

SKEE BALL Classic
Installation and Operation
Single Ball Release
Manual 990010 (I)

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WARNINGS

Read this manual thoroughly before assembling your game. Failure to follow the instructions could cause damage to your game and void your warranty. In addition, the manual explains the game in detail and the options you have so that you and your players can enjoy the game to its fullest.

- A. The power cord must be plugged into a grounded, three-prong outlet. Failure to do so could cause permanent injury or game damage.*
- B. This game is suitable for indoor use only. The game should not be installed outdoors or in areas directly exposed to sunlight, high humidity, direct water contact, dust, high heat or extreme cold. Installation in any such environment shall void the warranty.*
- C. Replacement of fuses, lamps and any other servicing on the product shall be conducted by trained personnel.*

Specifications

Height	79"
Width	29 ¼"
Length	156"
Weight	400 lbs. Uncrated 520 lbs. Crated
Power	Maximum: 115 vac, 5.0 amps 575 watts Average: 115 vac, 1.4 amps 161 watts

Tools Required

9/16" Wrench	Bolt the Front Support to Runway
½" Wrench	Bolt the Legs to the Back Cabinet
11/16" Wrench	Bolt the Runway to the Back Cabinet
11/16" Socket & Ratchet	Bolt the Runway to the Back Cabinet
Flat Head screwdriver	Mount protective cage

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Installation & Operation, Continued...

Hardware Provided

<u>QTY</u>	<u>P/N</u>	<u>DESCRIPTION</u>
1	100047-1	Assy, Back cabinet
1 (13FT)	100090-13	Assy, Alley, 13ft
1 (10FT)	100090-10	Assy, Alley, 10ft
1	990010	CLASSIC MANUAL REV I
1	800109 BH754	KEY
3	800109 2316	KEY
8	800030-2	8"BLACK TIE WRAPS
1	800030-4	7.5 SCREW EYE TIE WRAP
1	800007-19	#8-5/8 SCREW
2	800181-1	LEGS
2	800182-1	ADAPTER CLIPS
2	800111-1	GLIDES
5	800179-52	3-1/8" BROWN PLASTIC BALLS
1	100043-1	COIN MECH ASSY
1	100040-1	FRONT SUPPORT ASSY W/ COIN BOX
1	100046-1	TICKET DISPENSER ASSY W/ TRAYS
1	100039-1	RED BEACON ASSY
1	100045-1	LEFT FRONT CHANNEL COVER ASSY W/ HOOD
2 (13FT)	800076-2	LARGE PLASTIC SIDE NET TRIM
2 (10FT)	800076-1	SMALL PLASTIC SIDE NET TRIM
1 (13FT)	800180-1	SMALL FRONT/TOP NET ASSY
1 (13FT)	800403-1	LARGE FRONT/TOP NET ASSY
1 (13FT)	800404-1	LARGE WHITE RIGHT SIDE NET ASSY
2 (10FT)	800180-1	SMALL FRONT/TOP NET ASSY
1 (10FT)	800279-1	SMALL WHITE RIGHT SIDE NET ASSY
1 (13FT)	800404-2	LARGE WHITE LEFT SIDE NET ASSY
1 (10FT)	800279-2	SMALL WHITE LEFT SIDE NET ASSY
4	800113-1	5/16-18 X 2-1/2"L STEP BOLTS(Legs to back cabinet)
4	800027-1	5/16-18 HEX NUT (legs to back cabinet)
4	800079-4	5/16 FLAT WASHERS (legs to back cabinet)
4	800084-4	3/8-16 HEX HEAD BOLTS (front support to runway)
2	800084-3	1/2-13X3"L HEX HEAD BOLTS(cabinet to runway)
2	800026-7	1/2-13 HEX NUTS (cabinet to runway)
2	800198-1	3/8-16 X 2"L FL HD SLOTTED MS (side nets to cab)
2	800026-8	3/8-16 HEX HEAD NUTS(side nets to cabinet)
2	800079-3	3/8" FLAT WASHERS(side nets to cabinet)
Legend		
(10FT)	Included with 10FT Alley Only	
(13FT)	Included with 13FT Alley Only	

ASSEMBLY INSTRUCTIONS

A. Pre-assembly

1. Remove all parts from the shipping boxes and inspect for any possible damage during handling. Use the list on the specifications page to inventory the items. If any part (s) are missing, call your salesperson immediately. If shipping damage is noted, call the trucking company making the delivery.

B. ASSEMBLY

1. Lay back cabinet and runway on their sides. Join the two using the (2) ½-13 x 3”L Hex Head Bolts and ½-13 Hex Nuts. Be sure the face of the joint is free of any packing material, which would prevent a tight joint. Tighten to secure.
2. Fasten the front support to the corresponding front runway using the (4) 3/8-16 Hex Head Bolts. T nuts are already fastened to the runway to receive these bolts. Tighten to secure.
3. Carefully loosen cable tie in rear cabinet and pass harnesses through opening of cabinet. Run harness into back of runway and connect junction plugs.
4. Insert square steel legs into square holes in floor on back corners of rear cabinet and fasten with 5/16-18 x 2 ½”L Step Bolts, in each leg with nuts and washers on inside of the cabinet.

NOTE: To install the leg on the lower side, which is on the floor, it will be necessary to lift the alley. Slip a 3” or 4” block underneath in order to get clearance from the floor to install the bolts. Be sure all four nuts are tight before attempting to raise alley upright.

5. With assistance, you can now set the alley upright on its supports. One person should grip and lift under the cover on top of the back cabinet. The other should grip the front of the assembled alley to follow through on the lift and prevent undue twist in the alley as it is lifted. Any other alleys should be assembled and set upright before proceeding.
6. Install flasher. Remove display panel on front of cabinet. While feeding cable down through pipe, screw the flasher onto the nipple on top of cabinet. Plug cable into the power supply inside cabinet at P3. Replace display panel.

7. Net frame assembly: Nets are packed in a separate box. The net frame assembly consists of three parts: Top Net, Left Side Net, and Right Side Net. Place side net on alley so that the protruding boss on the lower casting fits into the slot on the top of the channel cover. Install 3/8-16 x 2"L Flat Head Slotted Machine Screws into the upper casting and through the rear cabinet. Install 3/8 Flat Washer and 3/8-16 Hex Nut hand tight from rear of machine. Repeat this procedure on the other side.

Attach 4 clips to each side net, 2 along the top edge of each side to hold the top net in place, and 2 along the front of each side to hold front net in place. Clip front and top net in place, deflector wire facing down and plastic trim fronts facing forward. Install black plastic side net trim over clips and side nets. Secure in place with black tie wraps. SEE DIAGRAM 100175.

