

ETL

FRANTIC™ FRED



OWNERS AND SERVICE MANUAL SECOND REVISION

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INTRODUCTION

GAME FEATURES

FRANTIC FRED™ is the latest in Redemption Video games from I.C.E.

SIMPLE GAME PLAY - Central to all successful games is simple play. When a player sees a game and says "I can do that", you have a game that will consistently earn well. The game play of FRANTIC FRED™ was developed to do just that, and while catering to young children, it is fun for the whole family.

UNIQUE "CABIN"ETTE DESIGN - The cabinet of FRANTIC FRED™ has been designed to be totally unique for a video game. The attractive Log Cabin design has just what it takes to draw customers in from all over the arcade. The cabinet has a realistically sculpted Roof and Log Control Panel made of impact resistant vacuum formed ABS. The balance of the machine is constructed with a cabinet grade - 7 ply plywood, with full Vinyl Graphics laminated to it. The front door of the cabinet is full length to offer the best possible serviceability to the operator. Virtually everything is accessible once the door has been opened. Oh....Don't forget about that Pesky Squirrel sitting on top of the cabin.

GREAT VIDEO - The video in FRANTIC FRED™ has been designed with simplicity in mind. As FRANTIC FRED™ is a game for children, it is important to keep the graphics cartoonish and uncluttered. An additional benefit of this approach is that it allows the use of the less expensive CGA type monitor.

HIGH TECH GAME ELECTRONICS - are the key to reliability, and FRANTIC FRED™ has them, along with a high power audio amplifier for great game sound.

UNIQUE STEERING WHEEL - The steering wheel is not unique, JUST the way we use it. An absolutely great controller for moving Fred back and forth across the playfield. Move him just a little.....or FRANTICALLY !!!

GAME PLAY

The object of FRANTIC FRED™ is to make Fred move back and forth across the playfield and eat the Apples as they fall from the tree. The Apples are worth tickets, and the idea is to eat as many Apples as possible to earn the most tickets. In fact, if you eat ALL of the Apples, you get to go to a special BONUS screen. Here you will get a chance to earn more tickets, maybe even get the big bonus prize.

But wait, there are a few problems. (These problems are known to Fred as Squirrels.) These pesky critters are up in the trees, laughing at Fred and trying to drop things on his head. Get hit and..... oh "Dat Hurt". When Fred gets hit, he's momentarily stunned and can't get to the next Apple. So "Steer Clear" and..... Good Luck.

ASSEMBLY

ASSEMBLY BEFORE YOU BEGIN

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

DO NOT ATTEMPT TO DEFEAT THE GROUND PRONG ON THE POWER CORD FOR THE SAME REASONS AS GIVEN ABOVE. USING AN IMPROPERLY OR NON GROUNDED OUTLET COULD VOID YOUR WARRANTY.

TOOLS NEEDED: The only tool you will need to assemble this game will be some sort of 7/16" socket or wrench.

Your game needs a minimum ceiling height of 7FT-6IN, however an 8FT height is ideal to fully utilize the marquees height.

SET-UP

CAUTION: Before making any adjustments to the height of the marquee disconnect all wire harnessing from the marquee.

1. Remove the game from all of its packaging.
2. You will notice that the game comes fully assembled with the exception of the marquee being installed. IF YOU HAVE A CEILING HEIGHT OF 8FT OR MORE PROCEED TO STEP 3. IF YOU HAVE A CEILING HEIGHT OF 7FT 6IN SEE MARQUEE HEIGHT ADJUSTMENT PROCEDURES AT THE END OF THIS SECTION.
GET SOMEONE TO HELP YOU HOLD THE MARQUEE IN PLACE WHILE INSTALLING THE HARDWARE DURING THE NEXT STEP.

3. In the rear of the cabinet are located 2 spacer wood blocks held on to the rear of the cabinet with bolts and washers.
4. Remove the bolts and washers and remove the spacer blocks.
5. Install the bolts and washers through the marquee mounting poles and slide the mounting blocks onto the hardware. These blocks will give the marquee poles the spacing necessary to clear the overhang of the roof panels.
6. Install the marquee to the rear of the cabinet being sure to run all of the wiring that runs down through the marquee pole into the wiring access hole located on the rear of the cabinet.

