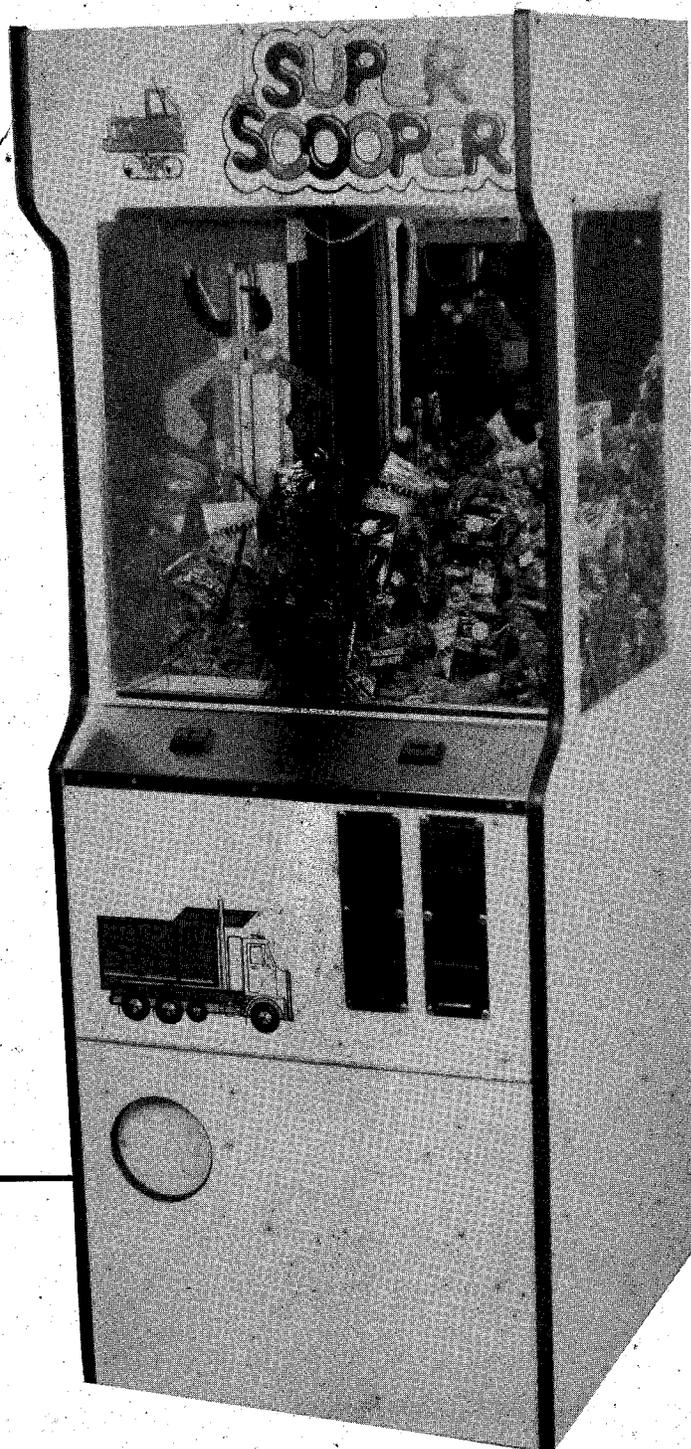


SUPER SCOOPER



**INSTRUCTION
MANUAL**

TO OUR VALUED CUSTOMER

Thank you for your purchase of the SUPER SCOOPER vending unit.

The utmost care has been taken to insure that your machines operate trouble-free and give years of profitable service. After receiving your machines, inspect them carefully and immediately report any physical damage to the freight company which delivered them.

(Note: Some minor blemishes may be present on the cabinet finish and are normal due to the nature of the materials used. In most instances scuff marks can be wiped off using a liquid dish soap or some WINDEX brand window cleaner.)

IMPORTANT: BEFORE PLUGGING POWER CORD INTO WALL SOCKET AND POWERING UP MACHINE, CUT PLASTIC ZIP TIES USED TO HOLD UPPER MECHANISM IN PLACE DURING SHIPMENT. After the tie wraps are cut the mechanism inside the upper cabinet should move freely from side to side and front to back. Check connectors, belts, wires, etc. to be sure nothing has become loose or disconnected during shipment.

For shipping reasons there will be a protective coating on the mirror, the side plexi-glass windows and the front brass console. This paper or plastic coating easily peels off. Refer to the set up and trouble shooting sections for further assistance.

You may call our service department, telephone (407) 241-2655 hours 9:00am - 5:00pm est. for additional information and technical support.

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I. SET UP PROCEDURES

1. If any physical damage is found after checking the entire machine report it immediately to the shipping company.
2. Cut plastic tie wraps to free the scooper mechanism from the rails inside the upper cabinet.
Note: Mechanism should move freely when pushed from side to side and from front to back.
3. Installation of the Scooper or Claw is quite simple.
 - 1) Use the supplied 1/16" Hex Key to attach the Scooper or Claw body to the installed cap.
 - 2) Fasten the quick connect #11 (fig. 3).
 - 3) Make necessary adjustment to rheostat VR1.
4. Plug in detachable power cord to any convenient grounded 120 VAC outlet. Switch power supply on from the inside of the cabinet.
5. Deposit appropriate coin (U.S. coin only) and test play game. Repeat testing procedure.
6. **CORRECT OPERATION:** After inserting an appropriate coin, the coin lights will turn off, the coin totalizer will increment and the left forward arrow button light will come on. After releasing this button the mechanism will stop its motion to the rear and the right hand lateral arrow light will illuminate. After releasing the right button the motion of the lateral crane plate will stop and the scoop/claw will automatically drop, close at the bottom and return to the "home" position. The coin lights will illuminate once again.

NOTE: The closing strength of the Scooper/Claw can be adjusted using the potentiometer VR1 located on the circuit board (fig. 2). Turning the potentiometer knob counter-clockwise will increase the Scooper/Claw closing power.

