WINNER EVERY TIME

OWNERS AND SERVICE MANUAL

INNOVATIVE CONCEPTS IN ENTERTAINMENT INC.

10123 MAIN STREET, CLARENCE, NY 14031
SERVICE: 1-716-759-0360
FAX: 1-716-759-0884
E-MAIL: service@icegame.com
WEBSITE: www.icegame.com

TABLE OF CONTENTS

INTRODUCTION

GAME FEATURES

Thank you for your purchase of the new **PLUSH PALACE™** game from I.C.E.

The brand new **PLUSH PALACE™** all metal crane game by I.C.E. was designed with the operator in mind. Reliability, low maintenance, themed cabinetry, and all metal construction are the key design features, exactly what is needed to ensure a combination of long life and profit.

With nearly the entire construction made of metal, it was only natural to Powder Epoxy Coat everything, inside and out. This provides the owner – operator with a game that will certainly outlast its wooden counterparts. A few of the major advantages of all metal construction include:

- Vault like security
- Long service life
- Low maintenance
- High Durability

All windows, of the **PLUSH PALACE™**, are ¼" tempered glass to provide an easy clean, maximum safety, scratch resistant surface. Other features include, 40 strand conductor cables to prevent wire fatigue, full range of operator adjustable software, and a newly designed crane mechanism.

The first step in I.C.E.'s new crane design was to select several leading cranes available on the market today, observe and determine what problems can be or are causes of failure and costly down time. I.C.E. then surveyed operators nation wide, requesting information like:

- What are the leading causes of crane failures in your locations
- What are some problems in servicing cranes
- What changes would you make to current cranes to create a better machine

I.C.E.'s engineers then compiled all critical data, addressed and corrected each problem and used this information to create what we call the **PLUSH PALACE™** .

This method of design ensures that the needs and concerns of the owner-operators dictate the final design parameters, for who knows a crane's attributes and faults better than a crane operator.

GAME PLAY

As coins are inserted into the **PLUSH PALACE™** all metal game, a customized music is heard. When sufficient coins have been inserted, the claw clicks closed and re-opens, which signals the start of the game. The crane will then position itself in the middle of the "play field" and remain there, until the player is ready.

When the player has moved the joystick or pressed the buttons to move the crane, the timer on the right display will begin to count down. The player will then position the crane above the prize they are attempting to win and press the drop button to lower the claw.

If the nudging option is on, then the player will have the ability to keep "nudging" the claw each time the button is pressed to home-in on the chosen prize. If the nudging option is off, then the player will have only one chanceto drop the claw.

When the claw has fully dropped, it will close and retract to its uppermost position. The crane will then automatically position itself over the prize chute at the rear of the cabinet. The claw will then open, releasing the prize into the prize chamber. The player can now remove the prize from the chamber through the prize door located in the front, lower left corner of the game. The game is now at its home position and is ready for the next player in line.

If you have any questions regarding Programming, Troubleshooting or Repair, please call our Service Department.

I.C.E. Parts/Service Dept.

Phone #: (716) - 759 – 0360

Fax #: (716) – 759 – 0884

NORMAL BUSINESS HOURS ARE:
MONDAY - FRIDAY, 9:00 AM TO 6:00 PM EST

* The crane will remain in the home position if the game type (option 0) is set to 2, 3 or 4. In these options the player may have only two buttons, one for right travel and one for forward travel. The crane will remain in the home position to allow the player access to the entire play field.

SETUP / TESTING / MAINTENANCE

SAFETY PRECAUTIONS

IMPORTANT: FAILURE TO FOLLOW THESE DIRECTIONS CLOSELY COULD CAUSE SERIOUS DAMAGE TO 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, 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.

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 CORRECT VOLTAGE, HOWEVER IT IS A GOOD IDEA TO CHECK THE A.C. WALL RECEPTACLE VOLTAGE BEFORE PLUGGING THE GAME IN.

ASSEMBLY INSTRUCTIONS

1. Carefully unbox the game from its packaging.
2. Using the supplied keys, unlock the front door of the cabinet.
3. Cut all tie wraps holding the wagon assembly and crane in place.
4. Plug the game into a three prong grounded receptacle. **NOTE:** The appliance must be positioned such that the plug is accessable during use.
5. The game is now ready for start up.

TESTING

After the initial setup, it is time to test your game for proper operation.

1. Locate the game in its permanent location and lock all casters.
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 16Ga.
4. Verify that the game is set up for the proper voltage, and turn the power to the game on.
5. The game will run through a test mode at every startup. (See test mode explanation in the programming section for details.)
6. Insert coins/bills into the machine at least ten times into the coin mech/bill acceptor to ensure proper operation.
7. Check the credit and prize counters for proper operation.
8. Check that the door disconnect switch works properly.
9. Check game volume during busy time at location to set it at the proper level.

CLEANING

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

Clean the windows of your **PLUSH PALACE™** with a standard window cleaner such as “Windex”®.

Clean the cabinet sides with a good cleaner such as “Fantastik”® or “409”® and a soft rag. 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.

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

SETUP / TESTING / MAINTENANCE

MANUAL SETTING

Initial adjustment tips

- It is important to know that a mechanical adjustment is known as a “Macro adjustment” or a large adjustment, and that a software adjustment is considered a “Micro adjustment” of a fine adjustment.

- **NOTE:** These adjustments need only be performed when setting up the crane for the first time or when major changes to plush size and or shape occur. Once a configuration has been determined for your particular requirements, the same configuration in another CRANE GAME may require only minor adjustments.

- Pack in the same fashion as usual and stay consistent

- Set option 0 (Game mode) for game type you desire.

- Set option 3 (Game cost) for your particular game.

- For the following tests make sure that option 9 (Auto Strength) is set to 00. Any setting other than 00 and auto percentaging is enabled and incorrect results may occur.

- Make sure that the claw tips, when closed, are just touching. DO NOT allow them to overlap, for the claw could mechanically bind causing some down time.

-**CHECK IF YOU HAVE THE CORRECT CLAW SHAPE.** Set option 8 to 50, 9 to 00, and play the game approx. 25 times. At this level you should have great difficulty picking up plush.

- If you are able to pick up the plush rather easily, you have the wrong claw shape or size and you should go to the end of this section and see **CLAW SHAPE**.
- If you are unable to pick up the plush then set option 8 to 99 and play 25 games. You should now be able to pick up the plush fairly consistently. If this is true, continue on to the next step. **NOTE**: When the game is first packed it is often difficult to pick up plush until an area is cleared to maneuver in. Take this into account while determining if the claw size or shape is correct.
- Initially set option 8 (Manual strength), based on your size plush, such that the claw is barely able to hold the plush when closed. If you are unsure, a good starting point for option 8 is 60 for average size plush and our standard medium claw. **NOTE**: When in programming mode at option 8 the claw will begin to open and close at approximately 5 second intervals. The operator can then associate the claw strength number on the right display with actual “physical” claw strength at the claw.
- Knowing the cost of a game, the average cost of a piece of plush, and the desired pay out % calculate the proper plush dispensing intervals, for your setup, using the following formula:

1.)	100 *(Game cost)	=	A (# of dollars received for 100 games)
2.)	A *(Desired payout %)	=	B (# of dollars worth of plush that should be dispensed in 100 games)
3.)	B /(Cost Of Plush)	=	C (# of pieces of plush that should be dispensed in 100 games)
4.)	100/C	=	Proper plush dispensing intervals

SETUP / TESTING / MAINTENANCE

EXAMPLE

Game Cost = $0.50
Avg. cost of 1 plush = $2.00
Desired payout % = 33%

1.) 100* ($0.50) =$50

2.) $50* (.33) =$16.50 worth of plush in 100 games to give a 33% payout

3.) $16.5 / ($2.00) =8.25 pieces of plush per 100 games to give a 33% payout

4.) 100 / (8.25) =12.12 round off to 12

NOTE: This means that approximately every 12th game played 1 piece of plush should be won.

Armed with the information particular to your game (Proper plush dispensing intervals determined above) play at least 50 games and see if the correct number of plush have been dispensed. (For the example above, in 50 games you should have dispensed approximately 4 pieces of plush (Every 12.12 games.)

NOTE: The more games you play during the "TEST" the more accurate your accounting will be. When 50 games have been played calculate the payout % using the formula below:

1.) $$\frac{(\#\text{ of plush dispensed}) * (\text{Cost of 1 pc. of plush})}{(\#\text{ of games played}) * (\text{Cost of game})} = \text{Payout \%}$$

EXAMPLE

Cost of a game = $0.50
Cost of 1 piece of plush = $2.00
# of plush dispensed = 55
# of games played = 423

$$\frac{(55) * ($2.00)}{(423) * ($0.50)} = 52 = 52\%\text{ payout}$$

If the calculated pay out is very high, (your desired pay out + 10% or more), it will be necessary to make a macro adjustment or move the claw tips apart slightly by loosening the three screws holding the coil slider to the coil housing and moving the coil slider up slightly. (See Fig. 1) **NOTE**: MOVING THE COIL SLIDER 1/8TH OF AN INCH COULD CHANGE YOUR PAY OUT BY AS MUCH AS 60%. BE SURE TO MOVE THE SLIDER IN VERY SMALL INCREMENTS SO AS NOT TO OVERSHOOT YOUR DESIRED PAYOUT.

If the calculated payout is slightly high, (your desired payout + less than 10% or more), then you can make a micro adjustment or a software claw strength adjustment at option 8.

Conversely, if the calculated payout is very low or slightly low you will need to make a macro or micro adjustment accordingly.

Repeat the 50 game test and calculate the payout %. Repeat the mechanical adjustment until you are within approximately 5-10% of your desired payout. You can now enter the programming mode and adjust option 8 (Mechanical strength) up or down slightly to achieve your desired payout. Your game is now set up according to your Desired Payout, Game cost, and Plush cost. If, at a later date, you want to change your game cost, desired payout, plush cost, etc., it is NOT necessary to re-adjust your game manually. Just adjust the value of the option you wish to change in the PROGRAMMING SECTION. The game will adjust to your new configuration.

If after using the Initial adjustment tips above, you are still having difficulty in setting up your Crane Game, please call the I.C.E. service line @ 1-(716)-759-0360.

SETUP / TESTING / MAINTENANCE

AUTO % SETTINGS

Initial adjustment tips

- Before setting up auto percentaging it is highly advisable to set up manual percentaging. This is a precaution in the unlikely event that the prize sensor fails or error code 10 or 11 is logged. If either one of these situations occurs the game will AUTOMATICALLY revert to manual percentaging settings, allowing the game to still function until the error is corrected. If your manual settings are not set up, it may be possible to dispense too much plush resulting in a loss of revenue for that week, or dispensing to little plush causing your customers to feel as though they cannot win which will eventually result in a loss of play and revenue.

