

CYCLONE

OWNERS AND SERVICE MANUAL

jrTM

TABLE OF CONTENTS

- INTRODUCTION
- GAME SET UP / TESTING
- MAINTENANCE
- QUICK TROUBLESHOOTING
- GAME REPAIR
- PARTS LISTINGS
- SCHEMATICS
- WARRANTY INFORMATION

INTRODUCTION

GAME FEATURES

This game has many outstanding features, making it the perfect game for just about any location.

The game was designed with the location in mind, featuring unparalleled flexibility in regards to custom game set-up and programming. Virtually all game play, and ticket dispensing options are operator adjustable, practically letting the operator "build his own game".

CYCLONE jr.™ has many unique features for a "Ticket Spitter" type of game. Its unique design sets it apart from all other games in its category. Game Play, which is ALL SKILL, having no bounces, rolls, flips, or other chancy situations, also showcases its creative design. These, and other features, give players something that keep them playing time and time again.

Reliability is the key word in the design of CYCLONE jr.™. The electronics in the game have been extensively tested to assure years of trouble free service. The light ring light bulbs are powered using special circuitry and voltages to greatly enhance their life. The rope lighting used should last the life of the game.

The cabinet has been designed using only the finest materials. The play field cover is made from tempered 3/16" glass and all visible metal work has been powder coated to enhance its appearance as well as provide a very durable surface.

Game set-up is a snap. Just plug in, set a few programmable options, and you're ready to go. Even the programming options are easy to understand and adjust.

A "Tickets owed Display" on the scoreboard is used for to show tickets owed to the player. More on this feature is given in the following game play section.

GAME PLAY

The game begins when the player has inserted enough money to create 1 "credit".

The game has a ring of light bulbs encircling the play field. A lit bulb circles this ring every one and one third seconds. The object of the game is to stop the light between the two lit arches located in the middle of the play zone.

Each light bulb in the zone has a "ticket" value associated with it. As you get closer to the two lit arches in the center of the play zone, the ticket value increases. Between the two lit arches, described above, is the game JACKPOT. This is where a large number of tickets can be won.

Once the game begins you have one chance to stop the light (for each credit registered). Wherever the light stops is how many tickets the game pays out. Each time the Jackpot is NOT hit, the Jackpot value increases by 1 (or more if the incrementing Jackpot option is selected). When the Jackpot is hit, a Jackpot routine including special lights and sounds are displayed as well as a transfer of the Jackpot into the "tickets owed" display.

Additional games can be played while tickets are dispensing.

The game also has a unique "Tickets Owed" display. This display has many uses. When tickets are won, the amount is displayed, then counted down as the tickets are dispensed. This is a handy feature in the event that the game runs out of tickets while dispensing, or if the game is out of tickets. If the game cannot dispense the tickets it should, it will keep adding the number it should dispense to the tickets owed display, and thus allow the player to continue playing the game until an attendant can be contacted. This feature is also very helpful if the "do not dispense tickets on Jackpot" option is chosen. It may be desirable that tickets not be dispensed if the Jackpot is set to a very high number of tickets. This will be valuable, as the number of Jackpot tickets won would then be added to this display, then the ticket dispenser will lock up until an attendant is located, and the dispenser is reset via the reset button located on the coin mech.

GAME SET-UP / TESTING

SAFETY PRECAUTIONS

IMPORTANT: FAILURE TO FOLLOW THESE DIRECTIONS CLOSELY COULD CAUSE SERIOUS DAMAGE TO YOU AND/OR YOUR GAME.

WARNING: WHEN INSTALLING THIS GAME, A 3 PRONG GROUNDED RECEPTACLE MUST BE USED. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY TO YOURSELF OR OTHERS. FAILURE TO USE A GROUNDED RECEPTACLE COULD ALSO CAUSE IMPROPER GAME OPERATION AND/OR DAMAGE TO THE ELECTRONICS.

DO NOT DEFEAT OR REMOVE THE GROUNDING PRONG ON THE POWER CORD FOR THE SAME REASONS AS GIVEN ABOVE. USING AN IMPROPERLY GROUNDED GAME COULD VOID YOUR WARRANTY.

PAY SPECIAL ATTENTION TO THE SET UP SECTION BELOW, REGARDING VOLTAGE SETTINGS.

GAME SET-UP

BEFORE PLUGGING THE GAME IN, OR TURNING IT ON, BE SURE THE GAME HAS BEEN SET TO THE PROPER VOLTAGE. YOUR GAME SHOULD COME PRE-SET FROM THE FACTORY TO THE CORRECT VOLTAGE, HOWEVER IT IS A GOOD IDEA TO CHECK THE A.C. WALL RECEPTACLE VOLTAGE BEFORE PLUGGING THE GAME IN.

The game comes with 4 available voltage settings as described below. These settings should be used to provide power in the correct range to the game without over or under powering it.

| POWER RANGE | VOLTAGE SETTING |
|------------------|-----------------|
| 90 - 110 V.A.C. | 110 |
| 110 - 130 V.A.C. | 120 |
| 200- 220 V.A.C. | 220 |
| 220- 240 V.A.C. | 240 |

The game uses a POWER MODULE to handle all of the power distribution chores of the game. It incorporates an ON-OFF switch, primary A.C. game fusing, and power switching capabilities, for using the game with a wide variety of A.C. voltages by re-strapping the main transformer.

A.C. LINE VOLTAGE ADJUSTMENT

To adjust the game for a different A.C. voltage:

1. Unplug the game from the outlet.
2. Disconnect the power cord from the power module.
3. Using a small flat blade screwdriver, pry the fuse holder from the power module.
4. Notice a small window on the fuse holder with an arrow that points to the voltage the game is presently set at.
5. Using the small flat blade screwdriver, lift the retaining tab that holds the voltage selector in the fuse holder.
6. Rotate the voltage selector until the voltage you want is displayed in the voltage select window.
7. Push the voltage selector back into the fuse holder until it snaps into place. NOTE: Do not force the selector into the fuse holder. If it does not go in easily, it is NOT being installed correctly.
8. Snap the fuse holder assembly back into the power module.
9. Plug the power cord back into the receptacle in the power module, and into the wall outlet.

NOTE: WHEN CHANGING FROM 110-120 TO 220-240, LOWER THE MAIN FUSE VALUE BY 1/2.

WHEN CHANGING FROM 220-240 TO 110-120, DOUBLE THE MAIN FUSE VALUE.

GAME SET-UP / TESTING

PROGRAMMING YOUR GAME

This section will give you a detailed explanation on the functions and operating characteristics of each of the programming buttons. Please read this section carefully to avoid problems with your game.

