

STANDARD CRANE

FOR 5/11/92 DATE CODED EPROM

DIPSWITCH #1&2

ON ON -----> 1 CRED =2.00 <-----
OFF ON -----> 1 CRED =1.00 <-----
ON OFF -----> 1 CRED = .50 <-----
OFF OFF -----> 1 CRED = .25 <-----

DIPSWITCH #3&4

ON ON -----> 60 SECS PER PLAY <-----
OFF ON -----> 45 SECS PER PLAY <-----
ON OFF -----> 30 SECS PER PLAY <-----
OFF OFF -----> 15 SECS PER PLAY <-----

DIPSWITCH #5

ON -----> JOYSTICK <-----
OFF -----> BUTTON CONTROL <-----

DIPSWITCH #6

ON -----> DISPENSER ENABLED <-----
OFF -----> DISPENSER DISABLED <-----

DIPSWITCH #7

ON -----> TICKETS <-----
OFF -----> CARDS <-----

DIPSWITCH #8

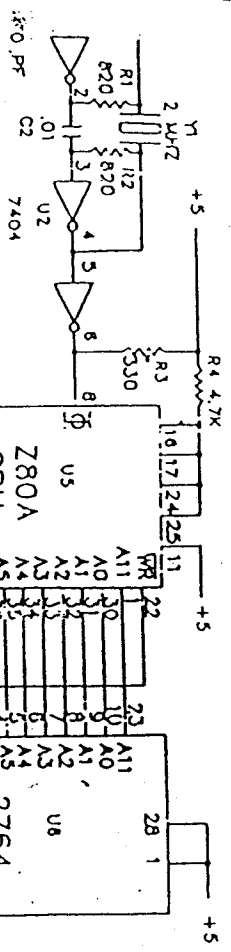
ON -----> SELF TEST <-----
OFF -----> NO SELF TEST <-----

CODES:

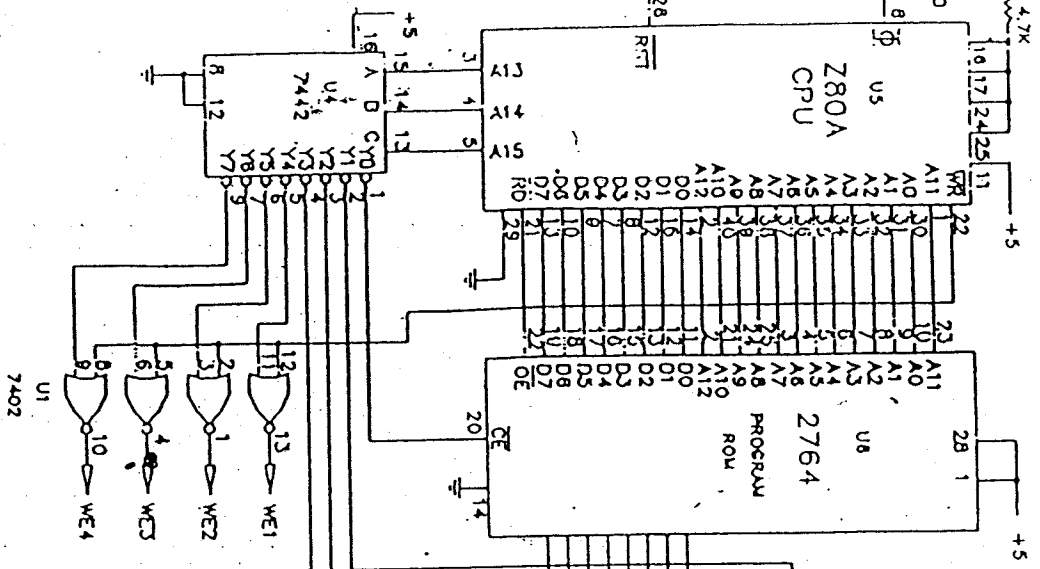
88-01= UP PLATE, UPSWITCH STUCK OR BAD, OR PCB PROBLEM

