

GAME NOS. 935, 936 & 937
JANUARY, 1981

MIDWAY'S RALLY-X PARTS AND OPERATING MANUAL



#935-UPRIGHT



#936-COCKTAIL



#937-MINI



MIDWAY MFG. CO.

A BALLY COMPANY

10750 WEST GRAND AVENUE
FRANKLIN PARK, ILLINOIS 60131
U.S.A.

PHONE: (312) 451-1360 CABLE ADDRESS: MIDCO TELEX NO.: 72-1596

GENERAL INSTRUCTIONS FOR RALLY-X UPRIGHT

INSTALLATION

1. Remove shipping cleats located on bottom of cabinet.
2. Install four (4) provided leg levelers to bottom of cabinet and level cabinet.
3. The power is controlled by a switch located on top of the cabinet. Additional taps have been provided on the transformer to compensate for fluctuating line voltage.
4. Upright only - To remove protective paper coating from decal - each side of cabinet, soak paper with water to soften and carefully start "peel back" of paper with fingernail. Peel paper parallel to cabinet side. "DO NOT PULL OUT".

LINE VOLTAGE SAFETY SWITCH

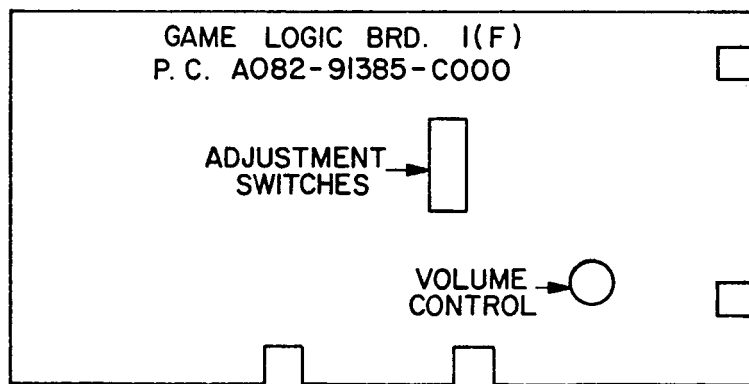
A line voltage safety switch has been provided for your protection. It is located on the right rear side of the cabinet in the back door area. When the back door is removed, it opens the circuit to the line voltage. To restore power (when servicing), pull switch fully out.

VOLUME CONTROL

The volume control pot is located on the Game Logic Board (P.C. A082-91385-C000). This pot controls the volume of all sounds and may be varied as desired by rotating pot control.

ADJUSTMENT SWITCHES

Located on Game Logic Board (P.C. A082-91385-C000) and may be adjusted as indicated on separate instruction card in back box area.



TO REMOVE CONTROL PANEL AND MONITOR DISPLAY GLASS

1. Open coin door.
2. Release two (2) clamps located below Control Panel on each side of cabinet.
3. Disconnect control panel jack.
4. Remove control panel.
5. Remove monitor display glass.

CREDIT PUSH BUTTON SWITCH

Located in cash box area and is readily accessible by opening coin door. This switch is provided as a test aid and awards one credit without advancing coin meter.

WARNING: This equipment Generates, Uses and can Radiate Radio Frequency Energy and if not installed and used in accordance with the Instruction Manual, may cause interference to Radio Communications. As temporarily permitted by Regulation it has not been tested for compliance to Subpart J or Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference. Operation of this equipment in a Residential Area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

M051-00935-A003

GENERAL INSTRUCTIONS FOR RALLY-X MINI

INSTALLATION

1. Remove shipping cleats located on bottom of cabinet.
2. Install four (4) provided leg levelers to bottom of cabinet and level cabinet.
3. The power is controlled by a switch located on the back of the cabinet. Additional taps have been provided on the transformer to compensate for fluctuating line voltage.

LINE VOLTAGE SAFETY SWITCH

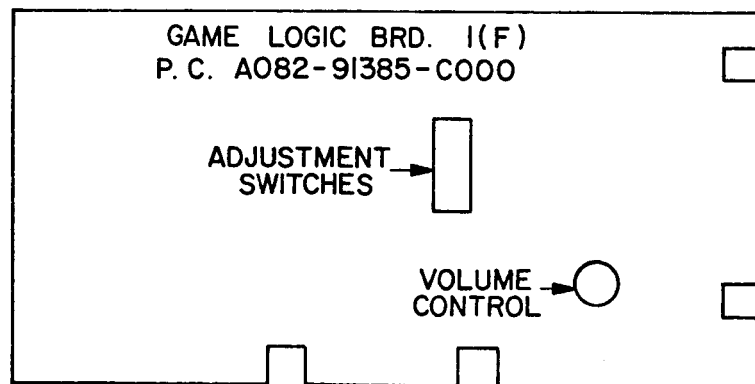
A line voltage safety switch has been provided for your protection. It is located on the right rear side of the cabinet in the back door area. When the back door is removed, it opens the circuit to the line voltage. To restore power (when servicing), pull switch fully out.

VOLUME CONTROL

The volume control pot is located on the Game Logic Board (P.C. A082-91385-C000). This pot controls the volume of all sounds and may be varied as desired by rotating pot control.

ADJUSTMENT SWITCHES

Located on Game Logic Board (P.C. A082-91385-C000) and may be adjusted as indicated on separate instruction card in back box area.



TO REMOVE CONTROL PANEL AND MONITOR DISPLAY GLASS

1. Open coin door.
2. Release two (2) clamps located below Control Panel on each side of cabinet.
3. Disconnect control panel jack.
4. Remove control panel.
5. Remove monitor display glass.

TEST SLIDE AND CREDIT PUSH BUTTON SWITCH

Located to right of cash box and is readily accessible by opening coin door. When placed in "ON" position, this switch indicates test mode. The credit push button switch is provided as a test aid and awards one credit without advancing coin meter.

GENERAL INSTRUCTIONS FOR RALLY-X COCKTAIL TABLE

INSTALLATION

1. Remove shipping cleats located on bottom of cabinet.
2. Install four (4) provided leg levelers to bottom of cabinet and level cabinet.
3. The power is controlled by a switch located on the bottom of the cabinet. Additional taps have been provided on the transformer to compensate for fluctuating line voltage.

LINE VOLTAGE SAFETY SWITCH

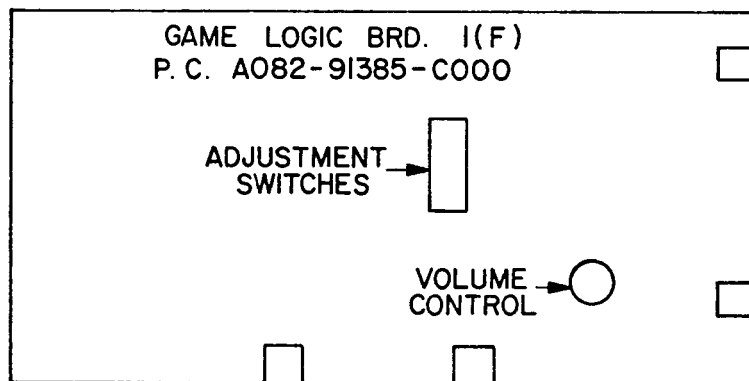
A line voltage safety switch has been provided for your protection. It is located in the cabinet on the left side of the coin door. When the coin door is opened the circuit to the line voltage is interrupted. To restore power (when servicing), pull switch fully out.

VOLUME CONTROL

The volume control pot is located on the Game Logic Board (P.C. A082-91385-C000). The pot controls the volume of all sounds and may be varied as desired by rotating pot control.

ADJUSTMENT SWITCHES

Located on Game Logic Board (P.C. A082-91385-C000) and may be adjusted as indicated on separate instruction card in back box area.



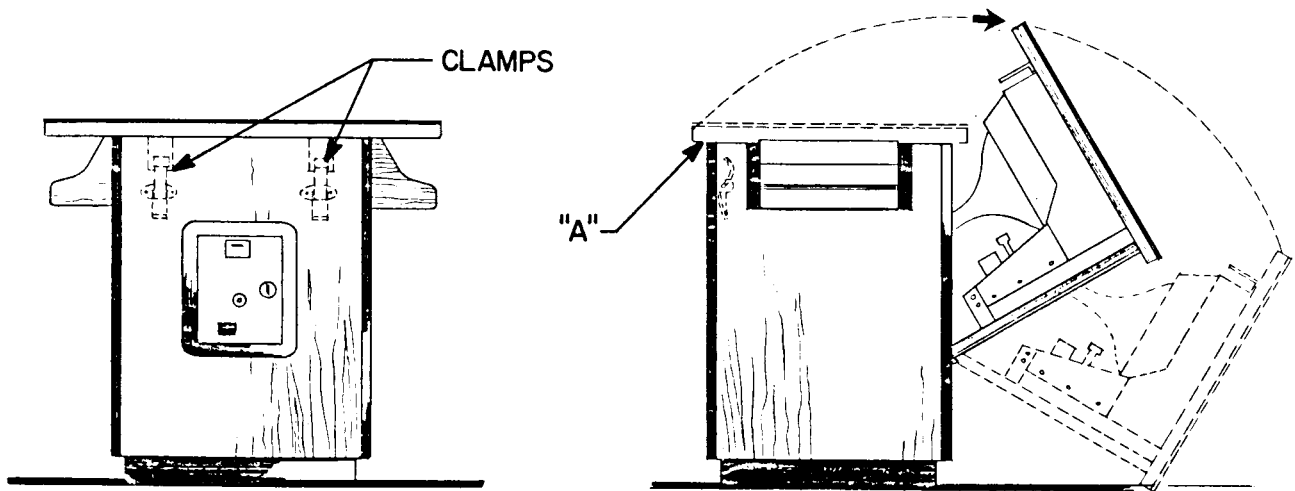
TEST SLIDE AND CREDIT PUSH BUTTON SWITCH

Located to the right of cash box and is readily accessible by opening coin door. When placed in "ON" position, this switch indicates test mode. The credit push button switch is provided as a test aid and awards one credit without advancing coin meter.

TO SERVICE MONITOR, GAME BOARD AND TRANSFORMER ASSY.

1. Open coin box door and release two (2) clamps indicated on sketch below.
2. Grasp monitor mounting panel at "A" and open as indicated in sketch below.

Caution: Due to the weight of the monitor extreme care must be exercised when opening cabinet for service.



ELECTRICAL BULLETIN:

FOR ALL APPARATUS COVERED BY THE CANADIAN STANDARDS ASSOCIATION (CSA) STANDARD C22.2 NO. 1, WHICH EMPLOYS A SUPPLY CORD TERMINATED WITH A POLARIZED 2-PRONG ATTACHMENT PLUG.

CAUTION:

TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION:

POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR. UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

CAUTIONARY NOTES IN SETTING UP PROCEDURE

Care in Setting Up

1. Place machine a sufficient distance from the wall and on a strong, level surface.
2. Do not place in dusty or damp locations or where the sun's rays will beat directly on the machine. Also, in order to avoid the interior of the machine's overheating, do not place near heaters.
3. Do not place in front of emergency or fire exits or in front of locations where fire fighting equipment or extinguishers are stored.
4. Make sure the ground wire on machine is connected to the ground.
5. Check to see whether all of the connectors on the PC boards, etc. are connected.
6. Check if the electric power switch is turned "ON", and game is plugged in.

Caution after Setting Up

Be very careful when inspecting and checking the machine because there are places in the monitor with high electrical voltage.

Control circuits are all composed of IC's for long life, but on the other hand according to the way it is set up, these can be instantly destroyed; therefore, take special care with the following points:

1. Make sure the electric power is shut off when replacing parts or when removing connectors, etc.
2. PC board repairs are to be done by the seller — do not handle in any case. Above all else, never conduct test with the tester, etc. The voltage in the tester can ruin the IC's.
3. When connecting the connectors, be careful not to reverse the direction of the connectors.
When shipping PC boards use plastic airmats or other such protective material.
When pulling the electric power source, always hold the plug — never pull the cord.

Self-Test

The self-test is the same as the inspection of an automobile. If possible, it is best to do this each day. Rally-X has Self-Test capabilities and using the Test Switch most parts can be tested.

1. Automatic Self-Test

When the power in Rally-X is turned on the Self-Test automatically begins. If there is no problem in the PC boards it will change automatically into the "Attract Mode", when there is a problem the Self-Test is repeated and the words "BAD RAM" or "BAD ROM" will appear on the screen. Even if the problem cannot be located, do not go on to other test switches or volume test, but carry out the Self-Test using the Test-Switch.

Note: When the problem has been located using the results of the Self-Test, contact the place of purchase of the machine.

2. Self-Test Using the Test Switch

The slide switch on the opposite side when the selector switch is opened is the Test Switch. Turn the Test Switch "ON". The Self-Test will start (Normally this switch is OFF). The figures and words of the Test Mode will appear on the screen in 10 seconds.

RALLY-X TEST MODE

Game is in test mode for a moment immediately after power is turned on or when test switch is on. When test switch is returned to "OFF" the game goes into attract mode.

1. ROM TEST

The ROM data are checked 4K bytes at a time, and then checked together over all. If there are irregularities, the screen will display, for example, "ROM 1" or the like, identifying the bad ROM by number. The test series will not proceed to the RAM test. When there are no irregularities, "ROM OK" will be displayed and the RAM test will then be performed. The character ROM is not checked.

The position of the ROMs on the PCB
as given by the ROM test message

| Test Message | Position of ROM and PCB | | |
|--------------|-------------------------|-------------------|---------|
| ROM 1 | 1B or 1C | 1B | 1D |
| ROM 2 | 1D or 1E | 1D | |
| ROM 3 | 1H or 1J | 1H | 1K |
| ROM 4 | 1K or 1L | 1K | |
| | MB8516 (EPROM) | UPD2332 TMM333 | UPD2364 |

2. RAM TEST

Each of the 12 ICCs numbered 2114 are checked and when any irregularity is found a message (e.g. RAM 1L) is displayed and the test series stops. If there are no irregularities tests of game sounds and switches can begin.

The RAM test is performed only on ICCs numbered 2114

Position of RAMs on PCB
as given by test message

| Test Message | Position of RAM on PCB |
|--------------|------------------------|
| RAM 1L | 6C |
| RAM 1H | 6A |
| RAM 2L | 6D |
| RAM 2H | 6B |
| RAM 3L | 6K |
| RAM 3H | 6J |
| RAM 4L | 6L |
| RAM 4H | 6H |
| RAM 5L | 6M |
| RAM 5H | 6F |
| RAM 6L | 6N |
| RAM 6H | 6E |

3. SWITCH & SOUND TEST

The following sounds are made when switches are depressed:

| SWITCH | SOUND |
|-----------------------------|---|
| Coin sw 1, 2 | sound made when coin is deposited |
| service sw | service sound |
| 1 player start | start music |
| 2 players start | music played before challenging stage |
| plyr 1 cntrl sw up | fuel warning |
| plyr 1 cntrl sw down | sound made when fuel added to score |
| plyr 1 cntrl sw right | sound made when special check pt cleared |
| plyr 1 cntrl sw left | sound made when check pt cleared |
| plyr 1 cntrl sw smoke scrn | sound made when bonus car received |
| *plyr 2 cntrl sw up | sound made when one full pattern is cleared |
| *plyr 2 cntrl sw down | BGM |
| *plyr 2 cntrl sw right | crash noise |
| *plyr 2 cntrl sw left | high score noise |
| *plyr 2 cntrl sw smoke scrn | sound of car running |

*Applies only to table model

If player one and player two's smoke screen buttons are depressed at the same time, the display flip-flops and the smoke screen sound is made.

If the test switch is pressed to off and back to on within one second while the smoke screen buttons are depressed, a cross-hatch pattern will appear. In the table model one edge and in the upright model two edges of the pattern will not appear.

JK BAR CAN CAUSE LOSS of all color or all video.

SWITCH ADJUSTMENTS

| METHOD OF PLAY (RALLY-X) | | |
|--|---------------|--|
| SW. #1 | SW. #2 | |
| OFF | OFF | 1 COIN, 1 CREDIT |
| OFF | ON | 1 COIN, 2 CREDIT |
| ON | OFF | 2 COINS, 1 CREDIT |
| ON | ON | FREE PLAY |
| DIFFICULTY & NUMBER OF CARS PER CREDIT | | |
| SW. #3 | SW. #4 | SW. #5 |
| ON | ON | ON LOW DIFF, 2 CARS |
| ON | ON | OFF LOW DIFF, 3 CARS |
| ON | OFF | ON MID DIFF, 1 CARS |
| ON | OFF | OFF MID DIFF, 2 CARS |
| OFF | ON | ON MID DIFF, 3 CARS |
| OFF | ON | OFF HIGH DIFF, 1 CARS |
| OFF | OFF | ON HIGH DIFF, 2 CARS |
| OFF | OFF | OFF HIGH DIFF, 3 CARS |
| BONUS CARS | | |
| SW. #6 | SW. #7 | |
| ON | OFF | 1 CAR GAME 10,000 PTS. 2 CAR GAME 15,000 PTS. 3 CAR GAME 20,000 PTS. |
| OFF | ON | 1 CAR GAME 20,000 PTS. 2 CAR GAME 30,000 PTS. 3 CAR GAME 40,000 PTS. |
| OFF | OFF | 1 CAR GAME 30,000 PTS. 2 CAR GAME 40,000 PTS. 3 CAR GAME 60,000 PTS. |
| SW. #8 | | |
| OFF | PLAY MODE | |
| ON | LOCKS PICTURE | |