NOTE: THE PROGRAMMING BUTTONS ARE LOCATED ON THE LOWER LEFT SIDE OF THE MAIN P.C. BOARD.

PROGRAMMING BUTTON (SW1)

This button is used to enter the "Programming" mode. It is located on the Main P.C. Board in the lower left hand corner. Press this button once to enter the programming mode.

Once in this mode you can push SW2 to select modes 1-44, then use SW3 or SW4 to move up or down in numbers within the chosen mode.

To exit the programming mode and return to game play, push SW1 again.

SELECT BUTTON (SW2)

This button is used to advance through all the programming modes. Each push of this button, will move you to the next programmable mode. The mode number will be displayed in the "CREDITS" display on the scoreboard.

STEP UP BUTTON (SW3)

Each push of this button will advance you to the next available "value" for a particular programmable mode. The value for that mode is shown on the "JACKPOT" display located on the scoreboard.

STEP DOWN BUTTON (SW4)

Each push of this button will back you up to the previous "value" for a particular programmable mode. The value for that mode is shown on the "JACKPOT" display located on the scoreboard.

SELF TEST MODE (SW5)

This mode was used in the prototype testing of the game and has no significance in the operation of this game.

AUDIO MODE (SW6)

This button is used to test the sounds the game makes during game play. Each push of the button will produce a new sound, used during game play, until all sounds have been heard, then it will repeat.

GAME SET-UP / TESTING

OPTION MODES

Please read the setting information carefully BEFORE making any adjustments. Failure to set options properly can yield unexpected results.

PLEASE NOTE: THE VALUES PRE-SET AT THE FACTORY HAVE BEEN FOUND TO WORK BEST FOR MOST LOCATIONS.

MODE 0 (VOLUME)

The number set in this mode controls the relative volume of the sound. "0" equals minimum, "9" equals maximum. As this button is pushed, a sound is played to make it easier to determine where the volume should be set. The default value for this mode is "3".

NOTE: THE SOUND IN THIS GAME CANNOT BE COMPLETELY TURNED OFF.

MODE 1 (COINS PER CREDIT 1)

The number set in this mode, is the number of coins necessary to earn 1 credit, and play 1 game. Setting a "0" in this mode will set the game in "Free Play" mode. The default for this mode is "1".

MODE 2 (COINS PER CREDIT 2)

This is an extra mode used to create a change in currency for games not sold in the United States.

MODE 3 (COINS PER CREDIT 3)

This is an extra mode used to create a change in currency for games not sold in the United States.

MODE 4 (COINS PER CREDIT 4)

This is an extra mode used to create a change in currency for games not sold in the United States.

MODE 5 (MULTICREDITS)

The number set in this mode is the number of credits that will be associated with each coin received.

Example: If this option is set to "2" then for every coin received there will be "2" credits given. If this option is set to "4" then for every coin received there will be "4" credits given.

The default value for this option is "1".

MODE 6 (CREDIT DISCOUNTING)

When this mode is enabled, the game will give you 1 free credit for every XXX coins inserted into the game AT ONE TIME. A setting of "0" turns this mode off.

Example: If "2" is chosen, for every 2 coins inserted, 1 free game will be given. If "4" is chosen, for every 4 coins inserted, 1 free game will be given.

The default value for this option is "0".

MODE 7 (ATTRACT MODE)

The attract mode consists of a sound used during the game being played whenever called to do so by the game program. The numbers in this mode represent minutes between attract modes. Setting a "0" in this mode turns the attract mode off. The default value in this mode is 3.

GAME SET-UP / TESTING

MODE 8-33 (ZONE VALUES)

The play field consists of 66 lights, 26 of which make up the play zone. In the center of the play zone lies the "Jackpot" where a large amount of tickets could be won. Each light, in the play zone, has a point value associated with it. Each light can be independently set for a point value different from the factory set default value for that zone. Each lights is a separate "zone".

Listed on the table below are the 26 zones and the associated "mode" number for each. Zone 1 is the furthest zone from the Jackpot to the right, while zone 26 is the furthest from the Jackpot to the left. Also in this table, are the default values for each zone.

| LIGHT RING ZONE VALUES | | |
|------------------------|------|---------|
| MODE | ZONE | DEFAULT |
| 8 | 1 | 1 |
| 9 | 2 | 2 |
| 10 | 3 | 2 |
| 11 | 4 | 3 |
| 12 | 5 | 3 |
| 13 | 6 | 4 |
| 14 | 7 | 4 |
| 15 | 8 | 5 |
| 16 | 9 | 5 |
| 17 | 10 | 6 |
| 18 | 11 | 7 |
| 19 | 12 | 8 |
| 20 | 13 | 10 |
| 21 | 14 | 10 |
| 22 | 15 | 8 |
| 23 | 16 | 7 |
| 24 | 17 | 6 |
| 25 | 18 | 5 |
| 26 | 19 | 5 |
| 27 | 20 | 4 |
| 28 | 21 | 4 |
| 29 | 22 | 3 |
| 30 | 23 | 3 |
| 31 | 24 | 2 |
| 32 | 25 | 2 |
| 33 | 26 | 1 |

For each zone a value from 0 to 20 can be set. If the values are changed from the factory default settings, it will be necessary to change the numbers indicated on the play zone by using the supplied decal overlay sheets.

MODE 34 (JACKPOT DIFFICULTY)

To make the game easier or harder to win, this mode should be adjusted.

The value displayed is equal to how many half milliseconds the "WINDOW" to win the Jackpot is open. (A half millisecond is 1/2000 of a second.) A setting of "1" is the hardest (equal to 1/2 millisecond), and a setting of "40" is the easiest (equal to 20 milliseconds). The remainder of the lights in the play field have a factory set value of 20 milliseconds. The default value for this mode is "6".

MODE 35 (JACKPOT WINDOW)

This mode adds a valuable feature to those locations that have large variations in age groups. Under normal circumstances, the operator sets up MODE 34 for the best payout for his location. However this may be too difficult for some age groups. There are also circumstances where the operator may want the Jackpot to be won on an average of XXX amount of games. This mode will allow for that. When this mode is selected, no matter what window value is set at in MODE 34, the game will open a window, programmable from 1/2 millisecond (hardest) to 20 milliseconds (easiest), every XXX games. Every XXX games, is the number you choose on this setting. A setting of "0" turns this mode off. The default setting for this mode is "0".

MODE 36 (JACKPOT LOCK-UP)

This mode allows the operator the choice of whether or not to dispense tickets when the Jackpot is hit.

