SLIDE SWITCHES
STANDARD
PREMIUM
CREDIT
0.02 Mfd.
1800 Ω
START
RELAY
(R5)
SELECT PULSE
AND LATCH
RELAY (R1)
HUB
SHIFT
HUB
SHIFT COIL
SPEED
SHIFT COIL
SELECTION
COUNTER
SCAN COIL
STANDARD
CREDIT
LAMP
PREMIUM
CREDIT
LAMP
LETTER
PUSH-
BUTTON
SWITCHES
SEARCH UNIT
RELAY (R2)
AUTOMATIC
CANCEL
MAGAZINE
DETENT
SWITCH
MAGAZINE
MOTOR
LATCH
COIL
5Mfd.
SEARCH
UNIT
MOTOR
R1
R2
S1
S2
R5



MODEL R-74 PHONOGRAPH SCHEMATIC DIAGRAM

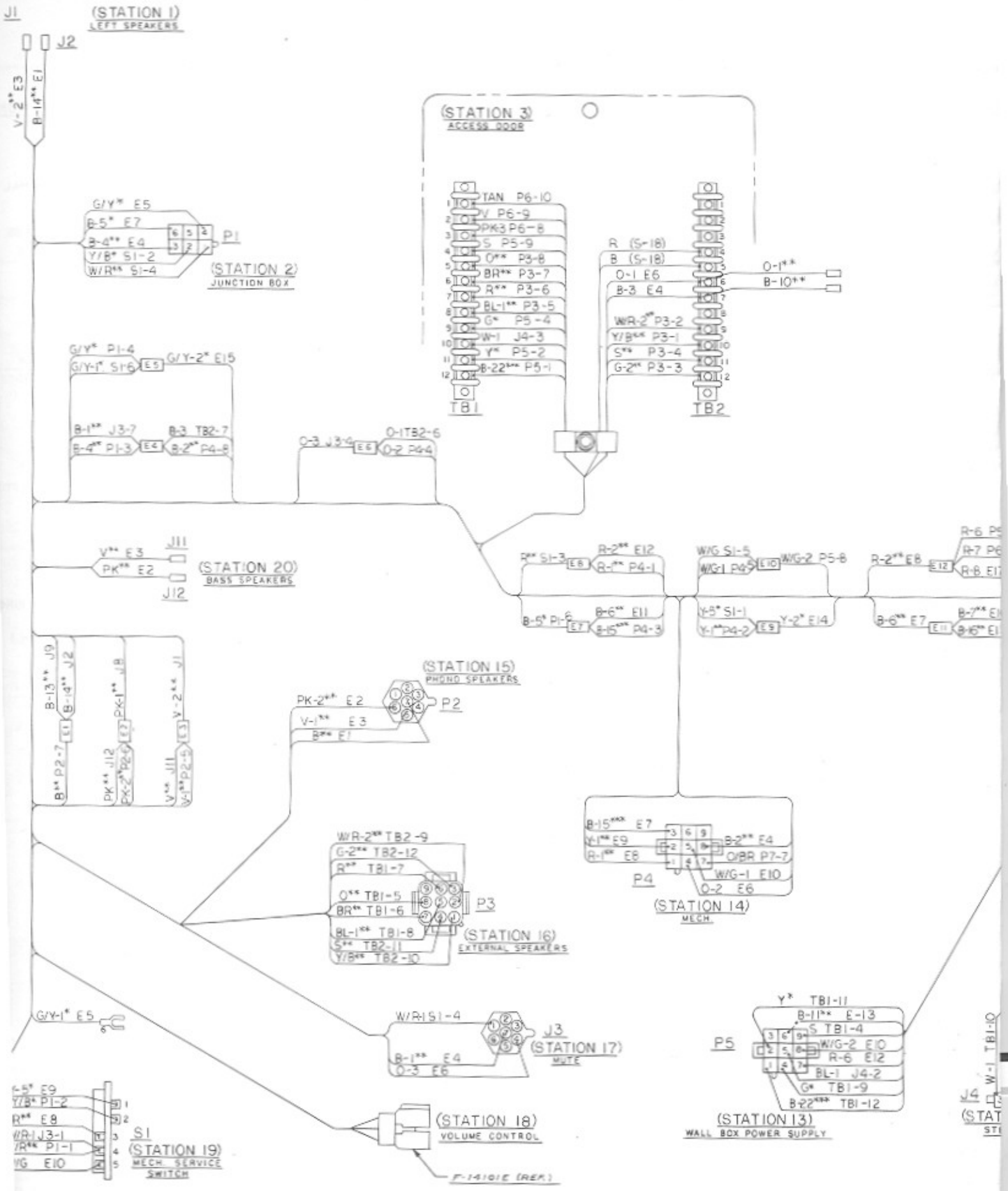
CONNECTOR IDENTIFICATION

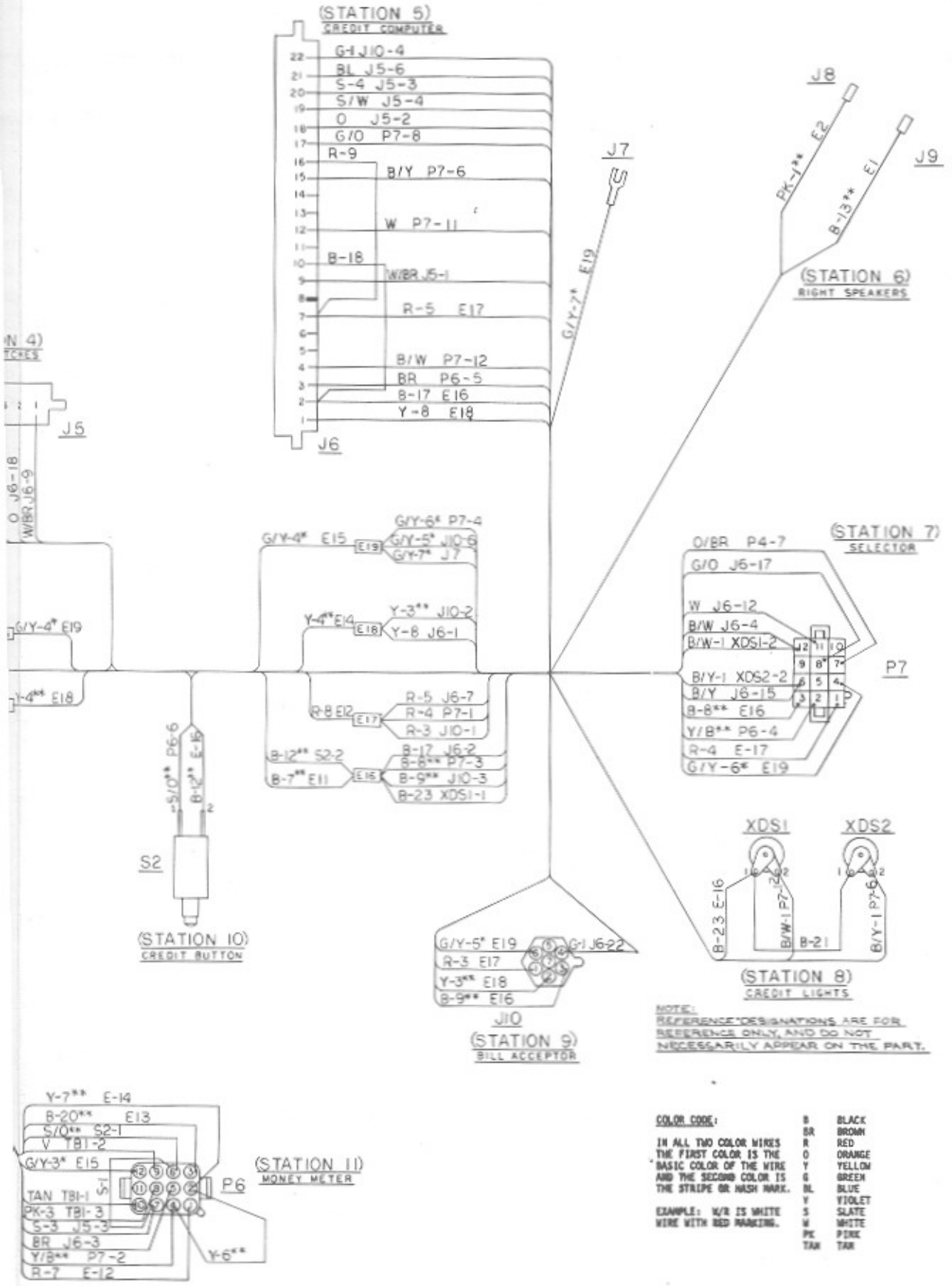
- MONEY METER
- MECHANISM TERMINAL BOARD TERMINALS
- MAIN PHONO HARNESS TO MECHANISM
- SEARCH UNIT EDGE CONNECTOR
- MAIN HARNESS TO SELECTOR ASS'Y
- CREDIT COMPUTER EDGE CONNECTOR
- COIN SWITCHES TO MAIN HARNESS
- MAIN HARNESS TO DOLLAR BILL ACCEPTOR
- AMPLIFIER
- JUNCTION BOX
- STOP SWITCH SLIP RINGS
- CS CAM SWITCH (MECH.)
- WALL BOX POWER SUPPLY

WIRE COLOR CODE

- B - BLACK
- BL - BLUE
- BR - BROWN
- G - GREEN
- O - ORANGE
- PK - PINK
- R - RED
- S - SLATE
- V - VIOLET
- W - WHITE
- Y - YELLOW

FIGURE 6-1. PHONOGRAPH SCHEMATIC DIAGRAM, MODEL R-74


J1
(STATION 1)
LEFT SPEAKERS
J2
V-2** E3
B-14** E1
(STATION 3)
ACCESS DOOR
TAN P6-10
V P6-9
PK-3 P6-8
S P5-9
O** P3-8
BR** P3-7
R** P3-6
BL-1** P3-5
G* P5-4
W-1 J4-3
Y* P5-2
B-22*** P5-1
TB1
R (S-18)
B (S-18)
O-1 E6
B-3 E4
W/R-2** P3-2
Y/B** P3-1
S** P3-4
G-2** P3-3
TB2
O-1**
B-10**
G/Y* E5
B-5* E7
B-4** E4
Y/B* S1-2
W/R** S1-4
P1
(STATION 2)
JUNCTION BOX
G/Y* P1-4
G/Y-1* S1-6
G/Y-2* E15
B-1** J3-7
B-4** P1-3
B-3 TB2-7
B-2** P4-8
O-3 J3-4
O-1 TB2-6
O-2 P4-4
V** E3
PK** E2
J11
J12
(STATION 20)
BASS SPEAKERS
R** S1-3
R-2** E12
R-1** P4-1
W/G S1-5
W/G-1 P4-5
W/G-2 P5-8
R-2** E8
R-6 P5
R-7 P6
R-8 E17
B-5* P1-6
B-6** E11
B-15*** P4-3
Y-5* S1-1
Y-1** P4-2
Y-2* E14
B-6** E7
B-7** E16
B-16** E1
B-13** J9
B-14** J2
B** P2-7
PK-1** J8
PK-2** P2-6
PK** J12
V-2** J1
V-3** P2-5
V** J11
(STATION 15)
PHONO SPEAKERS
PK-2** E2
V-1** E3
B** E1
P2
B-15*** E7
V-1** E9
R-1** E6
B-2** E4
O/BR P7-7
W/G-1 E10
O-2 E6
P4
(STATION 14)
MECH
W/R-2** TB2-9
G-2** TB2-12
R** TB1-7
O** TB1-5
BR** TB1-6
BL-1** TB1-8
S** TB2-11
Y/B** TB2-10
P3
(STATION 16)
EXTERNAL SPEAKERS
G/Y-1* E5
W/R-1 S1-4
B-1** E4
O-3 E6
J3
(STATION 17)
MUTE
Y* TB1-11
B-11** E-13
S TB1-4
W/G-2 E10
R-6 E12
BL-1 J4-2
G* TB1-9
B-22*** TB1-12
P5
(STATION 13)
WALL BOX POWER SUPPLY
(STATION 18)
VOLUME CONTROL
F-14101E (REF.)
S1
(STATION 19)
MECH. SERVICE SWITCH



NOTE:
REFERENCE DESIGNATIONS ARE FOR REFERENCE ONLY, AND DO NOT NECESSARILY APPEAR ON THE PART.

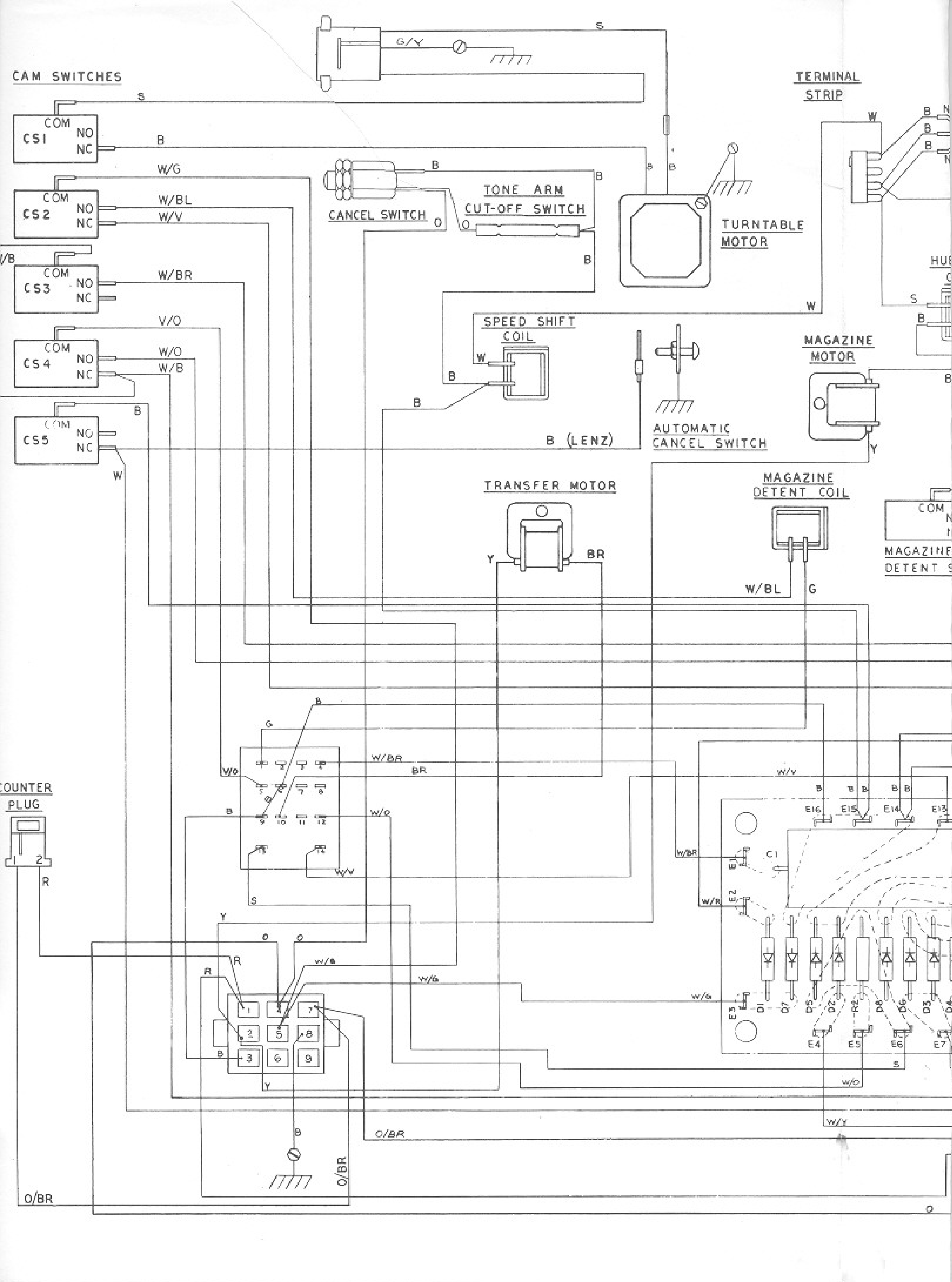
COLOR CODE:

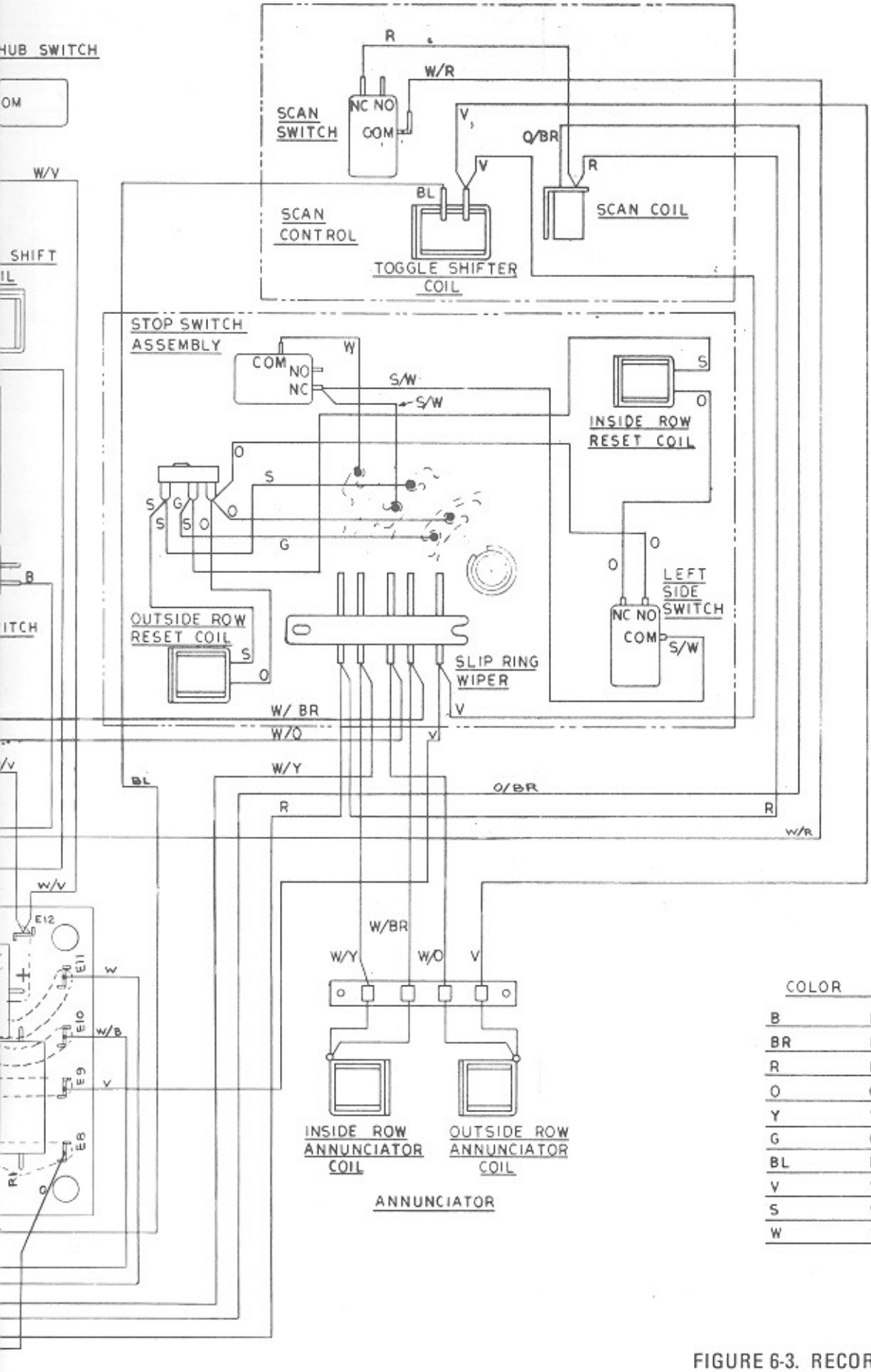
IN ALL TWO COLOR WIRES THE FIRST COLOR IS THE BASIC COLOR OF THE WIRE AND THE SECOND COLOR IS THE STRIPE OR MASH MARK.

EXAMPLE: W/R IS WHITE WIRE WITH RED MARKING.

B	BLACK
BR	BROWN
R	RED
O	ORANGE
Y	YELLOW
G	GREEN
BL	BLUE
V	VIOLET
S	SLATE
W	WHITE
PK	PINK
TAN	TAN

FIG-2
PHONO HARNESS DIAGRAM


CAM SWITCHES
CS1
CS2
CS3
CS4
CS5
COM
NO
NC
CANCEL SWITCH
TONE ARM CUT-OFF SWITCH
TURNTABLE MOTOR
TERMINAL STRIP
SPEED SHIFT COIL
AUTOMATIC CANCEL SWITCH
B (LENZ)
MAGAZINE MOTOR
TRANSFER MOTOR
MAGAZINE DETENT COIL
MAGAZINE DETENT S
COUNTER PLUG
W/G
W/BL
W/V
W/BR
V/O
W/O
W/B
G/Y
O/BR
E16
E15
E14
E13
E1
E2
E3
E4
E5
E6
E7
C1
D1
D7
D5
D2
R2
D8
D6
D3
D4

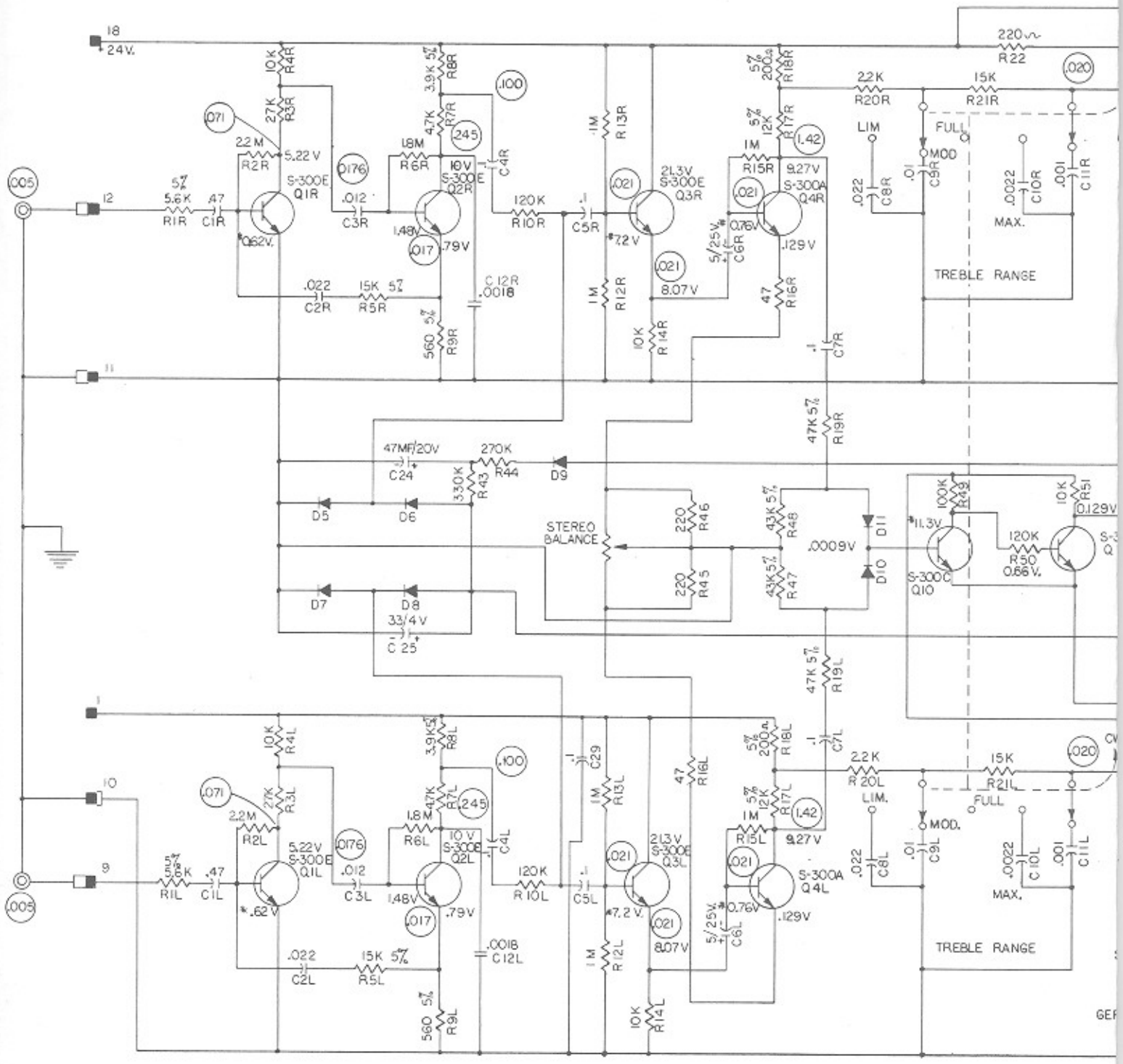


COLOR	CODE
B	BLACK
BR	BROWN
R	RED
O	ORANGE
Y	YELLOW
G	GREEN
BL	BLUE
V	VIOLET
S	SLATE
W	WHITE

IN ALL TWO COLOR WIRES, THE FIRST COLOR IS THE BASIC COLOR OF THE WIRE AND THE SECOND COLOR IS THE STRIPE OR HASH MARK.

EXAMPLE: W/R IS WHITE WIRE WITH RED MARKING.

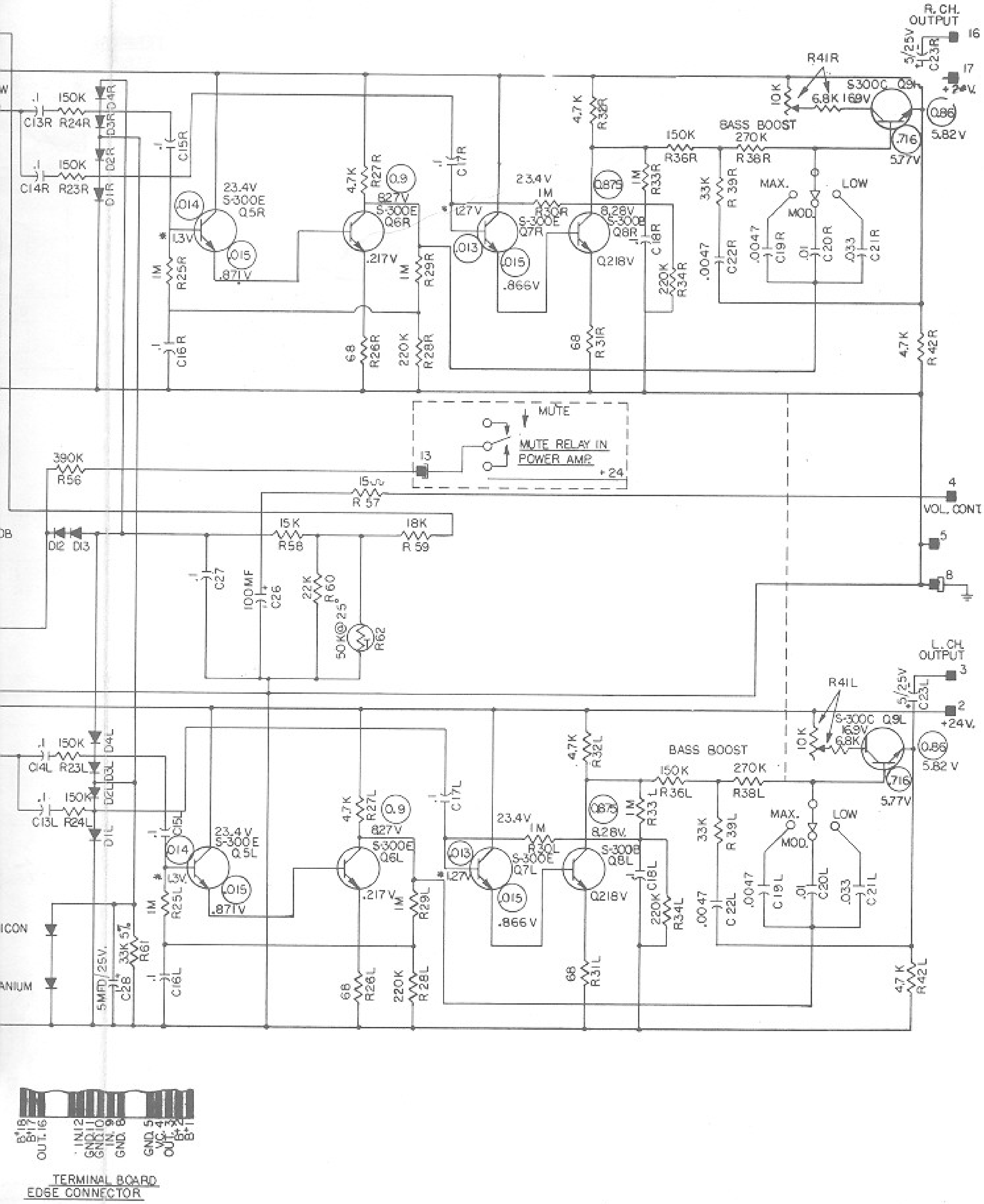
FIGURE 6-3. RECORD CHANGER WIRING DIAGRAM



NOTE:

CAPACITOR RATINGS ARE 100 V. MIN. UNLESS OTHERWISE SPECIFIED.
CAPACITOR VALUES ARE IN MFD. UNLESS OTHERWISE SPECIFIED.
A.C. SIGNAL VOLTAGE READINGS ARE ENCIRCLED & MEASURED TO CHASSIS WITH AN A.C. VTVM.
THE SIGNAL FREQUENCY IS 1 KC. VOLUME CONTROL AT MAX. TREBLE RANGE CONTROL AT FULL & BASS BOOST AT MOD.
ALL RESISTORS ARE 1/2 WATT & 10% TOL. UNLESS OTHERWISE SPECIFIED.
D.C. VOLTAGES ARE AS INDICATED BY A 11 MEG OHM VTVM & ARE APPROXIMATE FOR A 20,000 OHMS PER VOLT METER.
NO INPUT SIGNAL.
* INDICATES VOLTAGE SEVERELY AFFECTED BY LOADING OF 20,000 OHMS PER VOLT METER.

FOR ASS'Y. SEE DWG. B-3758 B



R. CH. OUTPUT
16
17
+24V.
R41R
S300C Q9R
16.9V
.86
5.82V
.716
5.77V
BASS BOOST
150K R36R
270K R38R
MAX.
MOD.
LOW
33K R39R
.0047 C22R
.0047 C19R
.01 C20R
.033 C21R
4.7K R42R
4.7K R32R
1M R33R
220K R34R
68 R31R
8.28V
S-300B Q8R
Q218V
C18R
23.4V
1M R30R
S-300E Q7R
.013
.015
.866V
1.27V
C17R
4.7K R27R
0.9
8.27V
S-300E Q6R
.217V
1M R29R
68 R26R
220K R28R
23.4V
S-300E Q5R
.014
.015
1.3V
.871V
1M R25R
.1 C16R
.1 C15R
.1 C13R 150K R24R
.1 C14R 150K R23R
D1R D2R D3R D4R
MUTE
MUTE RELAY IN POWER AMP.
13
+24
390K R56
15Ω R57
4
VOL. CONT.
5
8
D12 D13
15K R58
18K R59
.1 C27
100MF C26
22K R60
50K@25° R62
L. CH. OUTPUT
3
2
+24V.
R41L
5/25V C23L
S-300C Q9L
16.9V
6.8K
10K
.86
5.82V
.716
5.77V
BASS BOOST
150K R36L
270K R38L
33K R39L
.0047 C22L
.0047 C19L
.01 C20L
.033 C21L
4.7K R42L
4.7K R32L
1M R33L
220K R34L
68 R31L
.875
8.28V
S-300B Q8L
Q218V
C18L
23.4V
1M R30L
S-300E Q7L
.013
.015
.866V
1.27V
C17L
4.7K R27L
0.9
8.27V
S-300E Q6L
.217V
1M R29L
68 R26L
220K R28L
23.4V
S-300E Q5L
.014
.015
1.3V
.871V
1M R25L
.1 C16L
.1 C15L
.1 C14L 150K R23L
.1 C13L 150K R24L
D1L D2L D3L D4L
5MFD/25V. C28
33K 5% R61
ICON
ANIUM
B+18 B+17 OUT. 16
IN 12 GND 11 GND 10 IN 9 GND 8
GND 5 V.C. 4 OUT 3 B+2 B+1
TERMINAL BOARD EDGE CONNECTOR

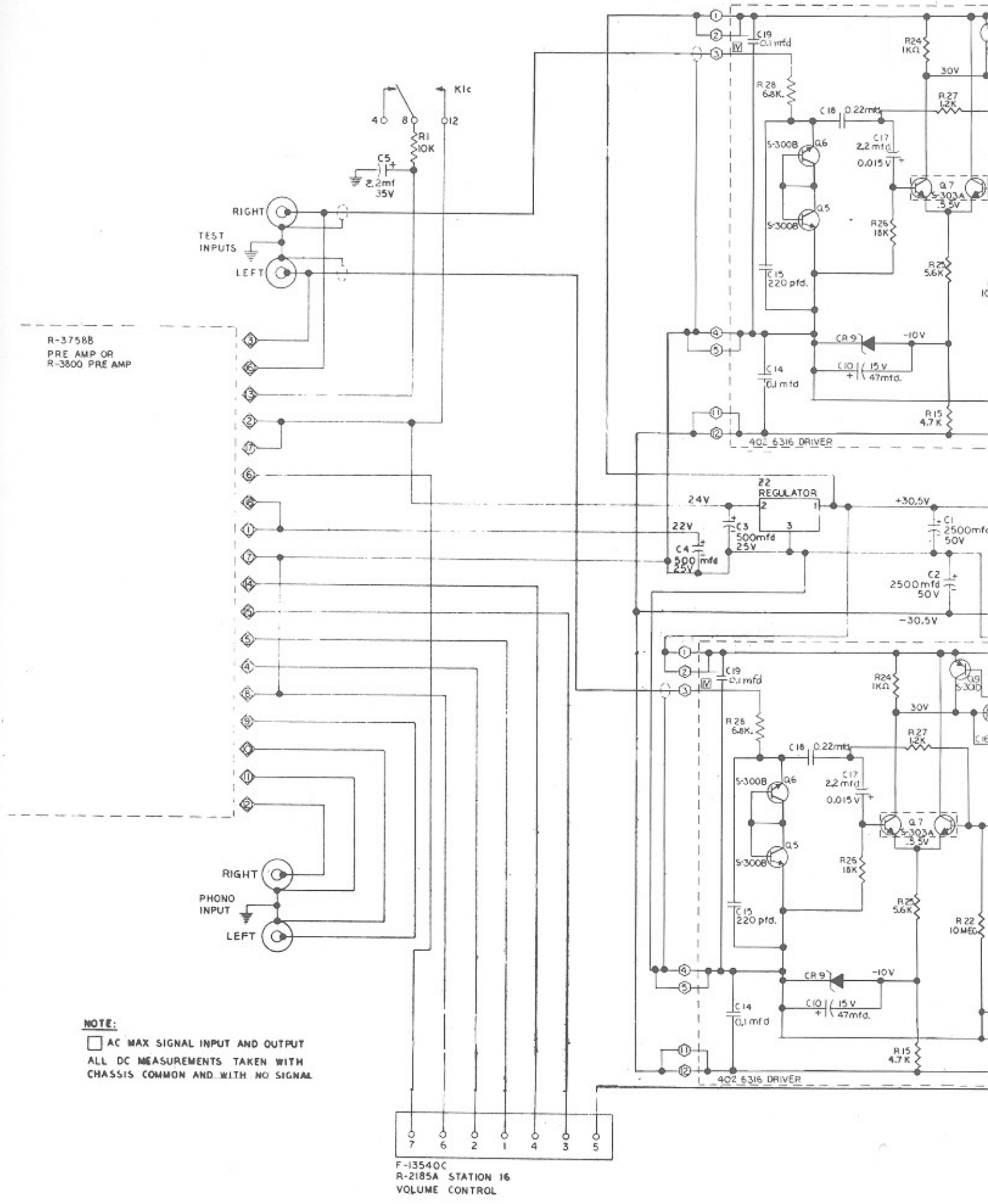
ONENT REF GNATION	DESCRIPTION		ROWE PART NO.
RE-AMPLIFIER ASSEMBLY (2 WIRE VOLUME CONTROL)	**602-03758**		
R, C1L	Capacitor, Mylar, 0.47 MFD, 100V		701-00240
R, C2L	Capacitor, Mylar, 0.022 MFD, 100V		702-00241
R, C3L	Capacitor, Mylar, 0.012 MFD, 100V		703-00241
R, C4L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C5L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C6L	Capacitor, Electrolytic, 5MFD, 25V		702-00233
R, C7L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C8L	Capacitor, Mylar, 0.022 MFD, 100V		704-00240
R, C9L	Capacitor, Mylar, 0.01 MFD, 100V		707-00240
R, C10L	Capacitor, Ceramic Disc, 0.0022 MFD, 100V		703-00224
R, C11L	Capacitor, Ceramic Disc, 0.001 MFD, 100V		702-00224
R, C12L	Capacitor, Ceramic Disc, 0.0018 MFD, 100V		712-00224
R, C13L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C14L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
, C15L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C16L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C17L	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, C18L	Capacitor, Mylar, 0.1 MFD, 100W		702-00240
R, C19L	Capacitor, Mylar, 0.0047 MFD, 100V		716-00240
R, C20L	Capacitor, Mylar, 0.01 MFD, 100V		707-00240
R, C21L	Capacitor, Mylar, 0.033 MFD, 100V		710-00240
R, C22L	Capacitor, Ceramic Disc, 0.0047 MFD, 100V		704-00224
R, C23L	Capacitor, Electrolytic, 5 MFD, 25V		702-00233
	Capacitor, Tantalum, 47 MFD, 15V		702-00251
		Alternate	702-00250
	Capacitor, Tantalum, 33 MFD, 4V		701-00251
		Alternate	701-00250
6	Capacitor, Electrolytic, 100 MFD, 25V		706-00233
7	Capacitor, Mylar, 0.1 MFD		702-00240
8	Capacitor, Electrolytic, 5 MFD, 25V		702-00233
9	Capacitor, Mylar, 0.1 MFD, 100V		702-00240
R, D1L	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
R, D2L	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
R, D3L	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
R, D4L	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
0	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
1	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
2	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
3	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
4	Diode, Silicon, (G.E. & ITT No. CD-8502)		707-00350
5	Diode, Germanium, (1N191, ITT, Sylvania, Gen'l Instr.)		701-00351
R, R1L	Resistor, Carbon, 5.6K ±5%, 1/2 W		718-00106
R, R2L	Resistor, Carbon, 2.2 Meg, 1/2 W		704-00102
R, R3L	Resistor, Carbon, 27 K, 1/2 W		724-00104
R, R4L	Resistor, Carbon, 10 K, 1/2 W		713-00102
R, R5L	Resistor, Carbon, 15 K ±5%, 1/2 W		716-00106
R, R6L	Resistor, Carbon, 1.8 Meg, 1/2 W		708-00121
R, R7L	Resistor, Carbon, 4.7K, 1/2 W		708-00104
R, R8L	Resistor, Carbon, 3.9K ±5%, 1/2 W		725-00104
R, R9L	Resistor, Carbon, 560 Ohm ±5%, 1/2 W		703-00104
OR, R10L	Resistor, Carbon, 120 K, 1/2 W		703-00106
2R, R12L	Resistor, Carbon, 1 Meg, 1/2 W		706-00102
3R, R13L	Resistor, Carbon, 1 Meg, 1/2 W		706-00102

COMPONENT REF DESIGNATION	DESCRIPTION	ROWE PART NO.
R14R, R14L	Resistor, Carbon, 10 K, 1/2 W	713-00102
R15R, R15L	Resistor, Carbon, 1 Meg, 1/2 W	706-00102
R16R, R16L	Resistor, Carbon, 47 Ohm, 1/2 W	708-00120
R17R, R17L	Resistor, Carbon, 12 K 5%, 1/2 W	714-00107
R18R, R18L	Resistor, Carbon, 200 Ohm ±5%, 1/2 W	701-00109
R19R, R19L	Resistor, Carbon, 47 K ±5%, 1/2 W	701-00102
R20R, R20L	Resistor, Carbon, 2.2 K, 1/2 W	710-00102
R21R, R21L	Resistor, Carbon, 15 K, 1/2 W	708-00106
R22	Resistor, Carbon, 220 Ohm, 1/2 W	711-00106
R23R, R23L	Resistor, Carbon, 150 K, 1/2 W	702-00102
R24R, R24L	Resistor, Carbon, 150 K, 1/2 W	702-00102
R25R, R25L	Resistor, Carbon, 1 Meg, 1/2 W	706-00102
R26R, R26L	Resistor, Carbon, 68 Ohm, 1/2 W	719-00102
R27R, R27L	Resistor, Carbon, 4.7 K 1/2 W	708-00104
R28R, R28L	Resistor, Carbon, 220 K, 1/2 W	707-00102
R29R, R29L	Resistor, Carbon, 1 Meg, 1/2 W	706-00102
R30R, R30L	Resistor, Carbon, 1 Meg. 1/2 W	706-00102
R31R, R31L	Resistor, Carbon, 68 Ohm, 1/2 W	719-00102
R32R, R32L	Resistor, Carbon, 4.7 K, 1/2 W	708-00104
R33R, R33L	Resistor, Carbon, 1 Meg, 1/2 W	706-00102
R34R, R34L	Resistor, Carbon, 220 K, 1/2 W	707-00102
R36R, R36L	Resistor, Carbon, 150K, 1/2 W	702-00102
R38R, R38L	Resistor, Carbon, 270 K, 1/2 W	704-00107
R39R, R39L	Resistor, Carbon, 33 K, 1/2 W	707-00106
R41R, R41L	Potentiometer, Linear, 10 K (Stackpole No. 20C; CTS No. X-201) with Resistor, Carbon, 6.8 K, 1/2 W	705-00400 718-00104
R42R, R42L	Resistor, Carbon, 4.7 K, 1/2 W	708-00104
R43	Resistor, Carbon, 330 K, 1/2 W	712-00102
R44	Resistor, Carbon, 270 K, 1/2 W	704-00107
R45, R46	Resistor, Carbon, 220 Ohm, 1/2 W	711-00106
R47, R48	Resistor, Carbon, 43 K ±5%, 1/2 W	722-00120
R49	Resistor, Carbon, 100 K, 1/2 W	718-00102
R50	Resistor, Carbon, 120 K, 1/2 W	703-00106
R51	Resistor, Carbon, 10 K, 1/2 W	713-00102
R52	Potentiometer, Linear, 200 Ohm	200-13023
R56	Resistor, Carbon, 390 K, 1/2 W	722-00106
R57	Resistor, Carbon, 15 Ohm, 1/2 W	702-00120
R58	Resistor, Carbon, 15 K, 1/2 W	708-00106
R59	Resistor, Carbon, 18 K, 1/2 W	708-00102
R60	Resistor, Carbon, 22 K, 1/2 W	711-00104
R61	Resistor, Carbon, 33 K ±5%, 1/2 W	714-00106
R62	Thermistor, 51 K @ 25°C (Keystone Carbon Co. No.RL2006-26900-150-S2)	701-00370
Q1R, Q1L	Transistor, Silicon, NPN(Sprague Elec. TZ-1205; Motorola SPS 1481; G.E. X32B4683)	705-00300
Q2R, Q2L	Transistor, Silicon, NPN(Sprague Elec. TZ-1205; Motorola SPS 1481; G.E. X32B4683)	705-00300
Q3R, Q3L	Transistor, Silicon, NPN(Sprague Elec. TZ-1205; Motorola SPS 1481; G.E. X32B4683)	705-00300
Q4R, Q4L	Transistor, Silicon, NPN (G.E. X32B4680; Motorola SPS6978)	701-00300
Q5R, Q5L	Transistor, Silicon, NPN (G.E. X32B4680; Motorola SPS6978)	705-00300
Q6R, Q6L	Transistor, Silicon, NPN (See Q1R)	705-00300
Q7R, Q7L	Transistor, Silicon NPN (See Q1R)	705-00300
Q8R, Q8L	Transistor, Silicon, NPN (G.E. X32B4682; Motorola SPS6979)	702-00300
Q9R, Q9L	Transistor, Silicon, NPN (G.E. X32B4686; Motorola SPS6980)	703-00300
Q10	Transistor, Silicon, NPN (G.E. X32B4686; Motorola SPS6980)	703-00300
Q11	Transistor, Silicon, NPN (See Q8R)	702-00300
	MISCELLANEOUS PARTS	
	Switch, Rotary, 4 Pole, 3 Position, Non-Shorting(Treble Range Control)	200-13024
	Switch, Rotary, 2 Pole, 3 Position, Non-Shorting, (Stereo Balance)	200-13025
	Circuit Board, Pre-Amplifier	602-03788

FIGURE 6-4. PRE-AMPLIFIER SCHEMATIC DIAGRAM

COMPONENT REF DESIGNATION	DESCRIPTION	ROWE PART NO.
64W POWER AMPLIFIER	**601-02193**	
C1, C2	Capacitor, Electrolytic, 2500 MFD, 50V	201-15181
C3, C4	Capacitor, Electrolytic, 500 MFD, 25V(Sprague No.43D; Mallory No.TT;G.E. No.76F)	711-00233
C5	Capacitor, Tantalum, 2.2 MFD, 35V(Sprague No.196D, 198D;Mallory No.TDC; Kemet No.T362)	712-00251
C6	Capacitor, Mylar, 0.1 MFD; 400V(Paktron Type MB; Sprague Type 225P, 418P; Electromotive No.P92242-1)	701-00213
CB-1	Circuit Breaker, 2 Amp(ETA Products Co. Series 41-06-P30-1125)	715-00733
CR1 to CR4	Diode, Silicon(Motorola No. MR 752)	710-00350
K1	Relay (Potter and Brumfield No.KH4487-1)	200-12751
Q1, Q3	Transistor, Darlington Amplifier, Silicon, NPN(Motorola No.MJE6044)	704-00302
Q2, Q4	Transistor, Darlington Amplifier, Silicon, PNP(Motorola No. MJE6041)	705-00302
R1	Resistor, Carbon, 10K, 1/2W	713-00102
T1	Transformer, Power	401-06317
Z2	Integrated Circuit, Linear, Voltage Regulator(Fairchild No.UA7824;Motorola No.MC7824CP)	702-00365
	MISCELLANEOUS PARTS	
	Cord and Plug Assembly	702-00502
	Strain Relief	705-02322
	Retaining Bracket(Pre-Amp Edge Connector) (2 Req'd)	200-09295
	Heat Sink	401-06321
	Insulator, Mica (4 Req'd)	201-15196
	Washer Torque (4 Req'd)	201-15197
	Eyelet (2 Req'd)	207-03709
	Washer (2 Req'd)	720-01208
	Chassis Assembly with Lettering	601-02192
	Circuit Board Support	705-05000
DRIVER BOARD ASSEMBLY	**403-06316**	
C1, C2	Capacitor, Tantalum, 47 MFD, 15V (Sprague 196D; Mallory TDC; ITT TAG, TAP	702-00251
C3	Capacitor, Mylar, 0.01 MFD, 100V (Sprague 225P. Paktron FM720; Amperex C280)	707-00240
C4, C5	Capacitor, Tantalum, 47 MFD, 15V (See C1)	702-00251
C6	Capacitor, Ceramic Disc, 470 MFD, 100V (Sprague, Centralab, Skottie Elect; Radio Mat'l Corp.)	701-00224
C7	Capacitor, Electrolytic, 100 MFD, 50V (Sprague 43D; Mallory TCW)	719-00233
C8	Capacitor, Electrolytic, 5 MFD, 50V (Sprague 30D; Mallory TT; Collins ASD; G.E. 76F)	703-00233
C9	Capacitor, Ceramic Disc, 220pFD, 100V (Same Type As C6)	706-00224
C10	Capacitor, Tantalum, 47 MFD, 15V (See C1)	702-00251
C11	Capacitor, Mylar, 0.01 MFD, 100V (See C3)	707-00240
C12	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
C13	Capacitor, Tantalum, 15 MFD, 18V (Same Type As C1)	705-00251
C14	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
C15	Capacitor, Ceramic Disc, 220 pFD, 100V (Same Type As C6)	706-00224
C16	Capacitor, Ceramic Disc, 56 pFD, 100V (Same Type As C6)	720-00224

COMPONENT REF DESIGNATION	DESCRIPTION	ROWE PART
C17	Capacitor, Tantalum, 2.2 MFD, 15V (Same Type As C1)	707-002
C18	Capacitor, Mylar, 0.22 MFD, 100V (Paktron FM1100; Amperex C280)	703-002
C19	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-002
CR1 to CR8	Diode, Silicon (1N4002, Solitron, Westinghouse, Motorola, Transitron)	702-003
CR9	Diode, Zener (1N961B, Solitron, Motorola, ITT, Transitron)	714-003
F1, F2	Fuse, Cartridge, 2 Amp (Buss No. AGC-2; Littlefuse No.312002	701-007
Q3	Transistor, Silicon, PNP(Motorola MPS-A56; Fairchild MPS-A56)	704-003
Q4	Transistor, Silicon, NPN(Motorola MPS-A06; Fairchild MPS-A06)	708-003
Q5, Q6	Transistor, Silicon, NPN(Motorola SPS6979; Sprague TZ8630; G.E.X32B 4682)	702-003
Q7	Transistor, Silicon, Dual NPN(Motorola MD8002; 2N2919, Fairchild, Texas Instr; Nat'l Semi-Conductor)	701-003
Q8, Q9	Transistor, Silicon, PNP (See Q3)	704-003
R1, R2	Resistor, Wirewound, 0.47 Ohm, 2W (I.R.C. Type BWH)	714-001
R3	Resistor, Carbon, 180 Ohm, 1/4W	7-9900-
R4	Resistor, Carbon, 220 Ohm, 1/4W	7-9900-
R5, R6	Resistor, Carbon, 15K, 1/4W	7-9900-
R7	Resistor, Carbon, 820 Ohm, 1/4W	7-9900-
R8	Resistor, Carbon, 2.2K, 1/4W	7-9900-
R9	Resistor, Carbon, 470 Ohm, 1/4W	7-9900-
R10	Resistor, Carbon, 180 Ohm, 1/4W	7-9900-
R11	Resistor, Carbon, 390 Ohm, 1/4W	7-9900-
R12	Resistor, Carbon, 220 Ohm, 1/4W	7-9900-
R13	Resistor, Carbon, 2.7K, 1/4W	7-9900-
R14	Resistor, Carbon, 2.2K, 1/4W	7-9900-
R15	Resistor, Carbon, 4.7K, 1/4W	7-9900-
R16	Resistor, Wirewound, 0.27 Ohm, 2W	718-001
R17	Resistor, Carbon, 22 Ohm, 1W	716-001
R18	Resistor, Carbon, 470 Ohm, 1/4W	7-9900-
R19	Resistor, Carbon, 68 Ohm, 1/4W	7-9900-
R20	Resistor, Carbon, 3.3K, 1/4W	7-9900-
R21	Resistor, Carbon, 12K, 1/4W	7-9900-
R22	Resistor, Carbon, 10 MEG, 1/4W	7-9900-
R23	Resistor, Carbon, 47 Ohm, 1/4W	7-9900-
R24	Resistor, Carbon, 1K, 1/4W	7-9900-
R25	Resistor, Carbon, 5.6K, 1/4W	7-9900-
R26	Resistor, Carbon, 18K, 1/4W	7-9900-
R27	Resistor, Carbon, 1.2K, 1/4W	7-9900-
R28	Resistor, Carbon, 6.8K, 1/4W	7-9900-
Z1	Diode Assembly, Bias (Made Up of Three 711-00350 Diodes)	301-036
	MISCELLANEOUS PARTS	
	Transistor Socket (4 Req'd)(Molex No.09-52-3030)	201-151
	Fuse Clip (8 Required)	200-507
	Driver Circuit Board (2 Required)	403-063


R-3758B
PRE AMP OR
R-3800 PRE AMP
RIGHT
TEST
INPUTS
LEFT
K1c
4
8
12
R1
10K
C5
2.2mf
35V
RIGHT
PHONO
INPUT
LEFT
C19
0.1 mfd
R24
1KΩ
30V
R28
6.8K.
C18 0.22mfd
R27
1.2K
S-300B
Q6
C17
2.2 mfd
0.015 V
Q7
S-303A
.5 V
Q5
S-300B
R26
18K
C15
220 pfd.
R25
5.6K
CR9
-10V
C14
0.1 mfd
C10
15 V
47mfd.
R15
4.7K
402 6316 DRIVER
22
REGULATOR
24V
22V
C3
500mfd
25V
C4
500 mfd
25V
+30.5V
C1
2500mfd
50V
C2
2500mfd
50V
-30.5V
NOTE:
AC MAX SIGNAL INPUT AND OUTPUT
ALL DC MEASUREMENTS TAKEN WITH
CHASSIS COMMON AND WITH NO SIGNAL
7
6
2
1
4
3
5
F-13540C
R-2185A STATION 16
VOLUME CONTROL

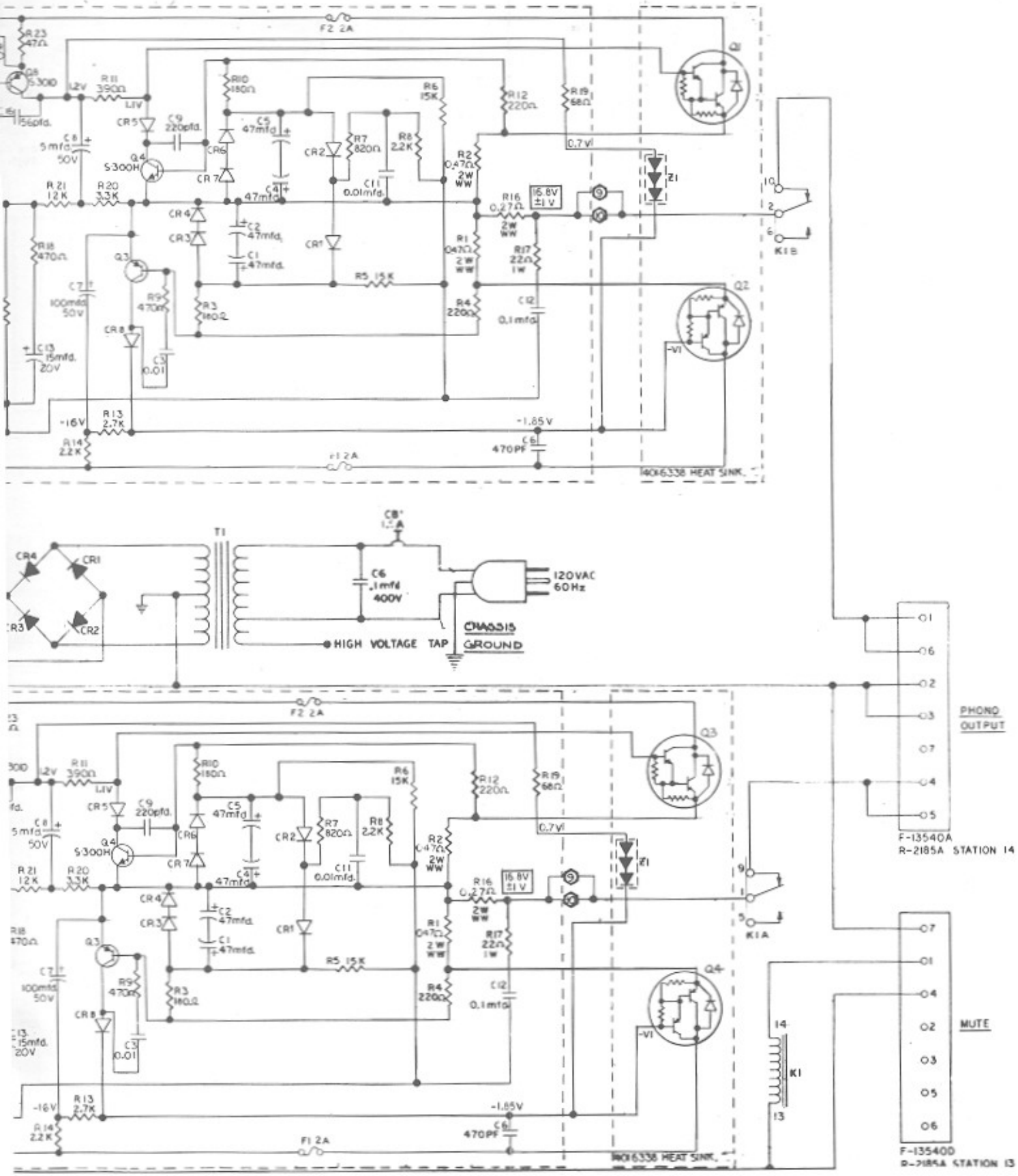
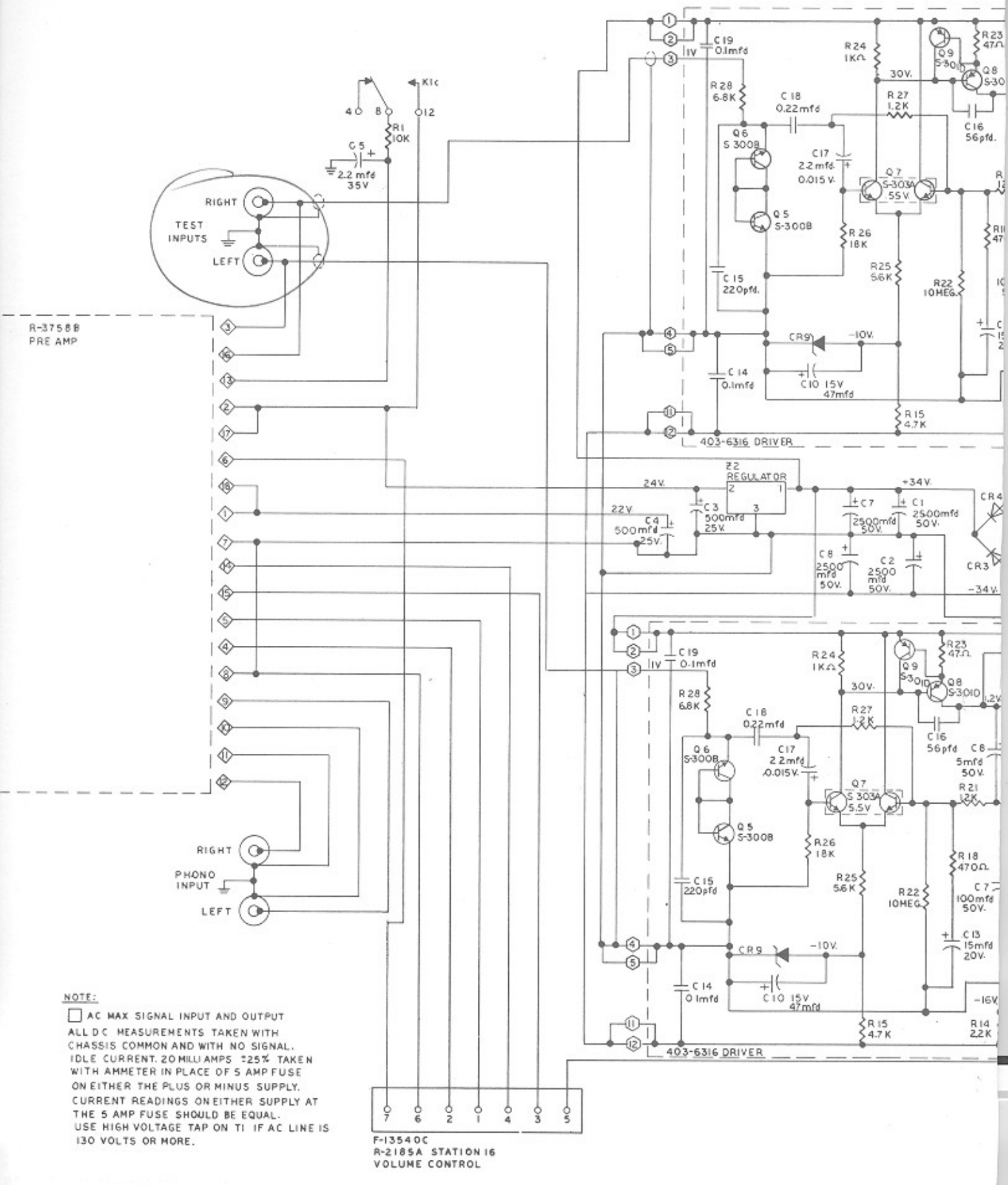