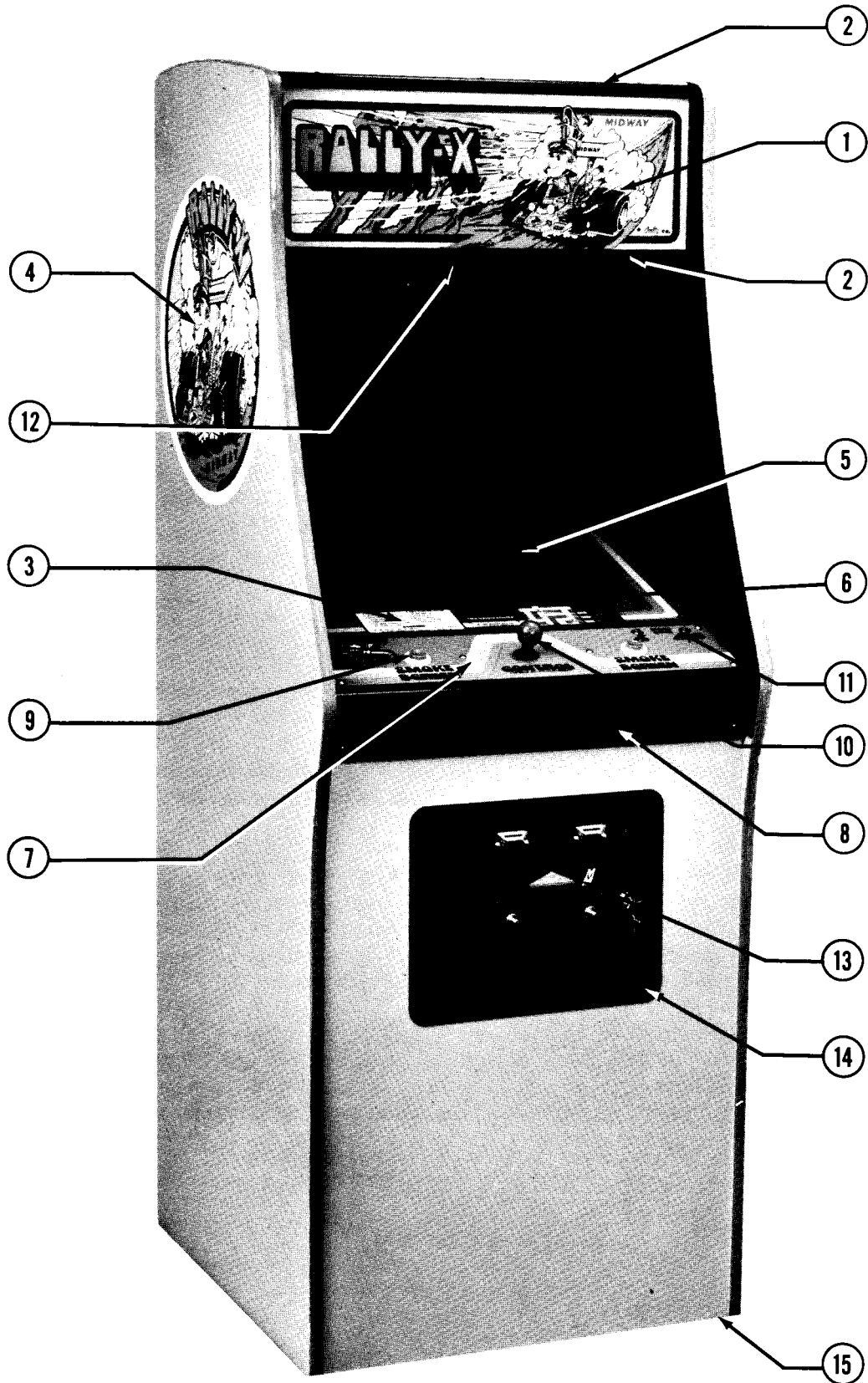
M051-00935-A014

PLAYING INSTRUCTIONS

- 1 or 2 persons can play.
- By moving the control level, “My Car” (blue) can be moved up, down, right and left.
- Avoiding barriers, use a smoke screen on the pursuing red cars.
- With the help of the radar screen touch the check points, clear and continue on. There are 10 check points per round, one of which is the Special Check Point.
- Check Point points

| When cleared | Points |
|--------------|--------|
| 1st | 100 |
| 2nd | 200 |
| 3rd | 300 |
| 4th | 400 |
| 5th | 500 |
| 6th | 600 |
| 7th | 700 |
| 8th | 800 |
| 9th | 900 |
| 10th | 1000 |
- When an accident occurs (hitting a barrier or red car) you must start over from the first 100 points.
- When the Special Check Point is cleared, the points accumulated up to that time are doubled (the screen shows X2). Of course when an accident occurs, this score is wiped out.
- Fuel.....“My Car” starts off with a full tank (60 L.). When all check points are cleared, an additional 100 pts. is awarded for each 1 liter of fuel remaining. And, when a smoke screen is produced, the fuel decreases by 3 liters. When the fuel remaining reaches the 10 L. level, the fuel indicator turns red and a warning is sounded. When the gas is all used, the car’s speed will gradually decrease and come to a stop.
- Challenging Stage - Rounds 3, 7, 11, 15....are “Challenging”, here 8 red cars appear but cannot run until the fuel in “My Car” is used up. Because “My Car” runs at full speed, it’s fuel is soon gone. Clear all check points before the blocking red cars can move. When this stage ends, starting with the next round the scene changes to city streets.

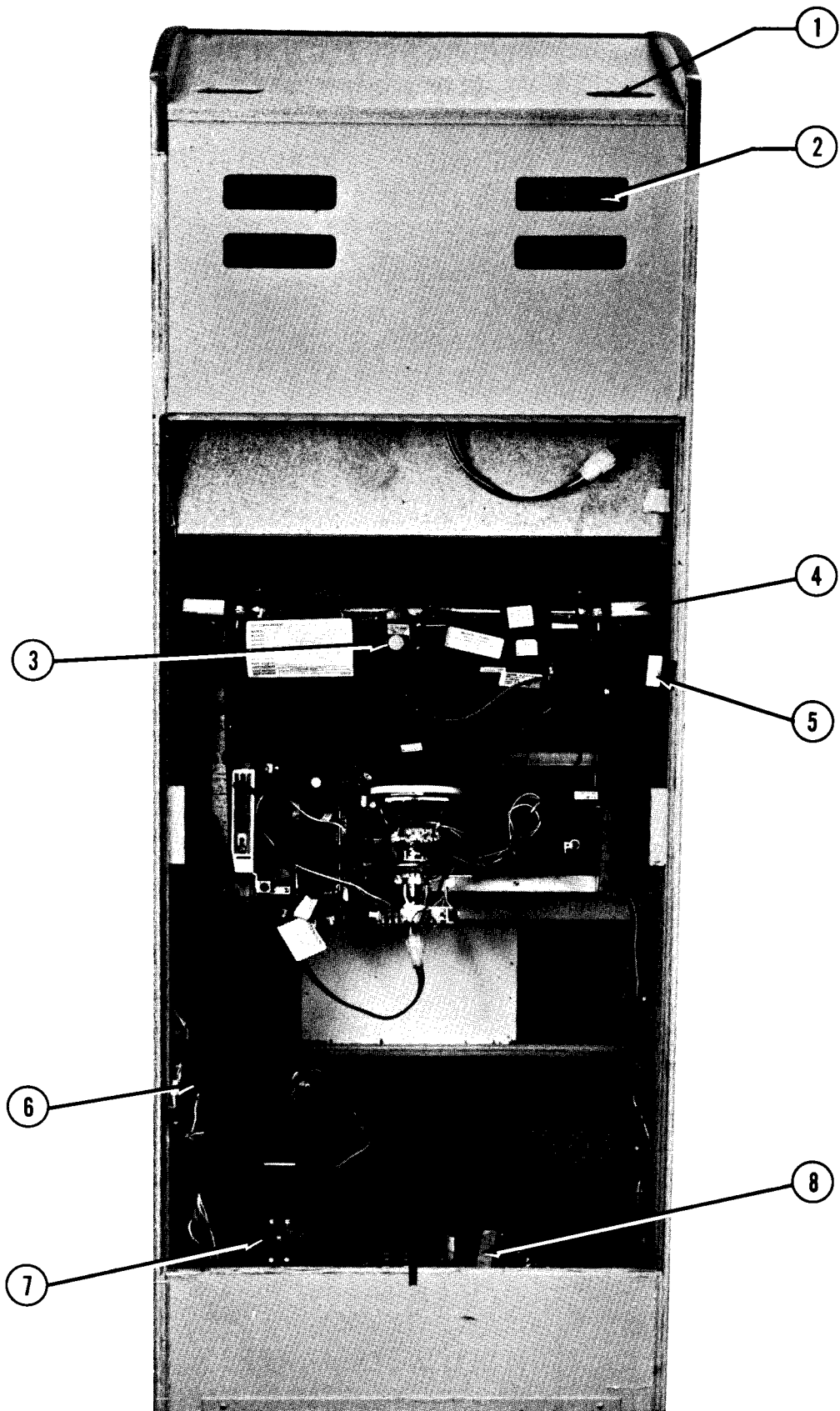
NO. 935 — RALLY-X UPRIGHT — PHOTOGRAPH



NO. 935 — RALLY-X UPRIGHT — PHOTOGRAPH
ORDER BY PART NUMBER ONLY

| ITEM | PART N ^o | DESCRIPTION |
|------|---------------------|--|
| 1 | 0935-00902-0000 | DECORATIVE PLEXI - UPPER 23'' x 9-1/16'' x 3/16'' |
| 2 | 0866-00103-00XF | PLEXI RETAINING BRKT. (2 REQ'D.) |
| | 0017-00101-0066 | #10 x 5/8 PHIL. HD. SCR. (6 REQ'D.) |
| 3 | 0935-00901-00XF | MAIN DISPLAY GLASS-TEMPERED 23'' x 21-1/8'' x 3/16'' |
| 4 | 0935-00905-0000 | DECAL - SIDE OF CABINET (2 REQ'D) |
| 5 | 0017-00003-0339 | 19'' DUAL SYNC COLOR MONITOR - ELECTROHOME |
| 6 | A866-00064-0000 | T.V. BEZEL & PLEXI ASSY. |
| 7 | 0935-00900-0000 | CONTROL SHELF OVERLAY |
| 8 | 0935-00100-00XF | CONTROL PLATE |
| | 0017-00101-0118 | #8-32 x 1-1/8 CARRIAGE BOLT (6 REQ'D.) |
| | 0017-00104-0022 | #8 WASHER (6 REQ'D.) |
| | 0017-00103-0061 | #8-32 HEX NUT W/SEMS (6 REQ'D.) |
| | 0017-00101-0065 | #6 x 1/2 PHIL. TRS. HD. SCR. (2 REQ'D.) |
| 9 | A855-00016-0000 | PUSH BUTTON ASSY. (2 REQ'D.) |
| 10 | A932-00008-0000 | CONTROL ASSY. |
| 11 | 0017-00032-0051 | SMALL RED SWITCH BUTTON W/HARDWARE (2 REQ'D.) |
| 12 | 0017-00003-0187 | 6'' x 9'' SPEAKER, 8 OHM, 9W. |
| | 0017-00009-0393 | BLACK SPEAKER GRILL W/4, 1-1/2'' SCREWS |
| 13 | 0151-00055-0100 | DOUBLE ENTRY COIN DOOR ASSY. |
| 14 | 0090-00002-02BK | COIN DOOR FRAME |
| | 0017-00101-0121 | #6-32 x 5/16 PHIL. TRS. HD. SCR. (3 REQ'D.) (MOUNTS COIN DOOR TO FRAME) |
| 15 | 0017-00102-0048 | 3/8-16 x 2'' LEG LEVELERS (4 REQ'D.) |
| | 0017-00103-0026 | 3/8-16 LEG LEVELER HEX NUTS (4 REQ'D.) |
| | | NOT SHOWN LIST |
| | A866-00068-0000 | DISPLAY LAMP BRKT. ASSY. (BEHIND ITEM #1) |
| | 0017-00003-0135 | LAMP SOCKET (2 REQ'D.) |
| | 0017-00003-0309 | LAMP 12V., 25W. (2 REQ'D.) |
| | 0017-00101-0626 | #8-32 x 3/4 SLT. PAN HD. M.S. (4 REQ'D.) |
| | 0017-00103-0061 | #8-32 HEX NUT W/SEMS (4 REQ'D.) |
| | 0017-00101-0025 | #8 x 1/2 SLT. HEX HD. BLK. WD. SCR. (4 REQ'D.) |
| | 0017-00009-0033 | BASSICK CLAMP (2 REQ'D.) |
| | 0603-00131-0000 | STRIKE (2 REQ'D.) |
| | 0017-00101-0028 | #8 x 3/4 SLT. HEX. HD SCR. (4 REQ'D. CLAMP, 4 REQ'D. STRIKE) |
| | 0935-00906-0100 | KICK PLATE (BASE OF CABINET) |
| | 0935-00907-0000 | DECAL - (CABINET FRONT) |

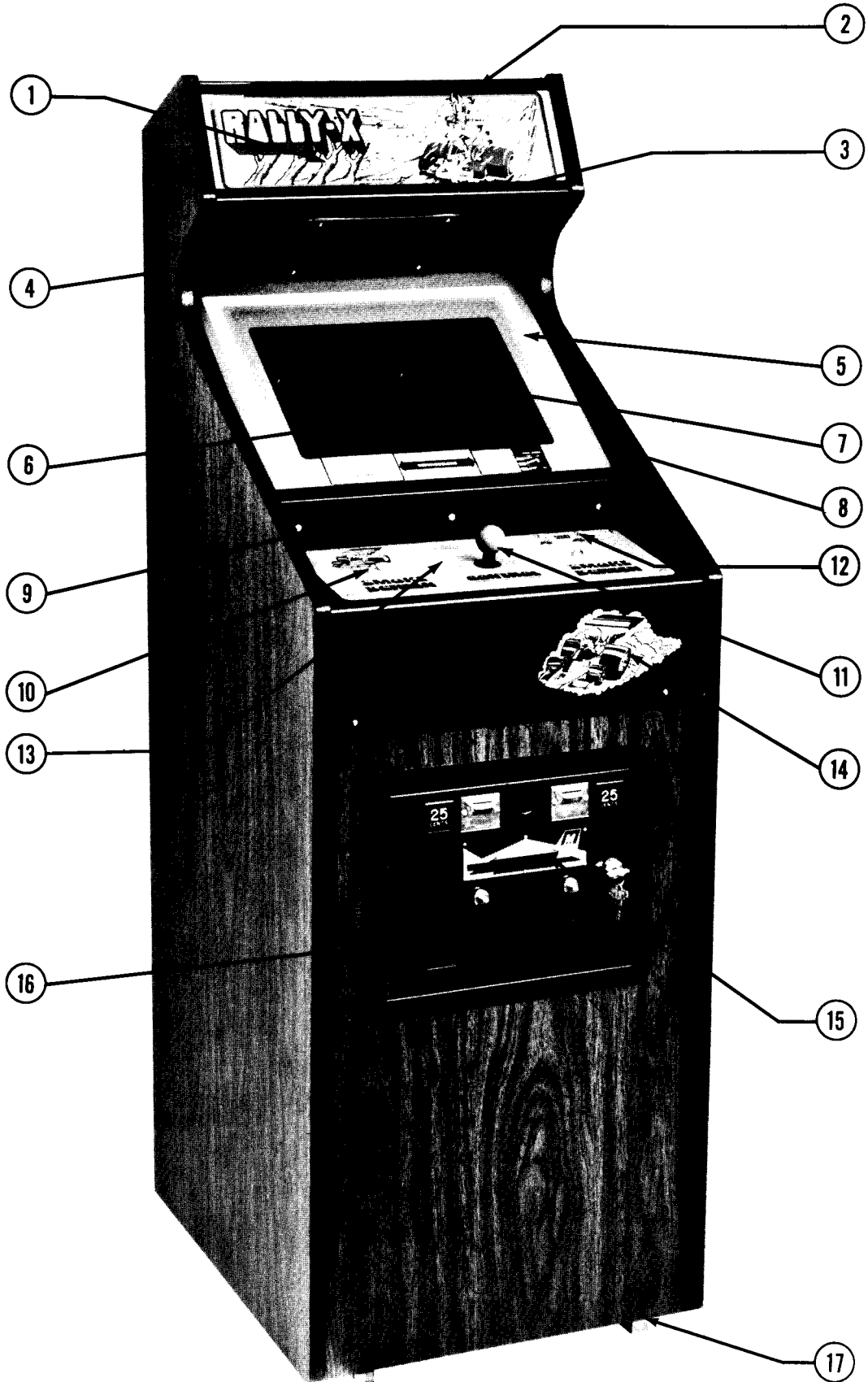
NO. 935 — RALLY-X UPRIGHT — INTERIOR ACCESS PICTURE



ORDER BY PART NUMBER ONLY

| ITEM | PART NO | DESCRIPTION |
|------|---|---|
| 1 | 0586-00036-0000 0567-00106-0100 0017-00101-0028 | ON/OFF SWITCH SWITCH MTG. BRKT. #8 x 3/4 SLT. HEX HD. WD. SCR. (4 REQ'D.) |
| 2 | 0017-00009-0490 | 5-5/8" SQ. VENT GRILL (2 REQ'D.) |
| 3 | A935-00006-0000 | ELECTROHOME - 19" COLOR MONITOR W/CHASSIS, DUAL SYNC HORIZONTAL TUBE (OR) |
| 3 | 0017-00003-0354 | WELLS-GARDNER - 19" COLOR MONITOR W/CHASSIS, DUAL SYNC HORIZONTAL TUBE |
| 4 | 0935-00101-0000 0017-00102-0066 | MONITOR MTG. BRKT. (2 REQ'D.) 1/4-20 x 1-1/4 UNSLOTTED FIN. HEX HD. BOLT (4 REQ'D.) |
| 5 | 0017-00104-0005 0017-00032-0071 A866-00035-00XF | SPLIT WASHER (4 REQ'D.) INTERLOCK SWITCH INTERLOCK SWITCH BRKT. ASSY. |
| 6 | A084-90414-C935 0624-00902-0100 0624-00902-0200 0017-00101-0027 0017-00104-0037 | POWER SUPPLY ASSEMBLY P.C. SUPPORT BRKT. - 12" (2 REQ'D.) P.C. SUPPORT BRKT. - 6-1/2" (2 REQ'D.) #8 x 3/4 SLT. HEX HD. SCREW (10 REQ'D.) #8 FLAT WASHER (10 REQ'D.) |
| 7 | A935-00008-0000 | CARD RACK ASSEMBLY |
| 8 | A935-00007-0000 | TRANSFORMER BOARD ASSEMBLY |
| | | <u>ADDITIONAL PARTS LIST</u> |
| | 0017-00009-0477 | CASH BOX - MOLDED |
| | A905-00026-0000 | CASH BOX COVER ASSY. |
| | A624-00001-0000 | CASH BOX GUIDE BRKT. ASSY. |
| | 0624-00101-0000 | CASH BOX SIDE CHANNEL |
| | 0017-00101-0628 | #8-32 x 3/4 CARRIAGE BOLT (4 REQ'D.) |
| | 0017-00104-0022 | #8 WASHER (4 REQ'D.) |
| | 0017-00103-0061 | #8-32 HEX NUT W/SEMS (4 REQ'D.) |
| | A151-00029-0000 | LOCK ASSY. - BACK DOOR |
| | 0017-00004-0022 | 304 DYMAX STRAP |
| | A866-00036-0000 | TEST SWITCH & BRKT. ASSY. |
| | 0866-00126-0000 | MONITOR BRKT. (4 REQ'D.) |