If the operator normally sets the Jackpot to a very high value, he/she may not wish to dispense tickets when the Jackpot is hit. If the game is set to a lower Jackpot, it is a good idea to let the game dispense tickets by itself.

It is usually better to let the game dispense tickets, as part of the fun in the game is watching all those tickets come out when the Jackpot is hit. It also attracts attention to the game, promoting further game play by others in the general area.

Setting a "0" dispenses tickets. Setting a "1" does not allow tickets to dispense when the Jackpot is hit. The default value for this mode is "0".

NOTE: WHEN THE GAME IS SET NOT TO DISPENSE TICKETS, THE TICKET DISPENSER RESET BUTTON MUST BE PRESSED FOR THE GAME TO RESUME DISPENSING ANY TICKETS. THE RESET BUTTON IS CONVENIENTLY LOCATED ON THE COIN MECH HOLDER.

GAME SET-UP / TESTING

MODE 37 (JACKPOT BASE VALUE)

The value set in this mode, is the value of the jackpot when the game is first powered up, or just after a jackpot is won. The default value for this mode is "100".

MODE 38 (JACKPOT CAP)

The number shown in this mode is the maximum amount of tickets the game will dispense when the jackpot is won. Setting a "0" turns the cap off. The default value for this mode is "500".

MODE 39 (STATION I.D.)

When more than one game is to be employed in a single location, it may be desirable to have the games linked so as to eliminate the chance of having one game more desirable than another due to the size of the "Jackpot". To synchronize the "Jackpot", the games must have different identification numbers. The numbers available are from 0-15. It doesn't matter which numbers you pick, or if the numbers are sequential or not, so long as each number is different. The default value for this mode is "15".

IMPORTANT: IF THE STATION I.D.'S ARE NOT SET PROPERLY, THE GAME WILL WORK STRANGELY, CAUSING MANY UNEXPECTED PROBLEMS.

MODE 40 (GAMES INCREMENT)

The number set in this mode is the number of games that will need to be played before an increase in the jackpot base will take place. A setting of "0" for this option will cause the jackpot to remain constant at the number set in MODE 37. The default value for this option is "1".

MODE 41 (JACKPOT INCREMENT)

The number set in this mode, is the amount the jackpot value will increase by each time the game is played, and the jackpot IS NOT WON. Setting a "0" for this mode will turn the incrementing feature off and cause the jackpot to remain constant at the number set in MODE 37. The default value for this mode is "1".

MODE 42 (CREDITS OR COINS)

This mode allows the operator to choose whether coins or credits are being counted as coins are fed into the game. Setting this option to "0" counts credits while a setting of "1" will count coins. The default value for this option is "0".

MODE 43 (SAVE HIGH SCORE)

This mode allows the operator to choose whether the high score is retained after power down or if the high score will be reset to the jackpot base value set in MODE 37. Setting this mode to "0" WILL NOT retain high score after power down. Setting this mode to "1" WILL retain the high score after power down. The default value for this option is "0".

MODE 44 (RESET DEFAULT)

When this mode is selected, the game will revert to all factory default settings.

SET "1" THEN EXIT PROGRAMMING MODE TO RESET ALL VALUES TO FACTORY DEFAULT.

The default value for this mode is "0".

GAME SET-UP / TESTING

TESTING

After the initial programming adjustments have been made, it's time to test your game for proper operation.

1. Locate the game in it's permanent location.
2. Be sure the game has been properly plugged into a 3 prong grounded outlet, and that the receptacle is in good working order.
3. If using an extension cord, be sure it is a 3 prong grounded type of at least 16 Ga..
4. Adjust the leg levelers and lock into position.
5. Verify that the game is set up for the proper voltage, and turn power to the game on.
6. Insert coins at least ten times into the coin mech to assure proper operation. An audible sound should be heard each time a credit is accumulated.
7. Check the coin counter (located inside the coin door) and check for proper operation.

8. Run tickets through the ticket dispenser by playing games. Check that tickets do not get stuck behind ticket louver.

9. Check each ticket counter for proper operation.

10. Check to see that the proper amount of tickets are dispensed based on the numbers shown on the scoreboard.

11. Check that all door locks work smoothly.

12. Check game volume during busy time at location to set it at the proper level.

IF YOU HAVE ANY QUESTIONS OR COMMENTS REGARDING INSTALLATION OR PROPER FUNCTION OF THE GAME, PLEASE CALL OUR SERVICE DEPARTMENT AT 1-716-759-0360

MAINTENANCE

GENERAL MAINTENANCE

This game has been designed for an absolute minimum amount of maintenance.

The light ring light bulbs have been designed in such a fashion as to greatly extend their life. However, eventually they will reach the end of their life span. When this time comes, you will notice that 2 or 3 bulbs have burned out within a couple of weeks time from each other. At this point, it is advisable to change all of the bulbs. The bulbs are a simple push in type, very easy to change, and very inexpensive. Changing all of the bulbs at once, will save you work in the long run, and keep the game looking good.

CLEANING

Regular cleaning of the game will keep it looking new, and greatly enhance its appeal.

Clean the play field glass with standard glass cleaner a like "Windex" to keep the games appearance up. The scoreboard face can be cleaned using a spray type furniture polish like "Behold". It will fill minor scratches and give the plastic surface a deeper, clearer look.

Clean the cabinetry with a good cleaner such as "Fantastic" or "409." A mild soapy solution can also be used.

NOTE: DO NOT USE ALCOHOL, THINNERS OF ANY KIND, OR PINBALL PLAY FIELD CLEANERS ON ANY OF THE CABINET SURFACES, ESPECIALLY THE DECALS.