8. Ticket Dispenser Assembly and Ticket Locking Channel Cover are shipped in a separate box. Connect the wire harness from the Ticket Dispenser Assembly to the matching connector on left side of alley. Load ticket bin with tickets. Place the Ticket Dispenser Assembly in the alley making sure that rear of dispenser hooks over the 3/4" poplar rib. Insert tab of the Ticket Locking Channel Cover under the front of the already installed Channel Cover. Lower front of cover into place with the key in the lock and the lock turned in the unlocked position. Turn the key and lock into place.

NOTICE: The lock may become difficult to engage if the locking tab on the hinge on the left knock off cover is bent down. It can be adjusted by bending the tab back up into its original position.

10. This alley contains the Single Ball System; place a **maximum** of 6 balls in the alley.
11. Open coin cover on right side of alley. Place mech into slide. Connect junction plug, keeping cable away from REJECT area. Close cover and lock. Plug cord into properly wired 120V AC receptacle. The alley is ready to play.

FUNCTIONAL DESCRIPTION

A. MAJOR GAME COMPONENTS

1. **Back Cabinet Assembly** - This portion of the game houses all of the electronics, score panel, and target board assembly.
2. **Runway Assembly** - This assembly houses the ball release assembly, coin mech., ticket dispenser, Ball Count sensor, Ball Release Sensor, ticket counter, coin counter and Prog/Aux Switches.
3. **Scoreboard Display Glass** - Located in front of the score panel. It is easily removable by pulling outward on the knob at the top center to gain access to the light bulbs, power supply and all electronic assemblies.
4. **Controller Assembly** - This assembly is located behind the display readout assembly. The metal enclosure contains the power supply and CPU on one printed circuit board. It is referred to as the model 'S' controller.
5. **Opto Sensors** – Used in the bonus rail, ball drop, and along the right side channel. They are Omron Part #EE-SPY415 (opto-interrupter). This part is used for the target sensors, ball count, and ball release functions.
6. **Ball Release Assembly** - Located under the right side channel cover and is secured with 4 phillips head sheet metal screws. It has a solenoid connected via linkage to a release arm. Upon start of the game the solenoid engages and allows the balls to roll down to the player. The Ball Release Sensor, which is mounted in front of this assembly, counts the balls as they are being released. After counting the appropriate amount, the solenoid disengages and is able to prevent any more balls from being released due to the pressure applied by the springs. Example: The game is set for 9 balls of play but you only have 5 balls loaded into the game. The solenoid will remain engaged until the sensor detects 9 balls and will then immediately disengage.
7. **Ball Count Sensor** - Located in the right side ball return channel and mounted to the rear bulkhead of the alley. It counts balls that are played. Main function is to count balls that do not enter a pocket, and it decides the game end when the total number of balls is returned.
8. **Speaker** - Located on the front underside of the alley assembly. Volume is controlled by manually turning a volume control pot on the Controller, with a small screwdriver. There is a hole in the enclosure just for this purpose.
9. **Target Board Protective Net** - There are 4 different panels fabricated out of tubing and fabric netting. These are fastened to the back cabinet assembly to protect the Target Board from players trying to cheat by throwing balls directly into the targets.

10. **Ball Release Sensor** – Located on a bracket in front of the Ball Release assembly. This sensor counts the number of balls that have been released to the player.
11. **Ticket Dispenser** – Located in the left front portion of the alley under the Ticket Dispenser Hood. This device dispenses tickets to the player.
12. **Front Support** – Located under the front portion of the Runway. This unit supports the front of the Runway, and contains the cash box.
13. **Display** – Located behind the display panel. This display is referred to as an SBD-4. This LED display shows the score on the 3 larger digits, and balls played on the 1 smaller digit.

OPERATING INSTRUCTIONS

There are two modes of operation: **Fixed** and **Programmable**.

1. **Fixed Mode:** (Switch 4 is **ON**)

Whenever Dip Switch 4 is turned **ON**, the game will be using the options programmed into the EPROM at the factory. During this mode you will be able to control some of the options by use of the **8 Position Dip Switch** located at **U13**. The following chart describes this:

SWITCH	POSITION	FUNCTION
1	OFF	Ticket Dispenser ON
1	ON	Ticket Dispenser OFF
2	OFF	Free Game OFF
2	ON	Free Game ON
3	OFF	Single Ball
3	ON	Rocker Arm
4	OFF	Programmable (Stored in NOVRAM)
4	ON	Fixed Program (Stored in EPROM)
5	OFF	No Bonus Sign
5	ON	Bonus Sign Enabled
6	OFF	No Attract Sound
6	ON	Attract Sound ON
7 8		Number of Coins:
OFF OFF		1
OFF ON		2
ON OFF		3
ON ON		4

NOTE: Whenever a Dip Switch setting is changed, you must turn the alley OFF and ON, because the controller only reads the Dip Switch during the Power Up routine!

2. **Programmable Mode:** (Switch 4 is **OFF**, and remains **OFF**)

STEP 1 - Apply Power

After the game has been plugged in, the controller will immediately play the "POWER UP" tune and turn on the "GAME OVER" light. Next, it will delay two (2) seconds before displaying anything. If Switch 4 is **OFF** then the score will change to 990 for about two (2) seconds. The Program Mode can be entered during a four (4) second "window" which opens after the score changes from 990 to 000 and closes when the display goes into the rotating segment mode. The Program Mode can be re-entered whenever you are in the ATTRACT mode by depressing the **PROGRAM** button. When programming the game with the switch, you will have to keep the button depressed for about two (2) seconds. The controller will let you know when you have held the switch closed long enough by blinking the score on and off and beeping once. It will continue to blink until you release the button. You can proceed to the next step. You can skip a step by depressing the **AUX** button for about two (2) seconds.

NOTE: When entering a new value, keep the button depressed until the display begins to blink on and off. Then release the button!

STEP 2 - Menu Mode

The score will display 000 and the ball count will be 0.

NOTE: Re-programming is optional at this time. If you elect to do nothing, the game will enter the ATTRACT mode in five (5) seconds and the current settings which were previously set by you will be used. Or, you can depress the PROGRAM switch and enter the Programming Mode as shown in Step 3.

STEP 3 - Program Mode

During the programming sequence the Ball Count display is used to identify the current selection and the Score display is used to identify the available options. As the program steps through the various selections, it will pause at each option for about four (4) seconds. It is during this time the operator can make a selection by depressing the program switch or skipping to the next option by depressing the **AUX** button.

NOTE: If no option is selected during this process, the old value will be used. The default values are stored in the controller's EPROM and are loaded automatically whenever a checksum error is found during power up.