CARDS: 88-02= FAILURE OF DISPENSE SWITCH TO OPEN UP
88-03= EITHER EMPTY OR SECOND CARD FAILED TO LOAD

TICKETS:99-11= TICKET JAM OR EMPTY

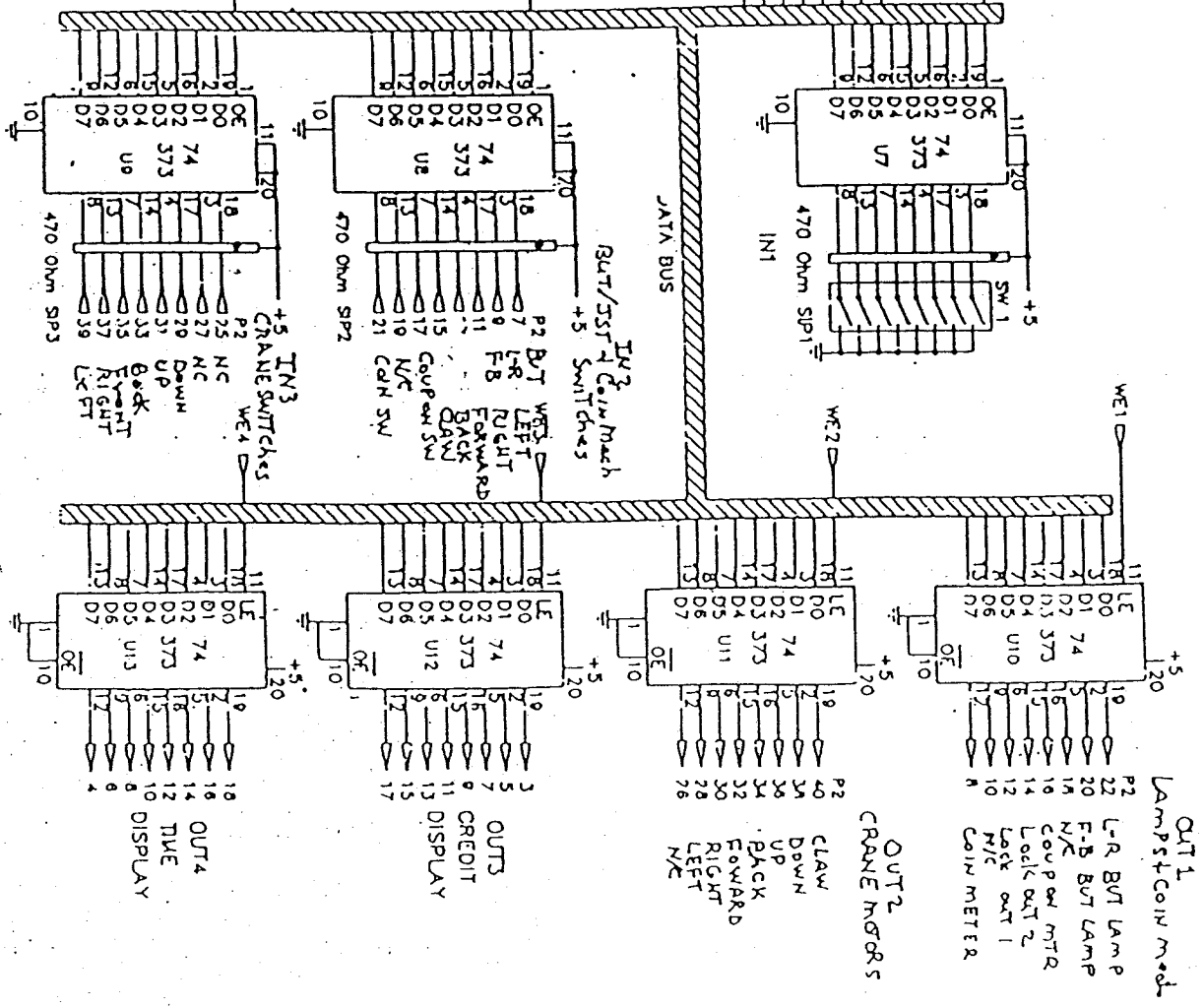


- ROU 1, Y0=0-040000A
- I/O 1, Y1=040000A
- I/O 2, Y2=100000A
- I/O 3, Y3=140000A
- I/O 4, Y4=200000A
- I/O 5, Y5=240000A
- I/O 6, Y6=300000A
- I/O 7, Y7=340000A



John C. 10/1/86

CRANE CPU
SEPT 2, 1986
REV-A



OUT 1
Lampst coin mod.

