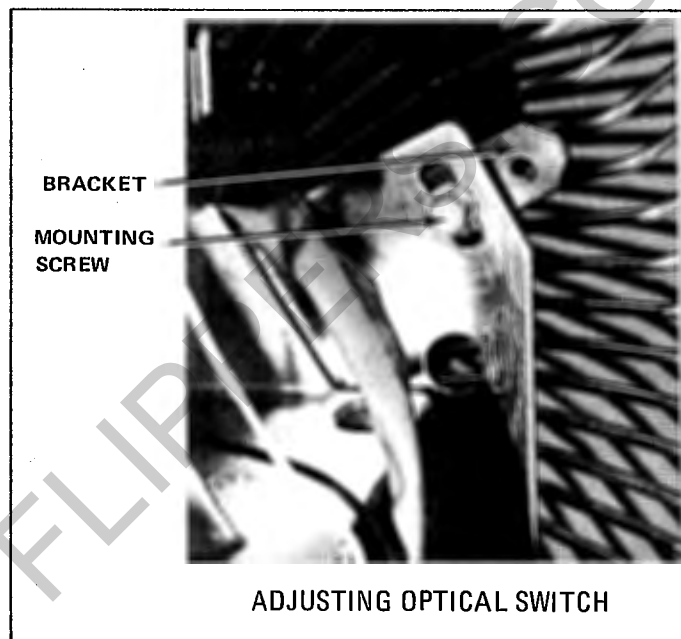




R-85 Phonograph Record Changer Mechanism Adjustment

It has been found that improper adjustment of the Optical Switch on Model 8700 Record Changer Mechanisms results in erroneous play (e.g., if selection 160 is made, record 159 or 161 will play instead).

To improve accuracy of Optical Switch Adjustment, a revised method is hereby outlined:



1. Release Magazine Sprag Lever from Sprag Wheel and rotate Record Magazine until selection 99 is at top center. Engage the Sprag Lever, locking the magazine in place.
2. Loosen Optical Switch Bracket Mounting Screw and move bracket to the most downward (clockwise) position.
3. Rotate Record Magazine counter-clockwise to remove gear backlash — *hold in this position.*

continued.....

ROWE DISTRIBUTOR REFERENCE: 952
Distribution Code: A, B 1/81
Category Code: Phonograph

Rowe international, inc.

A SUBSIDIARY OF TRIANGLE INDUSTRIES, INC.
75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL. (201) 887-0400, CABLE: ROVENO

SERVICE BULLETIN

Phonograph Newsletter

OPTICAL SWITCH RESISTORS

The Optical Switch 3-07944-01 electrical characteristics can degrade slightly per hour of usage. This could cause the mechanism to play a selection one to five selections beyond the correct selection. (For example, 110 is selected but 111 plays, even though the digital display indicates 110 should be playing.)

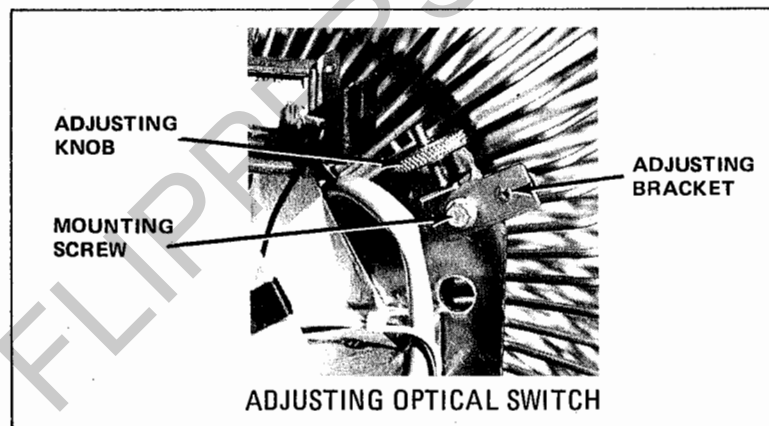
This situation can be avoided by changing the 1/4 watt resistors R 213 and R 215 in the Mechanism Control 4-07221-01 and -02 from 18K Ohm to 27K Ohm.

It should be noted that this condition is likely to occur only in a very small percentage of phonographs on location.

Mech. Control Assemblies with inspection stickers dated July 1981 or later will contain the 27K Ohm resistors.

VERNIER OPTICAL SWITCH

A vernier Optical Switch adjustment has been added to the R-85 Phonograph Record Changer Mechanism starting with mechanism serial no. 068967. The vernier provides a more accurate Optical Switch adjustment when record magazine realignment is required.