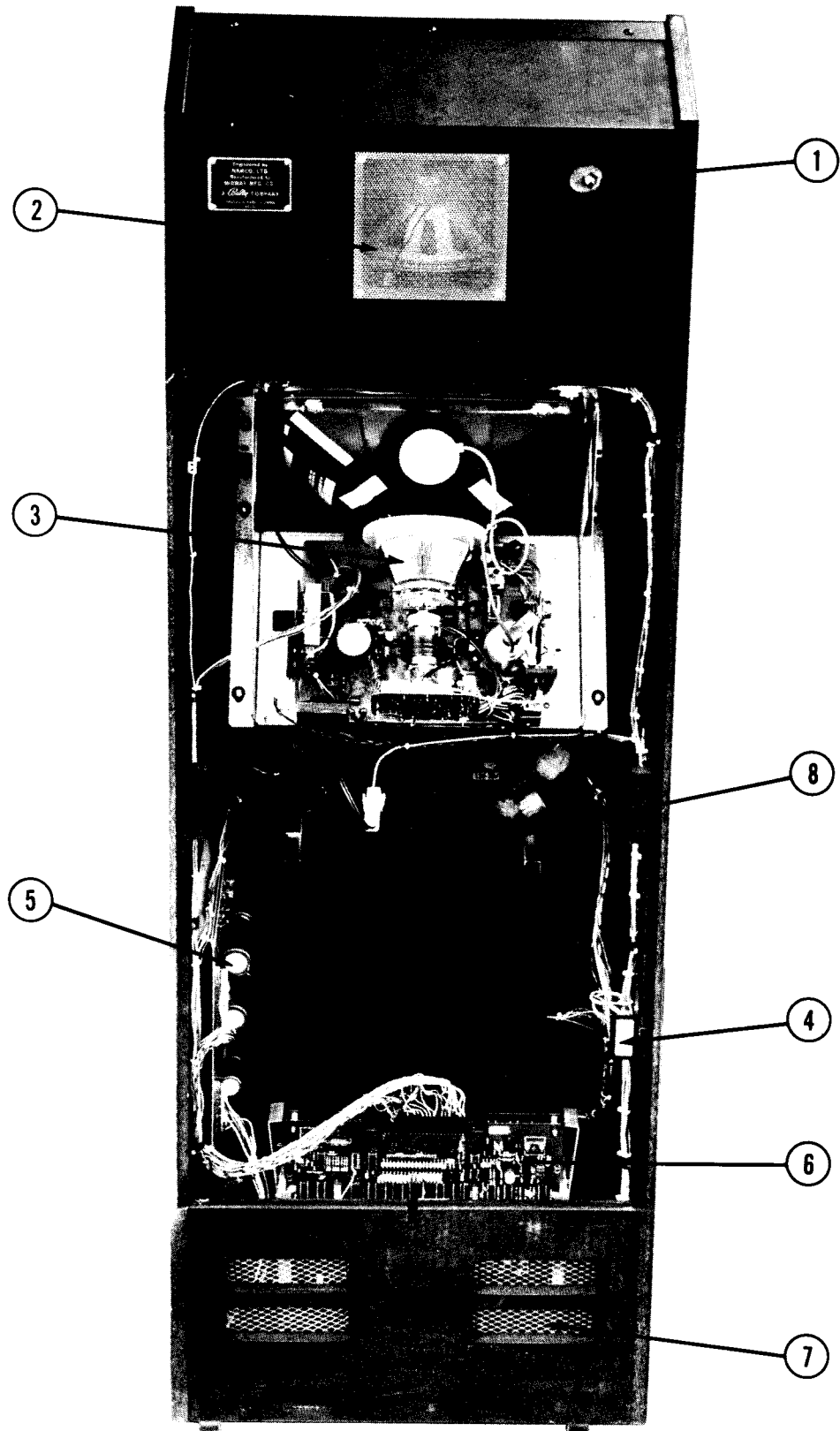
NO. 937 — RALLY-X MINI — PHOTOGRAPH



ORDER BY PART NUMBER ONLY

| ITEM | PART N ^o | DESCRIPTION |
|------|---|--|
| 1 | 0937-00901-00XF A905-00014-0000 0017-00003-0219 0017-00031-0030 | UPPER DISPLAY PLEXI - 17-15/16'' x 5-3/4'' x 3/16'' INSERT ASSEMBLY #194 WEDGE BASE LAMP 14V., 27A (5 REQ'D.) LIGHT SOCKET (5 REQ'D.) |
| 2 | 0905-00115-00XF | TOP BRKT. |
| 3 | 0905-00116-00XF 0017-00101-0117 | BOTTOM BRKT. #8 x 5/8 PHIL. TRS. HD. SCR. (3 REQ'D. TOP, 3 REQ'D. BOTTOM) |
| 4 | 0017-00009-0393 A762-00028-0000 0017-00101-0642 0017-00103-0061 0017-00104-0022 | BLACK SPEAKER GRILL W/4 - 1-1/2'' SCREWS 6'' x 9'' SPEAKER ASSY. W/CABLE, 8 OHM, 7W. #8-32 x 1-1/2'' CARRIAGE BOLT (4 REQ'D.) #8-32 HEX NUT W/SEMS (4 REQ'D.) #8 FLAT STL. WASHER (4 REQ'D.) |
| 5 | A937-00005-0000 | MAIN GLASS ASSY. - 17-13/16'' x 13-1/8'' x 3/16'' |
| 6 | 0017-00003-0340 | 13'' COLOR MONITOR DUAL SYNC HORIZONTAL MTG. - ELECTROHOME |
| 7 | A937-00006-0000 | T.V. BEZEL ASSY. |
| 8 | 0905-00903-0100 | GLASS CHANNEL - 14-1/2'' LG. (2 REQ'D.) |
| 9 | 0905-00102-00XF 0017-00101-0639 0017-00104-0037 0017-00103-0009 | GLASS CLAMPING PLATE #8-32 x 1-1/4 CARRIAGE BOLT (3 REQ'D.) #8 WASHER (3 REQ'D.) #8-32 WING NUT (3 REQ'D.) |
| 10 | A855-00016-0000 | PUSH BUTTON ASSY. (2 REQ'D.) |
| 11 | A932-00008-0000 | CONTROL ASSEMBLY |
| 12 | 0017-00032-0051 | SMALL RED SWITCH BUTTON W/HARDWARE (2 REQ'D.) |
| 13 | 0937-00902-0000 | DECORATIVE CONTROL SHELF OVERLAY |
| 14 | 0937-00100-00XF 0017-00101-0118 0017-00104-0022 0017-00103-0061 0017-00101-0065 | CONTROL PLATE #8-32 x 1-1/8 CARRIAGE BOLT (6 REQ'D.) #8 WASHER (6 REQ'D.) #8-32 HEX NUT W/SEMS (6 REQ'D.) #6 x 1/2 PHIL. TRS. HD. SCR. (2 REQ'D.) |
| 15 | 0151-00055-0100 | DOUBLE ENTRY COIN DOOR ASSY. |
| 16 | 0090-00002-02BK 0017-00101-0121 | COIN DOOR FRAME #6-32 x 5/16 PHIL. TRS. HD. SCR. (3 REQ'D.) (MOUNTS COIN DOOR TO FRAME) |
| 17 | 0017-00102-0048 0017-00103-0026 | 3/8-16 x 2'' LEG LEVELERS (4 REQ'D.) 3/8-16 LEG LEVELER HEX NUTS (4 REQ'D.) |

NO. 937 — RALLY-X MINI — INTERIOR ACCESS PICTURE

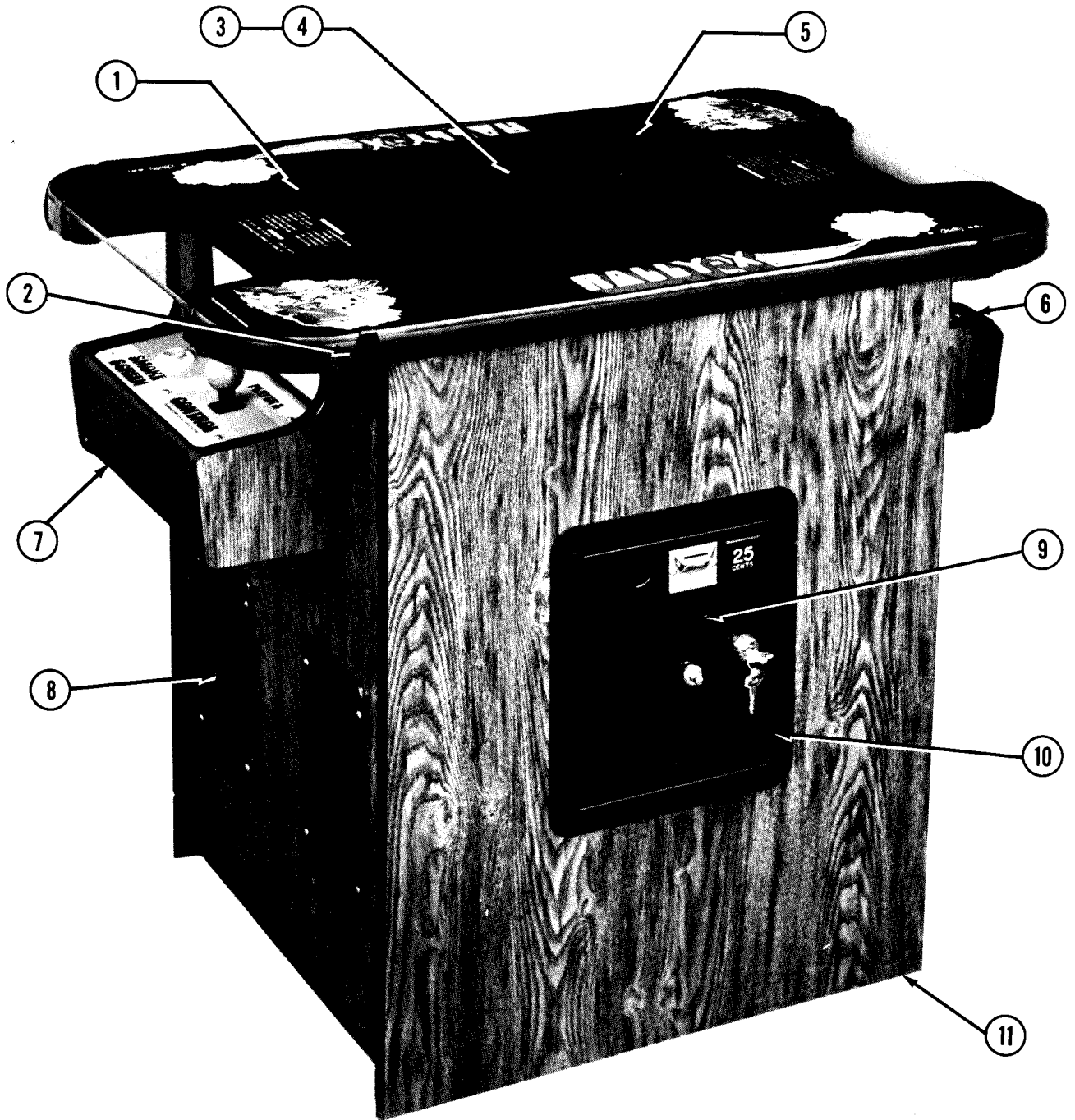


NO. 937 — RALLY-X MINI — INTERIOR ACCESS PICTURE

ORDER BY PART NUMBER ONLY

| ITEM | PART N ^o | DESCRIPTION |
|------|---------------------|---|
| 1 | 0017-00032-0083 | ON/OFF SWITCH |
| | 0567-00106-0100 | ON/OFF SWITCH PLATE |
| 2 | A762-00028-0000 | 6'' x 9'' SPEAKER ASSY. W/CABLE, 8 OHM, 7W. |
| | 0618-00117-00XF | VENT GRILL |
| | 0017-00101-0015 | #6 x 1/2 SLT. HEX HD. SCR. (4 REQ'D.) |
| 3 | 0017-00003-0340 | 13'' COLOR DUAL SYNC HORIZONTAL |
| | | MONITOR & CHASSIS - ELECTROHOME |
| | 0017-00102-0013 | 1/4-20 x 1-1/4 CARRIAGE BOLT (4 REQ'D.) |
| | 0017-00104-0014 | PERIPHERY WASHER (4 REQ'D.) |
| | 0017-00103-0018 | 1/4-20 HEX NUT (4 REQ'D.) |
| 4 | 0017-00032-0071 | INTERLOCK SWITCH |
| | A866-00035-00XF | INTERLOCK SW. BRKT. ASSY. |
| 5 | A084-90414-C935 | POWER SUPPLY ASSEMBLY |
| | 0624-00902-0100 | P.C. SUPPORT BRKT. - 12'' (2 REQ'D.) |
| | 0624-00902-0200 | P.C. SUPPORT BRKT. - 6-1/2 (2 REQ'D.) |
| | 0017-00101-0027 | #8 x 3/4 SLT. HEX HD. SCREW (10 REQ'D.) |
| | 0017-00104-0037 | #8 FLAT WASHER (10 REQ'D.) |
| 6 | A935-00008-0000 | CARD RACK ASSY. |
| | A935-00011-0000 | TRANSFORMER BOARD ASSY. - NOT SHOWN |
| 7 | 0017-00009-0490 | LOCATED BEHIND CARD RACK ASSY. |
| 8 | A905-00028-0000 | 5-5/8'' SQ. VENT GRILL (2 REQ'D.) |
| | A905-00026-0000 | CASH BOX ASSY. W/HANDLE |
| | A624-00001-0000 | CASH BOX COVER ASSY. |
| | 0624-00101-0000 | CASH BOX GUIDE BRKT. ASSY. |
| | 0017-00101-0628 | CASH BOX GUIDE BRKT. |
| | 0017-00104-0022 | #8-32 x 3/4 CARRIAGE BOLT (4 REQ'D.) |
| | 0017-00103-0061 | #8 WASHER (4 REQ'D.) |
| | | #8-32 LOCK NUT W/SEMS (4 REQ'D.) |
| | | <u>ADDITIONAL PARTS</u> |
| | A151-00029-0000 | LOCK ASSY. - BACK DOOR |
| | 0017-00004-0022 | 304 DYMAX STRAP |
| | 0017-00009-0033 | LATCH CLAMP (2 REQ'D.) |
| | 0603-00131-00XF | STRIKE |
| | 0017-00101-0028 | #8 x 3/4 SLT. HEX HD. SCR. |
| | | (4 REQ'D. CLAMP, 4 REQ'D. STRIKE) |
| | 0597-00124-00B0 | BACK DOOR CUP |
| | 0017-00101-0129 | #10-32 x 1'' CARRIAGE BOLT (3 REQ'D.) |
| | 0017-00103-0081 | #10-32 HEX NUT W/SEMS (3 REQ'D.) |
| | A866-00036-0000 | TEST SWITCH & BRKT. ASSY. |