7. Place on location, test play and load with product.

II. GENERAL MAINTENANCE

FREQUENCY

Most problems can be prevented by periodic inspection and adjustment of mechanical parts. Every 6,000 plays general inspection and maintenance should be performed by going through the checklist below. This will insure many years of trouble-free service from your Super Scooper.

CHECKLIST

UPPER CABINET Refer to Figures 3 and 4.

1. Drive shafts lubricated (3, 5, 6).
2. Lateral track aligned.
3. Forward limit switch operative (14, 15).
4. Lateral limit switch operative (17).
5. Vertical limit switch operative (7).
6. Vertical stop switch operative (8).
7. Spring tension O.K. (9).
8. Scooper/claw string condition and positioning O.K.
9. Scooper/claw opens fully and closes smoothly.
10. Wheels and pulleys tight on shafts (1, 2, 3).
11. Crane car guide bolts adjusted properly (4).

LOWER CABINETS

1. Electronics mounting secure.
2. All connections tight and clean.
3. All fuses in good condition.

COIN MECHANISM

1. Wire connections tight and wire harnesses routed to clear front door opening and coin box removal.
2. Lights on coin mechanism operative.
3. Coin slots clear of foreign objects.
4. Coin passes through to coin box consistently.

III. TROUBLESHOOTING

QUICK REFERENCE (Refer to Figures 3, 4, and 7)

SYMPTOM #1

NO POWER:

Check A.C. source, power supply on/off switch, and fuse. Check main power connector J4 (Fig. 7) to circuit board. Reset power supply by switching it off and then on.

SYMPTOM #2

SCOOPER/CLAW DROPS PREMATURELY:

Check lateral limit switch (#17). Slightly bend the switch lever with thumb and forefinger outwards, towards crane car.

SYMPTOM #3

CHRONIC FUSE BLOWING:

There are two fuses on the circuit board. One fuse for the main power, F1 (2-1/2A delay), and one fuse to protect the motors F2 (1A fast reacting). If a new fuse continually burns this is an indication of a short circuit. It could be a short in a motor, solenoid, relay or diode on the circuit board. Please call a service technician for further assistance.

SYMPTOM #4

INADEQUATE SCOOPER/CLAW CLOSING POWER:

Regulate solenoid closing power with Potentiometer VR1 located on the circuit board. Rotating counter-clockwise increases the strength of the Scoop/Claw and therefore increases the amount of product given away.

SYMPTOM #5

STRING WINDS UP COUNTER-CLOCKWISE (BACKWARDS) AROUND TAKE-UP PULLEY OR STRING WINDS AROUND BACK OF PULLEY:

1. Make sure vertical limit switch (#7) is being actuated by string tension armature (#6) when scoop is at the lowest point of travel. Check string positioning around pulleys. This is very important (Refer to figure 3).
2. Check if coin switch(es) are sticking in the down position. These switches are located at the lowest part of the coin mechanism (inside cabinet) and have three wires connected to them. Re-adjust the switch(es) so that the trip-wire is clear of any obstruction over the entire movement and it springs back up after a coin passes by.
3. Check to make sure that the black curly electrical cord attached to the Scooper/Claw is not overstretched. This cord must be tight enough to reverse the motor if the Scoop/Claw happens to fall in the chute where the product is dispensed.

TROUBLE SHOOTING (CONTINUED)

SYMPTOM #6

BROKEN STRING:

Replace with 150 lb. test braided nylon string. Restring with 38" length. Refer to symptom #5 if necessary.

SYMPTOM #7

COIN COUNTER NOT WORKING:

Check wire connector J3 (Fig. 7).

SYMPTOM #8

CARRIAGE MOTOR CONTINUES TO RUN:

Check limit switches (#14, 17) to see if they are being actuated. Adjust actuator arms on the switches if necessary until motors are switched off and the mechanism returns to the front left in the cabinet.

SYMPTOM #9

SCOOPER/CLAW DOES NOT DROP:

Check string positioning around all three pulleys, refer to Fig. 3 (Crane Car). Refer to symptom #5 if necessary.

SYMPTOM #10

COIN INCREMENTS COUNTER BUT DOES NOT INITIATE GAME:

Check position and operation of switch #7 fig. 3.

TROUBLESHOOTING FLOW CHART

A. NO POWER AT ALL (NO LIGHTING, NO MECHANISM POWER, NO COIN LIGHTS, ETC.)

CHECK

Power cord plugged in wall?

IF NO
Plug it in.

IF YES

Power supply switch on?

IF NO
Switch on.

IF YES

Is wall outlet good?

IF NO
Use another outlet.

IF YES

Check power supply fuse.

IF NO
Reset power supply.

B. NO COIN LIGHTS, NO CRANE POWER BUT CABINET LIGHT IS ON.

CHECK

Is wire harness from power supply to circuit board plugged in? (J4 Fig. 7)

IF NO
Plug in.

IF YES

Are fuses on circuit board OK?

IF NO
Replace and retry. See chronic fuse blowing. (QUICK REFERENCE).

IF YES

Are both connectors J1 and J2 on circuit board plugged in? Fig. 2

IF NO
Plug in.

IF YES

Are all soldered connections on mechanism OK?

IF NO
Re-solder wire to switch or motor.

IF YES

Does switching power supply off and on again help?

IF NO

Check the power supply fuse. 1/2A. Check AC voltage.

C. NO COIN LIGHTS. CABINET LIGHT OK AND CRANE MECHANISM HAS POWER i.e. Returns to the front left of cabinet.

CHECK

Does machine cycle thru playing sequence OK?

IF YES

Check coin light bulb, connections.

IF NO

Is the lateral motor continuously running?

IF YES

Adjust switch #17 Fig. 4.

IF NO

Is the forward drive motor continuously running?

IF YES

Adjust switch #14 Fig. 4.

IF NO

Is the string incorrectly positioned around the pulleys? (Refer to Fig. 3).

IF YES

Reposition string correctly.