A kit is available for mechanism update. Order from Rowe, Grand Rapids, as follows:

PART NO.	DESCRIPTION	LIST PRICE
2-66999-01	Optical Switch Adjustment Kit	\$3.00

Frank J. Boykie
Frank J. Boykie
Manager
Customer Services

ROWE DISTRIBUTOR REFERENCE: 966
Distribution Code: A, B 4/81
Category Code: Phonograph

Rowe international, inc.

A SUBSIDIARY OF TRIANGLE INDUSTRIES, INC.
75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL. (601) 887-0400, CABLE: ROVENO

Call CUSTOMER SERVICES Toll Free: 800-631-8084

R-89 Price Setting Problem

Machines prior to serial number 1035739 may exhibit the following:

1. The operator changes the factory set pricing.
2. Coins are inserted to check new pricing.
3. The phonograph will automatically go into the programming mode.

The error has been corrected in present production (serial number 1035739 and above).

The updated machines will have a red or yellow dot affixed to Z7 on the Central Control Computer.

The following procedure will correct the problem in machines without the red dot.

Set Location	≡ 10	Same as	≡ 00
	≡ 11		≡ 01
	≡ 12		≡ 02
	≡ 13		≡ 03
	≡ 14		≡ 04
	≡ 15		≡ 05
	≡ 16		≡ 06
	≡ 17		≡ 07
	≡ 18		≡ 08
	≡ 19		≡ 09



JERRY MAGUIRE
MANAGER,
CUSTOMER SERVICES

ROWE DISTRIBUTOR REFERENCE: 1090
Distribution Code: A, B, F 12/84
Category Code: Phonographs

Rowe international, inc.

A SUBSIDIARY OF TRIANGLE INDUSTRIES, INC.
75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL. (201) 687-0400, CABLE: ROWEND

R-90 Phonograph Newsletter

Changes to the power supply, optical switch, computer and mech control on the R-90 phonograph prevent interchangeability with R-89 components unless specifically noted in this bulletin.

Item no.1:

R-90 Phonographs cannot use the R-89 Main Power Supply in its present configuration because of the additional power required to run the Bill Stacker and Bill Transport unit. However, the R-90 Main Power Supply is compatible with the R-89 with no modifications required.

The difference between the two power supplies is R-503 is a 0.82 ohm 2 watt wire wound resistor (part no.79920828) on the R-89 and on the R-90 Power Supply this same resistor (R-503) has been changed to a 0.33 ohm 2 watt wire wound resistor. (part no.79920338).

Converting the R-89 Power Supply to the R-90 Power Supply is merely a matter of replacing R-503 as outlined.

Item no.2:

The R-90 optical switch is new and must be used with a 4-07221-05 mech control unit only. This switch is identified by a "red" connector instead of the "white" connector previously used on the R-89 and earlier phonographs.

R-89 PART NUMBER

3-07927-01 Optical Switch Assy.
3-07944-01 Optical Switch & Connector
4-07226-01 Optical Switch

R-90 PART NUMBER

3-09068-01 Optical Switch Assy.
3-09059-01 Optical Switch & Connector
4-08037-01 Optical Switch

Item no.3:

The R-90 uses a new "Mechanism Control Unit" (part no.4-07221-05) incorporating index and home potentiometers needed to adjust the R-90 Optical Switch. This mech control unit is "backwards compatible" but conversion of earlier control units to the R-90 configuration is not recommended.

..... continued

ROWE DISTRIBUTOR REFERENCE: 1115
Distribution Code: A, B 9/85
Category Code: Phonographs

rowe international, inc.

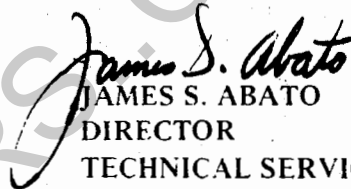
75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL. (601) 887-0400, CABLE: ROWEINT

Item no.4:

The R-90 uses a new Central Control Computer (part no.4-07773-05). This computer can replace computers 4-07773-01 through 4-07773-04 allowing the R-88 Video and all R-89 Phonographs to have the same features as the R-90 Phonographs.

Conversion of earlier computers is not advised.

Please direct this publication to the individual or department responsible.


JAMES S. ABATO
DIRECTOR
TECHNICAL SERVICE-ROWE

FLIPPERS.COM

SEP 25 1985

SERVICE BULLETIN

F-436

Electronic Micro-processor Controlled Equipment Grounding

Field communications indicate an increasing number of service problems that are "baffling" or "erratic" with regards to the symptom of the malfunction.