TIGHTEN THE HARDWARE SECURELY, BUT BE CAREFUL NOT TO OVER TIGHTEN AND BREAK THE INSERTS IN THE REAR OF THE CABINET.

7. There are 3 connectors from the marquee that need to be connected inside the game. Open the front door of the game.
8. Connect the (2) 15 pin connector cables from the marquee to the marquee driver board located on the left hand side of the cabinet. IT DOES NOT MATTER WHICH 15 PIN CONNECTOR GOES INTO WHICH 15 PIN SOCKET.
9. Connect the 2 pin AC harness to the 2 pin plug which will be located in the lower cabinet.
10. Turn on the AC power to the game. The game should power up at this time. IF THE GAME DOES NOT FULLY POWER UP AT THIS TIME, BE SURE THE SWITCH IS DEPRESSED THAT COMES OUT OF THE SWITCHING POWER SUPPLY.

ASSEMBLY

CHANGING THE MARQUEE HEIGHT

CAUTION: Before any maintenance or repairs are made disconnect game power.

The marquee on FRANTIC FRED™ can be lowered by 6 inches when necessary.

1. Lay the marquee on the floor and remove the (6) phillips head screws that hold the cover onto the rear of the marquee.
2. Remove the connectors from the cover to the rear of the marquee.
3. Remove the A.C. wiring from the rear of the marquee to the marquee poll.
4. Unbolt the marquee poles and move them up to the alternate set of holes located at the rear of the marquee.
5. Re-connect the A.C. wiring.
6. Re-connect the marquee cover wiring and re-install the cover with the (6) phillips head screws. GO BACK TO STEP 3 OF SET-UP

GAME TEST

Now that the game has been powered up, it is important to be sure that all areas of the game are functioning properly. Please test the following areas for correct function

1. Low ticket LED should be lit.
2. Place tickets in ticket bin. Low LED light should go off.
3. Check that video screen is working properly. Check for the following:
 - All colors are working
 - Screen edges are straight
 - video goes to edge of screen
 - Screen has no jitters or rolling

NOTE: IF ANY OF THE ABOVE CHECKS REVEAL A VIDEO PROBLEM, PLEASE CALL OUR SERVICE DEPARTMENT.

4. Check that the Florescent lighting is working on the marquee.
5. Check that all the marquee Fire Fly light bulbs are flashing.
6. Insert coins to see that the game responds properly.
7. Check for adequate sound levels.

NOTE: YOU CAN ADJUST THE SOUND VOLUME WITH THE CONTROL LOCATED ON THE AUDIO AMPLIFIER.

8. Move the steering wheel to be sure that FRED moves back and forth properly.
9. Win a game, advance to the BONUS round, and be sure the BONUS button is working properly.
10. Check for proper ticket dispensing.
11. Go to PROGRAMMING section.

FUSE REPLACEMENT

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

MARQUEE	250 V	6 AMP	MDQ
POWER MOD	250 V	3 AMP	MDQ
POWER SUPPLY (F1 - F4)	250 V	5 AMP	MDQ

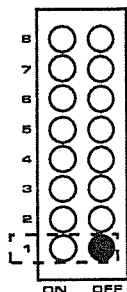
PROGRAMMING INSTRUCTIONS

The FRANTIC FRED programming options are adjusted by means of dip switch settings. An 8 position dip switch controls game function, while a 4 position dip switch controls additional game and coin functions.

IMPORTANT: AFTER CHANGING ANY DIP SWITCH SETTINGS, IT WILL BE NECESSARY TO TURN GAME POWER OFF THEN BACK ON FOR THE NEW SETTINGS TO TAKE EFFECT.

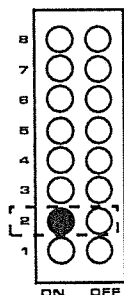
NOTE: DARKENED CIRCLES = ACTIVE POSITION

DOUBLE TICKET VALUES - DIP SWITCH #1 controls doubling ticket values. This option is valuable if your tickets value is very low, or if you just would like a higher payout. Turning the switch ON enables double tickets, and turning the switch OFF disables double tickets. The default value for this option is OFF.