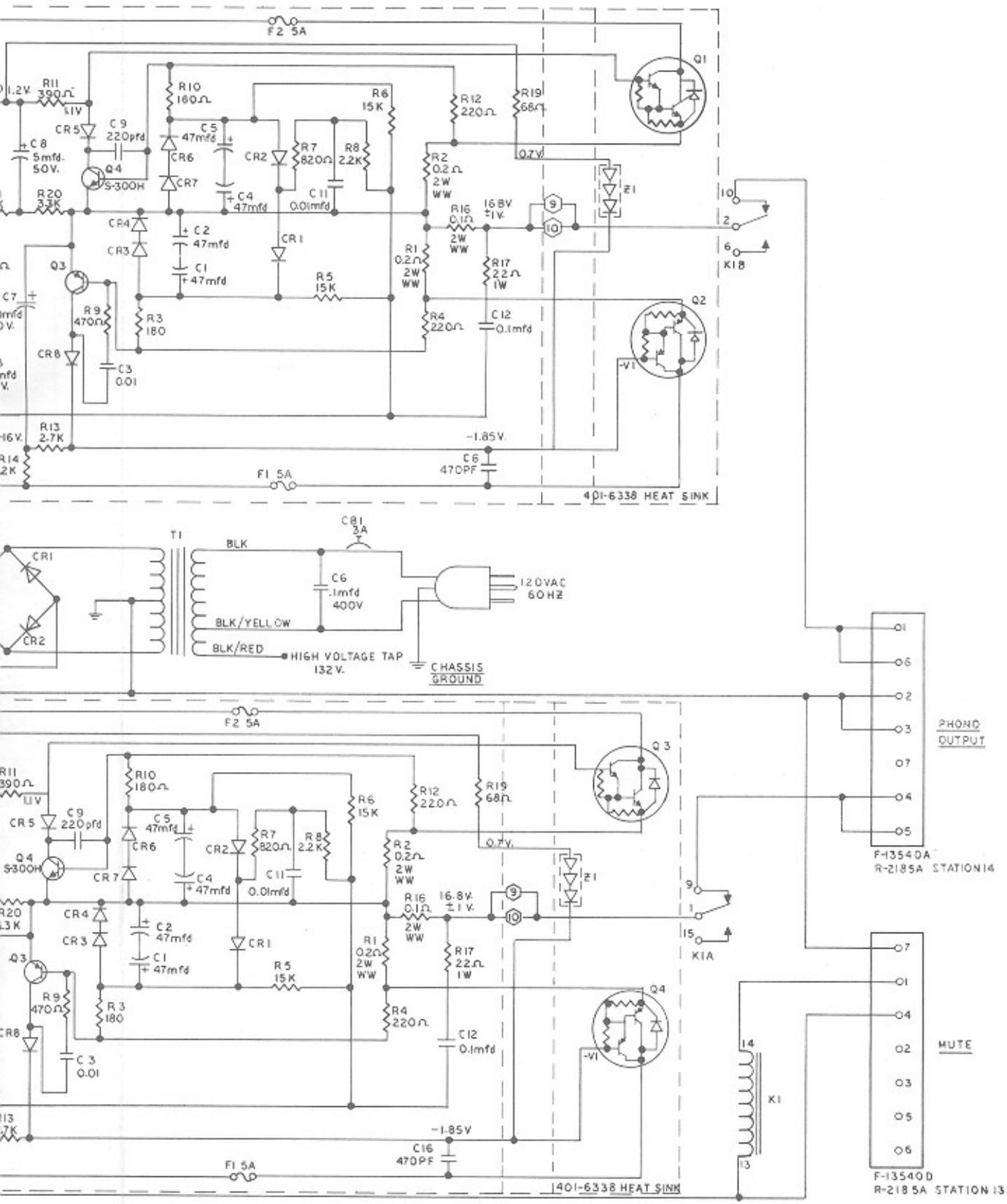
FIGURE 6-5. 64 WATT AMPLIFIER SCHEMATIC DIAGRAM



NOTE:

☐ AC MAX SIGNAL INPUT AND OUTPUT

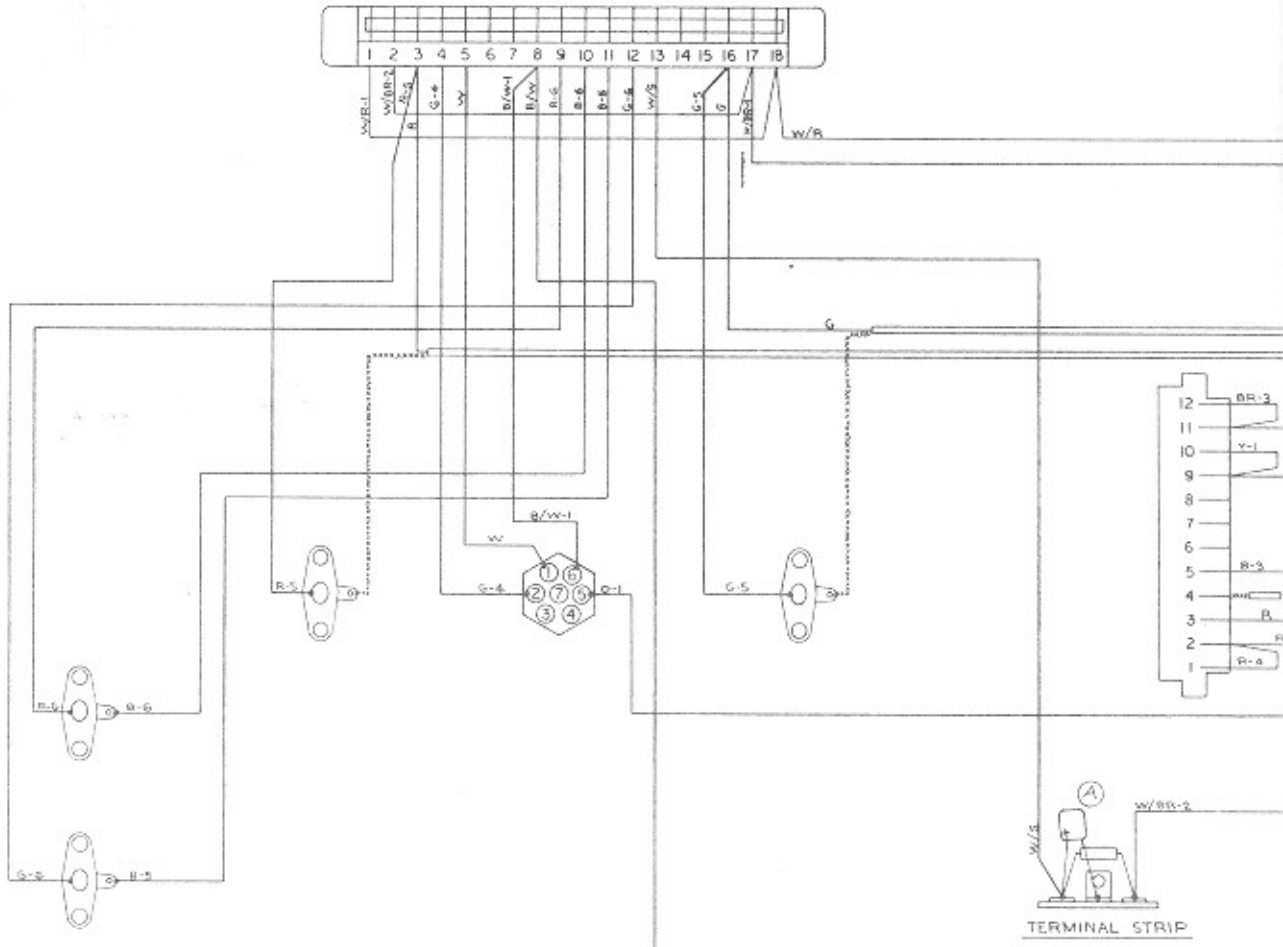
ALL DC MEASUREMENTS TAKEN WITH CHASSIS COMMON AND WITH NO SIGNAL. IDLE CURRENT. 20 MILLI AMPS ±25% TAKEN WITH AMMETER IN PLACE OF 5 AMP FUSE ON EITHER THE PLUS OR MINUS SUPPLY. CURRENT READINGS ON EITHER SUPPLY AT THE 5 AMP FUSE SHOULD BE EQUAL. USE HIGH VOLTAGE TAP ON T1 IF AC LINE IS 130 VOLTS OR MORE.


F2 5A
Q1
R10 160Ω
R6 15K
R12 220Ω
R19 68Ω
R11 390Ω 1W
CR5
C9 220pfd
C5 47mfd
CR6
CR7
CR2
R7 820Ω
R8 2.2K
C8 5mfd 50V.
Q4 S-300H
C4 47mfd
C11 0.01mfd
R2 0.2Ω 2W WW
0.7V.
Z1
R20 3.3K
CR4
CR3
C2 47mfd
C1 47mfd
CR1
R16 0.1Ω 2W WW
16.8V. ±1V.
9
10
R1 0.2Ω 2W WW
R17 2.2Ω 1W
R5 15K
Q3
R9 470Ω
R3 180
CR8
C3 0.01
R4 220Ω
C12 0.1mfd
Q2
-V1
10
2
6
K1B
R13 2.7K
R14 2K
-1.85V.
C6 470PF
F1 5A
401-6338 HEAT SINK
T1
CR1
CR2
BLK
C81 3A
C6 .1mfd 400V
120VAC 60HZ
BLK/YELLOW
BLK/RED
HIGH VOLTAGE TAP 132V.
CHASSIS GROUND
F2 5A
Q3
R10 180Ω
R6 15K
R12 220Ω
R19 68Ω
R11 390Ω 1W
CR5
C9 220pfd
C5 47mfd
CR6
CR7
CR2
R7 820Ω
R8 2.2K
Q4 S-300H
C4 47mfd
C11 0.01mfd
R2 0.2Ω 2W WW
0.7V.
Z1
R20 3.3K
CR4
CR3
C2 47mfd
C1 47mfd
CR1
R16 0.1Ω 2W WW
16.8V. ±1V.
9
10
R1 0.2Ω 2W WW
R17 2.2Ω 1W
R5 15K
Q3
R9 470Ω
R3 180
CR8
C3 0.01
R4 220Ω
C12 0.1mfd
Q4
-V1
9
1
15
K1A
R13 2.7K
-1.85V.
C16 470PF
F1 5A
401-6338 HEAT SINK
K1
14
13
PHONO OUTPUT
F-13540A
R-2185A STATION 14
MUTE
F-13540D
R-2185A STATION 13

ONENT REF IGNATION	DESCRIPTION	ROWE PART NO.
120W POWER AMPLIFIER	**601-07404**	
C1, C2	Capacitor, Electrolytic, 2500 MFD, 50V	201-15181
C3, C4	Capacitor, Electrolytic, 500 MFD, 25V (Sprague No. 43D; Mallory No. TT; G.E. No.76F)	711-00233
C5	Capacitor, Tantalum, 2.2 MFD, 35V (Sprague No.196D, 198D; Mallory No.TDC;Kemet No.T362)	712-00251
C6	Capacitor, Mylar, 0.1 MFD, 400V (Paktron Type MB; Sprague Type 225P, 418P; Electromotive P92242-1)	701-00213
C7, C8	Capacitor, Electrolytic, 2500 MFD, 50V	201-15181
CB-1	Circuit Breaker, 3 Amp(E.T.A. Products Co.Series 41-06-P30-1125)	717-00733
CR1 to CR4	Diode, Silicon (Motorola No. MR752)	710-00350
K1	Relay (Potter & Brumfield, No.KH-4487-1)	200-12751
R1	Resistor, Carbon, 10K, 1/2W	713-00102
T1	Transformer, Power	401-06337
Z2	Integrated Circuit, Linear, Voltage Regulator(Fairchild No.UA7824;Motorola No.MC7824CP)	702-00365
	MISCELLANEOUS PARTS	
	Cord and Plug Assembly, 3 Conductor	702-00502
	Strain Relief	705-02322
	Retaining Bracket(Pre-Amplifier Edge Connector)(2 Required)	200-09295
	Circuit Board Support (8 Required)	706-05000
	Washer Flat (4 Required)	718-01208
	Harness Assembly 601-02185 Containing	
	Edge Connector, 12 Circuit (2 Req'd)(Driver Board Connectors)	204-50572
	Edge Connector, 18 Circuit (Pre-Amplifier Connector)	208-13333
	Socket, Relay	202-13782
	Housing Plug, Combo-Line, 7 Circuit (Phono Spkrs.)	201-13540
	Housing, Plug, Combo-Line, 7 Circuit, Black (Vol. Control)	203-13540
	Housing, Plug, Combo-Line, 7 Circuit, Brown (Mute)	204-13540
	Chassis Assembly with Lettering	601-07403
HEAT SINK ASSEMBLY	**401-06338**	
Q1, Q1	Transistor, Darlington Amplifier, Silicon, NPN,(Motorola No.MJ4031)	707-00302
Q2, Q2	Transistor, Darlington Amplifier, Silicon, NPN, (Motorola No. MJ4034)	706-00302
Z1, Z1	Diode Assembly, Bias (Made up of three 711-00350 Diodes)	301-03693
	MISCELLANEOUS PARTS	
	Eyelet	206-03709
	Washer, Flat (2 Req'd)	720-01207
	Insulator (4 Req'd)	200-13189
	Connector and Cable Assembly	301-04219
	Heat Sink	401-05472
DRIVER BOARD ASSEMBLY	**402-06316**	
C1, C2	Capacitor, Tantalum, 47 MFD, 15V (Sprague 196D; Mallory TDC; ITT TAG, TAP	702-00251
C3	Capacitor, Mylar, 0.01 MFD, 100V (Sprague 225P. Paktron FM720; Amperex C280)	707-00240
C4, C5	Capacitor, Tantalum, 47 MFD, 15V (See C1)	702-00251
C6	Capacitor, Ceramic Disc, 470 MFD, 100V (Sprague, Centralab, Skottie Elect; Radio Mat'l Corp.)	701-00224
C7	Capacitor, Electrolytic, 100 MFD, 50V (Sprague 43D; Mallory TCW)	719-00233
C8	Capacitor, Electrolytic, 5 MFD, 50V (Sprague 30D; Mallory TT; Collins ASD; G.E. 76F)	703-00233

COMPONENT REF DESIGNATION	DESCRIPTION	ROWE PART NO.
C9	Capacitor, Ceramic Disc, 220pFD, 100V (Same Type As C6)	706-00224
C10	Capacitor, Tantalum, 47 MFD, 15V (See C1)	702-00251
C11	Capacitor, Mylar, 0.01 MFD, 100V (See C3)	707-00240
C12	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
C13	Capacitor, Tantalum, 15 MFD, 18V (Same Type As C1)	705-00251
C14	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
C15	Capacitor, Ceramic Disc, 220 pFD, 100V (Same Type As C6)	706-00224
C16	Capacitor, Ceramic Disc, 56 pFD, 100V (Same Type As C6)	720-00224
C17	Capacitor, Tantalum, 2.2 MFD, 15V (Same Type As C1)	707-00251
C18	Capacitor, Mylar, 0.22 MFD, 100V (Paktron FM1100; Amperex C280)	703-00240
C19	Capacitor, Mylar, 0.1 MFD, 100V (Same Type As C3)	702-00240
CR1 to CR8	Diode, Silicon (1N4002, Solitron, Westinghouse, Motorola, Transitron)	702-00350
CR9	Diode, Zener (1N961B, Solitron, Motorola, ITT, Transitron)	714-00355
F1, F2	Fuse, Cartridge, 5 Amp (Buss MTH-5)	710-00720
Q3	Transistor, Silicon, PNP(Motorola MPS-A56; Fairchild MPS-A56)	704-00301
Q4	Transistor, Silicon, NPN(Motorola MPS-A06; Fairchild MPS-A06)	708-00300
Q5, Q6	Transistor, Silicon, NPN(Motorola SPS6979; Sprague TZ8630; G.E.X32B 4682)	702-00300
Q7	Transistor, Silicon, Dual NPN(Motorola MD8002; 2N2919, Fairchild, Texas Instr; Nat'l Semi-Conductor)	701-00303
Q8, Q9	Transistor, Silicon, PNP (See Q3)	704-00301
R1, R2	Resistor, Wirewound, 0.2 Ohm (IRC Type BWH)	701-00126
R3	Resistor, Carbon, 180 Ohm, 1/4W	7-9900-181
R4	Resistor, Carbon, 220 Ohm, 1/4W	7-9900-221
R5, R6	Resistor, Carbon, 15K, 1/4W	7-9900-153
R7	Resistor, Carbon, 820 Ohm, 1/4W	7-9900-821
R8	Resistor, Carbon, 2.2K, 1/4W	7-9900-222
R9	Resistor, Carbon, 470 Ohm, 1/4W	7-9900-471
R10	Resistor, Carbon, 180 Ohm, 1/4W	7-9900-181
R11	Resistor, Carbon, 390 Ohm, 1/4W	7-9900-391
R12	Resistor, Carbon, 220 Ohm, 1/4W	7-9900-221
R13	Resistor, Carbon, 2.7K, 1/4W	7-9900-272
R14	Resistor, Carbon, 2.2K, 1/4W	7-9900-222
R15	Resistor, Carbon, 4.7K, 1/4W	7-9900-472
R16	Resistor, Wirewound, 0.1 Ohm (IRC Type BWH)	702-00126
R17	Resistor, Carbon, 22 Ohm, 1W	716-00108
R18	Resistor, Carbon, 470 Ohm, 1/4W	7-9900-471
R19	Resistor, Carbon, 68 Ohm, 1/4W	7-9900-680
R20	Resistor, Carbon, 3.3K, 1/4W	7-9900-332
R21	Resistor, Carbon, 12K, 1/4W	7-9900-123
R22	Resistor, Carbon, 10 MEG, 1/4W	7-9900-106
R23	Resistor, Carbon, 47 Ohm, 1/4W	7-9900-470
R24	Resistor, Carbon, 1K, 1/4W	7-9900-102
R25	Resistor, Carbon, 5.6K, 1/4W	7-9900-562
R26	Resistor, Carbon, 18K, 1/4W	7-9900-183
R27	Resistor, Carbon, 1.2K, 1/4W	7-9900-122
R28	Resistor, Carbon, 6.8K, 1/4W	7-9900-682
	MISCELLANEOUS PARTS	
	Polarizing Wafer Assembly (Q1), 3 Circuit (2 Req'd)	703-00750
	Polarizing Wafer Assembly (Q2), 4 Circuit (2 Req'd)	704-00750
	Clip, Fuse (8 Req'd)	200-50775
	Driver Circuit Board (2 Req'd)	403-06315

FIGURE 6-6. 120 WATT AMPLIFIER SCHEMATIC DIAGRAM



WIRE CHART					
CODE	REQ'D	LENGTH	COLOR	STRIP	SPEC.
101	1	2	BLACK	1/4 x 1/4	5010

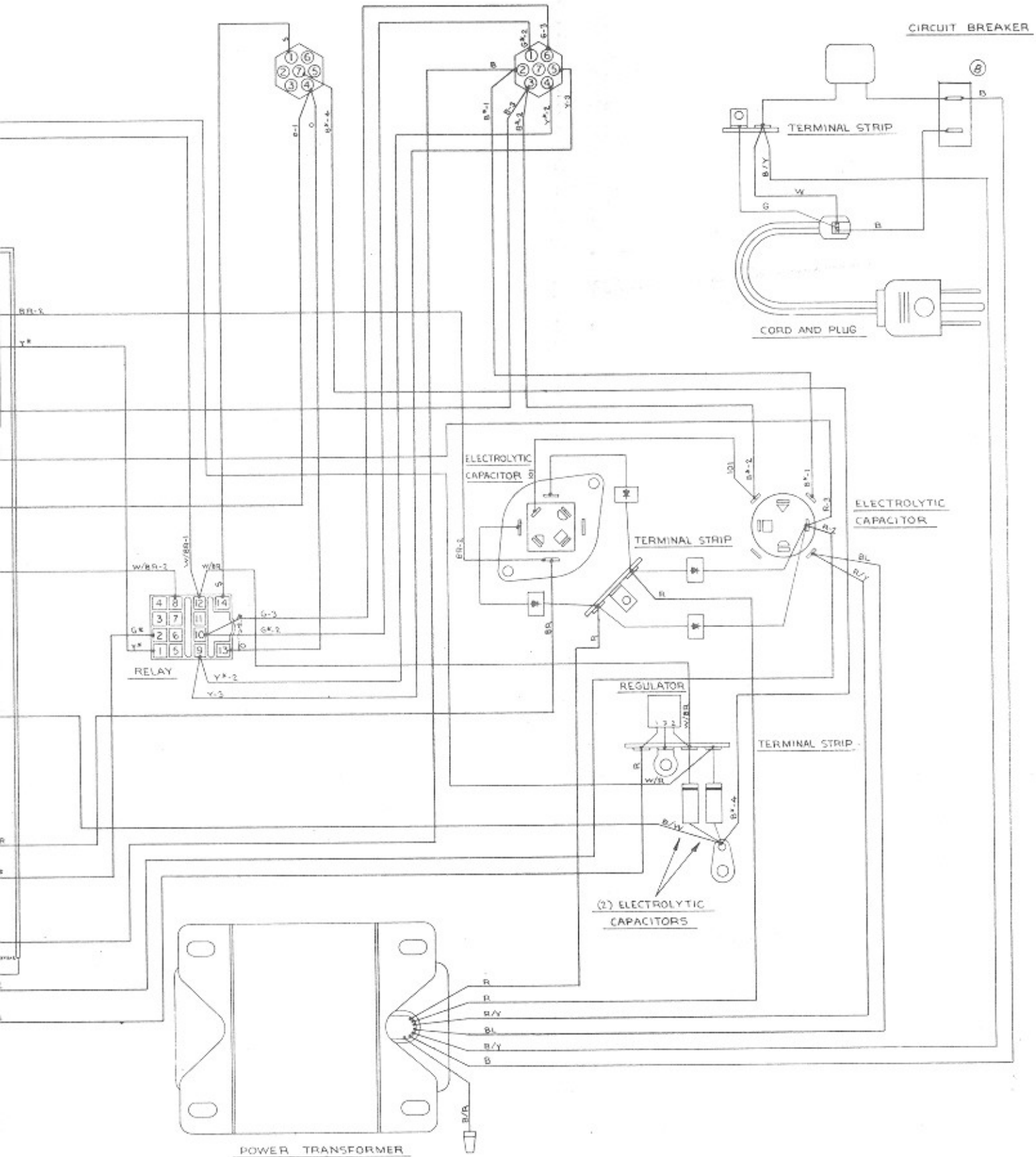
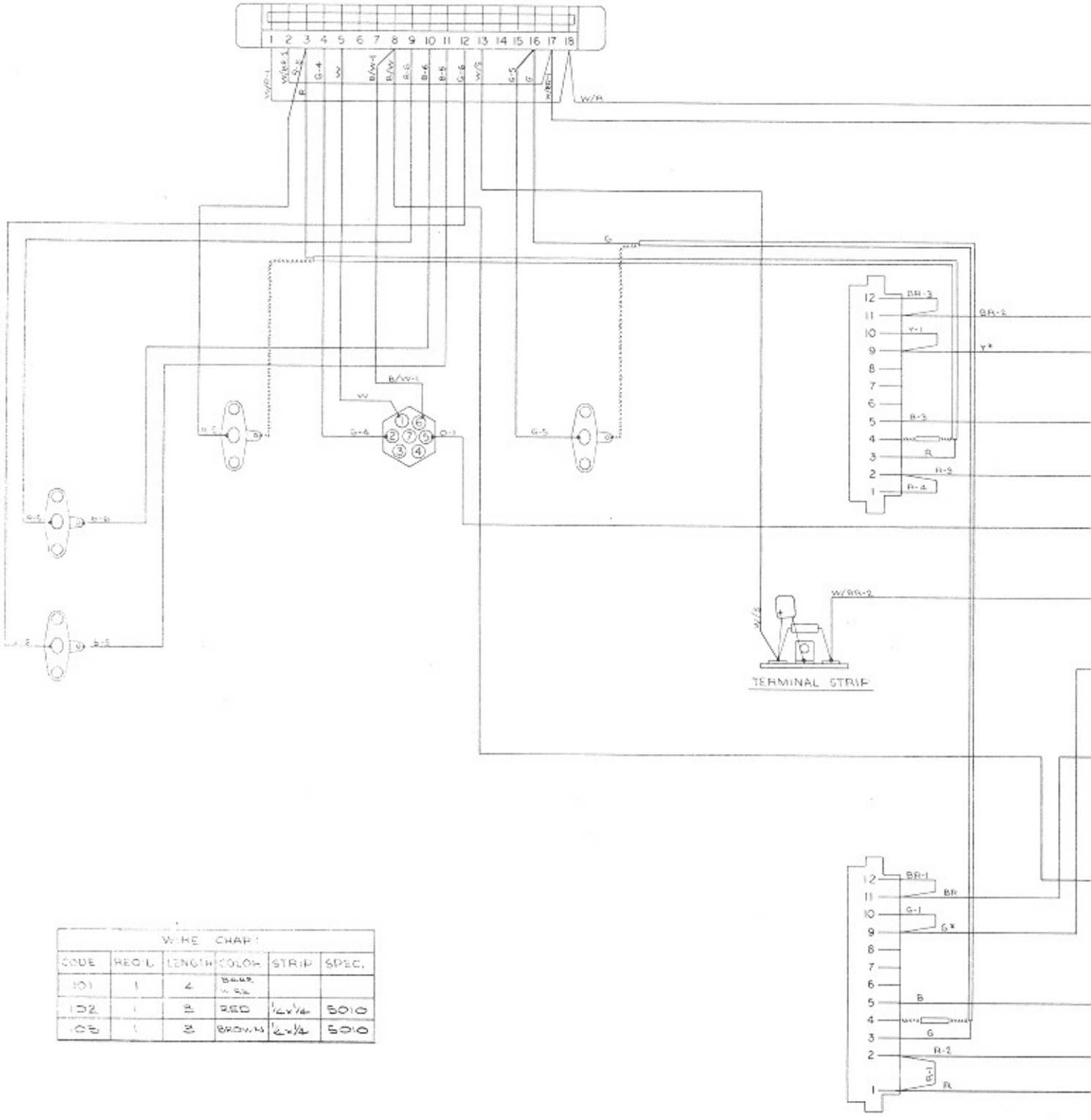


FIGURE 6-7. 64 WATT AMPLIFIER WIRING DIAGRAM



WIRE CHART					
CODE	REQ'D	LENGTH	COLOR	STRIP	SPEC.
101	1	4	BLUE W/RED		
102	1	3	RED	1/4 x 1/4	5010
103	1	3	BROWN	1/4 x 1/4	5010

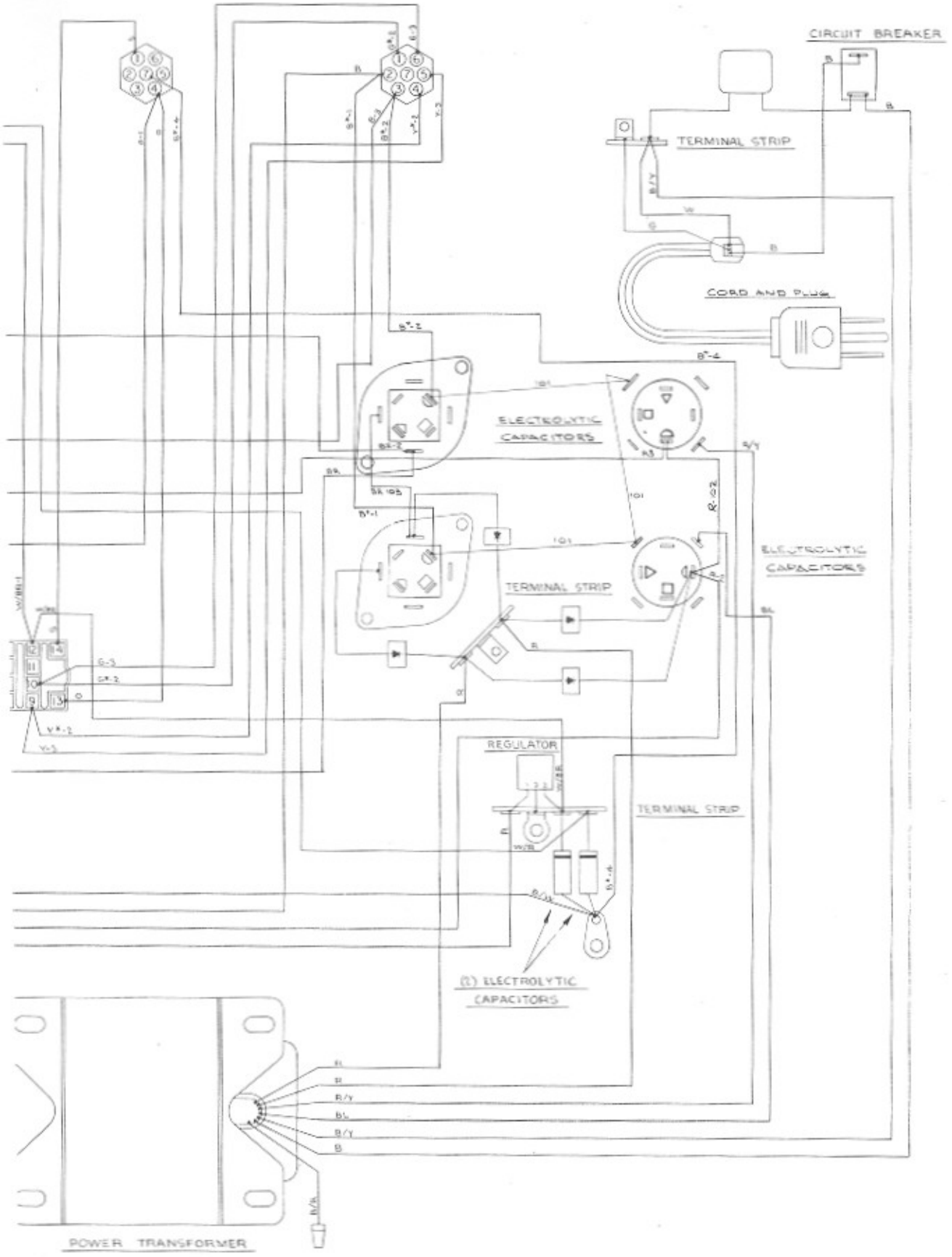
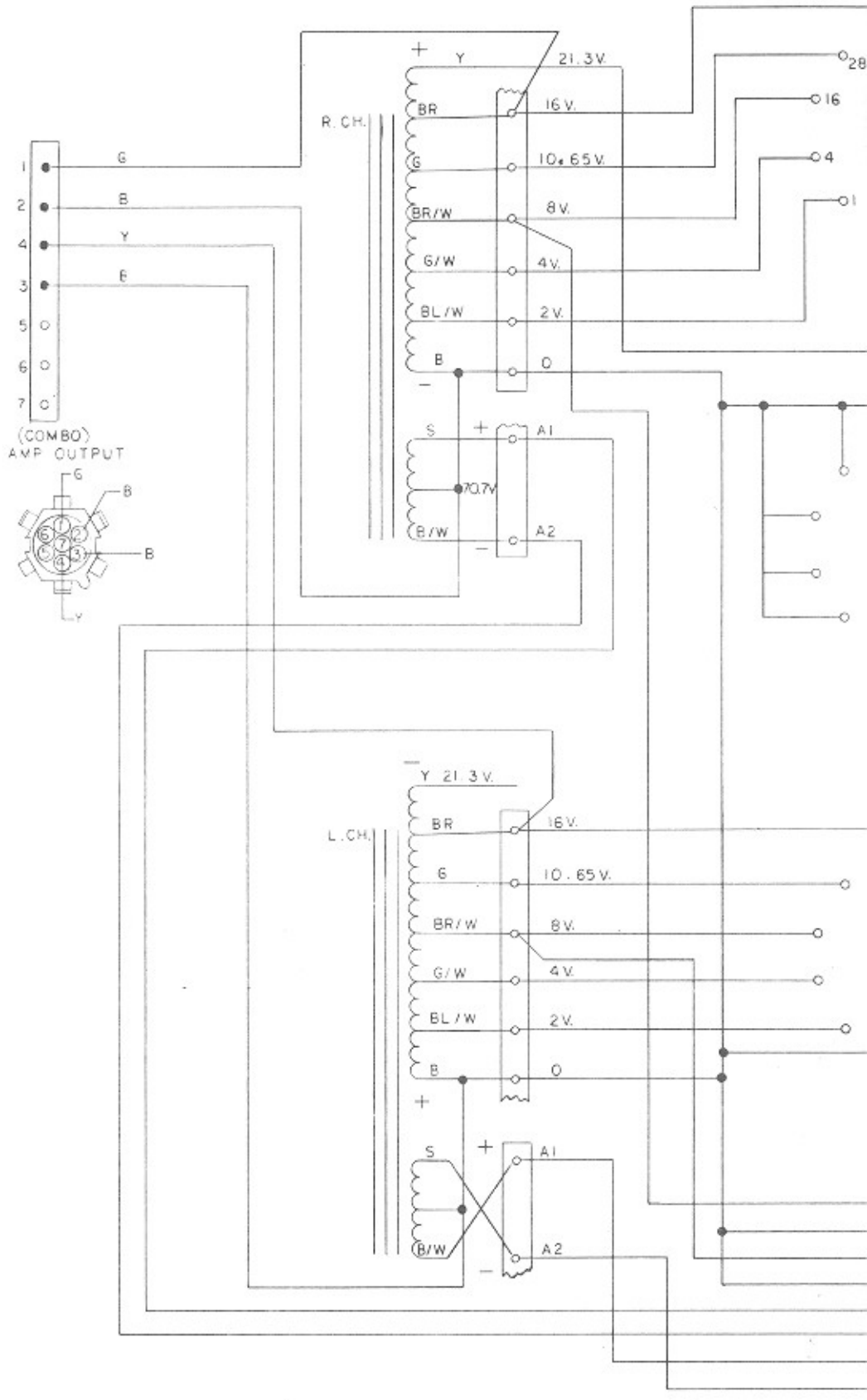


FIGURE 6-8. 120 WATT AMPLIFIER WIRING DIAGRAM


R. CH.
L. CH.
Y
21.3V.
BR
16V.
G
10.65V.
BR/W
8V.
G/W
4V.
BL/W
2V.
B
0
S
A1
A2
7Ω.7V
B/W
28
16
4
1
(COMBO)
AMP OUTPUT
G
B
B
V

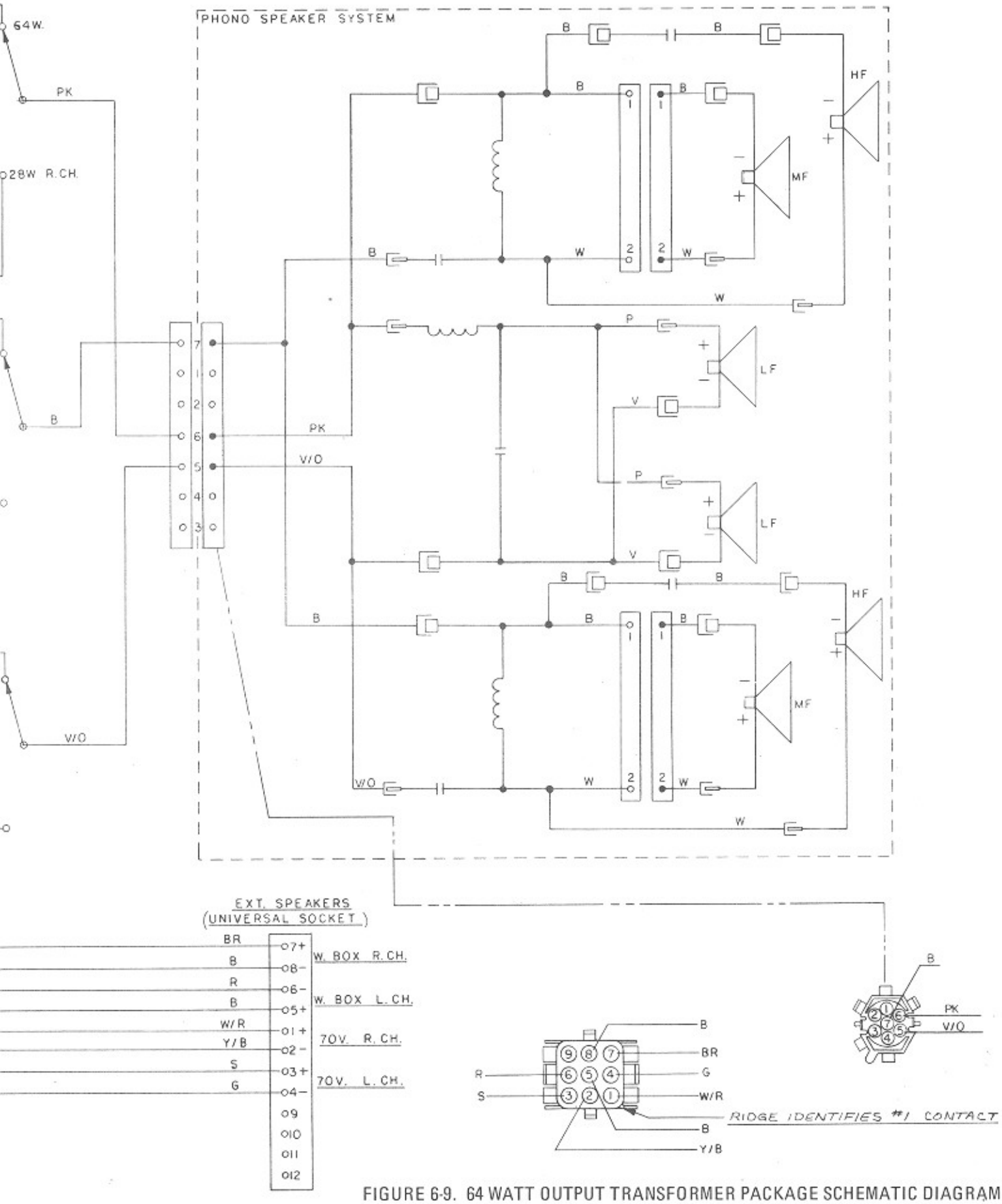
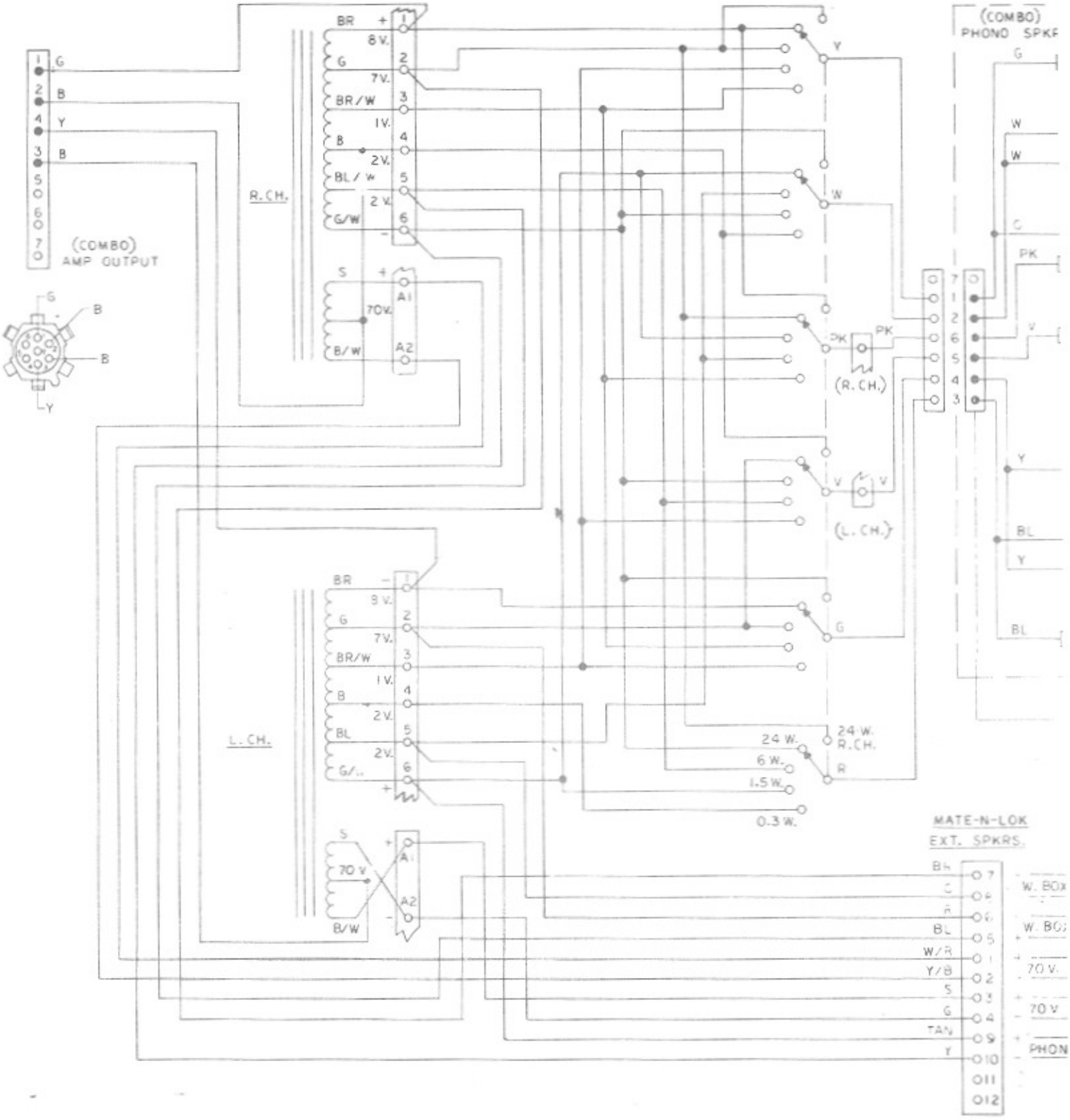


FIGURE 6-9. 64 WATT OUTPUT TRANSFORMER PACKAGE SCHEMATIC DIAGRAM


(COMBO)
AMP OUTPUT
G
B
Y
B
R.CH.
BR
8 V.
G
7V.
BR/W
1V.
B
2V.
BL/W
2 V.
G/W
S
70V.
B/W
A1
A2
(R.CH.)
(L.CH.)
L.CH.
BL
2V.
G/..
70 V
24 W.
6 W.
1.5 W.
0.3 W.
24 W.
R.CH.
(COMBO)
PHONO SPKR
PK
MATE-N-LOK
EXT. SPKRS.
W/R
Y/B
TAN
W. BOX
70 V.
PHON

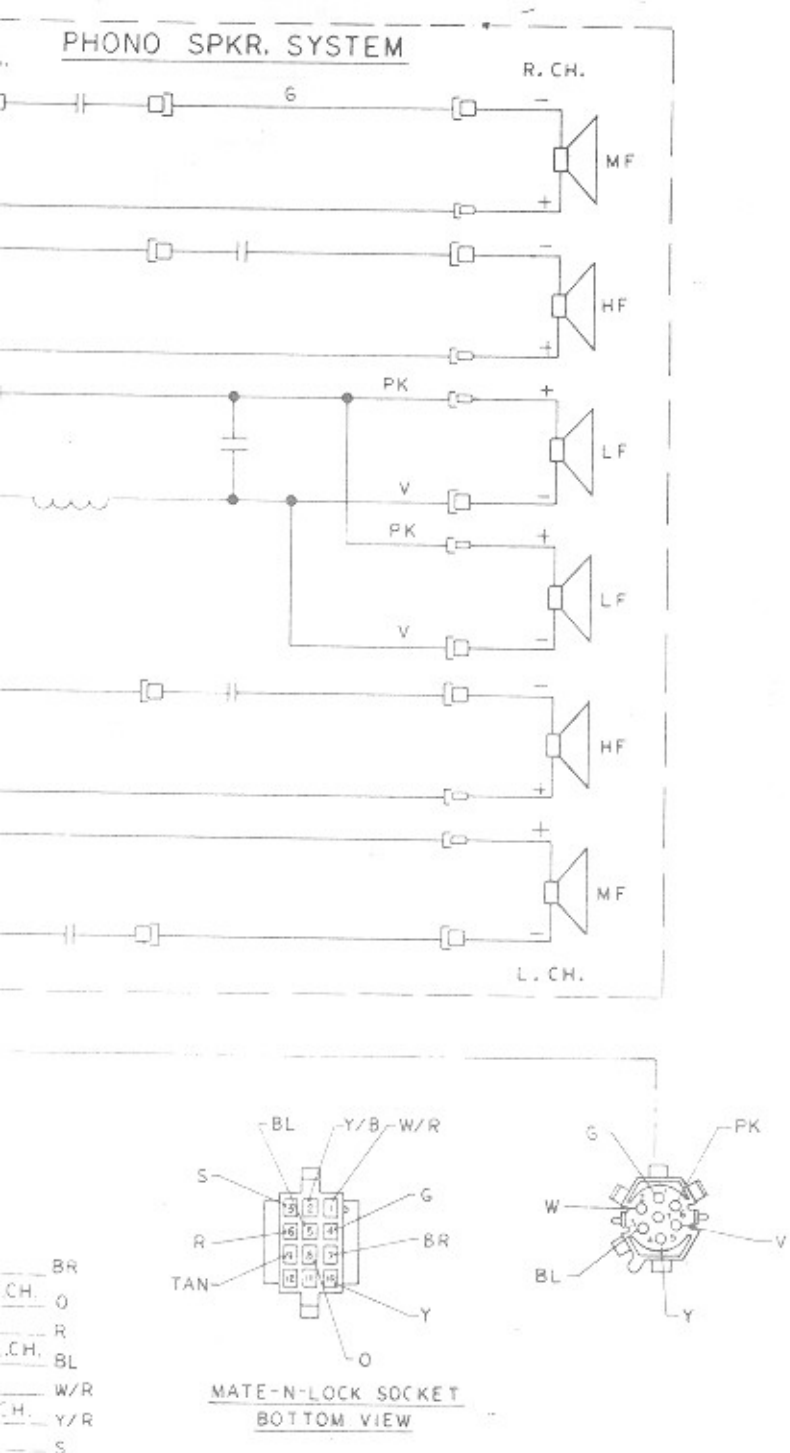
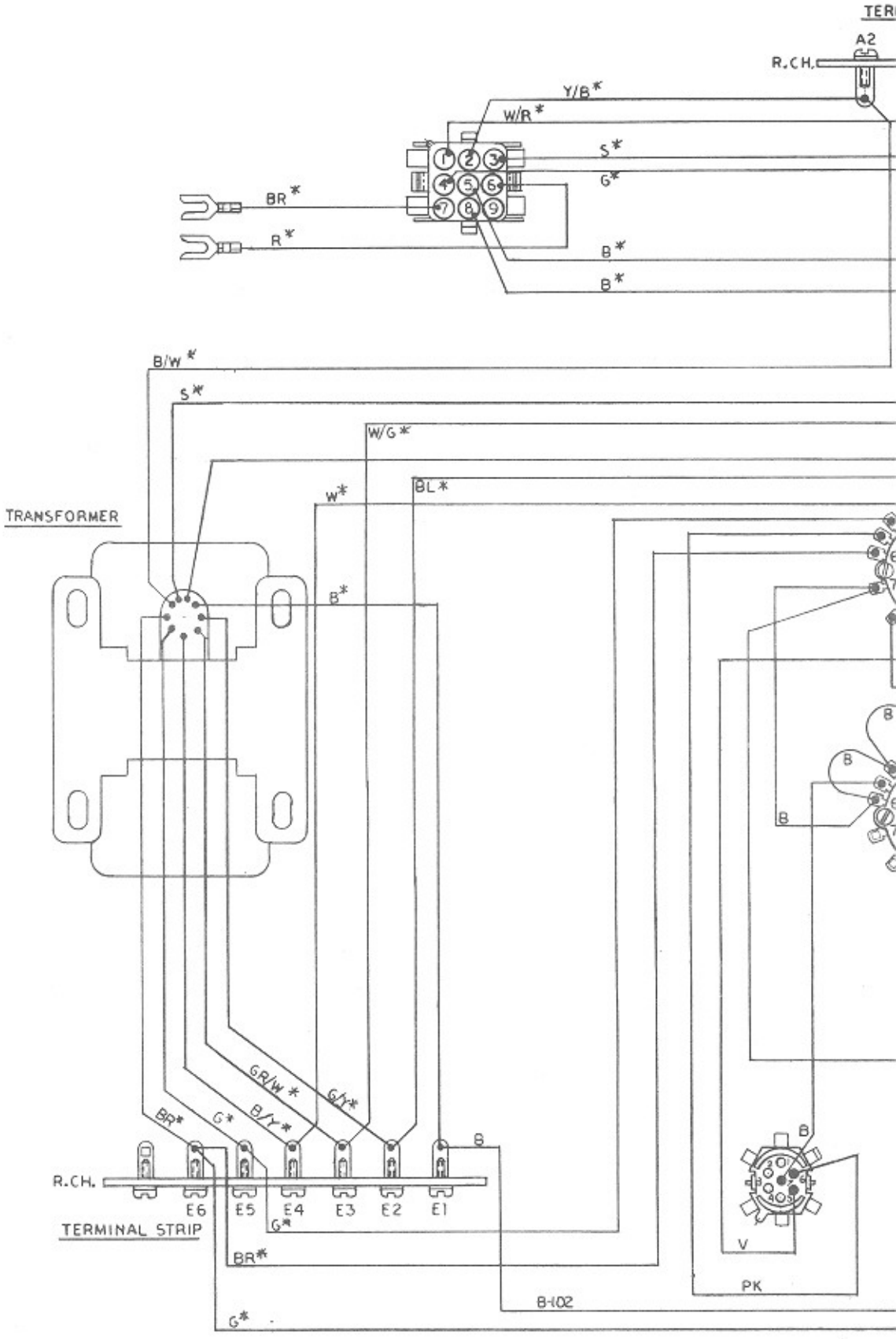


FIGURE 6-10. 120 WATT OUTPUT TRANSFORMER PACKAGE SCHEMATIC DIAGRAM



CODE	REQ'D.	LENGTH	STRIP	COLOR	SPEC.
101	1	4	7/32 X 1	BLACK	5033
102	1	4	7/32 X 7/32	BLACK	5033

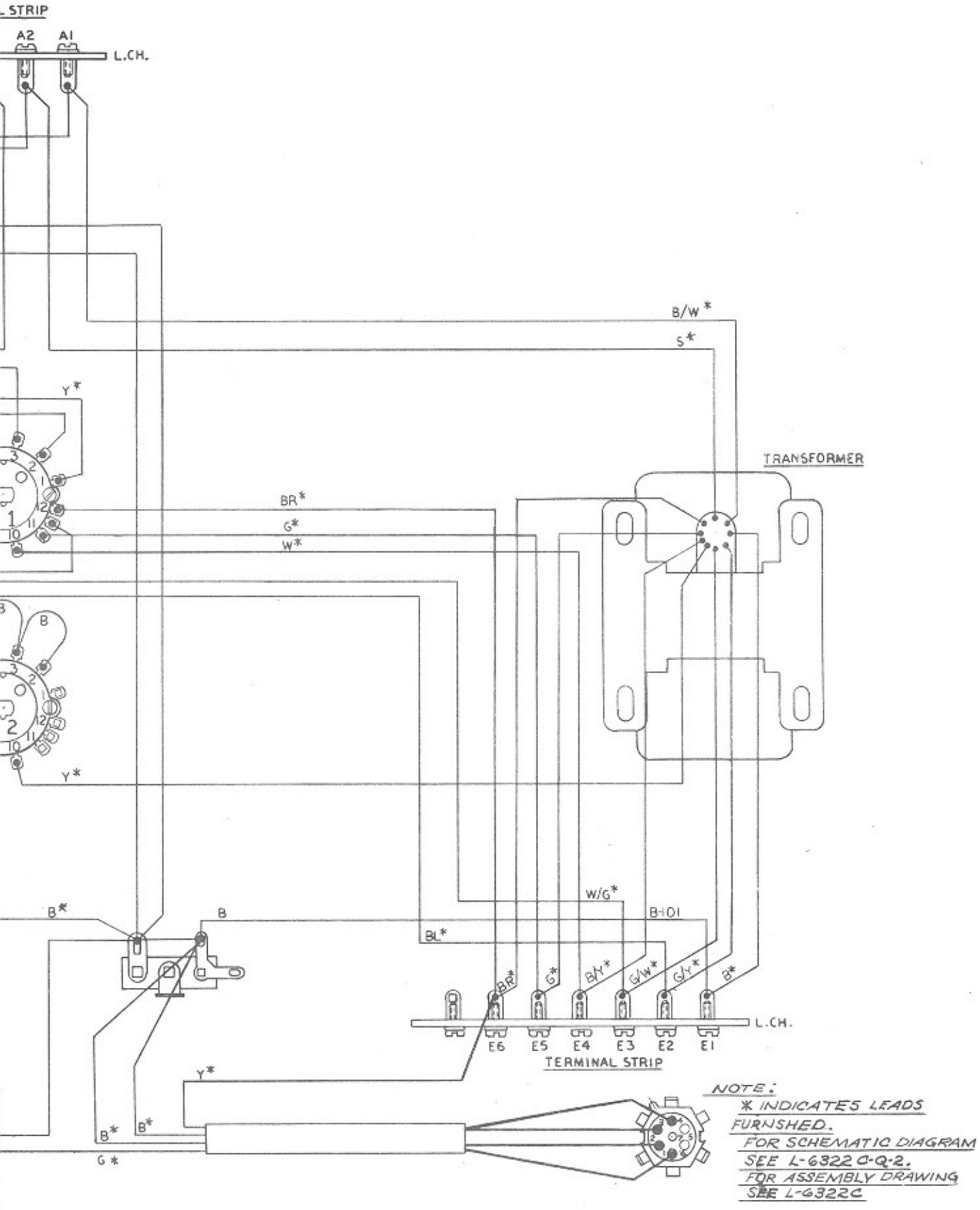
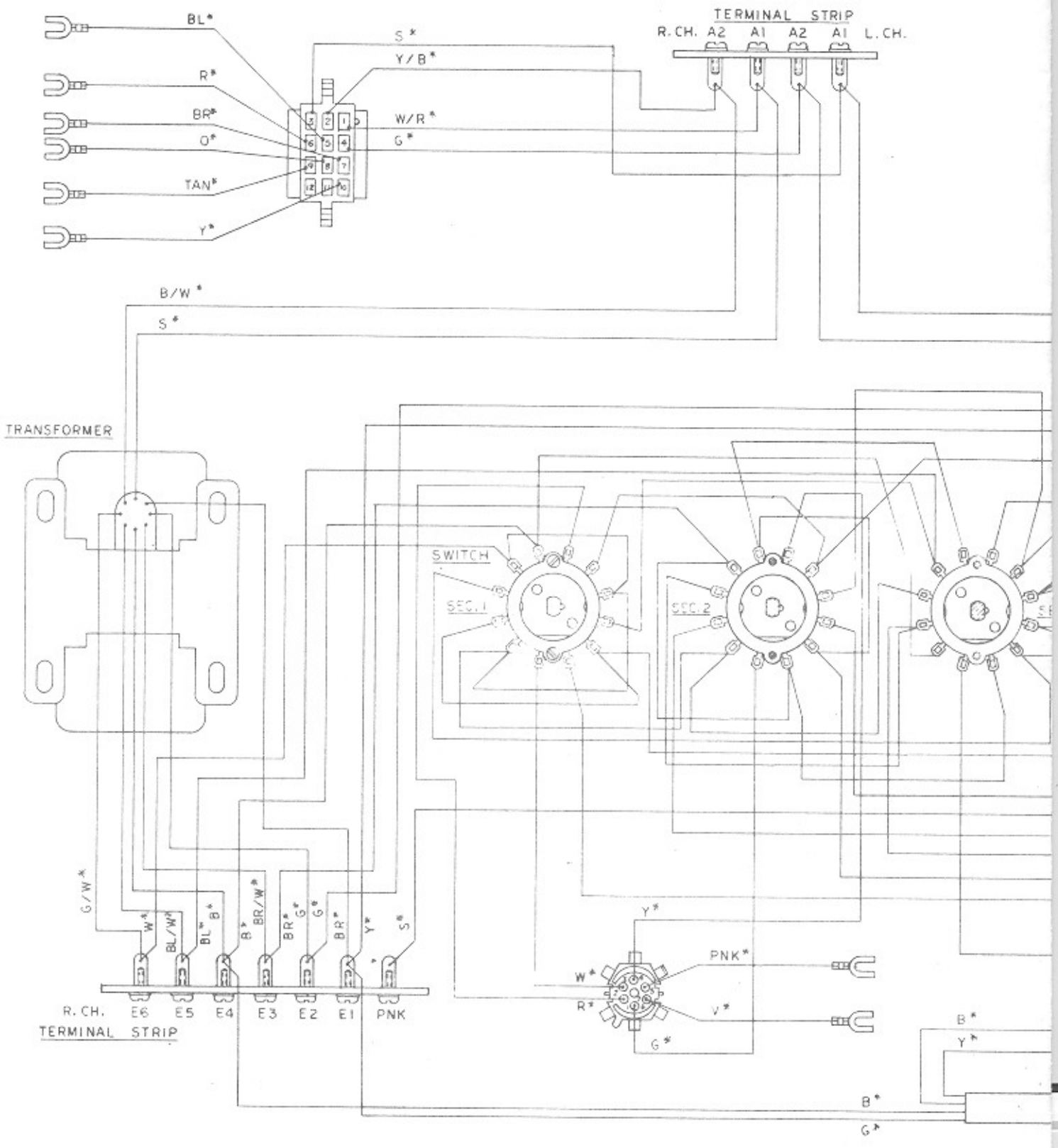