Alleys manufactured prior to April 1, 1992 use the Knock Off Switch to program the score settings. (That is the stainless steel switch located on the left hand side of the alley. Also, it uses an EPROM with an SP31 or earlier number.)

Presently, the following selections are available:

1. **WINNER SCORE:**
The range is from 010 to 950. It determines when the first ticket is dispensed and the WINNER light comes on. It will begin with 010 and go to 950 in increments of 10. **Default value is 100.**
2. **FREE GAME SCORE:**
The range is 000 to 950. It increases the same as the Winner Score, except it begins at 000. If it is desired that no free games are to be issued, depress the **PROGRAM** Switch while 000 is being displayed. **Default value is 0, no Free Game.**
3. **TICKET SPAN POINTS:**
The range is 010 to 090 in increments of 10. This value determines the intervals at which the tickets will be issued. For example, if the Winner Score is set to 100 and the Ticket Span is set to 20, the first ticket is issued at 100. The next one would be issued at 120, then 140, and every 20 points thereafter. **Default value is 20.**
4. **NUMBER OF TICKETS:**
The range is 00 to 09 in increments of 1. This will determine the amount of tickets issued at the Winner Score and span points. If you wish to turn the Ticket Dispenser OFF, select option 00. **Default value is 01, tickets enabled to pay out at Winner Score and each score span.**
5. **IDLE SONG:**
There are only two (2) options available for this selection. They are 00 to turn the song OFF, and 01 to turn the song ON. **Default value is 01, the song is ON.**
6. **NUMBER OF COINS:**
The range is 01 to 09 in increments of 1. **Default value is 01, one (1) coin.**
7. **JACKPOT SCORE:**
The range is 010 to 950. It will go from 010 to 950 in increments of 10. This value determines when the Jackpot is won. This only pertains to alleys linked to a BONUS JACKPOT sign. **Default value is 450.**
8. **TICKETS AT COINUP:**
The range is 00 to 09. This is used to give tickets at COINUP. Setting this to the amount to give, and setting the Ticket Dispenser to 0 can set the game for a fixed amount for every play. Then, only tickets at COINUP will be issued. **Default is 0.**

DO NOT TURN SWITCH 4 ON AFTER YOU PROGRAM THE NEW SETTINGS!

GAME PLAY

After the proper number of coins have been inserted, the controller turns the Ball Release Solenoid ON, and the proper number of balls are released. The following conditions should exist:

- a. Score is 000
- b. Ball played is 0
- c. WINNER and GAME OVER lights are OFF
- d. COINUP tune will play

The alley is now ready to be played. If a ball is rolled and goes into the Fifty pocket, the score will increase by 10 every time it passes one of the score sensors. Therefore, after the ball reaches the bottom of the score track, the score should have increased by 50. Also, shortly after passing the ball count sensor, the controller will play a tune and the ball count display will increment by one. Each pocket has a tone. If, however, during the scoring time a winning score is achieved, the winner song is played instead of the pocket sound. This is also true if a HIGH SCORE is achieved. Each achievement has its own sound. If the ball does not go into any of the pockets (a gutter ball), a GUTTER BALL tune is played and the balls played are increased by one. When the last ball is played, the score will FLASH for approximately twenty (20) seconds. After the twenty (20) seconds delay, the machine will go into the **ATTRACT** mode.

TICKET DISPENSER

1. **Basic Electronic Operation of Ticket Dispenser Model DL1275S:** When the control unit calls for a ticket to be issued, the motor in the dispenser is turned on. When a ticket is dispensed, the opto beam breaker senses a notch in the ticket and sends back a signal to the control unit. At this time the ticket counter is incremented. If no more tickets are called for, the motor is turned off.
2. **Basic Mechanical Operation of the Ticket Dispenser Model DL1275S:** Tickets are moved through the ticket chute by means of a power driven roller which is spring loaded against an idler roller. The power driven roller is mounted on the output shaft of the motor gear train assembly. The motor assembly is mounted to the pivot bracket assembly in the two Oilite bearings. The motor assembly has a limited free swing, limited by a single pin engaged in the brake sprag. The brake sprag engages the roller as an anti theft device. With the free swing of the motor assembly, the direction of torque, when the electric power is applied, is in a direction so as to release the brake sprag. When an attempt is made to pull tickets from the machine with the power off, the torque is reversed and the brake sprag is engaged. In addition, the pulling of tickets will cause the pivot bracket assembly to apply a pressure to the power driven roller against the ticket and idler roller greater than the pre-set spring load. This will cause the course-knurled surface of the roller will then grip the tickets. One ounce of pull will apply 20 lbs. of pressure on the rollers.
3. **Loading of Tickets:** Tickets are entered in the rear of ticket chute and pushed forward. The power driven roller will be spring loaded against the idler roller and tickets will not pass until the rollers are clear of each other. This is accomplished by use of thumb and index finger, one placed on the block to which the spring is attached, the other on the pivot bracket assembly, then squeeze. Push the tickets through until you see the edge of the ticket. Align the notch in the center of the optic sensor.
4. **Ticket Dispenser Controller Board:** Attached to the ticket machine is a transistor motor controller which provides dynamic braking to ensure accurate and repeatable ticket stopping after issuing any number of tickets. Included as part of the controller is ticket sensing by means of an opto beam breaker sensor. Also included is signal conditioning, which provides high electrical noise immunity. The output of the ticket sensing circuitry is the equivalent to a single pole double throw switch.
5. **Roller Tension Spring:** The roller tension spring keeps constant tension on the tickets, which insures proper delivery and prevents tickets from being pulled through when the dispenser is idle. To increase tension, loosen screw and move spring forward. Tension is adjusted correctly when the tickets cannot be pulled from the dispenser.

6. **Ticket Guide Spring:** The ticket guide spring insures that the notches in the tickets pass through the opto beam breaker sensor. To increase tension, loosen screw and move outer spring up. This changes the tension on the inner spring. Tickets should be snug between the spring and side plate, but not deformed by excess tension. This spring is adjusted at the factory for 1-3/16" wide tickets.
7. **Ticket Stop Adjustment:** The ticket stop adjustment allows positioning of tickets while machine is off. The ticket should protrude through slot approximately 1/16". The ticket dispenser PC board is mounted with two screws in two slotted holes. Loosening the screws and moving the board forward will allow the tickets to stop farther out beyond the edge of the slot.
8. **Ticket Dispenser Replacement:** The ticket dispenser can be removed and replaced after unlocking and removing the channel cover over the dispenser. Lift out the ticket tray/dispenser assembly, and disconnect the connector at the dispenser. Next, remove the 4 screws (2 large and 2 small) on the face of the dispenser assembly (near the ticket meter) and lift out the dispenser. Install the new dispenser in reverse order remembering to reconnect the connector.