IF NO

Does a new fuse on the circuit board continually burn?

IF YES

See chronic fuse burning. (QUICK REFERENCE).

(Continued)

TROUBLESHOOTING FLOW CHART

D. COIN LIGHTS O.K. BUT GAME SEQUENCE NOT CORRECT.

CHECK

Does coin pass thru to coin box? i.e.
Does coin trip coin switch?

IF NO
Problem is coin mechanism. Take out coin insert, clear, clean, align, etc.

IF YES
Does coin light turn off?

IF NO
Are the three wire connectors attached to the coin switch?

IF YES
Does coin counter increment?

IF NO
Check connector J3. Fig. 7

IF YES
Does forward arrow button operate?

IF NO
Switch out of socket of push button, relay K2 is bad, or bad connection from switch to circuit board.

IF YES
Does forward arrow button light illuminate?

IF NO
Check connection of light bulb. Check light bulb itself.

IF YES
Does forward arrow button light turn off after releasing it?

IF NO
Adjustment to switch #14 is needed or rod #15 is sticking.

IF YES
Does lateral button arrow operate?

IF NO
Switch is out of socket, relay K3 is bad, or bad connection between switch and circuit board.

IF YES
Does lateral arrow button light illuminate?

IF NO
Check connection or light bulb itself.

IF YES
Does lateral arrow button light turn off after releasing it?

IF NO
Check string position around pulleys.

IF YES
Does scoop/claw motor reverse direction when it hits bottom?

IF NO
Make sure armature #6 hits switch #7. Make sure coin switches are returning to upright positions. Refer to Fig. 3.

IF YES
Does mechanism return to the "home" position?

IF NO
Check switch #8 for proper actuation Fig. 3.

IF YES
Do coin lights illuminate once again?

IF NO
Go to step C.

IF YES
Play sequence OK.

E. SCOOP/CLAW DOES NOT CLOSE BUT DOES RETURN.

CHECK

Increase power to solenoid by turning potentiometer knob VR1 Fig. 2 counter-clockwise.

Is connector #11 attached securely?

IF NO
Push together conn.

IF YES
Does scoop/claw close manually?

IF NO
Make necessary mechanical adjustments.

(Continued)

TROUBLESHOOTING FLOW CHART

IF YES

Is there continuity between connector #11 and the circuit board?

IF NO

Push in the wires on the circuit board connector J2 with small screwdriver. (Purple and gray wires.)

IF YES

Replace scoop/claw solenoid.

F. SCOOP/CLAW CLOSSES BUT DOES NOT RETURN.

CHECK

Are fuses F1 and F2 O.K.?

IF YES

Replace relay K1 on circuit board.

IF NO

Replace, retry. If fuse burns again it's possibly a bad scoop/claw motor.

G. SCOOP/CLAW DOES NOT CLOSE AND DOES NOT RETURN.

CHECK

Are fuses F1 and F2 O.K.?

IF YES

Replace relay K1 on the Circuit board (Fig. 2).

IF NO

Replace, retry. If fuse burns again disconnect terminal #11 and retry. If O.K. now replace solenoid otherwise replace claw motor.

H. FORWARD ARROW BUTTON ILLUMINATES BUT DOES NOT MOVE MECHANISM WHEN ACTIVATED.

CHECK

Is the blue wire attached to the N.C. position on the coin switch?

IF YES

Pop out forward arrow switch from socket and test.

IF NO

Re-connect.

I. SCOOP/CLAW NOT CONSISTENTLY GIVING AWAY AN ADEQUATE AMOUNT OF PRODUCT.

CHECK

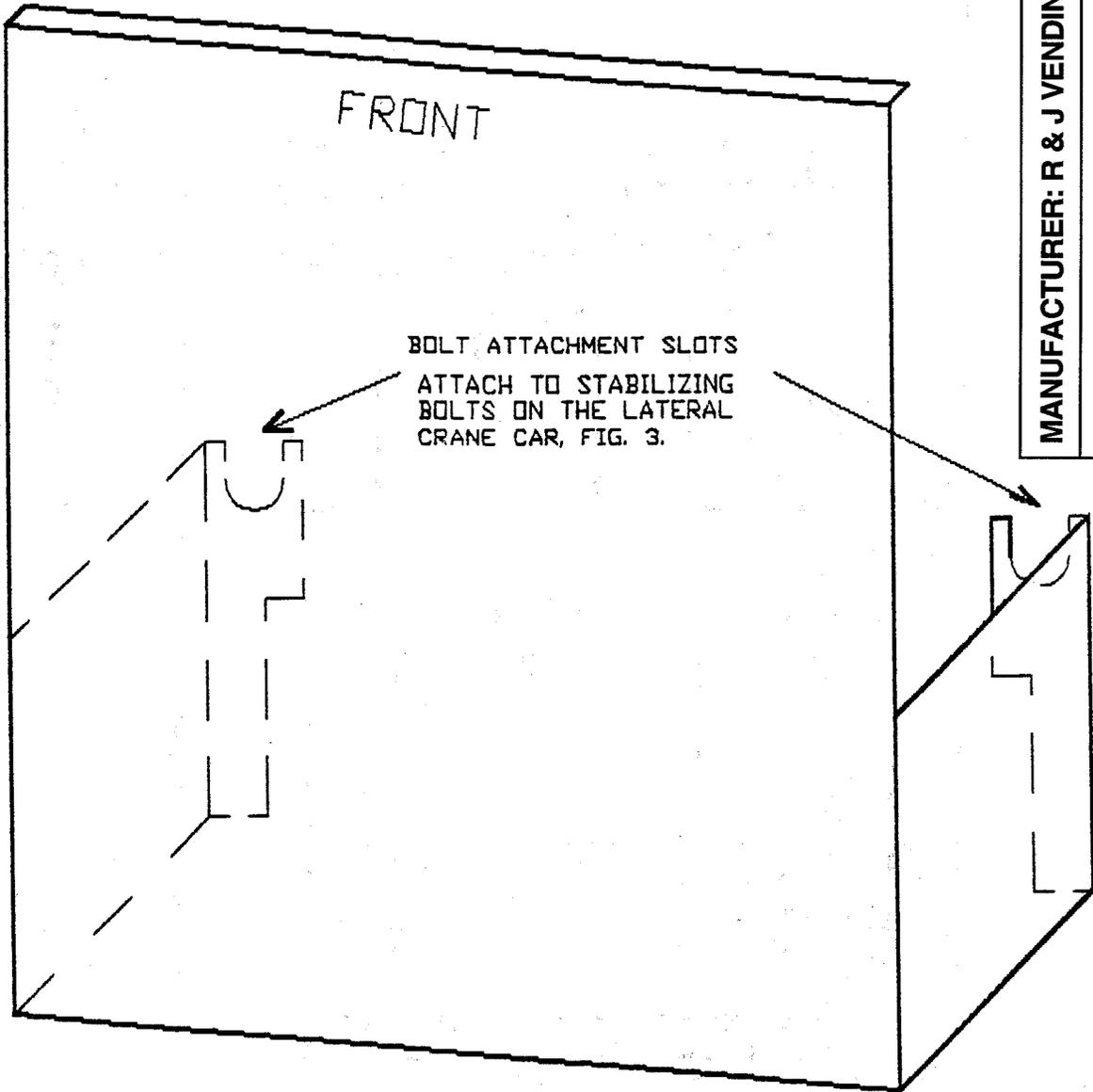
Does the Scoop/Claw open and close freely?