FIGURE 6-11. 64 WATT OUTPUT TRANSFORMER PACKAGE WIRING DIAGRAM


TERMINAL STRIP
R.CH. A2 A1 A2 A1 L.CH.
BL*
R*
BR*
O*
TAN*
Y*
S*
Y/B*
W/R*
G*
B/W*
S*
TRANSFORMER
SWITCH
SEC.1
SEC.2
G/W*
W*
BL/W*
BL*
B*
BR/W*
BR*
G*
G*
BR*
Y*
S*
R.CH. E6 E5 E4 E3 E2 E1 PNK
TERMINAL STRIP
Y*
PNK*
W*
R*
V*
G*
B*
Y*
B*
G*

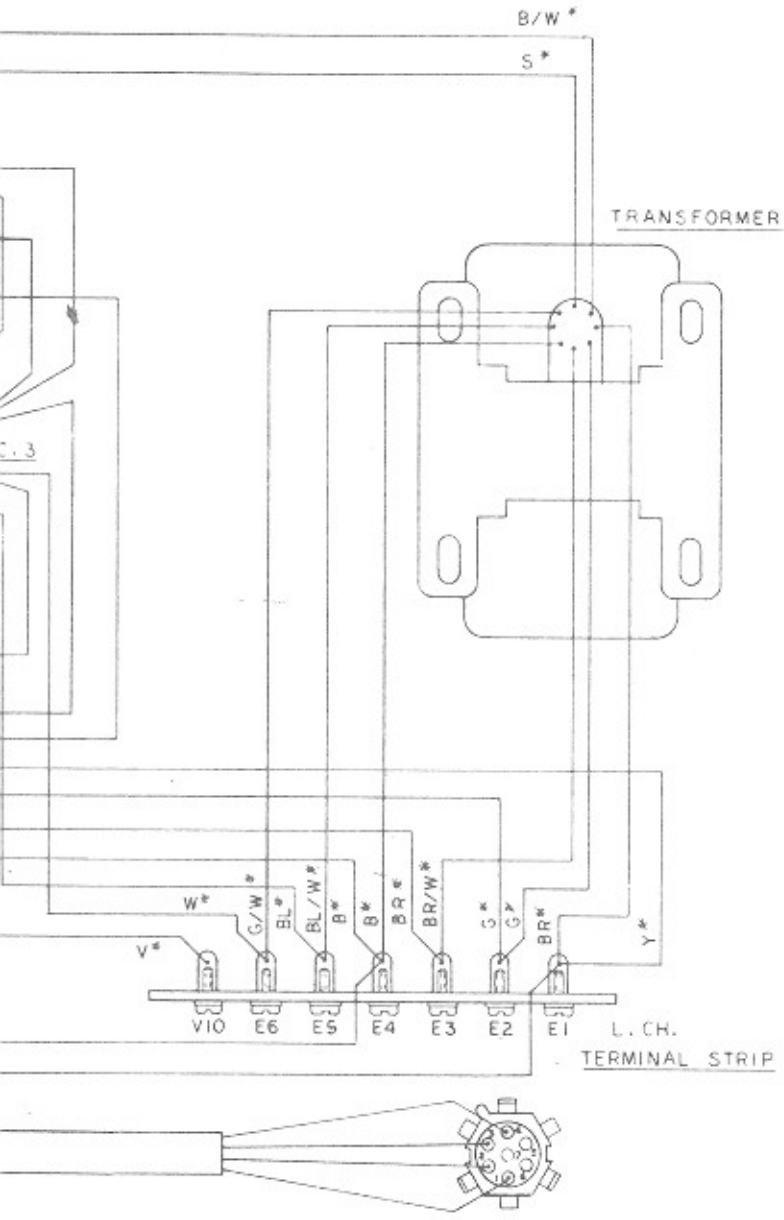
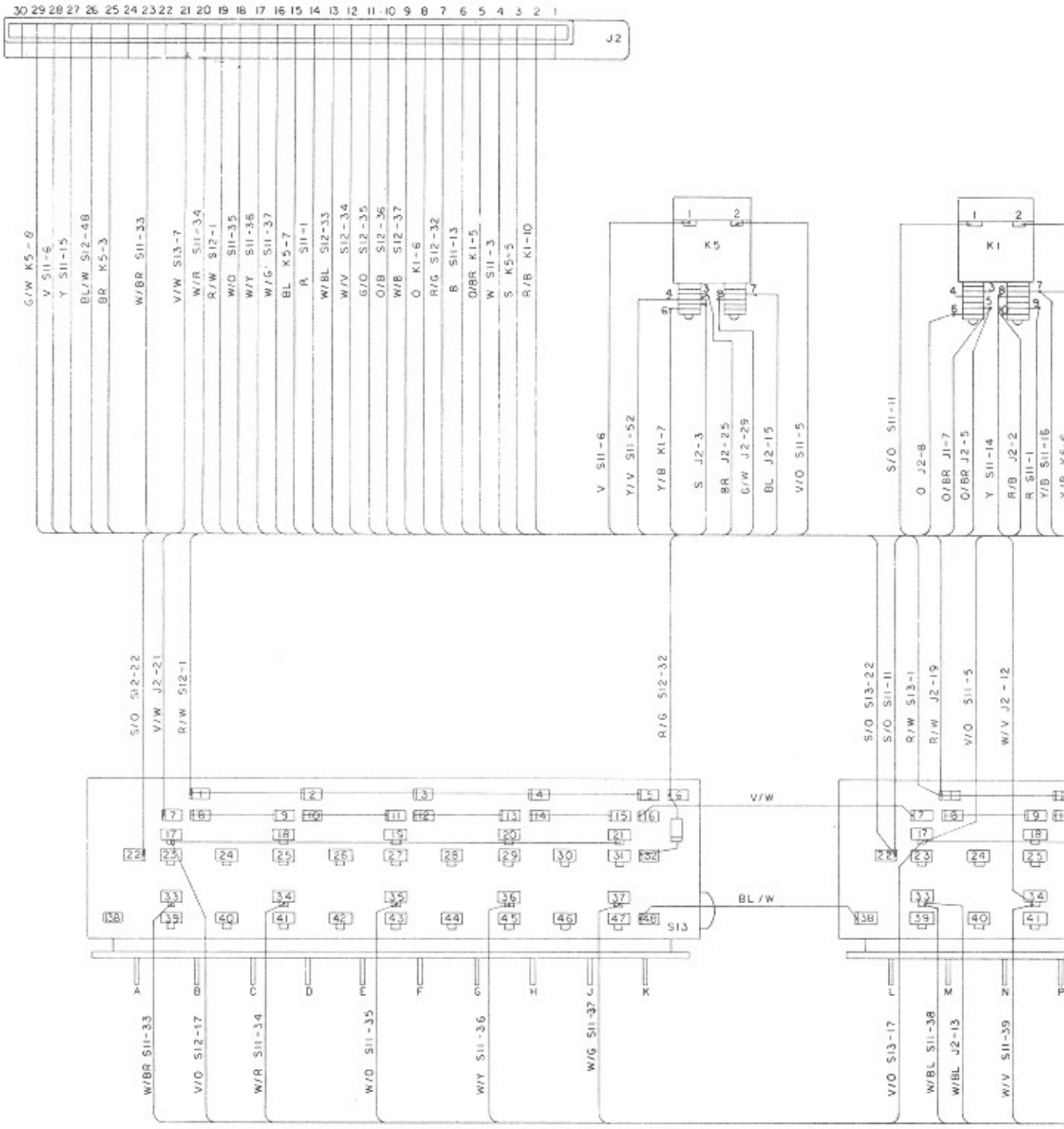


FIGURE 6-12. 120 WATT OUTPUT TRANSFORMER PACKAGE WIRING DIAGRAM



COLOR CODE:

IN ALL TWO COLOR WIRES THE FIRST COLOR IS THE BASIC COLOR OF THE WIRE AND THE SECOND COLOR IS THE STRIPE OR HASH MARK.

EXAMPLE: W/R IS WHITE WIRE WITH RED MARKING.

B	BLACK
BR	BROWN
R	RED
O	ORANGE
Y	YELLOW
G	GREEN
BL	BLUE
V	VIOLET
S	SLATE
W	WHITE
PK	PINK
TAN	TAN

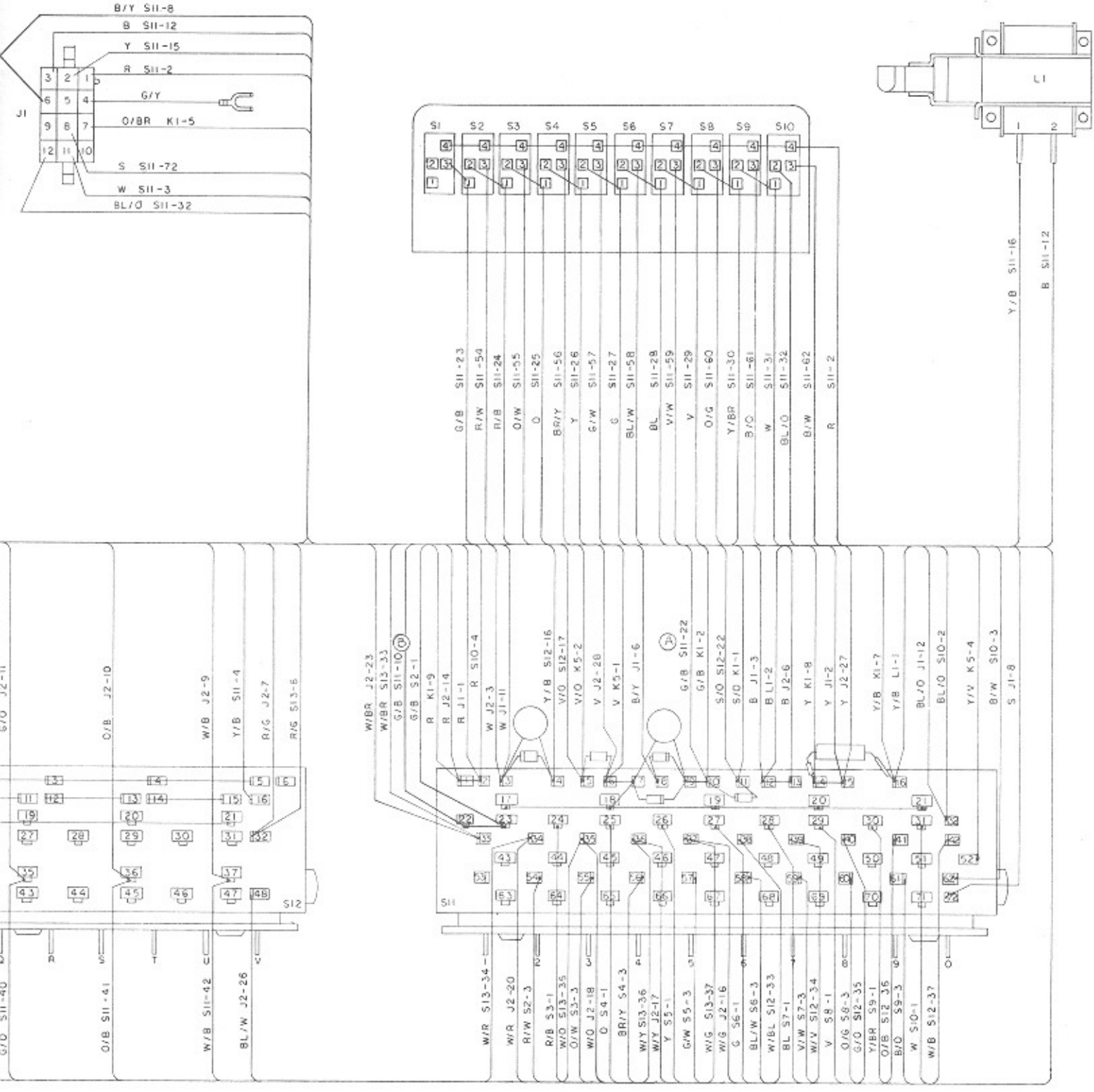
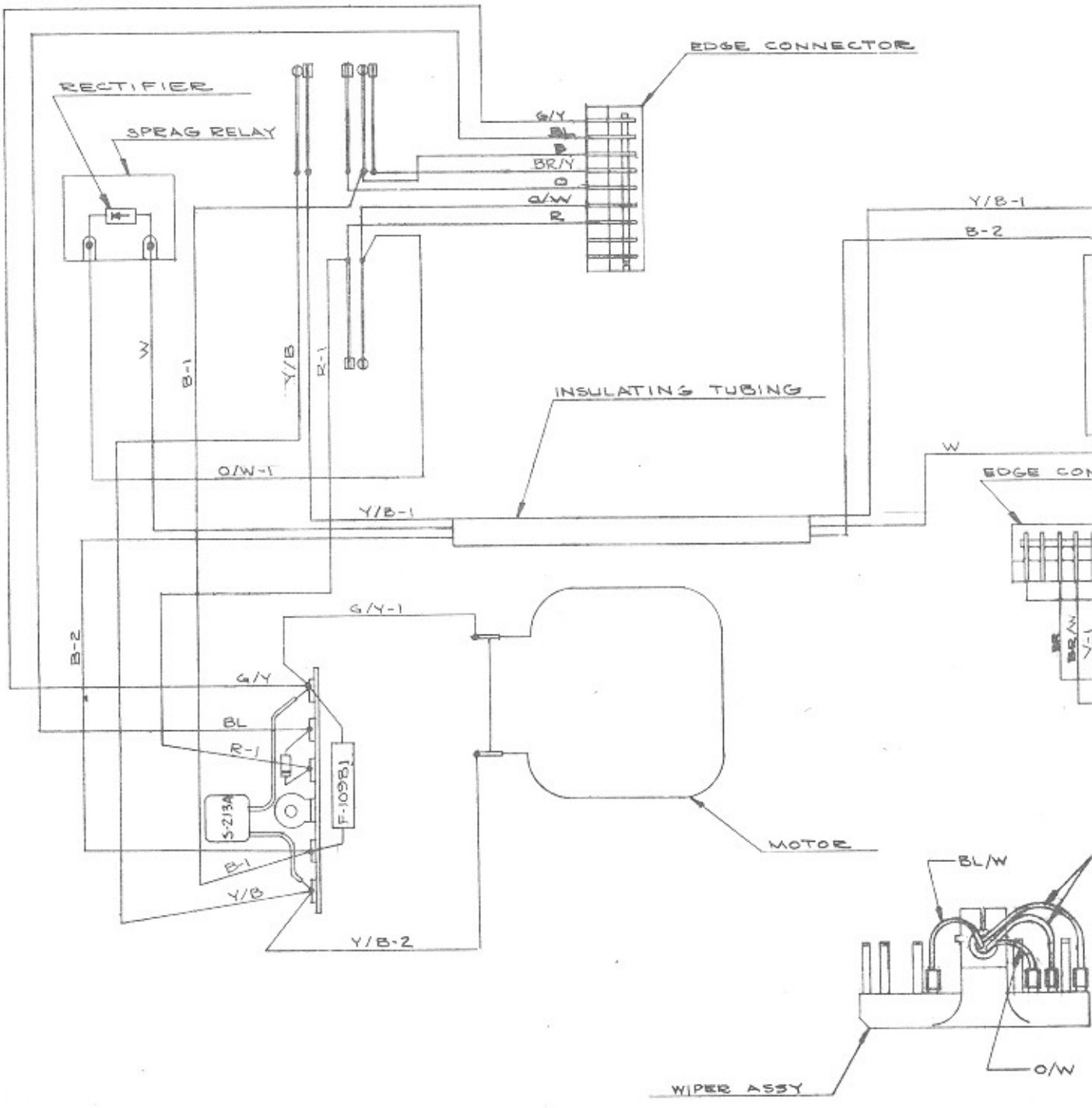


FIGURE 6-13. SELECTOR ASSEMBLY WIRING DIAGRAM


EDGE CONNECTOR
RECTIFIER
SPRAG RELAY
G/Y
BL
P
BR/Y
O
G/W
R
Y/B-1
B-2
W
B-1
Y/B
R-1
INSULATING TUBING
O/W-1
Y/B-1
W
EDGE CON
G/Y-1
B-2
G/Y
BL
R-1
S-213A
F-10981
B-1
Y/B
Y/B-2
MOTOR
BL/W
WIPER ASSY
O/W

COLOR CODE

R	RED
BL	BLUE
PK	PINK
B	BLACK
S	SLATE
O	ORANGE
Y	YELLOW
G	GREEN
BR	BROWN
V	VIOLET
W	WHITE
TAN	TAN

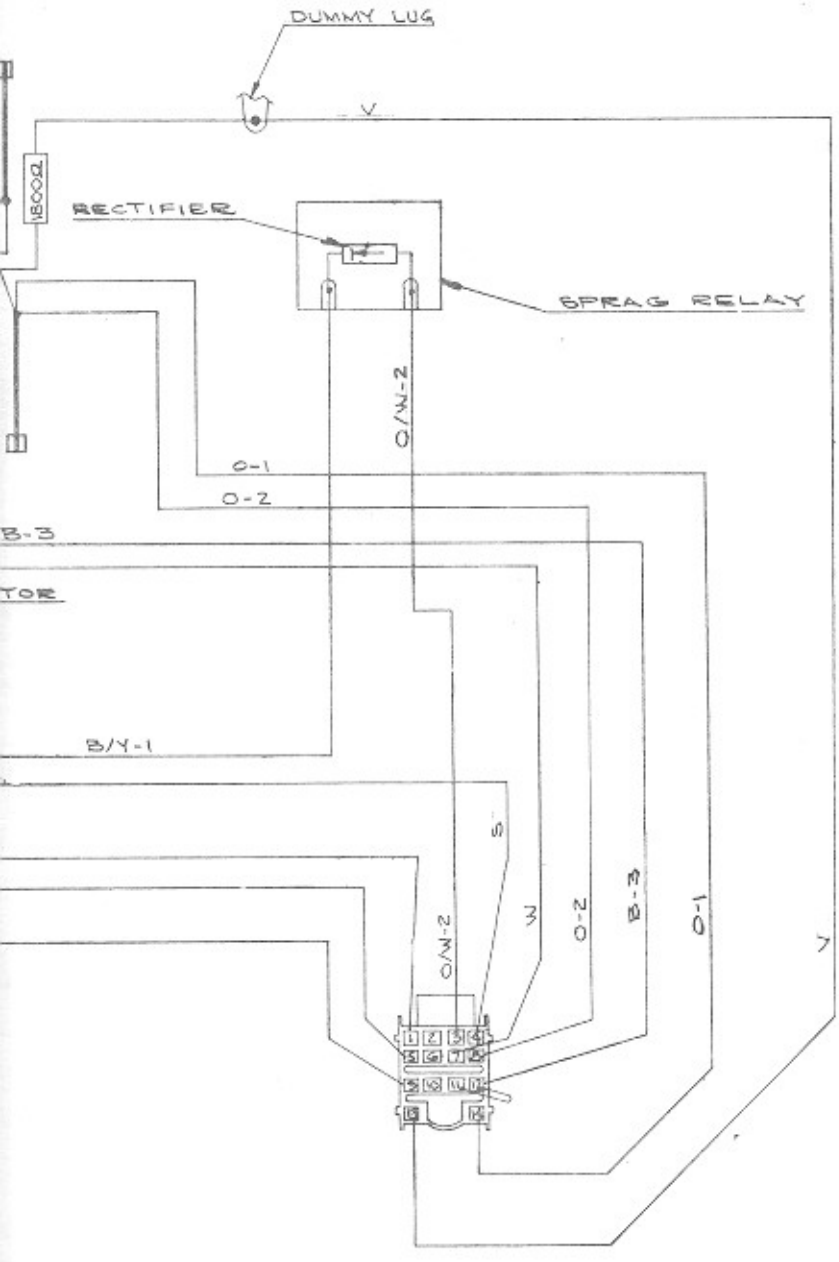
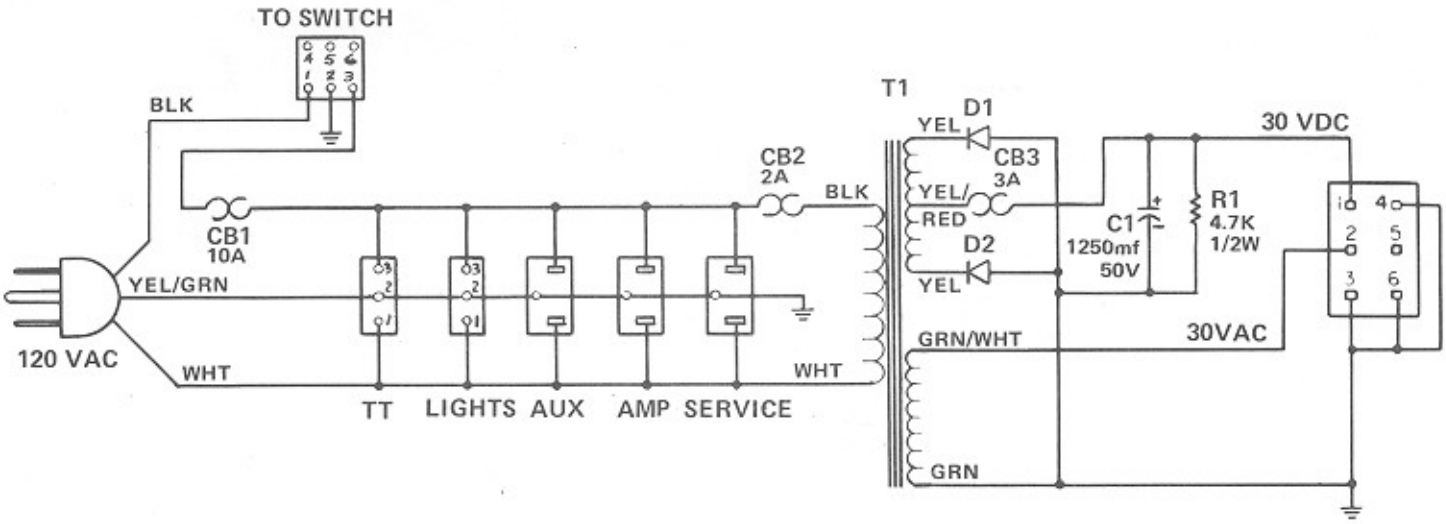


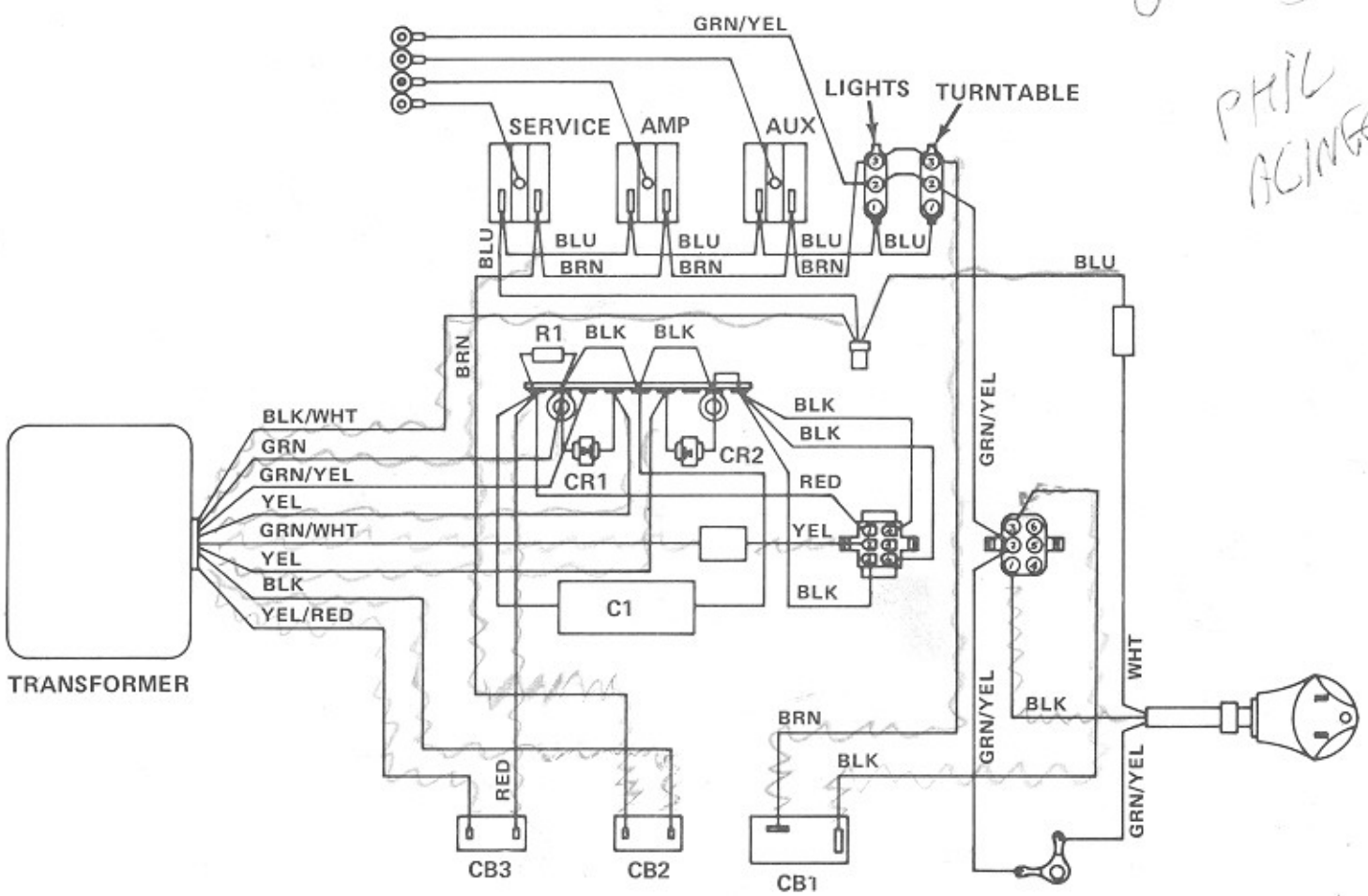
FIGURE 6-14. SEARCH UNIT ASSEMBLY WIRING DIAGRAM



L-6703A-Q-2 F

800 554 545

PHIL ACINFO



L-6703A-Q-1 L

FIGURE 6-15. JUNCTION BOX ASSEMBLY WIRING AND SCHEMATIC DIAGRAMS

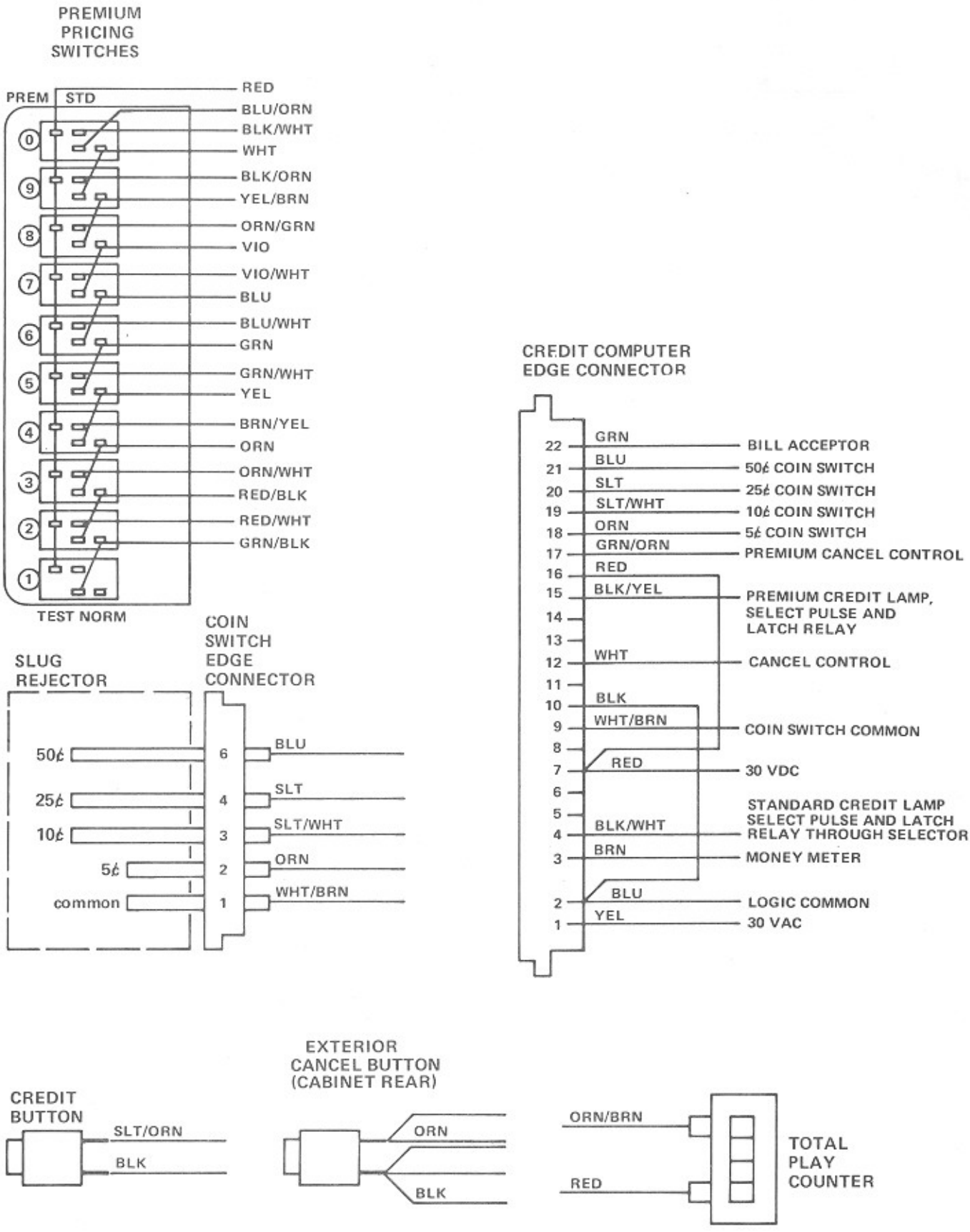


FIGURE 6-16. CREDIT AND PRICING SYSTEM WIRING DIAGRAM

SECTION 4 - TROUBLESHOOTING

GENERAL

This section contains troubleshooting charts listing probable trouble causes and corrective procedures. Fifteen sequence of operation schematic diagrams plus a complete, detailed explanation of the operation of each Phonograph component are included in aid in isolating and correcting equipment malfunctions easily and rapidly. Use the instructions in this section in conjunction with the adjustment and repair and replacement instructions in Section 5 - Maintenance to isolate and correct Phonograph malfunctions.

TROUBLESHOOTING

It is important to troubleshoot logically so that effort is not wasted in removing and replacing the wrong parts. Most failures are caused by minor defects, such as loose connections or dirty contacts. Check the following before replacing any parts:

1. Check that all plugs are firmly seated in their receptacles.
2. Check that connector pins are not bent, broken, or pushed through the back of the connector or receptacle when mated.
3. Check that wires are not broken at connector pins.
4. Check that the area of the search unit commutator board that mates with harness edge connector is clean and intact. Make sure that the connector is firmly seated.
5. Check that commutator segments are clean and that all wiper blades are properly positioned on their respective commutator segments.

CREDIT COMPUTER TROUBLESHOOTING

PRELIMINARY CHECK

In order to isolate a problem in the credit system, perform the following preliminary check. Observe phonograph functions step by step to identify the specific problem area, then proceed to Table 4-1 Credit Computer Troubleshooting Charts for specific solutions.

1. Check the setting of the program switches in the Credit Computer to make sure they are set to the desired price of play program. Also make sure the premium price switches in the selector are set to the desired position. The "test switch"(in the selector premium pricing switch bank) must be set to the "normal" position.
2. Deposit nickels, one at a time, to reach the required credit level for standard play. Check to see that the "Make Standard Selection" lamp does not light until a sufficient number of nickels have been deposited.

NOTE

IF LAMP DOES NOT LIGHT WHEN CORRECT CHANGE IS ACCEPTED, CHECK LAMP; CHECK CREDIT COMPUTER EDGE CONNECTOR.

3. Make a standard selection. The "Make Standard Selection" lamp must go out and no further selections can be made.

NOTE

IF THE DESIRED PRICE PROGRAM IS 2/25¢ OR 3/25¢, IT IS NECESSARY TO DEPOSIT 25¢ (5 NICKELS) BEFORE THE CREDIT LAMP LIGHTS. IT IS NECESSARY TO MAKE 2 (OR 3) STANDARD SELECTIONS TO CANCEL CREDIT.

4. Next deposit nickels and dimes to reach the required credit level to obtain bonus play (25¢ or 50¢ typically). Check to see that the "Make Any Selection" lamp lights, in addition to the "Make Standard Selection" lamp.

5. Make standard selections or a combination of standard and premium selections as indicated by the price of play card. The "Made any Selection" lamp goes out when premium credit no longer exists. The "Make Standard Selection" lamp goes out when standard credit no longer exists. Make sure proper credit is established for the total coin deposit.

6. Repeat the above procedure for checking credit and cancel operation at each credit level shown on the price card. Use combinations of coins (i.e. nickels, dimes and quarter) to achieve the desired deposit.

7. Establish credit on the phonograph. Interrupt power by turning the scan switch off, power switch off, etc. If the power interruption is greater than one second duration, credit must be erased. This is the method used to remove credit during test and/or troubleshooting.

8. Push the manual credit button. Credit must be established as though a 25¢ deposit had been made. Remove credit.

TABLE 4-1. CREDIT SYSTEM TROUBLESHOOTING

CHART 1 - NO CREDIT ESTABLISHED WHEN COINS ARE INSERTED

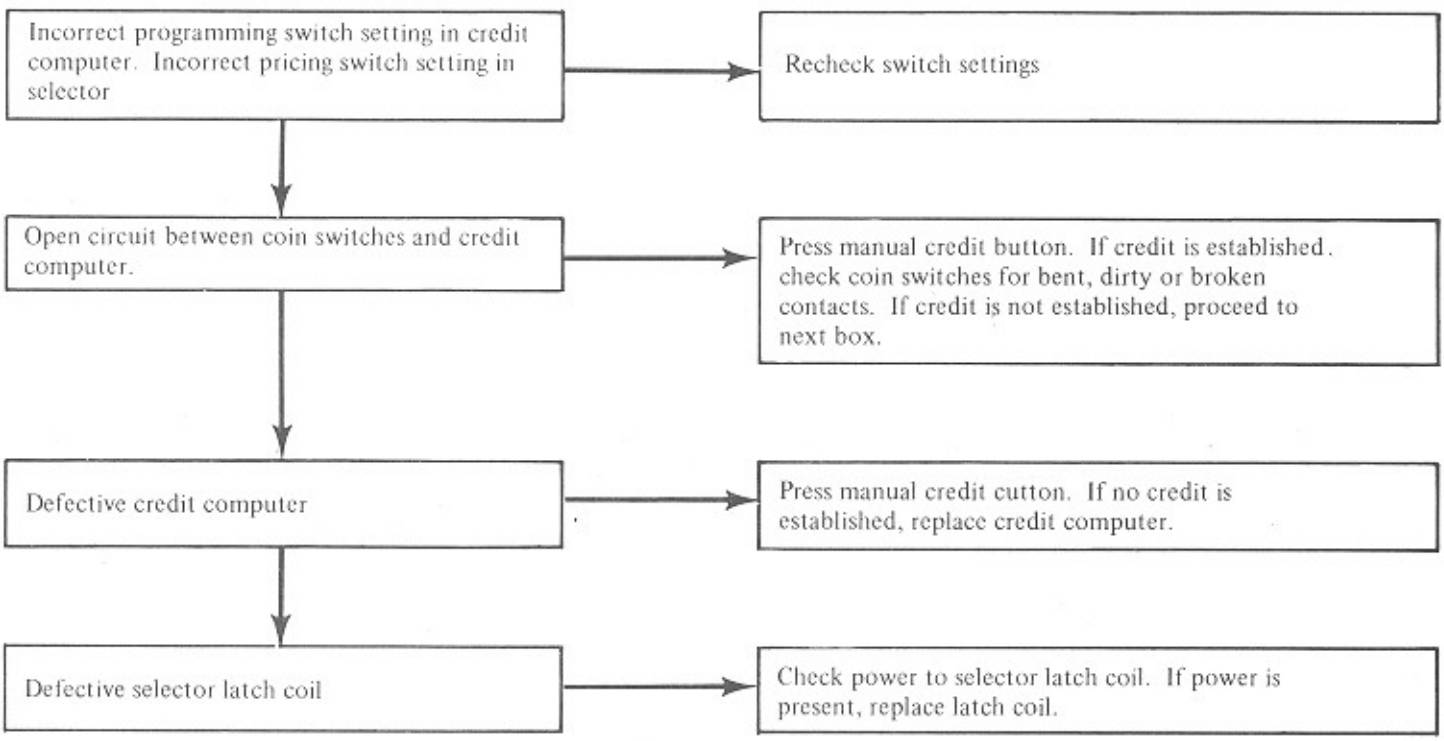


CHART 2 - TOO MUCH CREDIT ESTABLISHED WHEN COINS ARE INSERTED

Incorrect settings of pricing or programming switches.	Recheck switch settings
Incorrect connections to credit computer	Check to see that proper coin switches are connected to credit computer edge connector (See page 6-18)
Faulty coin switch operation	Incorrect adjustment or tension may cause switch bounce resulting in double coin credit. Adjust coin switches. (See page 5-28).
Defective credit computer	Replace credit computer.

CHART 3 - INSUFFICIENT CREDIT FOR COINS INSERTED

Incorrect settings of pricing or programming switches.	Recheck switch settings
Incorrect connections to credit computer	Check to see that proper coin switches are connected to credit computer edge connector (See page 6-18)
Dirty or bent coin switch contacts	Clean and adjust coin switch contacts (See page 5-28)
Dirty programming switches on credit computer	Exercise all programming switches by turning off and on several times. Reset desired program and recheck operation.
Defective credit computer	Replace credit computer.

CHART 4 - CONTINUOUS FREE PLAY

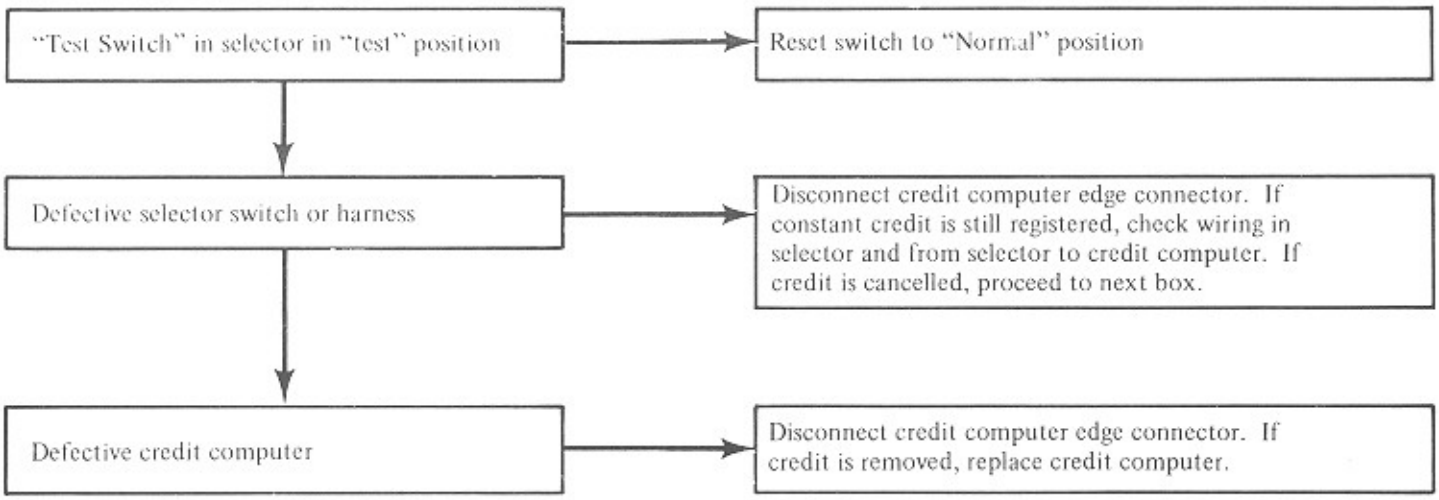
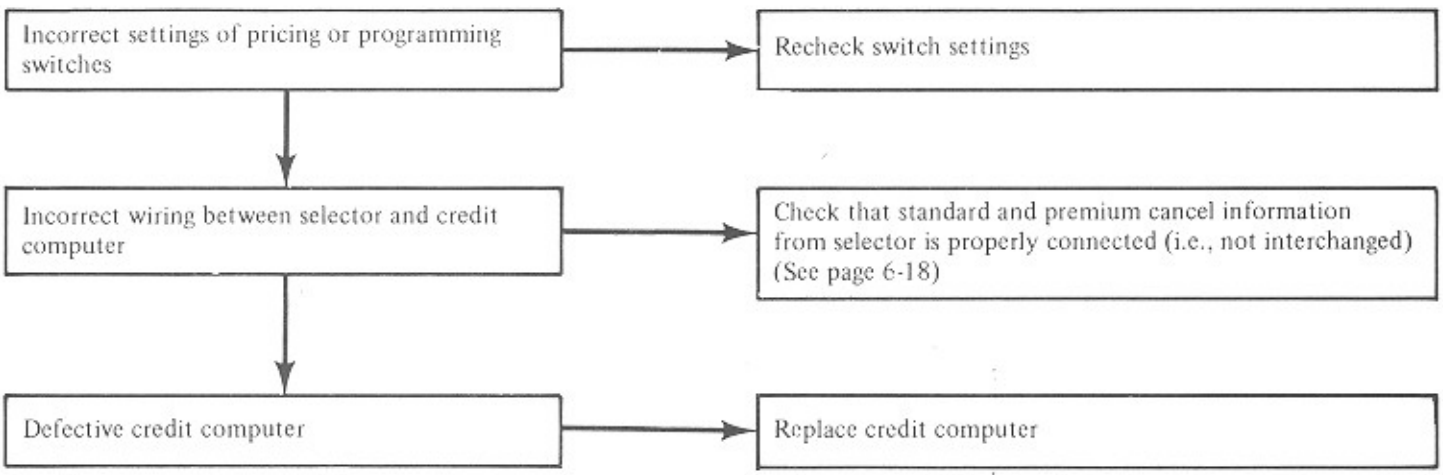


CHART 5 - IMPROPER CANCEL OPERATION WHEN SELECTIONS MADE



TROUBLESHOOTING CHARTS

The possible malfunctions of the Phonograph, their probable causes and remedies are listed in tables 4-2 through 4-4. The TROUBLE column contains specific failures. Each failure has one or more corresponding causes in the PROBABLE CAUSE column. If more than one probable cause and remedy are listed for a particular trouble, perform the procedures in the REMEDY column in the order listed.

TABLE 4-2. SLUG REJECTOR AND SELECTION SYSTEM TROUBLESHOOTING

TROUBLE	PROBABLE CAUSE	REMEDY
Valid coins fail to pass through slug rejector into cash box. Coins remain jammed in rejector .	Dirt or foreign matter clogging coin passages in rejector	Refer to coin rejector service manual for cleaning procedure. Clean in accordance with instructions.
	Scavenger binding, rejector out of adjustment .	Refer to coin rejector service manual for adjustment procedure.

TABLE 4-2. SLUG REJECTOR AND SELECTION SYSTEM TROUBLESHOOTING (CONTINUED)

TROUBLE	PROBABLE CAUSE	REMEDY
Valid coins accepted, credits are established, pushbuttons do not latch in.	Latch coil not operating. Select pulse and latch relay R1 not picking up.	Check coil for continuity. Check relay contacts for closure. Replace relay or coil if necessary.
	Select pulse and latch relay R1 contacts broken, dirty, or out of adjustment. R1 not picking up after credit is established.	Clean and adjust relay contacts.
	Open circuit between credit unit and select pulse and latch relay R1. R1 not picking up after credit is established.	Check for open circuit. Refer to sequence of operation, page 4-10.
Pushbuttons latch in but release prematurely; no selection played.	Select pulse and latch relay R1 time delay circuit giving short pulse.	Check diode on selector assembly. Check relay R1 for dirt between core and armature. Replace parts if necessary.
Pushbuttons latch in; no further action.	Open circuit to search unit motor.	Check wiring. See page 6-16.
Pushbuttons latch in, search unit motor starts, but runs continuously.	Open circuit in selector assembly, wiring from pushbutton switches to search unit printed board segments.	Check wiring against selector assembly wiring diagram. See page 6-15.
	Contacts on mechanism control relay R dirty, broken, or out of adjustment.	Check mechanism control relay R for proper operation. Replace if necessary. This relay is nonrepairable.
Selection is registered, magazine rotates one complete scan cycle and stops. No record is played.	No circuit through stop switch.	Check wiring to stop switch. See page 6-5.
	Selected pin not pushed far enough; select coil not properly positioned.	Check inside and outside row select coils for proper operation. Adjust select coil arm assembly. See page 5-27.
Wrong selection is played every time.	Search unit select coil arm assembly out of adjustment.	Adjust search unit select coil arm assembly. Check search unit wiper adjustment. See page 5-25.
	Stop switch out of adjustment.	Check stop switch alignment. See page 5-5.
	Stop switch gear not properly installed.	Check stop switch gear alignment. See page 5-6.
One particular letter or number, in combination with all letters and numbers, will not register.	Open circuit in the particular letter or number wiring.	Check for dirt on search unit commutator board or wiper contacts. Clean with alcohol, if necessary. To locate the open circuit, make 20 selections in the following order: A1, B1, C2,D2, E3, F3, G4, H4, J5, K5, L6, M6, N7, P7, Q8, R8, S9, T9, U0, V0. This test combination will determine which letter or number has an open circuit.
Search unit motor energized but does not run.	Search unit gears binding.	Check for dirt or foreign matter lodged in gear teeth. Check backlash adjustment. See page 5-20.
	Tip of select coil plunger hung up on side of pin, excessive backlash causing select coil arm overtravel.	Adjust search unit gears for proper backlash. See page 5-20.

TABLE 4-2. SLUG REJECTOR AND SELECTION SYSTEM TROUBLESHOOTING (CONTINUED)

TROUBLE	PROBABLE CAUSE	REMEDY
Only one selection is made but two selections play.	Select coil plunger hitting two adjacent pins; select coil arms out of adjustment, or overtravel caused by excessive gear backlash.	Adjust select coil arm assembly. Adjust search unit gears for proper backlash. See pages 5-20 and 5-27.

TABLE 4-3. RECORD CHANGER MECHANISM TROUBLESHOOTING

TROUBLE	PROBABLE CAUSE	REMEDY
All selections register properly but magazine does not rotate.	Scan Assembly not operating	Check scan coil for open, check for binding linkage.
	Scan switch defective or out of adjustment .	Check scan switch for proper operation, adjust switch position.
	Diode D-1 open.	Check by shorting across diode.
	Cam switch CS2 faulty or out of adjustment.	Check switch for proper operation or adjust switch position.
	Magazine detent coil open or binding detent linkage.	Check coil for continuity, free linkage.
	Relay contact 1 & 9 faulty.	Check relay, replace if necessary.
	Detent switch faulty or out of adjustment.	Check switch for proper operation or adjust switch position.
	Magazine motor faulty or drive gears binding.	Check motor and gear train for proper operation.
Scan linkage operates, magazine completes one scan cycle and stops - no record is played. Stop switch jumps pins.	No circuit through stop switch	Check stop switch and wipers on back of stop switch.
	Diode D-2 defective.	Check diode.
	Short circuit in 50 MFD capacitor.	Check capacitor resistance.
	Faulty mech. relay. (R)	Replace relay.
	CS5 cam switch defective or out of adjustment.	Check cam switch for proper operation - replace if necessary, adjust switch position.
	Short circuit on common side of magazine detent coil.	Check detent coil circuit.
Magazine stops at proper selection, but record transfer assembly does not operate. Relay (R) picked up.	Open circuit to transfer motor.	Check relay contacts 6 and 10, 7 and 11, for proper operation.
	Defective transfer motor.	Check motor, replace if necessary.
Transfer arm stops in mid travel between magazine and turntable. Phono power is on.	Cam switch CS2 faulty of out of adjustment.	Check for proper operation of switch. Replace if necessary. Adjust as required.
	Open circuit breaker in junction box.	Check for short or overload condition. After correcting condition, reset circuit breaker.

TABLE 4-3. RECORD CHANGER MECHANISM TROUBLESHOOTING (CONTINUED)

TROUBLE	PROBABLE CAUSE	REMEDY
Transfer arm moves each record selection from magazine to turntable and back without being played, all other functions normal.	Diode D-3 shorted.	Check for short.
	Short circuit in cancel line, cut off switch or automatic cancel circuit.	Check for short.
	Cam switches CS-4 or CS5 faulty or out of adjustment.	Check switches - adjust or replace if necessary.
	Needle height improperly adjusted.	Adjust height of needle.
Wrong side of record plays; selection is improperly registered.	Center slip ring wiper broken or out of adjustment.	Adjust or replace.
	Left side switch in stop switch assembly faulty.	Check left side switch - replace if necessary.
	Toggle switch coil open or linkage binding.	Check coil and linkage. Replace or free if necessary
	Diode D-3 open.	Check diode.
	Cam switch CS4 faulty or out of adjustment.	Check switch, replace or adjust if necessary
	Mechanism relay (R) contacts 5 and 9, not making connection.	Check relay - replace if necessary.
Wrong record played, selection is properly registered.	Stop switch gear out of adjustment.	Align 200 mark on stop switch gear with step in search unit mounting bracket. See page 5-6.
	Stop switch out of alignment.	Align stop switch. See page 5-6.
Selections play over and over, pins not being reset.	Slip ring wipers No. 2 or 3 broken or out of adjustment.	Adjust or replace slip ring wiper blade assembly.
	Cam switch CS3 or CS4 faulty or out of adjustment.	Check switches - replace or adjust if necessary.
	Reset pawl out of adjustment.	Adjust reset pawl. See page 5-5.
Magazine scans continuously after last selection is played.	Detent coil plunger binding or detent assembly out of adjustment.	Manually operate plunger to check that the detent pawl locks the detent wheel. Adjust or replace if necessary.
	Scan switch faulty or out of adjustment.	Check switches, repair or replace if necessary.

TABLE 4-4. SOUND SYSTEM TROUBLESHOOTING

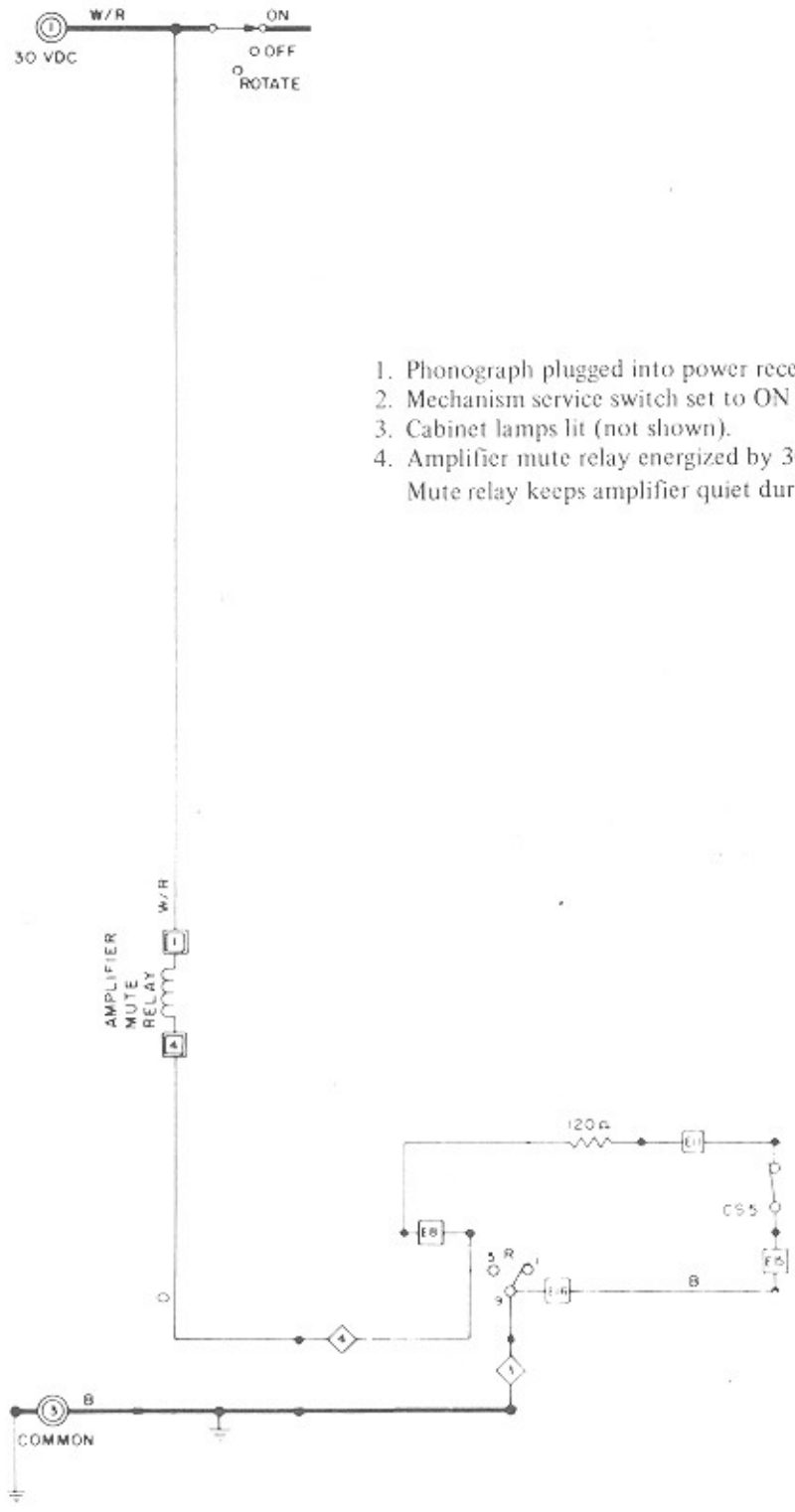
TROUBLE	PROBABLE CAUSE	REMEDY
No sound. Phonograph mechanical operation normal.	Amplifier circuit breaker open.	Check for short or overload condition which caused breaker to open. Reset breaker after this condition is corrected.
	Faulty mute relay	Check operation of mute relay; replace if necessary. This relay is nonrepairable.
	Cartridge leads broken or shorted.	Check that both cartridge leads are intact and that all connectors and plugs are firmly seated.
Partial or distorted sound.	Damaged stylus	Carefully check stylus, replace if necessary.
	Incorrect remote speaker hookup.	Check remote speaker connections. See page 2-5.
	Defective output transistors in in either channel.	Check output transistors. Replace if defective.
	Partial short in local or remote volume control. Incorrect speaker hookup. Incorrect remote volume control hookup.	Check volume control and speaker connections as shown in sound system connection diagram. See page 2-5.
Low volume apparent in one channel.	Cartridge defective	Replace cartridge if necessary. Check by substituting a cartridge that is known to be good.
	Faulty preamplifier board.	Replace preamplifier board.
	Blown DC fuse on driver board	Blown fuse on driver board will indicate a shorted output transistor. Replace fuse and transistor. See page 5-30
	Faulty driver board.	Replace driver board.
	Balance control not properly adjusted.	Adjust balance control for equal sound from each stereo channel. See page 2-3.
Constant high volume, cannot be adjusted at volume control.	Short in volume control circuit.	Check wiring. See sound system connection diagram. See page 2-5.
Excessive record scratch evident through speakers.	Scratched or worn records.	Replace records.
	Damaged stylus.	Check stylus force. Replace stylus.
	Treble range control set too high for condition of records.	Reduce treble range control setting. See page 2-3.
Intermittent sound.	Speaker lines shorted	Check for shorted or partially shorted speaker lines.
Excessive hum-low volume.	Broken shield on cartridge leads.	Be sure that shielding or wires are not broken at any point between the cartridge and amplifier input plug.