OUT 2
CRANE MOTORS

OUT 3
CRANE MOTORS

OUT 4
DISPLAY

OUT 5
DISPLAY

OUT 6
DISPLAY

CLAW BD TECHNICAL INFORMATION

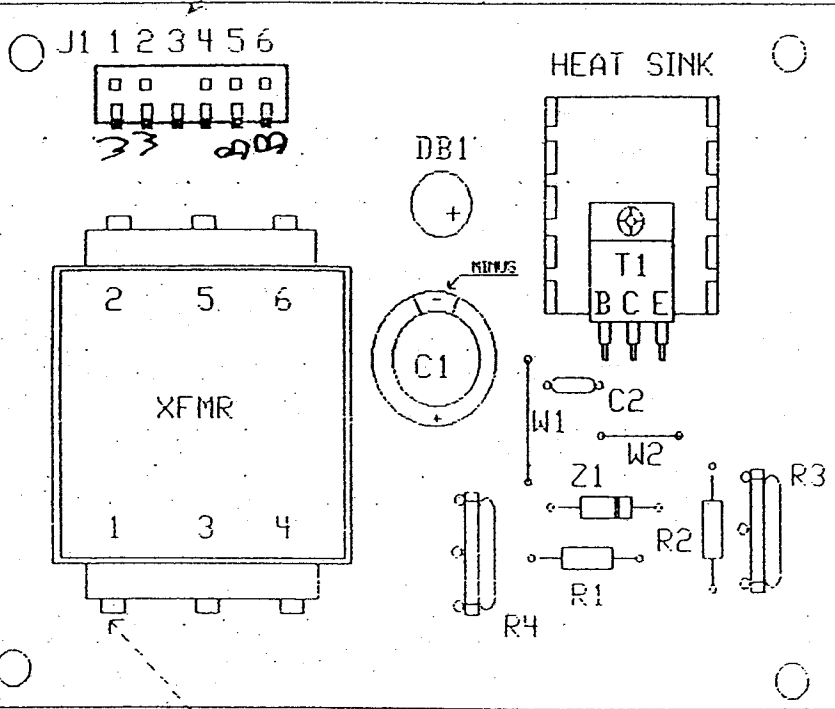
PROPERTY OF GRAYHOUND, INC

PREPARED BY J.M. PECCI

3-5-91

CLAW BD PCB ASS'Y

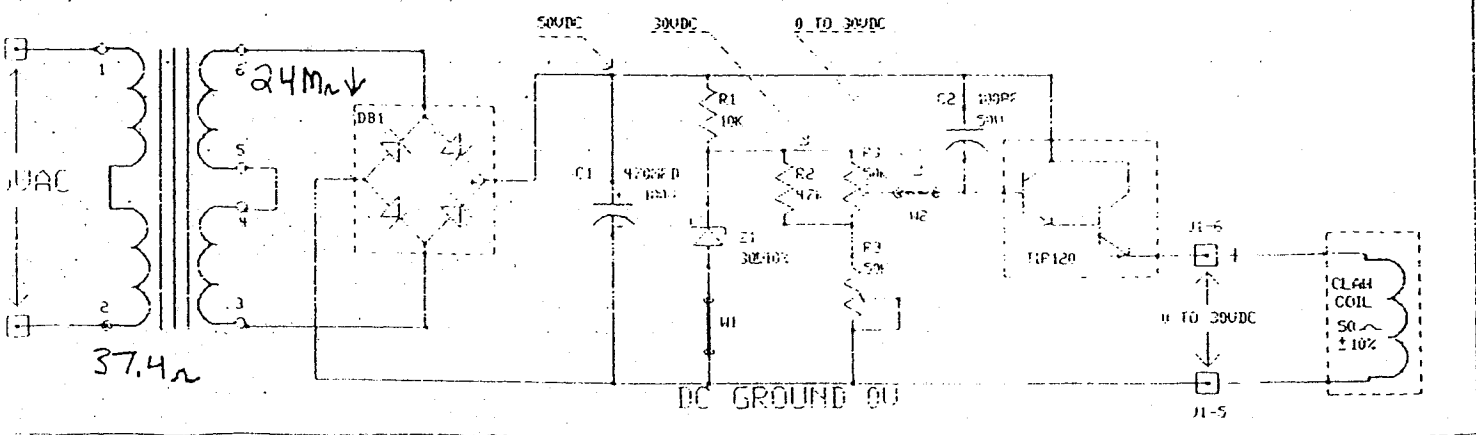
NOTE: LOCATION 3 IS FOR POLARIZATION, THERE SHOULD BE NO PIN IN THIS LOCATION



| PART LIST | |
|-------------|-----------|
| DLX CLAW BD | |
| R1 | 10K |
| R2 | 47K |
| R3 | 50K POT |
| R4 | 50K POT |
| C1 | 470MFD |
| C2 | 100PF |
| Z1 | 30V |
| T1 | TIP120 |
| DB1 | BRIDGE |
| XFMR | GEI |
| J1 | 6 PIN HDR |
| HEAT SINK | |
| JUMBO MOD | |
| C2 | 10MFD |
| Z2 | 9V |

RED OR BLK DOT ALSO INDICATES PIN 1

CLAW BD SCHEMATIC



CRANE CONTROL BOARD

PREPARED AND DRAWN BY JOHN M PECCI