After great expense of time and changing of many components the problem is very often isolated to a poor/intermittent or non-existent "earth ground".

When installing a new electronically controlled vendor it is essential that the polarity of the wall receptacle be checked to insure that the 120 volt A.C. "hot" line is coming into the machine on the black wire and the "earth ground" ("U" shaped socket) is connected to the ground wire in the building conduit.

When confronted with a "mystery" problem, the same precautions should be exercised **BEFORE** the troubleshooting sequence begins.

To verify the 120 volt A.C. "Hot" polarity use a two wire neon test lamp or a three prong polarity tester. For the two wire test lamp, insert one wire into the "U" socket. Insert the remaining wire into the receptacle slot to the left side of the "U" socket. (Procedure assumes the receptacle is installed with the "U" socket to the top.) The neon lamp should light. If not, remove the wire from the left hand slot and insert it into the right hand slot. If the neon lamp lights the polarity is incorrect and the wires must be reversed in the wall receptacle. If the neon lamp still fails to light, there is no "earth ground".

If an "earth ground" cannot be established through the building conduit attach a single 18 gauge or larger wire from the machine to a ground point. A nearby water pipe is an excellent "earth ground". Be sure all wire contact points are clean (no rust, paint etc.) and secured with screws and clamped to the water pipe.

Please direct this publication to the individual or department responsible.


JAMES S. ABATO
DIRECTOR
TECHNICAL SERVICE-ROWE

ROWE DISTRIBUTOR REFERENCE: 1117
Distribution Code: A, B, F 9/85
Category Code: Miscellaneous

Rowe international, inc.

75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL. (609) 867-0400, CABLE: ROWEINT

OCT 16 1985

SERVICE BULLETIN



Video Phonograph Monitors

Rowe - Grand Rapids has instituted an exchange program for the Video Phonograph Monitors.

The monitor will be billed at full distributor cost and a credit issued upon receipt of the defective monitor at Rowe - Grand Rapids.

Please pack the return unit in the same packaging material that the new one came in, to prevent damage in transit.

Order from service parts, Rowe - Grand Rapids as follows:

PART NO.	DESCRIPTION	DIST. COST	LIST PRICE
3 - 08918 - 01	Monitor (NEC)	\$550.00	\$735.00
6 - 09733 - 01	Monitor (Electrohome)	\$550.00	\$735.00

The above part Nos. are also applicable for ordering the monitors as a "spare part".

Application for No. 3 - 08918 - 01 is the R - 89 and R - 90 Video Phonographs while No. 6 - 09733 - 01 is for the R - 88 only.

Upon examination, any repairs necessitated by vandalism, improper packing for shipment or unauthorized repair practices will be charged back accordingly.

Please direct this publication to the individual or department responsible.


JAMES S. ABATO
DIRECTOR
TECHNICAL SERVICE-ROWE

ROWE DISTRIBUTOR REFERENCE: 1121
Distribution Code: A,B, 10/85
Category Code: Video Phonographs

Rowe international, inc.

75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL. (601) 887-0400, CABLE: ROWEND

R-90 Flashing Light Intensity

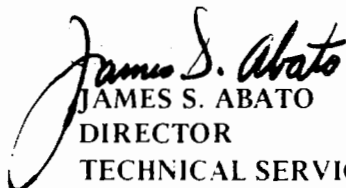
A diode has been added to reduce the "Flashing Lights" light intensity.

This diode is currently located in the harness to the light controller. In future production, the diode will be installed on the light controller circuit board assembly.

The diode may be removed to restore the lights to full brilliancy for those wishing to do so.

Exercise care in removing the diode to prevent damaging the harness wires.

Please direct this publication to the individual or department responsible.


JAMES S. ABATO
DIRECTOR
TECHNICAL SERVICE-ROWE

ROWE DISTRIBUTOR REFERENCE: 1122
Distribution Code: A,B, 10/85
Category Code: Phonograph

rowe international, inc.

75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL. (801) 887-0400, CABLE: ROWEND

SERVICE BULLETIN

Bulletin # 1135 Correction

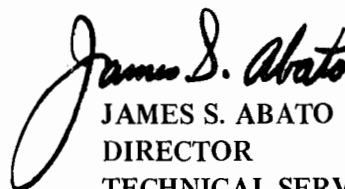
On Service Bulletin No. 1135 issued 1/86 there were two errors in the third paragraph under the heading "R-90 CENTRAL CONTROL COMPUTER COMPATABILITY". Please correct that paragraph to read as follows:

R-90 Controller to R-89 (with or without video);

- 1- Turn "Service Switch" off.
- 2- Press and HOLD Pushbutton 9 AND the Reset Pushbutton WHILE turning on the "Service Switch".