SEQUENCE OF OPERATION

To enable you to read the sequence of operation while simultaneously viewing the sequence diamgrams and complete schematic, spread foldout page 6-3 out to the right.

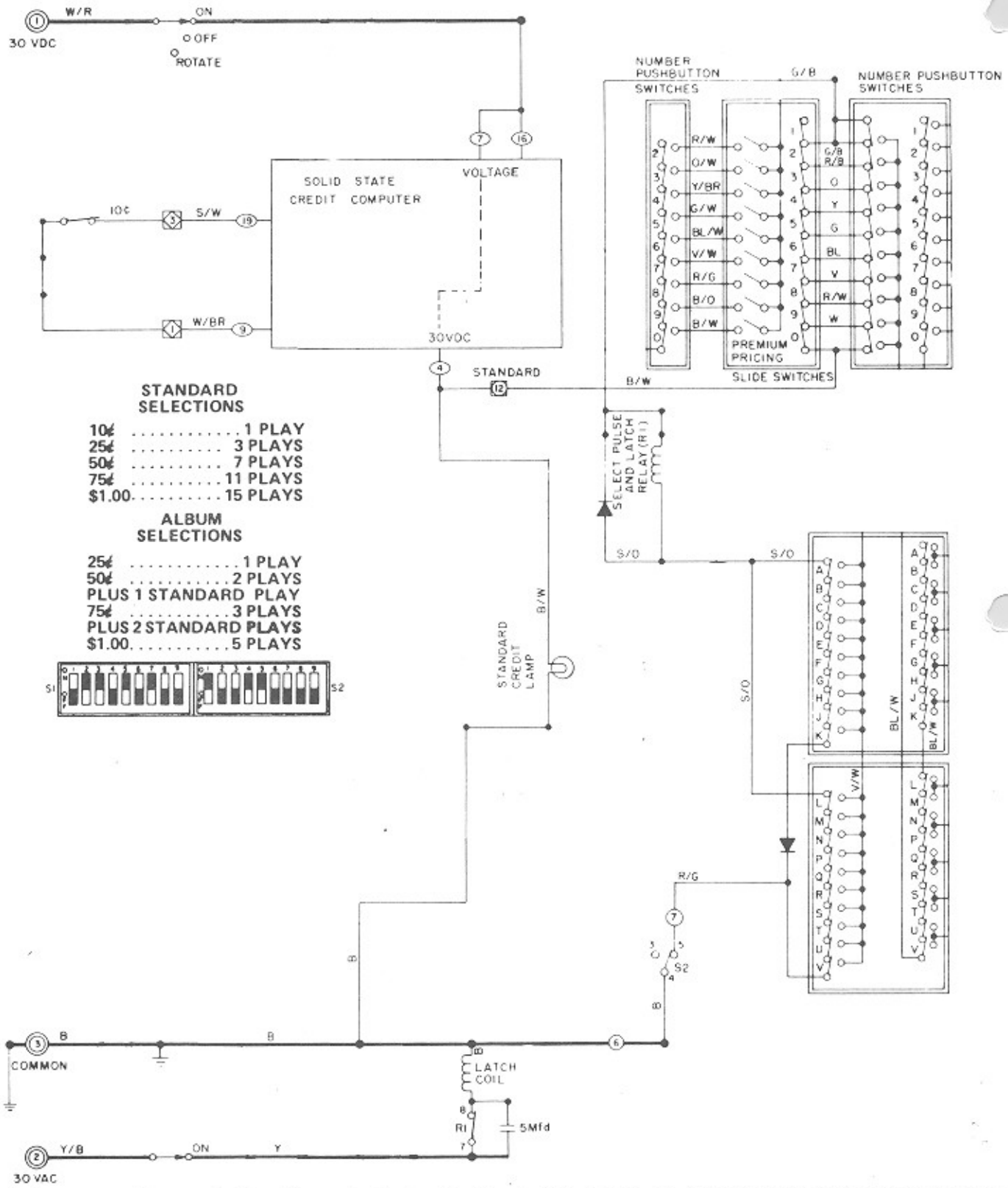
Each diagram is a partial simplified schematic of the phonograph schematic diagram, figure 6-1. Only the circuits under discussion for the particular sequence are shown. The accompanying text on each diagram explains circuit operations.

1. STANDBY



1. Phonograph plugged into power receptacle.
2. Mechanism service switch set to ON position.
3. Cabinet lamps lit (not shown).
4. Amplifier mute relay energized by 30 V.D.C. through CS5.
   Mute relay keeps amplifier quiet during record transfer cycle.

2. CUSTOMER INSERTS DIME, CREDIT ESTABLISHED



STANDARD SELECTIONS

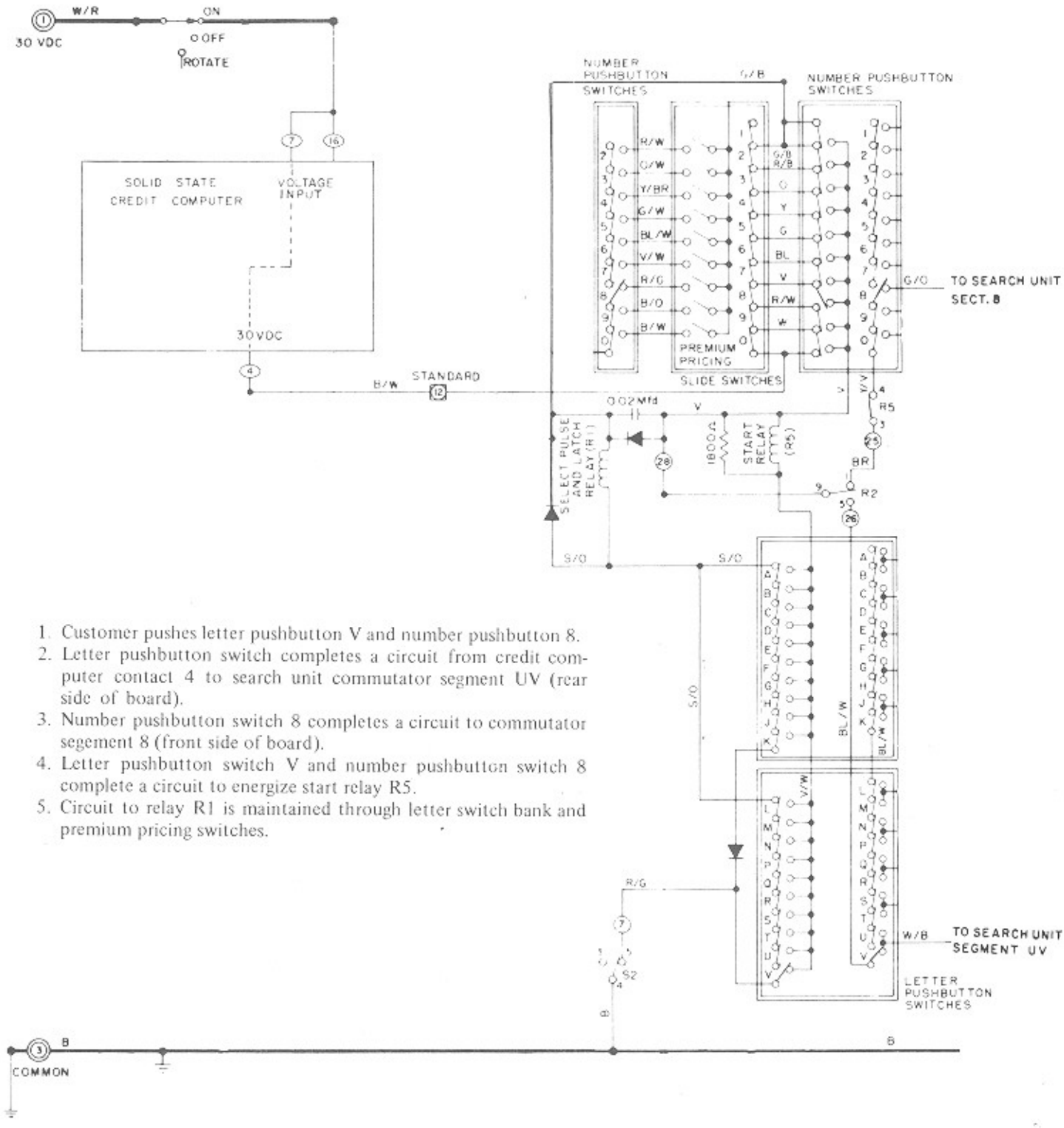
10¢ . . . . . 1 PLAY
25¢ . . . . . 3 PLAYS
50¢ . . . . . 7 PLAYS
75¢ . . . . . 11 PLAYS
$1.00 . . . . . 15 PLAYS

ALBUM SELECTIONS

25¢ . . . . . 1 PLAY
50¢ . . . . . 2 PLAYS
PLUS 1 STANDARD PLAY
75¢ . . . . . 3 PLAYS
PLUS 2 STANDARD PLAYS
$1.00 . . . . . 5 PLAYS

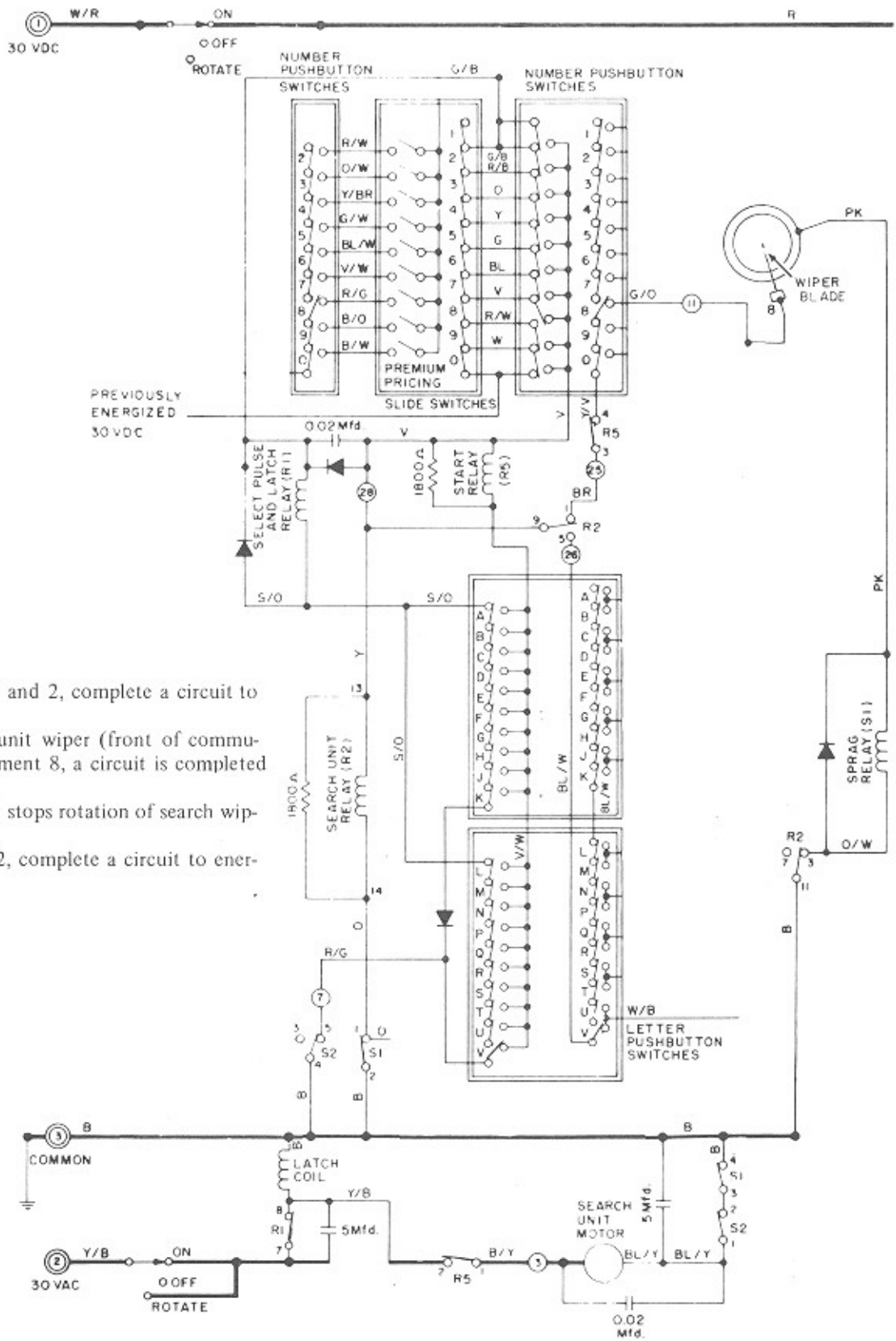
1. Assume credit computer is set for a standard price of 10¢. Dime passes through slug rejector.
2. Dime operates 10¢ coin switch lever, closing 10¢ coin switch.
3. Credit is established in the credit computer.
4. Power is applied to standard price lamp through contact 4 of credit computer edge connector.
5. Select pulse and latch relay energized through number and letter pushbuttons and sprag relay S2, contacts 4 and 5.
6. Select pulse and latch relay R1, contacts 7 and 8 pull in, energizing latch coil. Pushbuttons will latch in when pressed.

3. CUSTOMER MAKES SELECTION



1. Customer pushes letter pushbutton V and number pushbutton 8.
2. Letter pushbutton switch completes a circuit from credit computer contact 4 to search unit commutator segment UV (rear side of board).
3. Number pushbutton switch 8 completes a circuit to commutator segement 8 (front side of board).
4. Letter pushbutton switch V and number pushbutton switch 8 complete a circuit to energize start relay R5.
5. Circuit to relay R1 is maintained through letter switch bank and premium pricing switches.

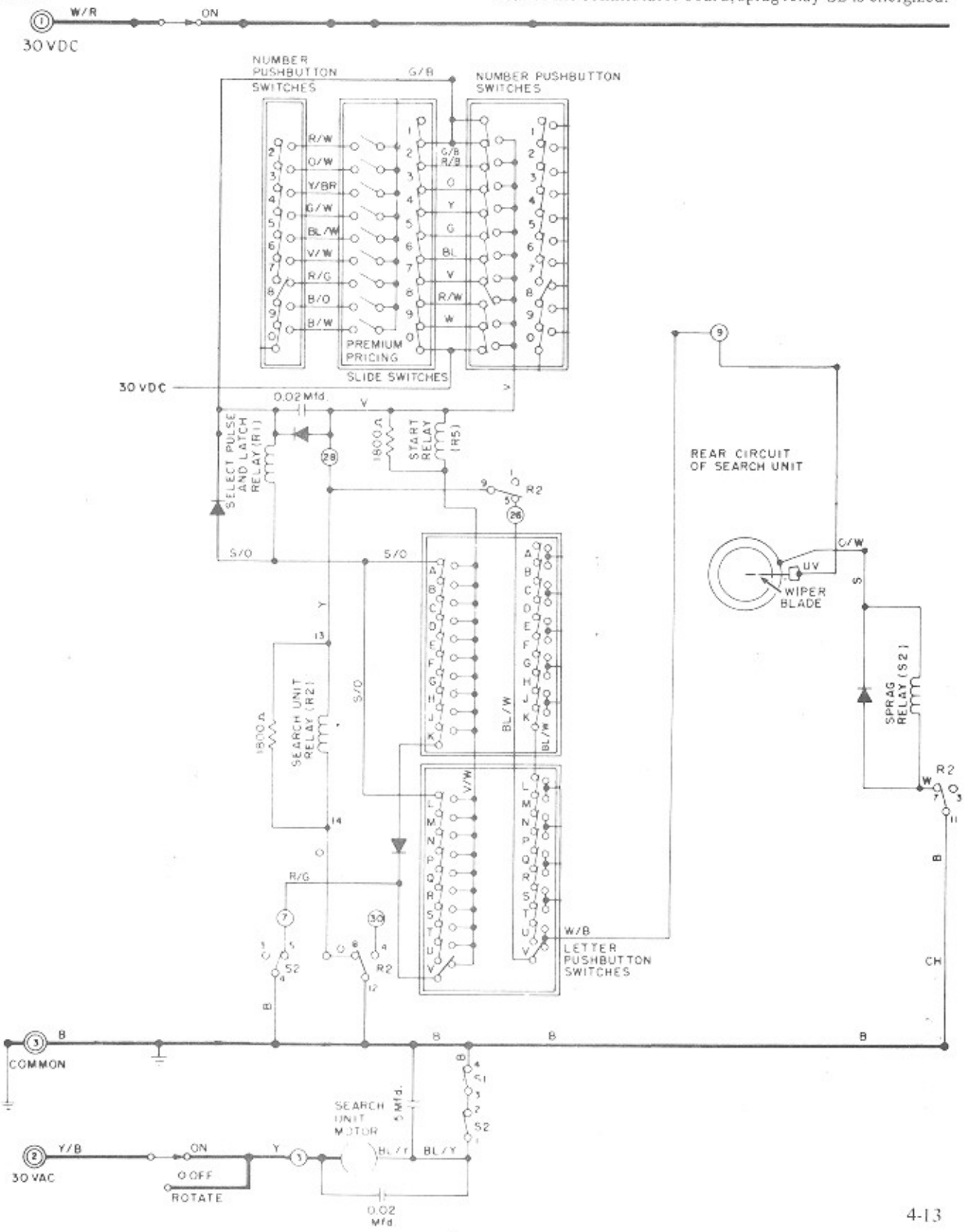
4. SEARCH WIPERS LOCATE NUMBER



1. Start Relay R5, contacts 1 and 2, complete a circuit to search unit motor.
2. When the number search unit wiper (front of commutator board) runs onto segment 8, a circuit is completed to energize sprag relay S1.
3. The sprag tooth on relay S1 stops rotation of search wipers and select coils.
4. Relay S1, contacts 1 and 2, complete a circuit to energize search unit relay R2.

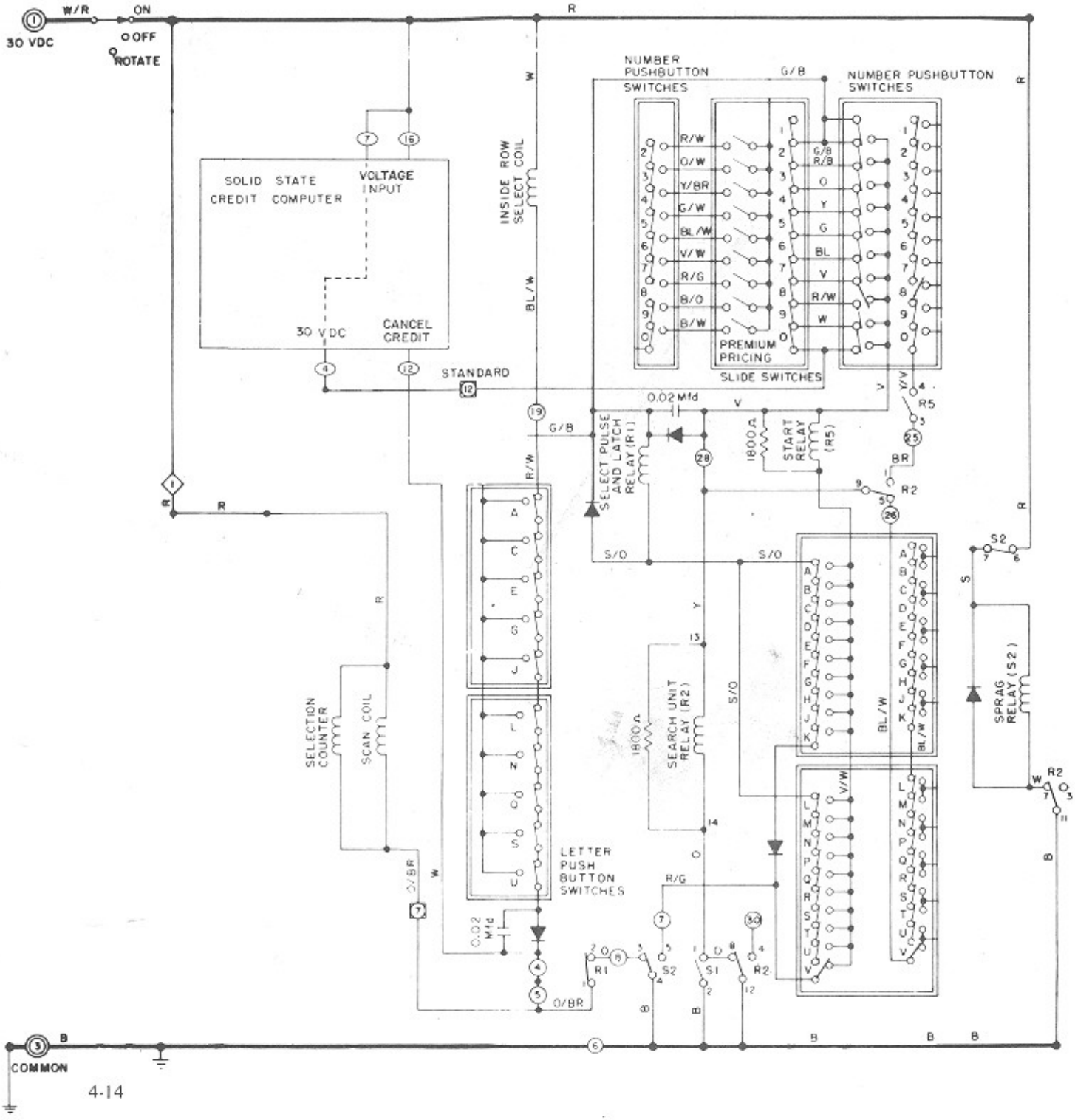
5. SEARCH CONTINUES

1. Search unit relay R2, contacts 7 and 11, transfer the common side of the circuit from sprag relay S1 to sprag relay S2.
2. Search unit relay R2, holds itself in through contacts 8 and 12.
3. Search unit relay R2, contacts 5 and 9, transfer the positive side of the selection circuit from the number pushbutton switches to the letter switches.
4. Sprag relay S1 drops out, contacts 3 and 4 energize search unit motor.
5. When the letter wiper runs onto the UV segment on the rear of the commutator board, sprag relay S2 is energized.

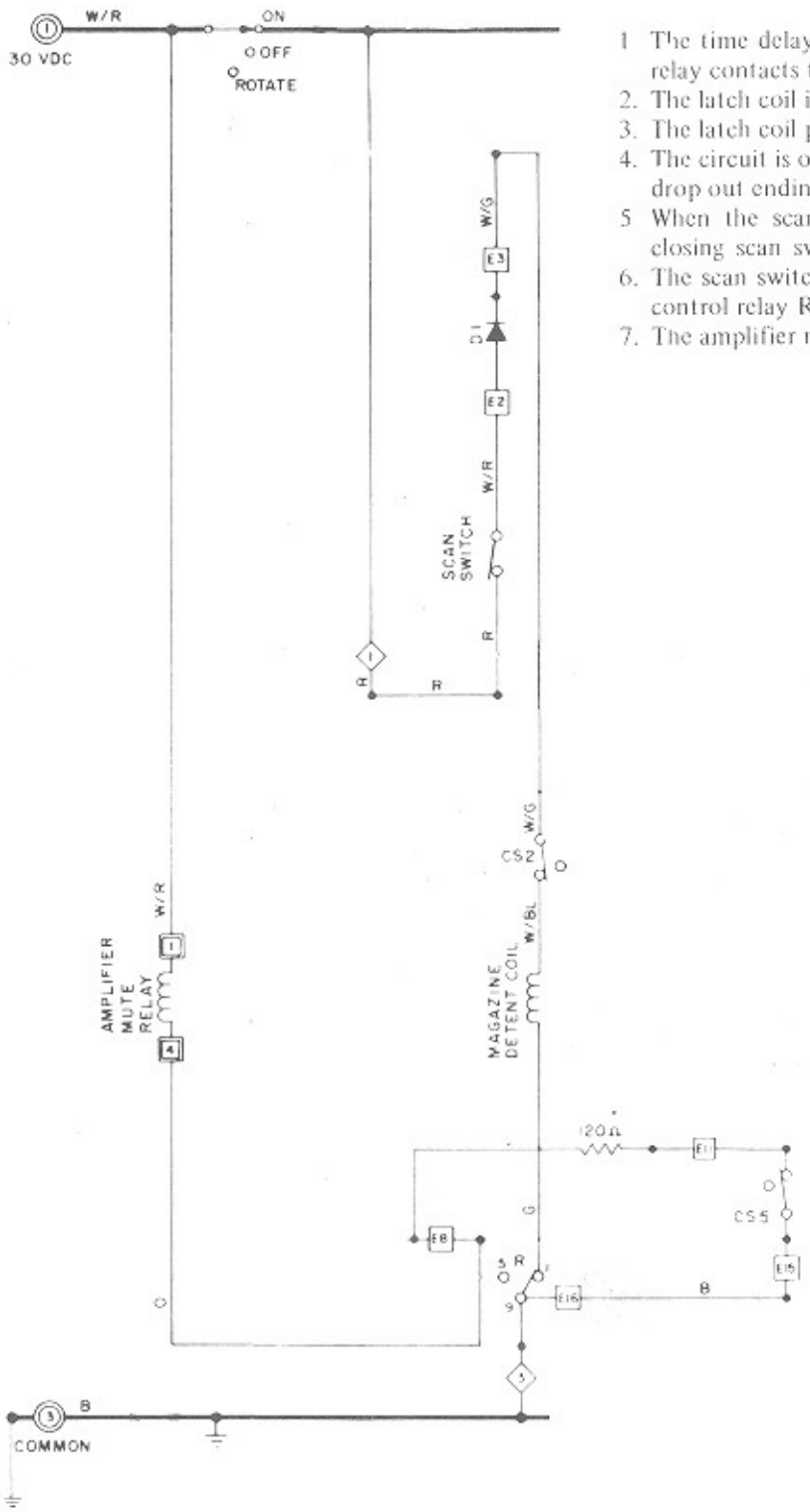


6. SELECTION REGISTERED, CREDIT REMOVED, AND SCAN CONTROL OPERATED

1. Sprag relay S2 locks the search wipers and select coils in place with the select coils aligned with pins representing selections U8 and V8.
2. Sprag relay S2, contacts 1 and 2, de-energize search unit motor.
3. Sprag relay S2 holds itself in through contacts 6 and 7.
4. Sprag relay S2, contacts 4 and 5, transfer, opening the circuit to select and latch relay R1. Start relay R5 drops out.
5. Select pulse and latch relay R1 is held for a short time after S2 transfers due to a diode connected across the coil. This time delay determines the length of the select pulse. During select pulse, search unit relay R2 is held closed through number pushbuttons and R2, contacts 8 and 12.
6. Select pulse and latch relay R1, contacts 1 and 2, and sprag relay S2, contacts 3 and 4, complete a circuit to energize inside row select coil, scan coil, selection counter and contact 12 on credit computer circuit board. Circuit to credit computer cancels one standard credit.
7. Inside row select coil pushes pin into select position on the search unit pinwheel assembly.

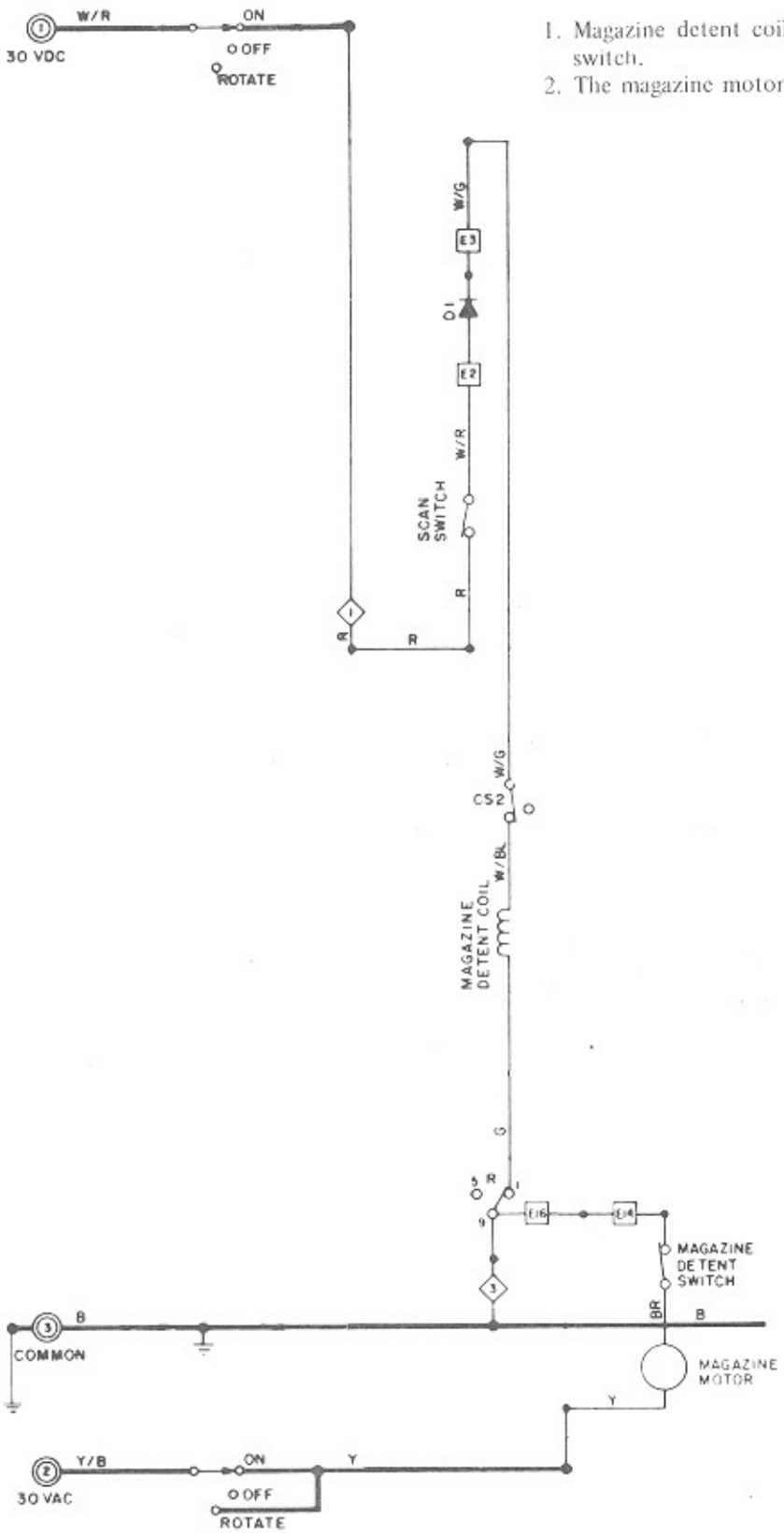


7. PUSHBUTTONS UNLATCH AND RECORD CHANGER STARTS



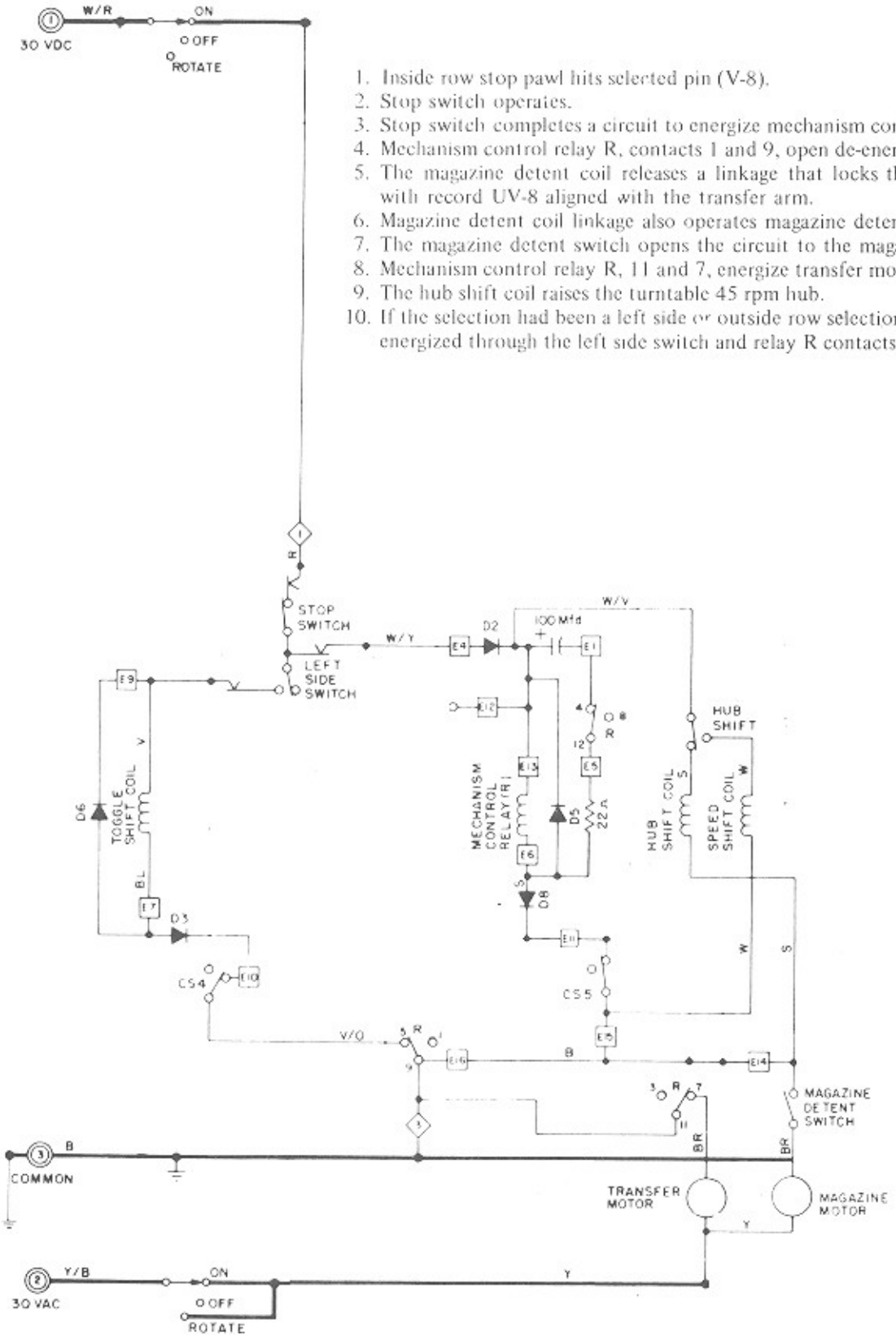
1. The time delay across select pulse and latch relay R1 runs out and the relay contacts transfer. This ends the select pulse.
2. The latch coil is de-energized.
3. The latch coil plunger releases pushbuttons V and 8.
4. The circuit is opened to search unit relay R2, sprag relay S2. The relays drop out ending the selection cycle.
5. When the scan coil was energized, it tripped the scan control gear, closing scan switch.
6. The scan switch energizes the magazine detent coil through mechanism control relay R, contacts 1 and 9.
7. The amplifier mute relay remains energized through cam switch CS5.

8. RECORD MAGAZINE ROTATES



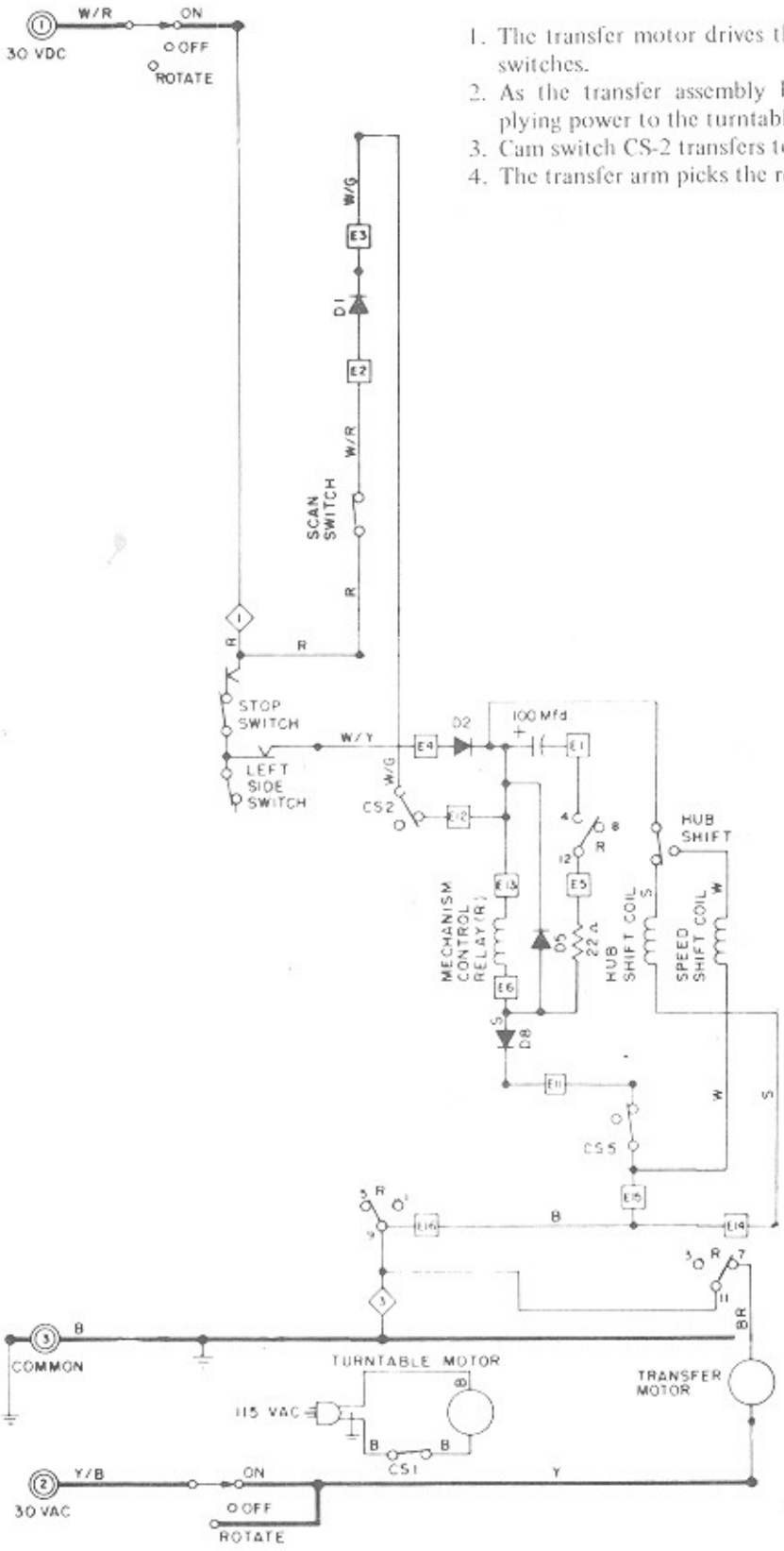
1. Magazine detent coil unlocks the magazine and trips magazine detent switch.
2. The magazine motor rotates the record magazine.

9. STOP SWITCH PAWL HITS SELECTED PIN-TRANSFER MOTOR STARTS



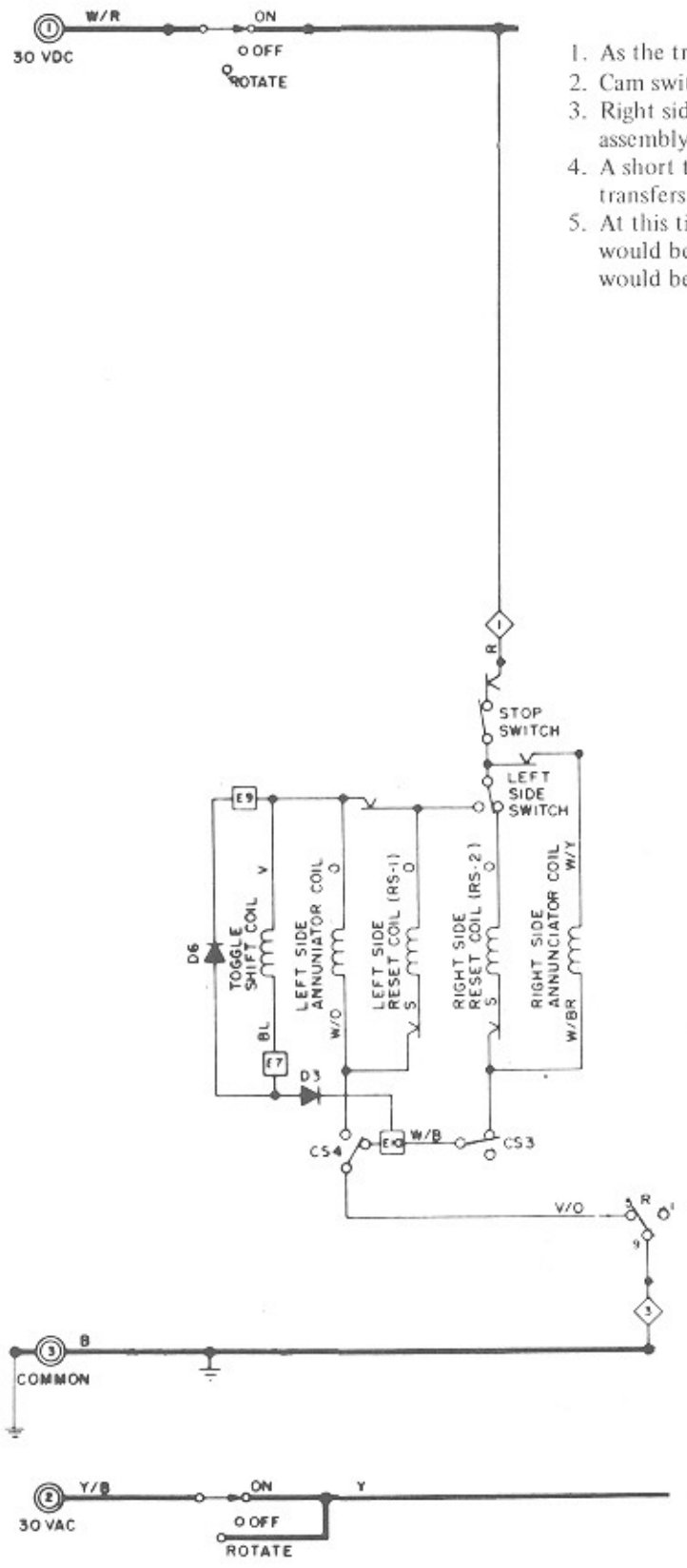
1. Inside row stop pawl hits selected pin (V-8).
2. Stop switch operates.
3. Stop switch completes a circuit to energize mechanism control relay R and hub shift coil.
4. Mechanism control relay R, contacts 1 and 9, open de-energizing magazine detent coil.
5. The magazine detent coil releases a linkage that locks the record magazine in position with record UV-8 aligned with the transfer arm.
6. Magazine detent coil linkage also operates magazine detent switch.
7. The magazine detent switch opens the circuit to the magazine motor.
8. Mechanism control relay R, 11 and 7, energize transfer motor.
9. The hub shift coil raises the turntable 45 rpm hub.
10. If the selection had been a left side or outside row selection, the toggle shift coil would be energized through the left side switch and relay R contacts 5 and 9.

10.RECORD PICKED UP



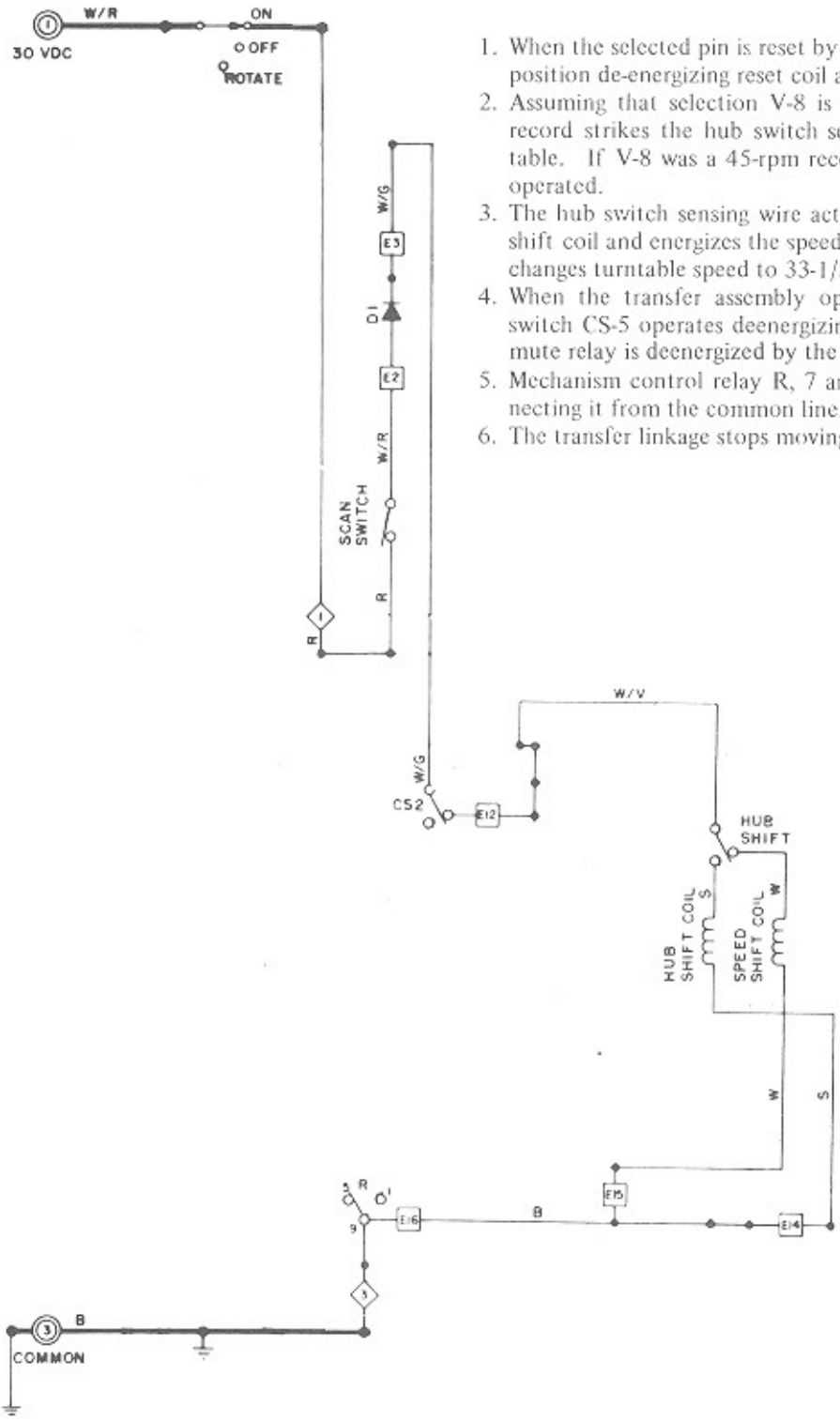
1. The transfer motor drives the transfer assembly and the cam that operates the cam switches.
2. As the transfer assembly begins to move, the cam closes cam switch CS-1 applying power to the turntable motor.
3. Cam switch CS-2 transfers to hold in hub shift coil and mechanism control relay R.
4. The transfer arm picks the record out of the magazine.

11.RECORD APPROACHES TURNTABLE



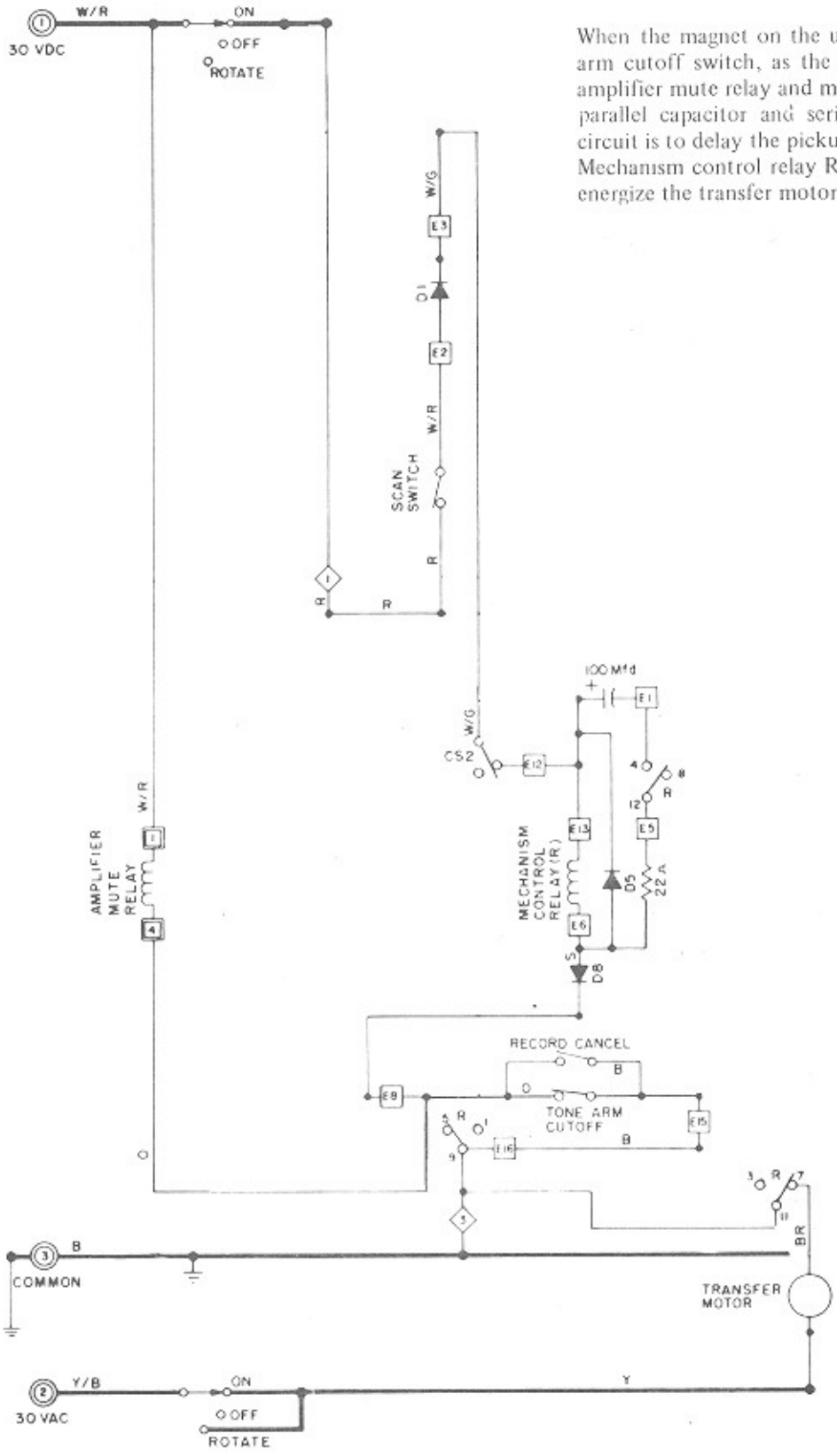
1. As the transfer motor continues to operate, cam switch CS-3 closes.
2. Cam switch CS-3 operates right side annunciator coil and right reset coil.
3. Right side reset coil plunger resets pin V-8 in the search unit pinwheel assembly.
4. A short time later, cam switch CS-3 opens and cam switch CS-4 transfers to the position opposite that shown.
5. At this time, if selection had been left hand, the toggle shift coil would be de-energized and the left side reset and annunciator coils would be operated by cam switch CS-4.

12. RECORD PLACED ON TURNTABLE



1. When the selected pin is reset by the reset coil, the stop switch returns to normal position de-energizing reset coil and right side annunciator coil.
2. Assuming that selection V-8 is a 33-rpm, 7-inch LP record, the center of the record strikes the hub switch sensing wire as the record is placed on the turntable. If V-8 was a 45-rpm record, the hub switch sensing wire would not be operated.
3. The hub switch sensing wire actuates the hub switch which deenergizes the hub shift coil and energizes the speed shift coil. This drops the large 45-rpm hub and changes turntable speed to 33-1/3 rpm.
4. When the transfer assembly operates far enough to release the record, cam switch CS-5 operates deenergizing mechanism control relay R and the amplifier mute relay is deenergized by the tone arm cutoff switch.
5. Mechanism control relay R, 7 and 11, deenergize the transfer motor by disconnecting it from the common line.
6. The transfer linkage stops moving and the record plays.

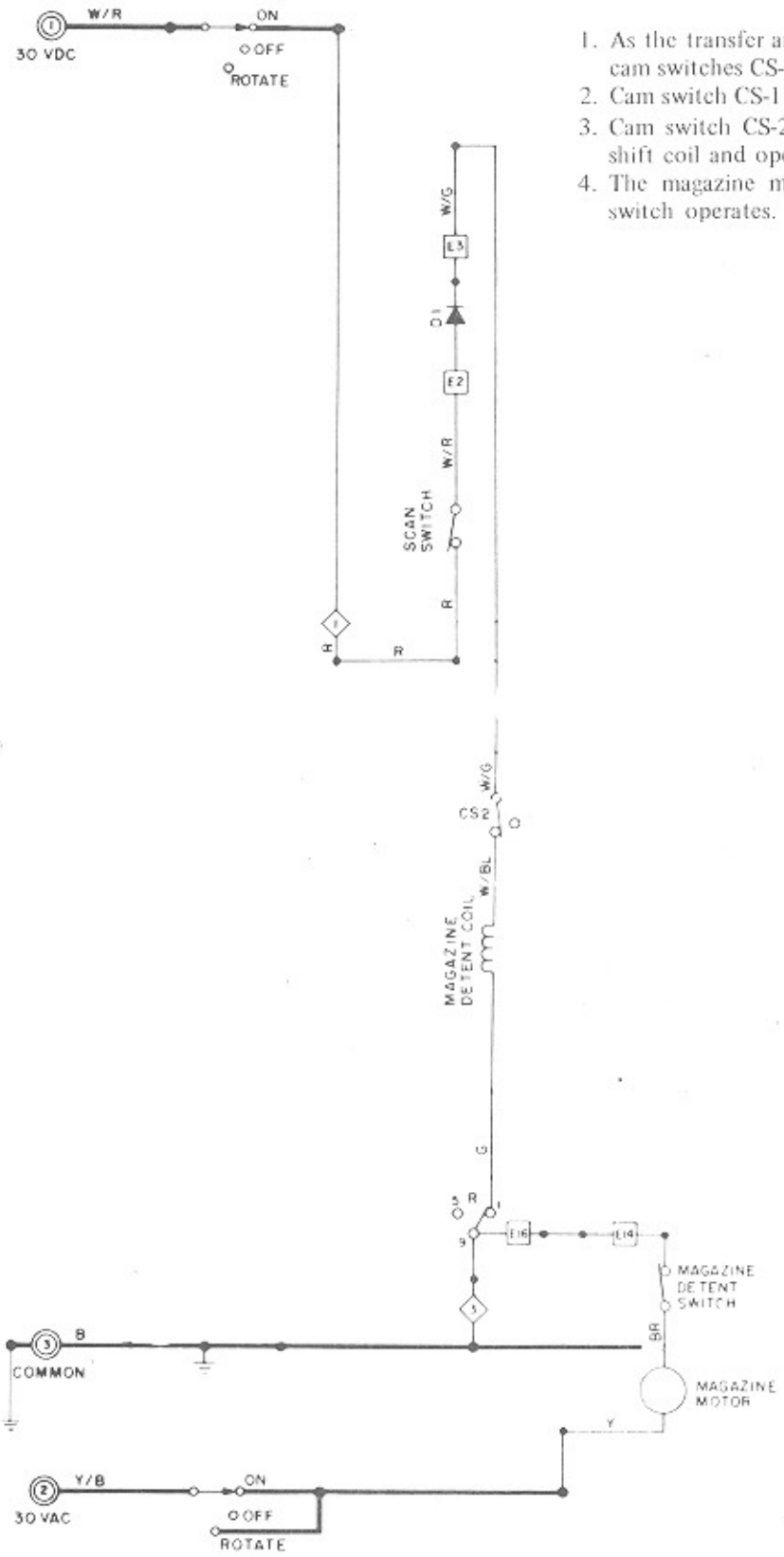
13. RECORD ENDS



When the magnet on the underside of the tone arm operates the tone arm cutoff switch, as the tone arm tracks into the cutoff groove, the amplifier mute relay and mechanism control relay R are energized. The parallel capacitor and series resistor in the mechanism control relay circuit is to delay the pickup of the mechanism.