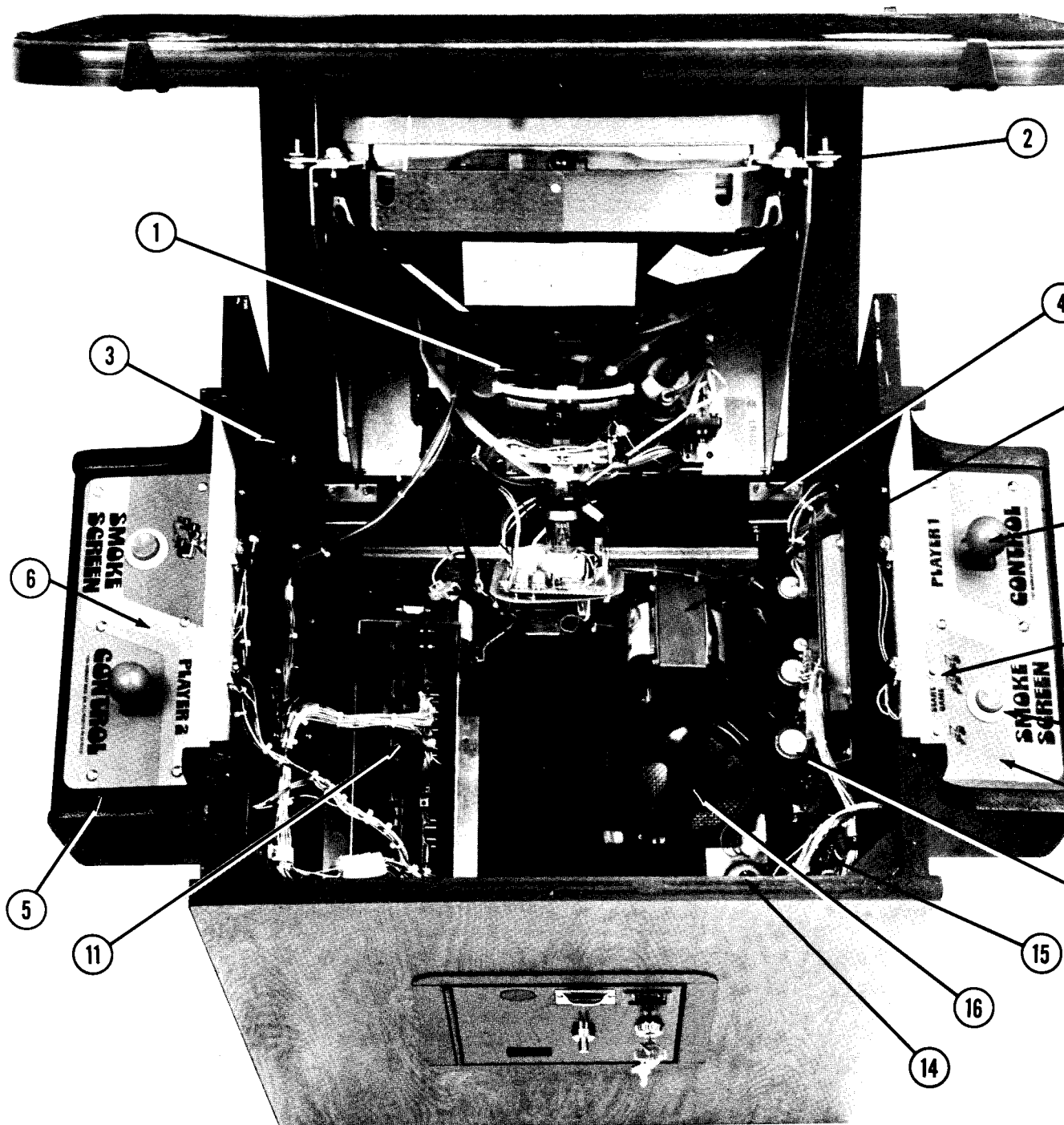
NO. 936 — RALLY-X COCKTAIL — PHOTOGRAPH



NO. 936 — RALLY-X COCKTAIL — PHOTOGRAPH
ORDER BY PART NUMBER ONLY

| ITEM | PART NO | DESCRIPTION |
|------|-----------------|---|
| 1 | 0936-00902-0000 | COVER GLASS - 32'' x 22'' x 1/4'' |
| 2 | 0775-00104-00XF | GLASS CLIPS (8 REQ'D.) |
| | 0017-00101-0117 | #8 x 5/8 PHIL. TRS. HD. SCR. (16 REQ'D.) |
| 3 | 0017-00003-0334 | 19'' DUAL SYNC COLOR MONITOR - ELECTROHOME |
| 4 | 0936-00903-0000 | PLEXI - GLASS |
| 5 | 0921-00901-0000 | T.V. BEZEL |
| 6 | A936-00004-0000 | CONTROL SHELF ASSY. - PLAYER #1 |
| 7 | A936-00005-0000 | CONTROL SHELF ASSY. - PLAYER #2 |
| 8 | 0017-00009-0393 | BLACK SPEAKER GRILL (4 REQ'D.) |
| | 0017-00101-0639 | #8-32 x 1-1/2 CARRIAGE BOLT (16 REQ'D.) |
| | 0017-00103-0061 | #8-32 HEX NUT W/SEMS (16 REQ'D.) |
| 9 | 0151-00055-0200 | SINGLE ENTRY COIN DOOR ASSY. |
| 10 | 0090-00002-01BK | COIN DOOR FRAME |
| | 0017-00101-0121 | #6-32 x 5/16 PHIL. TRS. HD. SCR. (3 REQ'D.) |
| 11 | 0017-00102-0048 | 3/8-16 x 2'' LEG LEVELERS (4 REQ'D.) |
| | 0017-00103-0026 | 3/8-16 LEG LEVELER HEX NUTS (4 REQ'D.) |
| | G927-00005-0000 | COCKTAIL TABLE - HIGH BASE - LEG KIT INCLUDING WHIZ BOLTS, WASHERS & LEGS (4 REQ'D.) (OPTIONAL) |
| | | <u>NOT SHOWN LIST</u> |
| | 0610-00132-0000 | STRIKE (2 REQ'D.) |
| | 0017-00101-0028 | #8 x 3/4 HEX HD. S.M.S. (4 REQ'D.) |
| | 0017-00009-0033 | BASSICK CLAMP (4 REQ'D.) |
| | 0017-00101-0026 | #8 x 5/8 HEX HD. S.M.S. (4 REQ'D.) |
| | A749-00003-0000 | COIN BOX ASSY. |
| | A627-00056-0000 | COIN BOX COVER ASSY. |
| | A625-00024-0000 | COIN BOX GUIDE BRKT. ASSY. |
| | 0625-00117-0000 | COIN BOX SIDE CHANNEL |
| | 0017-00101-0628 | #8-32 x 3/4 CARRIAGE BOLT (4 REQ'D.) |
| | 0017-00103-0008 | #8-32 HEX NUT (4 REQ'D.) |
| | 0017-00004-0022 | 304 DYMAX STRAP |
| | A749-00005-0000 | INTERLOCK SWITCH ASSY. |
| | A866-00036-0000 | TEST SW. & BRKT. ASSY. |

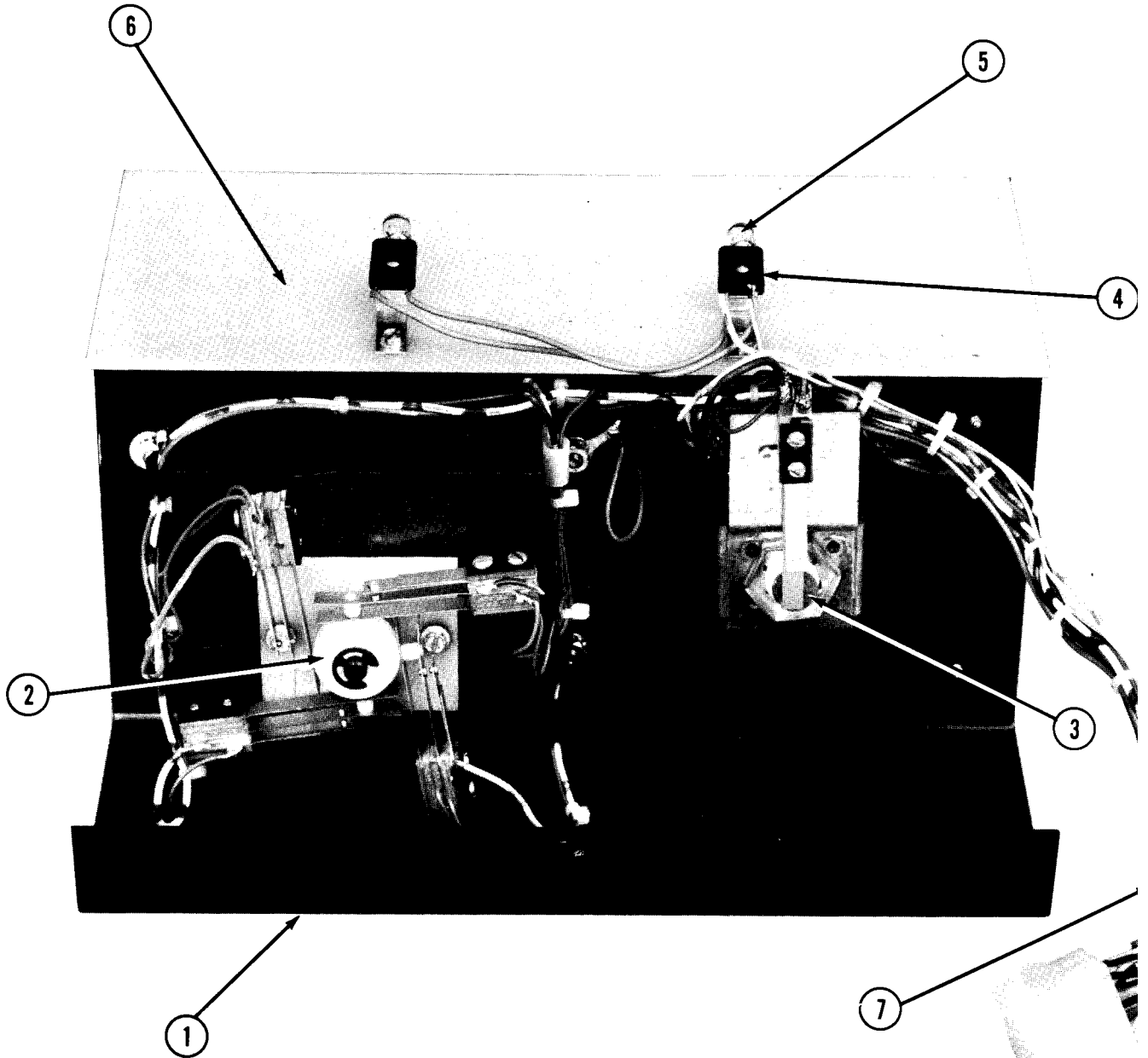
NO. 936 — RALLY-X COCKTAIL — INTERIOR ACCESS PICTURE



ORDER BY PART NUMBER ONLY

| ITEM | PART N ^o | DESCRIPTION |
|------|---------------------|--|
| 1 | 0017-00003-0334 | 19" DUAL SYNC VERTICAL COLOR MONITOR & CHASSIS - ELECTROHOME |
| 2 | A921-00010-00XF | MONITOR MTG. BRKT. ASSY. (2 REQ'D.) |
| | 0017-00101-0642 | #8-32 x 1-1/2 CARRIAGE BOLT (4 REQ'D.) |
| | 0017-00104-0031 | #8 FLAT WASHER (4 REQ'D.) |
| | 0017-00103-0061 | #8-32 HEX NUT W/SEMS (4 REQ'D.) |
| 3 | A889-00017-0000 | LATCH SLIDE ASSY. (TABLE TOP PROP) |
| 4 | 0017-00009-0495 | 2" HINGE (2 REQ'D.) |
| | 0017-00101-0639 | #8-32 x 1-1/4 CARRIAGE BOLT (8 REQ'D.) |
| | 0017-00103-0061 | #8-32 HEX NUT W/SEMS (8 REQ'D.) |
| 5 | 0927-00100-00XF | CONTROL PANEL (2 REQ'D.) |
| 6 | 0936-00900-0000 | DECORATIVE OVERLAY - PLAYER #2 |
| 7 | 0936-00901-0000 | DECORATIVE OVERLAY - PLAYER #1 |
| | 0017-00101-0620 | #8-32 x 1/2 CARRIAGE BOLT (4 REQ'D. EACH FOR PLAYER #1 & #2) |
| | 0017-00104-0022 | #8 FLAT WASHER (4 REQ'D. EACH FOR PLAYER #1 & #2) |
| | 0017-00103-0061 | #8-32 HEX NUT W/SEMS (4 REQ'D. EACH FOR PLAYER #1 & #2) |
| | 0017-00101-0341 | #6 x 1/4 PHIL. TRS. HD. SCR. (2 REQ'D. EACH FOR PLAYER #1 & #2) |
| 8 | A932-00008-0000 | CONTROL ASSY. (2 REQ'D.) |
| 9 | 0017-00032-0051 | SMALL RED SWITCH BUTTON (2 REQ'D.) - (PLAYER #1 SIDE ONLY) |
| 10 | A855-00016-0000 | PUSH BUTTON ASSY. (2 REQ'D.) |
| 11 | A935-00008-0000 | CARD RACK ASSY. |
| 12 | A936-00011-0000 | TRANSFORMER BOARD ASSY. |
| 13 | A084-90414-C935 | POWER SUPPLY ASSY. |
| | 0624-00902-0100 | P.C. SUPPORT BRKT. - 12" (3 REQ'D.) |
| | 0017-00101-0017 | #6 x 1/2 SLT. HEX HD. SCR. (9 REQ'D.) |
| | 0017-00104-0031 | STL. WASHER (9 REQ'D.) |
| 14 | 0017-00032-0083 | ON/OFF SWITCH 120V, 6A. |
| | 0567-00106-0100 | ON/OFF SWITCH MTG. PLATE |
| 15 | 0017-00003-0187 | 6" x 9" SPEAKER 8 OHM, 9W. |
| 16 | A775-00013-0000 | FAN ASSY. (NEXT 7 PART NO'S) |
| | 0017-00003-0222 | FAN |
| | 0775-00110-00XF | FAN PLATE |
| | 0870-00100-00XF | VENT SCREEN |
| | 0017-00101-0347 | #6-32 x 1/2 PHIL. R.H.M.S. SEMS (4 REQ'D.) |
| | 0017-00104-0009 | #6 EXT. WASHER (4 REQ'D.) |
| | 0017-00103-0005 | #6-32 HEX NUT (4 REQ'D.) |
| | 0017-00101-0026 | #8 x 5/8 SLOT. HEX HD. S.M.S. (4 REQ'D.) |

NO. 936 — RALLY-X COCKTAIL — CONTROL SHELF ASSEMBLY

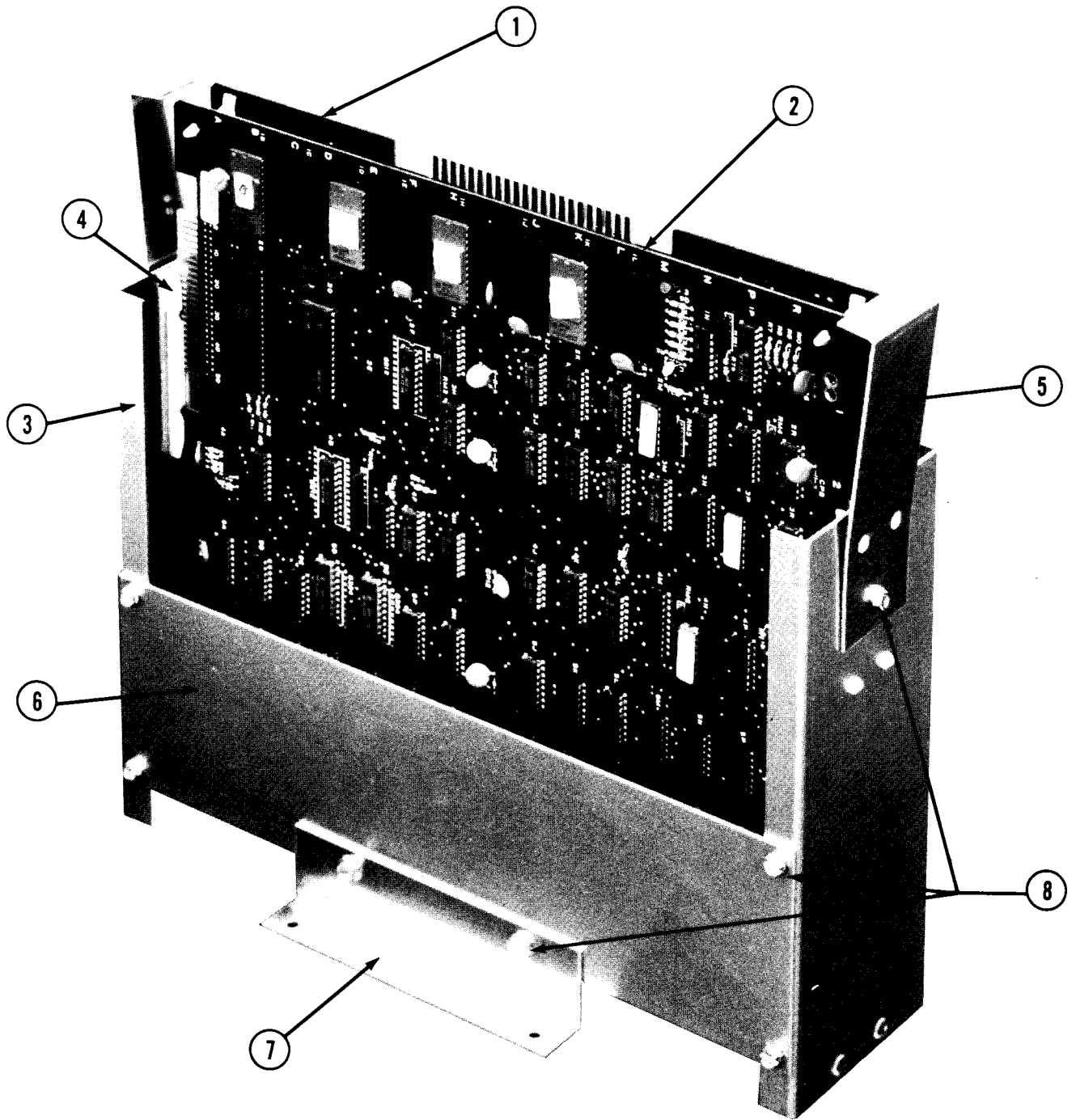


NO. 936 — RALLY-X COCKTAIL — CONTROL SHELF ASSEMBLY

ORDER BY PART NUMBER ONLY

| ITEM | PART N ^o | DESCRIPTION |
|------|---------------------|--|
| 1 | 0927-00100-00XF | CONTROL PANEL |
| 2 | A932-00008-0000 | CONTROL ASSEMBLY - SEE SEPERATE DETAIL |
| 3 | A855-00016-0000 | PUSH BUTTON ASSY. -SEE SEPERATE DETAIL |
| 4 | 0017-00031-0044 | WEDGE BASE LAMP SOCKET |
| | | (2 REQ'D. PER CONTROL) |
| | 0017-00101-0555 | #6-32 x 5/16 SLT. HEX HD. SCR. |
| | | (2 REQ'D. PER CONTROL) |
| 5 | 0017-00003-0219 | #194 WEDGE LAMP 14V., .27A. |
| | | (2 REQ'D. PER CONTROL) |
| 6 | 0921-00903-0000 | LIGHT SHIELD |
| 7 | A936-00006-0000 | CONTROL SHELF CABLE ASSY. - PLAYER #1 |
| | A936-00007-0000 | CONTROL SHELF CABLE ASSY. - PLAYER #2 |

RALLY-X — CARD RACK ASSEMBLY

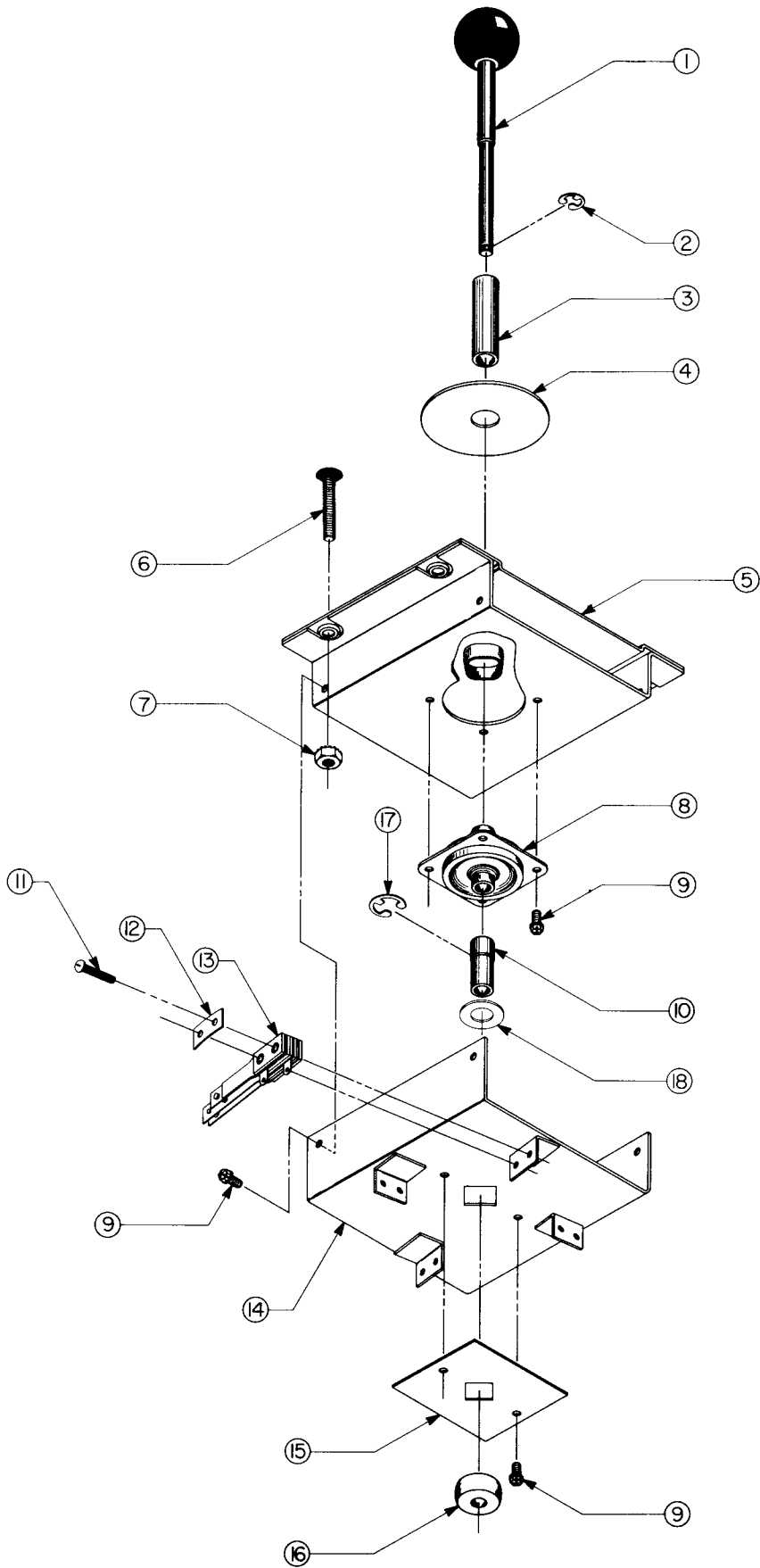


RALLY-X — CARD RACK ASSEMBLY

ORDER BY PART NUMBER ONLY

| ITEM | PART NO | DESCRIPTION |
|------|-----------------|--|
| 1 | A082-91385-C000 | GAME LOGIC BOARD ASSY. - BOARD #1 |
| 2 | A082-91387-C000 | GAME LOGIC BOARD ASSY. - BOARD #2 |
| 3 | A935-00015-0000 | HOLDER PLATE & STOP ASSY. (2 REQ'D.) |
| 4 | 0017-00009-0478 | NYLON GUIDE (4 REQ'D.) |
| 5 | 0935-00105-0000 | RETAINER (2 REQ'D.) |
| 6 | 0935-00103-0000 | SIDE SUPPORT (2 REQ'D.) |
| 7 | 0935-00102-0000 | MOUNTING BRACKET (2 REQ'D.) |
| 8 | 0017-00101-0096 | #6 x 3/8 SLT. HEX HD. SCR. (14 REQ'D.) |