- It is important to know that a mechanical adjustment is known as a “Macro adjustment” or a large adjustment, and that a software adjustment is considered a “Micro adjustment” or a fine adjustment.

- **NOTE**: These adjustments need only be performed when setting up the crane for the first time or when major changes to plush size and or shape occur. Once a configuration has been determined for your particular requirements, the same configuration in another CRANE GAME may require only minor adjustments.

- Pack in the same fashion as usual and stay consistent.

- Set option 0 (Game mode) for game type you desire.

- Set option 3 (Game cost) for your particular game.

- Make sure that the claw tips, when closed, are just touching. DO NOT allow them to overlap, for the claw could mechanically bind causing some down time.

- **CHECK IF YOU HAVE THE CORRECT CLAW SHAPE.** Set option 8 to 50, 9 to 00 and play the game approx. 25 times. At this level you should have great difficulty picking up plush.

  - If you are able to pick up the plush rather easy, you have the wrong claw shape or size and you should go to the end of this section and see **CLAW SHAPE**.
  - If you are unable to pick up the plush then set option 8 to 99 and play 25 games. You should now be able to pick up the plush fairly consistently. If this is true, continue on to the next step.

    NOTE: When the game is first packed it is often difficult to pick up plush until an area is cleared to maneuver in. Take this into account while determining if the claw size or shape is correct.

- Make sure option 8 (Manual Strength) is set up as detailed above before setting up auto %

- Make sure option 9 (Auto Strength) is set to 60. **NOTE**: This is a good setting for jumbo mix and a medium claw. It is advisable to keep the claw strength high enough to slightly move the plush around yet low enough to prevent a player from easily picking up a prize.

- Set option 16 (Plush Cost) based on the cost of your plush.

- Set option 17 (Desired Payout %) based on your desired payout.

- Knowing the cost of a game, the average cost of a piece of plush and the desired pay out %, calculate the proper plush dispensing intervals for your setup, using the following formula:

1.) 100 *(Game cost) = A (# of dollars received for 100 games)

2.) A *(Desired payout %) = B (# of dollars worth of plush that should be dispensed in 100 games)

3.) B /(Cost Of Plush) = C (# of pieces of plush that should be dispensed in 100 games)

4.) 100/C = Proper plush dispensing intervals

SETUP / TESTING / MAINTENANCE

EXAMPLE

Game Cost = $0.50
Avg. cost of 1 plush = $2.00
Desired payout % = 33%

1.) 100* ($0.50) =$50

2.) $50* (.33) =$16.50 worth of plush in 100 games to give a 33% payout

3.) $16.5 / ($2.00) =8.25 pieces of plush per 100 games to give a 33% payout

4.) 100 / (8.25) =12.12 round off to 12

NOTE: This means that approximately every 12th game played 1 piece of plush should be won.

Armed with the information particular to your game (Proper plush dispensing intervals determined above) play at least 50 games and see if the correct number of plush have been dispensed. (For the example above, in 50 games you should have dispensed approximately 4 pieces of plush (Every 12.12 games.)

NOTE: The more games you play during the "TEST" the more accurate your accounting will be). When 50 games have been played calculate the payout % using the formula below:

1.) $$\frac{\text{(\# of plush dispensed) * (Cost of 1 pc. of plush)}}{\text{(\# of games played) * (Cost of game)}} = \text{Payout \%}$$

EXAMPLE

Cost of a game = $0.50
Cost of 1 piece of plush = $2.00
# of plush dispensed = 55
# of games played = 423

$$\frac{(55) * ($2.00)}{(423) * ($0.50)} = 52 = 52\% \text{ payout}$$

If the calculated pay out is very high, (your desired pay out + 10% or more), it will be necessary to make a macro adjustment or move the claw tips apart slightly by loosening the three screws holding the coil slider to the coil housing and moving the coil slider up slightly. (See Fig. 1) **NOTE**: MOVING THE COIL SLIDER 1/8TH OF AN INCH COULD CHANGE YOUR PAY OUT BY AS MUCH AS 60%. BE SURE TO MOVE THE SLIDER IN VERY SMALL INCREMENTS SO AS NOT TO OVERSHOOT YOUR DESIRED PAYOUT.

If the calculated payout is slightly high, (your desired payout + less than 10% or more), then you can make a micro adjustment or a software claw strength adjustment at option 8.

Conversely, if the calculated payout is very low or slightly low you will need to make a macro or micro adjustment accordingly.

Repeat the 50 game test and calculate the payout %. Repeat the mechanical adjustment until you are within approximately 5-10% of your desired payout. You can now enter the programming mode and adjust option 8 (Mechanical strength) up or down slightly to achieve your desired payout. Your game is now set up according to your Desired payout, Game cost, and Plush cost. If, at a later date, you want to change your game cost, desired payout, plush cost, etc., it is NOT necessary to re-adjust your game manually. Just adjust the value of the option you wish to change in the PROGRAMMING SECTION. The game will adjust to your new configuration.

If after using the Initial adjustment tips above, you are still having difficulty in setting up your Crane Game, please call the I.C.E. service line @ 1-(716)-759-0360.

SETUP / TESTING / MAINTENANCE

CLAW SHAPE

In an attempt to satisfy all variables associated with the proper payout ICE has opted to include directions on how to reshape your medium claw for a lesser and greater mechanical advantage. Below are two medium claws shapes which will give very different mechanical advantages and ultimately very different claw strengths.

- When option 8 is set to 50 and you are still picking up plush, then you will need to reshape your 3 claws to look more like shape “A”. (SEE FIG. 2) **NOTE**: Be sure to align holes in the claw with drawn holes in the template. This will ensure proper shaping of the claw.
- When option 8 is set to 99 and you are unable to pick up consistently then you will need to reshape your 3 claws to look more like shape “B”. (SEE FIG. 2) **NOTE**: Be sure to align holes in the claw with drawn holes in the template. This will ensure proper shaping of the claw.

These are the two claw shapes that ICE has proven work well, although there are many other shapes that may work. You will need to remove the claws from the claw mechanism by following the steps.

1. Remove the claw mechanism from the coil housing by loosening the three screws on the coil slider and removing. Be sure not to loose the small spring around the plunger and the black rynite washer below the spring. These two parts are critical in the proper operation of the crane mechanism. (SEE FIG.1)
2. Loosen and remove the 6 small Philips head machine screws and nylock nuts attaching the three claws to the coil-claw interconnect and coil spider (SEE FIG. 1)
3. Reshape the claws according to the claw shape templates “A” or “B”.
4. Re assemble in reverse order.

Now that you have reshaped your claws for your plush, return to the beginning of Adjustment tips and proceed through each step.

FIG. 1

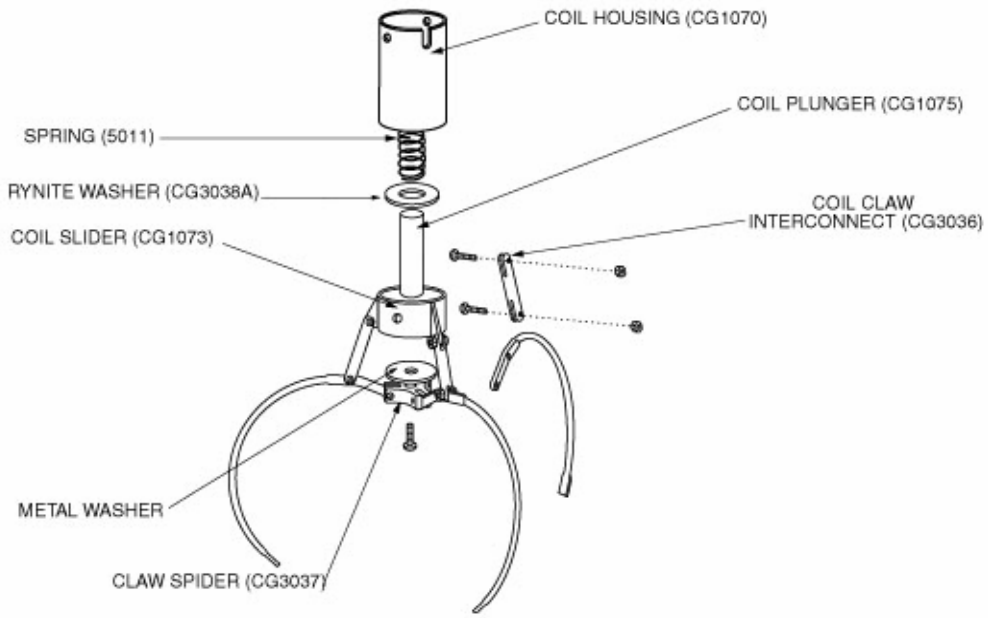
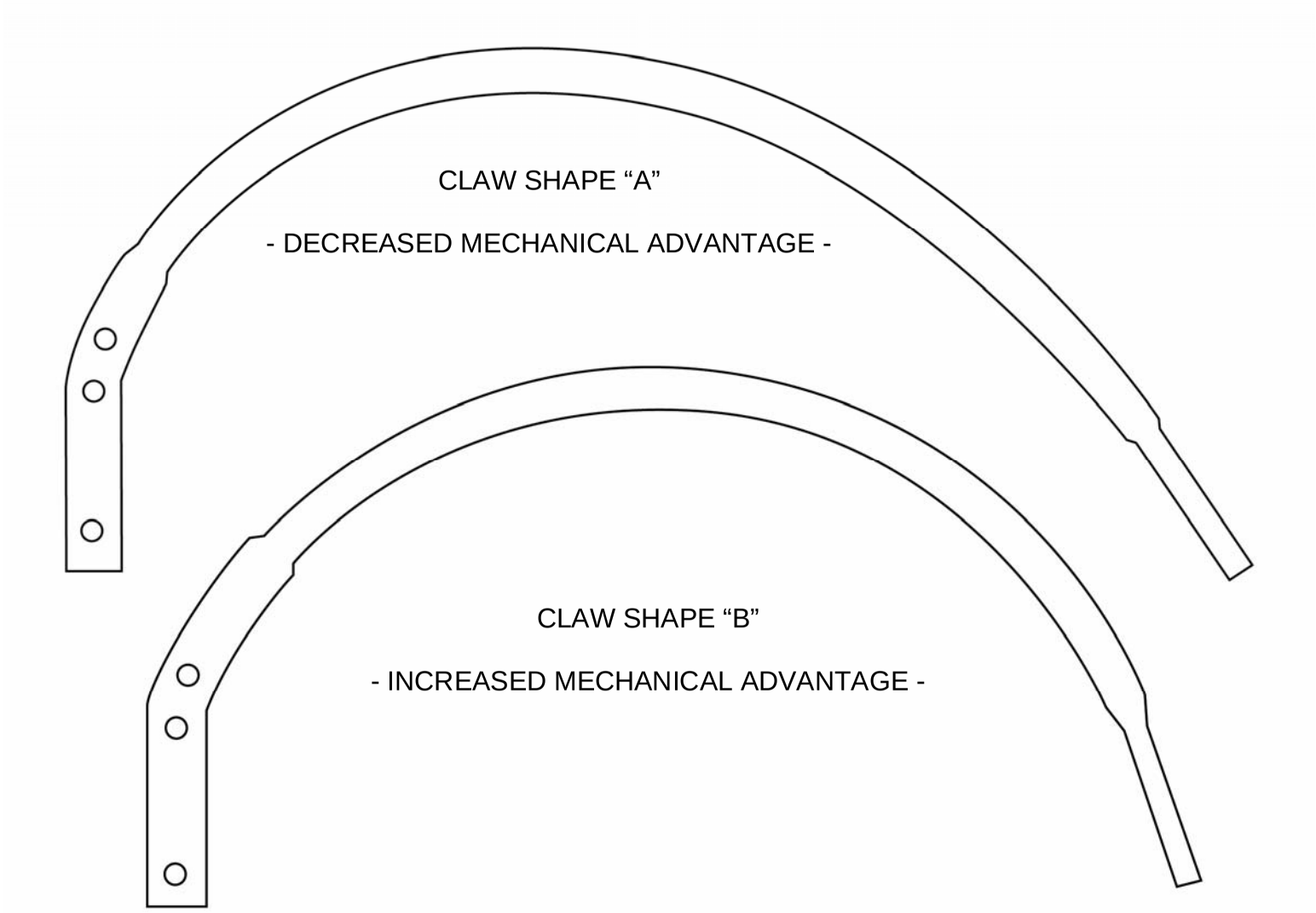