Conditions which could cause "HELP" or "CALL":

1. Dispenser out of tickets.
2. Insufficient tension on roller tension spring.
3. Tickets stopping back too far in slot causing tickets to jam.
4. Ticket guide spring not guiding tickets.
5. Dirt on opto beam breaker.
6. Missing notches on tickets.
7. Defective dispenser controller board or motor.

Tickets are available through: **National Ticket Co., in Shamokin, PA (800) 829-0829.** We have found these tickets to be of the best quality for use in Skee-Ball machines.

GENERAL TROUBLESHOOTING OF SKEE-BALL CLASSIC

CAUTION: High voltage is present in some areas of the alley (power supply, fan, solenoid, etc.). Unplug line cord before performing any troubleshooting.

PROBLEM	RECOMMENDATION
No Display	1. Make sure power is applied to the alley. 2. Check the connections on the cable from the controller to the display. 3. Fan should be on. If not, replace fuse on side of controller. 4. Replace display with a known good display. 5. Check fuse (F1) on controller board. 6. Replace controller.
Display not showing proper readout	1. Inspect cable for good connections. 2. Replace display with a known good display.
Ball count not accurate	1. Adjust ball count sensor towards the ball if it does not count the ball. 2. Adjust the sensor away from the ball if it counts one ball as two.
Missing ball count.	1. Adjust the sensor to make sure it detects the ball. 2. Replace the sensor
Ball release inaccurate	1. Adjust ball count sensor towards the ball if it does not count the ball. 2. Adjust the sensor away from the ball if it counts one ball as two.
Missing ball release count	1. Adjust the sensor to make sure it "Sees" the ball. 2. Replace the sensor.
Coins-up but does not release balls	1. Check fuse F2 on controller (1 amp Slo-Blo). 2. Replace solenoid. 3. Replace controller.
Will not coin up	1. Check the connection at coin switch. 2. Manually activate switch. 3. OHM across the coin switch. If you do not read from a normally open to a closed position, replace the switch. 4. Replace controller.

Does not give ticket at winning score. Displays “HELP” or “CALL”.	1. Out of tickets. 2. Tickets jammed. 3. Clean optic eye. **See Ticket Dispenser Section of this manual for Ticket Dispenser Maintenance. 4. Replace ticket dispenser. 5. Replace controller.
Does not give ticket. Does not display “HELP” or “CALL”.	1. Make sure the unit is programmed properly. **See Programming Instructions section of this manual.
Gives more than 1 ticket	1. Adjust tension spring. 2. Replace brake sprag. 3. Replace drive roller. **See Ticket Dispenser Section of this manual for Ticket Dispenser Operation.
None of the above	1. Review the manual for a possible solution. 2. Obtain as much information about the problem before calling Skee-Ball’s Technical Service. 3. Before calling Skee-Ball, make sure you know the Model # and Serial # of your Skee-Ball alley. These are located on the metal plate found on the back of the game cabinet.

1. **Improper Scoring:**

Each of the five sensors in the score track should score ten points. To determine which sensor is not functioning properly, simply roll a ball into each pocket starting with 10 and increasing to 50. The first sensor that scores improperly is suspect. Try cleaning the faulty sensor with canned air. Replace the defective sensor. Check that the cables are connected properly. Replace the Logic Assembly.

2. **Improper Ball Count Display:**

Check the **Ball Count** sensor for proper action. Try cleaning the faulty sensor with canned air. The sensor may need adjusting or the entire sensor may need replacement.

3. **No Sound:**

If no music occurs during the play of a game, first check that the volume control (on the controller) is set properly. Then check that the cables are connected properly from the power supply to the speaker. Next make sure that the speaker is not damaged. Replace speaker if necessary. Then replace the sound board. If this is not the problem, then return the controller unit as per instructions.

5. **Counters Do Not Work:**

Check the cable connection from the counters to the logic board. Replace the counter with a good counter. If it still does not work, then replace the logic board. Return the unit for repair as instructed in this text.

6. **Lamp Does Not Light:**

If any lamp does not light, first check to insure that the lamp is properly seated in the socket. Do not replace lamps while power is on. Use only the proper replacement bulbs. Remove bulb by the glass portion of the bulb only. Do not place any tool in the socket while the power is on. This could damage expensive circuitry.

If the lamp is one of the two lights above the readouts (WINNER, or HIGH SCORE), ensure that the bulbs and sockets are good. Check the readout cable connections back to the power supply. If the lamp does not light, then replace it as instructed above. If the lamp still does not light, then replace the logic and/or the power supply and return for repair.

7. **“HELP” or “CALL” Appears in the Display:**

When the word **HELP** appears from the Balls Played and Score display, it means that the CPU board has turned on the ticket dispenser, but has not seen the signal back from the ticket dispenser to indicate that a ticket has been dispensed. This will occur if there are no more tickets, if they have jammed, or two or more notches are missing on the ticket, or if the circuit board on the dispenser is faulty. First, depress the **RESET** button on the ticket dispenser CPU board to attempt to clear the problem. If that fails, then examine the ticket dispenser. After the ticket problem is cleared, reload the tickets **making sure that the notch is centered in the optic eye**. Depress the **PROGRAM** switch. You should hold the switch down until you hear a beep. This usually takes about three (3) seconds. After you hear the beep, then release the **PROGRAM** button. The dispenser should now deliver the proper number of tickets owed. If **HELP** still appears, replace and return the defective unit for repair.

CLEANING AND ROUTINE MAINTENANCE

1. Plastic Channel Covers, Display Panel:
Skee-Ball, Inc. recommends using only “Kleenmaster Brilliantize”, or any good plastic cleaner.
2. Painted Wood Surfaces:
Skee-Ball, Inc. recommends any good furniture polish. Try on an area not seen by the public first. If the polish does not react with the paint or wood, use on the rest of the wood surfaces.
3. Black Bumper Strip on Runway:
Skee-Ball, Inc. recommends “Armour All” protectant.
4. Metal Surfaces:
Skee-Ball, Inc. recommends using a damp rag & warm soapy water or other general purpose cleaning products.
5. Sensors:
Skee-Ball, Inc. recommends using canned air to blow any dirt off the surface of the sensors. This includes the sensors in the ball return channel (ball count & ball release). All the sensors should be blown clean once a month.
6. Hinges:
Once a month, lightly apply a light lubricant to the channel cover hinges.
5. Runway Carpet:
The flooring material requires periodical maintenance. The frequency that one must clean the flooring will depend on the intensity of play on the game. For areas where the material has been relatively clean, the flooring can be *well mopped and cleaned with clean water*. For areas under heavy use, use soapy water and rinse well.