 NOVEMBER 14, 1991

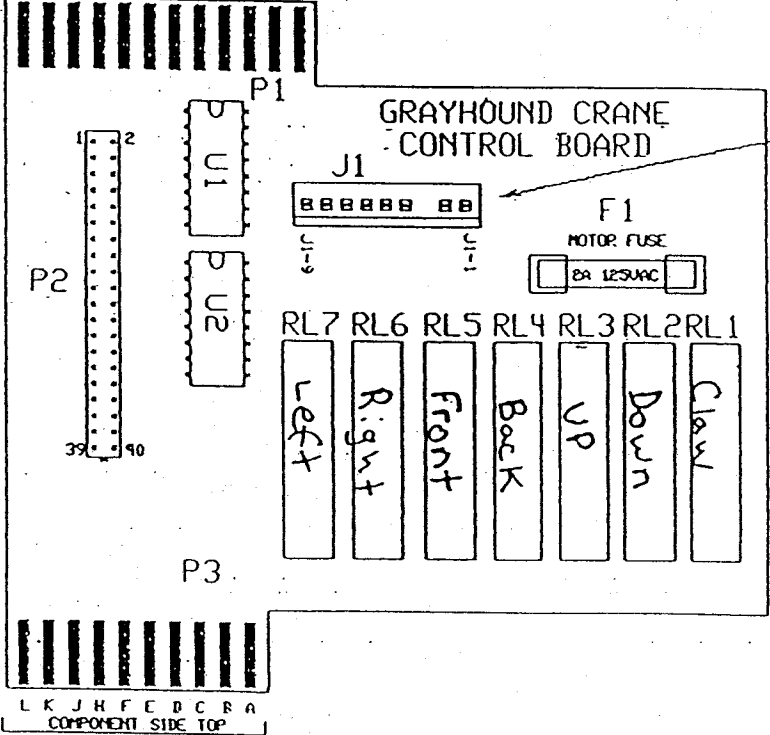
P1 CONNECTOR-FRONT PANEL INTERFACE HARNESS

| SOLDER SIDE BOTTOM | | COMPONENT SIDE TOP | |
|--------------------|---------|--------------------|------------------|
| SW DC GND | BLK 1 | A BLK | SW DC GND |
| JOYSTK BUTTON | N/C 2 | B N/C | |
| LEFT SW L/R SW | BRN 3 | C W/Org | COIN METER |
| RIGHT SW F/B SW | YEL 4 | D N/C | AUX OUT1-GR |
| FRONT SW | GRN 5 | E RED | COIN LOCK-OUT #2 |
| BACK SW | GRY 6 | F RED | COIN LOCK-OUT #1 |
| DROP SW | WHT 7 | H WHT/BLK | AUX OUT1-3 |
| TXT ON | W/Org 8 | J BLU | TXT MOTOR |
| FLUSH BCT | VL 9 | K WHT/YEL | F/B BUTTON LAMP |
| COIN SW | BLU 10 | L WHT/BRN | L/R BUTTON LAMP |
| AUX IO-0 | N/C 11 | M N/C | AUX OUT2-7 |
| AUX IO-1 | N/C 12 | N ORG | +12 VDC |