FIG. 2

CLAW TEMPLATES



NOTE: THESE ARE THE TWO CLAW SHAPES THAT HAVE BEEN THOROUGHLY TESTED BY I.C.E. AND ARE PROVEN TO WORK. THEY SHOULD BE USED AS A GUIDE TO INCREASE OR DECREASE THE MECHANICAL ADVANTAGE OF THE CLAW FOR YOUR PARTICULAR PLUSH. OTHER CLAW SHAPES IN - BETWEEN CLAW SHAPES A & B MAY WORK BUT WILL REQUIRE FURTHER TESTING.

PROGRAMMING

Test Mode Explanation

Every time that the game is powered up, the door is closed or exiting programming mode, the game will run through a test mode to check the following items:

- HOME BACK SWITCH
- HOME LEFT SWITCH
- UP SWITCH
- DOWN SWITCH
- FRONT / BACK MOTOR
- LEFT / RIGHT MOTOR
- CREDIT / COIN DISCONNECT
- CLAW CLOSE, CLAW OPEN
- PRIZE SENSOR
- OUT OF RANGE
- E^2 (MEMORY)

If any of the above items are malfunctioning, the game will light up the 4 decimal points on the podium displays. This will alert the operator that there has been a problem. The operator needs only unlock and open the front door and the error codes will be displayed one at a time on the left display. To move to the next error code, the operator needs to press the drop button. Repairs should be made to those areas in which errors have been logged. When all codes have been seen, and the door is closed, the game will reset the error codes, run through a test mode to check for proper operation and if all is well, game play can start. If not, the 4 decimals will once again light up and the operator will need to check the error codes again. Game play can continue to the best of the machine's abilities, with problems, until the errors are corrected. At no time should the game be inoperable unless a key component is damaged.

Error code 10 / 11 will alert the operator that the game has paid out 8 too many or 8 too little pieces of plush when in skill leveling. If this error is logged, the game will automatically revert to MANUAL settings until one of the following options has been changed. (COST OF PLUSH, SKILL % MIN., % PAYOUT, OR GAME COST) This is why it is imperative that the manual setting be setup before skill leveling is used.

NOTE: Changing one of these options will reset error code 10 / 11 and the game will begin skill leveling with the new settings.

NOTE: Some items on the list can not be detected by the game and require that the operator watches for these actions to be performed during the start up test mode. (Claw close, Claw open)

Error Codes

#	Problem	Solution
1	E^2 (Memory)	Replace Microprocessor
2	Prize Sensor	Check / Replace Prize Sensor
3	Up Sensor	Check / Replace Up Sensor
4	Down Sensor	Check / Replace Down Sensor
5	Left / Right Sensor	Check / Replace L /R Sensor
6	Front / Back Sensor	Check / Replace F /B Sensor
7	Front / Back Motor	Check / Replace F / B Motor
8	Left / Right Motor	Check / Replace L / R Motor
9	Counter Disconnect	Just a warning that the credit / coin counters were disconnected at some time.
10	Out Of Range (High)	Change setting for the Cost of Plush, Skill leveling Min, % Payout or Game Cost
11	Out Of Range (Low)	Change setting for the Cost of Plush, Skill leveling Min, % Payout or Game Cost

Entering the Accounting Mode

To enter the accounting mode, unlock and open the front door and press the button marked ACCOUNT, located near the main board. The left displays will flash between "cr" (Credits) then the number of credits 1 - 9999. If the operator presses the drop button, the displays will flash "pl" (Plush) then the number of plush that has passed through the sensor. These numbers can never be reset and WILL NOT match the numbers on the mechanical counters from the counters. It is advisable that the owner note this difference so that they will be able to track actual software coins / credits and plush out vs. the mechanical counters for accounting purposes.

QUICK TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
THE DECIMALS ON THE 4 DISPLAYS ARE LIT UP	THIS IS IN FACT NOT A PROBLEM BUT A WAY OF LETTING THE OPERATOR KNOW THAT THERE WAS A PROBLEM DURING THE START UP MODE	OPEN THE FRONT DOOR AND THE ERROR CODES ARE SHOWN ON THE DISPLAYS. TO ADVANCE THROUGH THE ERROR CODES, PRESS THE DROP BUTTON
NO GAME POWER	ON-OFF SWITCH ON THE GAME IS TURNED OFF BLOWN A.C. POWER FUSE GAME NOT PLUGGED IN OR CORD DAMAGED BAD TRANSFORMER TRANSFORMER HARNESS NOT CONNECTED BAD POWER MODULE	TURN POWER ON REPLACE WITH PROPER FUSE CHECK POWER CORD CHECK PROPER VOLTAGES CHECK HARNESS REPLACE POWER MODULE
GAME WILL NOT TAKE MONEY OR GIVE CREDITS CORRECTLY	BAD COIN SWITCH BAD COIN MECHANISM LOOSE OR DAMAGED HARNESSING BAD MAIN P.C. BOARD	CHECK W / METER AND REPLACE ADJUST OR REPLACE CHECK W / METER AND REPAIR REPAIR OR REPLACE MAIN BOARD
DISPLAYS DO NOT WORK	BAD 12V FUSE BAD DISPLAY P.C. BOARD BAD MAIN P.C. BOARD LOOSE OR DAMAGED DISPLAY HARNESSING	REPLACE WITH PROPER FUSE REPAIR OR REPLACE P.C. BOARD REPAIR OR REPLACE P.C. BOARD CHECK W / METER AND REPAIR
CRANE OR WAGON DOES NOT MOVE	BAD MOTOR LOOSE OR DAMAGED HARNESSING BAD SWITCH ON BUTTON OR JOYSTICK BAD HARNESSING TO BUTTONS OR JOYSTICK BLOWN FUSE TO MOTORS ON MAIN P.C. BOARD	REPLACE MOTOR CHECK W / METER AND REPAIR REPLACE SWITCH CHECK W / METER AND REPAIR REPLACE WITH PROPER FUSE
CRANE KEEPS TRYING TO MOVE IN THE HOME POSITION	BAD LIMIT SWITCH (S) LIMIT SWITCH NOT ALIGNED WITH ACTUATOR	REPLACE SWITCH (S) ALIGN SWITCH AND ACTUATOR
CLAW WILL NOT CLOSE	BLOWN FUSE TO CLAW ON MAIN P.C. BOARD BAD COIL LOOSE OR DAMAGED HARNESSING CLAW HAS MECHANICALLY JAMMED	REPLACE WITH PROPER FUSE REPLACE COIL CHECK W / METER AND REPAIR FIND JAM AND REPAIR
CLAW STAYS CLOSED	BAD DRIVE TRANSISTOR ON MAIN P.C. BOARD CLAW HAS MECHANICALLY LOCKED	REPLACE TRANSISTOR FIND JAM AND REPAIR
AUTO PERCENTAGING IS NOT FUNCTIONING	PROGRAMMING IS NOT CORRECTLY SET BAD PRIZE SENSOR LOOSE OR DAMAGED SENSOR HARNESS	SET OPTIONS “9” AND “17” REPLACE PRIZE SENSOR CHECK W / METER AND REPAIR
CLAW GOES DOWN AND THEN UP BUT DOES NOT CLOSE	DOWN SWITCH BAD LOOSE OR DAMAGED HARNESS TO DOWN SWITCH	REPLACE DOWN SWITCH CHECK W / METER AND REPLACE
CLAW COMES UP AND ABOUT 15 SEC. PASSES BEFORE CRANE MOVES TO THE HOME POSITION	UP SWITCH BAD LOOSE OR DAMAGED HARNESS TO UP SWITCH	REPLACE UP SWITCH CHECK W / METER AND REPLACE
CRANE OR WAGON WHEELS SLIP	MISSING OR DAMAGED O-RING DRIVE BELTS LOOSE SET SCREWS IN WHEELS LOOSE SET SCREWS IN DRIVE COUPLER RAILS NEED TO BE SCUFFED	REPLACE O-RING BELTS TIGHTEN SET SCREWS TIGHTEN SET SCREWS SCUFF TOP OF RAILS WITH SANDPAPER

QUICK TROUBLESHOOTING

- NOTE: A self-test will be performed each time the front door is “closed” or the game is powered up.

- **NOTE**: The game will not count credits or plush-out on either the mechanical or software counters while the front door is open.

- **NOTE**: If the Wagon does not move smoothly through a full travel from left to right, check to see that the wheel spacing is correct. If the spacing is correct then check the 2 cabinet rails for burrs that may cause the wheels to bind.

- **NOTE**: If the Crane does not move smoothly through a full travel from front to back, check to see that the wheel spacing is correct. If the spacing is correct then check the 2 cabinet rails for burrs that may cause the wheels to bind.

- **NOTE**: If the micro track for the left to right movement is binding during its travel, check to see if the top mirror bracket’s edge, also the shelf the micro track rides on, has been de-burred.

- **NOTE**: If the front door is having trouble closing fully, check to see that the front light harness is tie wrapped above the highest point of the prize chamber wall. Next, check to see that the prize chamber wall is far enough to the right to allow the right edge of the prize chamber doorframe to swing pass. Finally, check to see that the hinge leaf length is short enough to prevent binding in the cabinet frame.