REPLACEMENT / SPARE PARTS

PART #	DESCRIPTION
800773-3	EESPY-415 OMRON SENSOR
800581-2	FUSE, 2AMP SLO-BLO
800581-3	FUSE, 10AMP FAST-BLO
800581-4	FUSE, 1AMP SLO-BLO
800067-1	SOLENOID, BALL RELEASE
800072-4	NRAR SOLENOID SPRING
801143-1	MODEL 'S' CONTROLLER
800208-1	SBD-4 SEVEN SEGMENT, 4 DIGIT, DISPLAY
800142-1	DELTRONIC LABS DL1275 TICKET DISPENSER
800076-1	SIDE NET TRIM, 10FT ALLEY
800076-2	SIDE NET TRIM, 13FT ALLEY
100146-1	CHANNEL COVER, REAR, LEFT, 10' ALLEY
100134-1	CHANNEL COVER, REAR, LEFT, 13' ALLEY
100147-1	CHANNEL COVER, MIDDLE, LEFT, 10' ALLEY
100134-3	CHANNEL COVER, MIDDLE, LEFT, 13' ALLEY
100045-1	CHANNEL COVER w/TD, FRONT, LEFT, 10' ALLEY
100045-1	CHANNEL COVER w/TD, FRONT, LEFT, 13' ALLEY
100177-7	CHANNEL COVER wo/TD, FRONT, LEFT, 10' ALLEY
100178-7	CHANNEL COVER wo/TD, FRONT, LEFT, 13' ALLEY
100146-2	CHANNEL COVER, REAR, RIGHT, 10' ALLEY
100134-2	CHANNEL COVER, REAR, RIGHT, 13' ALLEY
100169-1	CHANNEL COVER, FRONT, RIGHT, 10' ALLEY
100169-2	CHANNEL COVER, FRONT, RIGHT, 13' ALLEY

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Installation & Operation, Continued...

100006-1	BANKING STRIP, LEFT, 10' ALLEY
100133-2	BANKING STRIP, LEFT, 13' ALLEY
100006-2	BANKING STRIP, RIGHT, 10' ALLEY
100133-1	BANKING STRIP, RIGHT, 13' ALLEY
100004-3	PLINTH, LEFT, 10' & 13' ALLEY
100004-2	PLINTH, RIGHT, 10' & 13' ALLEY
800233-1	FRONT CARPET CLAMP
800231-1	FOOTBALL PLATE & PLUNGER
800136-1	NUMBER SET
100076-1	OBSTACLE ROD
800134-1	BALL DEFLECTOR BLACK
800134-3	BALL DEFLECTOR WHITE
100031-1	10 POINT POCKET
100025-1	20 POINT POCKET
100030-1	30 POINT POCKET
100029-1	40 POINT POCKET
100028-1	50 POINT POCKET
100160-1	100 POINT POCKET

FCC INFORMATION

This equipment has been tested and found to comply with the limits for a class “A” digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC WARNING

Substitute part or equipment modifications may void FCC type acceptance.

UL NOTICE

This game complies with UL22 Standard for amusement and gaming machines.

UL WARNING

Substituting parts or equipment modifications will void the UL listing.

RETURNED COMPONENTS

Should your product need servicing, please have the following information ready prior to contacting Skee-Ball, Inc.

1. Model # of the Unit
2. Serial # of the Unit
3. Serial # of the Part (i.e. – Main Processor Board) if applicable.

Most of this information can be found on the UL tag attached to rear of the product.

When returning a unit for repair, call prior to returning your product to obtain a Return Material Authorization number (RMA#). Failure to obtain an RMA# can lead to parts being delayed in repairs / shipping or return without repairs being completed. Write the RMA# on the outside of the package. Include the following information inside of the packaging:

1. Name, Address, Phone & Fax Numbers including Area Code.
2. Product Serial & Model Numbers.
3. RMA#
4. Contact Name
5. If possible, symptoms and / or problems experiencing.

Postage, insurance and / or shipping costs incurred while presenting your unit for repairs (in or out of warranty) is the responsibility of the consumer. Skee-Ball, Inc. will ship warranty repaired / replaced items back to the consumer free of charge via UPS Ground, U.S. Mail or other comparable shipping means. Any Express Mail or Overnight Shipping expenses are at cost to the consumer.

Skee-Ball, Inc. can be contacted at:

Skee-Ball, Inc.
121 Liberty Lane
Chalfont, PA 18914
(215) 997- 8900 – Voice
(215) 997-8982 – Fax
penn@skeeball.com
Mon – Fri 8am – 5pm E.S.T

Skee-Ball, Inc.'s distributors are independent, privately owned and operated. In their judgement, they may sell parts or accessories other than those manufactured by Skee-Ball, Inc. We cannot be responsible for the quality, suitability, or safety of any non- Skee-Ball, Inc. part, or any modification, including labor, which is performed by such distributor.

WARRANTY INFORMATION

Skee-Ball, Inc. warrants to the original purchaser that the product will be free of defects in workmanship and materials. The main processor and display boards are warranted for 1 year from the date of purchase. During the first 6 months, our Advanced Exchange Program will replace the main processor and display boards. All other components are warranted for 90 days from the date of purchase. These parts will be replaced under our Advanced Exchange Program for a period of 90 days.