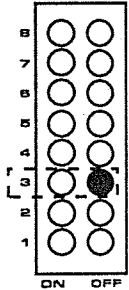
NOTE: TICKET VALUES ARE NOT DOUBLED IN BONUS ROUND REGARDLESS OF SETTING IN THIS OPTION

ENABLE BONUS ROUND - DIP SWITCH #2 controls enabling the bonus round. This video "CYCLONE" option gives the player a chance to win extra BONUS tickets at the end of the game. Turning the switch ON enables the bonus round. Turning the switch OFF disables the bonus round. The default value for this round is ON.

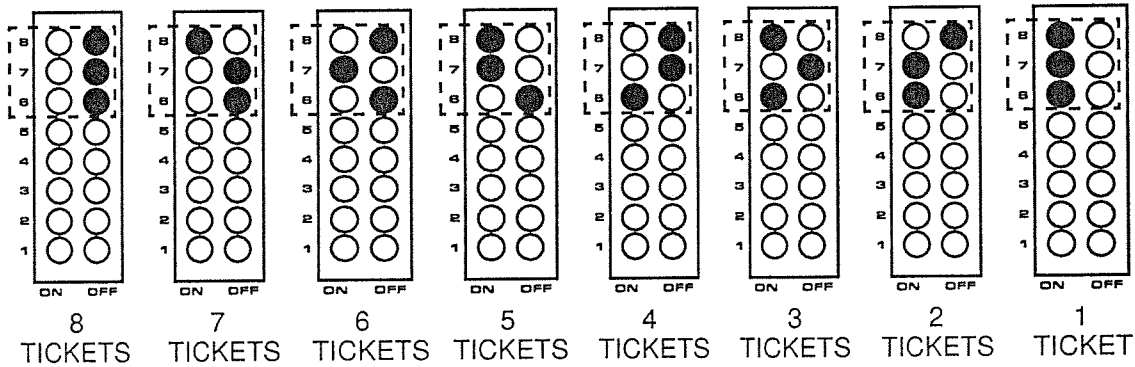


PROGRAMMING INSTRUCTIONS

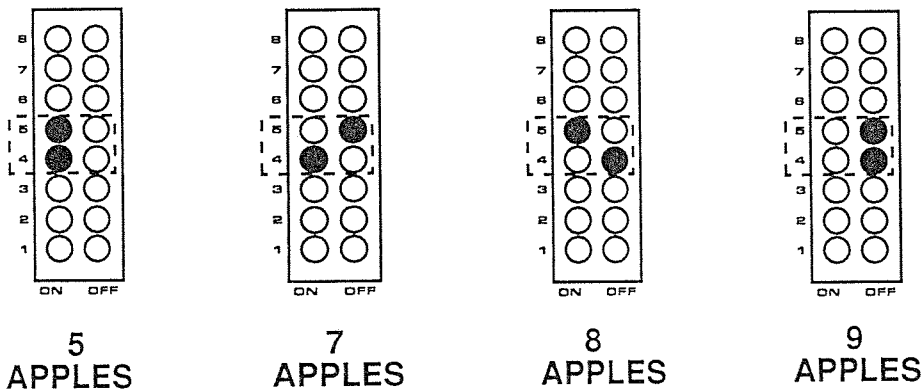
JUST FOR PLAYING - DIP SWITCH #3 controls the just for playing option. This "mercy" ticket option allows the players to receive tickets regardless of the score. This option is useful in municipalities that do not allow a variable ticket payout. On = Enabled Off= Disabled.



NOTE: IN JUST FOR PLAYING MODE, DIP SWITCHES 6,7,& 8 ARE USED TO SELECT THE JUST FOR PLAYING TICKET QUANTITIES. ADDITIONALLY, USING THE "DOUBLE TICKET VALUES" OPTION WILL DOUBLE THE TICKET VALUES SHOWN BELOW.



NUMBER OF APPLES PER GAME - DIP SWITCHES 4 & 5 control how many apples appear on the tree branch during the game. The more apples per game, the more difficult to play. (the actual difficulty is the same, but the increased number of apples make it more likely that FRED will get hit with an anvil. The number of apples per game is indicated below.....