IF YES

Adjust Potentiometer VR1 counter-clockwise, located on the circuit board. If using the Scoop adjust VR1 close to the maximum counter-clockwise position.

IF NO

Make necessary mechanical adjustments.



MANUFACTURER: R & J VENDING	
DESCRIPTION: COVER PLATE	DATE: 3/3/93
PRODUCT: SUPER SCOOPER	DRAWN BY: TMM

Fig. 1 CRANE MECHANISM COVER PLATE

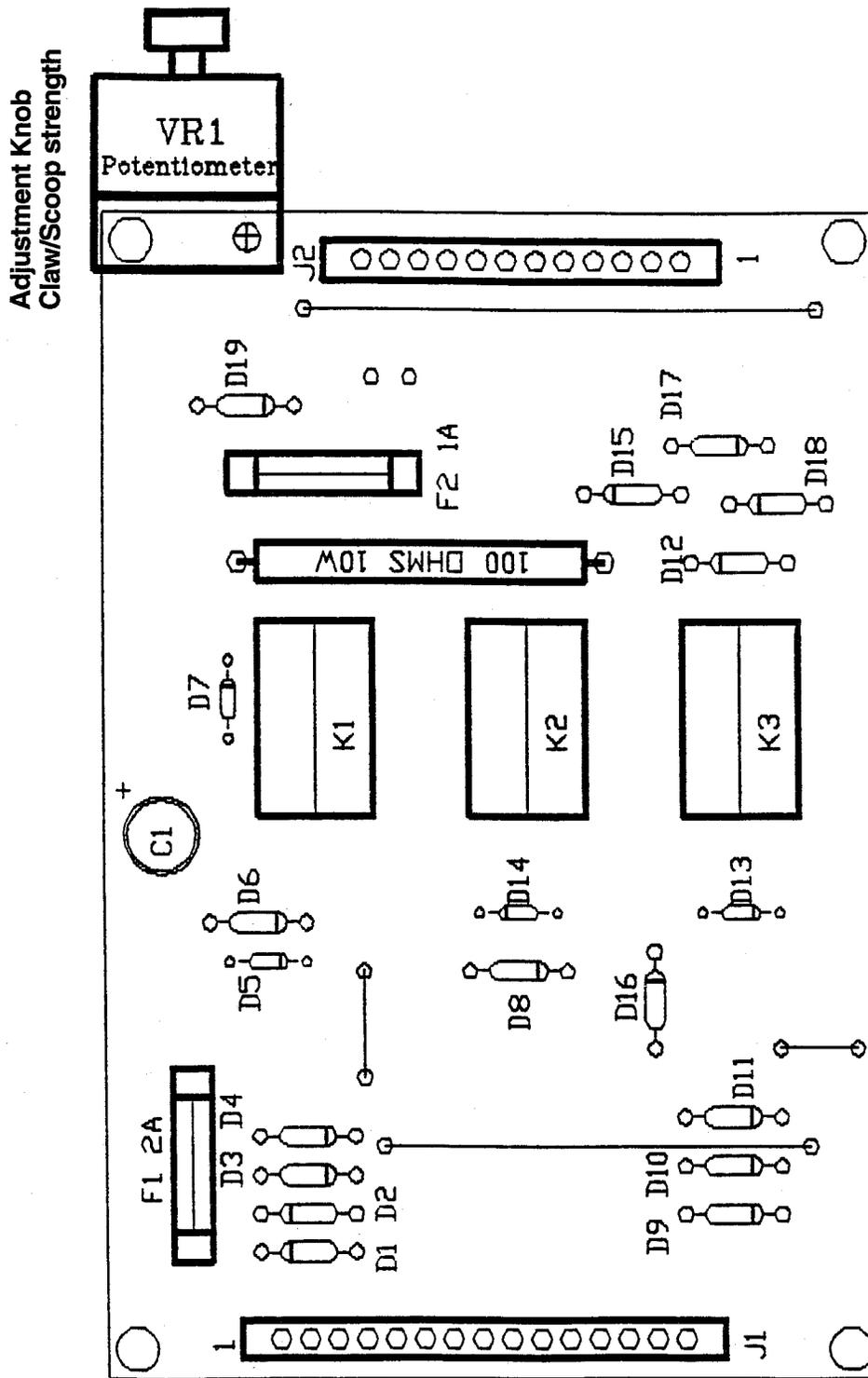


Fig. 2 CIRCUIT BOARD LAYOUT

MANUFACTURER: R & J VENDING	
DESCRIPTION: PCB LAYOUT	DATE: 3/3/93
PRODUCT: SUPER SCOOPER	DRAWN BY: TMM

- 1 STRING TAKE-UP PULLEY
- 2 LATERAL DRIVE PRIMARY
- 3 LATERAL DRIVE SECONDARY
- 4 STABILIZING BOLTS
- 5 STABILIZE ROLLER
- 6 SPRING TENSION ARMITURE
- 7 VERTICAL LIMIT SWITCH
- 8 VERTICAL STOP SWITCH
- 9 STRING GUIDE
- 10 SCOOPER/CLAW SOLENOID
- 11 SCOOPER/CLAW QUICK CONNECT