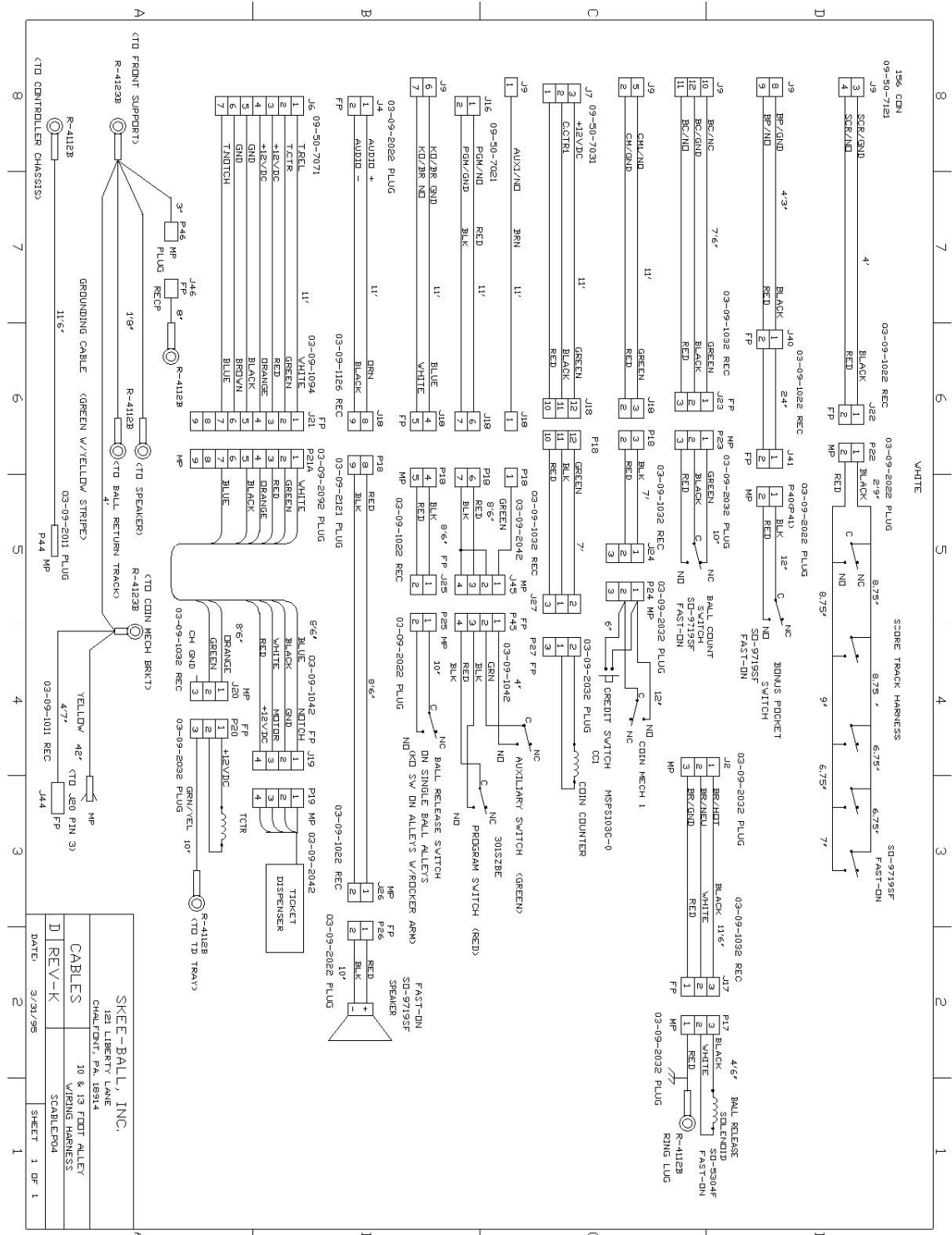
If your equipment fails to conform to the above-mentioned warranty, Skee-Ball, Inc.'s sole liability shall be, at its option, to repair or replace any defective component with a new or re-manufactured component of equal or greater OEM specifications.

Skee-Ball, Inc. will assume no liability whatsoever, for costs associated with labor to replace defective parts, or travel time associated therein.

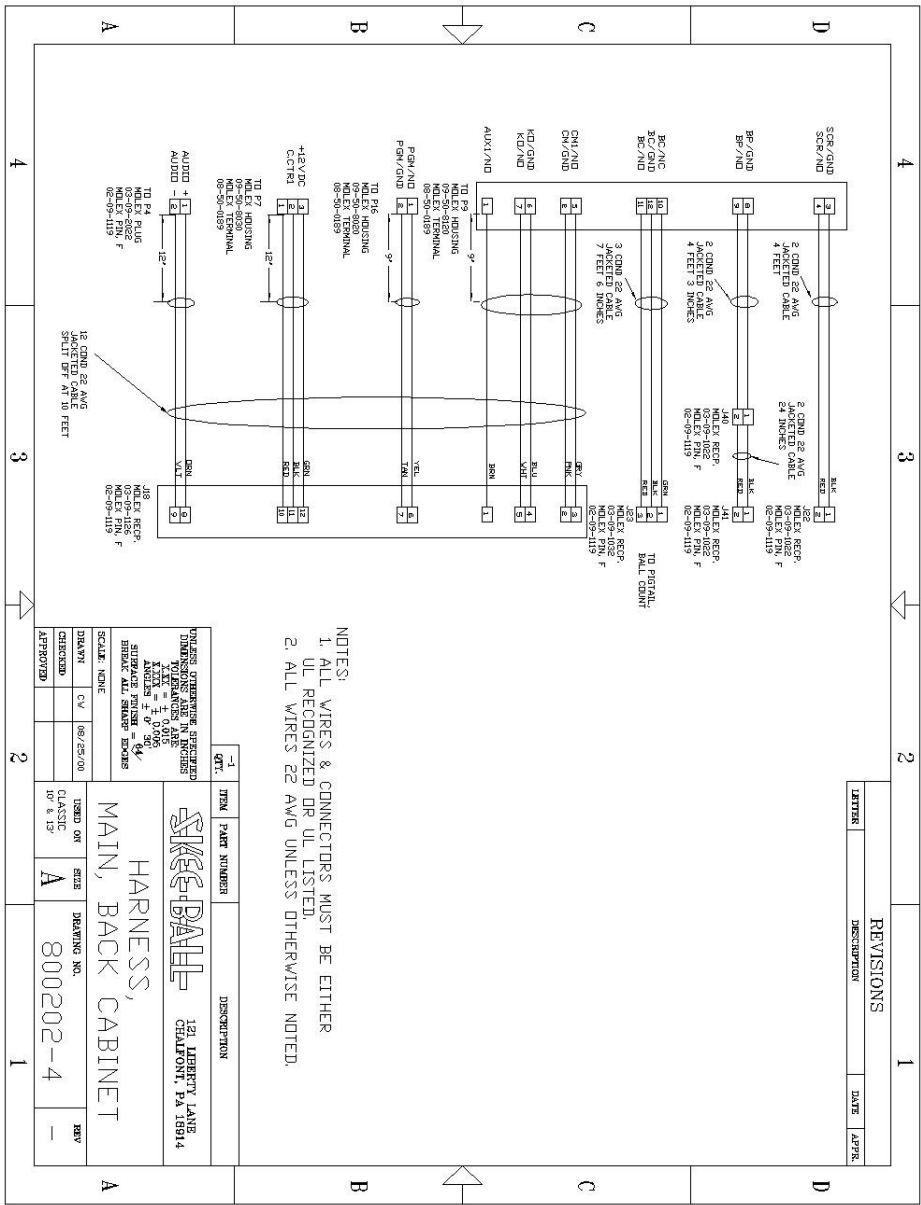
This warranty is contingent upon proper and normal use of the product and does not cover equipment, which has been modified without Skee-Ball, Inc. written consent. Which has been subject to unusual physical stress, incorrect assembly, hook-up, other misuse, neglect, improper electrical current, failures caused by natural disasters such as fire, flood, and lightning or as a result of any unauthorized repairs or alterations.