- **NOTE**: If the door will not lock properly or locks with difficulty, check to see if the lock rotates smoothly. Next, check that the lock rods are not binding on the lock cam or the lock rod guides. Next, check that all friction points have been lubricated with molly grease. Finally, if need be, file the lock rod guides such that the door closes and locks smoothly but be careful not to file out too much, for this may cause the door not to pull tightly to the cabinet as it was intended to do.

- **NOTE**: If the decimals light up on the displays after a self-test, an error has been logged. When the door is in the open position, error codes will be shown on the left display. To advance through the error codes press the drop button.

- **NOTE**: If, at the beginning of the self-test mode, the claw does not drop, one or more of the following may apply: the prize sensor is not working or blocked; the string or string lever is mechanically binding; the up or down switch is sticking or misaligned from its actuator.

- **NOTE**: If claw stays closed it is likely that the diode has blown and the transistor controlling the claw has also blown. Shut off the game immediately and have a new diode (in coil assembly,) and transistor (Q10 on main board,) installed. If the capacitors at C16 and C54 are not removed from the main board, remove them for added protection to the solenoid transistor @ Q10.

- **NOTE**: If claw is jerky while being lowered, it is likely that the up spring is missing or not properly elongated. Another possibility is that the string has mechanically bound on the spool. To fix the string binding, enter programming mode and go to mode 24. By moving the joystick to the left and right you are able to raise and lower the claw mechanism. Move the crane over the prize chute and lower the claw mechanism all the way until it starts to wind up backwards. Reverse the motor direction to raise the claw mechanism and properly rewind the string on the spool. Exit the programming mode and the string should be free of mechanical binding.

- **NOTE**: If the claw stays open, first check for bad fuses on the main board, next check that there are no wires dislodged from the connectors in the harness between the wagon and the crane, the harness between the wagon and the main board, the crane assembly and the wagon assembly. If the problem still exists and no fuses are blown or wires dislodged it is likely that the transistor controlling the voltage to the claw has blown on the main board. Replace main board and have the other main board repaired by electronics.

- **NOTE**: If the crane/wagon in the home position, still tries to move left or back, check to see that the actuators are both present. Check to see that the sensors are present. Next, check to see that the sensors and the actuators are both aligned. Then check to see that the sensor wires are not dislodged from the connectors. Finally replace the sensor, it is likely to be bad.

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.

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 are good.

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 **PLUSH PALACE™** crane game (if available) 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 metersif 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.

MAIN P. C. BOARD REPLACEMENT

1. Remove all A.C. power from the game.
2. Unlock and open the lower door.
3. Carefully remove all of the connectors from the main p.c. board.
4. Remove the 4 long plastic hexagon nuts that secure the board to the main board housing.
5. Gently pull the p.c. board from the mounting studs.
6. Reassemble in the reverse order using a new main p.c. board.

FRONT GLASS REPLACEMENT

DUE TO THE LARGE SIZE OF THE WINDOW, IT IS HIGHLY RECOMMENDED TO HAVE AT LEAST 2 OR 3 PEOPLE AVAILABLE FOR THIS WINDOW REPLACEMENT.

1. Remove all A.C. power from the game.
2. Open the Lower Front Door of the game. Locate the cable underneath the front podium/ control panel, pull cable down to release podium/control panel downward. Lift to open the front window frame.
3. With one person holding each end of the window frame, remove the safety clip from the bottom portion of each of the (2) hydraulic shocks. **NOTE:** DO NOT LOSE THESE 2 CLIPS, OR THE SHOCKS WILL NO LONGER WORK SAFELY.
4. Pull the bottom portion of the 2 shocks off the Ball Studs. MAKE SURE THAT THE WINDOW FRAME IS HELD UP BY 2 PEOPLE.
5. One person should then move towards the middle of the window frame, holding the frame by the outer and inner edges.
6. Loosen all 8 bolts inside the top front edge of the game, which hold the window frame to the game . Fully remove only the 4 bolts which are not in the slotted holes, leaving the other bolts loose, but in place.
7. Remove the entire window frame by lifting it away from the game. Carefully place the frame with the inside up, on a flat surface that is at least as large as the frame.
8. Remove all the bolts, the window tube frame, and the corner brackets which hold the glass to the window frame. Be sure to remove all pieces of broken glass from the frame where the new glass will rest.
9. Replace glass into frame and reassemble with tube frame and corner brackets.
10. Hand tighten all bolts in tube frame and corner brackets first, then tighten them securely once all bolts are in place.
11. Replace window frame onto game, making sure slotted bolts slide into slots evenly. Replace 4 bolts inside the top front edge of the game. Tighten all 8 bolts, including the ones in the slotted holes, to secure frame to game.
12. While holding window frame up, replace hydraulic shocks on the ball studs and secure with safety clips.
13. Close window down securely, lift up on podium/ control panel, and close front door.

GAME REPAIR

SIDE GLASS REPLACEMENT

1. Remove all A.C. power from the game.
2. Open the Lower Front Door of the game. Locate the cable underneath the front podium/control panel, pull cable down to release podium/control panel downward. Lift to open the front window.
3. Remove two-way mirror from front corner panel of the side that needs glass replaced. Slide it up through grooves until completely out, revealing mylar covering.
4. Gently peel back mylar from front corner panel to reveal bolts. Remove 4 lower bolts from corner panel that hold glass retainer on inside of game.
5. Loosen top bolt in front corner panel, until flush with nut on inside of game.
6. Remove both crane assemblies following instructions in the *Removal of Crane Assembly* Section below.
7. Using a 7/16” socket, remove wagon stop brackets located inside game attached to rail and side walls. BE CAREFUL THAT RAIL DOES NOT SLIDE OUT CAUSING POSSIBLE INJURY.
8. Remove prize chute(s) and prize fence as needed for each side needing repair.
9. Remove prize sensor, following instructions for Prize Sensor Replacement on the next page.
10. Remove any broken glass from the lower retainer bracket, found directly below the window, and any other glass pieces that may obstruct the window sitting correctly. **NOTE:** Lower retainer does not need to be removed.
11. Once all parts are removed per above, and there are no obstructions, you may carefully place new window into frame. Lean window at an angle with top towards frame, slide top in first, then slide bottom toward frame.
12. Lift slightly and lower into lower retainer bracket.
13. Replace all window retainers and tighten all bolts securely. Replace Prize Sensor, Prize Chute(s), Rail and Wagon Stop Brackets, and Crane Assembly following instructions in reverse order.
14. Close front window, lift Podium/ Control Panel to secure. Close Lower Front Door.
15. Replace two-way Mirror on front corner panel by sliding mirror into grooves to hold it.

REMOVAL OF CRANE ASSEMBLY

1. Remove all A.C. power from the game.
2. Open the Lower Front Door of the game. Locate the cable underneath the front podium/ control panel, pull cable downward to release podium/ control panel downward. Lift to open the front window.
3. Slide the crane assembly to the front center of the game.
4. Loosen black thumb screw securing the front to back micro track bracket in place. The thumb screw is located on the front face of the crane assembly nearest the door.
5. Slide the micro track bracket forward and up to disconnect it from the crane assembly.
6. Carefully lift the entire crane assembly off the rails approximately 2 inches, shift to the left as far as possible, drop the right side down past the right crane rail and slide the entire assembly out from between the two separator rails.
7. The crane assembly can now be removed from the cabinet so necessary maintenance / repairs can be made
8. Reassemble in reverse order.

REMOVAL OF WAGON ASSEMBLY

1. Remove all A.C. power from the game.
2. Open the Lower Front Door of the game. Locate the cable underneath the front podium/ control panel, pull cable downward to release podium/ control panel downward. Lift to open the front window.
3. Remove crane assembly as stated in previous step.
4. Loosen black thumb screw securing the micro track bracket in place. The thumb screw is located on the upper right face of the wagon assembly.
5. Slide the micro track bracket to the right and up to disconnect it from the wagon assembly.
6. Carefully lift the entire wagon assembly off the rails and rotate clockwise until the left front wheel clears the front rail.
7. Lower the front of the wagon assembly and remove the assembly from between the two rails.
8. The wagon assembly can now be removed from the cabinet so necessary maintenance / repairs can be made.
9. Reassemble in reverse order.

GAME REPAIR

PRIZE SENSOR REPLACEMENT

1. Remove all A.C. power from the game.
2. Open the Lower Front Door of the game. Locate the cable underneath the front podium/ control panel, pull cable downward to release podium/ control panel downward. Lift to open the front window.
3. Remove the connector from the prize sensor board, (located under playfield by prize chute.)
4. Remove the 2 bolts holding the prize sensor bracket to the playfield and remove the prize sensor and bracket from the game.
5. Remove the 2 plastic hexagonal nuts securing the sensor board to the bracket.
6. Carefully remove the sensor board from its mounting studs.
7. Reassemble in reverse order using a new prize sensor board.

STRING REPLACEMENT

1. Remove all A.C. power from the game.
2. Open the Lower Front Door of the game. Locate the cable underneath the front podium/ control panel, pull cable downward to release podium/ control panel downward. Lift to open the front window.
3. Remove Crane Assembly as previously stated.
4. Disconnect the claw assembly from the crane assembly by removing the two bolts securing the aluminum coil cap to the coil housing.
5. Tie a knot at the end of the replacement string. (Use super glue, or use a lighter to melt the knot, to prevent loosening).
6. Using a lighter, melt the other end of the string and form a point before it completely cools.
7. Feed the pointed end up through the hole in the coil cap and pull until the knot is firmly seated on the inside of the cap. SEE CRANE ASSEMBLY DIAGRAM AND STRING ROUTING DIAGRAM.
8. Feed the pointed end up through the hole in the bottom of the crane assembly housing.
9. Feed string over first string guide then under the next string guide.
10. Finally, feed the string through the hole in the side of the string spool, attached to the motor shaft, and tie another knot. (Use super glue, or use a lighter to melt the knot, to prevent loosening). The string is now properly strung.
11. Re-attach the claw assembly to the crane assembly using the two bolts that were removed in step 4.
12. Re-install the crane assembly into the game and set it in the home position with the claw assembly hanging in the prize chute.
13. Turn on the game and the crane will automatically rewind the string properly.