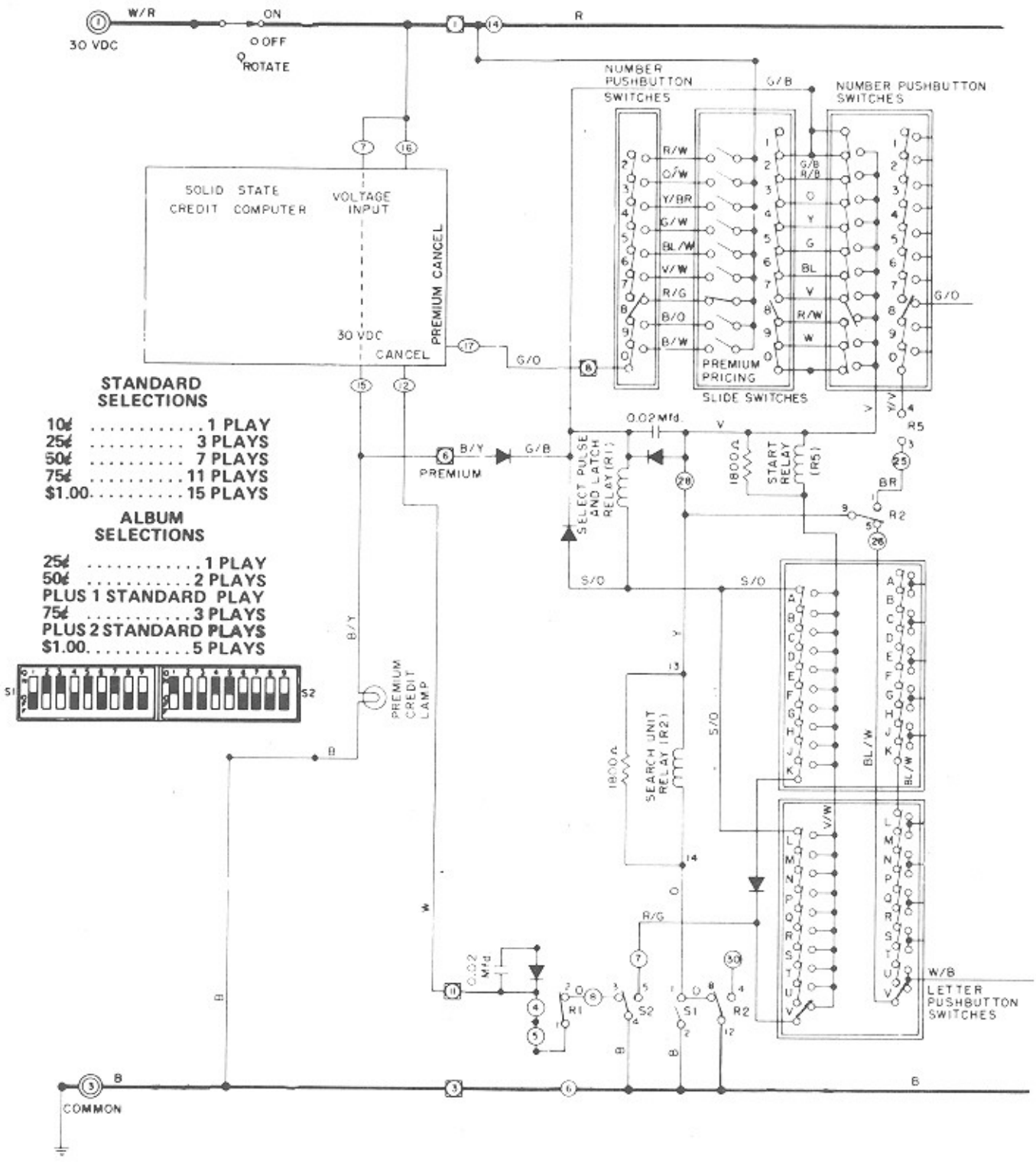
Mechanism control relay R, 7 and 11, complete a circuit to common to energize the transfer motor.

14. RECORD REPLACED IN MAGAZINE, MAGAZINE SCANS



1. As the transfer arm places the record in the magazine, the cam operates cam switches CS-1 and CS-2.
2. Cam switch CS-1 de-energizes the turntable motor.
3. Cam switch CS-2 deenergizes mechanism control relay R and the hub shift coil and operates the detent switch.
4. The magazine motor operates until the scan control switch or stop switch operates.

15.PREMIUM PRICE AND CREDIT



1. Assume that selections 8A through 8V are all premium price. This is done by moving premium price slide switch no.8 to premium price position. Assume also that premium price has been set in the credit computer for the equivalent of three standard plays, or 25¢.
2. When the customer inserts 25¢, premium credit is established in the credit computer as in sequence 2. 30 VDC appears at contact 15 rather than at contact 4.
3. Premium credit lamp lights, and positive line is connected directly to select pulse and latch relay R1.
4. Selection occurs as in sequence 3 through 6.
5. Sprag relay S2 is energized and select pulse is applied to credit computer contact 12. Premium credit cancels through premium pricing switch 8 and number push-button switch 8 to credit computer contact 12.

PRINCIPLES OF OPERATION

The following paragraphs contain a brief explanation of phonograph operation. Use this text in conjunction with the trouble-shooting charts and sequence of operation diagrams to isolate and correct malfunctions.

JUNCTION BOX

The junction box distributes 120-volt power to phonograph components and supplies 30-volt ac and 30-volt dc power required for phonograph operation. Power is controlled by toggle switch S1 located on the access door at the rear of the cabinet. 120-volt electrical receptacles provide for fluorescent lighting, the turntable motor, accessories, and service equipment. The primary power circuit is protected by a 10-amp circuit breaker. Transformer primary is protected by a 2-amp circuit breaker. 30-volt ac and 30-volt dc is applied to the phonograph wiring harness through a 6-circuit receptacle. Secondary circuit is protected by a 3-amp circuit breaker.

RECORD CHANGER MECHANISM

The record changer mechanism holds 100 records and plays selections on command from the selection system. Identification and location of each major component is shown below. The purpose and description of each component is explained in the following paragraphs.

Popularity Meter. The popularity meter indicates the number of times each record selection is played. The meter can register a total of 30 plays for each record. An integral plastic ring indicates 10 and 20 count points.

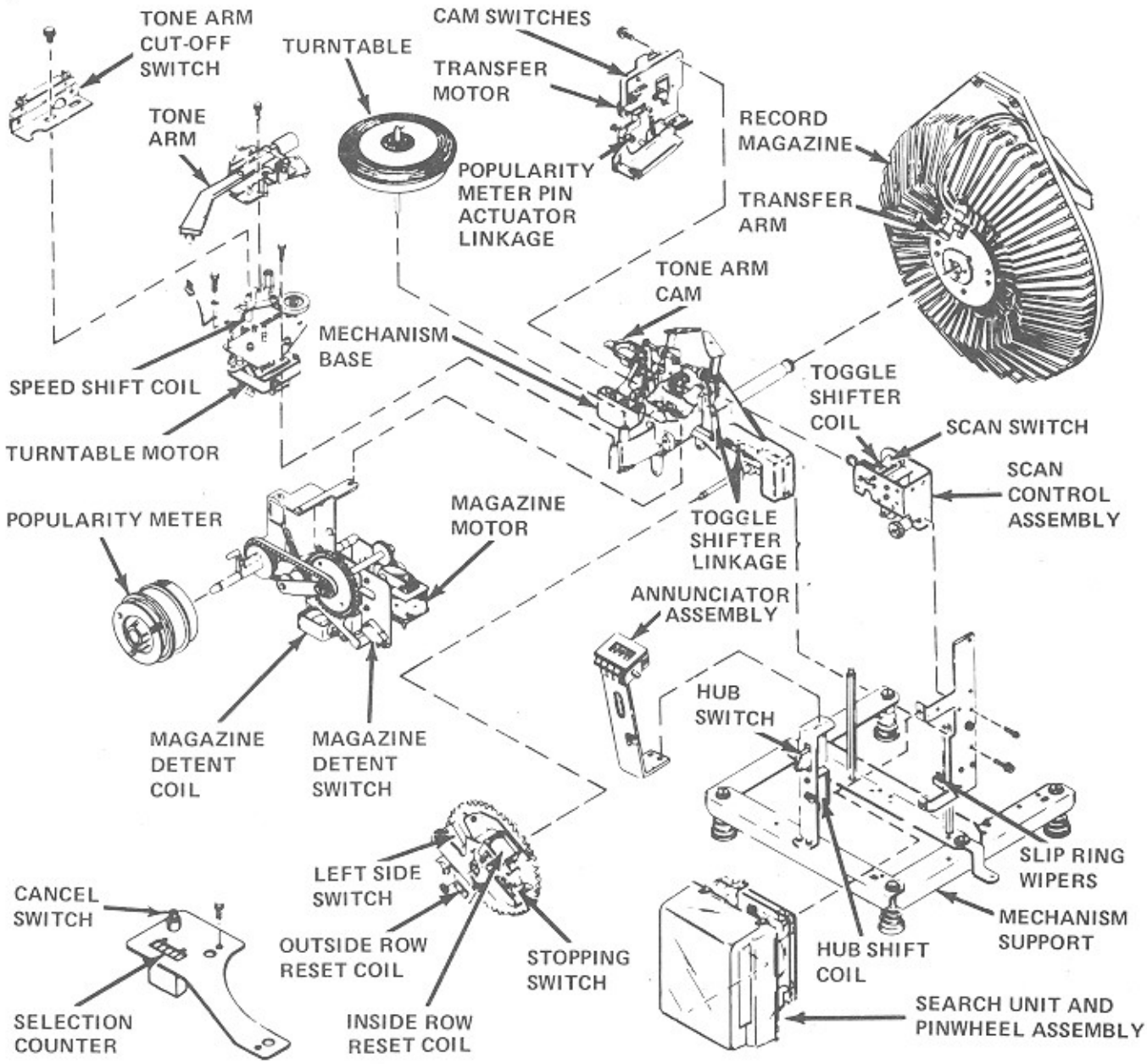


FIG. 4-1 RECORD CHANGER MECHANISM MAJOR COMPONENTS

Selection Counter. The selection counter is mounted to the left of the turntable and accumulates the total number of plays on the phonograph.

Annunciator Assembly. The annunciator assembly indicates the letter and number of the selection being played. It is mounted on the annunciator bracket located on the front of the record changer mechanism. The annunciator consists of a geared letter wheel, a geared number wheel and a solenoid-operated shutter mechanism.

Magazine, Belt and Transfer Arm. The record magazine stores 100 7-inch 33 or 45 rpm records in a circular cage. A seamless belt around the cage keeps records in position when they are at the bottom of the gripper bow bracket, above the cage. The rollers permit the transfer arm to clear the belt when removing and returning records to the magazine and also maintain belt tension.

Scan Control Assembly. The scan control assembly contains a scan coil, a micro-switch and a mechanical linkage. The assembly is mounted on the search unit bracket. When the scan coil is energized, the scan switch closes and the magazine motor starts. The scan control assembly also controls the length of scanning after all selections have played.

Search Unit and Pinwheel Assembly. The search unit and pinwheel assembly is a component of the selection system. It pushes pins on a pinwheel assembly that correspond to record selections. Refer to the selection system description for a complete explanation of search unit components and operation.

Stop Switch Assembly The stop switch assembly causes the record magazine to stop at the desired selection, determines which side of the record is to be played, and starts the transfer motor. It is mounted on the right side of the record changer mechanism directly behind the search unit.

Magazine Motor and Detent Assembly. This assembly operates the record magazine and popularity meter and locks the magazine in position. It is located at the center of the record changer mechanism, directly under the record transfer arm. The magazine motor and gear box, located behind the mounting plate, rotates the gears that operate the record magazine, stop switch gear, and popularity meter drive. The solenoid operated detent assembly locks the magazine in position

Tone Arm Assembly. The tone arm assembly plays records after they are positioned on the turntable by the record transfer arm. The tone arm contains a stereo cartridge with a diamond stylus that is designed to track at four to five grams pressure. The stylus plugs into the cartridge for easy replacement. A seven-pin receptacle on the tone arm assembly mates with a plug to connect the cartridge to the preamplifier via 4-conductor shielded cable.

Turntable Motor and Plate Assembly. The turntable motor and plate assembly consists of the turntable motor and associated components necessary to rotate the turntable. The turntable motor rotates a rubber idler wheel, mounted on a spring-loaded idler arm. The idler wheel contacts the inner rim of the record turntable. The turntable has heavy mass to reduce wow and flutter. Its upper surface is a rubberized pad to prevent records from slipping and to avoid record damage.

Automix. Automix operation enables the phonograph to play both 33 and 45 rpm records in any order. Automix components consist of a speed shift coil, a hub shift coil and a trip wire and switch on the turntable hub.

Cam Switch and Motor Assembly. (See figure 4-2)
The cam switch and motor assembly consists of the transfer motor and gear box, a switch cam, and five cam switches. A nylon cam operates cam switches CS-1 through CS-5. The function of each switch is described in Table 4-5.

SWITCH	FUNCTION
CS-1	Controls turntable motor.
CS-2	Magazine motor interlock during record transfer stops record transfer in magazine.
CS-3	Operates outside row reset coil.
CS-4	Operates toggle shift and inside row reset coil holding circuit for cancel button.
CS-5	Stops record transfer over turntable.

TABLE 4-5. CAM SWITCH FUNCTIONS

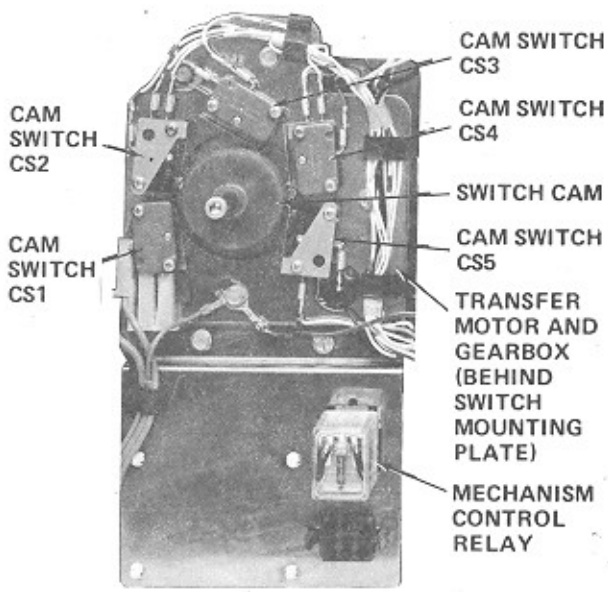


FIGURE 4-2. CAM SWITCH AND MOTOR ASSEMBLY COMPONENTS

SELECTION SYSTEM

The selection system provides a means for the customer to choose desired selections after credit is established. The selection system consists of a selector assembly and a search unit. The purpose and description of each selection system component is explained in the following paragraphs.

Selector Assembly (See figure below) The selector assembly is located above the title panel. It contains three pushbutton switch banks, a latch coil, a select pulse and latch relay, and a start relay. The pushbutton switch banks are designed A through V (no I, no O), and 1 through 0. Each pushbutton completes a circuit to a corresponding search unit commutator segment.

The latch coil mechanically latches the pushbutton switches until the search unit pushes a pin in the pinwheel assembly. Select pulse and latch relay R1 controls power to the latch coil. A delay in relay drop out due to a diode in parallel with the relay coil determines the length of the select pulse to the search unit. The select pulse permits the scan coil, and select coil to operate.

Start relay R5 completes the circuit to the search unit when both a number and letter pushbutton are operated. It also performs an interlock function in the number pushbutton circuit.

Search Unit. (See figure below) The search unit pushes pins that correspond to record selections. These pins are detected by the record changer mechanism stop switch pawl. The search unit is located on the record changer mechanism right side. The front side of the search unit printed circuit board represents the 10 numbers in the phonograph selection system. The rear side represents the 20 letters. The search unit motor drives search wipers, a sprag wheel, drive gears, and select coil arm assembly. The motor is energized after the letter and number pushbuttons are latched on the selector assembly. When a selection is made, the search unit motor rotates the number and letter wipers on the circuit board. Each wiper searches the commutator board until the wiper blades find the hot segments that represent the desired selection. When the number wiper runs onto the "hot"segment, sprag relay S1 is energized. Sprag relays S1 and S2 keep the wiper assemblies from moving beyond the "hot" segments.

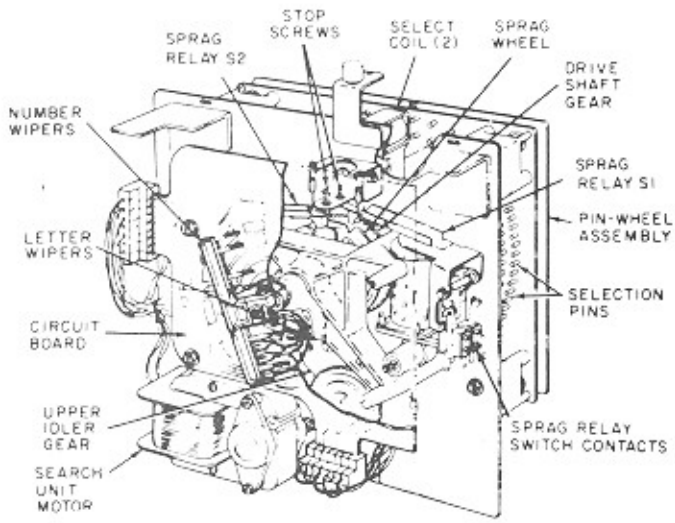


FIGURE 4-4. SEARCH UNIT MAJOR COMPONENTS

When relay S1 is energized, the large tooth at the end of the relay armature engages a notch in the sprag wheel, quickly stopping the wiper assembly. The hot side of the selection circuit is then transferred from the number side of the circuit board to the letter side by search unit relay R2.

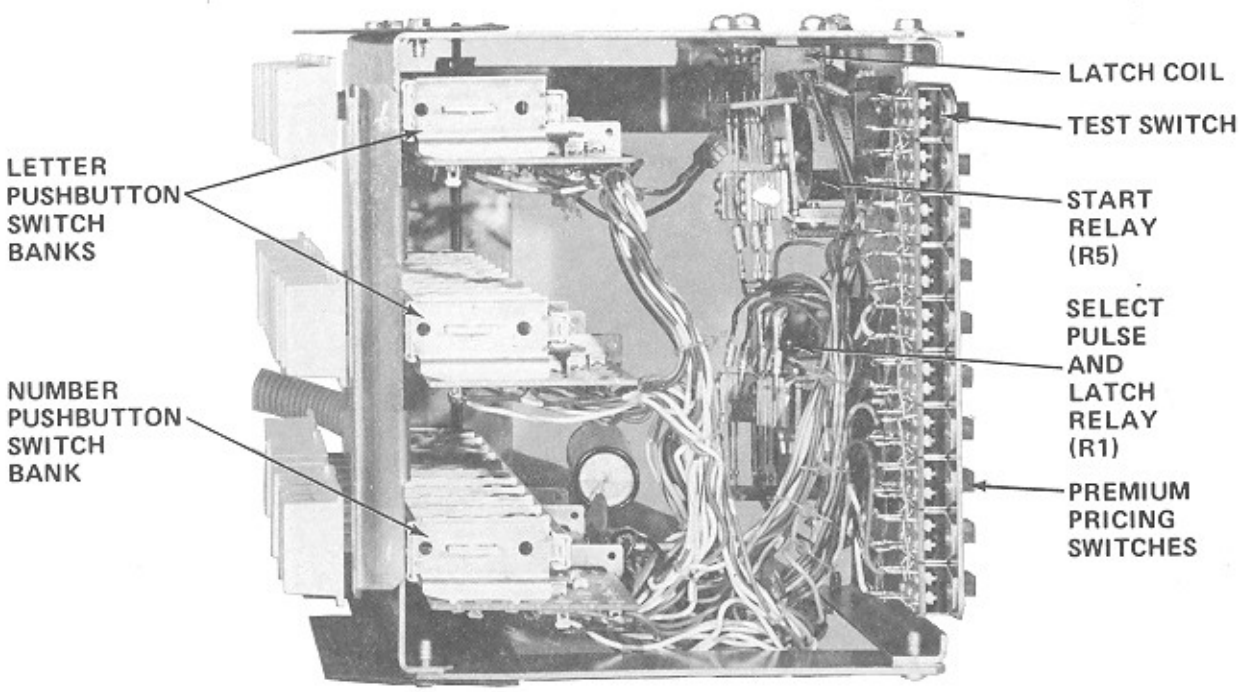


FIGURE 4-3. SELECTOR ASSEMBLY COMPONENTS

The letter wiper continues to rotate a short distance on the rear of the board. When the letter wiper runs onto the "hot" segment sprag relay S2 is energized. Relay S2 operates in a similar manner to S1, quickly stopping the letter wiper on the commutator segment. Relay S2 also de-energizes the search unit motor and energizes one of the two select coils that have been positioned by the pinwheel assembly.

The select coil plunger pushes one of the pins in the pinwheel assembly, corresponding to the chosen selection. The pinwheel assembly contains two rows of 100 1/2-inch long pins, mounted in a circular pattern. The inside row corresponds to right side selections while the outside row corresponds to left side selections. The pin is reset by a reset coil, mounted on the record changer mechanism stop switch.

The stop screws provide an adjustment of the clearance between the armature teeth of their respective sprag relays and the sprag wheel high points when the relays are de-energized.

CREDIT AND PRICING SYSTEM

The credit and pricing system validates coins deposited in the phonograph coin slot and establishes credit for record play. The system consists of a slug rejector and coin switches, premium pricing switches, and a credit computer. The identification and location of each component is shown in figure below. The purpose and description of each major component is explained in the following paragraphs.

CREDIT COMPUTER

The Rowe credit computer is a solid state credit system developed specifically for jukebox operation. Located on the middle of the rear wall of the phonog ph, the credit computer accumulates credit for deposits up to 255 standard plays. There are no moving parts to wear out and no bonus relays, 2 quarter adapter, pulse chopper, 2 quarter wheel or such parts required. See 'Setting Prices" in Section 2 for additional information.

Input signals are applied to the CS (coin switch) 1, CS2, CS3, CS4, and CS5 leads of the custom MOS circuit through appropriate interface circuits. One programming switch (S1-3) within credit computer permits these input signals to be weighted 1, 2, 5, 10, 20 (i.e. nickel, dime, quarter, half dollar, dollar) or to be weighted 1, 2, 4, 8, 16 (some foreign coin ratio such as 50 pf, 1DM 2 DM.

If programming switch S1-3, is off and coin switch closure on CS3 input line occurs, credit is established which is 5 times greater than minimum coin value. (i.e. 5 pulses stored. When a switch closure occurs on CS4 credit is established which is 10 times greater than minimum coin value (i.e. 10 pulses stored) etc.

As coins are deposited in acceptable denominations and in any sequence, deposits are weighted, by connection to specific input terminals, and deposit credit is accumulated (i.e. held in escrow).

Basic price of play can be established by setting additional programming switches (S2-5, S2-6, S2-7) within computer. Basic price of play can be set to 1, 2, 3, 4, 5, 6, 8 or 10 times the minimum coin value (MCV). When weighted for American money, price of play can be set to 5¢, 10¢, 15¢, 20¢, 25¢. 30¢, 40¢, or 50¢.

When accumulated deposit credits equal or exceed the programmed price of play, credit chip provides an output signal to light standard play credit lamp ("Make Standard Selection"). It also energizes the selector latch solenoid enabling phonograph selector.

When a standard selection is made by phonograph patron a "standard cancel" signal is generated which is applied to appropriate input of credit chip (through necessary interface circuit). The "Cancel" signal cancels or erases appropriate number of minimum coin value (MCV) pulses equivalent to programmed price of play. (If set for 25¢ price of play, a standard cancel signal will erase 5 MCV pulses.)

If an over deposit is made (assume 55¢ deposited by mixed coin denominations, and 25¢ standard price) a standard selection may be made, which leaves 30¢ credit held in escrow. As long as credit remaining still equals or exceeds programmed price of play, credit computer permits an additional selection to be made. If a second "standard" selection is made, 5 additional MCV pulses (25¢) are cancelled. When the remaining MCV deposit credits are less than programmed price of play, credit chip removes the latch solenoid signal and removes the signal which lit "standard credit" lamp in the phonograph. Since two standard play selections were made (totalling 10 MCV pulses) and 55¢ was deposited (totalling 11 MCV pulses) one MCV pulse (5¢) remains in storage. If additional coin deposits (nickels or dimes) accumulate an additional 20¢, these deposits and the 5¢ held in escrow will enable another "standard play" selection.

In addition to the ability to set standard price to 5¢, 10¢, 15, 20, 25, 30, 40, or 50¢ it is possible to add bonus plays at predetermined levels of deposit by setting additional programming switches (S2-8, S2-9). First bonus level may be set to 2, 3, 4, or 5 times the MCV (i.e. 10¢, 15¢. 20¢, or 25¢). When first bonus level has been programmed, a second, third, and fourth bonus level exists at 2, 3, and 4 times the level at which first bonus level occurs. For instance, when American coinage is used, the first bonus level is set to 25¢ (5MCV). This means that when 25¢ has been deposited it is possible to provide bonus plays, in addition to the standard play procedure. Since additional bonus levels are possible at 2, 3, and 4 times the first bonus level, it is possible to add bonus plays at the first bonus level (25¢), and at 50¢, 75¢ and $1.00 accumulated deposit levels. From 0 to 3 bonus plays may be added at first (25¢) and third (75¢) bonus levels. From 0 to 7 bonus plays may be added at second (50¢) and fourth ($1.00) bonus levels. Bonus plays are accumulated in another memory register within credit chip.

When programmed for standard play credits and bonus plays, record selection process cancels bonus plays first. When sufficient phonograph selections have been made to

cancel all accumulated bonus plays, subsequent record selections erase the appropriate number of MCV pulses.

When a bonus play is provided, it is necessary to deposit sufficient coinage totaling the standard play price, before an additional standard play is added. For example, if standard price was programmed for 15¢, deposits totalling 15¢ would result in one play credit (15¢ or 3 MCV pulses stored). If one bonus play was programmed at 25¢, then patron would get one play for the first 15¢ deposit and a bonus play for inserting enough money to reach the (1st) 25¢ bonus level. Having provided a bonus at the 25¢ accrued deposit, it now requires additional coin deposits of 15¢ to receive next standard play credit. (Which would occur at 40¢ total deposit). If no bonus credit was provided at 25¢, the first 15¢ would provide a standard play and the over-deposit (10¢ extra) would remain in escrow. Insertion of an extra 5¢, would then add to the 10¢ deposit in escrow to provide a second standard play.

It is also possible to accomodate premium (album) priced records through programming switches. When selections are made which are "premium" priced, the cancel signals will erase 2, 3, 4, or 5 accumulated play credits, depending on programming switch settings. Depending on the "premium" price programmed, credit chip has a premium selection output to enable premium selections and to light premium credit lamp ("Make any Selection"). When insufficient credit exists for "Premium" price programmed, premium selections are inhibited and "Make any Selection" lamp goes out.

The Credit Computer also provides an output signal which can be used with an (accessory) item - the Print-Out Money Meter. The money pulse signals from Credit Computer occur for each deposit, and appear as a series of pulses of Minimum Coin Value (MCV). For example, when a nickel is deposited (minimum coin value) a single MCV pulse is provided to the money meter. When a dime is deposited, two (MCV) pulses occur. When a quarter is deposited, five (MCV) pulses occur. These pulses are registered by the money meter.

Slug Rejector and Coin Switches. The slug rejector takes good coins and rejects slugs and bad coins. It takes nickels, dimes, quarters and half-dollars.

The coin switches establish credit in the credit computer. They are located at the bottom of the slug rejector. They are operated by the coins as they fall into the cash box. A good coin moves the switch lever, closing the switch and completing a circuit to the credit computer board.

Premium Pricing Switches. The premium pricing switches are located on the selector assembly. Each switch represents one number selection group and may be set for premium (album) price or regular price as desired. A test switch is also provided. This switch can be used as a "free play" switch.

SOUND SYSTEM

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 4-5. 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.

Preamplifier and Amplifier (See page 4-29). The preamplifier units amplify phonograph cartridge output and drive the speaker system. The latest concepts in silicon transistor circuitry are designed into the 64-watt stereo system. It delivers a full 32 watts rms power per channel. Its wide frequency response and low distortion assure good record reproduction. The unit incorporates automatic volume control (AVC) and automatic quality control (AQC).

The output stage is coupled to the speakers. Treble range and bass boost controls are provided on the preamplifier chassis to compensate for differences in room acoustics. A mute relay silences the amplifier while a record is being transferred to or from the turntable. Preamplifier 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 board is the same for both the 64 and 120 watt amplifiers. It is a component part mounted on the power amplifier.

The preamplifier amplifies the phonograph cartridge ac output voltage to drive the power amplifier. The preamplifier consists of two identical, independent audio channels. Right channel component designations end in the letter R, while left channel components end in the letter L. Treble range and bass boost controls are provided to enable adjustment of frequency contour. All components are mounted on a single printed circuit board.

64 Watt Amplifier. The 64 watt power amplifier features Darlington output stages and a fully regulated and surge protected power supply. Driver boards, one for each channel, plug in for ease of replacement and are completely interchangeable between channels or in other 64 watt amplifiers.

Integrated circuit Z2 regulates the 24 volts supplied to the preamplifier board. The input signal from the pre-amplifier is coupled through R28, C18, and C17 to differential amplifier 97. Transistors Q5 and Q6 are connected as regulators to arrest any input signal in excess of 5 volts. Resistor R28 protects Q5 and Q6.

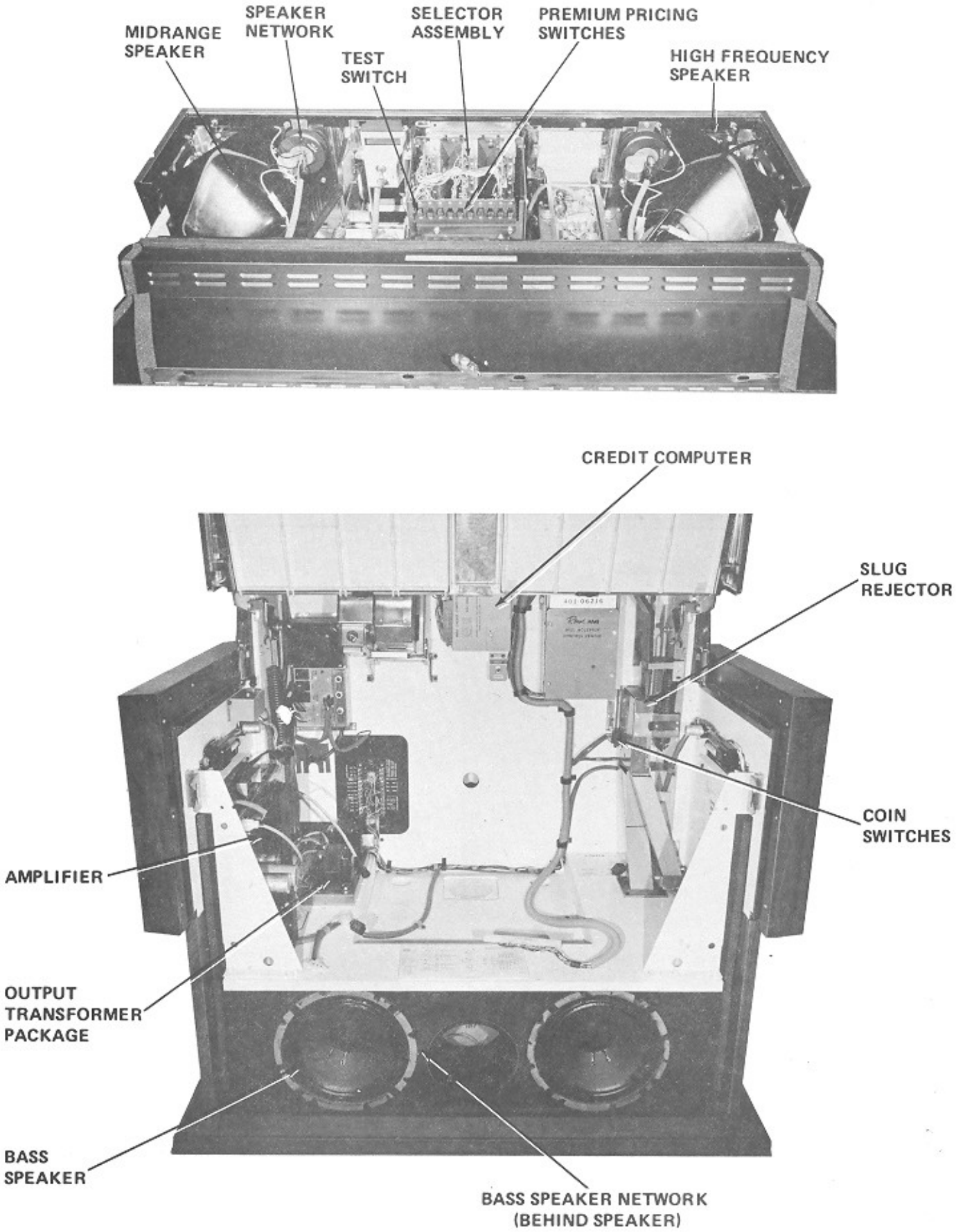


FIGURE 4-5. CREDIT SYSTEM AND SOUND SYSTEM COMPONENTS

Differential amplifier Q7 provides drive to driver transistor Q8 and sets the D.C. voltage at the output to zero enabling the amplifier to be coupled directly to the speakers.

Transistor Q8 functions as a high gain, common emitter driver with transistor Q9 performing as a current limiting device. Transistor Q8 handles the full load voltage swing to the output transistors but is isolated by resistors R11 and R19. These resistors protect Q8 in the event of an output transistor failure.

Capacitor C8 and resistor R21 provide A.C. feedback to differential amplifier Q7 from transistor Q8. Resistors R20 and R21 provide both A.C. and D.C. feedback to Q7 from the output signal delivered to the load, achieving maximum stability under all load conditions. Resistor R20 provides isolation between the driver A.C. feedback and the output load. To reduce turntable rumble, capacitors C17 and C18, and resistor R27 form a bandpass filter which attenuates signals below 50 Hz.

Power output devices Q1 and Q2 are mounted on a heat sink. These complementary darlington devices, although more reliable than conventional designs are fused to prevent damage to driver board components. See page 5-29 for troubleshooting and replacement data on these devices.

Resistor R19 and regulator Z1 maintain the output transistors in class AB mode.

Driver board transistor Q4 is part of the positive clamp circuit. Output device Q1 draws current through resistor R2. Driver board transistor Q4 drops the base of output device Q1 to below R2, limiting current to a safe valve. Driver board transistor Q3 acts on the negative signal component in the same manner as positive clamp Q4.

Output Transformer Package (See figure 4-7). The transformer package enables the amplifier to operate 70-volt speaker lines for extension speakers, and provides Rowe/AMI Stereo Sound. The package consists of two output transformers, a power level control, and associated parts, mounted on a single chassis. The chassis sits on the floor of the cabinet, left of the mechanism. The unit is electrically connected between the amplifier and speaker system. Output transformer secondary connections are brought out to terminal strips to allow operation with low-impedance extension speakers. A 6-position switch, at the center of the chassis, controls phonograph speaker level relative to extension speaker level.

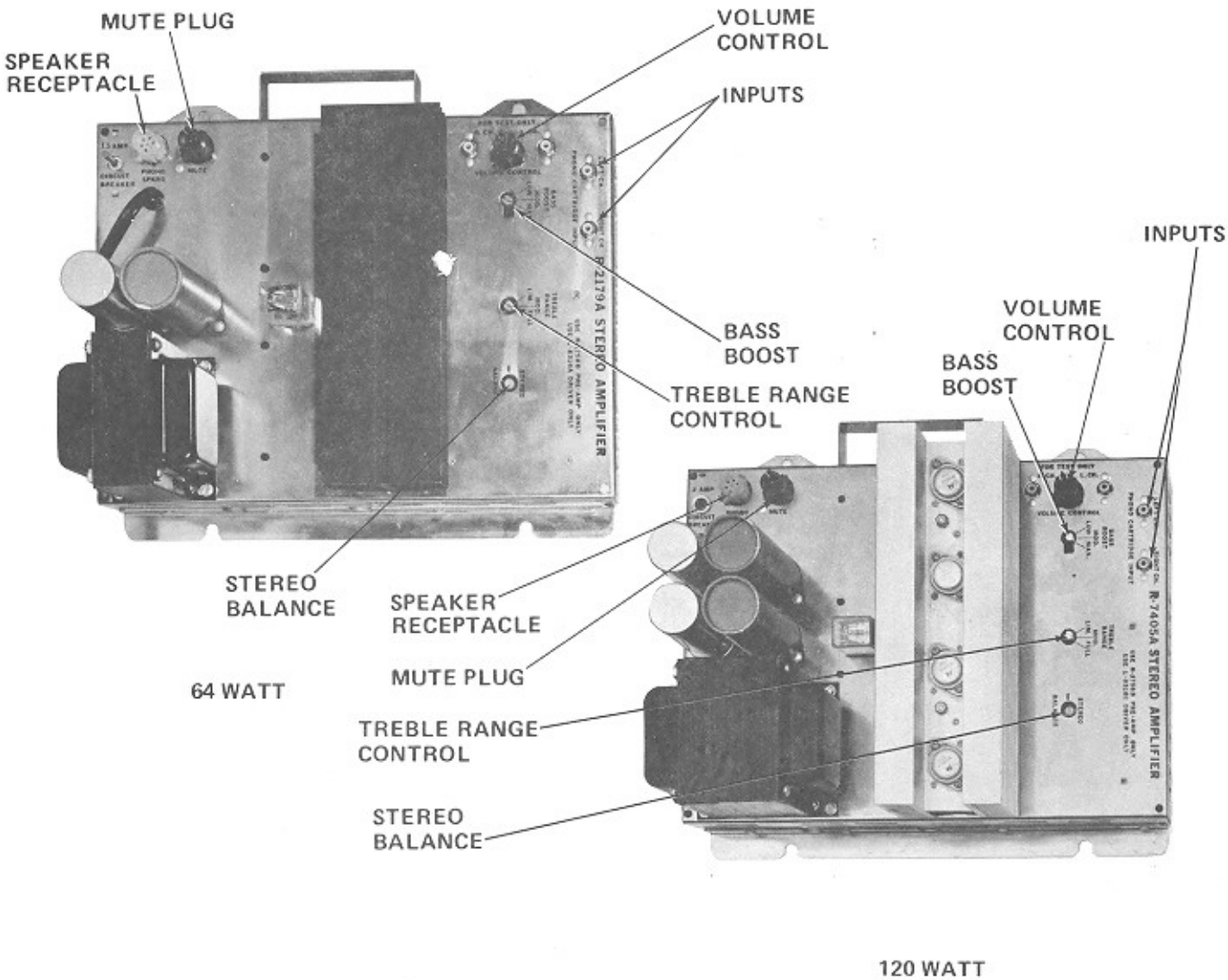


FIGURE 4-6. STEREO AMPLIFIERS COMPONENTS

Speaker System. The speaker system consists of two 10-inch low frequency speakers, two 6-inch mid-range speakers, two 3-inch tweeters for high frequencies, and coupling capacitors.

The 10-inch, heavy duty speakers are mounted in a duct-tuned enclosure at the bottom of the cabinet. The 6-inch mid-range speakers and the 3-inch tweeters are mounted at the top of the cabinet.

Two-Wire Volume Control. A Rowe/AMI first, the two-wire volume control simplifies large, complex installations and saves cost. Redesigned preamplifier circuitry permits remote volume control operation using two unshielded wires. Any wires can be used - there are no special requirements for conductor size or shielding.

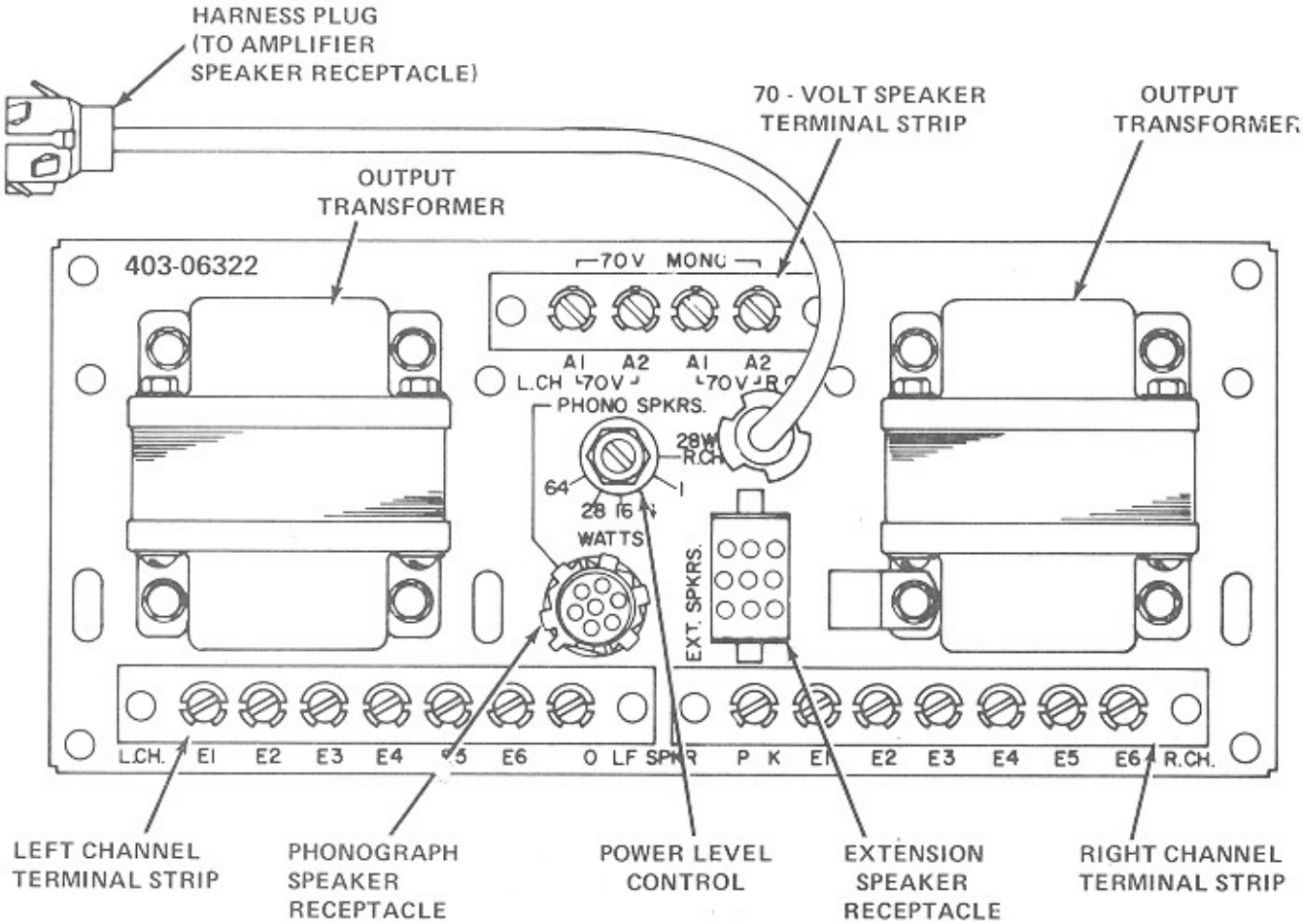


FIGURE 4-7. OUTPUT TRANSFORMER ACCESSORY PACKAGE

Parts Catalog

Model R-74

ROWE international, inc.

A SUBSIDIARY OF TRIANGLE INDUSTRIES, INC

75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL (201) 887-0400, CABLE: ROVEND

TABLE OF CONTENTS

SECTION 7-PARTS CATALOG

INTRODUCTION

This parts catalog lists procurable replacement parts for the R-74 phonograph.

The purpose of this parts catalog is to locate and identify replacable components and to supply ordering information.

DESCRIPTION

The parts catalog is divided into 23 major assemblies called "FIGURES" corresponding to the illustrations used. In some instances major assemblies require more than one illustration to identify the procurable parts. In this case sheet numbers are assigned to the figure, i.e. Figure 1, Sheet 1, Figure 1, Sheet 2.

Parts of riveted or welded units are not listed since repair of these parts is normally impractical in the field, however these parts are available as assemblies.

Standard hardware is indicated on each illustration by code letters which are defined in the Standard Hardware List at the rear of the catalog.

To be sure that this parts catalog contained the latest information, last minute revisions were made. In these instances the additions were added in sequence with a letter added to the identification numbers both in the parts list and corresponding illustration i.e. a A, 1 B, 1C.

The Parts List contains four columns:

- Items are listed for reference purposes only.
- The assembly listed has all piece parts indexed below.
- The item listed is an alternate part.
- Two or more assemblies are listed together in one illustration and the same parts are used but in different quantities.

ROWE Part No. - This column lists the part number of the item which should be specified for ordering purposes.

Description - This column contains a brief word description of the assembly or part. Each item is indented to show its proper relationship to the unit of which it is a part or to its next higher assembly.

Qty Per Assy - This column contains the quantity of the part used in the assembly. When a figure covers more than one model of an assembly, the "Qty Per Assy" 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 is determined, complete a standard parts order form available from your ROWE distributor at no charge. Very often parts orders are delayed, becuase of inadequate or incomplete information. To insure prompt parts delivery always specify the following information:

- Part Number and Description. State color if applicable.
- Quantity required.
- Model and Serial Number of machine for chich the repair part is needed.
- Complete shipping address including ZIP code.
- Shipping Instructions must be specified. If the shipping method selected is Parcel Post, Air Parcel Post, United Parcel Service or Air UPS, indicate an alternate shipping method if there is a possibilty the packages may exceed the size and weight limits established by these services. If you would like ROWE to select the best way to ship your parts order, specify "BEST WAY". If fastest delivery is the requirement, specify "FASTEST WAY". ROWE will select the carrier for those orders which justify shipment by truck.

FIGURE 1

Phonograph Final Assembly Sheet 1

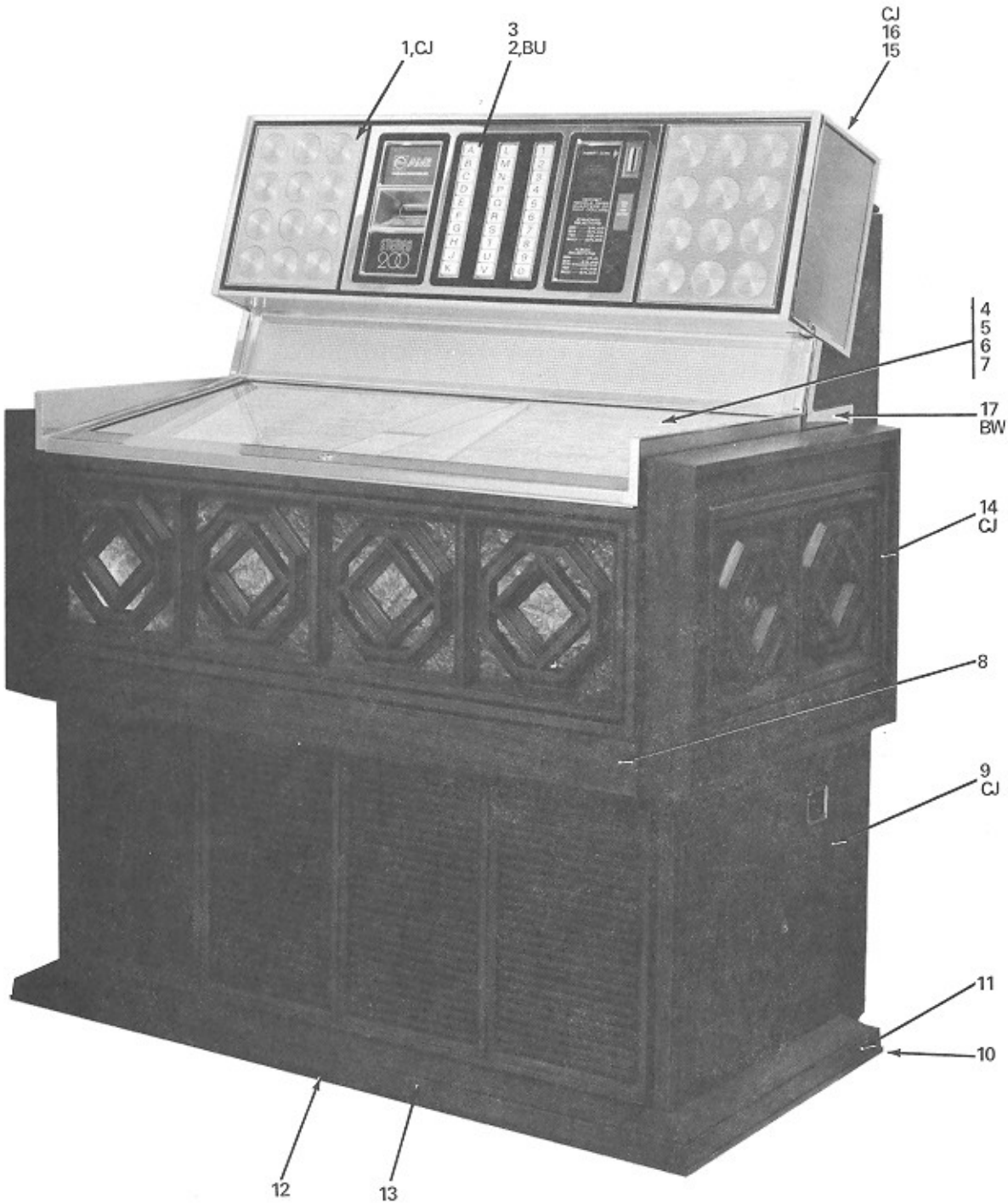
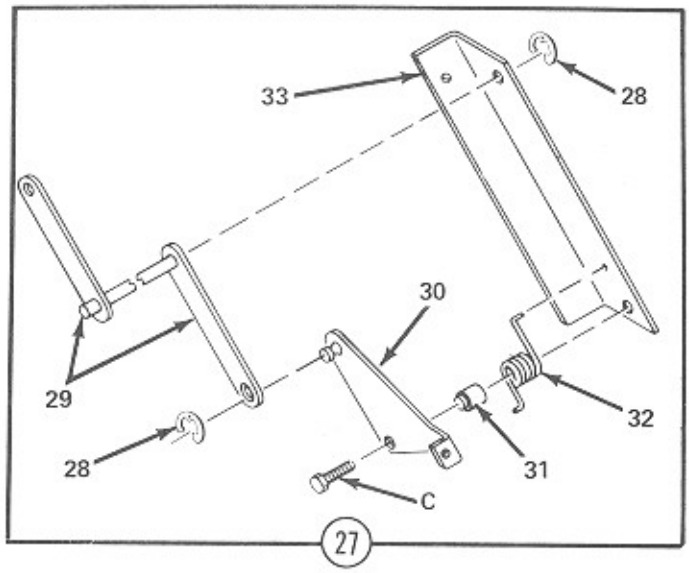


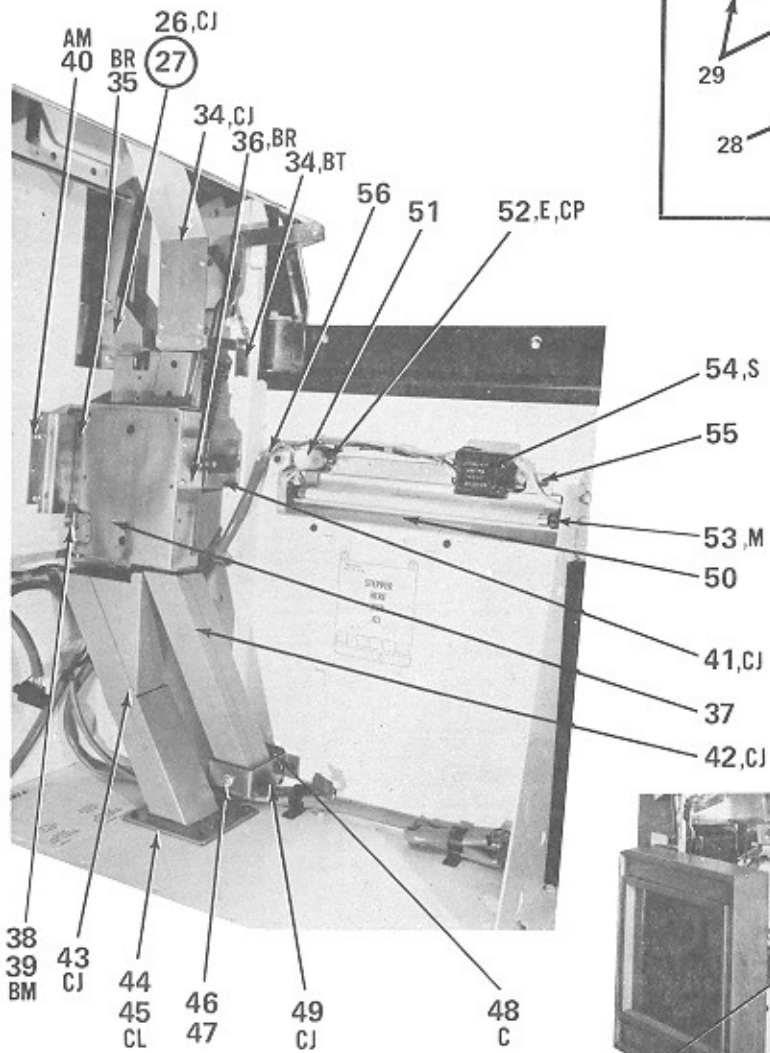
FIGURE 1

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
1-	601-07500	Phonograph Final Assembly, Model R-74, Wood Style (Classic)	
1-	602-07500	Phonograph Final Assembly, Model R-74, Blue Style (Arlington)	
1-	603-07500	Phonograph Final Assembly, Model R-74, Red Style (Export Only)	
	204-17305	. Accessories Bag Assembly containing	1
	703-00926	. . Solder Socket Contact, Mate-N-Lok	1
	704-00926	. . Solder Pin Contact, Mate-N-Lok	1
	716-00913	. . Slip-On Terminal Lug	10
	710-00926	. . Pin Contact	1
	711-00926	. . Socket Contact	1
	701-00975	. . Universal Connector Pin Contact	1
	702-00975	. . Universal Connector Socket Contact	1
	701-00720	. . 2 Amp Cartridge Fuse	2
	707-00720	. . 1/4 Amp Cartridge Fuse (Used on Credit Computer)	1
	301-07442	. Panel, Decorative (Covers Bill Acceptor Openings When No B.A. Is Used)	1
	201-17557	. Retainer, Insert (To Retain Decorative Panel Above)	1
	301-07528	. Universal Price Card Kit	1
	201-17536	. Price Card, 2/25¢	1
1	601-07587	. Selector And Speaker Panel Assembly (See Fig. 2)	1
2	601-07555	. Selector Assembly (See Figure 3)	1
3	201-17501	. Stud	1
4	601-07589	. Top Door Assembly (See Figure 4)	1
5	201-17528	. Pin, Hinge	2
6	7 -01430	. Ring, Retaining	2
7	710-01430	. Ring, Retaining	2
8	601-07592	. Front Door Assembly, Wood Style (See Figure 5)	1
8	602-07592	. Front Door Assembly, Blue Style (See Figure 5)	1
8	603-07592	. Front Door Assembly, Red Style (See Figure 5)	1
9	401-06846	. Overlay, Side Panel, R.H.	1
	401-06845	. Overlay, Side Panel, L.H.	1
10	301-07480	. Strap, Protective, Side	2
11	401-06811	. Kickrail, Side	2
12	301-07479	. Strap, Protective, Front	2
13	401-06810	. Kickrail, Front	1
14	601-07668	. Side Panel Assembly, Wood Style, L.H. (See Figure 6)	1
	601-07669	. Side Panel Assembly, Wood Style, R.H. (See Figure 6)	1
14	602-07668	. Side Panel Assembly, Blue Style, L.H. (See Figure 6)	1
	602-07669	. Side Panel Assembly, Blue Style, R.H. (See Figure 6)	1
14	603-07668	. Side Panel Assembly, Red Style, L.H. (See Figure 6)	1
	603-07669	. Side Panel Assembly, Red Style, R.H. (See Figure 6)	1
15	601-07591	. Top Access Door Assembly (See Figure 7)	1
16	201-15768	. Clamp, Hinge	1
17	401-06801	. Trim, Side, Door, R.H.	1
	401-06800	. Trim, Side, Door, L.H.	1