Skee-Ball Classic Manual

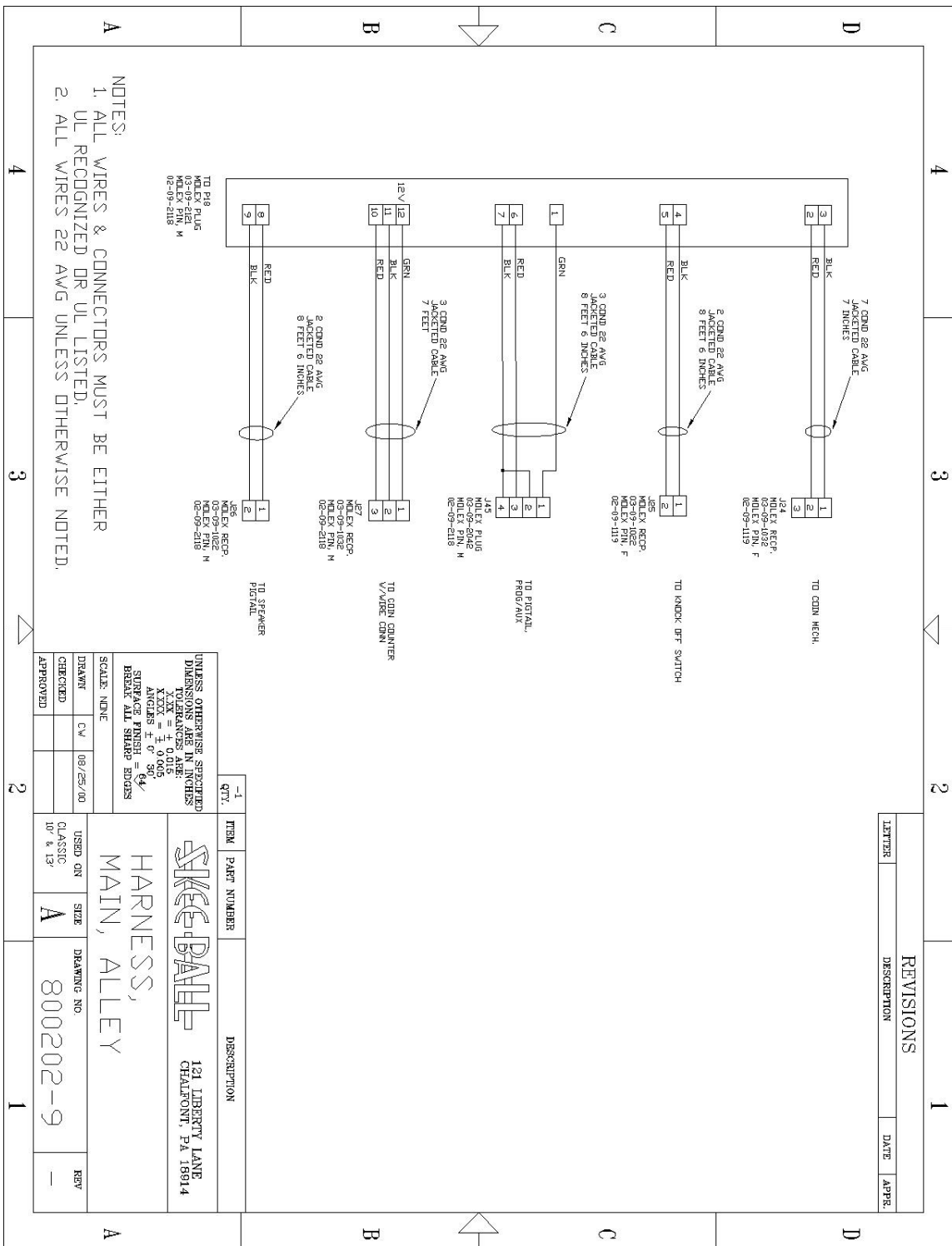
Installation & Operation, Continued...