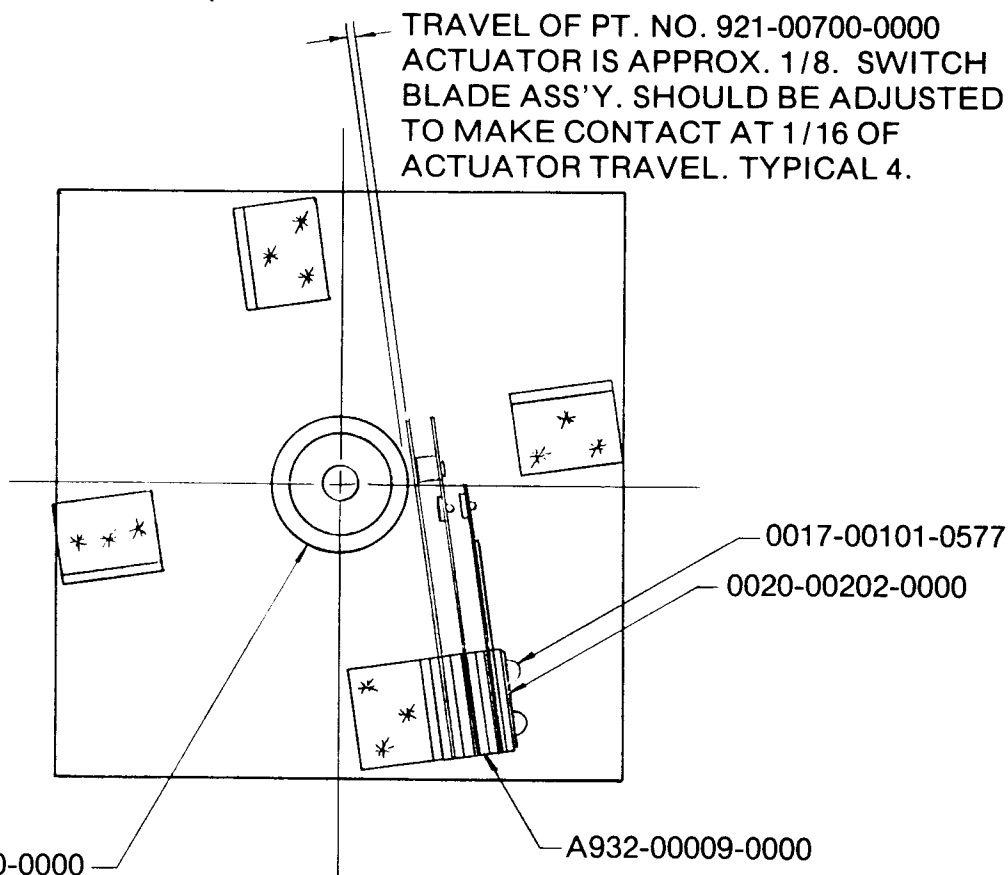
RALLY-X — CONTROL ASSEMBLY



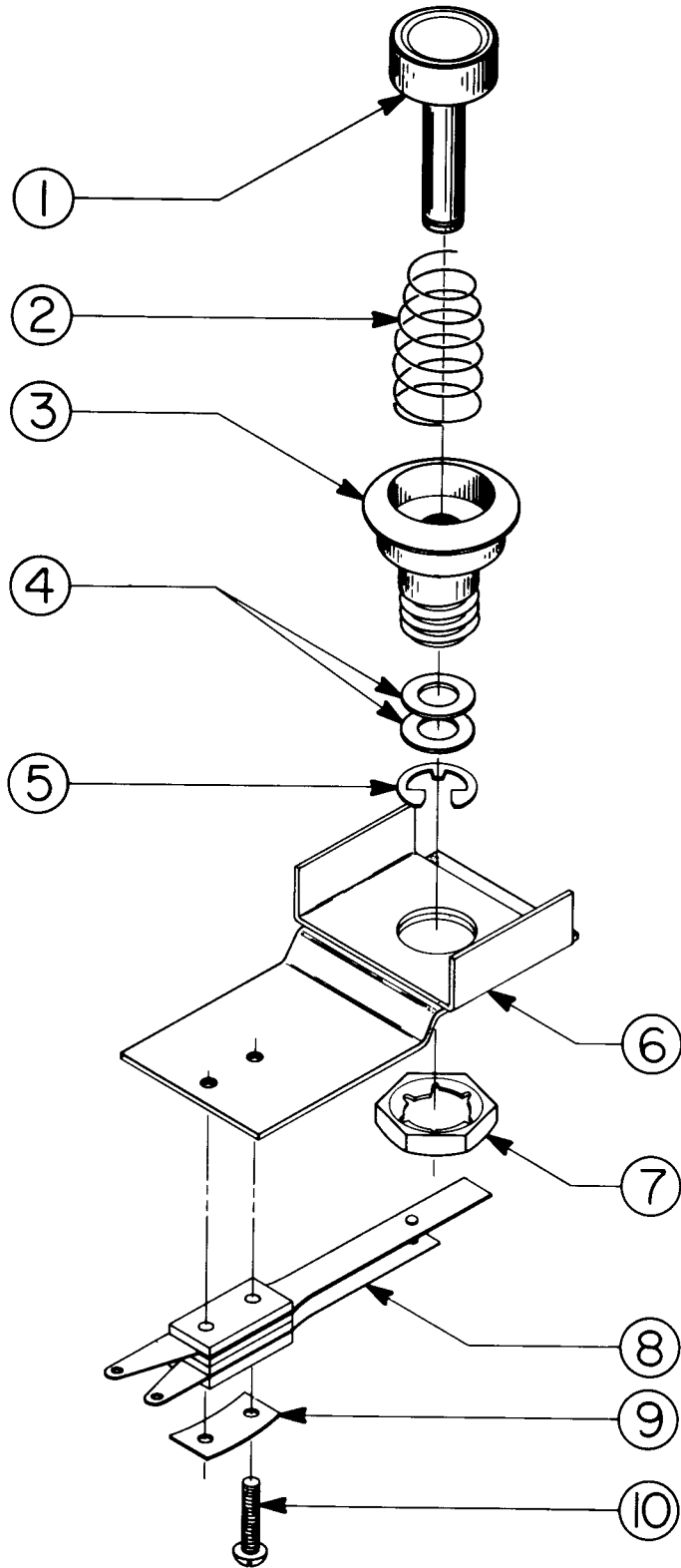
RALLY-X — CONTROL ASSEMBLY

ORDER BY PART NUMBER ONLY

| ITEM | PART N ^o | DESCRIPTION |
|------|---------------------|--|
| 1 | A932-00022-0000 | SHAFT & BALL ASSY. |
| 2 | 0017-00100-0025 | 1/4" E-RING |
| 3 | 0921-00702-0000 | STOP SPACER |
| 4 | 0921-00902-0000 | SLIDE PLATE |
| 5 | A932-00011-00XF | SPOT WELD ASSY. |
| 6 | 0017-00101-0713 | #8-32 x 1" SLT. FLAT HD. SCREW (4 REQ'D.) |
| 7 | 0017-00103-0061 | #8-32 HEX NUT W/SEMS (4 REQ'D.) |
| 8 | 0932-00902-0000 | GROMMET |
| 9 | 0017-00101-0598 | #8-32 x 5/16 SLT. HEX HD. M.S. (10 REQ'D.) |
| 10 | 0921-00701-0000 | SLEEVE |
| 11 | 0017-00101-0528 | #5-40 x 3/4 SLT. RND. HD. SCR. (8 REQ'D.) |
| 12 | 0020-00202-0000 | SWITCH PLATE (4 REQ'D.) |
| 13 | A932-00009-0000 | SWITCH ASSEMBLY (4 REQ'D.) |
| 14 | A932-00012-00XF | STOP PLATE & SWITCH BRKT. ASSY. |
| 15 | 0932-00904-0000 | WEAR PLATE |
| 16 | 0921-00700-0000 | ACTUATOR |
| 17 | 0017-00100-0115 | 7/16" E-RING |
| 18 | 0017-00104-0111 | NYLON FLAT WASHER |



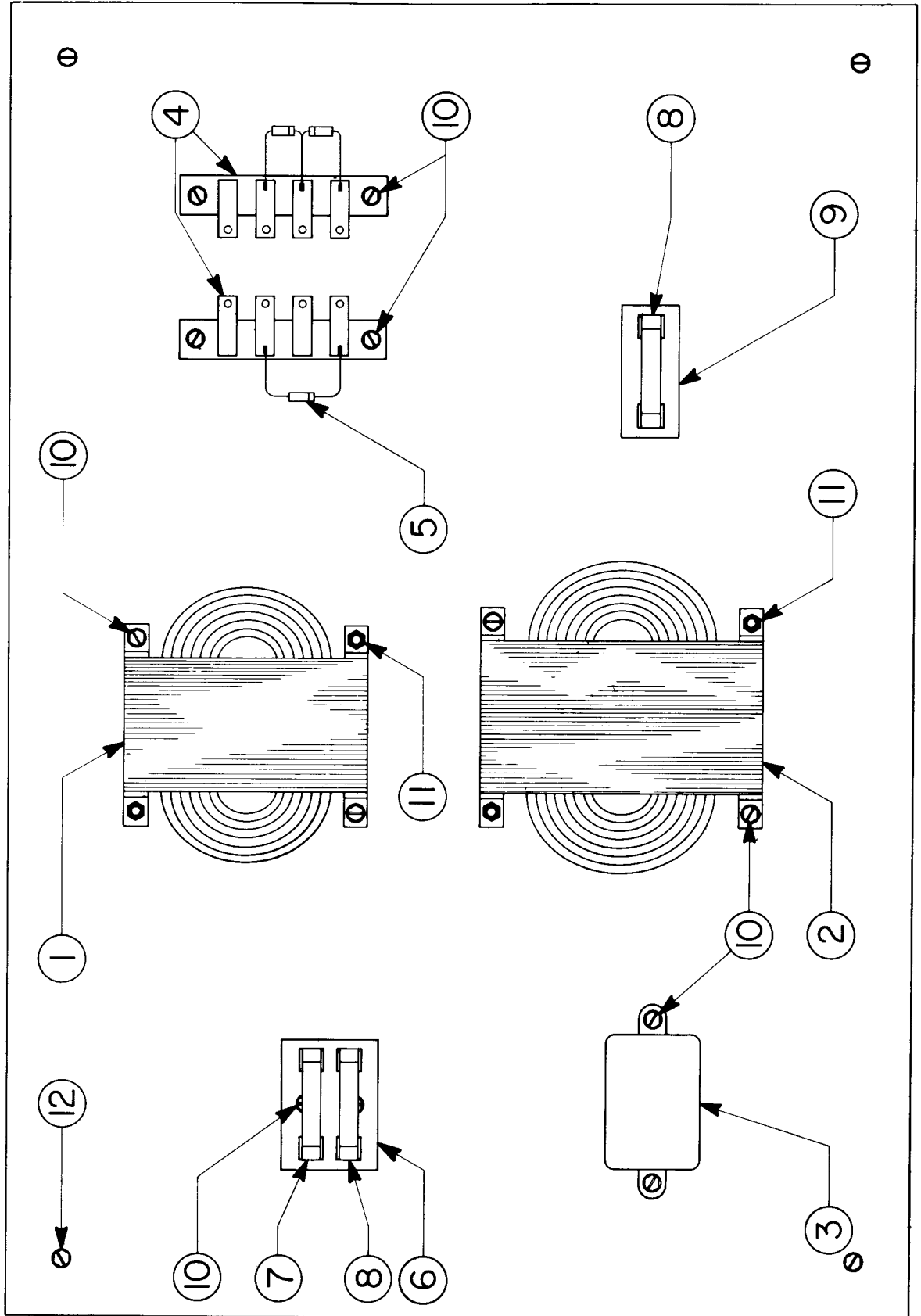
RALLY-X — PUSH BUTTON ASSEMBLY



RALLY-X — PUSH BUTTON ASSEMBLY
ORDER BY PART NUMBER ONLY

| ITEM | PART N ^o | DESCRIPTION |
|------|---------------------|--|
| 1 | 0017-00009-B384 | BUTTON - RED |
| 2 | 0010-00242-0000 | SPRING |
| 3 | 0017-00009-0376 | BUTTON HOUSING |
| 4 | 0017-00104-0028 | FLAT WASHER (2 REQ'D.) |
| 5 | 0017-00100-0025 | 1/4" E-RING |
| | A855-00016-0000 | PUSH BUTTON ASSY. (FIRST 5 ITEMS) |
| 6 | A927-00011-0000 | MOUNTING BRKT. ASSY. - (COCKTAIL) |
| 6 | 0586-00107-0000 | MOUNTING BRKT. - (UPRIGHT & MINI ONLY) |
| 7 | 0017-00103-0054 | PAL NUT |
| 8 | A739-00016-0000 | SWITCH ASSEMBLY |
| 9 | 0020-00202-0000 | SWITCH PLATE |
| 10 | 0017-00101-0526 | #5-40 x 9/16 PHIL. HD. M.S. (2 REQ'D.) |

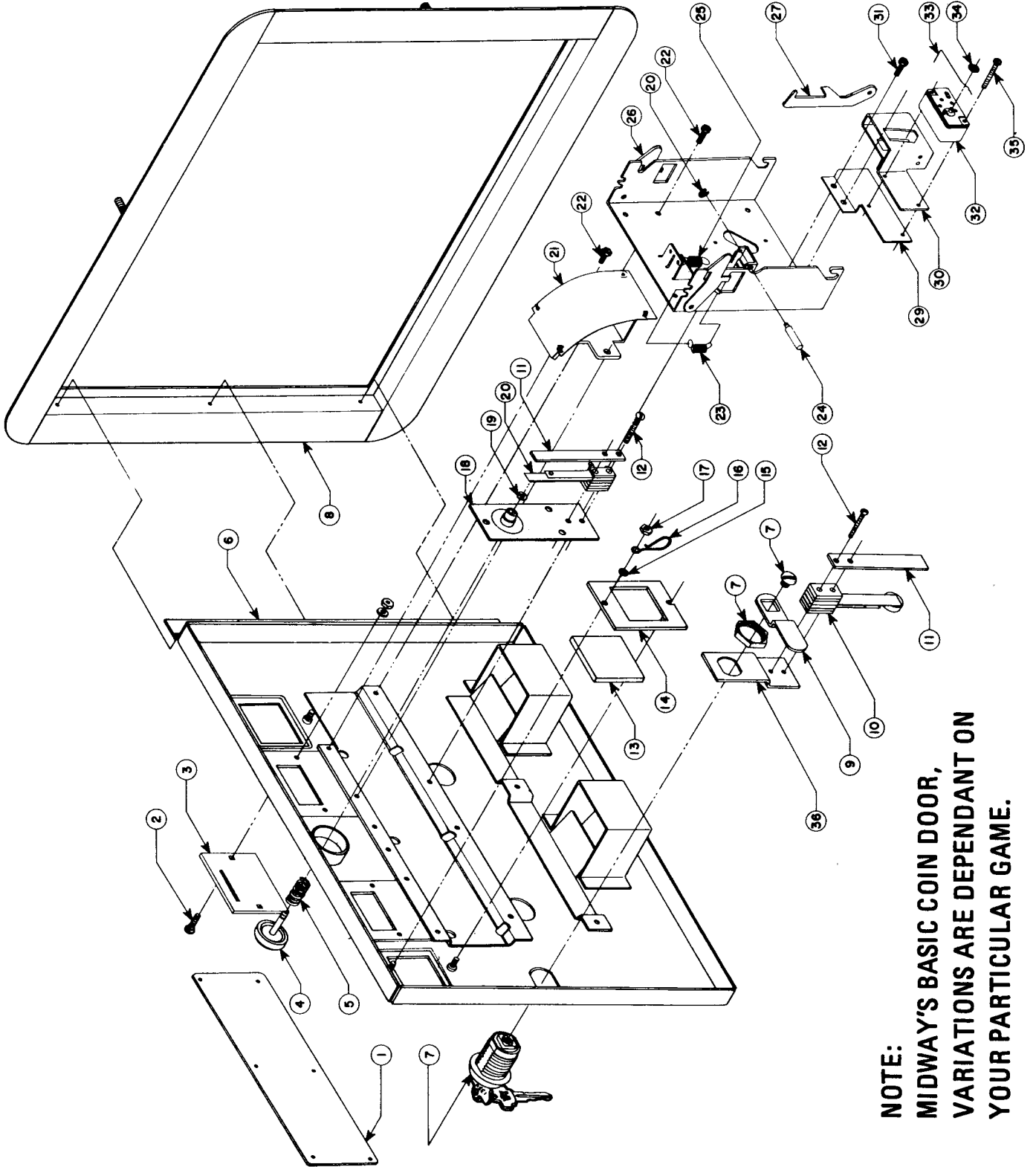
RALLY-X — TRANSFORMER BOARD ASSEMBLY



RALLY-X — TRANSFORMER BOARD ASSEMBLY
ORDER BY PART NUMBER ONLY

| ITEM | PART N ^o | DESCRIPTION |
|------|---------------------|--|
| 1 | MT00-00082-0000 | TRANSFORMER 115 VOLT |
| 2 | MT00-00087-0000 | TRANSFORMER 240 VOLT |
| 3 | 0017-00003-0114 | NOISE FILTER |
| 4 | A031-00002-0000 | TERMINAL STRIP ASSY. (2 REQ'D.) |
| 5 | 0064-030XX-XXPX | DIODE IN4004 400V. (3 REQ'D.) |
| 6 | 0720-00001-0200 | 2 POSITION FUSE CLIP |
| 8 | 0017-00003-0103 | FUSE 1A., 250V. SLO-BLO |
| 8 | 0017-00003-0004 | FUSE 2A., 250V. SLO-BLO (2 REQ'D.) |
| 9 | 0720-00001-0100 | 1 POSITION FUSE CLIP |
| 10 | 0017-00101-0015 | #6 x 1-1/2 SLT. HEX HD. SCR. (16 REQ'D.) |
| 11 | 0017-00101-0637 | #8-32 x 1-1/4 CARRIAGE BOLT (4 REQ'D.) |
| | 0017-00103-0008 | #8-32 HEX NUT (4 REQ'D.) |
| 12 | 0017-00101-0018 | #6 x 3/4 SLT. HEX HD. SCR. (4 REQ'D.) |
| | A866-00049-0000 | LINE CORD ASSY. - NOT SHOWN |
| | 3000-04271-0000 | GROUND STRAP - NOT SHOWN |