MANUFACTURER: R & J VENDING	
DESCRIPTION: CRANE CAR	DATE: 3/3/93
PRODUCT: SUPER SCOOPER	DRAWN BY: TMM

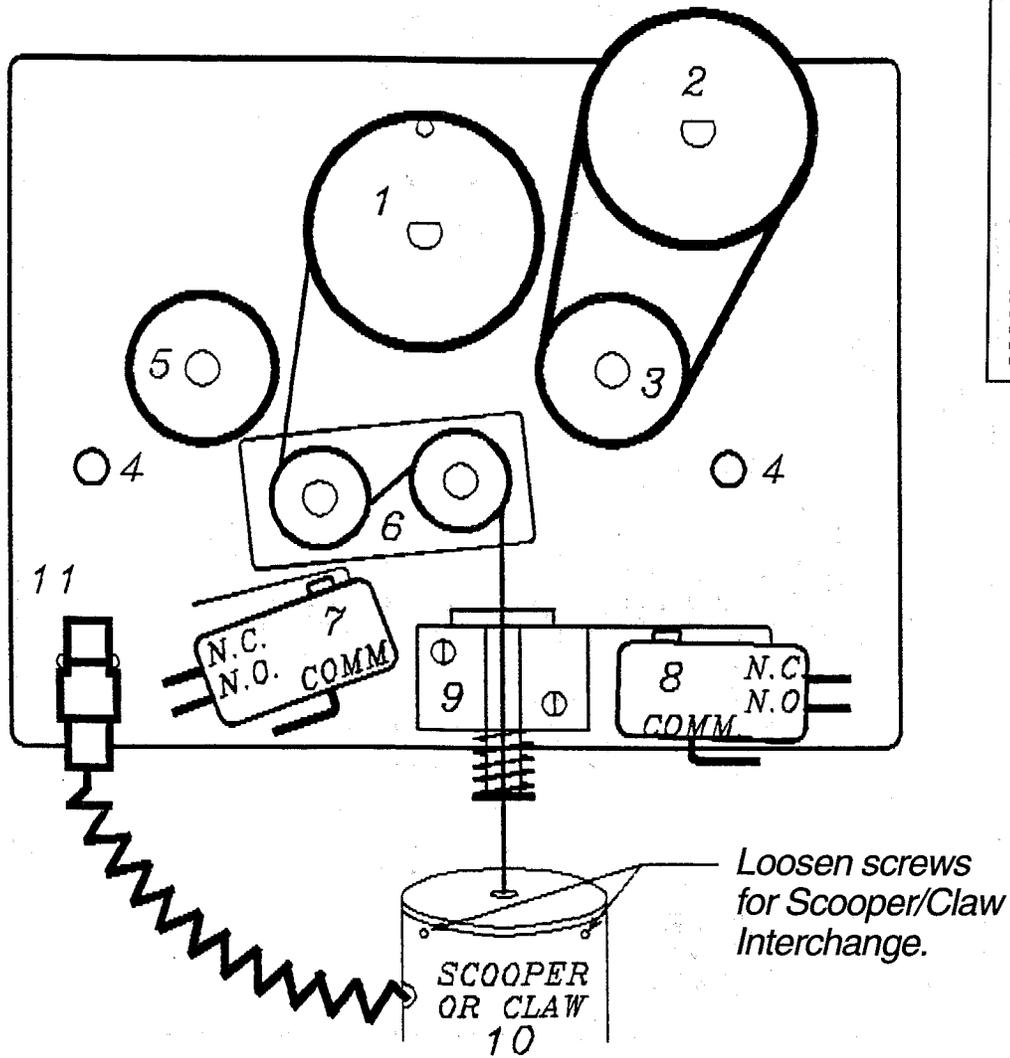


Fig. 3 LATERAL CRANE CAR

- 12 DRIVE ROD GROMMET
- 13 FORWARD DRIVE MOTOR
- 14 FORWARD LIMIT SWITCH
- 15 FORWARD PLUNGER ASSEMBLY
- 16 LATERAL SHOCK GROMMET
- 17 LATERAL LIMIT SWITCH