FIGURE 1

Phonograph Final Assembly Sheet 2





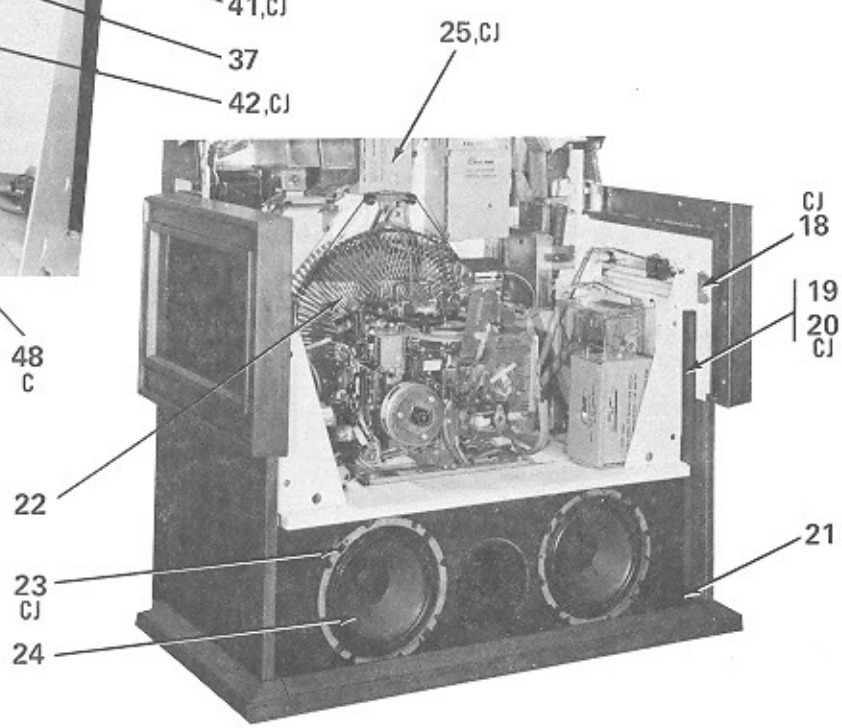
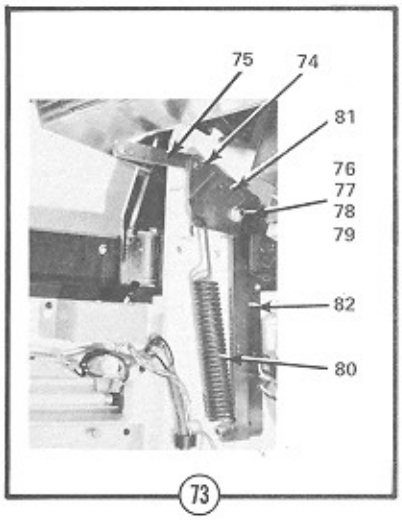
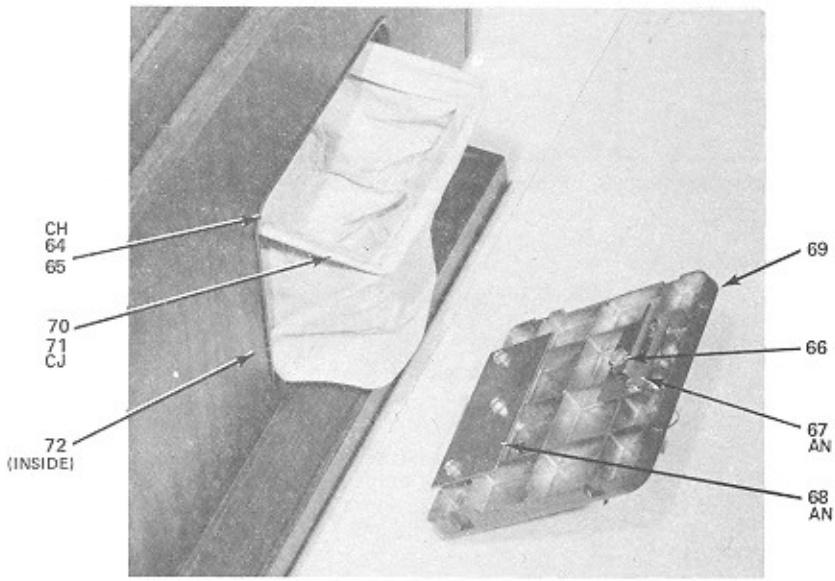


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
1-	601-07500	Phonograph Final Assembly, Model R74, Wood Style (Classic)(Continued)	
1-	602-07500	Phonograph Final Assembly, Model R74, Blue Style (Arlington)	
1-	603-07500	Phonograph Final Assembly, Model R74, Red Style (Export Only)	
18	201-17525	. Catch, Front Door	2
19	201-17607	. Block Light, Front Door	2
20	301-07423	. Pivot, Front Door	2
21	711-02202	. Tape, Foam	2
22	605-03060	. Record Changer Mechanism Assembly (See Figure 8)	1
	200-11537	. Support, Lower Spring (Under Mechanism Assembly - Not Shown)	4
23	201-08795	. Bracket, Retainer (2 On Rear Of Cabinet)	10
24	401-06480	. Speaker, Low Frequency	2
25	601-07593	. MOS Credit Computer Assembly	1
26	201-17555	. Bracket, Scavenge	1
27	401-06830	. Scavenge Assembly	1
28	704-01430	. . Ring, Retaining	2
29	201-17566	. . Pivot Assembly	1
30	201-17591	. . Link And Pin Assembly	1
31	201-17562	. . Spacer	1
32	201-17565	. . Spring, Torsion	1
33	201-17550	. . Bracket, Scavenge	1
34	401-06829	. Upper Coin Chute Assembly	1
34A	201-17140	. Bracket, Alignment	1
	401-06877	. Rejector And Coin Switch Assembly	1
35	201-17179	. . Hinge Rejector	1
36	201-14314	. . Plate And Pin Assembly	1
37	401-05793	. . Mounting Bracket Assembly	1
38	400-05476	. . Slug Rejector (50¢)	1
38	400-05470	. . Slug Rejector	ALT
	200-14114	. . Spacer (Used With 400-05476 Only)	1
39	301-07475	. . Coin Switch Assembly (4 Coin)	1
40	201-17533	. Support, Hinge	1
41	201-14295	. Catch Assembly (Rejector)	1
42	401-06831	. Slug Chute Assembly	1
43	401-06825	. Lower Coin Chute Assembly	1
44	301-07437	. Collar, Coin Chute	1
45	201-17544	. Gasket, Coin Chute	1
46	202-13578	. Nut, Elastic Stop, No.6-32	1
47	702-01200	. Washer, Flat	1
48	201-06463	. Slug Cup And Door Assembly	1
49	301-07441	. Bracket, Slug Cup Mounting	1
50	702-00601	. Lamp, Fluorescent, 12 inch, 8W Type T-5	2
51	702-00800	. Starter, Fluorescent	2
	401-06881	. Side Light Harness And Bracket Assembly, R.H.	1
	401-06880	. Side Light Harness And Bracket Assembly, L.H.	1
52	200-00295	. . Socket, Starter	1
53	201-17622	. . Lamp Holder	2
54	201-17308	. . Ballast, 6W	1
55	401-06839	. . Bracket, Light	1
56	703-00931	. . Clamp, Cable	1
	202-17322	. . Housing, Socket, Mate-N-Lok(3 Circuit) R.H.	1
	202-17322	. . Housing, Socket, Mate-N-Lok(3 Circuit) L.H.	2
	202-17323	. . Housing, Pin, Mate-N-Lok (3 Circuit)	1

FIGURE 1

Phonograph Final Assembly Sheet 3





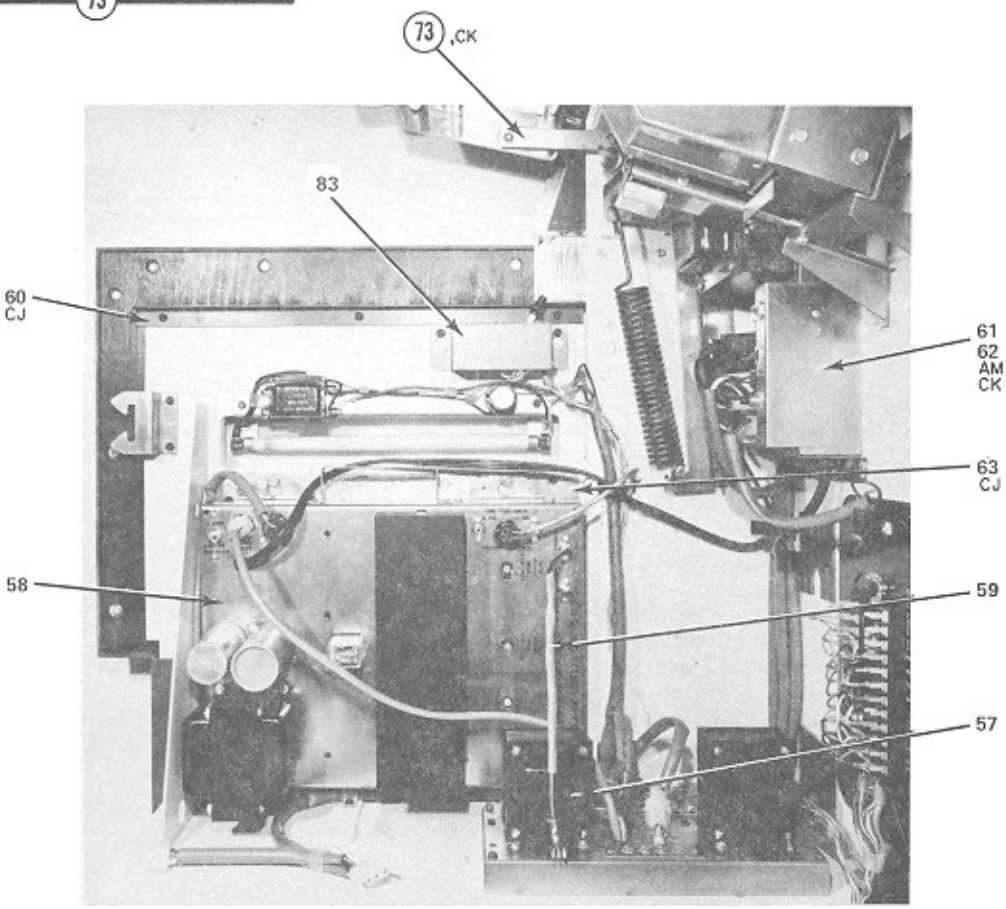
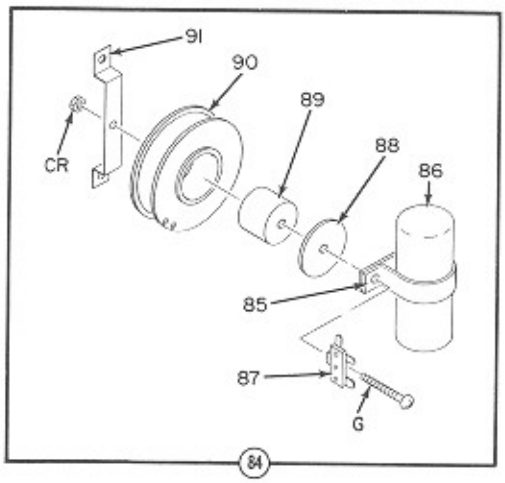


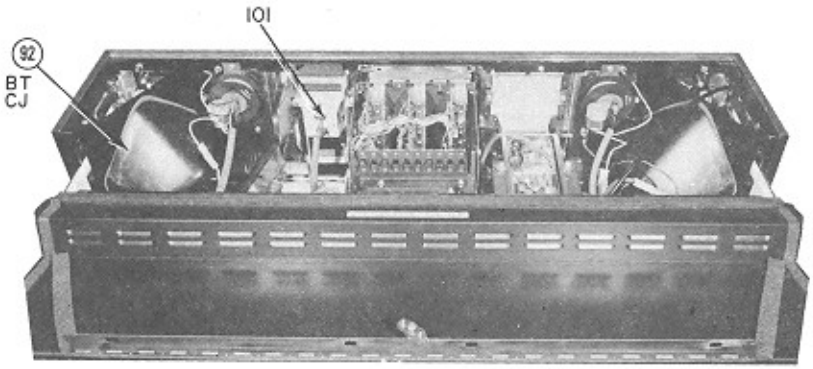
FIGURE 1

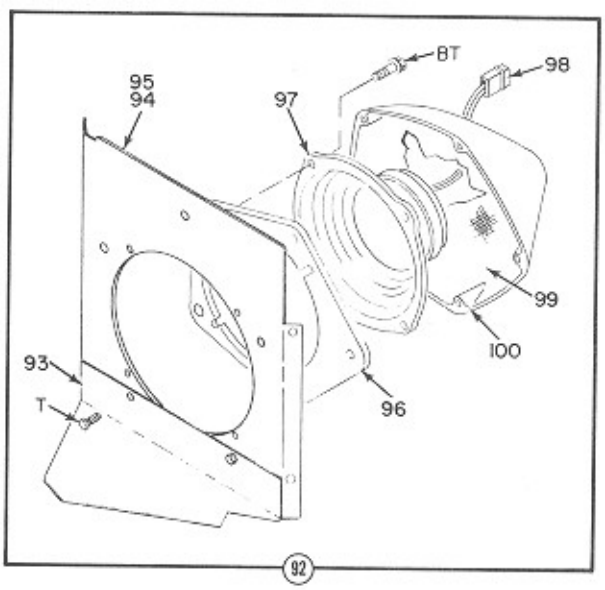
FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
1-	601-07500	Phonograph Final Assembly, Model R-74, Wood Style (Classic)(Continued)	
1-	602-07500	Phonograph Final Assembly, Model R-74, Blue Style (Arlington)	
1-	603-07500	Phonograph Final Assembly, Model R-74, Red Style (Export Only)	
	602-02182	. Stereo Amplifier And Transformer Assembly, 64W	1
	601-07406	. Stereo Amplifier And Transformer Assembly, 120W	1
57	403-06322	. . Output Transformer Assembly, 64W (See Figure 19)	1
57	401-06336	. . Output Transformer Assembly, 120W (See Figure 19)	1
58	601-02179	. . Stereo Amplifier Assembly, 64W	1
58	601-07405	. . Stereo Amplifier Assembly, 120W	1
	602-03758	. . . Pre-Amplifier Assembly (See Schematic, page 6-6, for parts)	1
	601-02193	. . . Power Amplifier Assembly, 64W (See Schematic, page 6-7, for parts)	1
	601-07404	. . . Power Amplifier Assembly, 120W (See Schematic, page 6-8, for parts)	1
59	203-09257	. Tone Arm Cable And Plug Assembly (Mech. To Amplifier)	1
60	201-17570	. Rail, Support, Top Door	2
61	401-06703	. Junction Box Assembly (See Figure 20)	1
62	200-9256	. Bracket, Junction Box Assembly Mounting	1
63	401-02426	. Mounting Bracket Assembly, Amplifier	1
64	414-05276	. Frame, Cash Box Door	1
65	200-11449	. Clip, Speed, "U" Type	1
66	210-11866	. Cash Box Door Assembly	1
67	716-01600	. . Lock, Cylinder	1
68	200-06695	. . Support, Lock	1
69	200-07703	. . Bracket, Catch	1
70	616-03267	. . Door, Cash Box	1
71	301-07026	. Bag, Cash	1
72	402-06495	. Support, Cash Bag	1
73	206-13723	. Burglar Alarm Kit	OPT
	200-13991	. . Power Pack, Alarm	1
	604-04450	. . Burglar Alarm Assembly (See Figure 21)	1
	301-07419	. Spring Assembly, L.H.	1
	301-07420	. Spring Assembly, R.H.	1
74	710-01430	. . Ring, Retaining	1
75	201-15691	. . Link And Pin Assembly	1
76	204-13578	. . Nut, Elastic Stop	1
77	200-13900	. . Pin, Lever	1
78	708-01214	. . Washer	1
79	719-01208	. . Washer	1
80	301-07421	. . Spring	1
81	201-15672	. . Lever, Spring, L.H.	1
81	201-15673	. . Lever, Spring, R.H.	1
82	301-06988	. . Support, Spring, L.H.	1
82	301-06989	. . Support, Spring, R.H.	1
83	601-07590	. Harness And Console Assembly (See Figure 22)	1

FIGURE 1

Phonograph Final Assembly Sheet 4







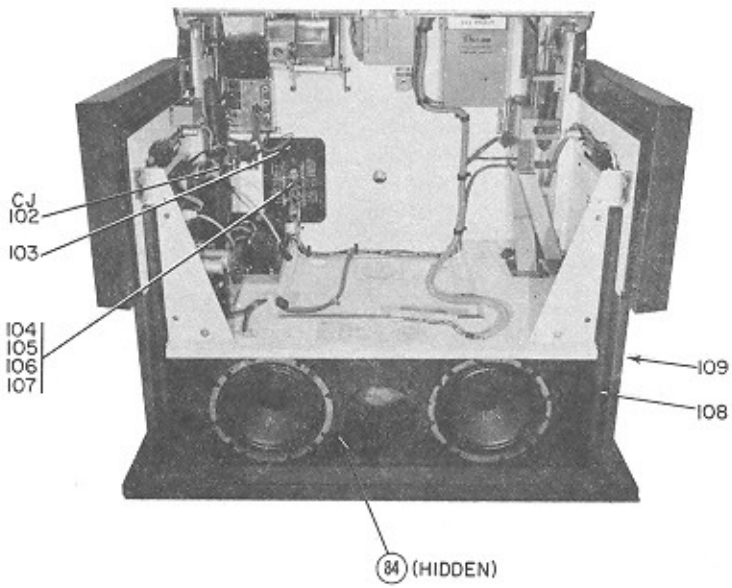
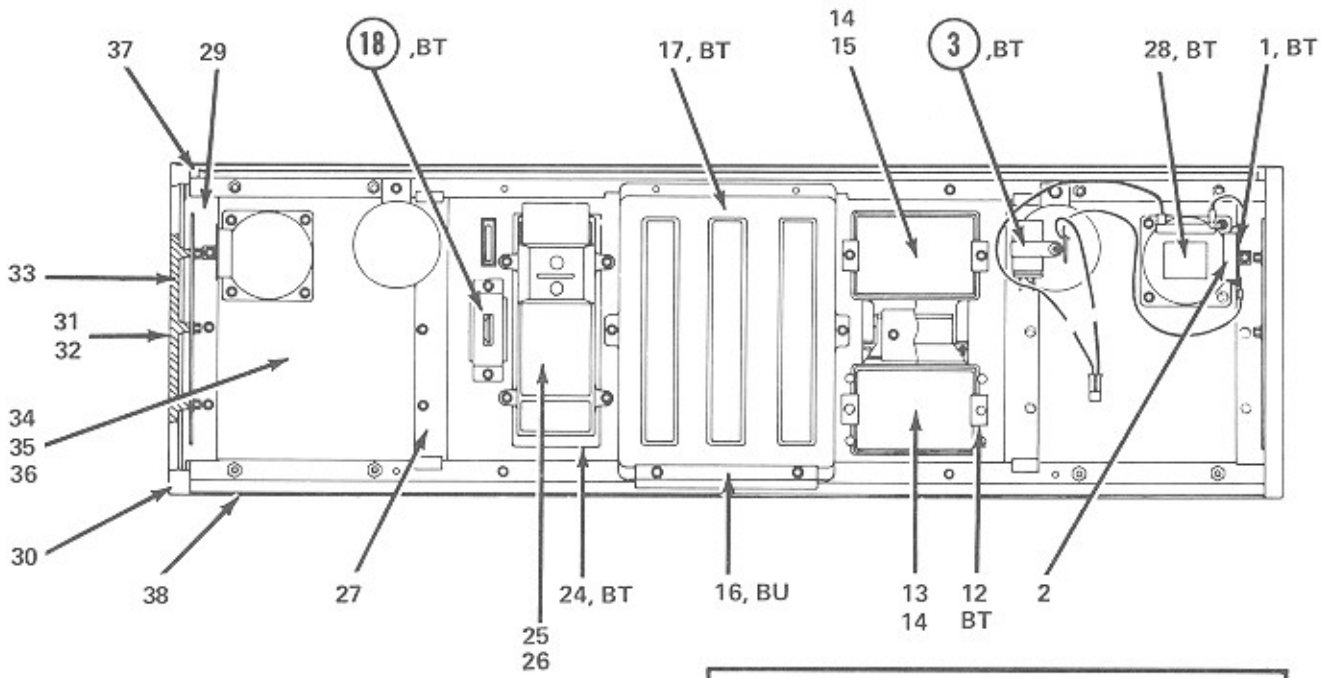
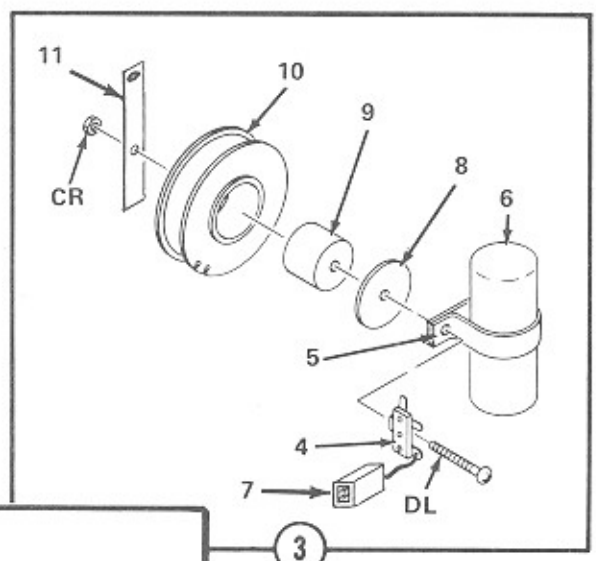


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
1-	601-07500	Phonograph Final Assembly, Model R-74, Wood Style (Classic) (Continued)	
1-	602-07500	Phonograph Final Assembly, Model R-74, Blue Style (Arlington)	
1-	603-07500	Phonograph Final Assembly, Model R-74, Red Style (Export Only)	
84	303-06284	. Speaker Network Assembly	1
85	712-00931	. . Clamp, Cable	1
86	200-14853	. . Capacitor, Electrolytic, 68 MFD, 50V	1
87	200-13244	. . Strip, Terminal	1
88	704-01200	. . Washer, Flat	1
89	710-01211	. . Spacer	1
90	201-14852	. . Inductor, 10 mH	1
91	200-09297	. . Bracket, Mounting	1
92	401-06827	. Speaker Assembly, L.H.	1
92	401-06828	. Speaker Assembly, R.H.	1
93	301-07481	. . Block, Light and Sound, L.H.	1
93	301-07482	. . Block, Light and Sound, R.H.	1
94	401-06851	. . Bracket, Speaker Mounting, L.H.	1
94	401-06852	. . Bracket, Speaker Mounting, R.H.	1
95	208-03709	. . Eyelet	4
96	300-06162	. . Gasket, Speaker	1
97	401-06882	. . Speaker, Mid/High Frequency	1
98	206-12445	. . Housing, Pin, Mate-N-Lok (2 Circuit)	1
99	200-13265	. . Pad, Acoustical	2
100	600-02583	. . Cover, Speaker	1
101	200-50562	. Lamp, Pilot (Credit Lights)	2
102	201-17593	. Cover, Cord Hole	1
103	204-17320	. Plug and Switch Assembly	1
	207-13081	. . Cord and Switch Assembly	1
	203-17323	. . Housing, Pin, Mate-N-Lok	1
104	200-01799	. Knob, Volume Control	1
105	200-02649	. Palnut	1
106	201-13935	. Volume Control and Terminal Assembly	1
107	201-14101	. Volume Control Harness Assembly	1
	702-00934	. Clamp, Cable, 13/16" Dia.	11
	702-00931	. Clamp, Cable, 3/16" Dia.	1
	703-00931	. Clamp, Cable, 1/4" Dia.	2
	704-00931	. Clamp, Cable, 5/16" Dia.	2
	705-00931	. Clamp, Cable, 3/8" Dia.	5
	707-00931	. Clamp, Cable, 1/2" Dia.	6
	708-00931	. Clamp, Cable, 9/16" Dia.	3
108	201-17611	. Acoustical Pad	1
109	601-07550	. Shell Assembly (See Figure 23)	1

FIGURE 2

Selector and Speaker Panel Assembly





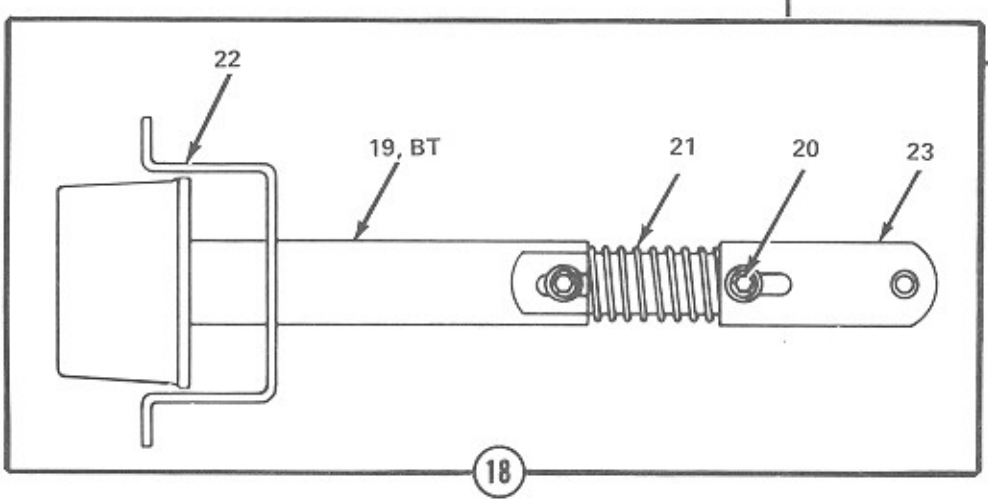


FIGURE 2

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
2-	601-07587	Selector and Speaker Panel Assembly (Figure 1, Item 1)	REF
	203-14957	. Speaker Capacitor Assembly	2
1	200-14952	. . Strip, Terminal	1
2	200-11455	. . Capacitor, Speaker, 2.5 MFD, 50V (Midwec Type M3-240)	1
3	301-07485	. Speaker Network Assembly	2
4	200-13244	. . Strip, Terminal	1
5	716-00931	. . Clamp, Cable	1
6	201-17612	. . Capacitor, AC Electrolytic, 12.5 MFD, 50V	1
7	206-12445	. . Housing, Pin, Mate-N-Lok, 2 Circuit	1
8	704-01200	. . Washer, Flat	1
9	710-01211	. . Spacer	1
10	201-17614	. . Inductor, 10 mH	1
11	201-17585	. . Strap, Mounting, Cross-Over Network	1
12	201-17594	. Retainer	4
13	201-17510	. Panel, Product Identification	1
14	201-17509	. Window, Legend ("B" Glass, Double Strength, 4"x2-3/4"x.115/133 Thk.)	2
15	201-17511	. Panel, Stereo	1
16	201-17504	. Retainer	1
17	401-06816	. Selector Panel Insert Assembly	1
18	301-07471	. Shaft and Stop Assembly	1
19	201-17507	. . Button and Shaft Assembly	1
20	202-09225	. . Spacer	2
21	200-14408	. . Spring, Compression	1
22	301-07411	. . Bracket, Stop	1
23	201-17564	. . Shaft and Pin Assembly	1
24	601-07673	. Light Housing	1
25	201-17581	. Background, Price Card	1
26	301-07412	. Window Price Card ("B" Glass, Double Strength, 7-7/8"x2-7/8"x.115/.133 Thk.)	1
27	401-06815	. Selector-Coin Insert Assembly	1
28	300-06788	. Speaker, High Frequency	2
29	401-06840	. Bracket, Trim	2
30	401-06869	. Retainer, Top Panel, L.H.	1
	401-06870	. Retainer, Top Panel, R.H.	1
31	601-07581	. Grille, Side	2
32	301-07484	. Backing, Grille, Side	2
33	601-07563	. Trim, Side Speaker, R.H.	1
	601-07562	. Trim, Side Speaker, L.H.	1
34	601-07570	. Grille, Front	2
35	301-07483	. Backing, Grille, Front	2
36	401-07561	. Trim, Front Speaker	2
37	401-06817	. Bar, Trim, Upper	1
38	401-06818	. Bar, Trim, Lower	1

FIGURE 3

Selector Assembly

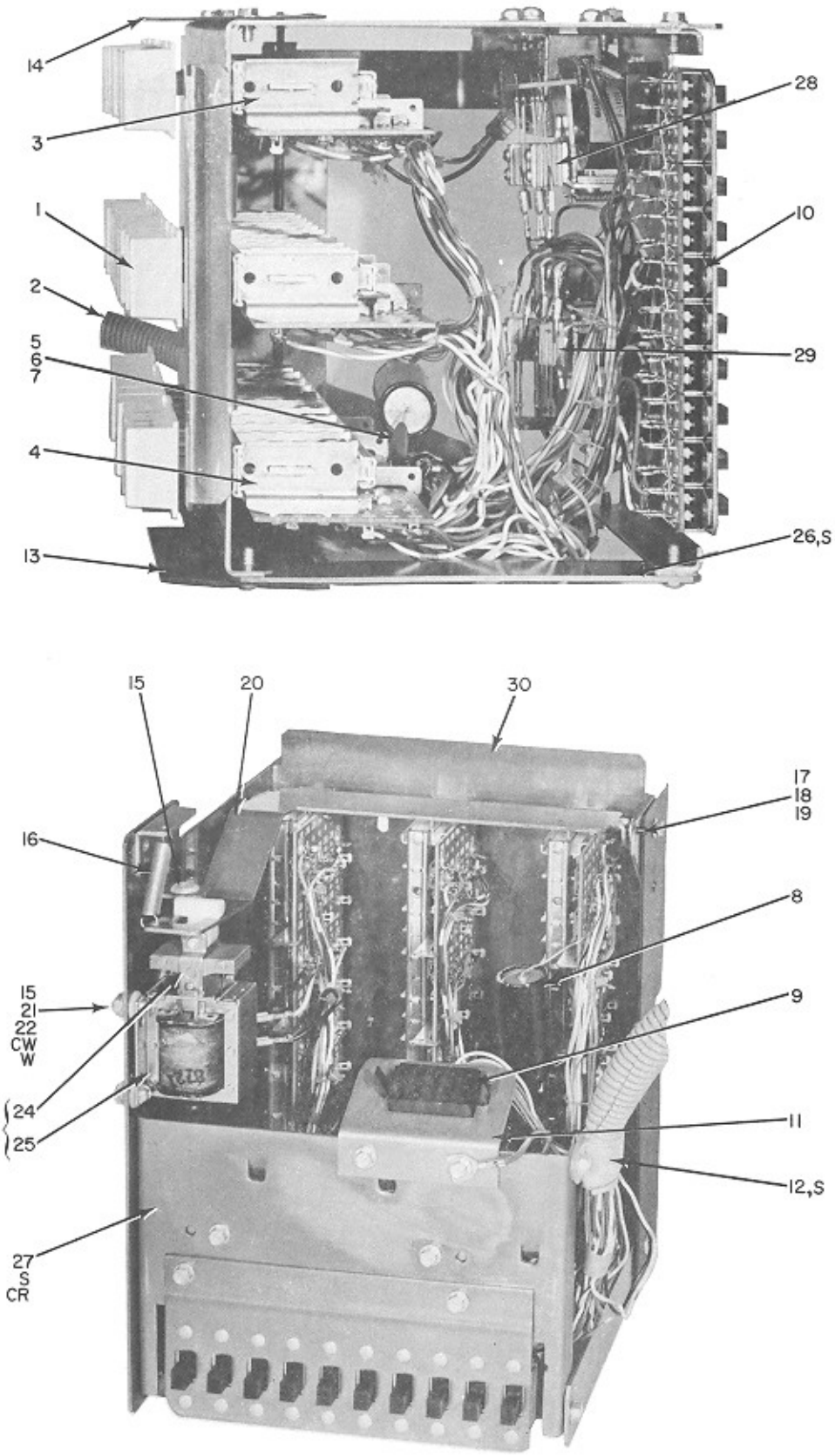
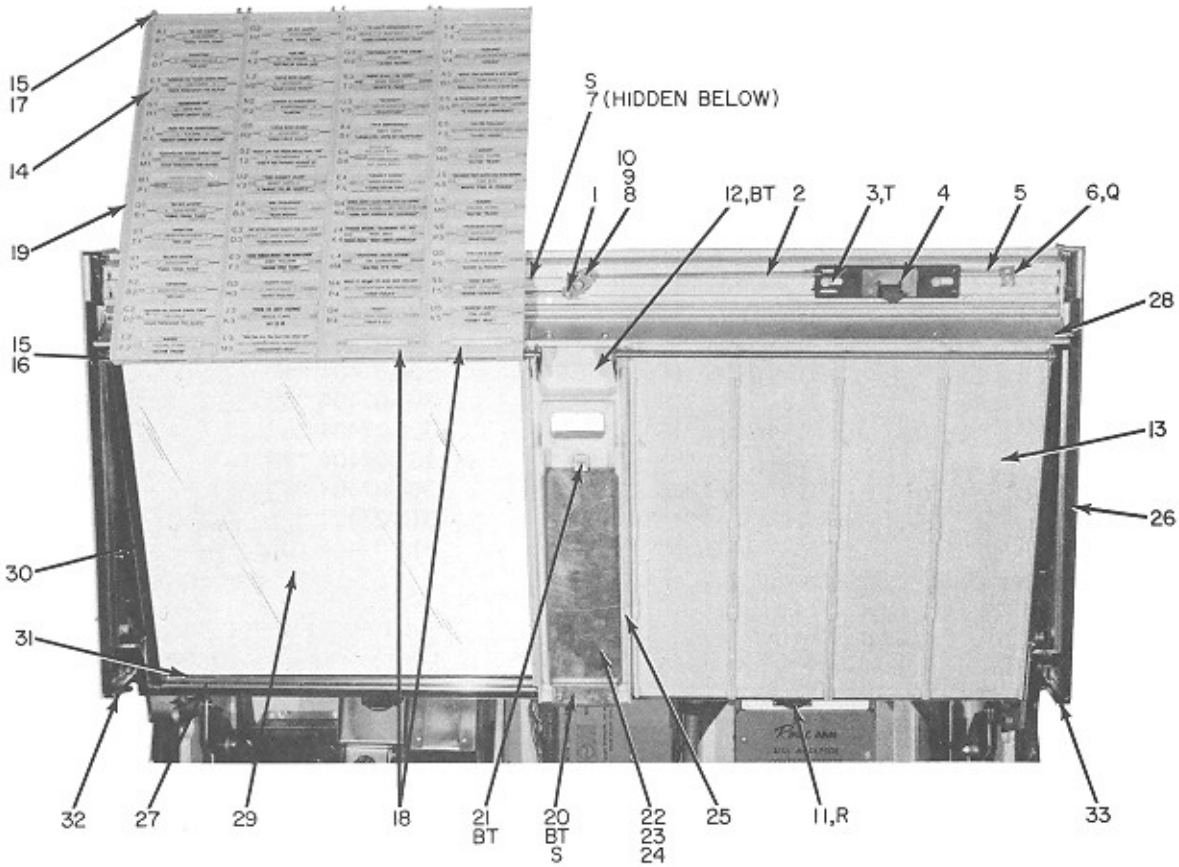


FIGURE 3

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
3-	601-07555	Selector Assembly (Figure 1, Item 2)	REF
1 each		The Following Pushbuttons:	
	301-07403 "A"	312-07403 "L"	301-07404 "1"
	302-07403 "B"	313-07403 "M"	302-07404 "2"
	303-07403 "C"	314-07403 "N"	303-07404 "3"
	304-07403 "D"	316-07403 "P"	304-07404 "4"
	305-07403 "E"	317-07403 "Q"	305-07404 "5"
	316-07403 "F"	318-07403 "R"	306-07404 "6"
	307-07403 "G"	319-07403 "S"	307-07404 "7"
	308-07403 "H"	320-07403 "T"	308-07404 "8"
	310-07403 "J"	321-07403 "U"	310-07404 "9"
	311-07403 "K"	322-07403 "V"	311-07404 "0"
2	601-07558	. Harness and Switch Assembly	1
	300-05210	. . Edge Connector, 30 Contact	1
3	401-06803	. . Letter Pushbutton Switch	2
4	401-06802	. . Number Pushbutton Switch	1
5	702-00350	. . Diode, Silicon (IN 4002)	5
6	703-00222	. . Capacitor, Ceramic Disc, 0.02 MFD, 500V	2
7	706-00104	. . Resistor, Carbon, 1.8K, 1/2W	1
8	714-00231	. . Capacitor, Electrolytic, 5 MFD, 400V (Cornell Dubilier No.BRNP5-400)	1
9	204-12444	. . Socket, Housing, Mate-N-Lok, 12 Circuit	1
10	301-07402	. . Slide Switch Assembly	1
11	202-14592	. Mounting Bracket	1
12	708-00931	. Cable Clamp	1
13	201-17604	. Selector Light Block	1
14	201-17605	. Selector Light Block	1
15	200-14828	. Grommet	5
16	200-10836	. Tension Spring	1
17	701-01430	. Retaining Ring	2
18	724-01206	. Flat Washer	1
19	201-17502	. Shaft	1
20	301-07401	. Latch Actuating Lever	1
21	210-13578	. Elastic Stop Nut, No. 6-32	4
22	200-14756	. Grommet Bushing	4
23	201-17137	. Solenoid and Push Rod Assembly	1
24	200-14754	. . Push Rod	1
25	201-17100	. . AC Solenoid	1
26	201-17500	. Brace	1
27	401-06812	. Selector Back	1
28	200-14508	. Start Relay (R5)	1
29	200-14827	. Select Pulse and Latch Relay (R1)	1
30	601-07557	. Selector Riveted Assembly	1

FIGURE 4

Top Door Assembly



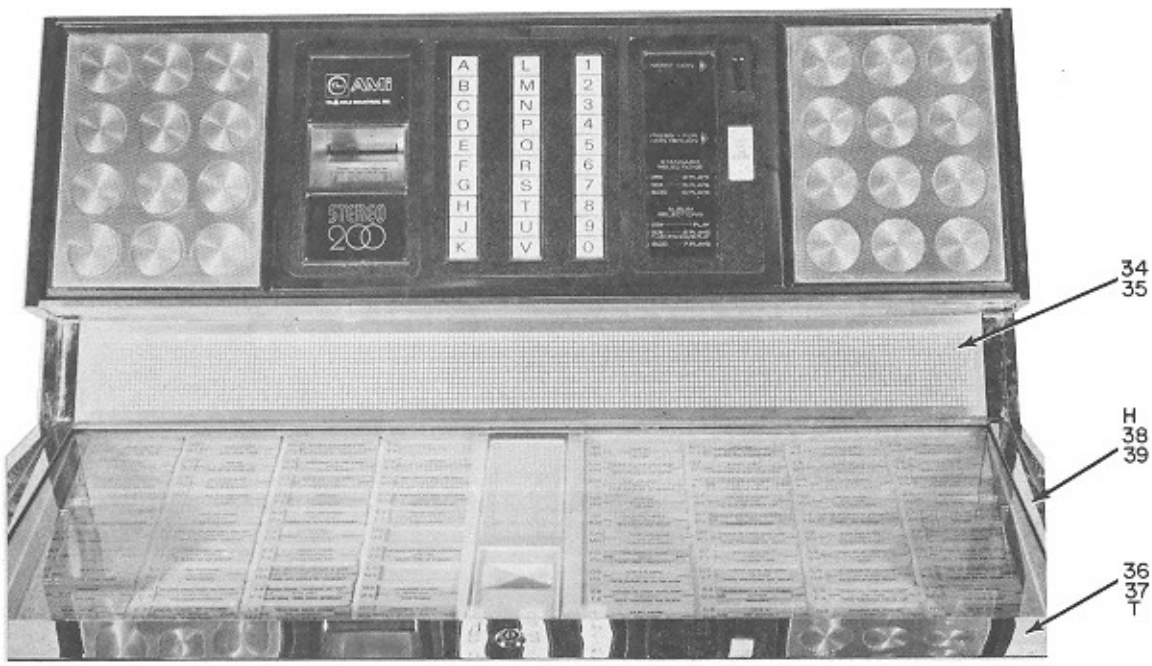
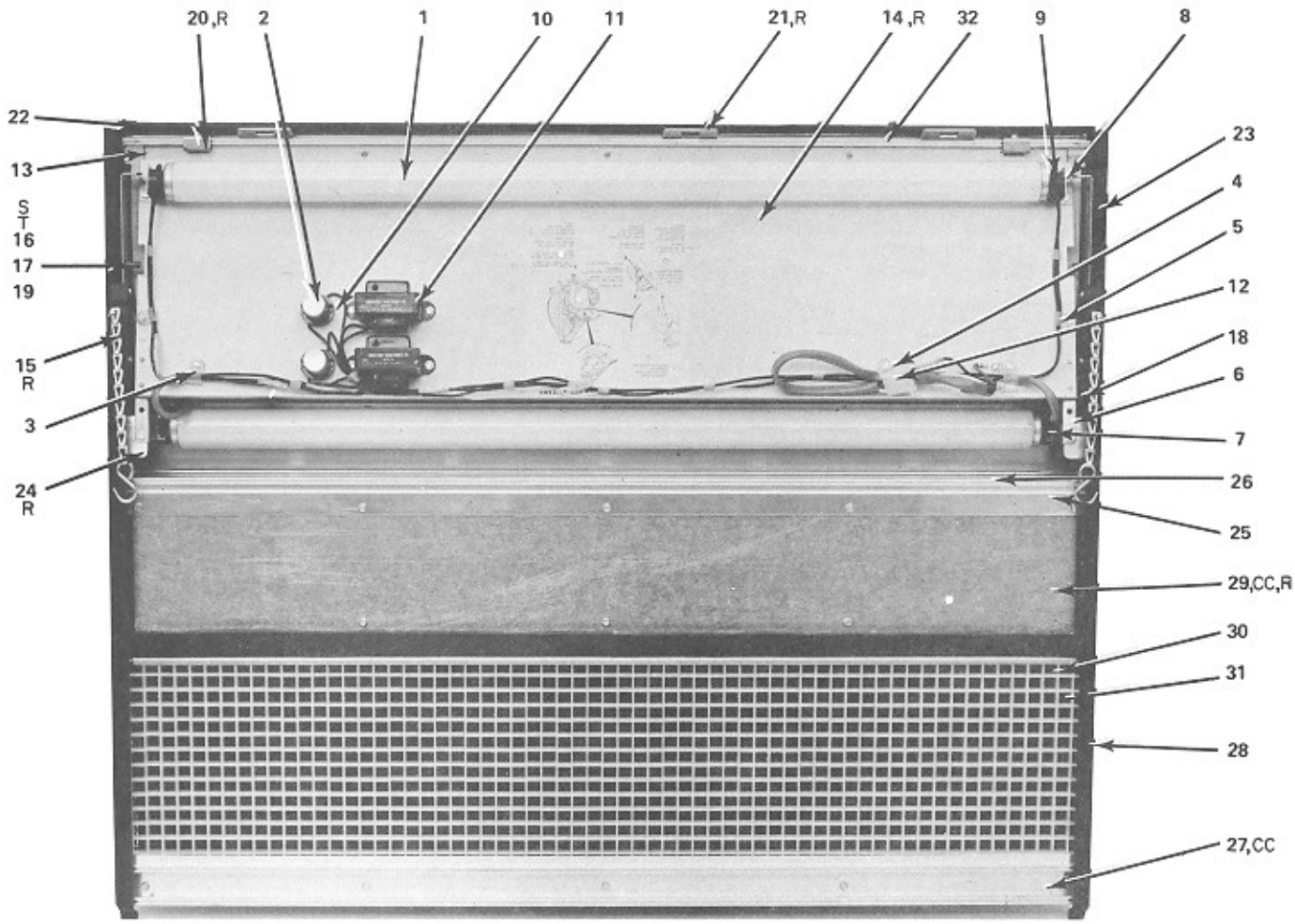


FIGURE 4

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
4-	601-07589	Top Door Assembly (Figure 1, Item 4)	REF
1	703-01430	. Ring Retainer	2
2	201-17534	. Link, Lock Bar	2
3	202-09225	. Spacer	4
4	201-17515	. Lock Bar Assembly, R.H.	1
	201-17514	. Lock Bar Assembly, L.H.	1
5	200-12562	. Spring	2
6	201-15674	. Retainer, Spring	2
7	201-17532	. Guide	1
8	201-14228	. Lock Bolt Assembly	1
9	706-01209	. Washer	1
10	719-01630	. Lock, Cylinder Type, Common Keying	1
11	201-17518	. Catch, Spring, Title Panel	2
12	201-17517	. Pivot Bracket and Spring Assembly	1
13	401-06821	. Title Panel Assembly, R.H.	1
	401-06820	. Title Panel Assembly, L.H.	1
14	301-07422	. . Number Strip, A1 to F2 (on 401-06820)	1
	302-07422	. . Number Strip, G2 to M3 (on 401-06820)	1
	303-07422	. . Number Strip, N3 to R4 (on 401-06820)	1
	304-07422	. . Number Strip, S4 to V5 (on 401-06820)	1
	305-07422	. . Number Strip, A6 to D7 (on 401-06821)	1
	306-07422	. . Number Strip, E7 to H8 (on 401-06821)	1
	307-07422	. . Number Strip, J8 to P9 (on 401-06821)	1
	308-07422	. . Number Strip, Q9 to Y0 (on 401-06821)	1
15	703-01430	. . Ring, Retaining	4
16	201-17519	. . Rod, Bottom	1
17	201-17520	. . Rod, Top	1
18	201-17628	. . Title Rack Insert	2
19	601-07571	. . Title Rack	4
20	201-17548	. Bracket, Mounting, Record Playing Frame	1
21	201-17554	. Bracket, Retainer, License Holder	1
22	201-17551	. Bracket, License Holder	1
23	201-17553	. Card, License	1
24	201-17552	. Cover, License	1
25	601-07564	. Frame, Record Playing	1
26	719-02129	. Tape, Foam	2
27	725-02203	. Tape, Foam	1
28	201-17516	. Diffuser	2
29	301-07416	. Window, Top Door, Fully Tempered Clear Glass 15-11/16"x34-5/8"x.178/.198 Thk.	1
30	208-15794	. Channel, 14-3/4" Long	2
31	210-15794	. Channel, 34-3/8" Long	2
32	201-17568	. Light Block and Reset Assembly	1
33	201-17541	. Light Block	1
34	401-06819	. Insert, Back Trim	1
35	401-06808	. Trim, Back (Top Door)	1
36	301-07417	. Overlay, Front Trim	1
37	401-06809	. Trim, Front	1
38	301-07418	. Side, Door Support	2
39	601-07560	. Support, Door, R.H.	1
	601-07559	. Support, Door, L.H.	1

FIGURE 5

Front Door Assembly



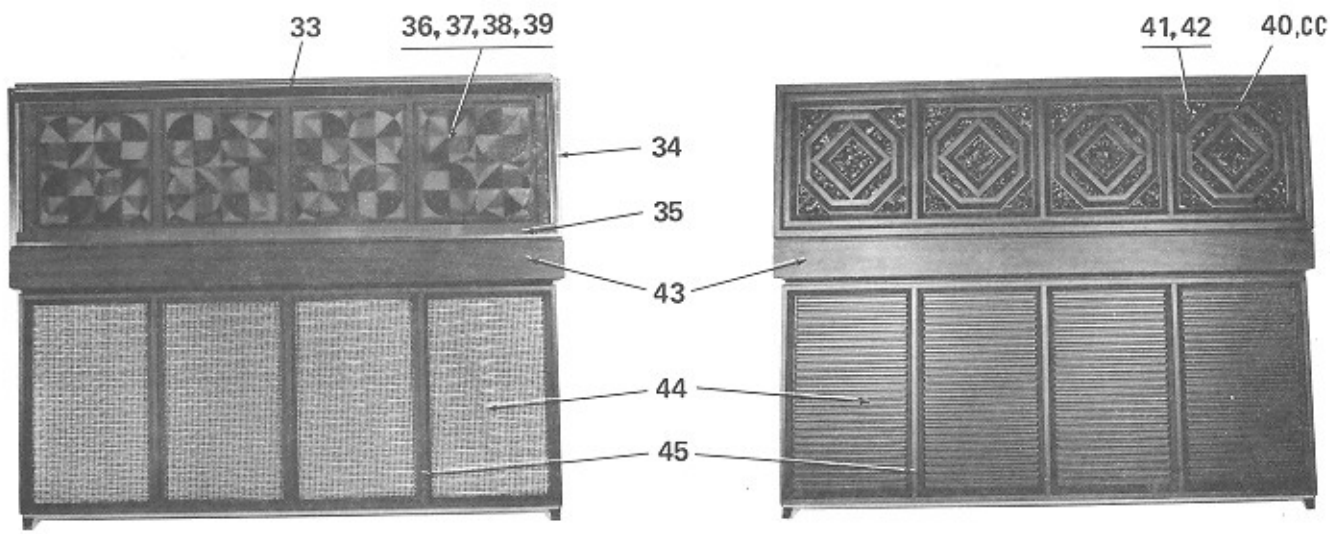


FIGURE 5

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASS'Y		
			WOOD	BLUE	EX-PORT
5-	601-07592	Front Door Assembly, Wood Style (Classic) (Figure 1, Item 8)	REF		
5-	602-07592	Front Door Assembly, Blue Style (Arlington) (Figure 1, Item 8)		REF	
5-	603-07592	Front Door Assembly, Red Style (Export) (Figure 1, Item 8)			REF
1	706-00601	. Fluorescent Lamp, 25W, 33in., Type T-12	2	2	2
2	703-00800	. Fluorescent Starter, FS-25	2	2	2
	601-07650	. Reflector Panel Assembly	1		
	602-07650	. Reflector Panel Assembly		1	1
3	703-00931	. . Cable Clamp	2	2	2
4	705-00931	. . Cable Clamp	1	1	1
5	702-00931	. . Cable Clamp	2	2	2
	401-06838	. . Front Door Harness Assembly	1	1	1
6	201-17630	. . . Lampholder Bracket (Lower)(L.H.)	1	1	1
	201-17631	. . . Lampholder Bracket (Lower)(R.H.)	1	1	1
7	208-15808	. . . Fluorescent Lampholder	2	2	2
8	201-17580	. . . Lampholder Bracket (Upper)	2	2	2
9	207-15808	. . . Fluorescent Lampholder	2	2	2
10	200-00295	. . . Starter Socket	2	2	2
11	200-13801	. . . 25 Watt Ballast	2	2	2
12	202-17323	. . . Pin Housing, Mate-N-Lok, 3 Circuit	1	1	1
13	722-02203	. . Foam Tape		1	1
14	601-07651	. . Reflector Panel	1	1	1
15	200-14958	. Fall Stop	2	2	2
16	202-11100	. Thrust Washer	4	4	4
17	202-09225	. Spacer	4	4	4
18	200-14941	. Tension Spring	2	2	2
19	201-17549	. Latch Assembly	2	2	2
20	201-17589	. Reflector Clamp		2	2
21	201-17537	. Strike Plate	3	3	3
22	708-02201	. Foamed Tape	1	1	1
23	723-02203	. Foamed Tape	2	2	2
24	201-17587	. Mounting Bracket	2	2	2
25	401-06804	. Center Tie Bar	1	1	1
26	201-17608	. Diffuser	1	1	1
27	401-06887	. Bottom Tie Bar	1	1	1
28	601-07567	. Front Door Support, L.H.	1	1	1
	601-07568	. Front Door Support, R.H.	1	1	1
29	601-07569	. Lower Grille Backing	1	1	1
30	401-06854	. Grille Support	1	1	1
31	301-07428	. Bottom Grille Foam Pad	1	1	1
32	401-06844	. Top Tie Bar	1		
33	401-06807	. Window Top Trim		1	1
34	401-06848	. Window Side Trim, L.H.		1	1
	401-06849	. Window Side Trim, R.H.		1	1
35	401-06888	. Window Bottom Trim		1	1
36	301-07438	. Front Door Window		1	1
37	706-00620	. Window Channel, Sides		2	2
38	705-00620	. Window Channel, Bottom & Top		2	2
39	401-06837	. Front Door Scene, Blue		1	
	402-06837	. Front Door Scene, Red			1
40	601-07573	. Wood Panel	1		
41	401-06836	. Front Panel Krinklglas	1		
42	301-07468	. Front Door Diffuser	1		
43	601-07598	. Center Tie Bar Overlay	1	1	1
44	601-07574	. Louvred Grille	4		
44	601-07551	. Perforated Grille		1	1
45	601-07575	. Lower Grille Frame	1	1	1

FIGURE 6

Side Panel Assembly

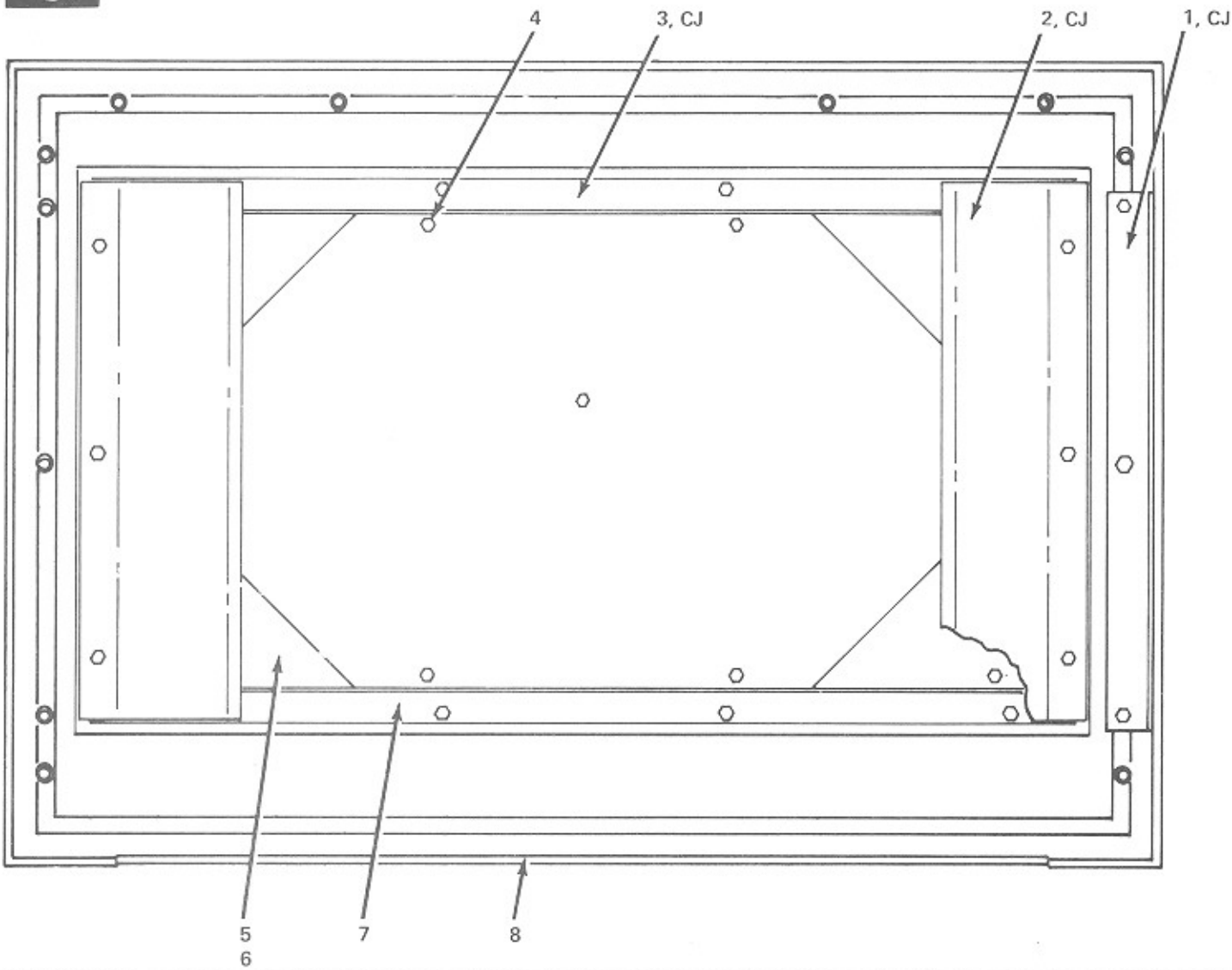


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION			QTY. PER ASSY
6-	601-07668	Side Panel Assembly, Wood Style, (Classic) L.H. (Figure 1, Item 14)	REF		
6-	601-07669	Side Panel Assembly, Wood Style, (Classic) R.H. (Figure 1, Item 14)	REF		
6-	602-07668	Side Panel Assembly, Blue Style (Arlington) L.H. (Figure 1, Item 14)		REF	
6-	602-07669	Side Panel Assembly, Blue Style (Arlington) R.H. (Figure 1, Item 14)		REF	
6-	603-07668	Side Panel Assembly, Red Style (Export) L.H. (Figure 1, Item 14)			REF
6-	603-07669	Side Panel Assembly, Red Style (Export) R.H. (Figure 1, Item 14)			REF
1	301-07430	. Bracket, Retainer, Side Frame	1	1	1
2	301-07466	. Reflector	2	2	2
3	201-17547	. Strap Retaining (Long)		2	2
4	201-17312	. Screw, Type 25 Special Washer Head	11		
5	301-07467	. Diffuser	1		
5	401-06814	. Scene, Side (Blue		1	
5	402-06814	. Scene, Side (Red)			1
6	401-06813	. Panel, Krinklglass	1		
6	301-07408	. Window, Side (Fully Tempered Clear Glass, 18-3/8"x9-3/4"x.110/.140 Thk.)		1	1
	726-02129	. Tape, Foam (Top and Bottom)		2	2
	724-02203	. Tape, Foam (Sides)		2	2
7	601-07585	. Insert, Wood	1		
8	601-07582	. Frame, Side	1	1	1