We regret any confusion or inconvenience this oversight may have caused.

Please direct this publication to the individual or department responsible.


JAMES S. ABATO
DIRECTOR

TECHNICAL SERVICE-ROWE

ROWE DISTRIBUTOR REFERENCE: 1137
Distribution Code: A,B 2/86
Category Code: Phonographs

Rowe international, inc.

75 TROY HILLS RD., WHIPPANY, N.J. 07981, TEL. (609) 887-0400, CABLE: ROWEND

SERVICE BULLETIN

R-90/WRE Wallbox Interface E-PROM Change

WRE wallboxes used with the R - 90 Phonograph may exhibit a Credit Problem. The symptoms are "No Credit" or "Incorrect Credit" established.

The E - PROMs used in locations Z2 and Z3 in the Wallbox Interface (P/N 60984301) have been revised to correct the problem.

The revised E - PROMs can be identified by the number 70039118 and V1.1 written underneath it. Early production E - PROMs will NOT have the revision number (V1.1) on the label.

It is recommended that BOTH E - PROMs (Z2 & Z3) be replaced. Full credit will be issued upon receipt of the "old" style E - PROM at Rowe - Grand Rapids.

Order from Rowe, Grand Rapids as follows:

Part No.	Description	List Price
70039118	E - PROM	\$18.00

Please direct this publication to the department or individual responsible.



BARRY COHEN
VICE PRESIDENT
CUSTOMER SERVICES

ROWE DISTRIBUTOR REFERENCE: 1139
Distribution Code: A,B 3/86
Category Code: R - 90 Phonograph



SERVICE BULLETIN F-453

418 Freeze Dried Model "Extra Strong Coffee" Portion Control

The E-PROM program for the Model 418 Hot Coffee Vendor has been changed to correct an error in the software that effects the Extra Strong Coffee portions on the Freeze Dried Model ONLY.

On the Fresh Brew Models the "Extra Strong Coffee" portions are controlled by setting the switch on the control board. On the F/D Model this function is a preprogrammed fixed percentage of the primary throw. The software error allows an excess of product to be dispensed.

To remedy this condition in the F/D Vendors the E-PROM must be replaced. The revised E-PROM can be identified by the number 7-00385-16, Rev. V1.4 and/or 418-1854-"E" on the label. This new chip may be used on ANY Model 418 vendor.

Revised chips if required, will be supplied on an exchange basis with full credit being issued upon receipt of the "old style" chip at Rowe, Whippany.

Order from Rowe, Whippany as follows:

Part No.	Description	List Price
418-1854	Microprocessor (Chip)	\$80.00

Please direct this publication to the individual or department responsible.



BARRY COHEN
VICE PRESIDENT
CUSTOMER SERVICES

ROWE DISTRIBUTOR REFERENCE: 1140
Distribution Code: A,B,F 3/86
Category Code: 418 Coffee Vendors



SERVICE BULLETIN

Video Phonograph Update

Below is a listing of all the modifications made to the Video Phonographs from the R-88 Video to current production.

This listing is a complete compilation of all EPROM updates for both the Central Control Computers and the Video Controllers. It also shows which VCR's can be used in which Video Phonographs as well as the interchangeability between Central Control Computers.

VCR's can be interchanged and operate with any of the Central Control Computers listed outside the lined box for the particular model Video Jukebox in question. However, the Video Control Center (VCC) MUST be matched to the VCR for which it is intended. EXAMPLE: For the R-89 VCR P/N6-09745-01 ONLY VCC P/N4-07775-02 may be used.

The applicable VCC part number appears on the same line as the VCR part number in the lined box. The symbols correspond to specific details for the component and/or assembly.

Model	CCC	Ckt. Bd.	PROM	VCR ✓	VCC	Ckt. Bd.	PROM	Graphics Asm.	Graphics Kit
R-88	4-07773-01	6-09738-01	7-00397-05(V1.2)	6-09745-01	4-07775-02	6-09728-01	7-00395-04(V2.0) ■	4-07774-01	2-70365-03 * *
	4-07773-03 ★	6-09738-03	7-00397-05(V1.2)						
	4-07773-05 □	6-09738-05	7-00382-03(V1.4)						
R-89	4-07773-02	6-09738-02	7-00382-02(V1.2)	6-09745-01 4-07884-02	4-07775-02 4-07885-01	6-09728-01 6-09747-01	7-00395-04(V2.0) ■ 7-00395-20(V1.2)	4-07774-01	2-70365-04 * *
	4-07773-04 ★	6-09738-04	7-00382-02(V1.2)						
	4-07773-05 ◆	6-09738-05	7-00382-03(V1.4)						
R-90	4-07773-05	6-09738-05	7-00382-03(V1.4)	4-07884-02	4-07885-01	6-09747-01	7-00395-20(V1.2)	4-08026-01 *	
				6-09930-01	4-07885-03	6-09747-03	7-00395-21(V1.1)		