NO. 935 & 937 — RALLY-X UPRIGHT & MINI — FRONT DOOR ASSEMBLY



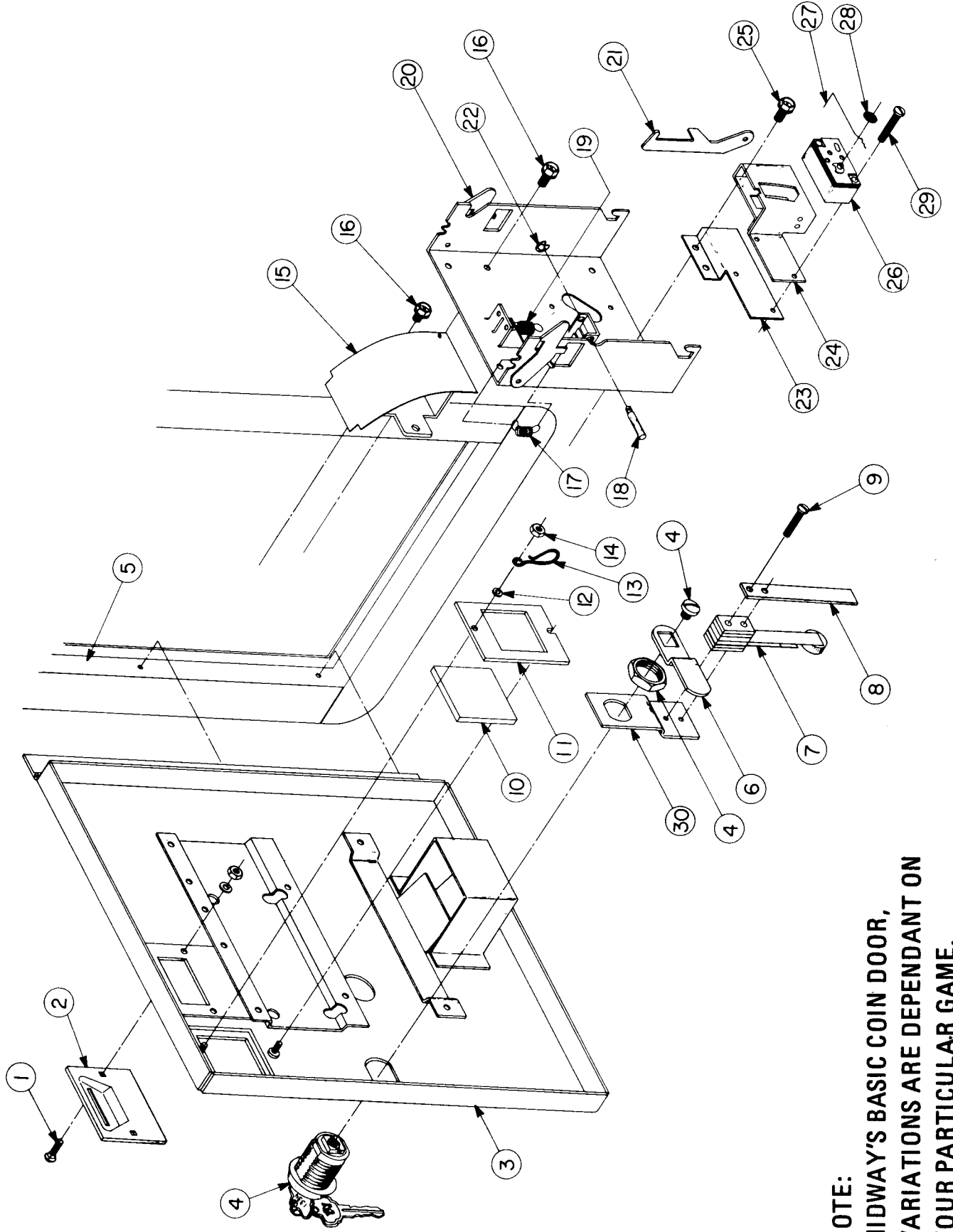
**NOTE:
MIDWAY'S BASIC COIN DOOR,
VARIATIONS ARE DEPENDANT ON
YOUR PARTICULAR GAME.**

NO. 935 & 937 — RALLY-X UPRIGHT & MINI — FRONT DOOR ASSEMBLY

ORDER BY PART NUMBER ONLY

| ITEM | PART NO | DESCRIPTION |
|------|-----------------|--|
| 1 | 0090-00902-0000 | DRESS PLATE |
| | 0090-00902-0100 | DRESS PLATE W/O BUTTON TO START GAME |
| 2 | 0017-00101-0552 | #6-32 x 1/4 CARRIAGE BOLT (2) |
| 3 | 0090-00117-03XF | COIN ENTRY PLATE (25¢) |
| 4 | 0090-00906-0000 | PLASTIC START BUTTON |
| 5 | 0010-00007-0000 | COMPRESSION SPRING |
| 6 | A090-00020-2003 | DOOR ASSY. DOUBLE ENTRY |
| 7 | 0017-00005-0050 | DOOR LOCK & KEY WITH SCREW & NUT |
| 8 | 0090-00002-02BK | DOUBLE DOOR FRAME |
| 9 | 0017-00005-0041 | 421 N.S. CAM |
| 10 | 0090-00901-0000 | DOOR SWITCH |
| | 0090-00126-01XF | SWITCH BACKUP PLATE |
| 12 | 0017-00101-0528 | #5-40 x 3/4" LNG. M.S. |
| 13 | 0090-00903-9500 | 25¢ WINDOW |
| 14 | 0090-00143-0000 | COIN PLEX RETAINER |
| 15 | 0017-00104-0002 | SPLIT LOCK WASHER |
| 16 | 0017-00007-0019 | KEY HOOK |
| 17 | 0017-00103-0005 | #6-32 HEX NUT |
| 18 | 0090-00010-0000 | SW. PLATE & OILLITE ASSY. |
| 19 | 0017-00100-0018 | "E" RING |
| 20 | 0090-00131-0000 | SWITCH |
| 21 | 0090-00104-0000 | TOP & BTM. COIN CHUTE W/BRKT. ASSY. |
| 22 | 0017-00101-0598 | #8 x 5/16 SCREW |
| 23 | 0010-00181-0100 | SPRING |
| 24 | 0090-00129-00XF | PIVOT POST |
| 25 | 0010-00134-0000 | SPRING |
| 26 | 0090-00008-0000 | ACCEPTOR FRAME ASSY. |
| 27 | 0093-00155-00XF | REJECTOR LEVER |
| 28 | 0017-00100-0012 | "E" RING |
| 29 | 0090-00162-00XF | COIN SWITCH MTG. BRKT. - SMALL (AMERICAN) |
| 29 | 0090-00163-00XF | COIN SWITCH MTG. BRKT. - LARGE |
| 30 | 0017-00005-0203 | COIN SWITCH CHUTE - SMALL (AMERICAN) |
| 30 | 0017-00005-0204 | COIN SWITCH CHUTE - LARGE |
| 31 | 0017-00101-0555 | #6-32 x 5/16 SCREW |
| 32 | 0017-00005-0195 | COIN SWITCH |
| 33 | 0010-00599-0000 | COIN SWITCH WIRE |
| 34 | 0017-00007-0132 | PUSH-ON RING (BLK.) |
| 35 | 0017-00101-0698 | #4-40 x 3/4 SCREW (2 REQ'D.) |
| 36 | 0090-00128-00XF | SWITCH BRKT. - DOOR TILT |
| | A090-00061-0000 | ANTI-STRING DEVICE ASSY. (REPLACES ITEM 30) |
| | A090-00064-0000 | ANTI-PENNY DEVICE ASSY. |

NO. 936 — RALLY-X COCKTAIL — FRONT DOOR ASSEMBLY

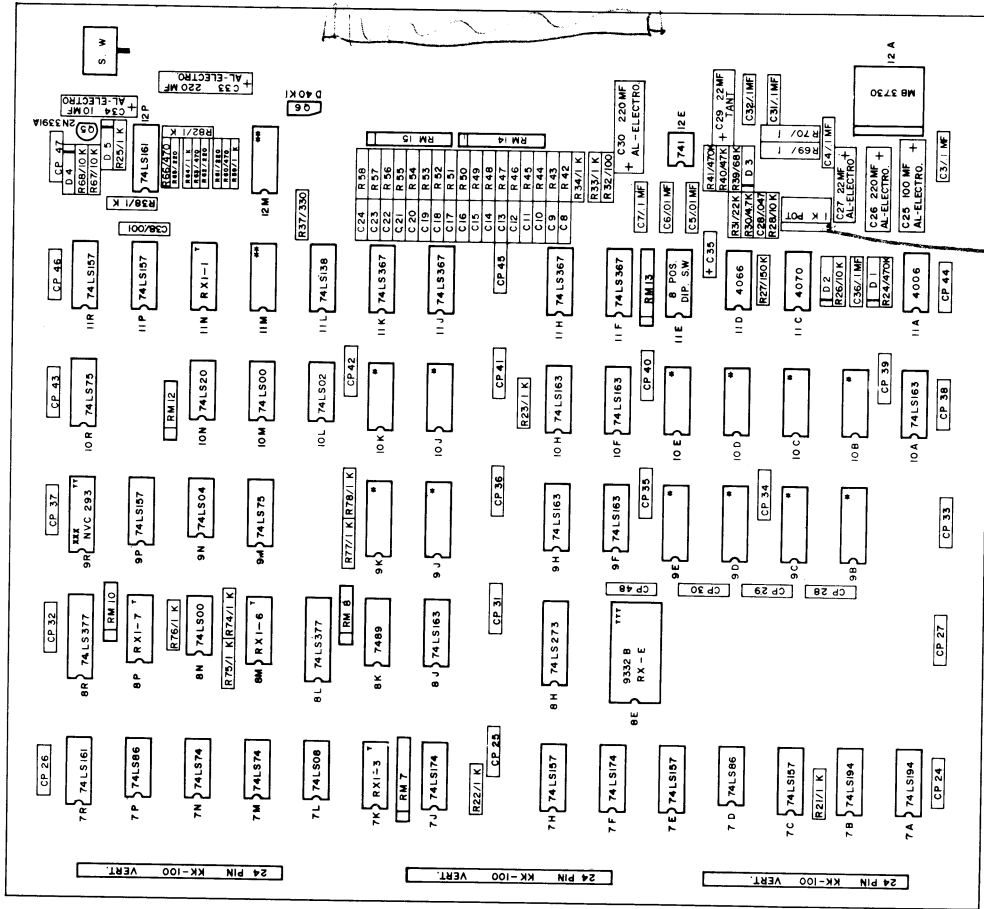


**NOTE:
MIDWAY'S BASIC COIN DOOR,
VARIATIONS ARE DEPENDANT ON
YOUR PARTICULAR GAME.**

NO. 936 — RALLY-X COCKTAIL — FRONT DOOR ASSEMBLY

ORDER BY PART NUMBER ONLY

| ITEM | PART N ^o | DESCRIPTION |
|------|---------------------|--|
| 1 | 0017-00101-0552 | #6-32 x 1/4 CARRIAGE BOLT (2 REQ'D.) |
| 2 | 0090-00117-03XF | COIN ENTRY PLATE (25¢) |
| 3 | A090-00058-0000 | DOOR ASSY. SINGLE ENTRY |
| 4 | 0017-00005-0050 | DOOR LOCK & KEY WITH SCREW & NUT |
| 5 | 0090-00002-01BK | SINGLE DOOR FRAME |
| 6 | 0017-00005-0041 | 421 N.S. CAM |
| 7 | 0090-00901-0000 | DOOR SWITCH |
| 8 | 0090-00126-01XF | SWITCH BACKUP PLATE |
| 9 | 0017-00101-0528 | #5-40 x 3/4 LONG M.S. (2 REQ'D.) |
| 10 | 0090-00903-9500 | 25¢ WINDOW |
| 11 | 0090-00143-0000 | COIN PLEX RETAINER |
| 12 | 0017-00104-0002 | SPLIT LOCK WASHER (2 REQ'D.) |
| 13 | 0017-00007-0019 | KEY HOOK |
| 14 | 0017-00103-0005 | #6-32 HEX NUT (2 REQ'D.) |
| 15 | 0090-00104-0000 | TOP & BOTTOM COIN CHUTE W/BRKT. ASSY. |
| 16 | 0017-00101-0598 | #8-32 x 5/16 SCREW (4 REQ'D.) |
| 17 | 0010-00181-0100 | SPRING |
| 18 | 0090-00129-00XF | PIVOT POST |
| 19 | 0010-00134-0000 | SPRING |
| 20 | 0090-00008-0000 | ACCEPTOR FRAME ASSY. |
| 21 | 0093-00155-00XF | REJECTOR LEVER |
| 22 | 0017-00100-0012 | E-RING |
| 23 | 0090-00162-00XF | COIN SWITCH MTG. BRKT. - SMALL (AMERICAN) |
| 23 | 0090-00163-00XF | COIN SWITCH MTG. BRKT. - LARGE |
| 24 | 0017-00005-0203 | COIN SWITCH CHUTE - SMALL (AMERICAN) |
| 24 | 0017-00005-0204 | COIN SWITCH CHUTE - LARGE |
| 25 | 0017-00101-0555 | #6-32 x 5/16 SCREW (2 REQ'D.) |
| 26 | 0017-00005-0195 | COIN SWITCH |
| 27 | 0010-00599-0000 | COIN SWITCH WIRE |
| 28 | 0017-00007-0132 | PUSH-ON RING (BLK.) |
| 29 | 0017-00101-0698 | #4-40 x 3/4 SCREW (2 REQ'D.) |
| 30 | 0090-00128-00XF | SWITCH BRKT. - DOOR TILT |
| | A090-00061-0000 | ANTI-STRING DEVICE ASSY. (REPLACES ITEM 24) |
| | A090-00064-0000 | ANTI-PENNY DEVICE ASSY. |



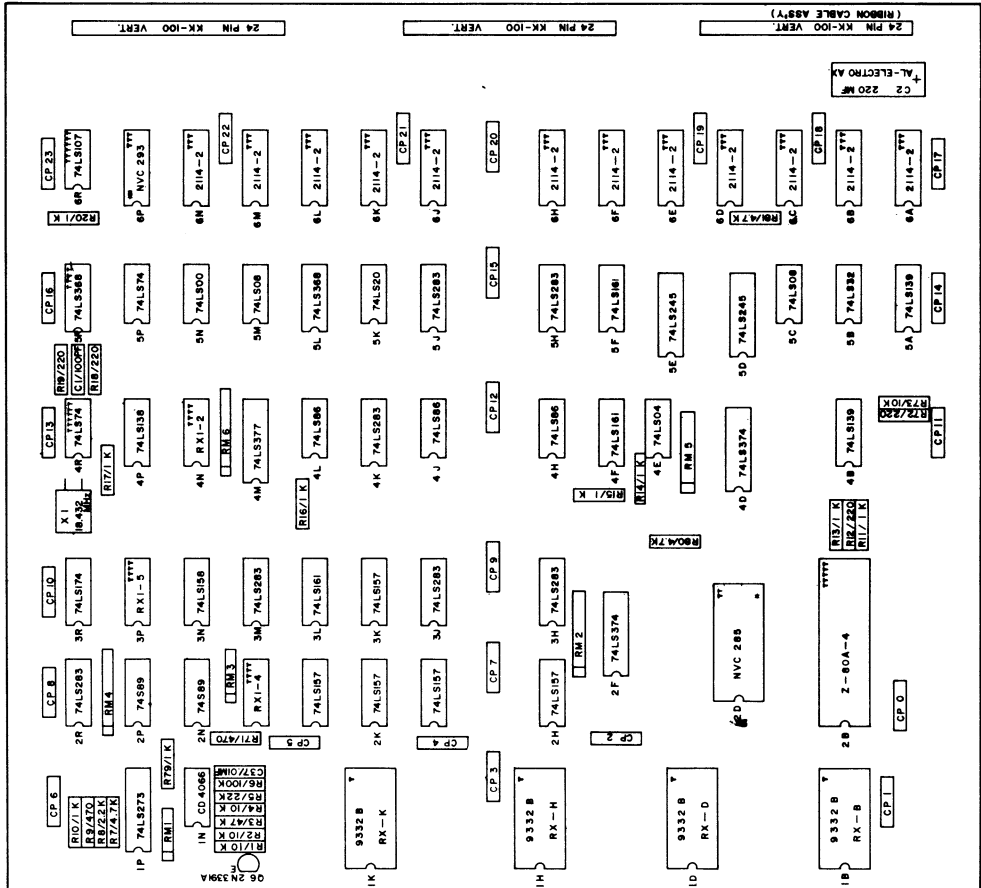
NOTE:
 K : W/HEATSINKS AS PER B.O.M.
 : PRIMARY - MBM2147H IN LOC. 9B, 9C, 9D, 9E, 9J, 9K
 SUB - MBM2147E IN LOC. 9B, 9C, 9D, 9E, 9J, 9K
 : PRIMARY - 93415 IN LOC. 10B, 10C, 10D, 10E, 10J, 10K
 SUB - 74LS259 IN LOC. 12M
 : PRIMARY - 74LS259 IN LOC. 12M
 SUB - CD 4099 IN LOC. 11M
 T : 16 PIN SOCKET (4 EA)
 TT : 18 PIN SOCKET (1 EA)
 TTT : 24 PIN SOCKET (1 EA)
 D1 - D5 : IN 914 B
 R42 - R58 : 220 Ohm
 R69, 70 : 1 Ohm 1/2 W
 C 4, 31, 32 : 1 MF DISC. CER.
 CP 24 - CP 48, C 8 - C 24 : 1 MF AX. CER.
 C 35 : 1 MF TANT
 RM 7, 13, 14, 15 : 1 K 9 OR 10 PIN SIP
 RM 8, 10, 12 : 1 K 6 PIN SIP
 UNIT UNMARKED CAPS ARE MF & ALL CAPS ARE AX. TYPE
 ALL RESISTOR UNIT Ohm
 C 5, 6 - MYLAR CAPS
 XXX : THIS LOCATION CAN UTILIZE EITHER
 (A) CUSTOM CHIP NYC 293
 OR (B) PLUG IN P. C. A082-91385-A000
 VIDEO SHIFTER (293)