QUICK TROUBLESHOOTING

| PROBLEM | PROBABLE CAUSE | SOLUTION |
|---|--|--|
| NO GAME POWER | ON-OFF SWITCH ON GAME TURNED OFF A.C. POWER FUSE BLOWN GAME NOT PLUGGED IN OR CORD DAMAGED BAD TRANSFORMER TRANSFORMER HARNESSING NOT CONNECTED BAD POWER MODULE | TURN POWER ON REPLACE WITH PROPER FUSE CHECK POWER CORD CHECK FOR PROPER VOLTAGES CHECK HARNESS REPLACE POWER MODULE |
| GAME WILL NOT TAKE MONEY OR GIVE CREDITS CORRECTLY. | BAD COIN SWITCH COIN DISCOUNTING OPTION SET WRONG COINS PER CREDIT SETTING INCORRECT BAD COIN MECHANISM LOOSE OR DAMAGED HARNESSING BAD MAIN P.C. BOARD BAD 5 VOLT POWER SUPPLY FUSE MULTICREDIT OPTION SET WRONG | CHECK W/METER - OR REPLACE CHECK PROGRAMMABLE SETTING CHECK PROGRAMMABLE SETTING ADJUST OR REPLACE CHECK W/METER - REPAIR REPAIR OR REPLACE MAIN BOARD CHECK AND REPLACE FUSE CHECK PROGRAMMING SETTING |
| TICKETS DO NOT DISPENSE OR DISPENSE INCORRECTLY | ZONE VALUES SET UP INCORRECTLY TICKET RESET BUTTON NOT PUSHED TICKET DISPENSER OPTICAL SENSOR DIRTY TICKET DISPENSER HARNESSING BAD TICKET DISPENSER BAD BAD MAIN P.C. BOARD BAD 5 VOLT POWER SUPPLY FUSE | CHECK PROGRAMMABLE SETTING PRESS RESET BUTTON CLEAN OPTICAL SENSOR CHECK W/METER AND REPAIR REPLACE DISPENSER REPLACE MAIN P.C. BOARD CHECK AND REPLACE FUSE |
| LIGHT ROPE DOES NOT LIGHT | BAD LIGHT ROPE BAD ROPE LIGHT HARNESSING BAD 5 VOLT POWER SUPPLY FUSE | TEST ROPE LIGHT AND REPLACE CHECK W/METER AND REPAIR CHECK AND REPLACE FUSE |
| RING LIGHT BULBS DO NOT LIGHT | BAD LIGHT BULB BAD LIGHT RING P.C. BOARD BAD INTERCONNECT HARNESSING BAD MAIN P.C. BOARD LIGHT RING POWER SUPPLY FUSE BAD BAD 5 VOLT POWER SUPPLY FUSE | REPLACE LIGHT BULB REPLACE LIGHT RING P.C. BOARD CHECK W/METER AND REPAIR REPAIR OR REPLACE P.C. BOARD CHECK AND REPLACE FUSE CHECK AND REPLACE FUSE |
| SCORE DISPLAYS DO NOT WORK | BAD 12 VOLT FUSE BAD 5 VOLT POWER SUPPLY FUSE BAD SCORE DISPLAY P.C. BOARD BAD MAIN P.C. BOARD BAD SCORE DISPLAY HARNESSING | CHECK AND REPLACE FUSE CHECK AND REPLACE FUSE REPAIR OR REPLACE P.C. BOARD REPAIR OR REPLACE P.C. BOARD CHECK W/METER AND REPAIR |
| JACKPOT LIGHT DOES NOT LIGHT | BAD 12 VOLT FUSE BAD 5 VOLT POWER SUPPLY FUSE BAD SCORE DISPLAY P.C. BOARD BAD MAIN P.C. BOARD BAD SCORE DISPLAY HARNESSING | CHECK AND REPLACE FUSE (F11) CHECK AND REPLACE FUSE REPAIR OR REPLACE P.C. BOARD REPAIR OR REPLACE P.C. BOARD CHECK W/METER AND REPAIR |
| LOW / NO TICKET INDICATOR DOES NOT WORK | BAD INDICATOR L.E.D. L.E.D. INSTALLED BACKWARDS HARNESSING BAD TICKET MICRO SWITCH BAD MAIN P.C. BOARD BAD | REPLACE L.E.D. REVERSE L.E.D. CHECK W/METER AND REPAIR REPLACE MICRO SWITCH REPAIR OR REPLACE P.C. BOARD |
| STORM STOPPER BUTTON DOES NOT STOP LIGHT | BAD BUTTON SWITCH BAD HARNESSING BAD MAIN P.C. BOARD | REPLACE SWITCH CHECK W/METER AND REPAIR REPAIR OR REPLACE P.C. BOARD |

GAME REPAIR

WARNING: ALWAYS REMOVE POWER FROM THE GAME BEFORE ATTEMPTING ANY SERVICE, UNLESS NEEDED FOR SPECIFIC TESTING. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN SERIOUS INJURY TO YOURSELF AND/OR OTHERS.

OPERATIONAL BACKGROUND

The CYCLONE jr.[™] coin operated amusement game has been designed for an absolute minimum of service. Special circuitry prolongs the life of the incandescent light bulbs. In addition, the rope light used has a life span measured in years.

The Light Ring P.C. Boards were designed to add reliability to the game, by eliminating the massive amount of wiring that would be needed for the 66 light ring bulbs used. The light sockets on the board were chosen to allow the use of the least expensive bulbs possible. The boards were designed to change quickly and easily in the unlikely event that something would go wrong with one of them.

TROUBLESHOOTING PHILOSOPHY

To find problems with the game, always check the obvious first. See that the game is plugged in, and that all of the fuses on the game are good. This includes the fuse that is located INSIDE the power module.

Next, check to see that all of the connectors are firmly seated, and that no wires have been pulled out.

When trying to find out if specific components are bad or not, try swapping them with components from another CYCLONE JR.[™] (if applicable) to see

if the problem moves with the component, or stays where it was. This will help you decide if you have a problem with a specific component, or maybe a problem with either the wiring or the Main P.C. Board. Use extreme caution when using probes or volt meters if the game is powered up. If checking continuity, it is important to disconnect the harnessing at both ends, as attached they may yield erroneous results.

If a P.C. Board is suspected as causing your problems, check to see that all of the I.C. chips are firmly seated on the board.

If light bulbs are suspected, swap them with one that is known to work to narrow the problem down to bulb or P.C. Board.

MAIN P.C. BOARD REPLACEMENT

1. Remove all A.C power from the game.
2. Carefully remove all of the connectors from the P.C. Board.
3. Remove the 4 long plastic hexagon nuts that secure the board to the mounting bracket.
4. Gently pull the P.C. board from the mounting bracket studs.
5. Re-install in the reverse order.

LIGHT RING P.C. BOARD REPLACEMENT

1. Remove all A.C power to the game.
2. Remove the harnesses to the suspected bad P.C. Board.
3. Remove the light bulbs from the bad board.
4. Remove the 4 screws that hold the P.C. board to the bottom of the play field.
5. Re-assemble in reverse order.