Top Access Door Assembly

FIGURE 7

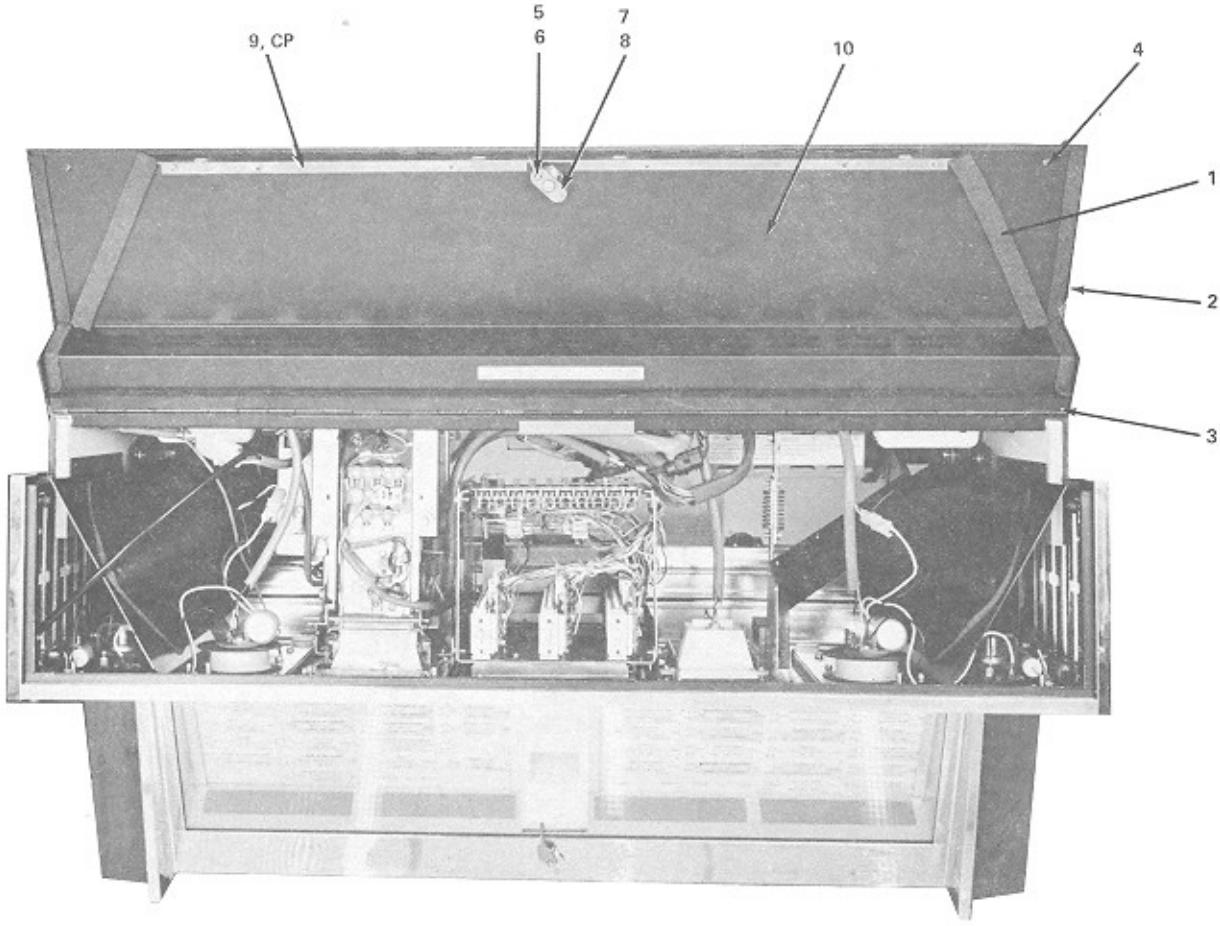


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
7-	601-07591	Top Access Door Assembly (Figure 1, Item 15)	REF
1	726-02203	. Tape, Foam	2
2	725-02129	. Tape, Foam	2
3	703-02121	. Tape, Foam	1
4	721-02203	. Tape, Foam	1
5	703-01430	, Ring, Retaining	1
6	201-15718	. Link, Latch Bar	1
7	202-14228	. Lock Bolt Assembly	1
8	719-01630	. Lock, Cylinder, Common Keying	1
9	301-07435	. Hinge, Latch	1
10	601-07659	. Top Door Weld Assembly	1

FIGURE 8

Mechanism Assembly Sheet 1

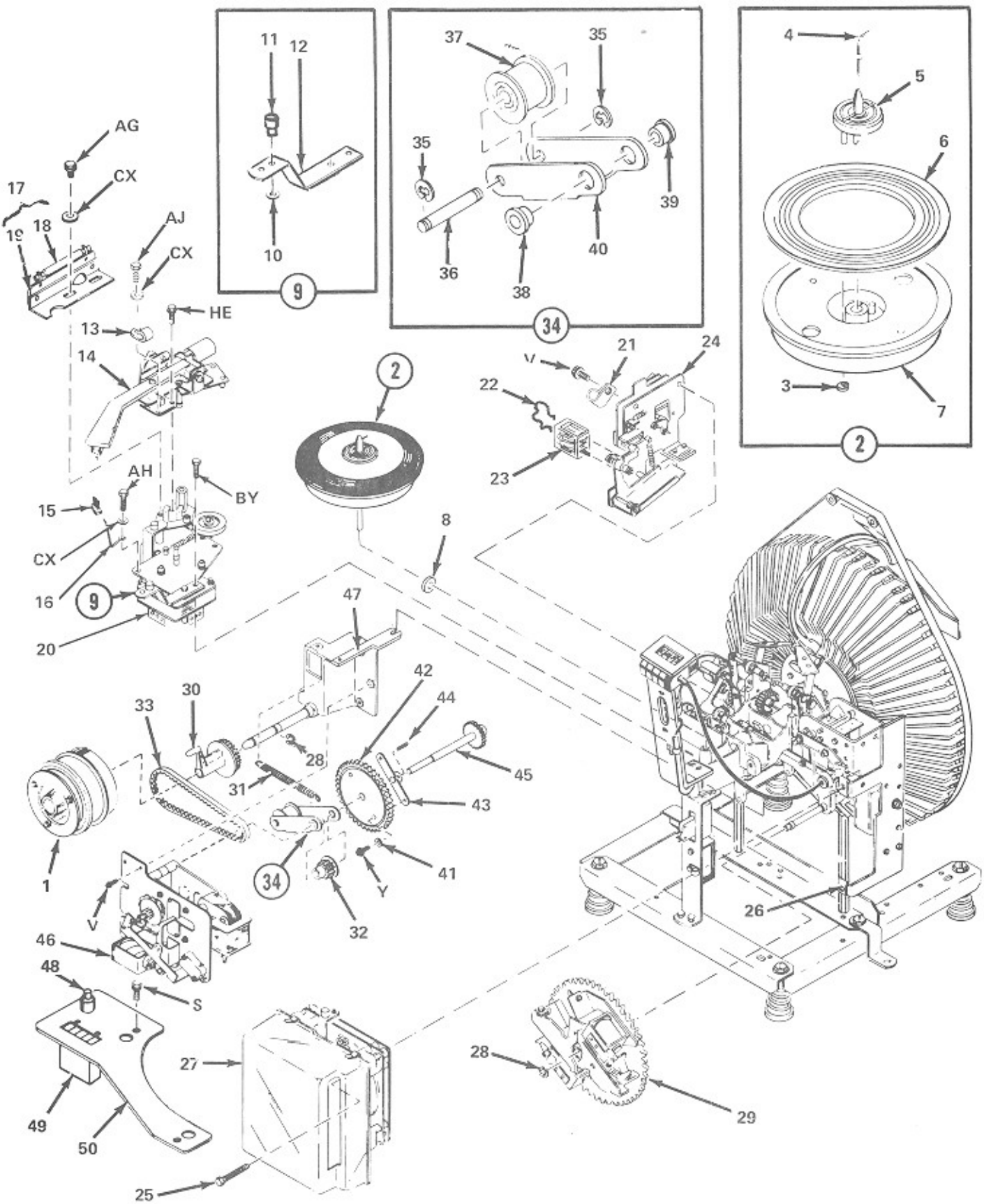


FIGURE 8

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
8-	605-03060	Mechanism Assembly (Figure 1, Item 22)	REF
1	303-05465	. Playmeter Wheel Assembly (See Figure 9)	1
2	301-05237	. Turntable Assembly	1
3	701-01430	. . Ring, Retaining	1
4	200-10867	. . Wire, Trip	1
5	201-12554	. . Hub, Turntable	1
6	301-05235	. . Face, Turntable	1
7	401-05069	. . Turntable and Shaft Assembly	1
8	725-01208	. Washer, Plain	1
9	201-14747	. Gripper Bow Rest Assembly	1
10	202-01437	. . Ring, Retaining	1
11	200-10897	. . Rest, Gripper Bow	1
12	200-14710	. . Bracket, Gripper Bow	1
13	701-00931	. Clamp, Cable	1
14	306-05124	. Tone Arm Assembly (See Figure 10)	1
15	200-02182	. Brush	1
16	200-11569	. Clip, Brush	1
17	201-10891	. Cutoff Switch Assembly	1
18	200-10726	. . Switch, Reed	1
19	201-10917	. . Terminal Board and Bracket Assembly	1
20	401-05076	. Turntable Motor and Plate Assembly (See Figure 11)	1
21	702-00931	. Clamp, Cable	1
22	200-12869	. Spring, Relay Retaining	1
23	200-12751	. Relay Assembly	1
24	401-05075	. Cam Switch and Motor Assembly (See Figure 12)	1
25	200-10789	. Bolt, Mounting, No.1/4-20	3
26	200-11587	. Speednut, No. 1/4-20	2
27	406-05012	. Search Unit and Pin Wheel Assembly (See Figure 13)	1
28	702-01430	. Ring, Retaining	2
29	401-05024	. Stop Switch Assembly (See Figure 15)	1
30	300-05149	. Pulley, Playmeter	1
31	200-10896	. Spring, Tension	1
32	200-10880	. Pulley	1
33	201-10878	. Belt, Timing	1
34	201-11012	. Idler Bracket Assembly	1
35	703-01430	. . Ring, Retaining	2
36	200-10879	. . Pin, Idler	1
37	200-03843	. . Roller, Belt	1
38	707-01460	. . Bearing	1
39	706-01460	. . Bearing	1
40	200-10877	. . Bracket, Idler	1
41	704-01222	. Washer, External Tooth	2
42	301-05181	. Pinion and Plate Assembly	1
43	200-10826	. Hub, Gear	1
44	206-01130	. Pin, Roll	2
45	201-11100	. Magazine Drive Shaft Assembly	1
46	403-05022	. Sprag Assembly (Magazine Motor)(See Figure 16)	1
47	301-05125	. Motor Bracket Assembly	1
48	201-15818	. Switch, Momentary Contact, Pushbutton Type	1
49	201-50657	. Counter Assembly	1
50	301-05242	. Plate, Counter Mounting	1

FIGURE 8

Mechanism Assembly Sheet 2

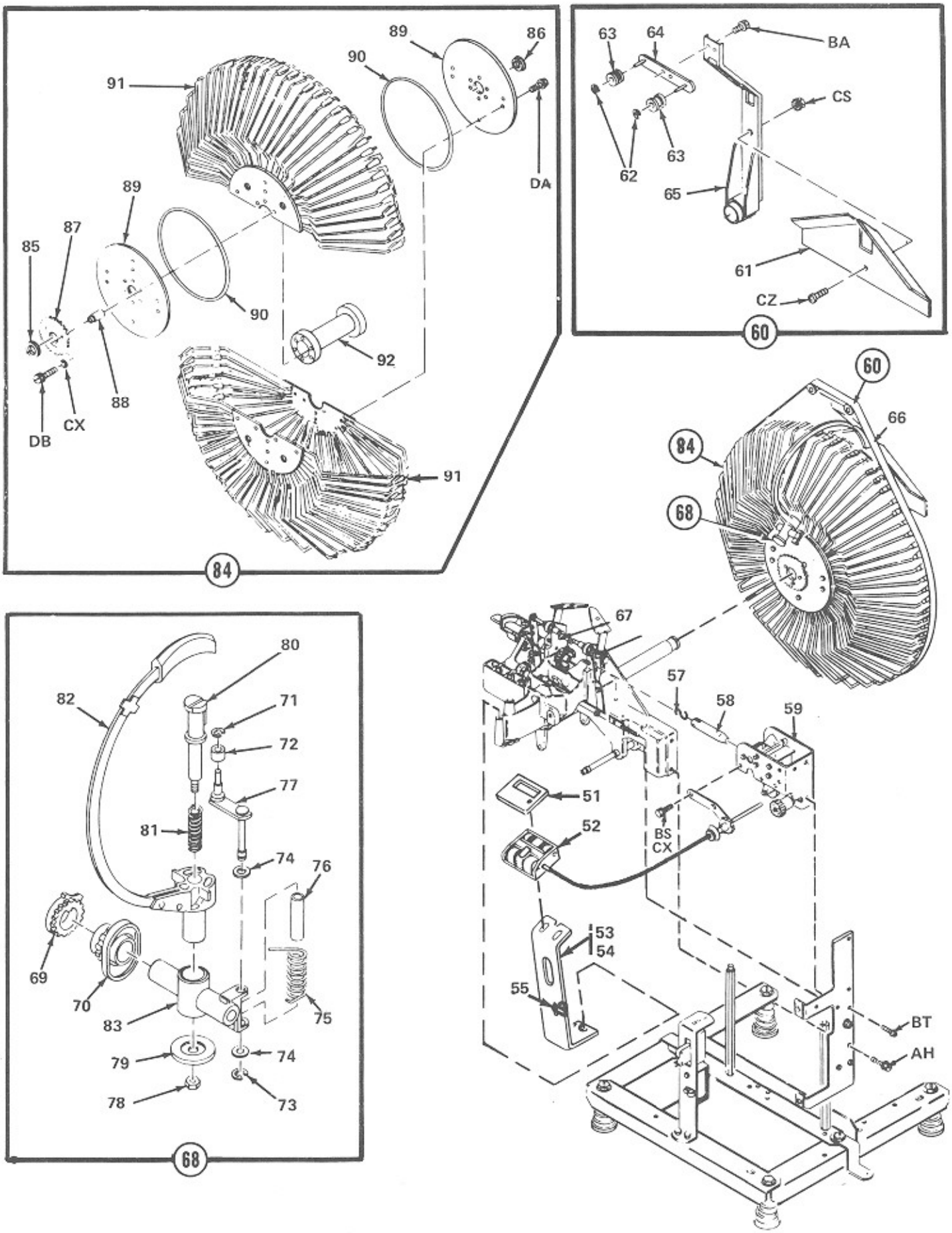


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
8-	605-03060	Mechanism Assembly (Continued)	
51	300-06452	. Trim, Annunciator	1
52	301-05241	. Cable and Annunciator Assembly (See Figure 17)	1
53	200-14739	. Strap	1
54	301-06615	. Annunciator Bracket Assembly	1
55	704-00931	. Clamp, Cable	1
56		. Not Used	1
57	200-11513	. Link, Toggle Plunger	1
58	201-11515	. Plunger Assembly	1
59	303-05111	. Scan Control Assembly (See Figure 18)	1
60	303-05169	. Guide and Belt Support Assembly	1
61	400-05049	. . Stop, Record	1
62	703-01430	. . Ring, Retaining	2
63	200-03843	. . Roller	2
64	201-10894	. . Roller Bracket Assembly	1
65	301-05147	. . Gripper Bow Assembly	1
66	201-10895	. Belt	1
67	200-10792	. Pin, Trunnion	2
68	401-05390	. Gripper Bow and Trunnion Assembly	1
69	300-05122	. . Gear, Trunnion	1
70	400-05013	. . Gear, Cam	1
71	707-01430	. . Ring, Retaining	1
72	200-12537	. . Roller	1
73	703-01430	. . Ring, Retaining	1
74	721-01207	. . Washer, Flat	2
75	200-12538	. . Spring, Torsion	1
76	200-12536	. . Bearing, Sleeve	1
77	201-12532	. . Pawl Lever and Shaft Assembly	1
78	210-13578	. . Nut, Stop	1
79	201-10815	. . Follower, Cam	1
80	201-10808	. . Shoe, Inner	1
81	200-10811	. . Spring, Record Release	1
82	301-05197	. . Transfer Arm and Hub Assembly	1
83	301-05121	. . Trunnion	1
84	602-03010	. Magazine Assembly	1
85	714-01460	. . Bearing	1
86	701-01460	. . Bearing	1
87	300-05191	. . Gear	1
88	200-11518	. . Spacer	3
89	300-05100	. . Support, Separator	2
90	200-10803	. . Ring, Cord	2
91	402-05044	. . Separator Assembly	2
92	300-05101	. . Spacer, Support	1

FIGURE 8

Mechanism Assembly Sheet 3

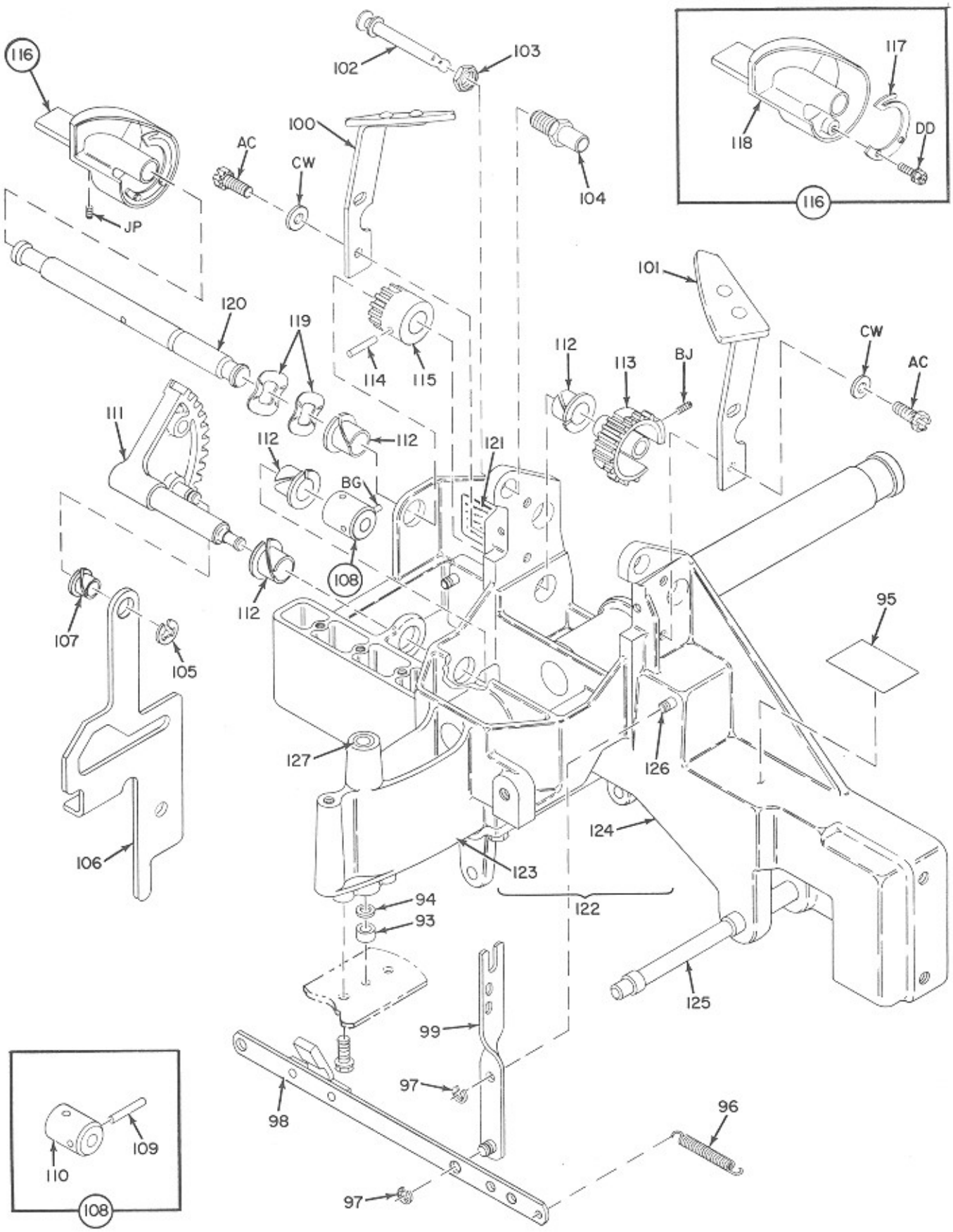


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
8-	605-03060	Mechanism Assembly (Continued)	
93	200-10866	. Bearing, Spacer	1
94	200-10364	. Bearing, Thrust	1
95	201-11004	. Nameplate, Mechanism	1
96	200-10955	. Spring, Tension	1
97	703-01430	. Ring, Retaining	4
98	201-10823	. Cross Link and Stop Assembly	1
99	201-11517	. Link and Pin Assembly	1
100	201-11520	. Record Guide Assembly (L.H.)	1
101	201-11521	. Record Guide Assembly (R.H.)	1
102	200-11528	. Pin, Toggle	2
103	704-01301	. Nut	2
104	200-10817	. Bushing, Toggle Pin	2
105	704-01430	. Ring, Retaining	1
106	200-10793	. Link, Transfer	1
107	704-01460	. Bearing	1
108	201-10809	. Collar and Pin Assembly	1
109	720-01101	. . Pin, Roll	1
110	200-10799	. . Collar	1
111	201-10800	. Segment Gear and Shaft Assembly	1
112	705-01460	. Bearing	4
113	400-05014	. Gear, Trunnion and Cam Drive	1
114	719-01130	. Pin, Roll	1
115	200-14175	. Gear, Camshaft	1
116	201-10892	. Tone Arm Cam Assembly	1
117	200-10909	. . Spring	1
118	400-05008	. . Cam	1
119	200-10820	. Washer, Wave	2
120	200-10791	. Shaft, Trunnion Drive	1
121	200-12665	. Label	1
122	403-05003	. Base Assembly	1
123	300-05205	. . Support, Shaft	1
124	401-05002	. . Base	1
125	200-10728	. . Shaft, Stop Switch	1
126	200-10729	. . Pin, Mounting	2
127	200-10377	. . Bearing	2

FIGURE 8

Mechanism Assembly Sheet 4

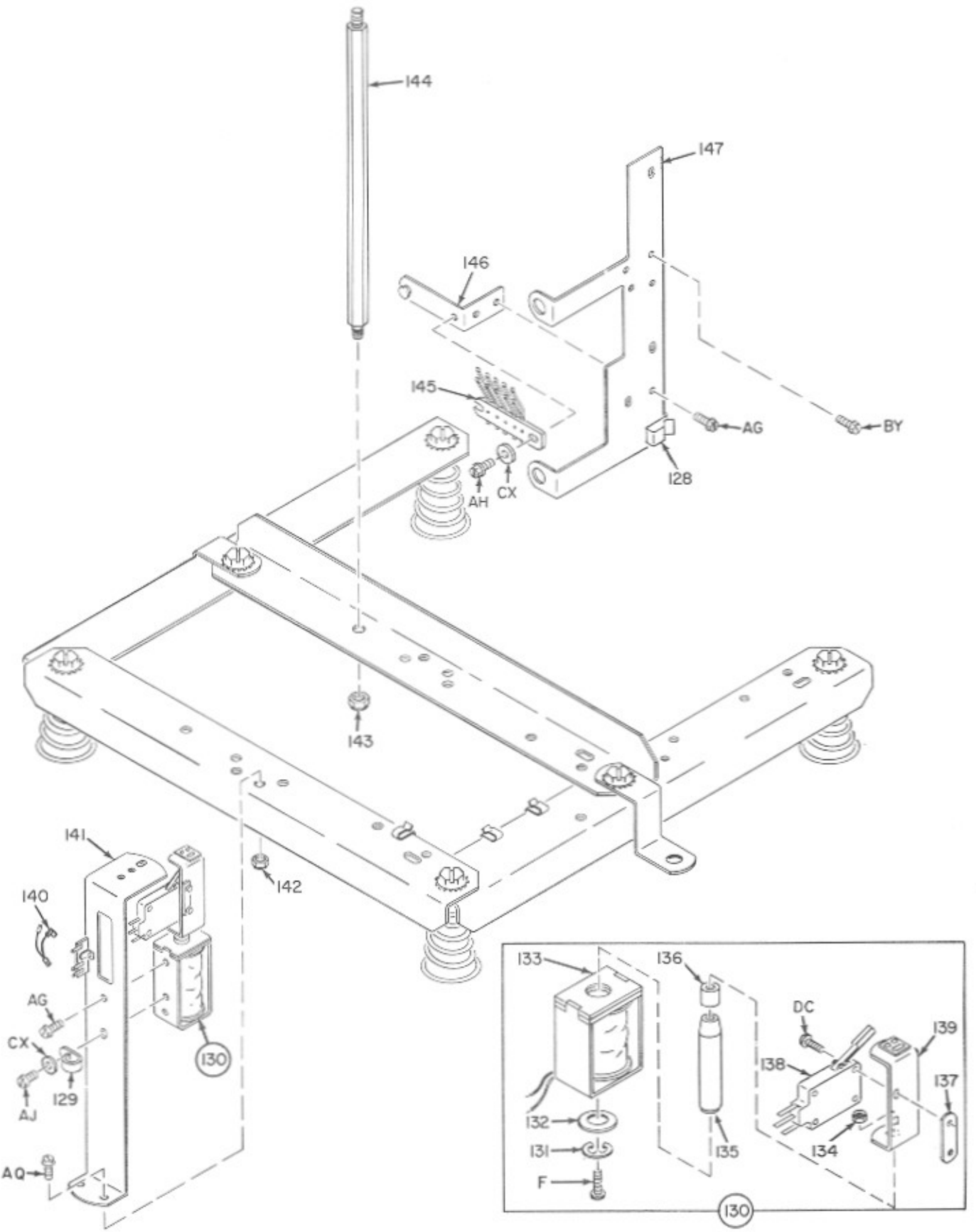


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
8-	605-03060	Mechanism Assembly (continued)	
128	200-07545	. Clip, Cable	2
129	705-00931	. Clamp, Cable	3
130	201-11011	. Hub Shift Assembly	1
131	702-01430	. . Ring, Retaining	1
132	710-01205	. . Washer, Flat	1
133	202-11505	. . Solenoid Assembly	1
134	203-13578	. . Nut, Stop	1
135	200-10862	. . Plunger	1
136	200-10861	. . Spacer	1
137	200-11017	. . Plate, Nut	1
138	200-10735	. . Microswitch	1
139	201-12609	. . Bracket Switch	1
140	201-12586	. Wire and Termination Assembly	1
141	201-12694	. Terminal Strip and Bracket Assembly	1
142	200-11014	. Nut, Lock	2
143	200-11013	. Nut, Lock	2
144	200-10881	. Support, Mechanism	2
145	201-10949	. Wiper Blade Assembly	1
146	201-10893	. Mounting Bracket Assembly	1
147	400-05388	. Bracket, Search Unit	1

FIGURE 8

Mechanism Assembly Sheet 5

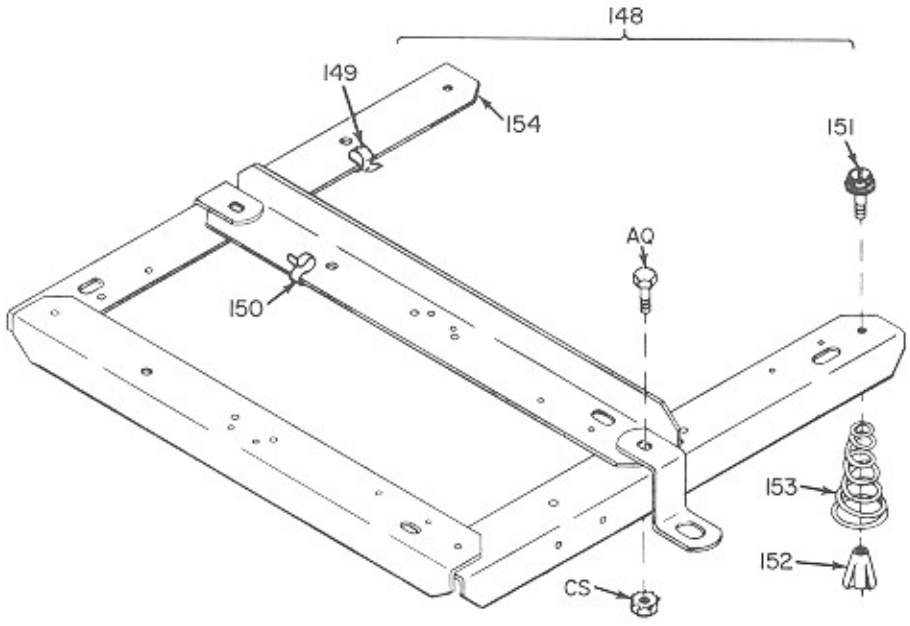


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
8-	605-03060	Mechanism Assembly (continued)	
148	301-06622	. Mechanism Support and Spring Assembly	1
149	202-05545	. . Clip, Cable	1
150	200-07545	. . Clip, Wire	5
151	200-11538	. . Pin, Screw, Spring Support	4
152	200-06272	. . Support, Spring	4
153	200-06128	. . Spring	4
154	302-05142	. . Mechanism Support Assembly	1

Playmeter Wheel Assembly

FIGURE 9

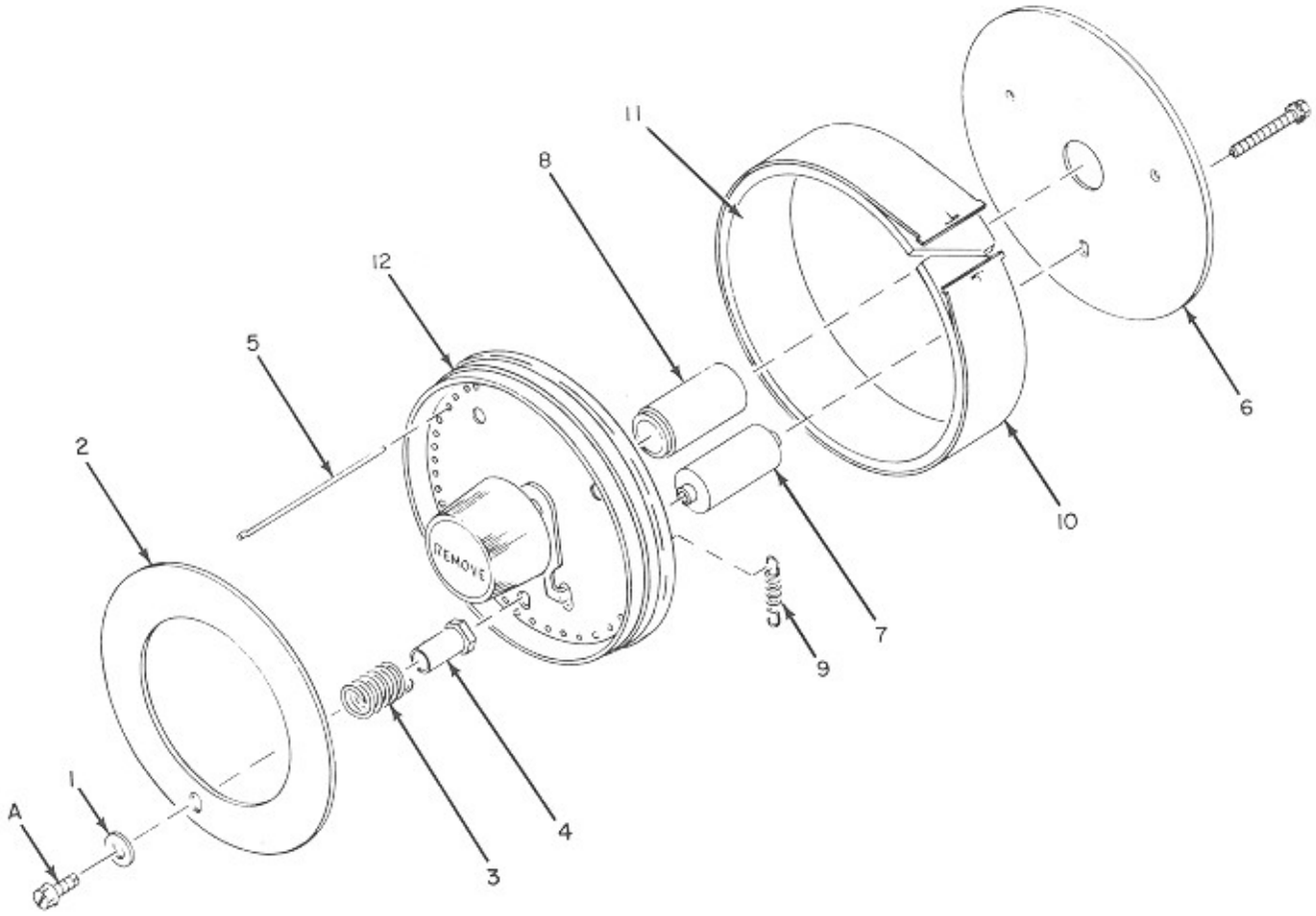


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
9-	303-05465	Playmeter Wheel Assembly (Figure 8, Item 1)	REF
1	702-01220	. Washer, Flat, No. 6	3
2	300-06262	. Plate, Reset	1
3	200-10965	. Spring, Compression	3
4	200-10969	. Stud, Reset Guide	3
5	200-11582	. Pin, Playmeter	100
6	300-05159	. Plate, Back	1
7	200-10962	. Spacer	3
8	200-10968	. Bearing	1
9	200-11581	. Spring, Tension	1
10	300-05198	. Strip, Playmeter	1
11	202-10966	. Strip, Pin Loading	1
12	201-13913	. Playmeter Plate Assembly	1

FIGURE 10

Tone Arm Assembly

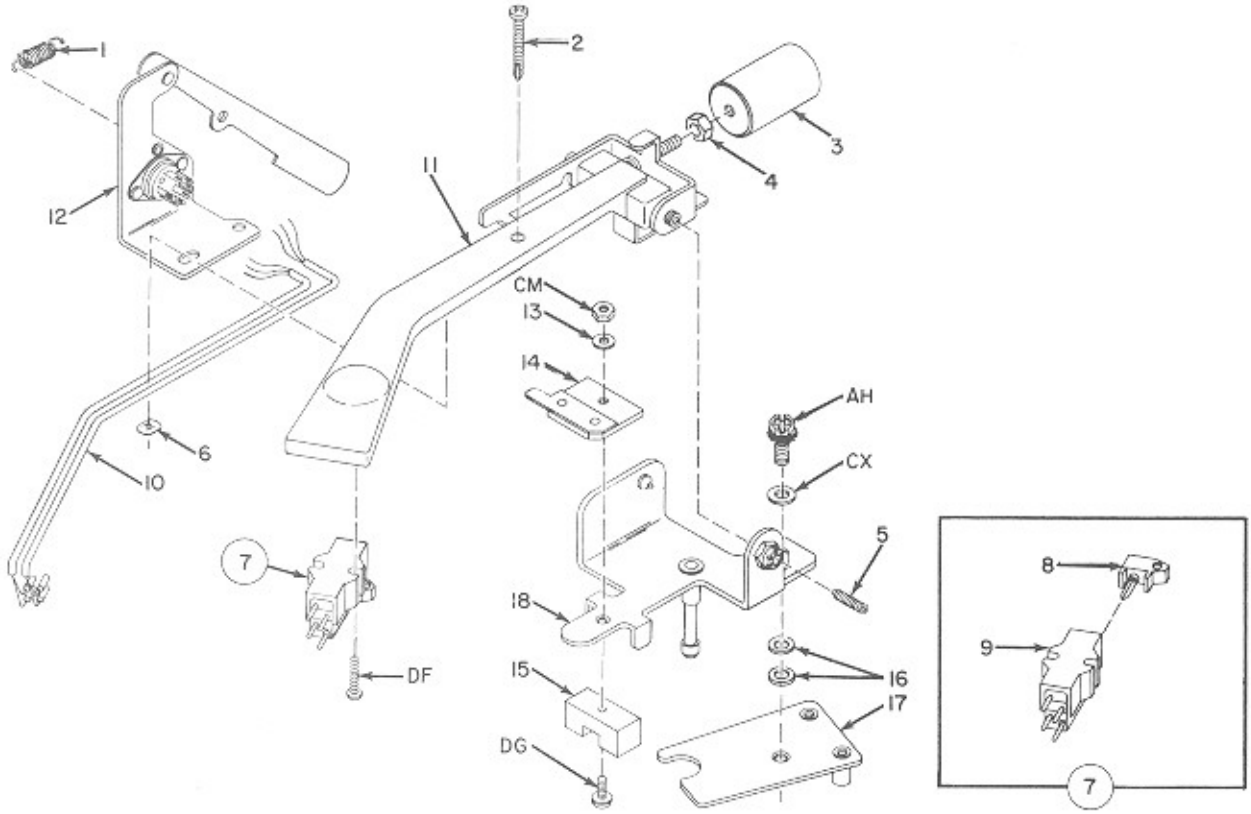


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
10-	306-05124	Tone Arm Assembly (Figure 8, Item 14)	REF
1	200-03713	. Spring, Tension	1
2	200-65025	. Screw, Contact	1
3	201-11585	. Counterweight	1
4	200-13306	. Nut	1
5	200-10712	. Screw, Pivot	1
6	200-10897	. Nut, Push-On	3
7	200-13011	. Cartridge, Stereo	1
8	200-13031	. . Stylus	1
9	200-10873	. . Cartridge	1
10	201-10874	. Cable Assembly	2
11	303-05118	. Arm and Lever Assembly	1
12	201-10785	. Bracket and Lever Assembly	1
13	724-01206	. Washer, Flat, No. 4	1
14	201-65023	. Blade, Contact	1
15	200-10724	. Magnet	1
16	719-01200	. Washer, Flat	AR
17	201-10727	. Cam Plate Assembly	1
18	201-10714	. Bracket and Shaft Assembly	1

Turntable Motor and Plate Assembly

FIGURE 11

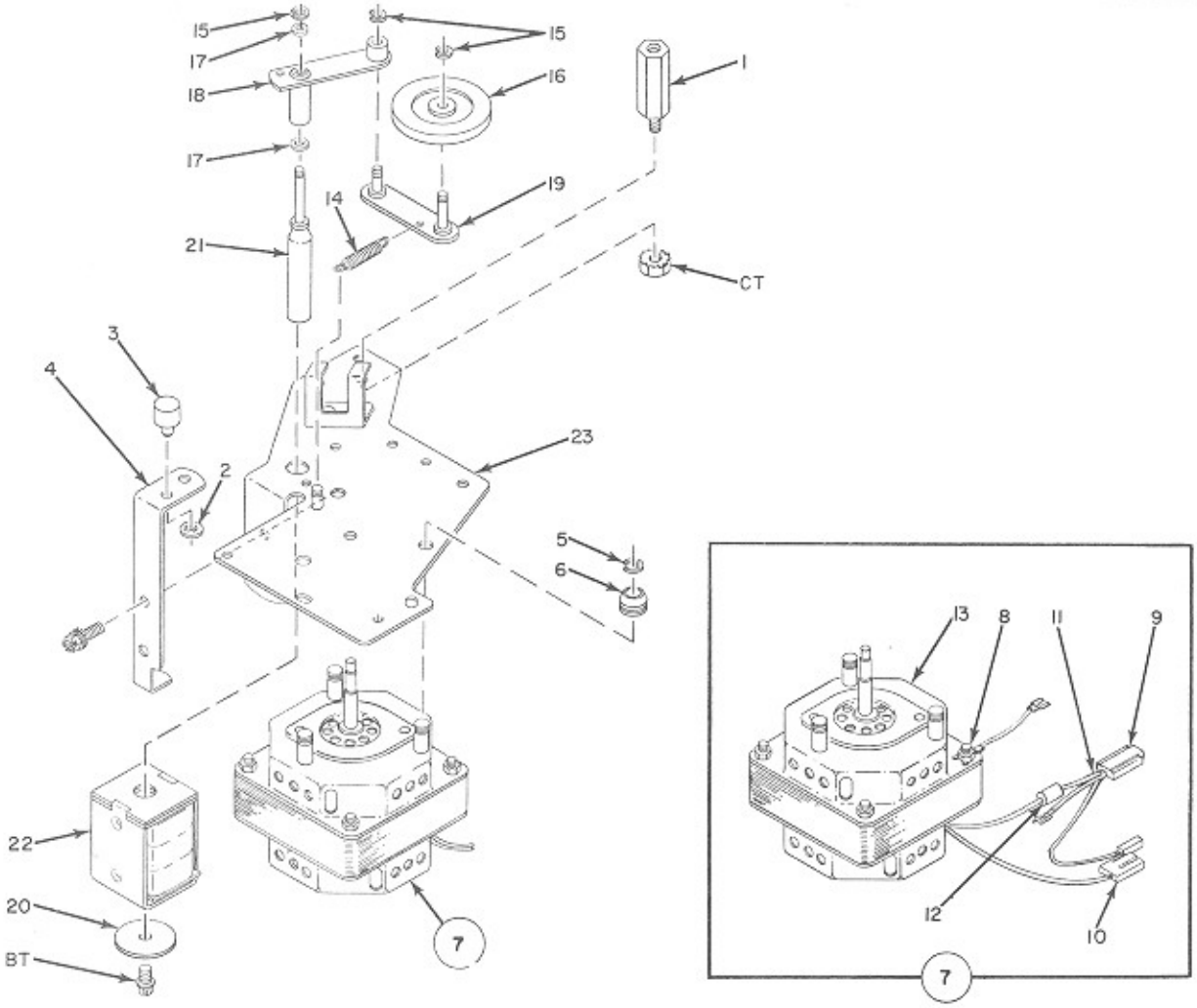
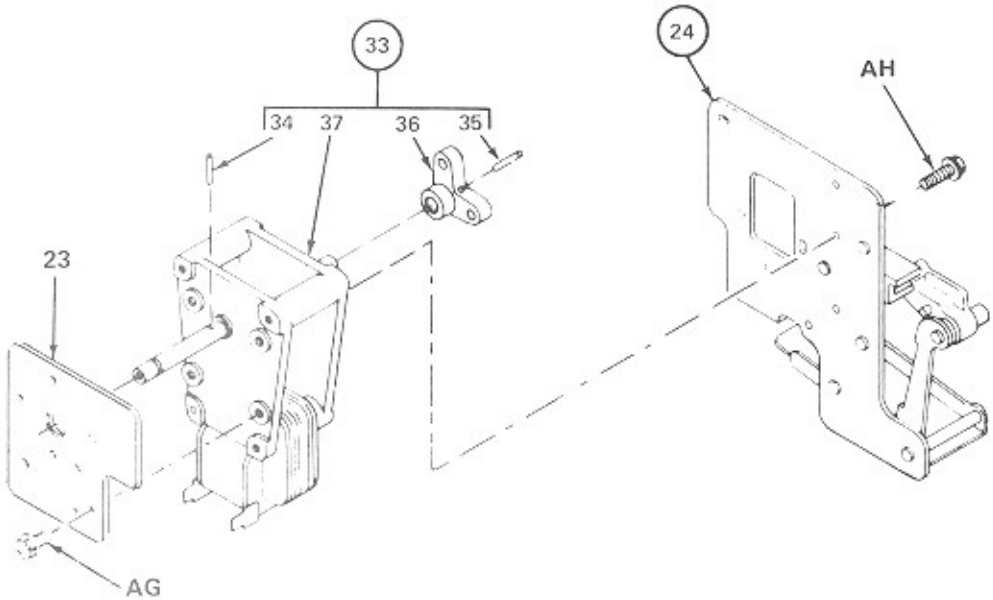
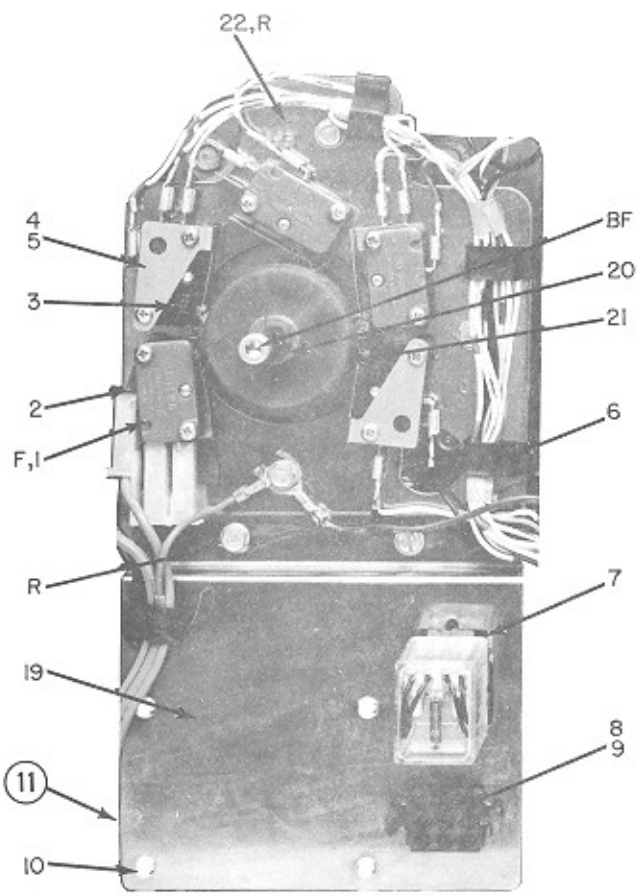


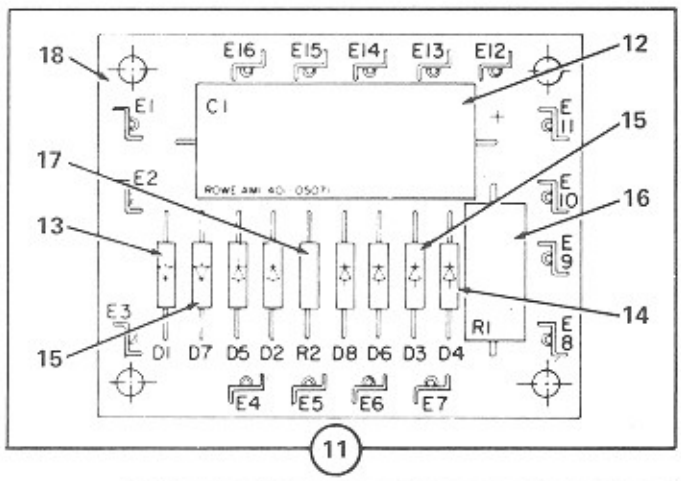
FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
11-	401-05076	Turntable Motor and Plate Assembly (Figure 8, Item 20)	REF
1	201-10708	. Bearing, Tone Arm	1
2	702-01437	. Ring, Retaining	1
3	200-10897	. Rest, Gripper Bow	1
4	200-10886	. Bracket, Gripper Bow Rest (L.H.)	1
5	712-01430	. Ring, Retaining	3
6	200-11501	. Grommet	3
7	301-05239	. Turntable Motor Assembly	1
8	216-12300	. . Wire and Lug Assembly	1
9	202-17323	. . Connector, Socket (3 Circuit)	1
10	201-51106	. . Receptacle, Triple (Insulation)	1
11	SPEC7065D	. . Cord, 3 Conductor	14"
12	704-00921	. . Connector, Solderless	1
13	300-05193	. . Motor, Turntable	1
14	200-00907	. Spring, Tension	1
15	701-01430	. Ring, Retaining	3
16	201-10889	. Idler Wheel Assembly	1
17	712-01213	. Washer	2
18	201-10887	. Link and Bushing Assembly	1
19	201-10888	. Link and Pin Assembly	1
20	714-01206	. Washer	1
21	201-08003	. Plunger Assembly	1
22	202-11505	. Solenoid Assembly	1
23	301-05189	. Turntable Motor Mount Assembly	1

FIGURE 12

Cam Switch and Motor Assembly







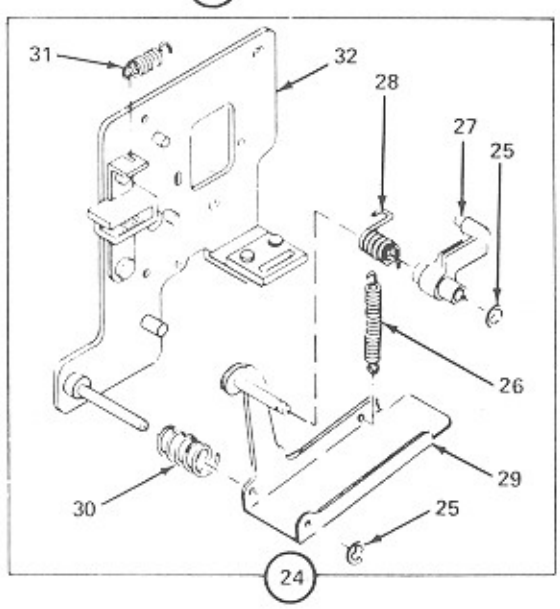


FIGURE 12

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
12-	401-05075	Cam Switch and Motor Assembly (Figure 8, Item 24)	REF
1	200-10732	. Switch	1
2	200-50548	. Insulator	1
3	200-10733	. Switch	4
4	200-10829	. Actuator, Switch	5
5	200-10830	. Nut, Twin	5
6	200-07545	. Clip	3
	403-05072	. Mechanism Harness and Terminal Board Assembly	1
7	202-13782	. . Socket, Relay	1
	603-03014	. . Mechanism Harness Assembly	1
8	203-12444	. . . Housing, Socket (9 Circuit) Brown	1
9	207-12444	. . . Housing, Socket (2 Circuit)	1
10	704-05000	. . Support, Circuit Board	4
11	401-05071	. . Terminal Board Assembly	1
12	719-00233	. . . Capacitor, Electrolytic, 100MFD, 50V	1
13	702-00350	. . . Diode, Silicon, (D1, D5, D6, D8)	4
14	705-00350	. . . Diode, Silicon, (D2, D4)	2
15	706-00350	. . . Diode, Silicon, (D3, D7)	2
16	725-00105	. . . Resistor, Carbon, 120 OHM, 2W (R1)	1
17	724-00107	. . . Resistor, Carbon, 22 OHM, 1/2W (R2)	1
18	401-05070	. . . Printed Wiring Board	1
19	301-05236	. . Bracket, Relay Mounting	1
20	704-01430	. Ring, Retaining	1
21	300-06636	. Cam, Switch	1
22	300-06628	. Plate, Switch Mounting	1
23	300-06627	. Plate, Motor Mounting	1
24	303-05129	. Motor Mounting Plate Assembly	1
25	703-01430	. . Ring, Retaining	2
26	201-11644	. . Spring, Tension	1
27	301-05204	. . Ratchet Pawl Assembly	1
28	200-10835	. . Spring, Torsion	1
29	201-10834	. . Actuator Arm Assembly	1
30	200-12075	. . Spring, Compression	1
31	200-03816	. . Spring, Tension	1
32	203-10833	. . Plate and Ratchet Assembly	1
33	201-11598	. Motor and Crank Assembly	1
34	706-01131	. . Pin, Roll	1
35	719-01131	. . Pin, Roll	1
36	202-10807	. . Crank and Pin Assembly	1
37	401-05059	. . Transfer Motor Assembly	1

FIGURE 13

Search Unit and Pinwheel Assembly

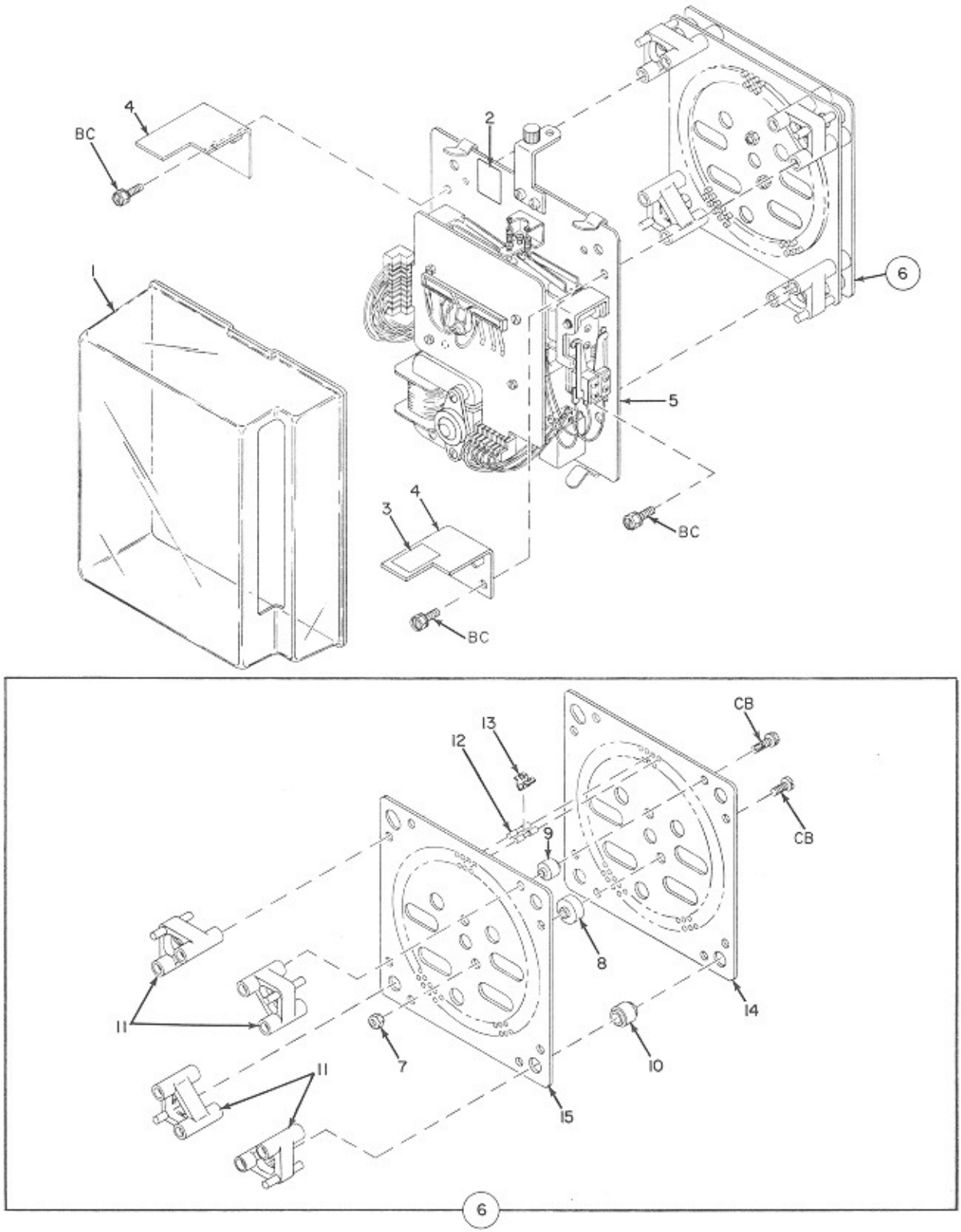


FIGURE 13

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
13-	406-05012	Search Unit and Pin Wheel Assembly (Figure 8, Item 27)	REF
1	400-05052	. Cover, Protective	1
2	701-03032	. Label, Serial Number	1
3	200-12665	. Label, Caution	1
4	200-11577	. Bracket, Locating	2
5	601-04158	. Search Unit Assembly (See Figure 14)	1
6	301-05190	. Pinwheel Assembly	1
7	706-01301	. . Nut, Self Locking	2
8	200-10939	. . Spacer	2
9	708-01215	. . Spacer	7
10	200-11511	. . Spacer	3
11	200-10832	. . Support, Search Unit	4
12	200-10942	. . Pin, Selector	200
—• 13	200-11072	. . Spring, Friction	100
14	201-13260	. . Plate Assembly - Pin Wheel	1
15	301-05157	. . Plate, Pin Wheel	1