USED ON RALLY - X
 NO REQ | PER
MIDWAY MFG. CO.
 FRANKLIN PA. U.S.A.
 PART NO. A082-91385-C000

REVISIONS
 SCALE
 HEAT TREAT
 FINISH
 ASS'Y DRAWING
 LOGIC BD I

M051-00935-C030
 DON'T SCALE DWG
 DIM TOLERANCES
 UNLESS SPECIFIED
 DECIMALS ±.015
 FRACTIONS ±.005
 HOLE DIA. ±.002
 DATE 1-9-81

CP 26, CP 32, CP 37, CP 43, CP 46, CP 47, CP 48, CP 29, CP 30, CP 31, CP 33, CP 34, CP 35, CP 36, CP 38, CP 39, CP 40, CP 41, CP 42, CP 44, CP 45, CP 49, CP 50, CP 51, CP 52, CP 53, CP 54, CP 55, CP 56, CP 57, CP 58, CP 59, CP 60, CP 61, CP 62, CP 63, CP 64, CP 65, CP 66, CP 67, CP 68, CP 69, CP 70, CP 71, CP 72, CP 73, CP 74, CP 75, CP 76, CP 77, CP 78, CP 79, CP 80, CP 81, CP 82, CP 83, CP 84, CP 85, CP 86, CP 87, CP 88, CP 89, CP 90, CP 91, CP 92, CP 93, CP 94, CP 95, CP 96, CP 97, CP 98, CP 99, CP 100



NOTE:

- T : 24 PIN SOCKET (4 EA)
- TT : 28 PIN SOCKET (1 EA)
- TTT : 18 PIN SOCKET (13 EA)
- TTTT : 16 PIN SOCKET (4 EA)
- TTTTT : 40 PIN SOCKET (1 EA)
- TTTTTT : 14 PIN SOCKET (2 EA)
- CP 0 - CP 23 : 1 MF AX. CER.
- RM 2, 4, 5, 6 : 1 K 9 OR 10 PIN SIP RESISTOR.
- RM 1, 3 : 1 K 6 PIN SIP RESISTOR.

ALL CER. CAPS ARE AX. TYPE.
RESISTOR UNIT : OHM

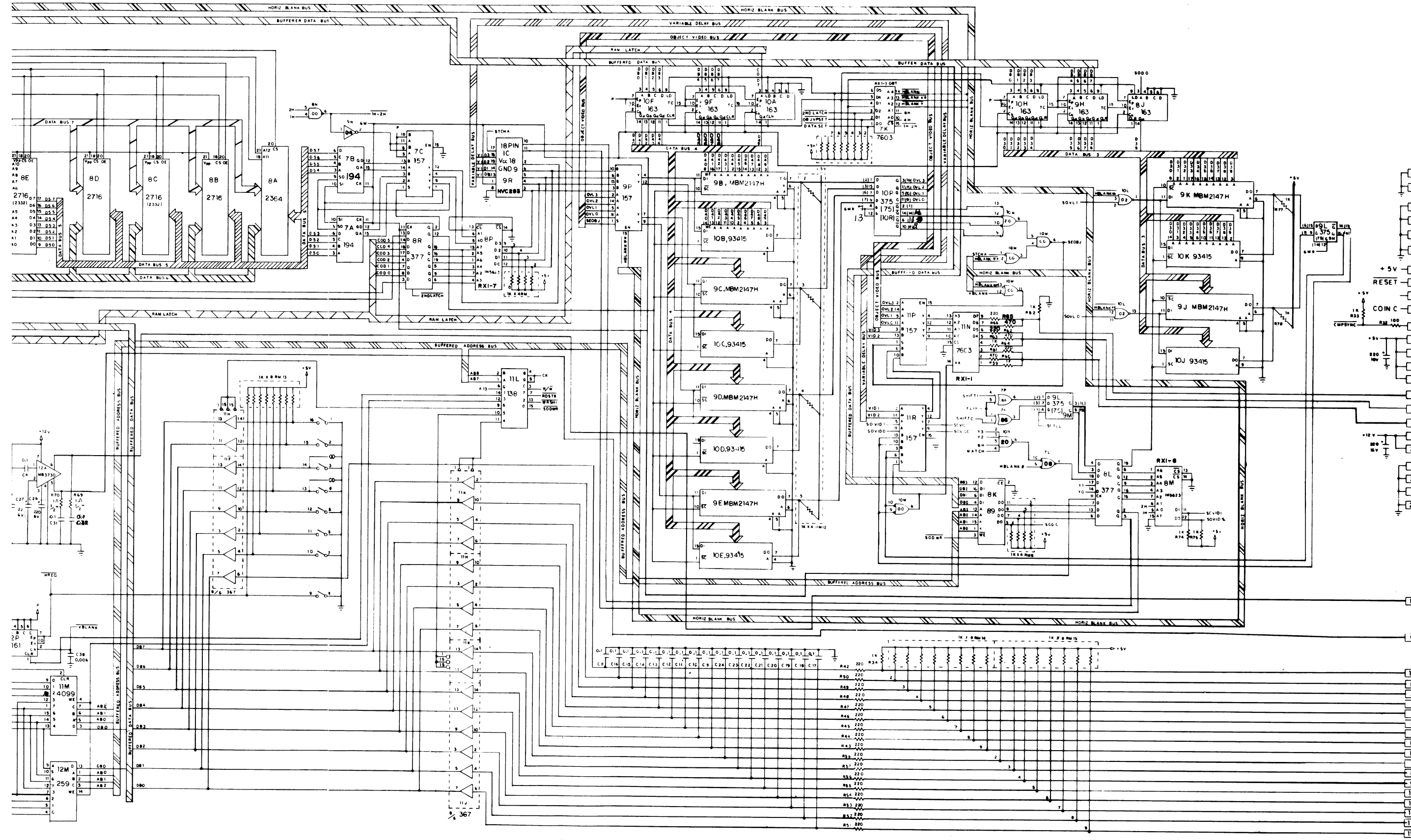
RICHO 3/4" STAND - OFF

* NOTE : THIS LOCATION CAN UTILIZE EITHER
(A) CUSTOM CHIP NYC 285
OR (B) PLUG IN P.C. A082-91387-8000
Z-80 SYNC BUSS CONTROLLER (285)

** NOTE : THIS LOCATION CAN UTILIZE EITHER
(A) CUSTOM CHIP NYC 283
OR (B) PLUG IN P.C. A082-91388-A000
VIDEO SHIFTER (283)

| | | | |
|------------------------------------|--|---------------------------------|--|
| REVISES | | USED ON RALLY-X | |
| NO. RECD | | PER | |
| MIDWAY MFG. CO. | | | |
| FRANKLIN PA. 4LL | | | |
| PART NO. | | A082-91387-C000 | |
| HEAT TREAT | | ASSY DRAWING | |
| SCALE | | LOGIC BD II | |
| DO NOT SCALE DIMS UNLESS SPECIFIED | | DIM TOLERANCES UNLESS SPECIFIED | |
| FINISH | | DATE 1-9-81 | |
| CONDUCTIVITY 1.18 - 480 | | ORIGINAL | |
| MATERIAL | | REV 1 | |

11 14



- T
- 16
- A
- 1
- B
- 2
- 5
- E
- F
- 6
- 18
- C
- 3
- D
- 4
- V
- 17
- U
- X
- 20
- Y
- 21
- Z
- 22

COMM. GND
MONITOR GND

C.T. GND
5 V

+ 5 V IN
FR. P.S.

BLUE GUN
GRN GUN
RED GUN

+ 12 V IN
FR. P.S.

C.T. GND
12 V

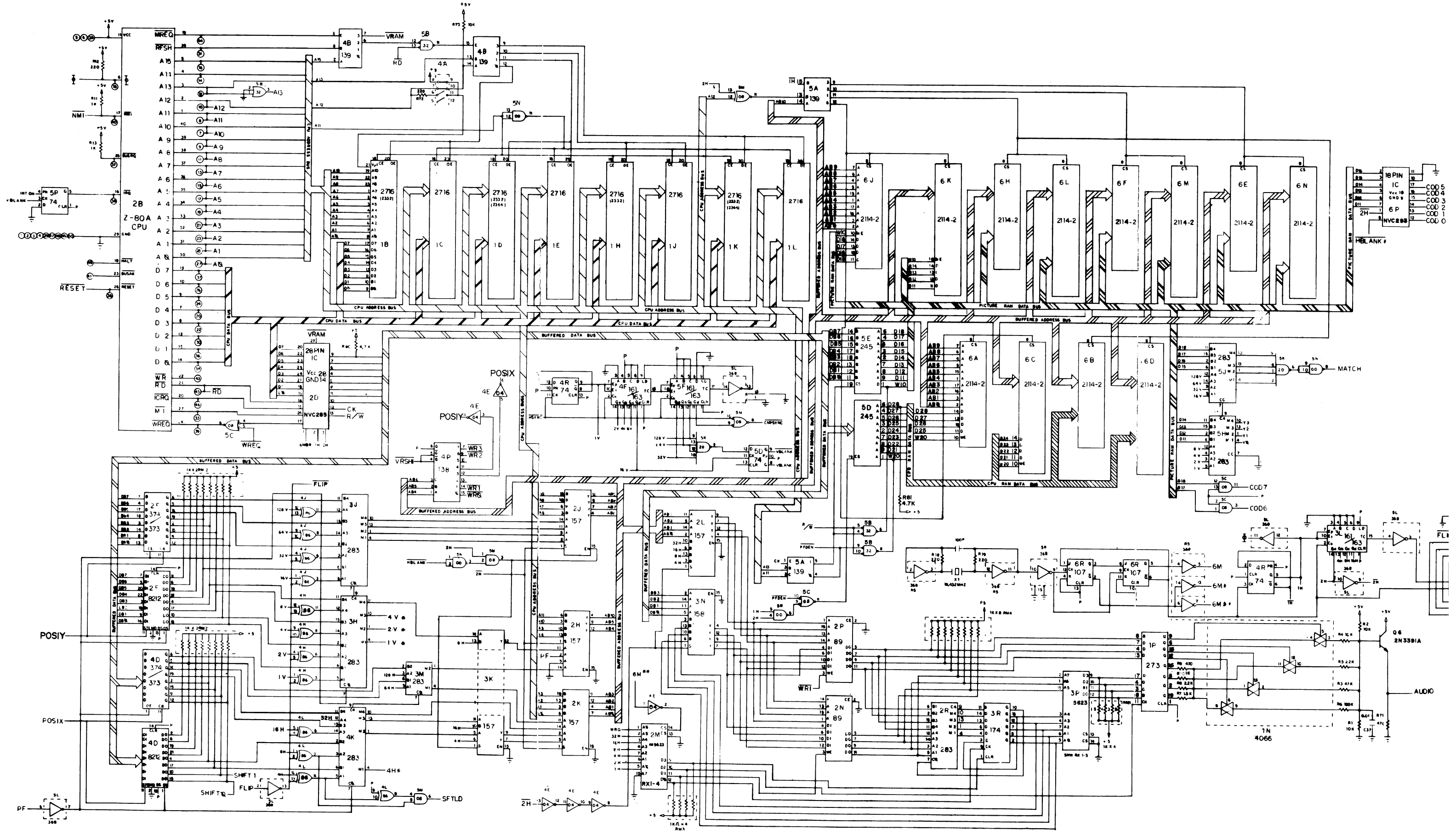
= LOGIC PINS
 = BOARD CONNECTION
 = PULL UP

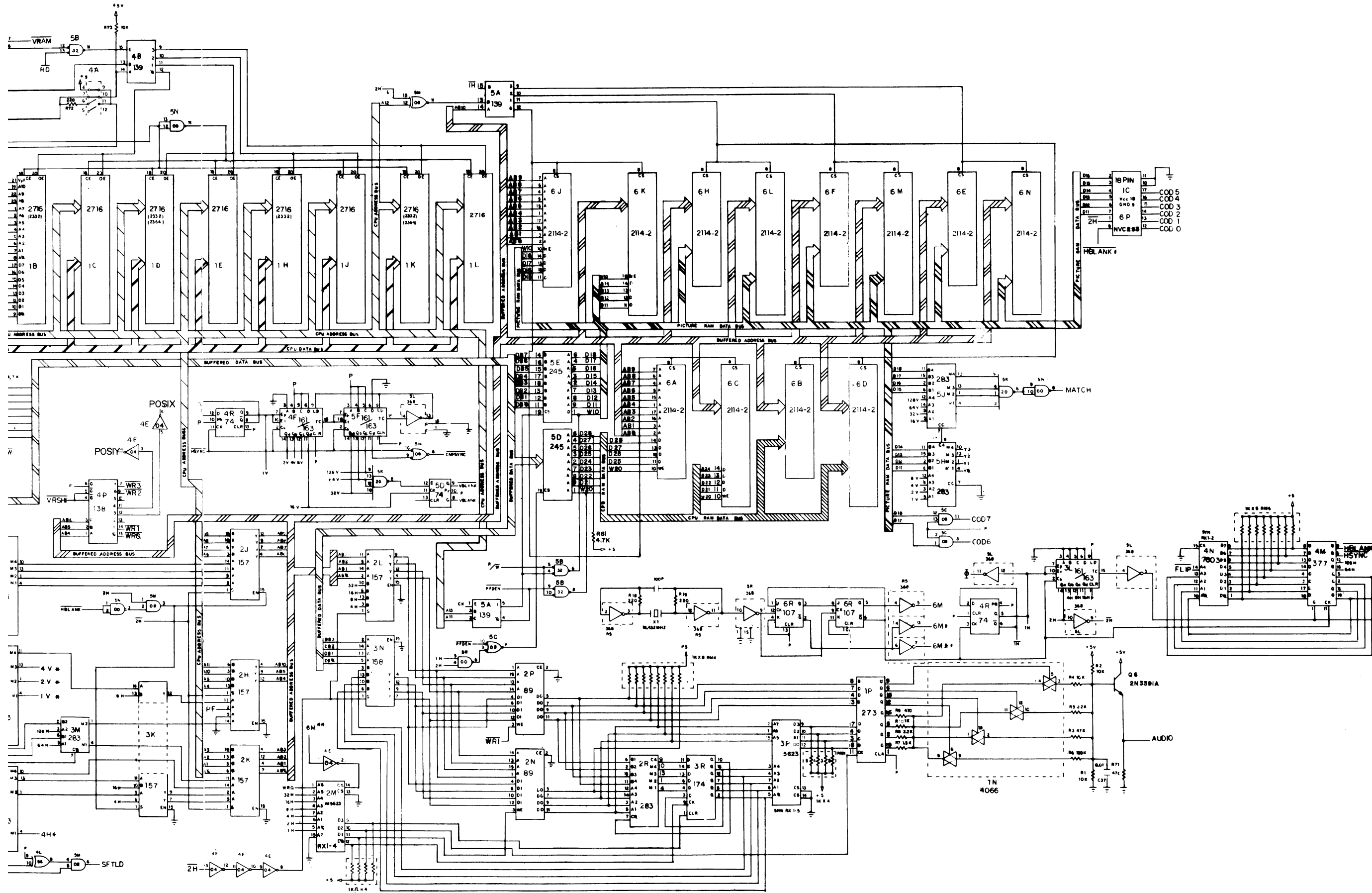
MIDWAY MFG. CO.
 FRANKLIN PARK, ILL.

REV. NO. CED
 DATE 1/8/70
 DESIGNED BY RALLY-X
 LOGIC SCHEMATIC PART NO. A082-91385-C000
 MOBI-00888-C028

- 14
- H
- J
- K
- L
- M
- N
- P
- R
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 15

TEST POS.
COIN S.W.
1 PLY SELECT
PI UP
PI DN
PI RT
PI LT
PI SMOKE
CREDIT S.W.
NC
2 PLY SELECT
P2 UP
P2 DN
P2 RT
P2 LT
P2 SMOKE
TO GND FOR C.T. ONLY





- 1 +5V
- 2 +5V
- 3 +5V
- 4 GND
- 5 GND
- 6 GND
- 7 GND
- 8 COD4
- 9 COD3
- 10 COD5
- 11 COD2
- 12 COD1
- 13 CODM
- 14 6M9
- 15 FLIP
- 16 SHFTO
- 17 SHFT1
- 18 SFTLD
- 19 RESET
- 20 HBLANK
- 21 1H
- 22 TC
- 23 6M
- 24 WRSH
- 25 INTON
- 26 AB7
- 27 AB8
- 28 AB9
- 29 CK
- 30 A13
- 31 AB1
- 32 AB2
- 33 HBLANK
- 34 ABC
- 35 AB3
- 36 Y2
- 37 Y3
- 38 Y1
- 39 Y0
- 40 MATCH
- 41 SOUND ON
- 42 VBLANK
- 43 DB4
- 44 DB7
- 45 DB6
- 46 DB5
- 47 4V
- 48 ROSTB
- 49 DB0
- 50 DB2
- 51 DB3
- 52 DB3
- 53 4H
- 54 4V
- 55 2V
- 56 1V
- 57 COD7
- 58 COD5
- 59 WRSH
- 60 CPMVNC
- 61 AUDIO
- 62 5H
- 63 GND
- 64 GND
- 65 GND
- 66 GND
- 67 GND
- 68 GND
- 69 GND
- 70 +5V
- 71 +5V
- 72 +5V

Y = BOARD CONNECTOR
 P = PULL UP

MIDWAY MFG. CO.
 FRANKLIN PARK, N.J.