- Replace PROM V1.9 with V2.0 only if experiencing problems with the Video System.
- This Kit allows the use of musical graphics and message capabilities to earlier Video Phonographs.
- ★ Contains PROM change of May, 1985.

- When using the 4-07773-05 to replace either 4-07773-01 or 4-07773-03 the following applies:
 - 1- Turn power off.
 - 2- Unplug P-1, swap W/BL wire (position 6) and Keying Plug (position 7), plug in P-1.
 3. Press and hold Key 8 and Reset Key while turning power on.

NOTE: This substitution will allow error messages to be displayed to assist in troubleshooting. The R-90 Manual contains the error codes and a troubleshooting chart.

- ◆ When using the 4-07773-05 to replace either the 4-07773-02 or 4-07773-04 the following applies:
 - 1- Turn power off.
 - 2- Press and hold Key 9 and Reset Key while turning power on.
 (See NOTE above)

* The Graphics Assembly used in the R-90 and Graphics Kits has a back-up battery enable button which when shipped from the factory will be "disabled". This button MUST be pushed in to allow the proper storage of messages. If not, the messages will be erased from the memory.

✓ The following is a Part Number and Model breakdown of the Video Cassette Recorders (VCR's):

Part No.	Compatible Models
6-09745-01	Sony SL-2000, Sony SL-2005 and Zenith VR-9800
4-07884-02	Toshiba VX-340
6-09930-01	Sony SLHFR-70

OCT 20 1986

.....continued

ROWE DISTRIBUTOR REFERENCE: 1157
 Distribution Code: A,B 10/86
 Category Code: Video Phonographs



REMINDER:

For optimum picture, sound and data transfer, the factory recommends that the VCR heads be cleaned each time the Video Tape is changed (once a month under normal conditions). Any high quality head cleaning cassette is suitable. Be sure to follow the manufacturer's instructions.

Please direct this publication to the department or individual responsible.



**BARRY COHEN
VICE PRESIDENT
CUSTOMER SERVICES**

FLIPPERS.COM

SERVICE BULLETIN

NOV 30 1987

NOV 30 1987

R-92 Series Phonograph "Hum"

In the R-92 series phonographs an audible "hum" may be detected while in standby or during transfer motor operation.

If this condition exists it may be corrected as follows:

1. Locate P-4 on the lamp control unit (P/N 40821201).
2. Cut the ground shield connection in Pin 1 of P-4.

Please direct this publication to the department or person responsible.



TERRY LACHER
DIRECTOR
TECHNICAL SERVICES

ROWE DISTRIBUTOR REFERENCE: 1210
Distribution Code: A,B 11/87
Category Code: Service Bulletin



SERVICE BULLETIN



R-88 & R-89 Video Phonograph Audio Selection Shortplay

Under certain conditions the R-88 and R-89 Video Phonographs may fail to play all of the chosen audio selections.

The circumstances required for failure to occur and the symptoms are as follows:

1. Customer makes a Video Selection and the fill-in record begins to play.
2. Customer makes three or more audio selections.
3. Video selection plays.
4. Phonograph plays one or two audio selections then returns to stand-by.

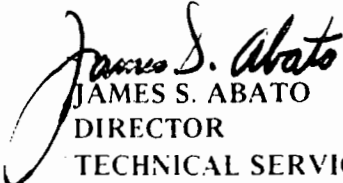
To remedy the problem proceed as follows:

1. Enter the programming mode.
2. Change location No.57 from 255 to 0.
3. Return to normal mode and test for proper operation.

If the phonograph requires updating, replacement Control Computers are available on an exchange, no charge basis through September 30, 1985.

Please order from Rowe, Grand Rapids as follows:

Part No.	Description	List Price
4-07773-03	Control Computer - R-88 Video	N/C (Exchange)
4-07773-04	Control Computer - R-89 Video	N/C (Exchange)


JAMES S. ABATO
DIRECTOR
TECHNICAL SERVICE-ROWE

ROWE DISTRIBUTOR REFERENCE: 2001
Distribution Code: A, B 7/85
Category Code: Phonographs

Rowe international, inc.

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