GAME REPAIR

SCOREBOARD DISPLAY P.C. BOARD REPLACEMENT

1. Remove all A.C. power from the game.
2. Remove (4) 1/2" allen head screws holding scoreboard cover in place.
3. Remove (2) white plastic dividers by gently pulling from the holes in the larger P.C. board.
4. Remove (4) 1/2" long metal hexagonal nuts that secure the small P.C. board in place.
5. Gently pull small P.C. board from the studs and allow it to carefully hang down.
6. Remove (4) 1" long plastic hexagonal nuts located on the same studs the small P.C. board came off.
7. Remove remaining (4) 1/2" plastic hexagonal nuts located on the outer edge of the larger P.C. board.
8. Gently pull the larger P.C. board from all studs while supporting the smaller P.C. board.
9. Re- install in the reverse order.

ROPE LIGHT REPLACEMENT

1. Remove all A.C. power from the game.
2. From underneath the play field, remove the white power cord from the rope light via the plastic "screw" connection.
3. Remove small "C" clip from the rope light near the power inlet end.

4. Feed the rope light partly through the lower hole then partly through the upper hole in the play field allowing the rope light to protrude slightly through the upper hole.

5. Remove the plastic end cap from the rope light end near the upper hole in the play field.

6. Remove the rope light from upper hole in the play field, then through lower hole in the play field.

7. Feed "NEW" rope light through the lower hole in the play field then through the upper hole in the play field.

8. Replace the end cap to the end of the rope light near the upper hole in the play field.

9. Attach "C" clip to the rope light as close as possible to the bottom of the play field, so as to keep the rope light as taught as possible on the other side.

10. Attach the white power cord to the rope light via the plastic "screw" connection.

BULB SEQUENCE

1. The rope light arches at the center of the Jackpot zone should alternately flash on and off.
2. When the Jackpot is hit, the ring lights, circling the play field, should sweep from the far side of the game, to the jackpot area.
3. The "Storm Stopper" button will light up only when the circling light is in the play zone.

PARTS LISTINGS

MECHANICAL PARTS

| | |
|--------|------------------------------|
| CJ1005 | Cabinet Door Frame |
| CJ1006 | Cabinet Coin Door |
| CJ1007 | Cabinet Ticket Door |
| CJ1009 | Main P.C. Mounting Bracket |
| CJ1010 | Scoreboard Mounting Bracket |
| CJ3004 | Score Board Housing |
| HR1013 | Ticket Door Chain |
| CJ1032 | Cash Box Door |
| CJ3001 | Play Field Cover |
| CJ3003 | Play Field |
| 3013 | Plastic Foot Pad |
| ----- | Coin Mech (Various) |
| CC2005 | Large Button (Yellow) |
| CJ7003 | Light Separator |
| S101 | Mech Holder |
| S101A | Reject Button |
| S101C | Entry bezel |
| S101D | Return Bezel |
| S101E | Entry Stop |
| HR3013 | Coin Funnel |
| HR3027 | Cover glass |
| HR1021 | Coin Funnel Mounting Bracket |
| CC1008 | Cash Box Enclosure |
| CC3012 | Cash Box |
| HR1002 | Vent Grill |
| HR1003 | Stadium Support Bkt. (Rear) |
| HR1004 | Stadium Support Bkt. (Front) |
| HR1011 | Control Panel Support |

HARDWARE & MISC.

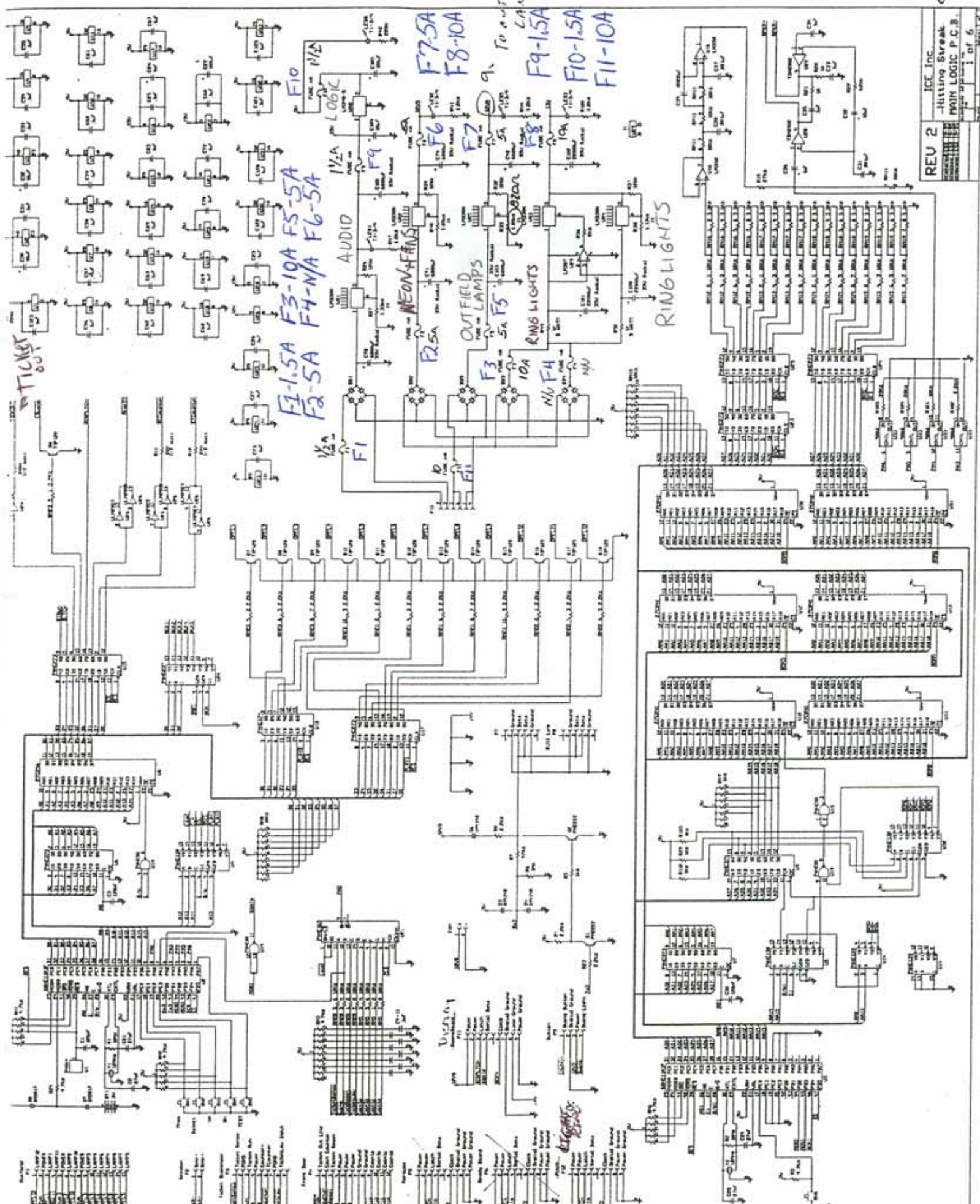
| | |
|----------|-------------------------|
| S014 | Coin Door Lock |
| PC60615A | #2 Square Drive Bit |
| FP1004 | Leg Levelers Mtg. Bkt. |
| 3039 | Grommet (BP2 - Punched) |
| 1017 | Leg Holder (Metal) |
| 2133 | Rope light (Yellow) |
| 2134 | Dead end Caps |
| 2133A | Hard Wire Leads |
| 2268 | Battery Holder |
| 2364G | Fan Finger Guard |
| 201 | T-Molding (3/4 Chrome) |