DATE 1/8/81 NO. REQD 1
 USED ON RALLY-X

DESC.
 LOGIC LOGIC 02 II

PART NO.
 A082-9387-0000

LOGIC SCHEMATIC PART NO.
 M501-00855-C024

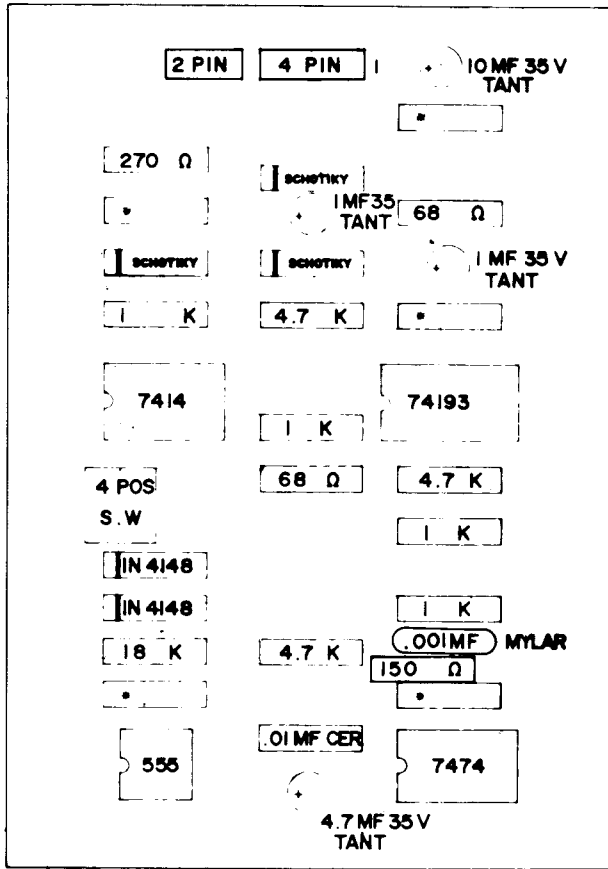
RALLY - X

Logic Board I A082-91385-C000

| PART NUMBER | FUNCTION |
|-----------------|--------------------------------|
| 74LS00 | Quad 2 input Nand |
| 74LS02 | Quad 2 input Nor |
| 74LS04 | Hex inverter |
| 74LS08 | Quad 2 input And |
| 74LS20 | Dual 4 input Nand |
| 74LS74 | Dual "D" Flip-Flop |
| 74LS75 | Quad latch |
| 74LS86 | Quad 2 input exclusive or |
| 74S89 | 64 Bit Ram 16 x 4 |
| 74LS138 | 3 to 8 line decoder |
| 74LS157 | Quad 2 to 1 line multiplexer |
| 74LS161 | 4 Bit binary counter |
| 74LS163 | 4 Bit binary counter |
| 74LS174 | Hex "D" Flip-Flop |
| 74LS194 | 8 Bit shift register |
| 74LS259 | 8 Bit addressable latch |
| 74LS273 | Octal "D" Flip-Flop |
| 74LS367 | Hex buss driver |
| 74LS377 | Octal "D" Flip-Flop |
| 4006 | 18 Bit shift register |
| 4066 | Quad bilateral switch - Cmos |
| 4070 | Quad exclusive or gate - Cmos |
| 4099 | 8 Bit addressable latch - Cmos |
| NVC293 | Custom video shifter |
| A082-91388-A000 | Video shifter P.C. |
| 9332 | 4K x 8 Rom |
| 2532 | 4K x 8 Eprom |
| 1M5623 | 256 x 4 Prom |
| MBM2147 | 1K x 1 Ram |
| 93415 | 1K x 1 Ram |
| 82S25 | 16 x 4 Ram |
| 7603 | 32 x 8 Prom - tri-state |
| 741 | Operational amplifier |
| MB3730 | Audio amplifier |
| 2N3391 | NPN transistor |
| D40K1 | NPN transistor |
| IN914 | Diode |

Logic Board II A082-91387-C000

| PART NUMBER | FUNCTION |
|-----------------|--|
| 74LS00 | Quad 2 input Nand |
| 74LS04 | Hex inverter |
| 74LS08 | Quad 2 input And |
| 74LS20 | Dual 4 input Nand |
| 74LS32 | Quad 2 input or |
| 74LS74 | Dual "D" Flip-Flop |
| 74LS86 | Quad 2 input exclusive or |
| 74S89 | 64 Bit Ram 16 x 4 |
| 74LS107 | Dual "JK" Flip-Flop |
| 74LS138 | 3 to 8 line decoder |
| 74LS139 | Dual 2 to 4 line decoder |
| 74LS157 | Quad 2 to 1 line multiplexer |
| 74LS158 | Quad 2 to 1 line multiplexer - inverting |
| 74LS161 | 4 Bit binary counter |
| 74LS174 | Hex "D" Flip-Flop |
| 74LS245 | Octal buss transceiver |
| 74LS273 | Octal "D" Flip-Flop |
| 74LS293 | 4 Bit full adder |
| 74LS368 | Hex buss driver - inverting |
| 74LS374 | Octal "D" Flip-Flop Tri-state |
| 74LS377 | Octal "D" Flip-Flop |
| NVC285 | Custom Z80 sync buss controller |
| A082-91383-B000 | Z80 sync buss controller P.C. |
| NVC293 | Custom video shifter |
| A082-91388-A000 | Video shifter P.C. |
| Z80 | CPU |
| 9332 | 4K x 8 Rom |
| 2532 | 4K x 8 Eprom |
| 1M5623 | 256 x 4 Prom |
| 7603 | 32 x 8 Prom - tri-state |
| 2114 | 1K x 4 Ram |
| 82S25 | 16 x 4 Ram |
| 4066 | Quad bilateral switch |
| 18.432 mhz | Crystal |
| 2N3391 | NPN transistor |



* 1 MF 50 V CER. AX.

SCHOTTKY DIODE -- IN5818 OR IN5817

M051-00932-C027

| | | | |
|--|--|--|--|
| | | | |
| | | | |
| | | | |
| | | | |

REVISIONS

MIDWAY MFG. CO.

FRANKLIN PK ILL

PART NO

A082-91348-C000

USED ON PAC-MAN

NO REQ'D

SCALE

ASSEMBLY DRAWING
CREDIT MULTIPLIER P.C

HEAT TREAT

MAT'L

FINISH

DO NOT SCALE DWG

DIM TOLERANCES UNLESS SPECIFIED

CONCENTRICITY TYP .003

FRACTIONAL DECIMAL .005

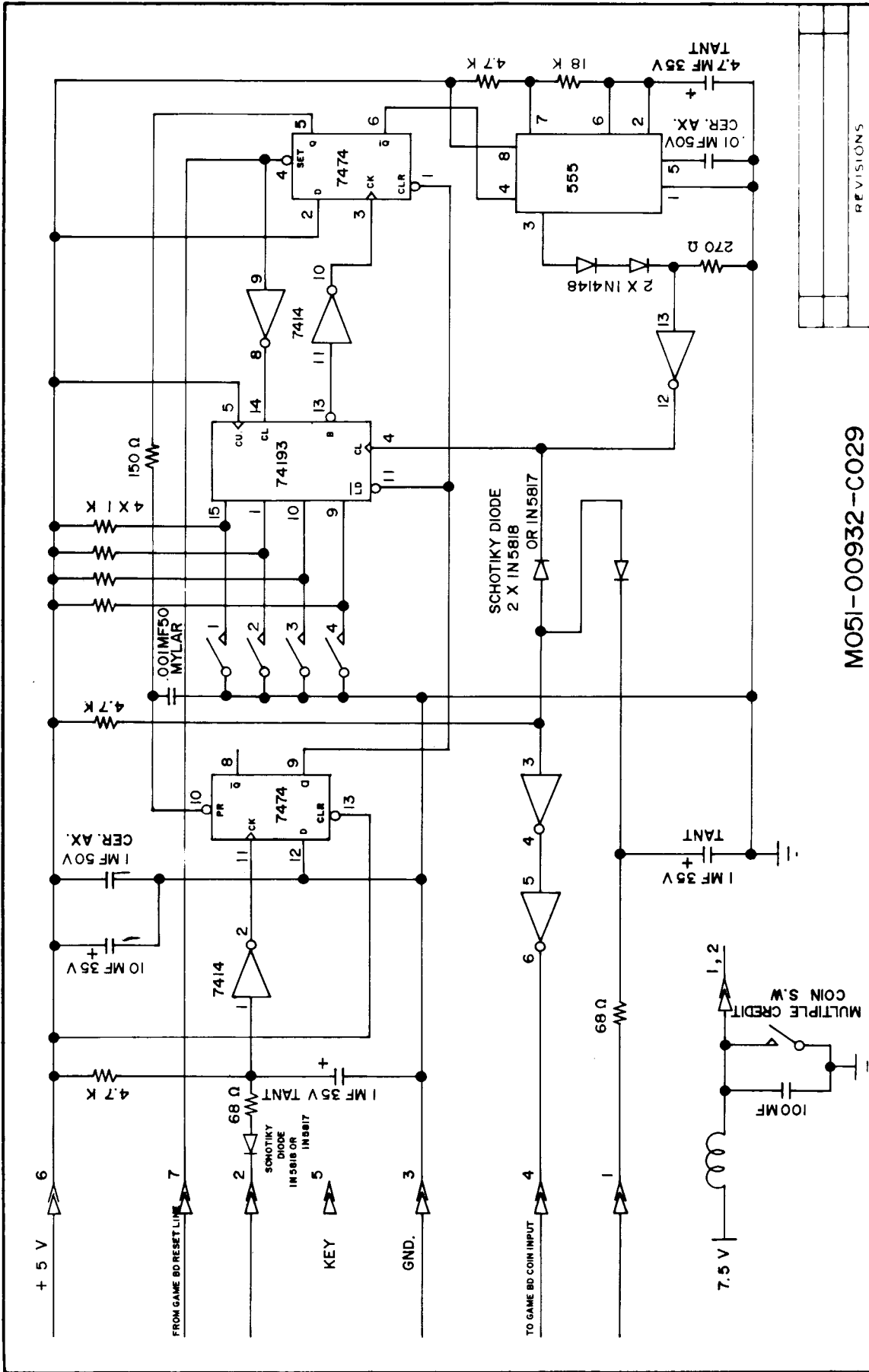
MOLE DIA + .002 .000

DRN *CY*

CHK

DATE

10/22/80

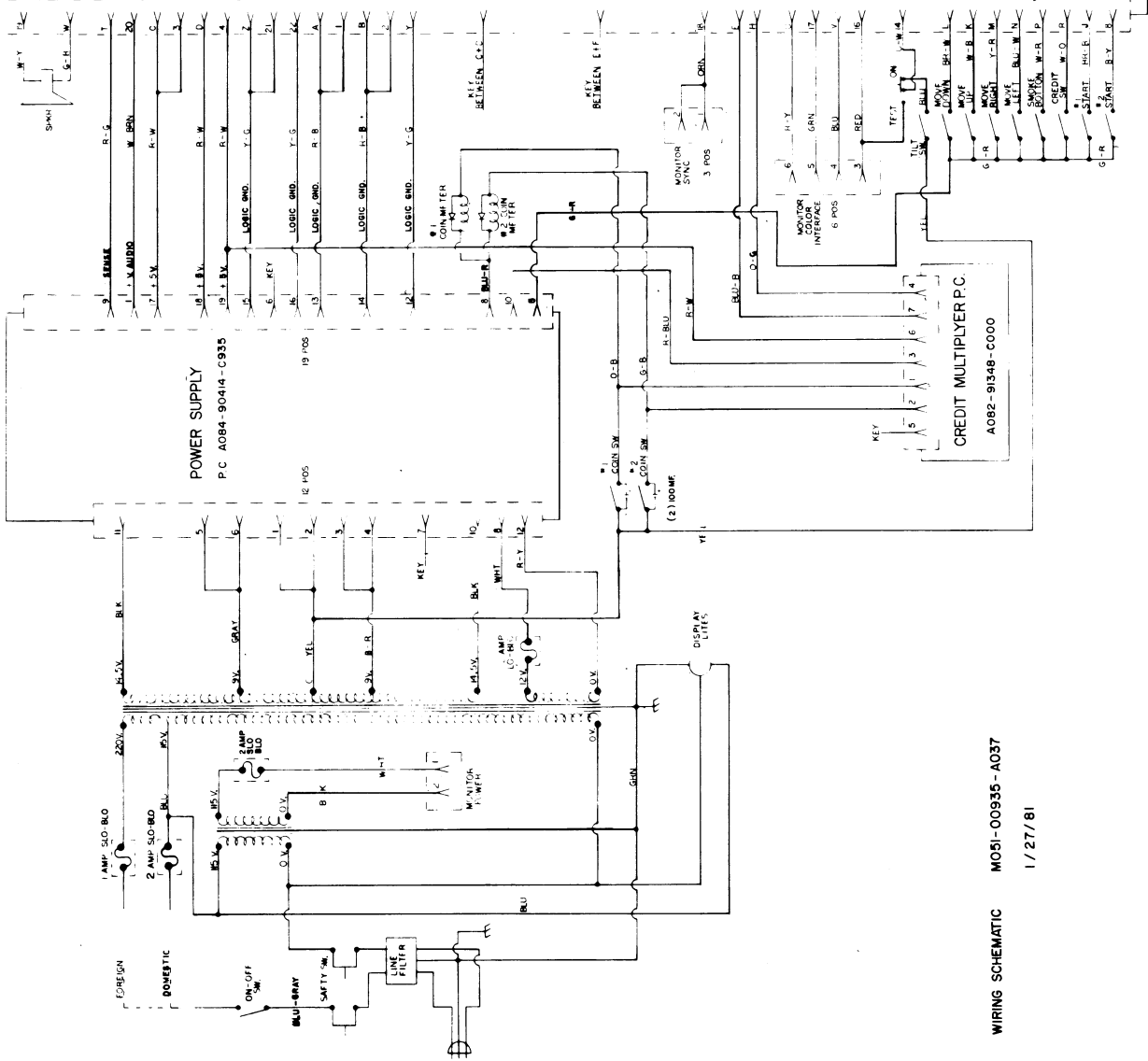


| | | | |
|---------------------------------|------------|---------------------|---------|
| REVISIONS | | MIDWAY MFG. CO. | |
| | | FRANKLIN PK ILL | |
| M051-00932-C029 | | USED ON | PAC-MAN |
| | | NO REQ D | |
| SCHEMATIC DIAGRAM | | PART NO | |
| CREDIT MULTIPLIER | | A082 - 91348 - C000 | |
| DO NOT SCALE DWG | HEAT TREAT | MATL | |
| DIM TOLERANCES UNLESS SPECIFIED | | | |
| DATE | 10/23/80 | | |

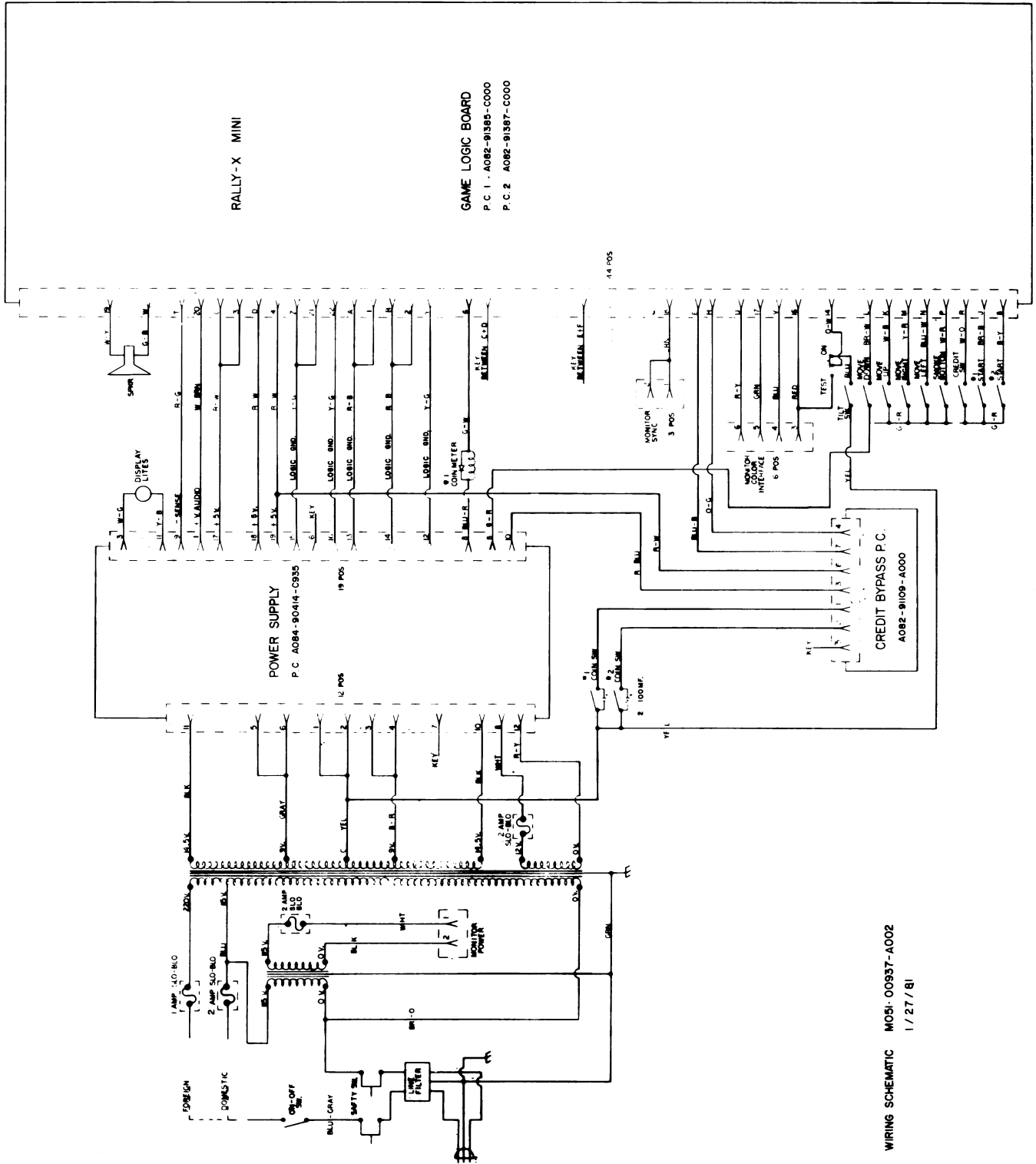
RALLY-X U.R.

GAME LOGIC BOARD
P.C.1 A082-91385-C000
P.C.2 A082-91387-C000

44 P.C.S.



WIRING SCHEMATIC MOSI-00935-A037
1/27/81



WIRING SCHEMATIC MOSI-00937-A002
1 / 27 / 81