MOTOR REPLACEMENT

1. Remove all A.C. power from the game.
2. Open the Lower Front Door of the game. Locate the cable underneath the front podium/ control panel, pull cable downward to release podium/ control panel downward. Lift to open the front window.
3. Remove crane and / or wagon assembly as previously stated. **NOTE:** What is removed depends on which motor has gone bad.
4. Loosen two thumb screws securing crane housing cap in place and remove. NOTE: This step is only for the 2 motors in the crane assembly.
5. Remove drive o-rings and wheels from the bad motor.
6. De-solder the motor leads from the bad motor. NOTE: Be sure to note which wire goes to which motor lead, for if they are re-installed backwards, the motor will run opposite of its intended direction.
7. Carefully remove the bronze bushing supporting the motor shaft of the bad motor. NOTE: This step is only for the 2 motors in the crane assembly.
8. Remove the 4 bolts securing the motor to the housing. Carefully remove the bad motor.
9. Re-assemble in reverse order using new motor. **NOTE:** When motor is completely re-installed, place one drop of thread lock on each of the 4 bolts that secure the motor in place to prevent the bolts from backing out.

FUSE REPLACEMENT

CAUTION FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATING.

AREA	LOCATION	AMP	VOLT
MAIN BOARD	F2	6 MDQ	250
	F3	3 MDQ	250
	F4	6 MDQ	250
POWER MOD	—	3 MDQ	250
ROPE LIGHT CONTROLLER	—	3 MDQ	250

CORD REPLACEMENT

IF THE SUPPLY CORD IS DAMAGED, IT MUST BE REPLACED BY THE MANUFACTURER OR ITS SERVICE AGENT OR A SIMILARLY QUALIFIED PERSON IN ORDER TO AVOID A HAZARD.

PARTS LISTINGS

MECHANICAL PARTS

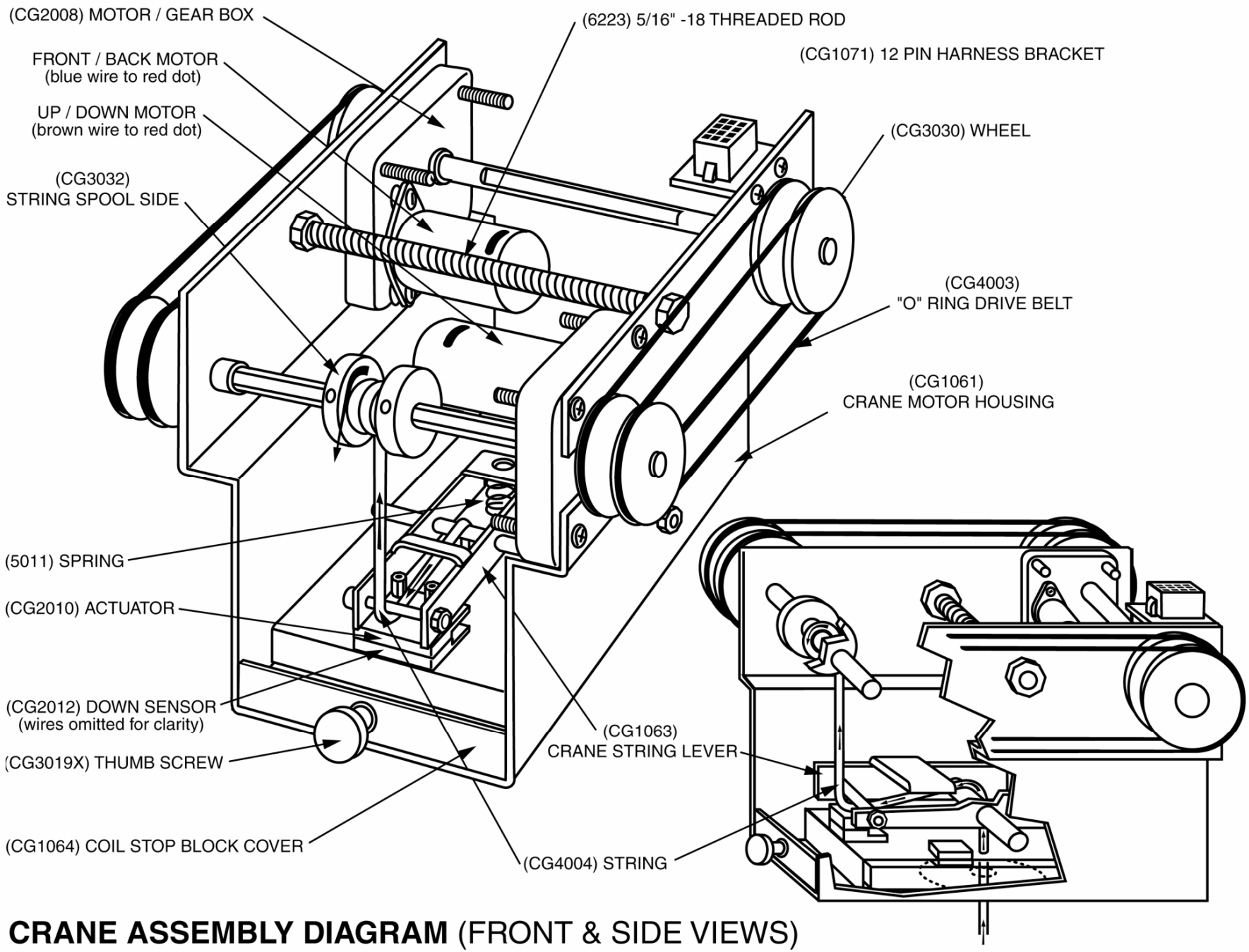
5011	SOLENOID SPRING
CG1052	3” SWIVEL CASTER
CG1055X	WAGON ASSEMBLY
CG1061X	CRANE ASSEMBLY
CG1054	WAGON ROLLER SHAFT
CG1069	TRACK MOUNT RAIL ASSEMBLY
CG2008	MOTOR / GEARBOX
CG3019X	THUMB SCREW
CG3030	WHEEL
CG4003	O-RING DRIVE BAND
CG1062	CRANE MOTOR HOUSING CAP
CG1066	CRANE UP SPRING
CG1070	COIL HOUSING
CG1173	COIL SLIDER
CG1075	COIL PLUNGER
CG1078B	MEDIUM CLAW
CG3036	COIL CLAW INTERCONNECT
CG3037	CLAW SPIDER
CG4004	STRING
CG2014	JOYSTICK
CG3008A	MICRO TRACK 36 LINK
CG3008B	MICRO TRACK END LINK SET
JC1051	SHOCK (HYDRAULIC)
JC1051A	BALL STUD 13MM
JC1051B	SAFETY CLIP
JC1052	LATCH (BEAR CLAW) LEFT
JC1053	LATCH (BEAR CLAW) RIGHT
JC3013	COIN FUNNEL
DC3026	MIRROR
JC3027	FRONT GLASS
BC3028	SIDE GLASS
JG5014	LOCK T-HANDLE
CG5015	LOCK BARREL
CG3033	SLIDER COLLAR
DC9001	SERVICE MANUAL

GRAPHICS & DECALS

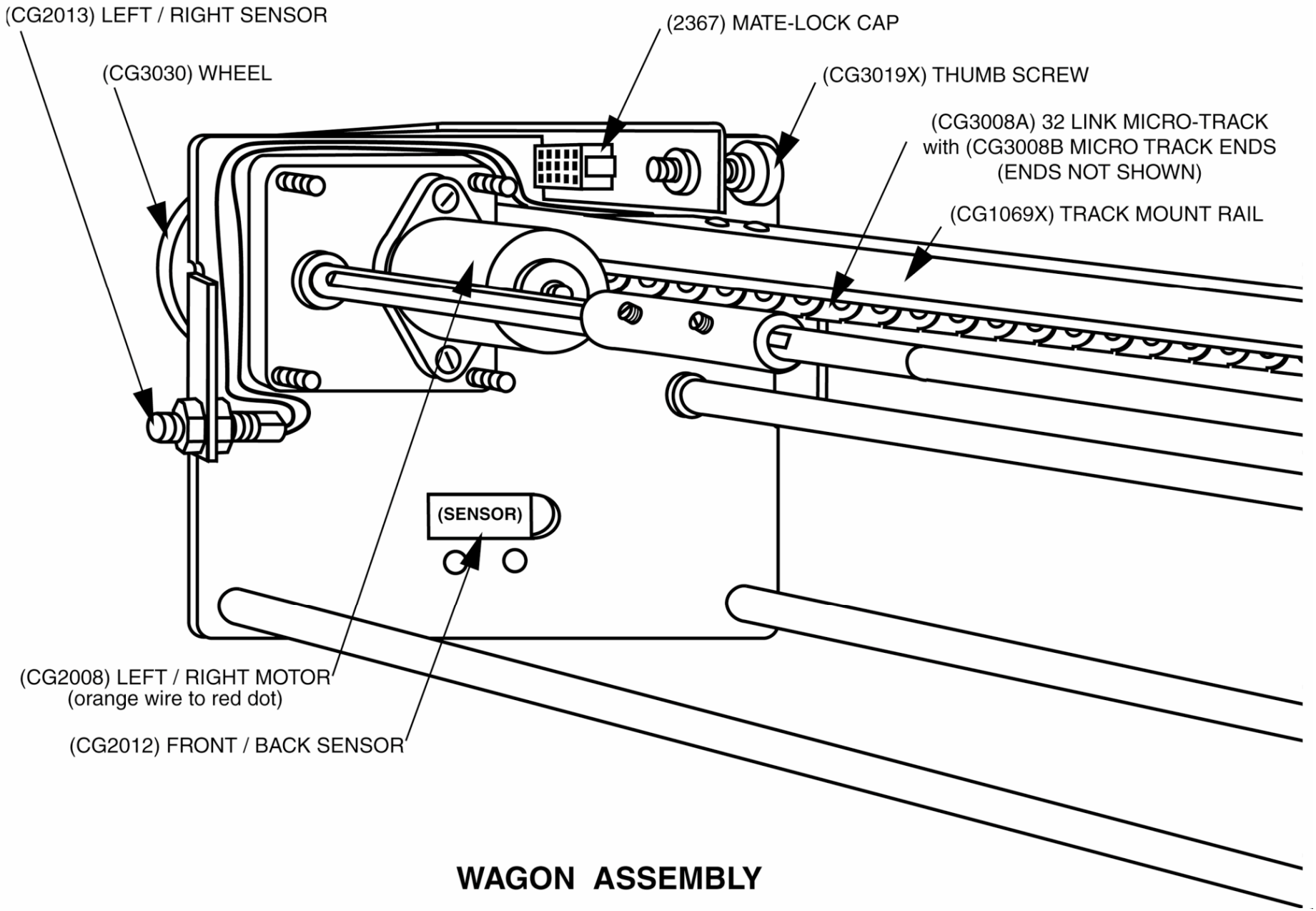
DC7000	DECAL SIDE RIGHT & LEFT
DC7001	DECAL PRIZE DOOR
DC7002	DECAL ABOVE PRIZE
DC7004	DECAL KICK PLATE RIGHT
DC7005	DECAL KICK PLATE LEFT
DC7012	DECAL CONTROL PANEL
DC7027	DECAL FRONT MARQUEE
DC7028	DECAL SIDE MARQUEE RIGHT
DC7029	DECAL SIDE MARQUEE LEFT