ELECTRICAL / ELECTRONIC PARTS

| | |
|----------|-----------------------------|
| FP2007 | Speaker |
| HH5005 | Ticket Dispenser |
| PC20224 | Counter (12v) |
| 2426 | Phone Cord 12' |
| 211 | Low Ticket Switch |
| 1024 | Ticket Bin (Double) |
| 1026 | Ticket Bin Switch Mtg. Bkt |
| 2289 | Reset Button |
| CC2027 | Power Cord 20' |
| HH2050 | Power Module |
| CC3007 | Power Module Enclosure |
| CC1008 | Cash Box Enclosure |
| CC1009 | Power Module Mounting Plate |
| CJ7001 | Score Board Ticket Overlay |
| 2364 | Fan |
| HR2002X | Transformer HR Assembly |
| CJ2032X | PCBA Display Junior Board |
| CJ2033X | PCBA Swirl Lamp Board |
| CJ2035RX | PCBA Banana JR. (Ring) |
| CJ2035JX | PCBA Banana JR. (Jackpot) |
| HR2034X | PCBA Main Board Assembly |
| HR2050X | Harness Lower Cabinet |
| HR2051X | Harness Score Board |
| HR2052X | Harness Pitch |
| HR2053X | Harness Button |

GRAPHICS

| | |
|--------|--------------------------------|
| CJ7001 | Score Board Ticket Overlay |
| CJ7002 | Control Panel Overlay |
| CJ7003 | Light Separator |
| CJ7004 | Mirror Logo |
| CJ7006 | Decal Cabinet Side |
| CJ7007 | Decal O.Ring Jackpot |
| CJ7008 | Decal (CJ Program) |
| CJ7009 | Decal Inner Left Upper |
| CJ7010 | Decal Inner Right Upper |
| CJ7011 | Decal Right Number Zone |
| CJ7012 | Decal Left Number Zone |
| CJ7013 | Decal Inner Ring Jackpot |
| CC7014 | Decal Alternate Zone #'s Sheet |
| CJ7015 | Decal Outer Ring Upper Left |
| CJ7016 | Decal Outer Ring Upper Right |
| CJ7018 | Decal Outer Ring Lower Left |
| CJ7019 | Decal Outer Ring Lower Right |
| 7033 | Decal (Warning Pwr Disconnect) |
| 7032 | Decal (Caution Fuse Replace) |
| CC7008 | Decal (CC Coin Door Winner) |
| CC7005 | Decal (CC Storm Stopper) |
| CJ7020 | Decal (CJ Ring Arrow) |
| FP7044 | Decal (FP Cover Glass Warning) |