*Push
Candy
sensor*

*M-hr Crd
Speaker*

SOLDER SIDE BOTTOM
 N M L K J H F E D C B A
 COMPONENT SIDE TOP
 12 11 10 9 8 7 6 5 4 3 2 1



J1 CONNECTOR-PS HARNESS

- 1 BLK 110 VAC HI
- 2 BRN 110 VAC LOH
- 3 KEY NC
- 4 ORG +12 VDC
- 5 YEL +5 VDC
- 6 NC
- 7 NC
- 8 BLK OR BLU DC GND
- 9 BLK OR BLU DC GND

SOLDER SIDE BOTTOM
 10 9 8 7 6 5 4 3 2 1

P3 CONNECTOR-BRIDGE HARNESS

| SOLDER SIDE BOTTOM | | COMPONENT SIDE TOP | |
|--------------------|-------|--------------------|---------------|
| SW DC GND | BLK 1 | A BLK | SW DC GND |
| 110VAC COM | GRY 2 | R GRY | 110V AC COM |
| RLY#1 CLAW BD | BRN 3 | C BLK | SW DC GND |
| FLY#2 DOWN MTR | RED 4 | D W/Org | LEFT LMT SW |
| FLY#3 UP MTR | GRN 5 | E WHT/BLU | RIGHT LMT SW |
| FLY#4 BACK MTR | VL 6 | F W/Org | FRONT LMT SW |
| FLY#5 FRONT MTR | BRN 7 | H WHT/YEL | BACK LMT SW |
| FLY#6 RIGHT MTR | BLU 8 | J W/Org | UP LMT SW |
| FLY#7 LEFT MTR | VL 9 | K WHT/RED | DOWN LMT SW |
| NO CONNECTION | 10 | L | NO CONNECTION |

PREPARED FOR

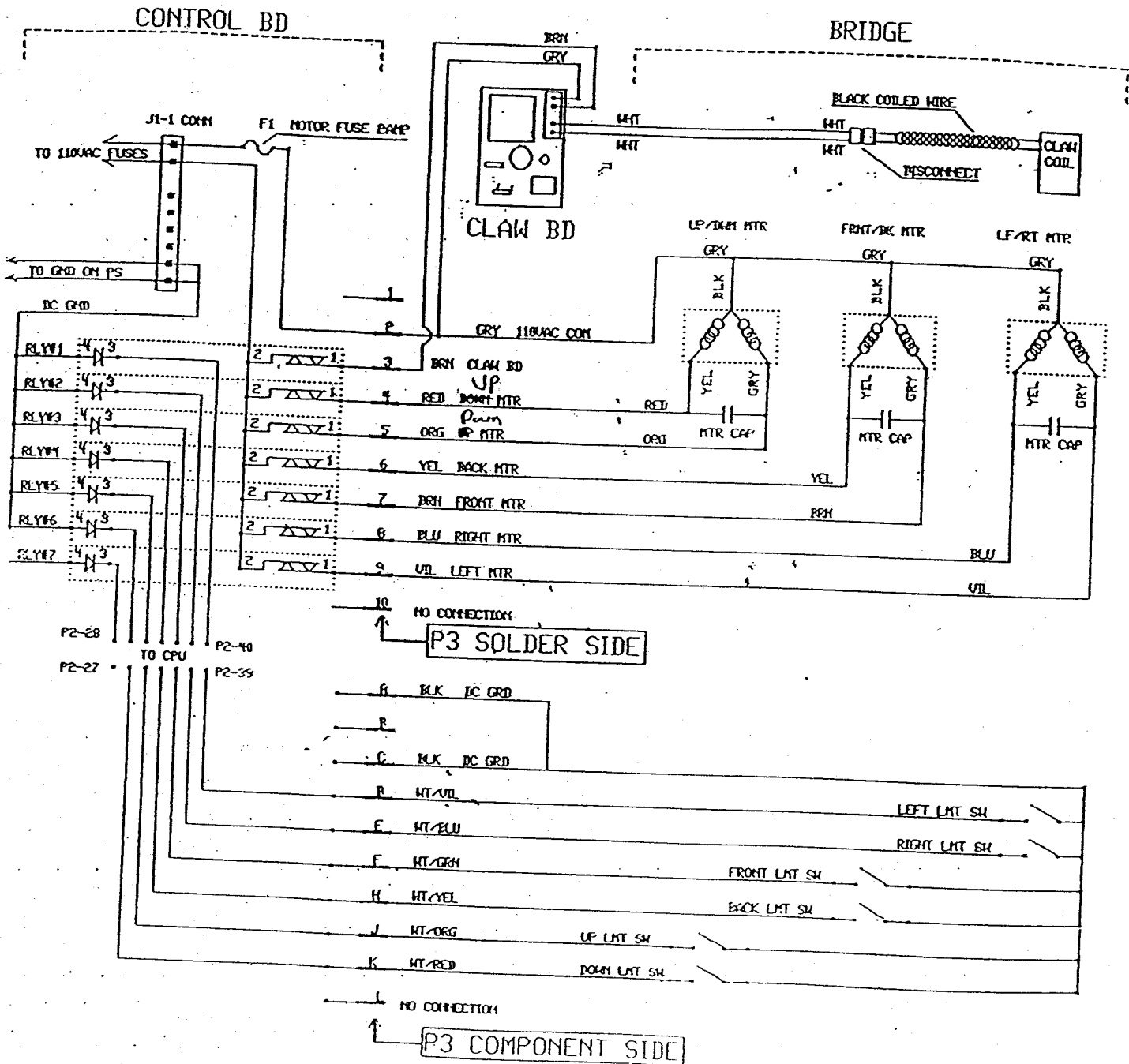
GRAYHOUND ELECTRONICS, INC TOMS RIVER, N.J. 08022 (908) 891-1111
 BY PECCI TECHNICAL SERVICES LAURELLE, N.J.