ELECTRICAL / ELECTRONIC PARTS

8312	BULB PL-L 40W
CP8284X	BALLAST ASSEMBLY
2970	DOOR SWITCH
FP2007	SPEAKER
CG2012	F / B, UP, DOWN SENSOR
CG2013	L / R SENSOR
CG2010	F / B, UP, DOWN ACTUATOR
CG3038	SOLENOID BOBBIN
CG2002	TRANSFORMER
BC2032X	DISPLAY PCB
CG2034B	MAIN PCB
CG2039B	PRIZE SENSOR PCB
HD20224	5 V COUNTER
2027X	FAN ASSEMBLY
CC2027	20 FT. POWER CORD

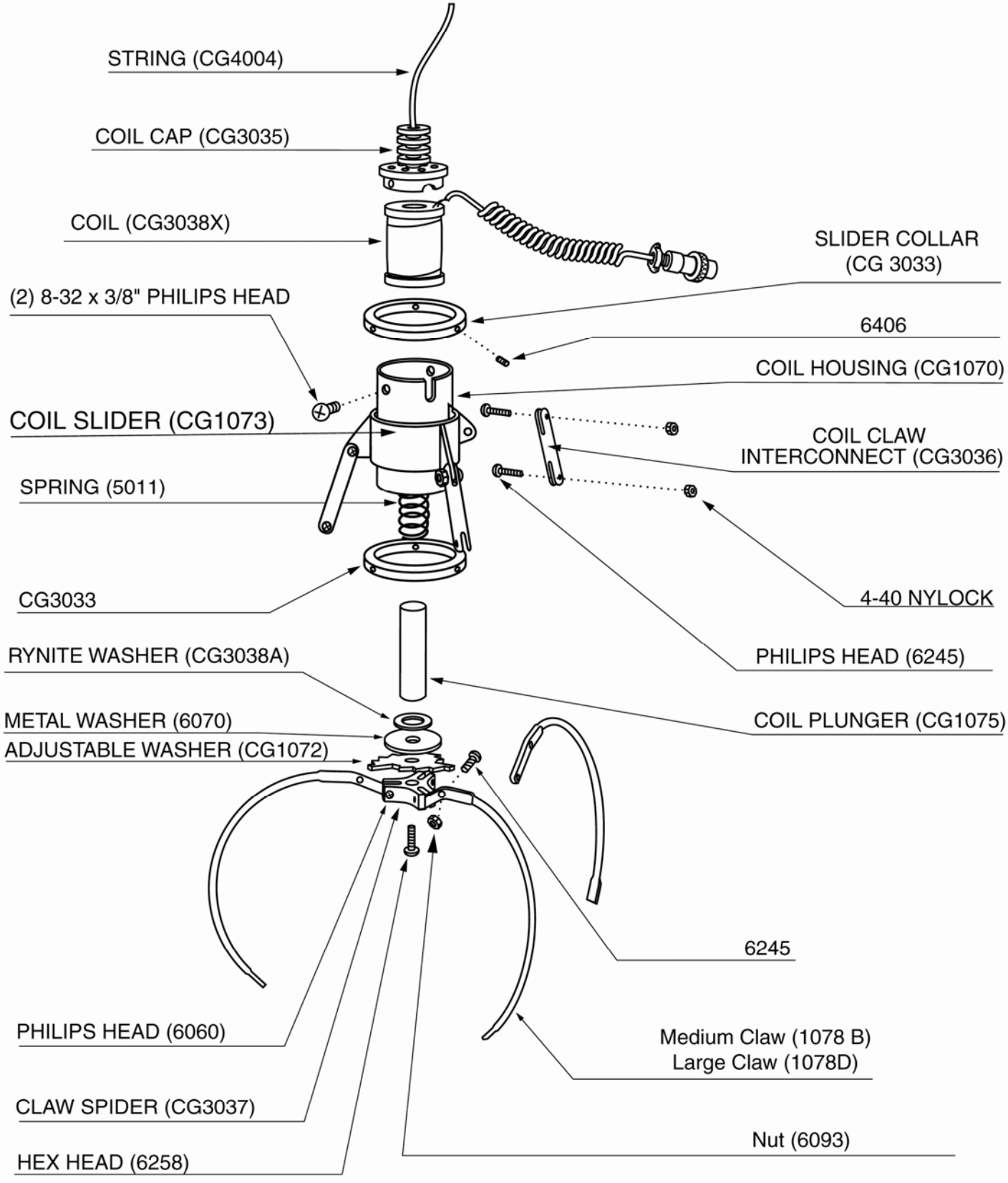


CRANE ASSEMBLY DIAGRAM (FRONT & SIDE VIEWS)