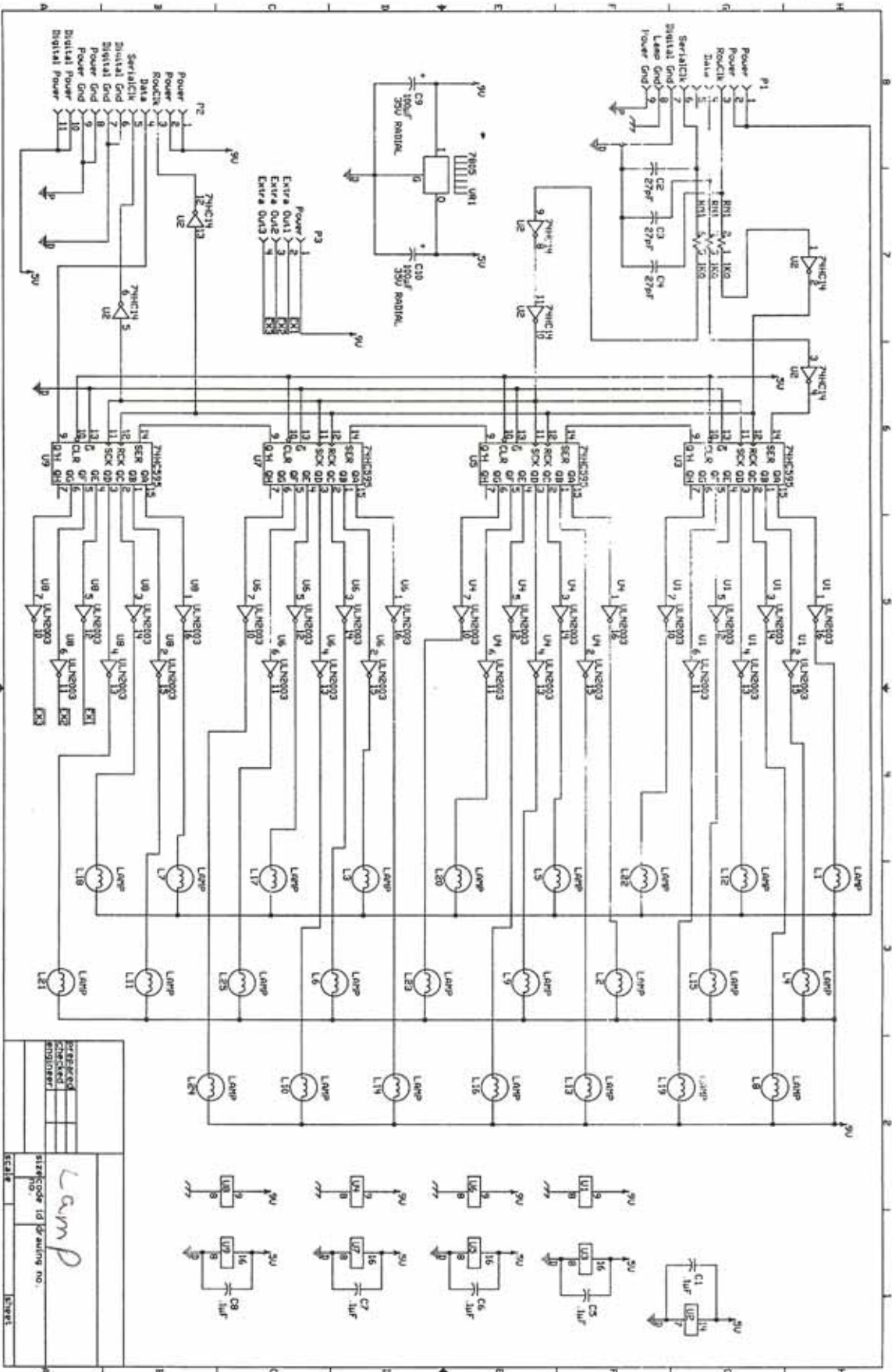
TICKETS

F1-1.5A
F2-5A
F3-10A
F4-10A
F5-5A
F6-5A

F7-5A
F8-10A
F9-10A
F10-1.5A
F11-10A

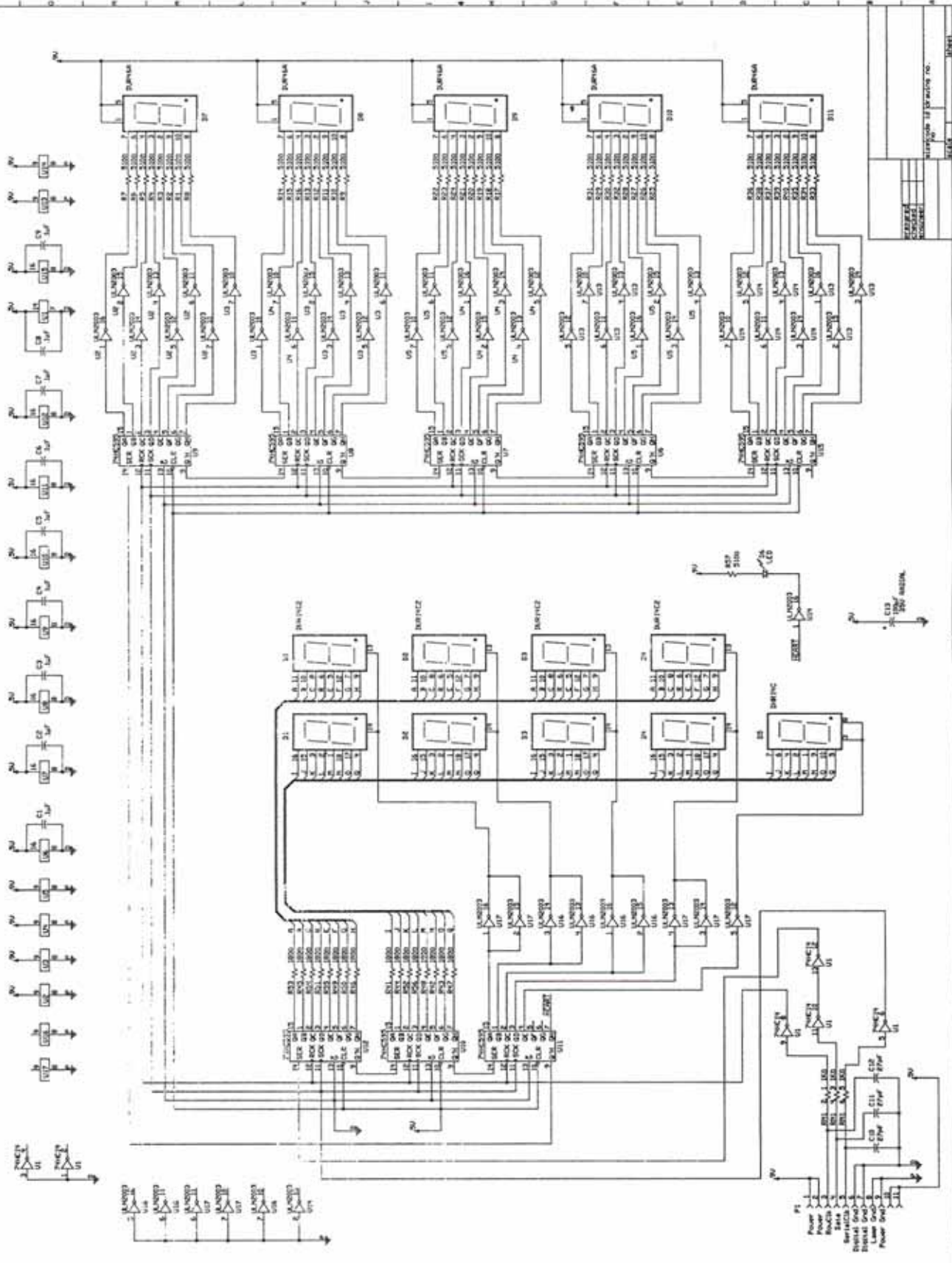
To arrive
LAmps

RINGLIGHTS



| | |
|--------------------------|------|
| SIZE CODE | |
| ENGINEER | |
| SIZE CODE ID DRAWING NO. | Lamp |
| SCALE | 1:1 |
| REVISION | |