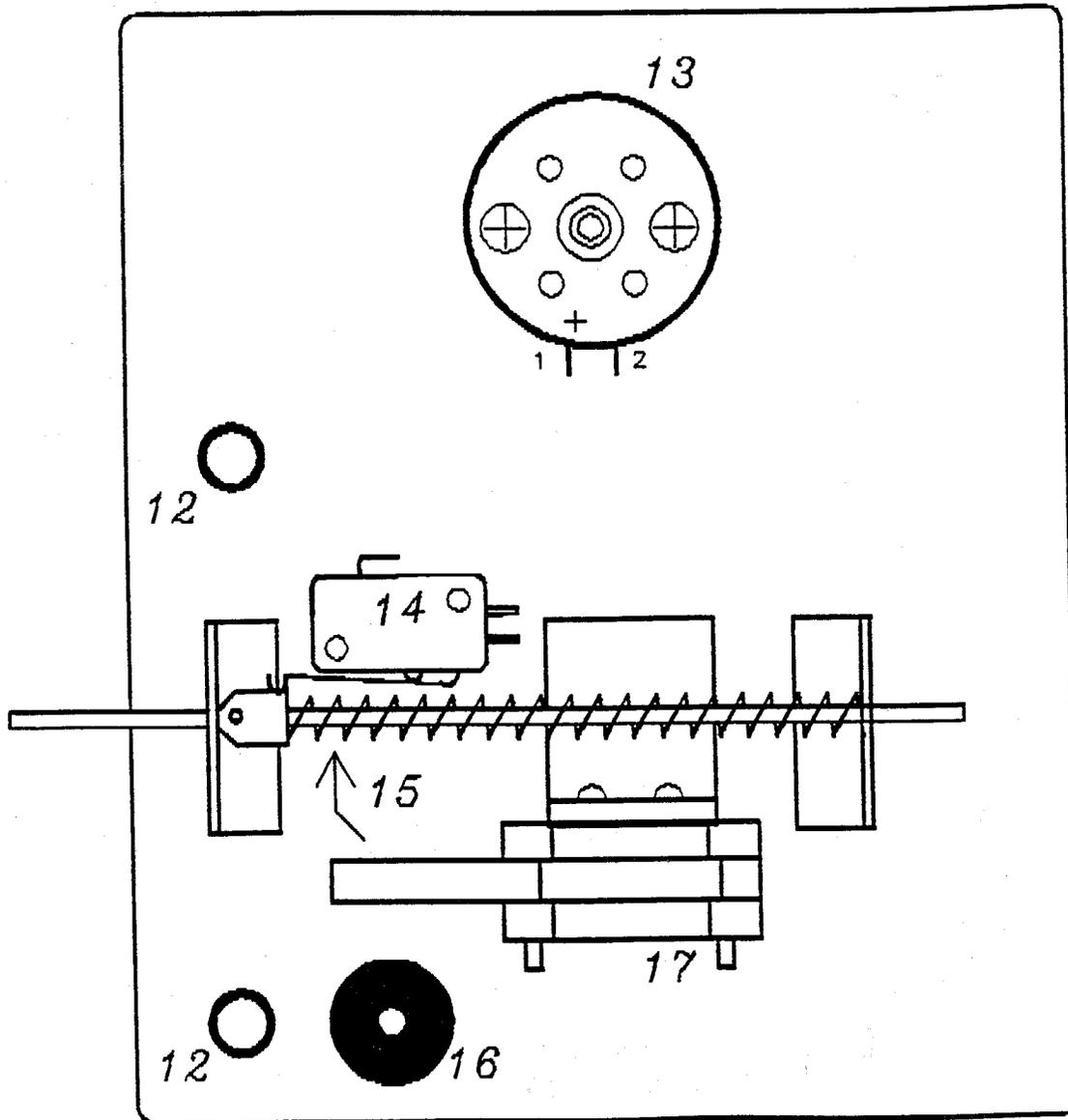


Fig. 4 FORWARD DRIVE TRAIN

MANUFACTURER: R & J VENDING

DATE: 3/3/93

DESCRIPTION: DRIVE TRAIN

DRAWN BY: TMM

PRODUCT: SUPER SCOOPER

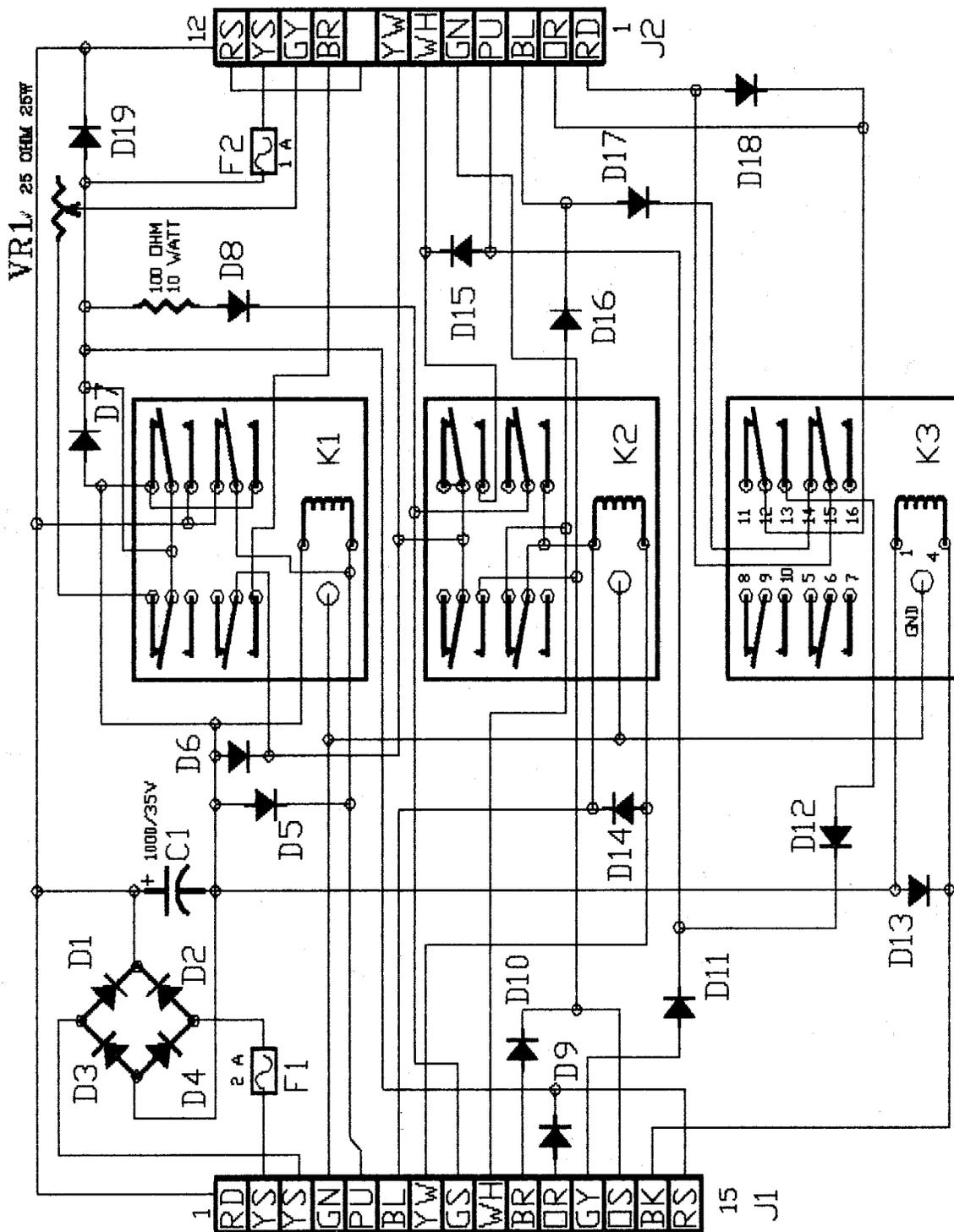


Fig. 5 CIRCUIT SCHEMATIC

MANUFACTURER: R & J VENDING	
DESCRIPTION: CIRCUIT SCHEMATIC	DATE: 3/3/93
PRODUCT: SUPER SCOOPER	DRAWN BY: TMM

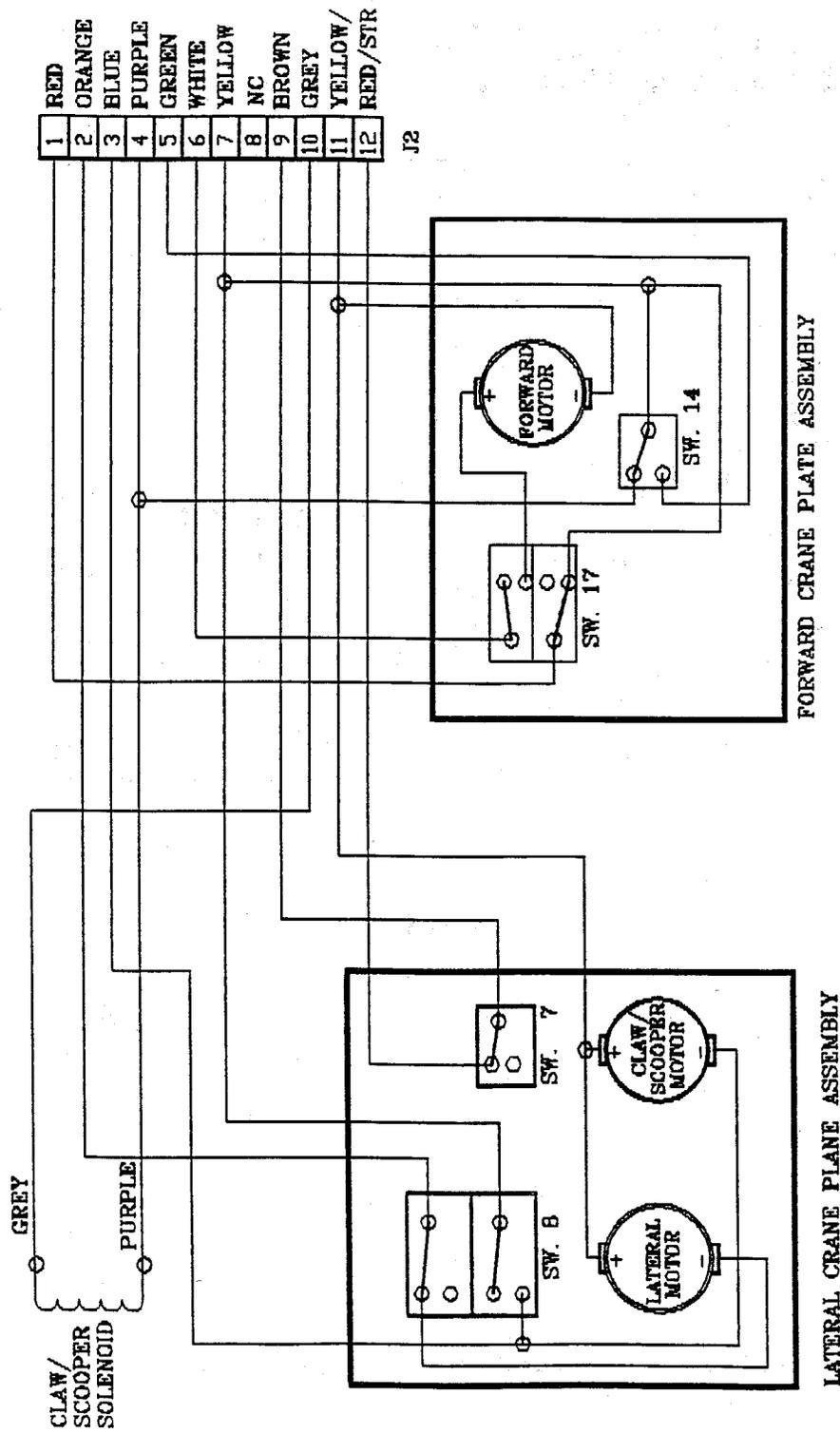


Fig. 6 MECHANISM WIRING DIAGRAM

MANUFACTURER: R & J VENDING	
DESCRIPTION: MECHANISM WIRING DIAGRAM	DATE: 3/3/93
PRODUCT: SUPER SCOOPER	DRAWN BY: TMM

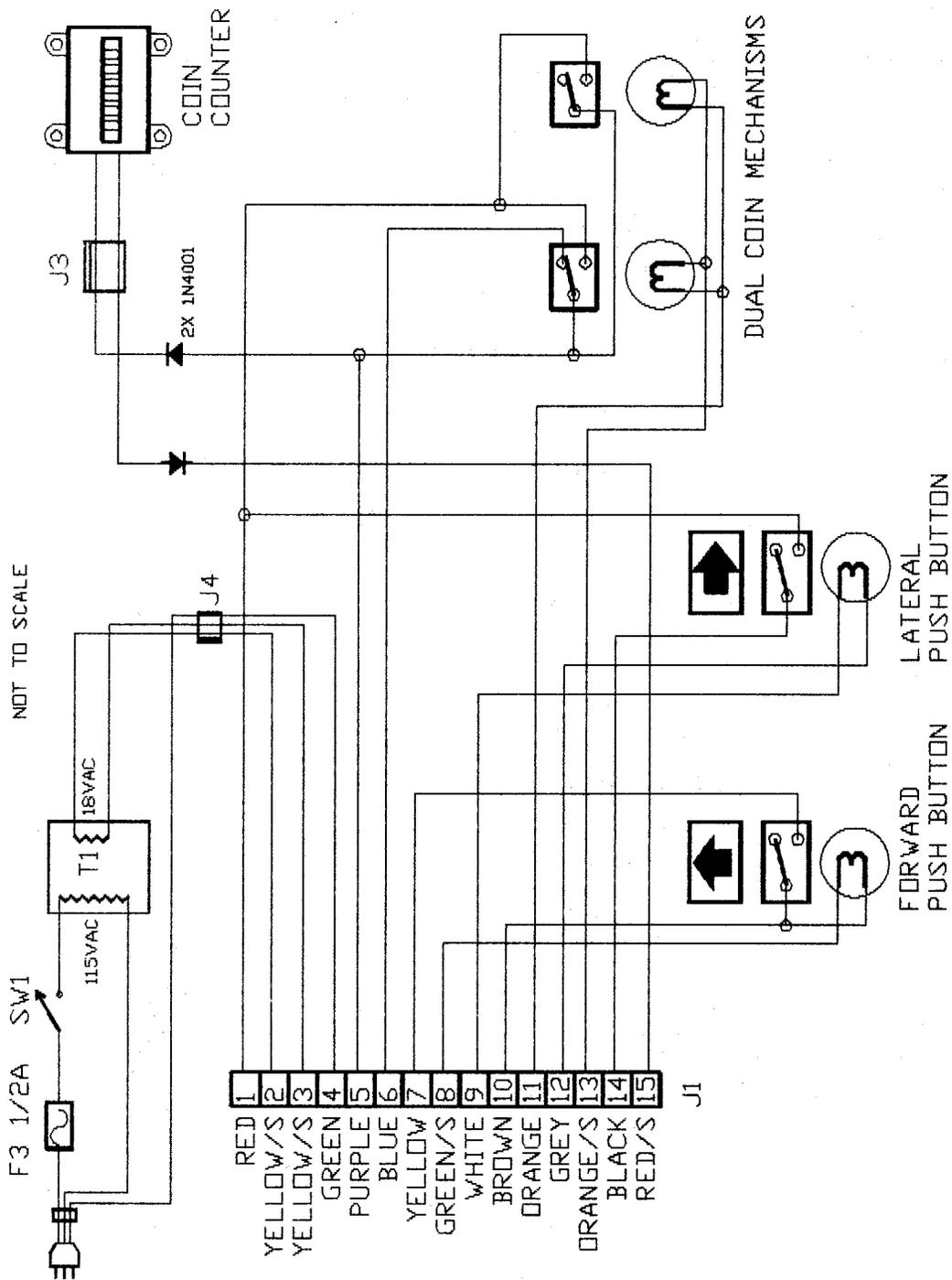


Fig. 7 CONTROL WIRING DIAGRAM

MANUFACTURER: R & J VENDING	
DESCRIPTION: CONTROL WIRING DIAGRAM	DATE: 3/3/93
PRODUCT: SUPER SCOOPER	DRAWN BY: TMM

PARTS LIST

Ref. #	Part Description	PRICE
1-1-006	Relay, 24VDC, K1, K2, K3	\$20.00
1-1-012	Fuse, 1A "Fast React" F2	1.00
1-1-013	Fuse, 2A "Time Delay" F1	1.00