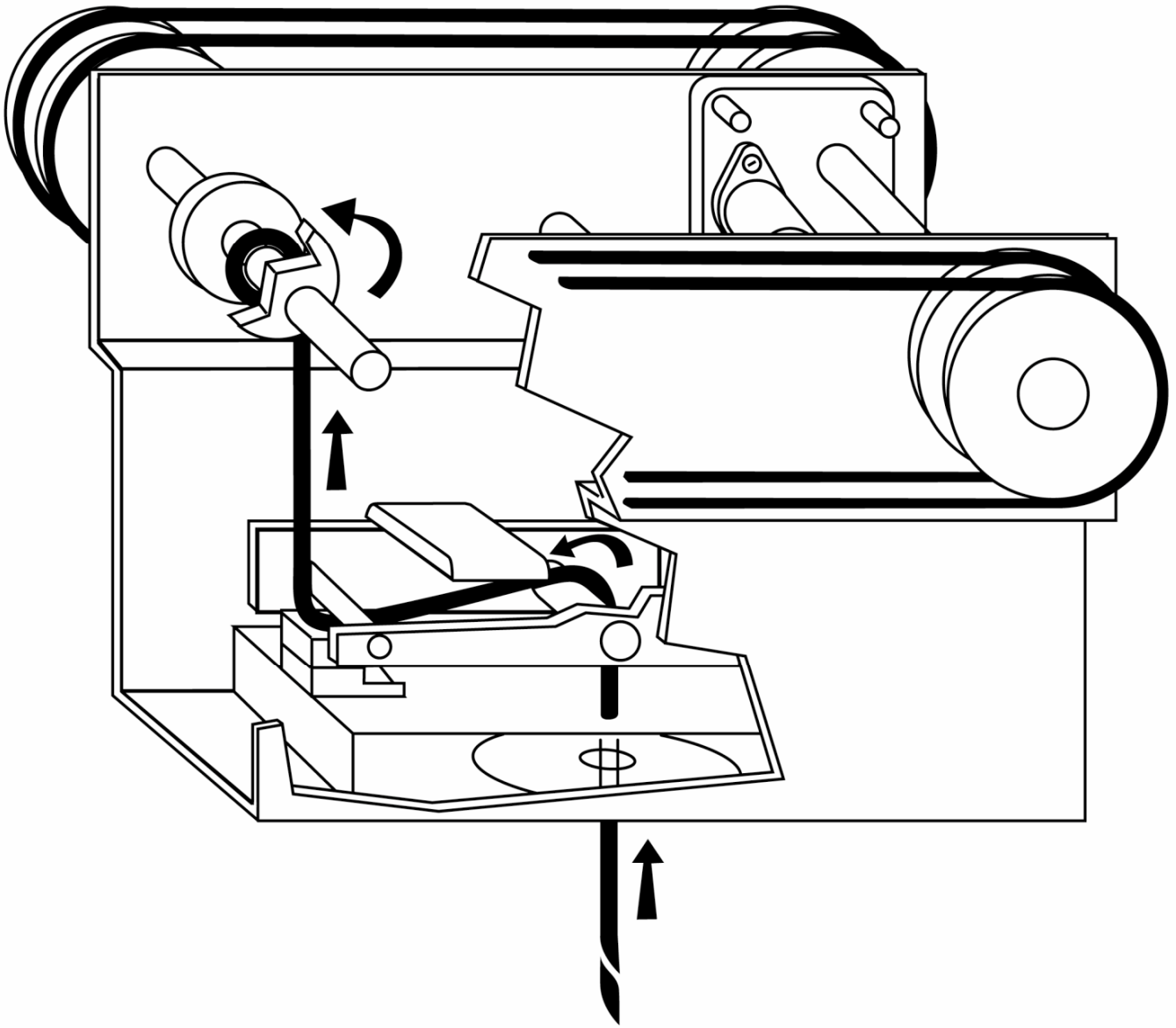


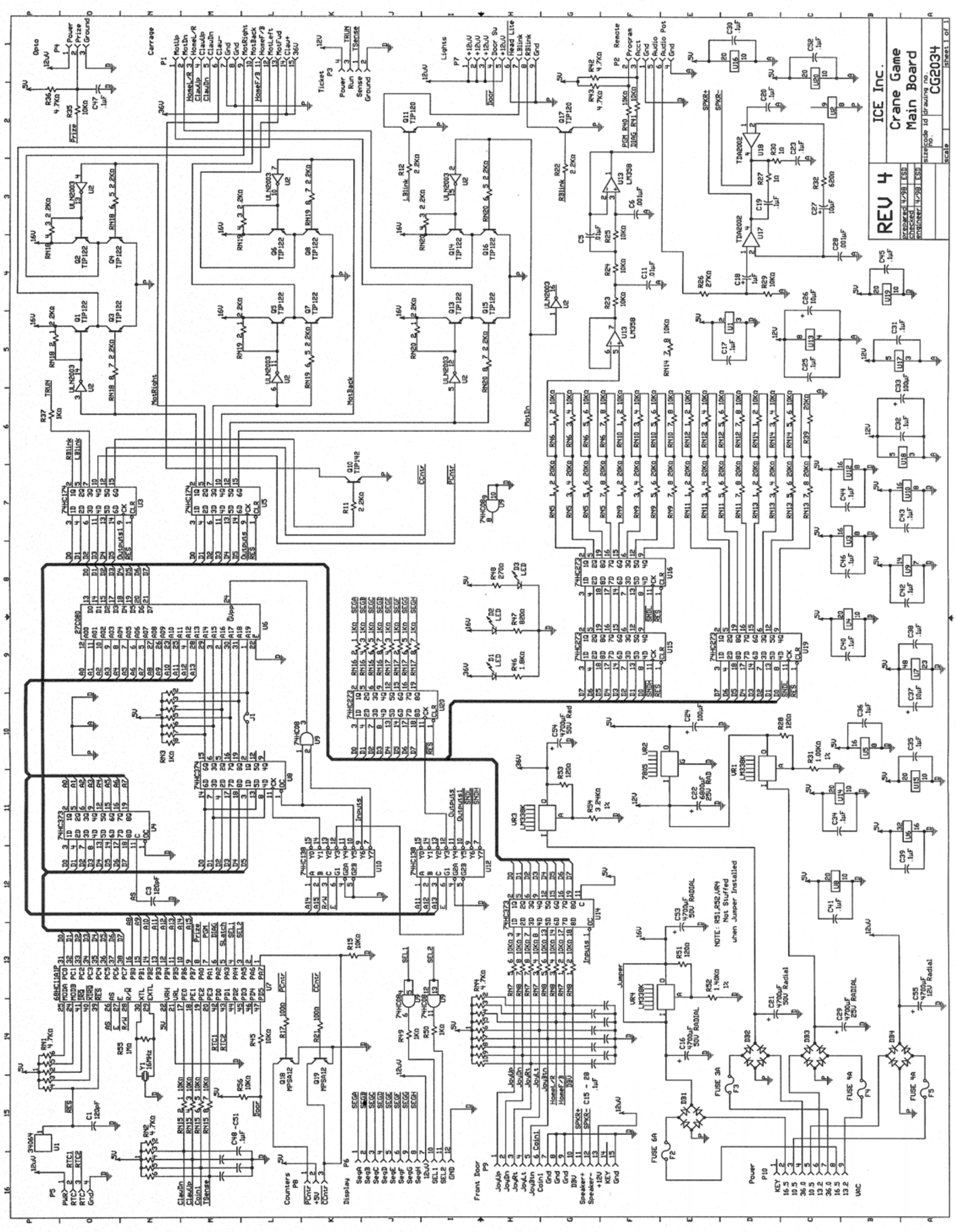
WAGON ASSEMBLY

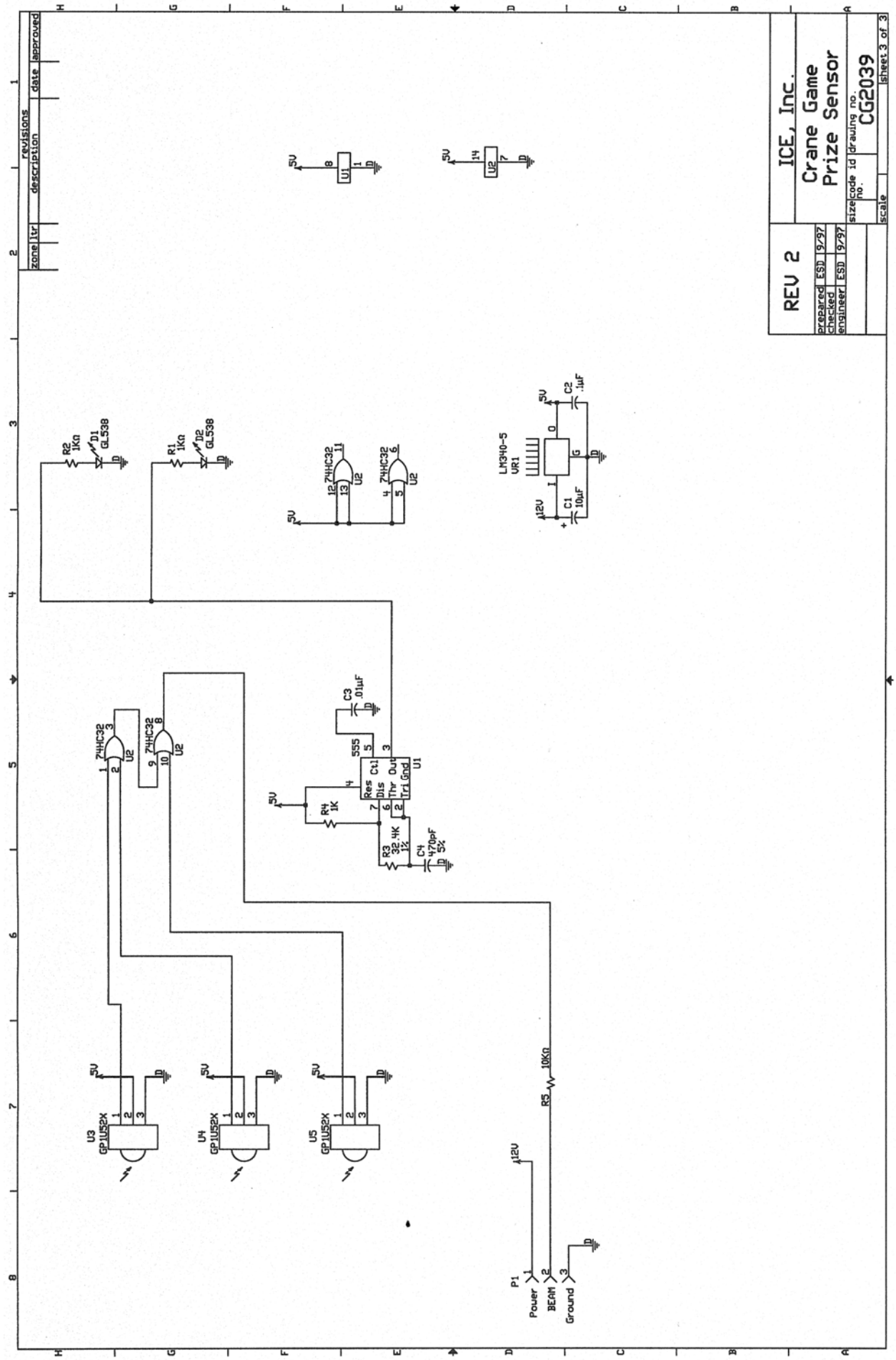
Claw Assembly

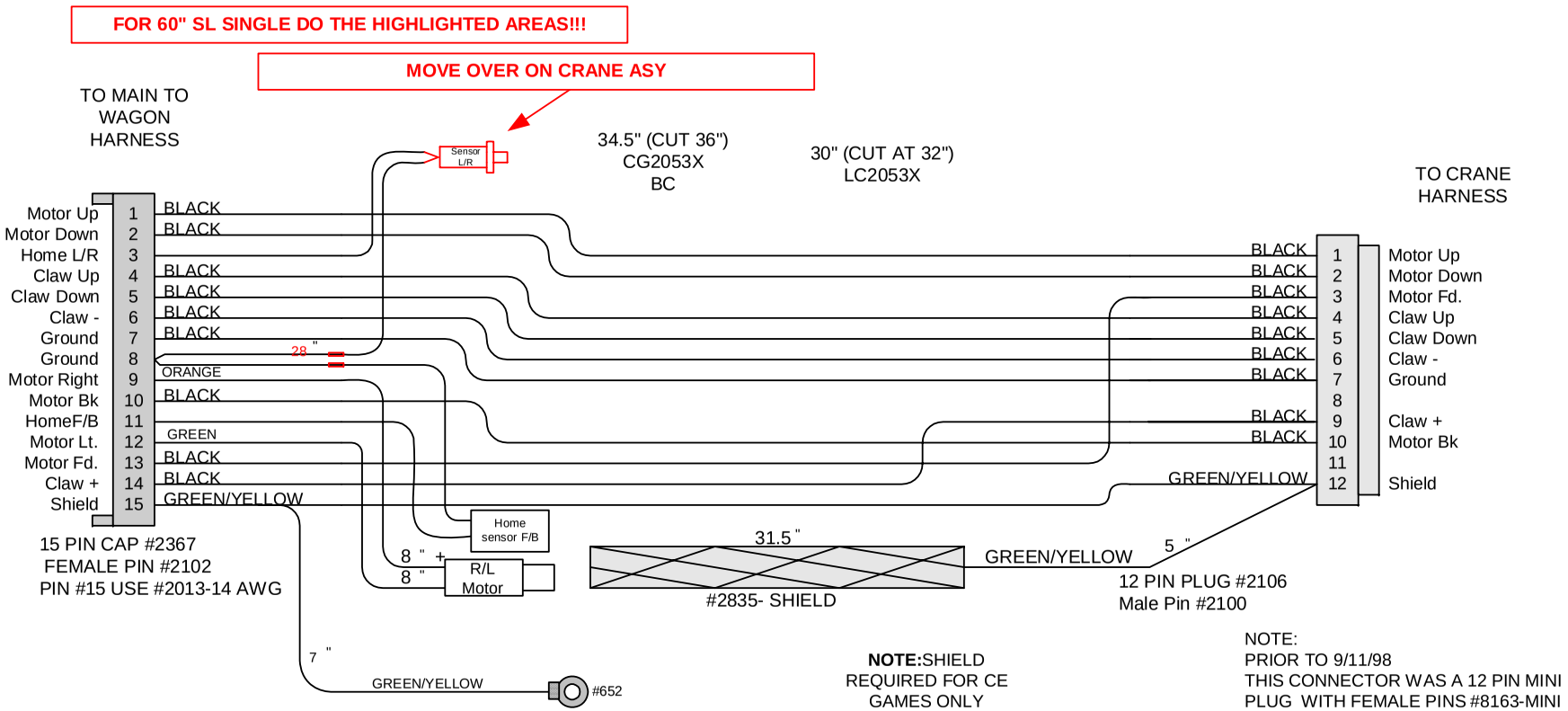


STRING ROUTING DIAGRAM



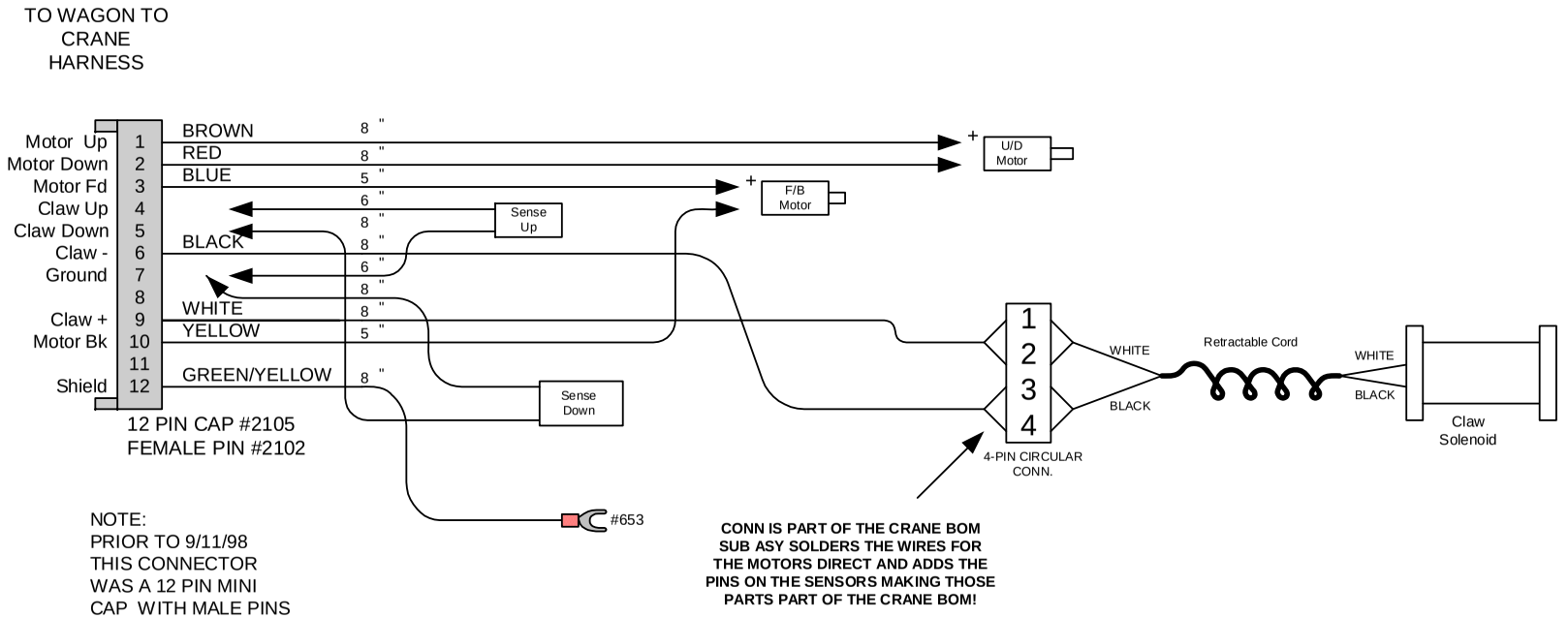

ICE Inc.
Crane Game
Main Board
REV 4
CG2034
prepared 4/98 ESD
checked
engineer 4/98 ESD
sheet 1 of 1


ICE, Inc.
Crane Game
Prize Sensor
REV 2
CG2039
sheet 3 of 3
revisions
zone ltr description date approved
R2 1Kn
D1 GL538
R1 1Kn
D2 GL538
74HC32
U2
LM340-5
VR1
C1 10µF
C2 .1µF
C3 .01µF
555
R4 1K
R3 32.4K 1%
C4 470pF 5%
GP1US2X
U3
U4
U5
R5 10Kn
P1
Power
BEAM
Ground
12V
5V



QTY 1 PER GAME

TITLE	#CG2053X		
DESCRIPTION	Wagon /Crane	FILENAME	PLUSH3.VSD
		DRAWN BY	CHERYLZ1RMO
DATE 2/19/98	REVISED 11/15/00	PAGE	4 OF 17

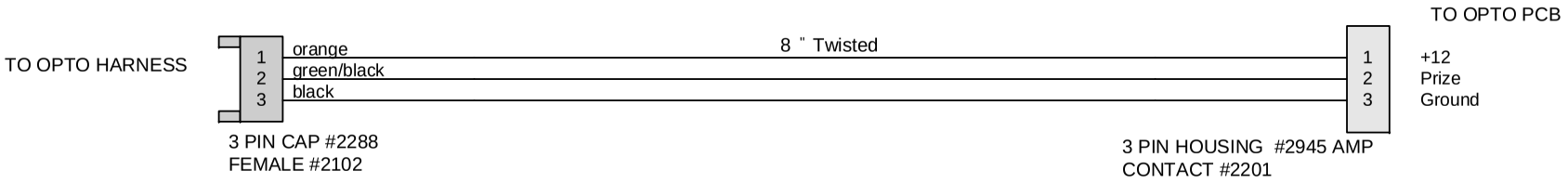


NOTE:
PRIOR TO 9/11/98
THIS CONNECTOR
WAS A 12 PIN MINI
CAP WITH MALE PINS

CONN IS PART OF THE CRANE BOM SUB ASY SOLDERS THE WIRES FOR THE MOTORS DIRECT AND ADDS THE PINS ON THE SENSORS MAKING THOSE PARTS PART OF THE CRANE BOM!

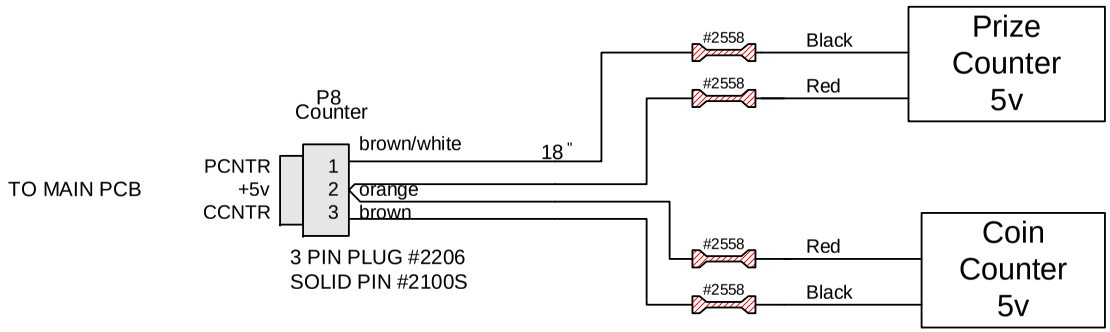
QTY 1 PER GAME

TITLE	#CG2056X		
DESCRIPTION	Crane	FILENAME	PLUSH3.VSD
		DRAWN BY	CHERYLZ1RMO
DATE 2/19/98	REVISED 11/15/00	PAGE	5 OF 17



QTY 1 PER GAME

TITLE	#CG2061X		
DESCRIPTION	Opto Extension	FILENAME	PLUSH3.VSD
		DRAWN BY	CHERYLZ1RMO
DATE 2/19/98	REVISED 11/15/00	PAGE	9 OF 17



QTY 1 PER GAME

TITLE	#CG2063X		
DESCRIPTION	Counter	FILENAME	PLUSH3.VSD
		DRAWN BY	CHERYLZ1RMO
DATE 2/19/98	REVISED 11/15/00	PAGE	12 OF 17

Warranty

I.C.E warrants all components in the **PLUSH PALACE™** game to be free of defects in materials and workmanship for a period of ninety days from the date of purchase.

This warranty does not cover items damaged due to normal wear and tear, subjected to abuse, improperly assembled by the end user, modified, repaired, or operated in a fashion other than that described in the service manual.

If your **PLUSH PALACE™** game fails to conform to the above-mentioned warranty, I.C.E.'s sole responsibility shall be at its option to repair or replace any defective component with a new or remanufactured component of equal to or greater O.E.M. specification.

I.C.E. will assume no liability whatsoever, for costs associated with labor to replace defective parts, or travel time associated therein.

I.C.E.'s obligation will be to ship free of charge, replacement parts by domestic U.P.S. Ground, U.S. mail, or other comparable shipping means. Any express mail or overnight shipping expense is at the cost of the purchaser.

Products will be covered under warranty only when:

- The serial number of the game with the defective parts is given.
- The serial number of the defective part, if applicable, is given.
- Defective parts are returned to I.C.E., shipping pre-paid, in a timely fashion, if requested by I.C.E.
- A copy of the sales receipt is available as proof of purchase upon request of I.C.E.

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

WARRANTY

ICE Inc warrants that all of its products will be free from defects in material and workmanship.

When placing a warranty request, please be prepared to provide the following information:

- Serial Number of Game or Bill of Sale
- Machine Type
- A Detailed Description of the Equipment Fault Symptoms

ICE product, including Cromptons, Sam's Billiards, Uniana and Bell Fruit is warranted as follows:

- 180 days on the Main PCB and Computers
- 180 days on Motors
- 90 days on all other components (i.e. DBV's, Ticket Dispensers, etc)