101 | 02 | 05 | DB | D4 | 07 | 08 | D9 | D10 | D11

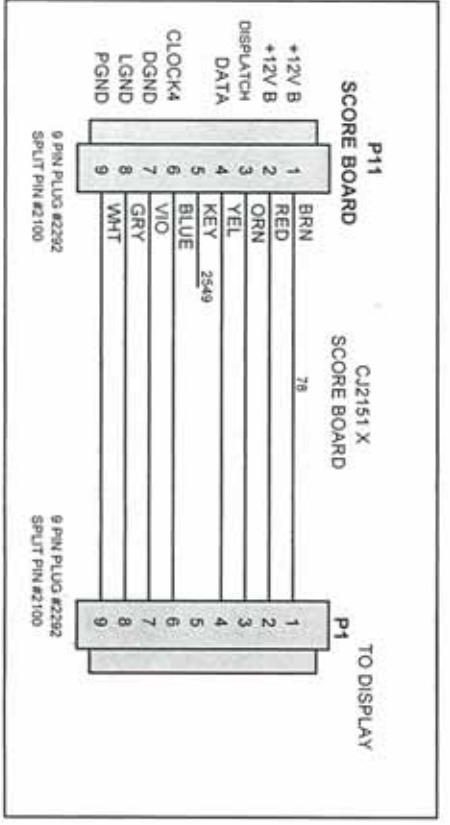
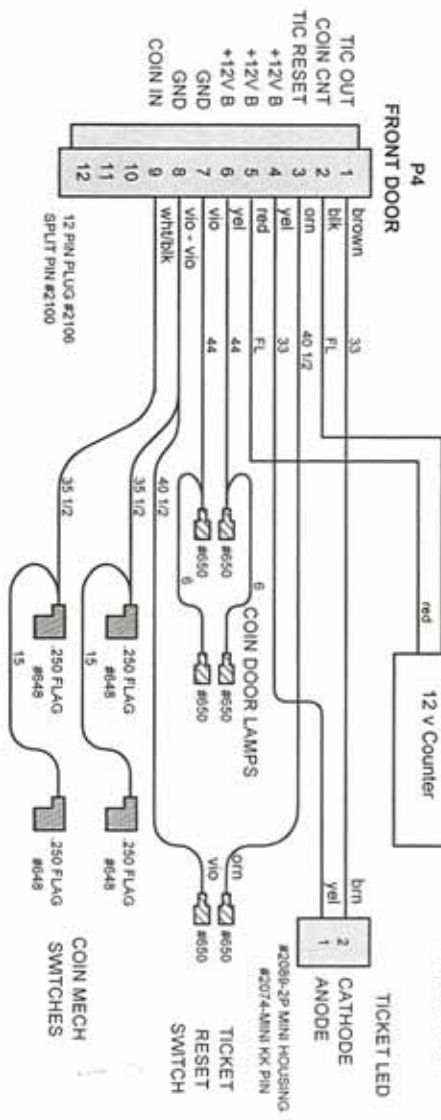
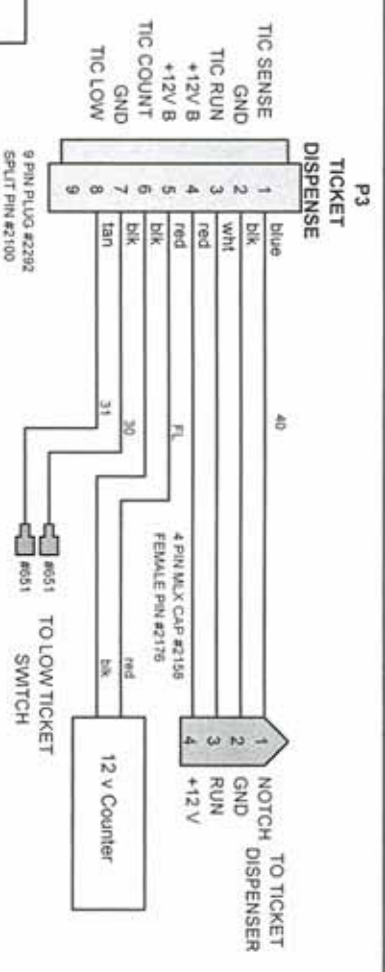


| NO. | DESCRIPTION |
|-----|-------------|
| 1 | ... |
| 2 | ... |
| 3 | ... |
| 4 | ... |
| 5 | ... |
| 6 | ... |
| 7 | ... |
| 8 | ... |
| 9 | ... |
| 10 | ... |
| 11 | ... |
| 12 | ... |

101 | 02



**CJ2150X
Lower Cabinet**



HARNES NUMBER
CJ2056X BECOMES
PART OF CJ2032X BOM

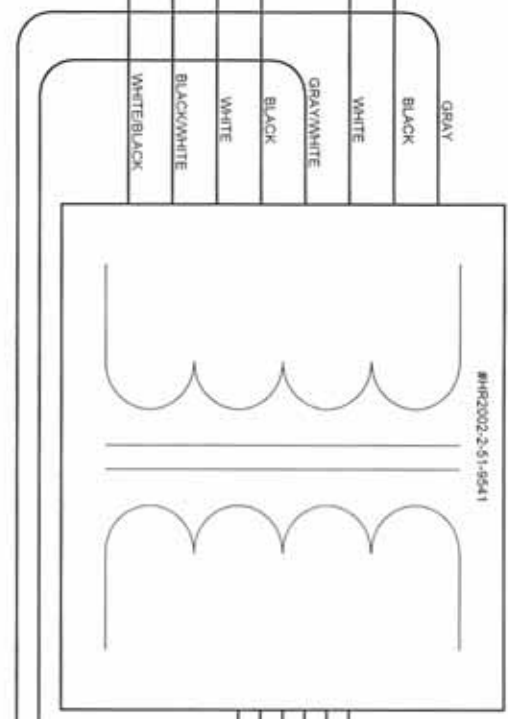
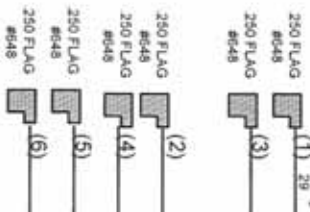
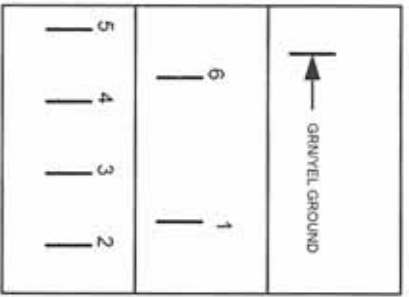
TO LAMP
PCB

| | | | |
|----|-------|---|---|
| 1 | red | 4 | □ |
| 2 | white | | ○ |
| 3 | white | | ○ |
| 4 | white | | ○ |
| 5 | white | | ○ |
| 6 | white | | ○ |
| 7 | white | | ○ |
| 8 | white | | ○ |
| 9 | white | | ○ |
| 10 | white | | ○ |
| 11 | white | | ○ |

SOLDER
DIRECT TO
DISPLAY PCB

11 PIN AMP HOUSING #2556
WITH CONTRACT #2201

| | | | |
|-------------|---------------------------------|---------|-------------|
| TITLE | CYCLONE JR. JR. WIRING DIAGRAMS | | CYCJRJR |
| DESCRIPTION | CABINET HARNESSES | | CYCJRJR VSD |
| DATE | 1/8/01 | REVISED | 1/30/01 |
| FILENAME | DRAWN BY | | RMO |
| PAGE | 1 OF 3 | | |



USED IN HITTING STREAK
CYCLONE JR
CYCLONE JR JR

| | | | |
|-------------|--------|-----------------------------|---------|
| TITLE | | HITTING STREET MOUSE ATTACK | |
| DESCRIPTION | | #HR2002X-TRANSFORMER ASY | |
| DATE | 3/3/00 | REVISED | 1/10/01 |
| FILE NAM | | MA_VSD.VSD | |
| DRAWN BY | | CHERYLZ1 | |
| PAGE | | 1 OF 1 | |