1/14/91

BRIDGE WIRING

PREPARED AND DRAWN BY JOHN M PECCI

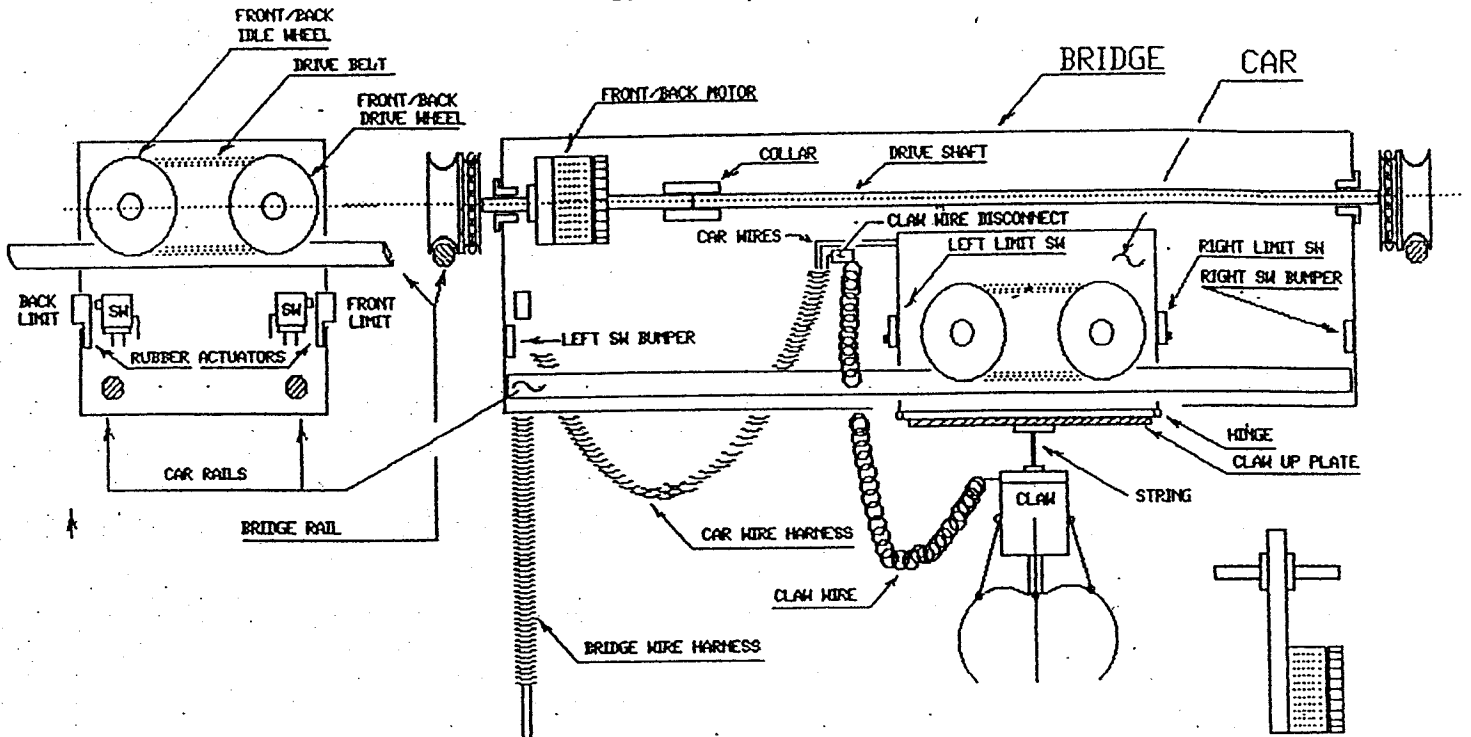
OCT 13th, 1991



CRANE BRIDGE ASSEMBLY

PREPARED AND DRAWN BY JOHN M PECCI

SEPT 29, 1991

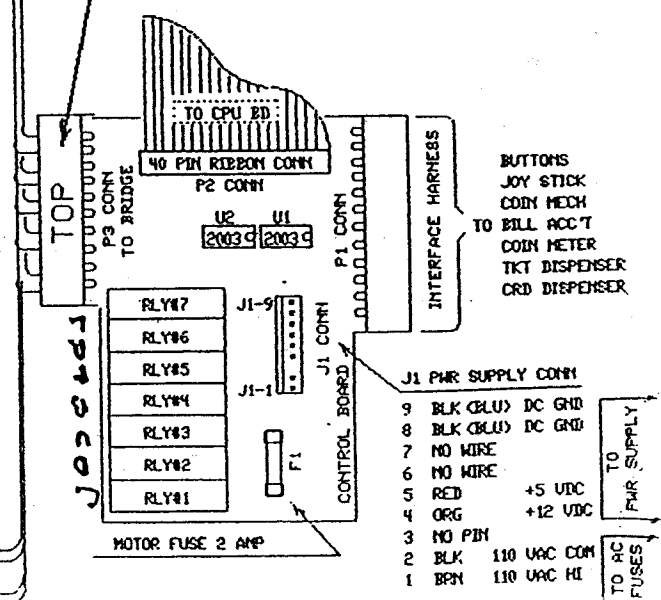


WARNING

 * PLUG MUST BE PUT ON WITH TOP LABEL AS SHOWN *
 * DONOT PLUG OR UNPLUG WITH POWER ON *

P3 CONN WIRING

| | | | | | |
|---------------|--------|----|---------------|-----|-----------------|
| NO CONNECTION | L | 10 | NO CONNECTION | | |
| DOWN LMT SW | WH/RED | K | 9 | VTL | RLY#7 LEFT MTR |
| UP LMT SW | WH/ORG | J | 8 | BLU | RLY#6 RIGHT MTR |
| BACK LMT SW | WH/YEL | H | 7 | BRN | RLY#5 FRONT MTR |
| FRONT LMT SW | WH/GRN | F | 6 | YEL | RLY#4 BACK MTR |
| RIGHT LMT SW | WH/BLU | E | 5 | ORG | RLY#3 UP MTR |
| LEFT LMT SW | WH/VIO | D | 4 | RED | RLY#2 DOWN MTR |
| SW DC GND | BLK | C | 3 | BRN | RLY#1 CLAW BD |
| 110V AC COM | GRY | B | 2 | GRY | 110VAC COM |
| SW DC GND | BLK | A | 1 | BLK | SW DC GND |



CLAW ADJUSTMENT PROCEDURE

- 1 TO START, MOVE BOTH CONTROLS COUNTER CLOCK WISE
- 2 MIN TENSION ADJUSTMENT R1
 - A MOVE R1 CLOCK WISE 1/8 INCH
 - B PLAY GAME AND SEE IF THE CLAW CLOSES
 - C REPEAT STEPS A AND B UNTIL CLAW JUST CLOSES
- 3 PERCENTAGE ADJUSTMENT R2
 - A PLAY GAME WITH PLUSH IN IT
 - B ADJUST R2 CLOCK WISE UNTIL THE CORRECT PERCENTAGE OF PLUSH IS BEING PICKED UP PER DOLLARS OF PLAYS