- 30 days on repaired items
- 3 years on all Crane Harnessing
- 9 Months on Printers

ICE Inc shall not be obligated to furnish a warranty request under the following conditions:

- Equipment has been subjected to unwarranted stress through abuse or neglect
- Equipment has been damaged as a result of arbitrary repair/modification attempts
- Equipment that has failed through normal wear and tear

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

All defective warranty covered components will be replaced with new or factory refurbished components equal to OEM specifications. ICE Inc will cover all domestic UPS ground, or comparable shipping means, freight costs during the warranty period. Expedited shipments are available for an additional charge.

Defective parts are returned to ICE Inc, at the customer's expense, in a timely fashion.

ICE distributors are independent, privately owned and operated. In their judgment, they may sell parts and/or accessories other than those manufactured by ICE Inc. We cannot be responsible for the quality, suitability or safety of any non-ICE part, modification (including labor) that is performed by such a distributor.

I.C.E. Parts/Service Dept.
Innovative Concepts in Entertainment
10123 Main St.
Clarence, NY 14031
Phone #: (716) - 759 – 0360
Fax #: (716) – 759 – 0884

WINNER EVERY TIME
MANUAL ADDENDUM

INTRODUCTION

Thank you for purchasing the **WINNER EVERY TIME™** Crane game from I.C.E. This Crane incorporates a great new feature where the customer truly is a "Winner Every Time".

When the player inserts money the Crane mechanism on the LEFT hand side of the game begins to move. The player then attempts to win a Plush or similar type of prize. If the player is successful winning the prize, the game is over.

If the player DOES NOT win a prize, the RIGHT hand Crane begins to move and signals the player to win candy on the right hand side of the game. THE GAME WILL CONTINUE UNTIL THE PLAYER HAS WON.

SPECIAL FEATURES AND SETTINGS

PLEASE NOTE: THESE FEATURES AND SETTINGS ARE UNIQUE TO THIS PARTICULAR MODEL OF CRANE. THE ACCOMPANYING MANUAL IS USED FOR ALL OTHER CRANE SETTING AND SERVICING ISSUES.

1. PROGRAMMING - While the crane uses 2 independent sets of electronics to operate the game, only the LEFT hand side of the game is programmable. The RIGHT hand board has hard coded programming and is NOT adjustable.

2. CRANE SET-UP - All claw and programming options are listed in the accompanying service manual. All servicing information is also in the manual.

3. CANDY SENSOR - The candy sensor ensures that the customer will always win. When the optical detector beam is broken, the game ends.

4. CANDY SENSOR ERROR - If the candy sensor fails to work, the dots on the display on the control panel will light to indicate an error. Check the error codes as indicated in the service manual to see what the errors are.

If you see ERROR 12, this means the CANDY SENSOR has failed.

NOTE: If the candy sensor fails, the default mode of the game will automatically give the player three grabs of the Candy Claw. This is to ensure that the player will get some candy. When the Candy Sensor is repaired, normal operation will return.

Before replacing the Candy sensor, please try to adjust its sensitivity. There is a small potentiometer located on the Candy sensor board. Try rotating the potentiometer to see if the sensor will function.

THE CANDY AND PLUSH PRIZE SENSORS ARE OF A DIFFERENT DESIGN AND ARE NOT INTERCHANGEABLE.