1-1-016	Circuit Board, Complete	145.00
1-1-017	Potentiometer, VR1	20.00
2-1-001	DC Motor, Forward and Lateral	45.00
2-1-002	DC Motor, Scoop/Claw	45.00
2-1-003	Rubber Belt, Large	2.00
2-1-004	Rubber Belt, Small	2.00
2-1-006	Switch, Lateral Limit	10.00
2-1-007	Switch, Forward and Vertical Limit	5.00
2-1-008	Switch, Vertical Stop	10.00
2-1-009	Switch, Coin	5.00
2-2-001	Solenoid, Scoop	30.00
2-2-002	Solenoid, Claw	20.00
2-2-003	Scooper, complete w/solenoid	90.00
2-2-004	Claw, complete w/solenoid	110.00
2-2-005	String, 50 lb. braided nylon 38"	1.00
3-1-000	Switch, Lighted Arrow Assembly	10.00
3-1-004	Power Supply	55.00
3-1-005	Coin Counter	20.00
3-1-006	Light Bulb, Coin Insert	1.00
3-1-007	Light Bulb, Arrow Indicator	1.00
3-1-008	Coin Mechanism, Complete	40.00
3-1-009	Coin Mechanism, Insert	25.00
3-1-010	Cabinet Light, Fluorescent	10.00
3-1-011	Plexiglass, Front Sliding Door	20.00
3-1-012	Coin Box	25.00
3-1-013	Levelers, Cabinet	2.50

All Prices Subject To Change Without Notice.

LIMITED WARRANTY

Machines delivered under this order are warranted to be free from defects in materials and workmanship for 90 days from shipment date. The Seller, will, at its option, repair or replace any defective items(s) at its plant, provided the item has not been subject to improper use. Items returned under this warranty shall be shipped prepaid and with the Seller's specific authorization. Buyer's request for replacement items under this warranty must include Buyer's name and machine serial number and date of purchase. Upon receipt of defective item, Seller will then repair or replace said item. Replacement item will not be sent until defective item is received by Seller. Except for the above warranty the Seller makes no other warranties, expressed or implied.

EFFECTIVE 2/93