FIGURE 14

Search Unit Assembly Sheet 1

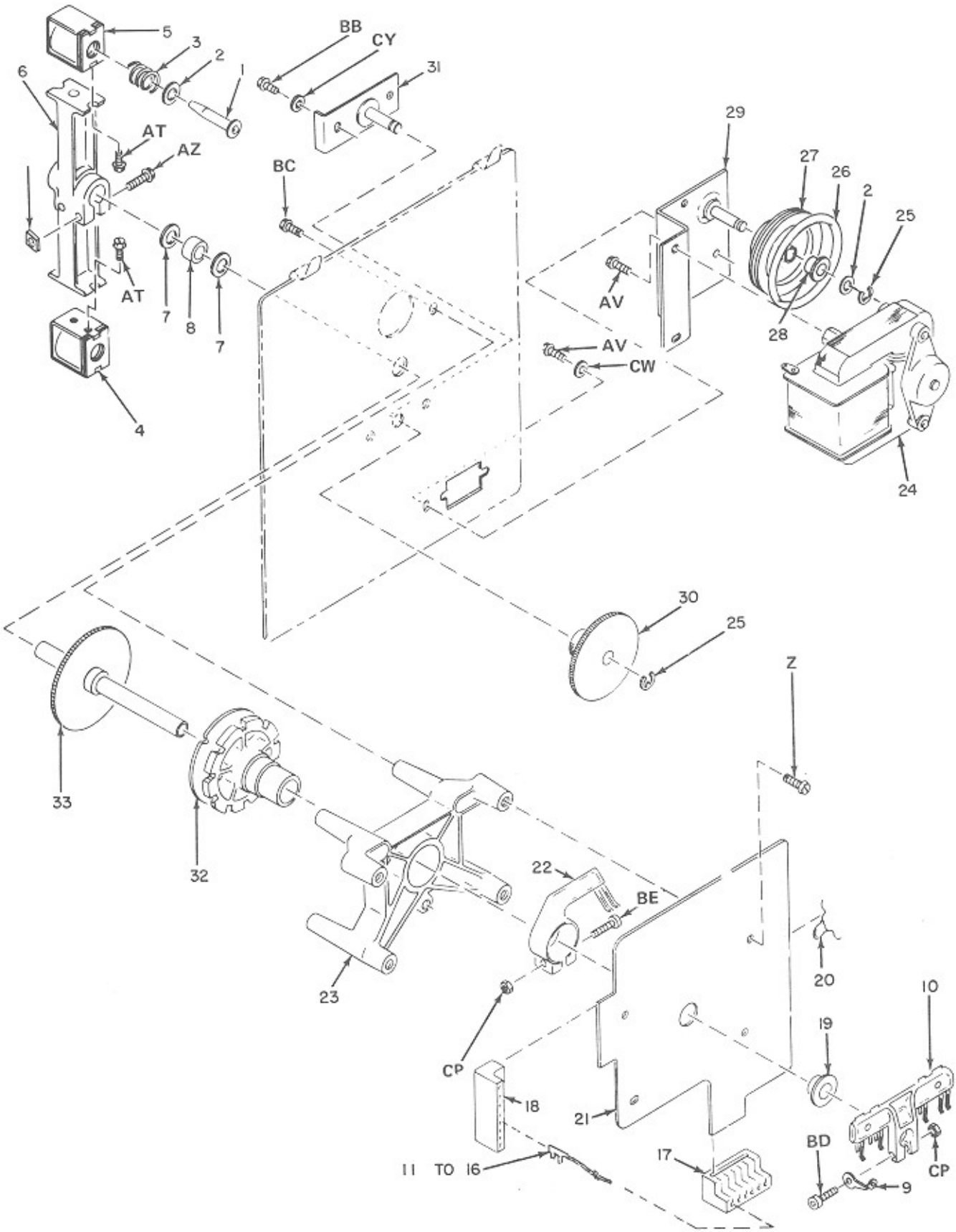


FIGURE 14

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
14-	601-04158	Search Unit Assembly (Figure 13, Item 5)	REF
1	201-11534	. Plunger Assembly	2
2	712-01207	. Washer, Flat	2
3	200-11533	. Spring, Compression	2
4	204-10743	. Solenoid Assembly	1
5	205-10743	. Solenoid Assembly	1
6	300-05112	. Arm. Solenoid	1
7	725-01205	. Washer, Plain	2
8	720-01214	. Spacer, Sleeve	1
9	200-11583	. Lug, Ground	1
10	301-06371	. Wiper Assembly	1
11	204-11579	. Jumper Assembly	2
12	208-11579	. Jumper Assembly	1
13	210-11579	. Jumper Assembly	1
14	211-11579	. Jumper Assembly	1
15	201-11580	. Jumper Assembly	1
16	202-11580	. Jumper Assembly	1
17	201-11575	. Connector, Edge	1
18	202-11575	. Connector Edge	1
19	201-11573	. Circuit Board and Eyelet Assembly	1
	707-01460	. . Bearing	2
20	706-00223	. . Capacitor, Ceramic Disc, 0.01 MFD, 500V	1
21	400-05048	. . Circuit Board	1
22	301-05599	. Wiper Assembly	1
23	400-05010	. Frame, Mounting	1
24	300-06417	. Motor Assembly	1
25	703-01430	. Ring, Retaining	2
26	200-14265	. Drive Belt, Search Unit	2
27	200-14264	. Gear and Hub	1
28	720-01460	. Bearing	1
29	201-14268	. Bracket and Pin Assembly	1
30	201-11838	. Gear Assembly, Idler	1
31	201-10760	. Pin and Plate Assembly, Idler	1
32	401-05011	. Wheel Assembly, Sprag	1
33	301-05141	. Gear and Shaft Assembly	1

FIGURE 14

Search Unit Assembly Sheet 2

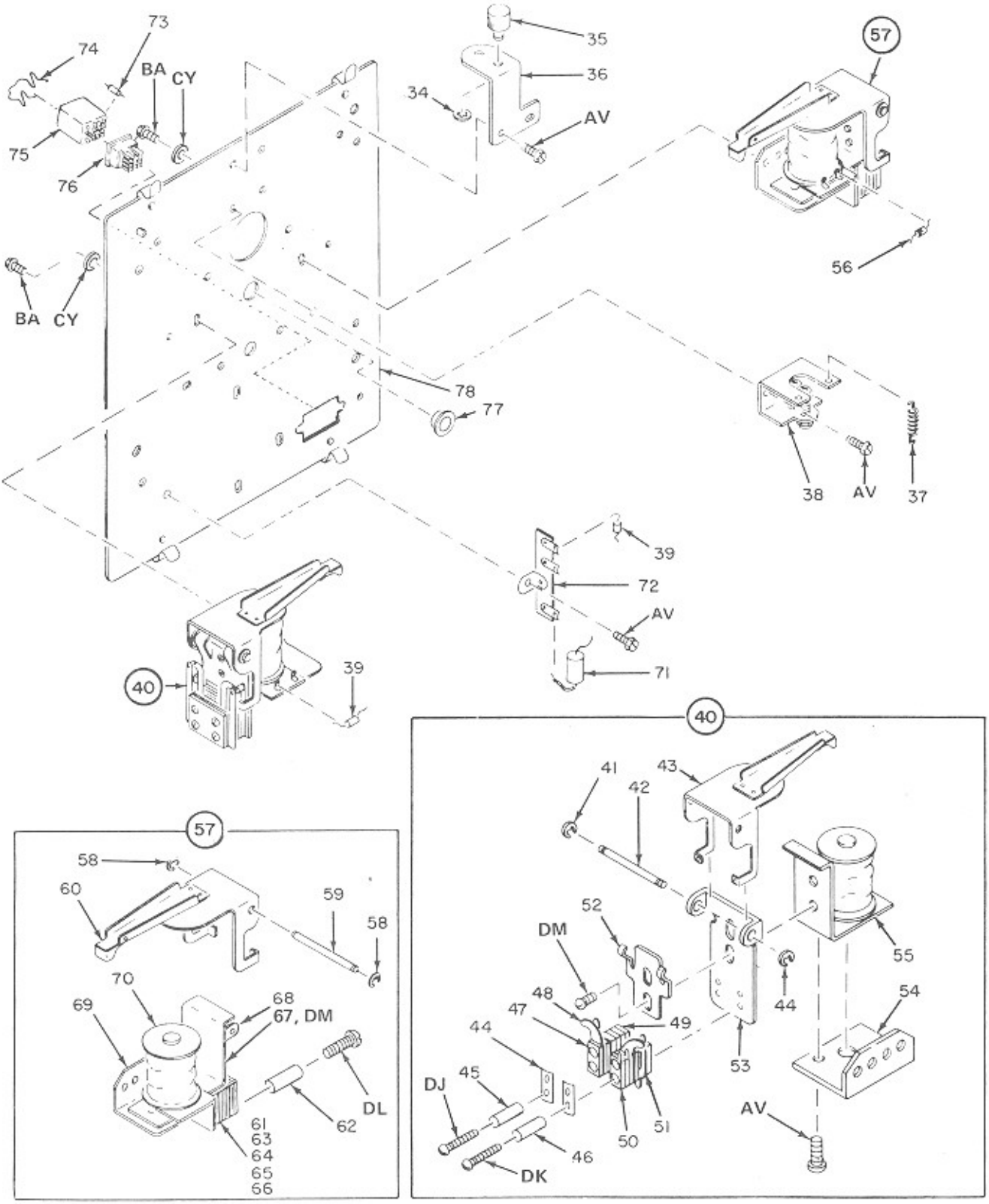


FIGURE 14

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
14-	601-04158	Search Unit Assembly (Continued)	
34	702-01437	. Clip, Retaining	2
35	200-10897	. Rest, Transfer Arm	1
36	200-10787	. Bracket, Support	1
37	200-10786	. Spring, Tension	2
38	201-10761	. Bracket and Stop Nut Assembly	1
39	702-00350	. Rectifier, Silicon	2
40	308-08050	. Relay Assembly, Sprag	1
41	701-01430	. . Ring, Retaining	2
42	200-03598	. . Pin, Hinge	1
43	201-10759	. . Armature Assembly	1
44	200-06163	. . Plate, Clamping	2
45	200-05319	. . Tubing, Insulating, 0.384 in. long	2
46	200-05319	. . Tubing, Insulating, 0.571 in. long	2
47	200-00547	. . Spacer, Contact Blade	20
48	201-09040	. . Contact Blade Assembly	4
49	206-09040	. . Contact Blade Assembly	1
50	204-09040	. . Contact Blade Assembly	1
51	207-09040	. . Contact Blade Assembly	1
52	200-03777	. . Plate, Clamp-Hinge	1
53	200-03597	. . Hinge, Relay	1
54	200-10747	. . Bracket, Sprag Relay Mounting	1
55	201-10757	. . Frame and Coil Assembly (Sprag)	1
56	702-00350	. Diode, Silicon	1
57	305-08050	. Relay Assembly, Sprag	1
58	701-01430	. . Ring, Retaining	2
59	200-03598	. . Pin, Hinge	1
60	201-10758	. . Armature Assembly	1
61	200-06163	. . Plate, Clamping	2
62	200-05319	. . Tubing, Insulating, 0.333 in.long	4
63	200-00547	. . Spacer, Contact Blade	14
64	206-09040	. . Contact Blade Assembly	1
65	201-09040	. . Contact Blade Assembly	2
66	207-09040	. . Contact Blade Assembly	1
67	200-03777	. . Plate, Clamping, Hinge	1
68	200-03597	. . Hinge, Relay	1
69	200-10747	. . Bracket, Sprag Relay Mounting	1
70	200-06075	. . Frame and Coil Assembly	1
71	200-10981	. Capacitor, 5 MFD, 100V	1
72	200-08250	. Strip, Terminal	1
73	706-00104	. Resistor, Carbon, 1.8K, 1/2W (R2)	1
74	200-12869	. Spring, Relay	1
75	200-12751	. Relay	1
76	202-13782	. Socket, Relay	1
	303-05114	. Plate and Bearing Assembly	1
77	200-10766	. . Bearing	1
78	400-05051	. . Plate and Bearing Assembly	1

FIGURE 15

Stop Switch Assembly

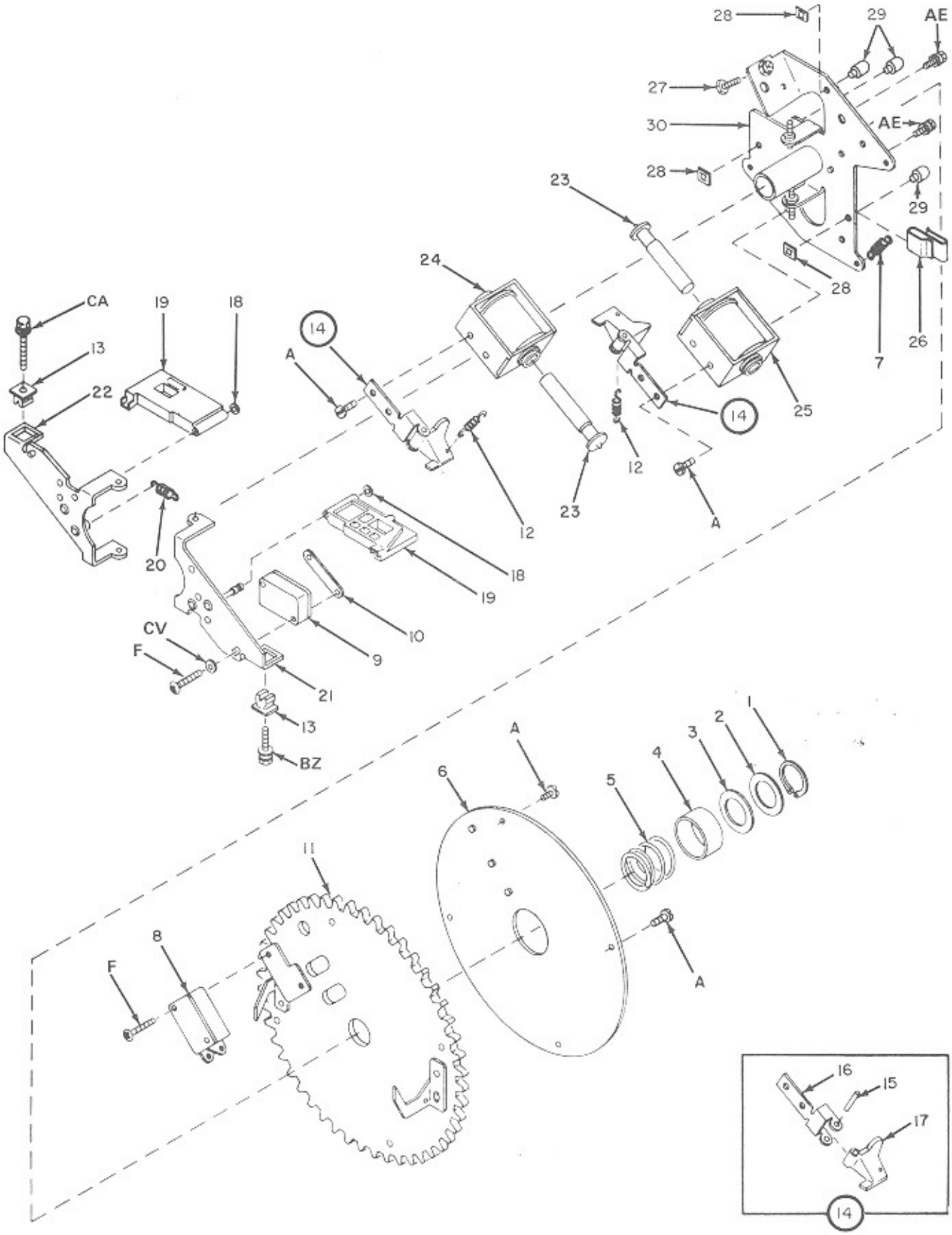


FIGURE 15

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
15-	401-05024	Stop Switch Assembly (Figure 8, Item 29)	REF
1	708-01432	. Ring, Retaining	1
2	721-01206	. Washer	1
3	720-01206	. Washer	1
4	200-11535	. Sleeve	1
5	200-10953	. Spring, Compression	1
6	201-10934	. Slip Ring Assembly	1
7	200-10954	. Spring, Compression	1
8	201-14968	. Switch, Sensitive	1
9	201-14969	. Switch, Sensitive	1
10	200-10830	. Nut, Plate	1
11	201-10860	. Gear, Selector	1
12	200-03713	. Spring, Tension	2
13	200-10725	. Nut, Snap-In	2
14	201-10926	. Reset Lever Assembly	2
15	706-01130	. . Pin, Roll	1
16	200-10929	. . Lever	1
17	200-10928	. . Bracket	1
18	701-01430	. Ring, Retaining	2
19	401-05028	. Pawl	2
20	200-12695	. Spring, Tension	1
21	201-10924	. Arm, Pivot	1
22	202-10924	. Arm, Pivot	1
23	201-11633	. Plunger & Tip Assembly	2
24	203-10936	. Solenoid Assembly	1
25	202-10936	. Solenoid Assembly	1
26	200-07545	. Clip	1
27	200-03822	. Screw, Adjusting	1
28	200-12402	. Nut, Speed	3
29	200-10921	. Button, Slide	3
30	301-05156	. Switch Plate Assembly	1

FIGURE 16

Sprag Assembly

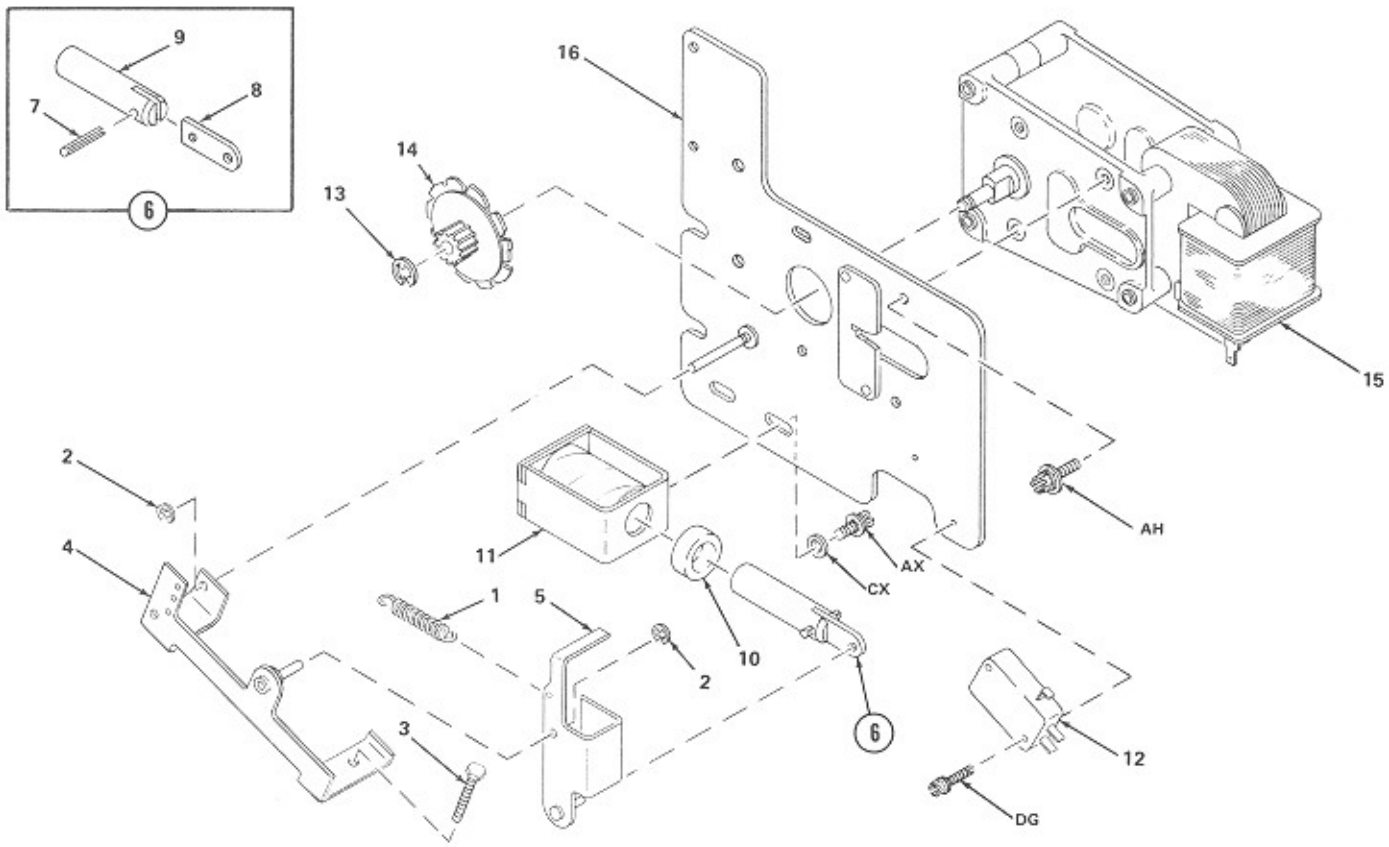


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
16-	403-05022	Sprag Assembly (Figure 8, Item 46)	REF
1	200-10843	. Spring, Tension	1
2	705-01430	. Ring, Retaining	2
3	200-03822	. Screw, Adjusting	1
4	201-10855	. Sprag Link Assembly	1
5	201-10856	. Sprag Lever Assembly	1
6	201-10857	. Plunger Assembly	1
7	703-01130	. . Pin, Roll	1
8	200-06226	. . Link, Plunger	1
9	200-10848	. . Plunger, Solenoid	1
10	200-10849	. Stop, Plunger	1
11	203-11505	. Solenoid Assembly	1
12	200-10731	. Switch	1
13	703-01430	. Ring, Retaining	1
14	300-05133	. Wheel, Sprag	1
15	401-05055	. Magazine Motor Assembly	1
16	301-05135	. Sprag Bracket Assembly	1

Cable and Annunciator Assembly

FIGURE 17

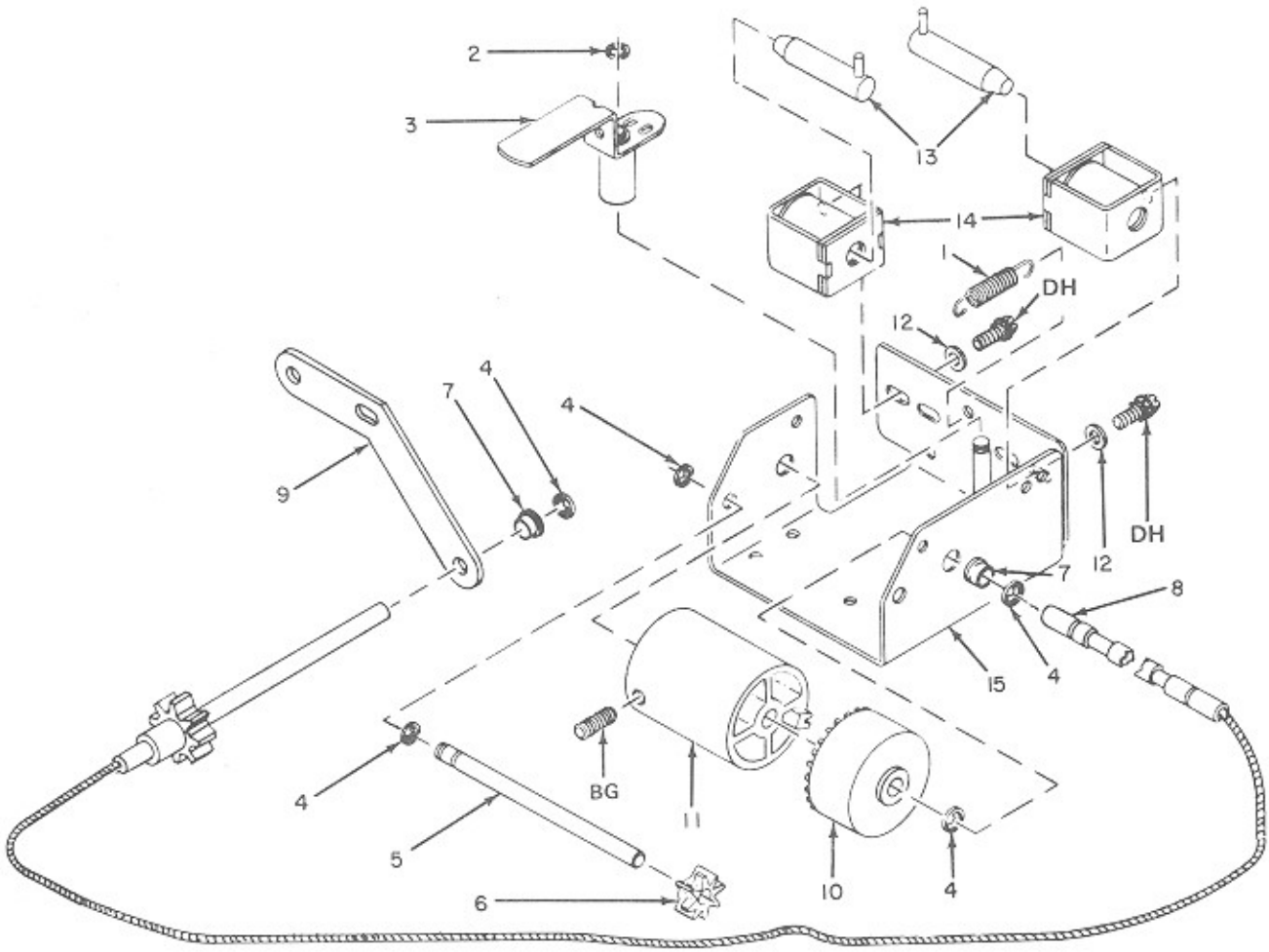


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
17-	301-05241	Cable and Annunciator Assembly (Figure 8, Item 52)	REF
1	200-03816	. Spring	1
2	701-01430	. Ring, Retaining	1
3	201-10994	. Bushing and Shutter Assembly	1
4	703-01430	. Ring, Retaining	5
5	200-10993	. Shaft, Pinion	1
6	200-10978	. Gear, Pinion	1
7	703-01460	. Bearing	3
8	301-06612	. Drive Assembly	1
9	200-10999	. Bracket	1
10	201-11641	. Number Wheel and Strip Assembly	1
11	201-11639	. Letter Wheel Assembly	1
12	711-01206	. Washer, Flat	4
13	201-10998	. Plunger Assembly	2
14	206-10743	. Solenoid Assembly	2
15	202-10984	. Frame Assembly	1

FIGURE 18

Scan Control Assembly

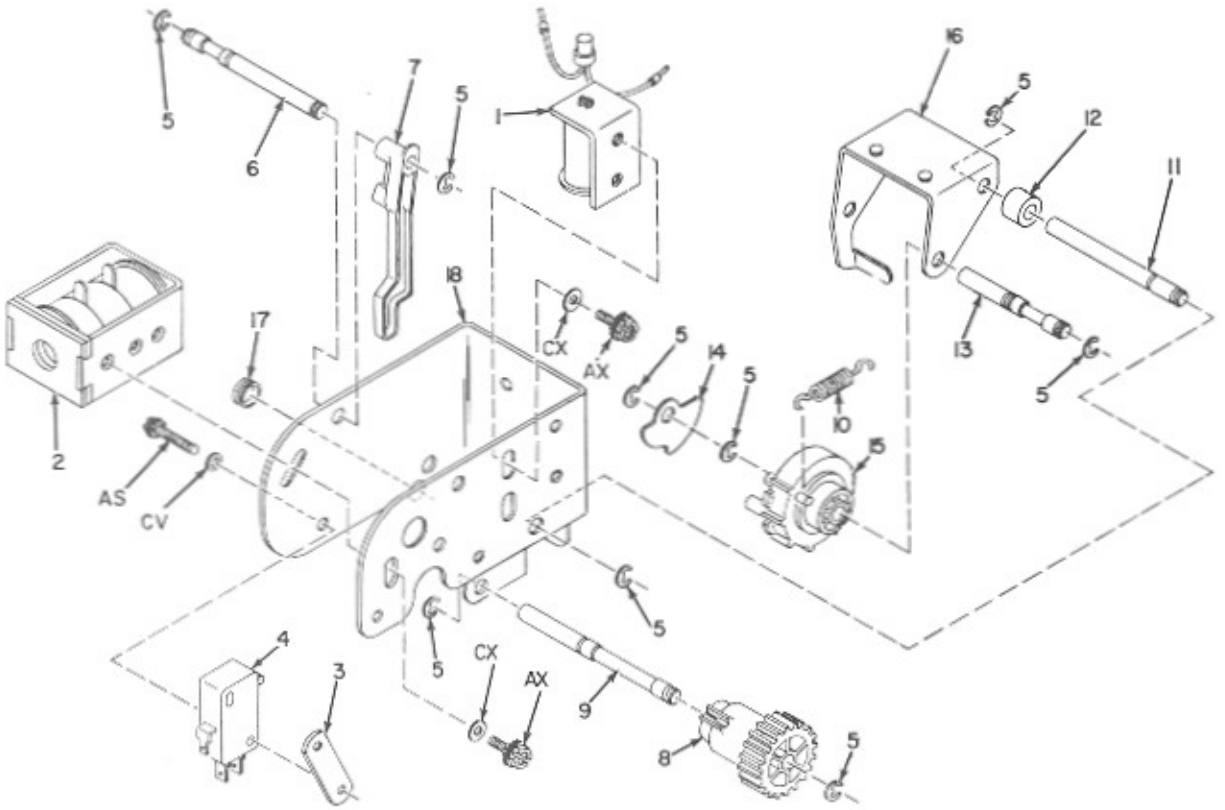


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
18-	303-05111	Scan Control Assembly (Figure 8, Item 59)	REF
1	202-12540	. Magnet Assembly, Reset	1
2	201-11505	. Solenoid Assembly	1
3	200-10830	. Nut, Plate	1
4	200-10731	. Switch	1
5	703-01430	. Ring, Retaining	10
6	200-10721	. Shaft, Switch Lever Pivot	1
7	300-05108	. Lever, Switch	1
8	300-05109	. Pinion, Scanning Control	1
9	200-10720	. Shaft, Pinion	1
10	200-08919	. Spring, Tension	1
11	200-08847	. Shaft, Pivot	1
12	707-01213	. Spacer, Sleeve	1
13	200-08846	. Shaft	1
14	200-11529	. Weight	1
15	201-10970	. Gear Assembly, Scan	1
16	202-08862	. Bracket Assembly, Reset	1
17	710-01460	. Bearing	1
18	400-05030	. Frame	1

Output Transfomer Package Assembly

FIGURE 19

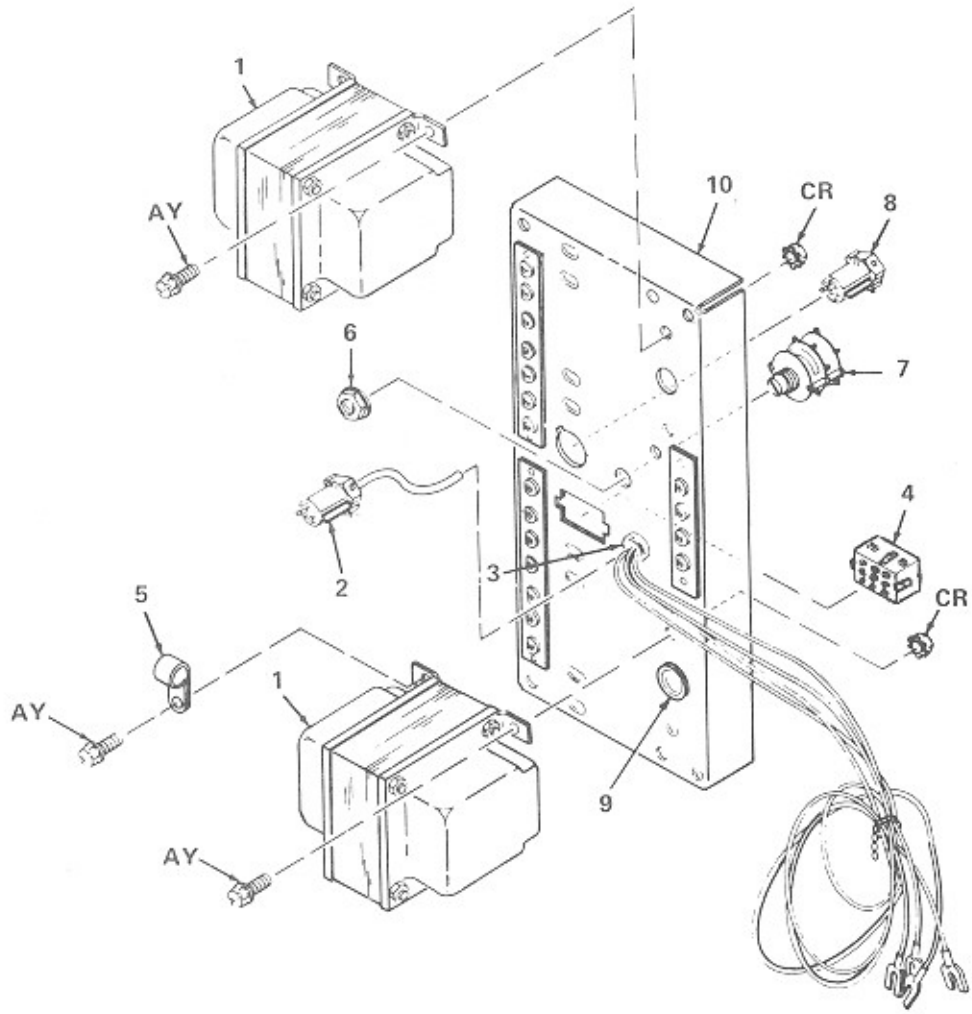


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASS'Y 64 WATT	QTY. PER ASS'Y 120 WATT
19-	403-06322	Output Transformer Assembly, 64W (Figure 1, Item 57)	REF	
19-	401-06336	Output Transformer Assembly, 120W (Figure, Item 57)		REF
1	401-06522	. Output Transformer	2	
1	401-06335	. Output Transformer		2
	301-06327	. Plug and Cable Assembly	1	1
2	201-13541	. . Combo-Line Cap Housing, 7 Circuit	1	1
3	701-02331	. Strain Relief	1	1
	301-07488	. Plug and Cable Assembly	1	1
4	305-07490	. . Universal Connector Cap Housing, 9 Circuit	1	1
5	704-00931	. Cable Clamp	1	1
6	200-02649	. Palnut, 3/8-32	1	1
	301-07487	. Connector and Switch Assembly	1	1
7	201-15278	. . Switch, 4 Pole, 6 Position	1	1
8	201-13540	. . Combo-Line Plug Housing, 7 Circuit	1	1
9	202-02331	. Strain Relief	2	2
10	404-05776	. Chassis Assembly with Lettering	1	
10	404-06260	. Chassis Assembly with Lettering		1

FIGURE 20

Junction Box Assembly

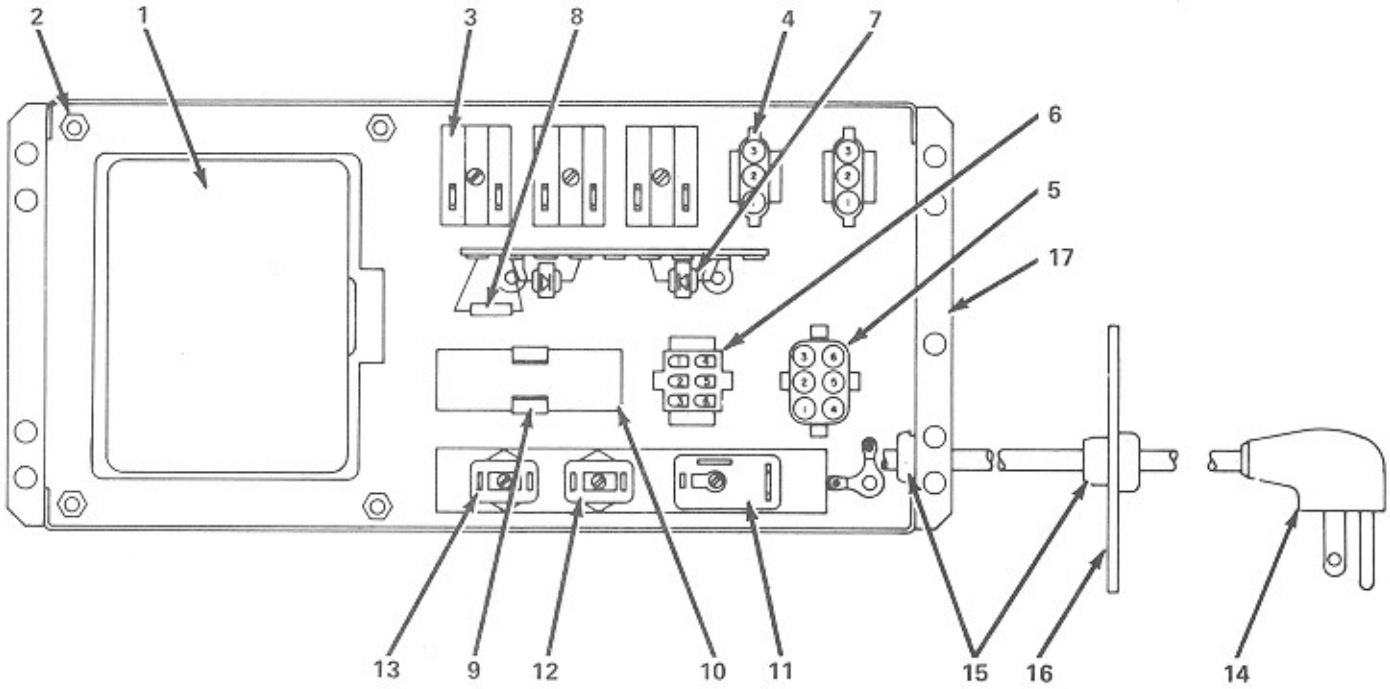


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
20-	401-06703	Junction Box Assembly (Figure 1, Item 61)	REF
1	400-05751	. Transformer	1
2	201-17621	. Nut, Hex, No.8-32	4
3	200-13759	. Outlet Convenience, 3 Wire	3
4	202-17322	. Housing, Socket, 3 Circuit	2
5	203-17322	. Housing, Socket, 6 Circuit	1
6	202-12444	. Housing, Socket, 6 Circuit	1
7	710-00305	. Diode, Silicon, Motorola No. MR 752, 16A, 200V	2
8	708-00104	. Resistor, Carbon, 4.7K, 1/2W	1
9	200-50174	. Clip, Capacitor Mounting	1
10	710-00233	. Capacitor, Electrolytic, 1250 MFD, 50V	1
11	725-00734	. Circuit Breaker 10 Amp	1
12	715-00733	. Circuit Breaker 2 Amp	1
13	717-00733	. Circuit Breaker 3 Amp	1
14	201-11212	. Cord and Plug Assembly	1
15	704-02321	. Relief, Strain	2
16	200-14059	. Cover, Cord Hole	1
17	301-07316	. Junction Box With Lettering	1

Burglar Alarm Assembly

FIGURE 21

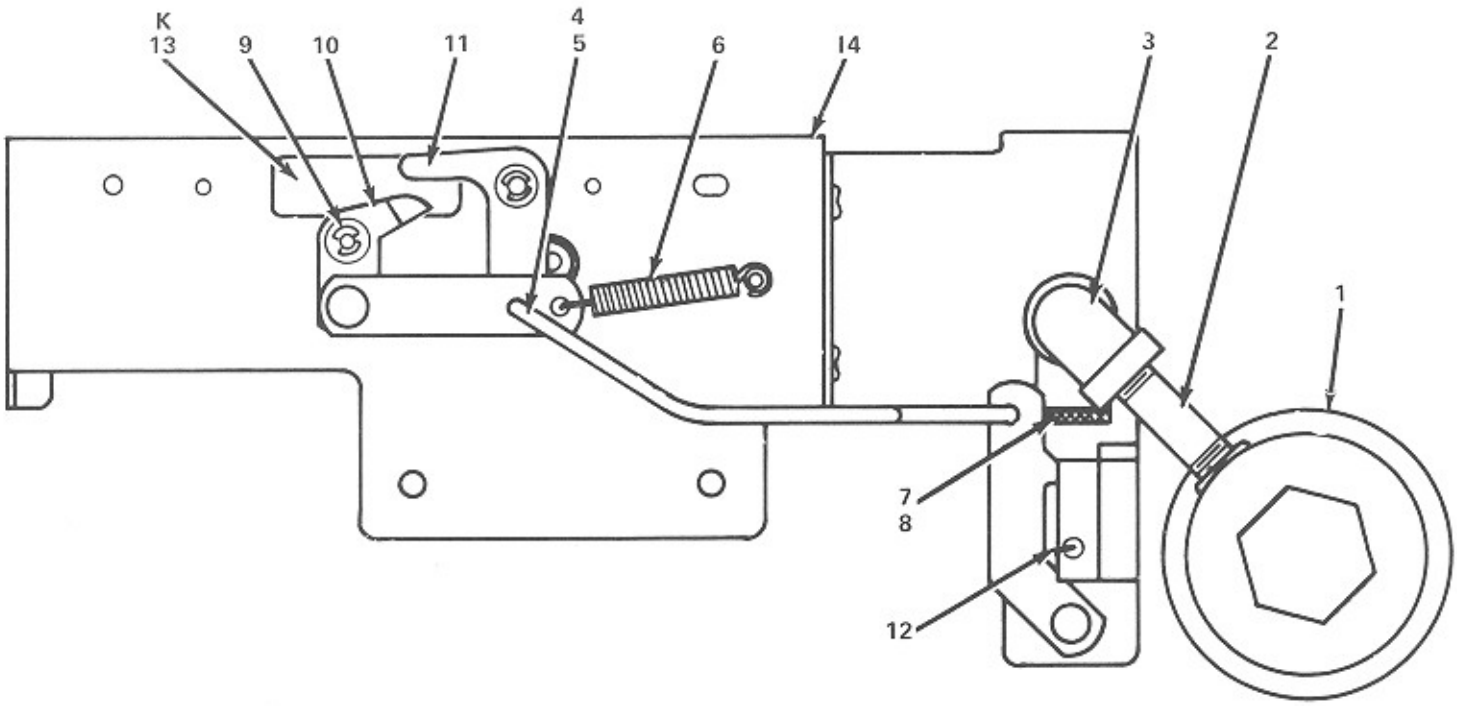


FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
21-	604-04450	Burglar Alarm Assembly (Figure 1, Item 73)	REF
1	200-13990	. Horn, Alarm	1
2	201-17627	. Nipple	1
3	200-14013	. Elbow	1
4	701-01437	. Ring, Retaining, Triangular	2
5	200-14528	. Rod, Actuating	1
6	200-14024	. Spring, Handle Return	1
7	712-01301	. Palnut, No.9/16-18	1
8	201-14018	. Valve and Handle Assembly	1
	722-01101	. . Pin, Drive , 3/32x5/16	1
	200-14011	. . Handle, Alarm Valve	1
	200-14000	. . Valve, Horn	1
9	701-01430	. Ring, Retaining	2
10	201-14021	. Trigger and Link Assembly	1
11	201-14020	. Trigger Assembly	1
12	200-14870	. Spring, Lock	1
13	200-14019	. Plate, Bolt Stop	1
14	401-06008	. Bracket and Latch Assembly	1
	200-13991	. Power Pack, Alarm	1

FIGURE 22

Harness and Console Assembly

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
22-	601-07590	Harness And Console Assembly (Figure 1, Item 83)	REF
	301-07448	. Switch Housing	1
	200-11016	. Switch Knob	1
	200-11009	. 3 Position Switch (Scan Switch)	1
	703-00931	. Cable Clamp	1
	204-13541	. Combo-Line Cap Housing, 7 Circuit (To Mute)	1
	201-13541	. Combo-Line Cap Housing, 7 Circuit (To Amplifier Phono Spkr. Plug)	1
	204-13540	. Combo-Line Plug Housing, 7 Circuit (To Bill Acceptor)	1
	305-07491	. Universal Connector Plug Housing, 9 Circuit (To Ext. Speaker)	1
	306-07491	. Universal Connector Plug Housing, 12 Circuit (To Money Meter)	1
	206-12444	. Mate-N-Lok Socket Housing, 3 Circuit, (To Stepper)	1
	202-12445	. Mate-N-Lok Plug Housing, 6 Circuit (To Junction Box)	1
	203-12445	. Mate-N-Lok Plug Housing, 9 Circuit (To Wallbox Power Supply and to Mechanism)	2
	205-12445	. Mate-N-Lok Plug Housing, 15 Circuit (To Selector)	1
	201-50572	. Edge Connector, 6 Circuit (To Coin Switches)	1
	207-50572	. Edge Connector, 22 Circuit (To Credit Computer)	1
	200-50590	. Lamp Socket (Credit Lamp)	2
	201-15818	. Momentary Contact Pushbutton Switch (Credit Switch)	1
	201-17582	. Credit Switch Mounting Bracket	1
	308-06792	. Access Door Assembly	1
	201-15818	. . Momentary Contact Pushbutton Switch (Cancel Switch)	1

FIGURE 23

Shell Assembly

FIG. AND INDEX NO.	ROWE PART NO.	DESCRIPTION	QTY. PER ASSY
23-	601-07550	Shell Assembly (Figure 1, Item 109)	REF
	200-09326	. Teenut	6
	200-11006	. Teenut	2
	201-17506	. Tube, Vent	1
	202-17506	. Tube, Vent	1
	203-17506	. Tube, Vent	1
	701-02402	. Screen, Wire Mesh	1
	719-02401	. Screen, Wire Mesh	1
	300-00422	. Cover, Hand Hole	2
	300-06257	. Cover, Hand Hole	2
	401-06001	. Support Bracket Assembly	1
	200-14518	. Spring Lock	1
	401-06340	. Caster and Cup Assembly	4
	401-06489	. Skid Rail	2
	400-06206	. Gusset	1
	400-06207	. Gusset	1
	201-15792	. Cover, Caster	1
	301-07443	. Enclosure, Cash Box, Front	1
	301-07444	. Enclosure, Cash Box, Rear	1

CODE	ROWE PART NO.	
A	80053003	Screw, Mac
B	80053009	Screw, Mac
C	80322310	Screw, Mac
D	80351604	Screw, Mac
E	80351606	Screw, Mac
F	80351610	Screw, Mac
G	80359022	Screw, Mac
H	80413508	Screw, Mac
J	80432304	Screw, Mac
K	80432305	Screw, Mac
L	80433005	Screw, Mac
M	80442304	Screw, Mac
N	80442305	Screw, Mac
P	80442306	Screw, Mac
Q	80443004	Screw, Mac
R	80443005	Screw, Mac
S	80443006	Screw, Mac
T	80443008	Screw, Mac
U	80443010	Screw, Mac
V	80444408	Screw, Mac
W	80542307	Screw, Mac
X	80663008	Screw, Mac
Y	80664404	Screw, Mac
Z	80682304	Screw, Mac
AA	80684432	Screw, Mac
AB	80712304	Screw, Mac
AC	80712305	Screw, Mac
AD	80712306	Screw, Mac
AE	80712308	Screw, Mac
AF	80712310	Screw, Mac
AG	80713004	Screw, Mac
AH	80713005	Screw, Mac
AJ	80713006	Screw, Mac
AK	80713008	Screw, Mac
AL	80713012	Screw, Mac
AM	80713014	Screw, Mac
AN	80713706	Screw, Mac
AP	80714406	Screw, Mac
AQ	80714408	Screw, Mac
AR	80714432	Screw, Mac
AS	80731610	Screw, Mac
AT	80732303	Screw, Mac
AU	80732304	Screw, Mac
AV	80732305	Screw, Mac
AW	80733003	Screw, Mac
AX	80733004	Screw, Mac
AY	80733008	Screw, Mac
AZ	80733014	Screw, Mac
BA	80734404	Screw, Mac
BB	80734406	Screw, Mac
BC	80743708	Screw, Mac
BD	80751610	Screw, Cap
BE	80751614	Screw, Cap
BF	80754408	Screw, Cap

STANDARD HARDWARE LIST

DESCRIPTION
ne, Pan Hd., 8-32 x 3/16
ne, Pan Hd., 8-32 x 9/16
ne, Flat Hd., Phil. SL. 6-32 x 5/8
ne, Rd. Hd., Phil. SL., 4-40 x 1/4
ne, Rd. Hd., Phil. SL., 4-40 x 3/8
ne, Rd. Hd., Phil. SL., 4-40 x 5/8
ne, Rd. Hd., Phil. SL., 8-32 x 1-3/8
ne, Hd., Phil. SL., 8-32 x 1/2
ne, Hex Wr. Hd., Swage Form, 6-32 x 1/4
ne, Hex, Wr. Hd , Swage Form 6-32 x 5/16
ne, Hex Wr. Hd., Swage Form, 8-32 x 5/16
ne, Hex Wr. Hds., Swage Form, 6-32 x 1/4
ne, Hex Wr. Hd., Swage Form, 6-32 x 5/16
ne, Hex Wr. Hd., Swage Form, 6-32 x 3/8
ne, Hex Wr. Hd., Swage Form, 8-32 x 1/4
ne, Hex Wr. Hd., Swage Form, 8-32 x 5/16
ne, Hex Wr. Hd., Swage Form 8-32 x 3/8
ne, Hex Wr. Hd., Swage Form, 8-32 x 1/2
ne, Hex Wr. Hd., Swage Form, 8-32 x 5/8
ne, Hex Wr. Hd., Swage Form, 10-32 x 1/2
ne, Rd. Hd., Phil. SL., Sems, 6-32 x 7/16
ne, Hex Wr. Hd., 8-32 x 1/2
ne, Hex Wr. Hd., 10-32 x 1/4
ne, Hex Wr. Hd., 6-32 x 1/4
ne, Hex Wr. Hd., 10-32 x 2
ne, Hex Wr. Hd., Sems 6-32 x 1/4
ne, Hex Wr. Hd., Sems 6-32 x 5/16
ne, Hex Wr. Hd., Sems 6-32 x 3/8
ne, Hex Wr. Hd., Sems 6-32 x 1/2
ne, Hex Wr. Hd., Sems 6-32 x 5/8
ne, Hex Wr. Hd., Sems 8-32 x 1/4
ne, Hex Wr. Hd., Sems 8-32 x 5/16
ne, Hex Wr. Hd., Sems 8-32 x 3/8
ne, Hex Wr. Hd., Sems 8-32 x 1/2
ne, Hex Wr. Hd., Sems 8-32 x 3/4
ne, Hex Wr. Hd., Sems 8-32 x 7/8
ne, Hex Wr. Hd., Sems 10-24 x 3/8
ne, Hex. Wr. Hd., Sems 10-32 x 3/8
ne, Hex Wr. Hd., Sems 10-32 x 1/2
ne, Hex Wr. Hd., Sems 10-32 x 2
ne, Hex Wr. Hd., Sems 4-40 x 5/8
ne, Hex Wr. Hd., Sems 6-32 x 3/16
ne, Hex Wr. Hd., Sems 6-32 x 1/4
ne, Hex Wr. Hd., Sems 6-32 x 5/16
ne, Hex Wr. Hd., Sems 8-32 x 3/16
ne, Hex Wr. Hd., Sems 8-32 x 1/4
ne, Hex Wr. Hd., Sems 8-32 x 1/2
ne, Hex Wr. Hd., Sems 8-32 x 7/8
ne, Hex Wr. Hd., Sems 10-32 x 1/4
ne, Hex Wr. Hd., Sems 10-32 x 3/8
ne, Hex Wr. Hd., Sems Swage Form 10-24 x 1/2
ocket Hd., Cup Pt., 4-40 x 5/8
ocket Hd., Cup Pt., 4-40 x 7/8
ocket Hd., Cup Pt., 10-32 x 1/2

CODE	ROWE PART NO.	DESCRIPTION
BG	80782703	Screw, Set, Socket Hd., Cup Pt., 6-32 x 3/16
BH	80783603	Screw, Set, Socket Hd., Cup Pt., 8-32 x 3/16
BJ	80784804	Screw, Set, Socket Hd., Cup Pt., 10-32 x 1/4
BK	80786108	Screw, Set, Socket Hd., Cup Pt., 1/4-20 x 1/2
BL	82353005	Screw, Self-tapping, Rd. Hd., Phil. SL., Type 23 8-32 x 5/16
BM	82662304	Screw, Self-tapping, Hex Wr. Hd., Type23 6-23 x 1/4
BN	82662305	Screw, Self-tapping, Hex Wr. Hd., Type 23 6-32 x 5/16
BP	82662306	Screw, Self-tapping, Hex Wr. Hd., Type 23 6-32 x 3/8
BQ	82662316	Screw, Self-tapping, Hex Wr. Hd., Type 23 6-32 x 1
BR	82663004	Screw, Self-tapping, Hex. Wr. Hd., Type 23 8-32 x 1/4
BS	82663005	Screw, Self-tapping, Hex Wr. Hd., Type 23
BT	82663006	Screw, Self-tapping, Hex Wr. Hd., Type 23 6-32 x 3/8
BU	82663008	Screw, Self-tapping, Hex Wr. Hd., Type 23 8-32 x 1/2
BV	82663010	Screw, Self-tapping, Hex Wr. Hd., Type 23 8-32 x 5/8
BW	82663016	Screw, Self-tapping, Hex Wr. Hd., Type 23 8-32 x 1
BX	82664406	Screw, Self-tapping, Hex Wr. Hd., Type 23 10-32 x 3/8
BY	82664408	Screw, Self-tapping, Hex Wr. Hd., Type 23 10-32 x 1/2
BZ	82682310	Screw, Self-tapping, Hex Wr. Hd., Type 23 6-32 x 5/8
CA	82682314	Screw, Self-tapping, Hex Wr. Hd., Type 23 6-32 x 7/8
CB	82684412	Screw, Self-tapping, Hex Wr. Hd., Type 23 10-32 x 3/4
CC	83663010	Screw, Self-tapping, Hex Wr. Hd., Type 25 8-32 x 5/8
CD	86323620	Screw, Self-tapping, Flat Hd., Phil. SL., Type 17 8 x 1-1/4
CE	86323624	Screw, Self-tapping, Flat Hd., Phil. SL., Type 17 8 x 1-1/2
CF	86332305	Screw, Self-tapping, Oval Hd., Phil. SL., Type 17 6 x 5/16
CG	86332312	Screw, Self-tapping, Oval Hd., Phil. SL., Type 17 6 x 3/4
CH	86662708	Screw, Self-tapping, Hex Wr. Hd., Type 17 6 x 1/2
CJ	86663610	Screw, Self-tapping, Hex Wr. Hd., Type 17 8 x 5/8
CK	86663612	Screw, Self-tapping, Hex Wr. Hd., Type 17 8 x 3/4
CL	86663616	Screw, Self-tapping, Hex Wr. Hd., Type 17 8 x 1
CM	87831600	Nut, Hex, 4-40
CN	87833000	Nut, Hex, 8-32
CP	87841600	Nut, Hex, Keps, 4-40
CQ	87842300	Nut, Hex, Keps, 6-32
CR	87843000	Nut, Hex, Keps, 8-32
CS	87844400	Nut, Hex, Keps, 10-32
CT	87845700	Nut, Hex, Keps, 1/4 x 20
CU	87853000	Nut, Square 8-32
CV	88931600	Washer, Flat 4
CW	88932300	Washer, Flat 6
CX	88933000	Washer, Flat 8
CY	88934400	Washer, Flat, 10
CZ	80374406	Screw, Machine, Truss Hd., Phil. SL., 10-32 x 3/8
DA	80433008	Screw, Machine, Hex Wr. Hd., Swage Form 8-32 x 1/2
DB	80433020	Screw, Machine, Hex Wr. Hd., Swage Form 8-32 x 1-1/4
DC	80500508	Screw, Machine, Round Hd., Phil. SL., Sems 2-56 x 1/2
DD	82681604	Screw, Self-tapping, Hex Wr. Hd., Type 23 4-40 x 1/4
DE	82682304	Screw, Self-tapping, Hex Wr. Hd., Type 23 6-32 x 1/4
DF	80311608	Screw, Machine, Fillister Hd., Phil. SL., 4-40 x 1/2
DG	80501610	Screw, Machine, Round Hd., Phil. SL., Sems, 4-40 x 5/8
DH	80712303	Screw, Machine, Hex Wr. Hd., Sems 6-32 x 3/16
DJ	80350909	Screw, Machine, Rd. Hd., Phil. SL., 3-48 x 9/16
DK	80350912	Screw, Machine, Rd. Hd., Phil. SL., 3-48 x 3/4
DL	80350924	Screw, Machine, Rd. Hd., Phil. SL., 3-48 x 1-1/2
DM	80541604	Screw, Machine, Rd. Hd., Phil. SL. 4-40 x 1/4