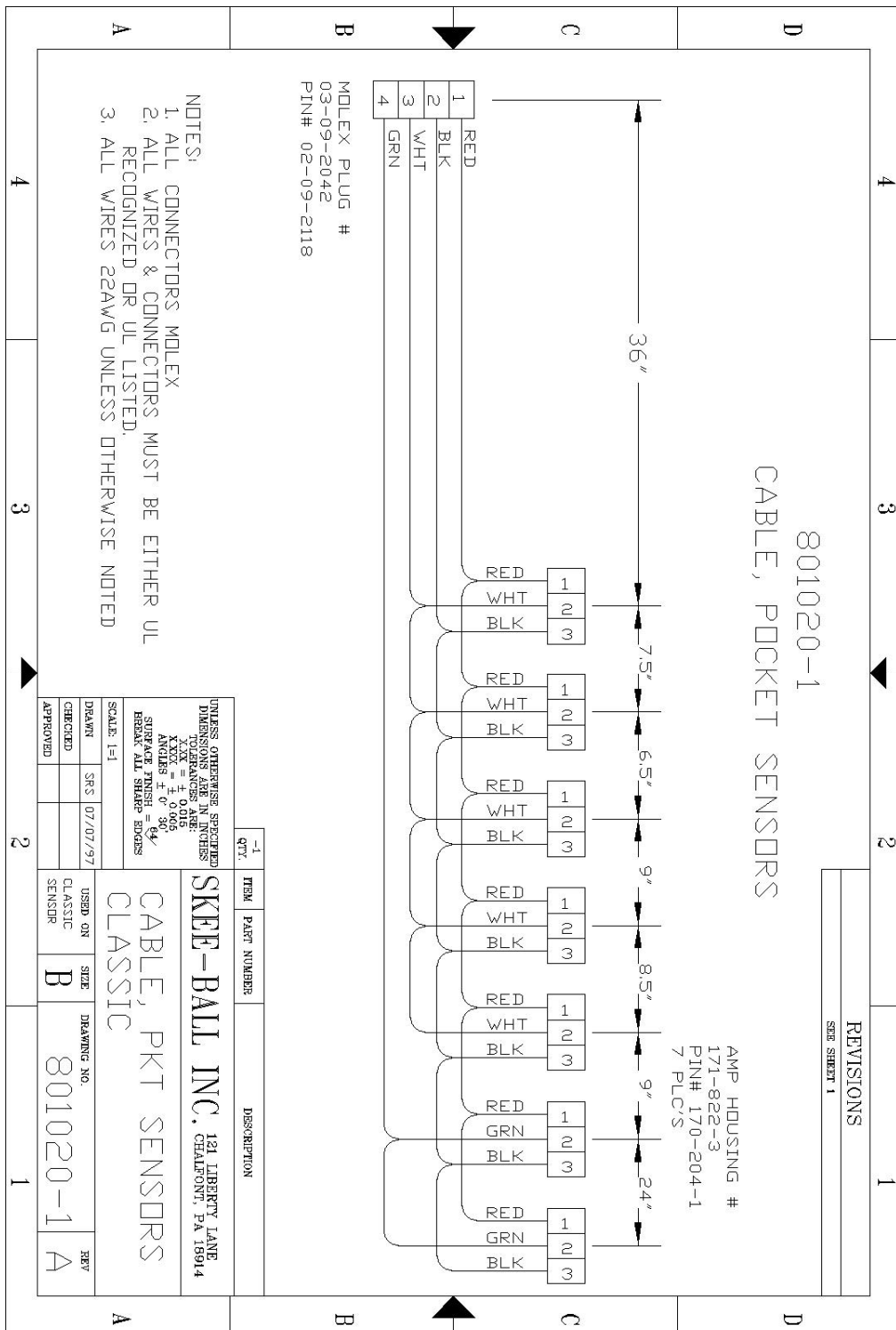


Skee-Ball Classic Manual
Installation & Operation, Continued...



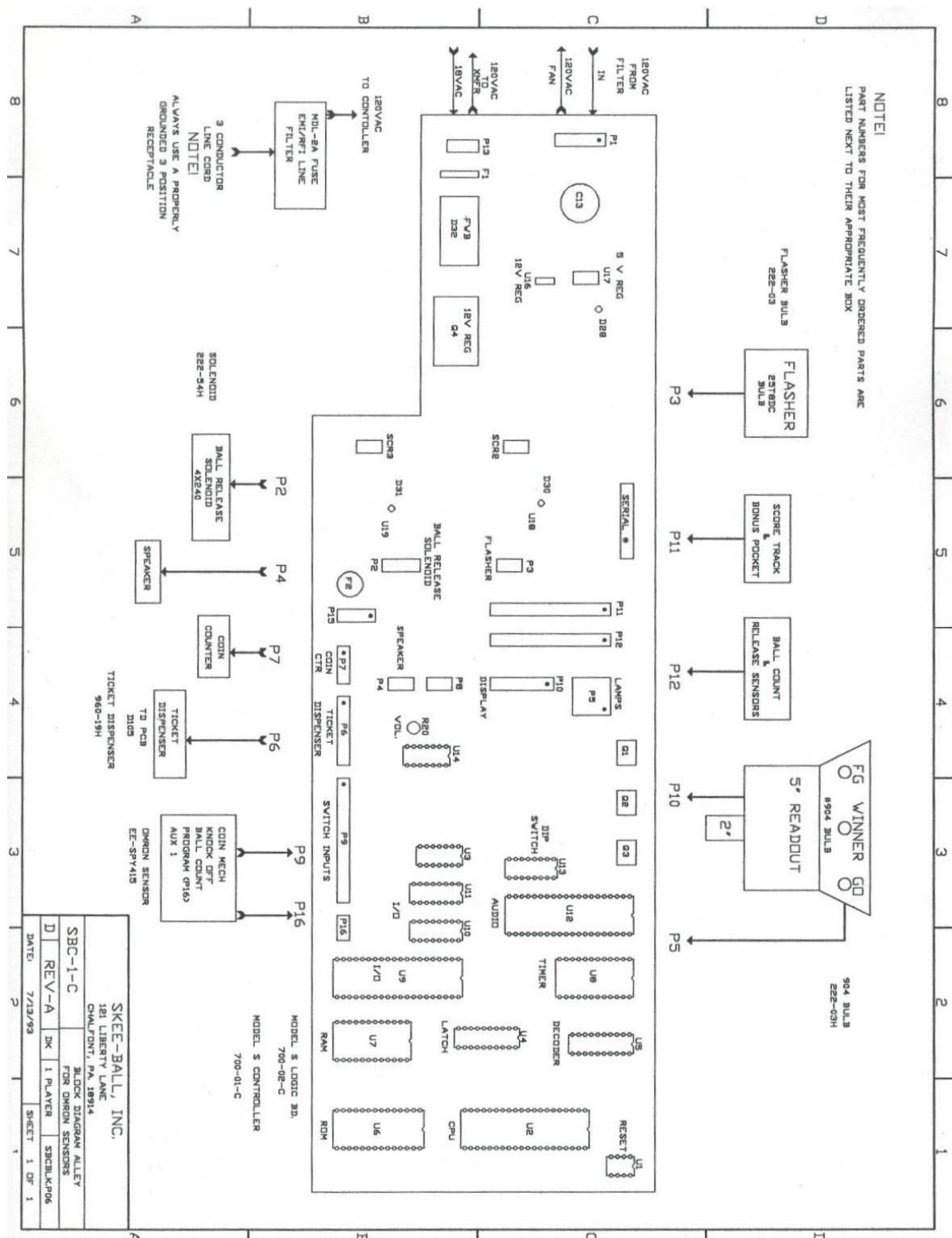
Installation & Operation, Continued...





Skee-Ball Classic Manual

Installation & Operation, Continued...



Technical drawing of a net clip assembly. The drawing includes a side view (top) and an end view (bottom right). The side view shows a curved plastic side net trim with a canvas net sleeve attached via net clips. Dimensions A, B, C, and D are indicated. The end view shows the net clip mechanism, including a pipe and a net clip. Labels include: PLASTIC SIDE NET TRIM, NET CLIP, TOP CABINET END, CANVAS NET SLEEVE, PIPE, BOTTOM RUNWAY END, BOSS, and ATTACH/LODP BLACK TIE WRAPS (BOTH ENDS).

DESCRIPTION	"A"	"B"	"C"	"D"
CLASSIC 10 FT ALLEY	4"	18"	15 3/4"	18 1/4"
CLASSIC 13 FT ALLEY	1/4"	18"	11"	18 1/4"

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
XXX = ± 0.015
XX = ± 0.010
X = ± 0.005
ANGLES ± 0° 30'
SURFACE FINISH = 64/
BREAK ALL SHARP EDGES
SCALE 1/4"

121 LIBERTY LANE
CHAUFONT, PA 18914