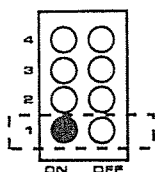
PROGRAMMING INSTRUCTIONS

TICKET TABLES - DIP SWITCHES 6, 7, AND 8 control how many tickets are paid out per game when FRED eats all of the apples. Look in the chart below at how many apples the game is set up to play. Cross reference that amount with your desired ticket payout. Then use an appropriate dip switch setting as listed:

DIP SWITCH SETTING	1	2	3	4	5	6	7	8	9
5 APPLES	3	9	3	9	7	6	5	5	
7 APPLES	4	10	4	13	8	7	9	7	
8 APPLES	4	10	6	15	9	9	9	8	
9 APPLES	5	11	6	18	10	9	10	9	

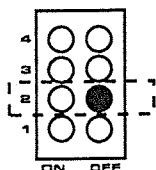
NOTE: YOU MAY NOTICE THAT THERE ARE DUPLICATE TICKET NUMBERS WITH DIFFERENT DIP SWITCH SETTINGS FOR EACH AMOUNT OF APPLES. THE DIFFERENT SETTINGS MERELY MOVE THE TICKET VALUES AROUND TO THE VARIOUS APPLES ON THE SCREEN.

BONUS INCREMENT - DIP SWITCH #1 of the smaller 4 dip switch block allows the operator to increase the bonus ticket value by 1 either every game or every 3 games. A setting of OFF increases the bonus every 3 games. A setting of ON increases the value every game. The default value for this option is OFF.

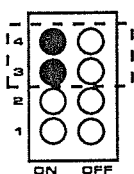


PROGRAMMING INSTRUCTIONS

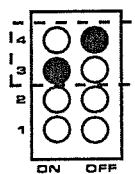
BONUS CHEAT MODE - DIP SWITCH #2 of the smaller 4 dip switch block controls the bonus cheat mode. When switch #2 is OFF, you must eat all of the apples to advance to the bonus round. When switch #2 is in the ON position, you can MISS 1 apple, and still make it to the bonus round. The default value for this option is OFF.



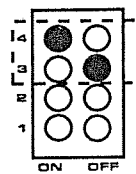
COIN SETTING - DIP SWITCHES 3 AND 4 of the smaller 4 dip switch block controls the coin settings for the game. The chart below will give the possible combinations. The default value for this options is 1 coin, 1 credit.



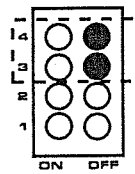
1 COIN
1 CREDIT



2 COINS
1 CREDIT



4 COINS
1 CREDIT



1 COIN
2 CREDITS

MAINTENANCE

It is a well know fact that keeping your game looking new is the best thing you can do to keep your earnings high. ALWAYS use the suggested cleaning materials to avoid damaging your game.

FRANTIC FRED™ has been engineered to be easy to maintain. We have used the most durable materials available to keep the game working for years to come.

PLASTIC PARTS - All of the plastic parts on the game can be cleaned with soapy water or any of the commercial spray cleaners available. These parts may also be finished with a coating of spray furniture polish to keep them looking new.

SQUIRREL - The squirrel on FRANTIC FRED™ has large and small threaded rods that keeps it attached to the game. The attachment method has been developed so that it can be kept tight after a period of time, yet not be obvious. (You wouldn't want a bolt sticking out of the squirrel's head). To re-tighten the squirrel's attachment, open the door and tighten the threaded rods under the roof of the game.

PRINTED DECALS - The decals on the game should be cleaned carefully to avoid damage. The decals have a clear ultra-violet ink overcoating to add durability, but care should still be exercised. Clean with a mild SOAPY SOLUTION ONLY. Use of spray cleaners could occasionally be used, but will wear through the clear coat and printing with time. Absolutely NEVER USE SOLVENTS TO CLEAN THE DECALS.

TICKET DISPENSER - It is a good idea to clean the tick path and optical detectors on the ticket dispenser at least once a month.

COIN MECHANISMS - The coin mechanisms should be cleaned periodically with warm soapy water using a stiff bristle brush. After cleaning with soapy water, check to be sure the mechs are fully cleaned. If not, clean again, this time using isopropyl alcohol. Between the soapy water and alcohol, all of the residues should now be removed. Re-install the mech, check for proper function, and adjust if necessary.

ELECTRONICS - It is a good idea to check for dirt on the steering wheel optical sensor occasionally. Check to see that all of the Marquee lights are working. Check to see that the BONUS button light bulb, and coin door light bulbs are working.

NOTE: TO AVOID DAMAGING THE GAME, ALWAYS USE THE PROPER REPLACEMENT LIGHT BULB.

TURN GAME POWER OFF. Then go around the game and be sure that all of the connectors are fully seated in their sockets.

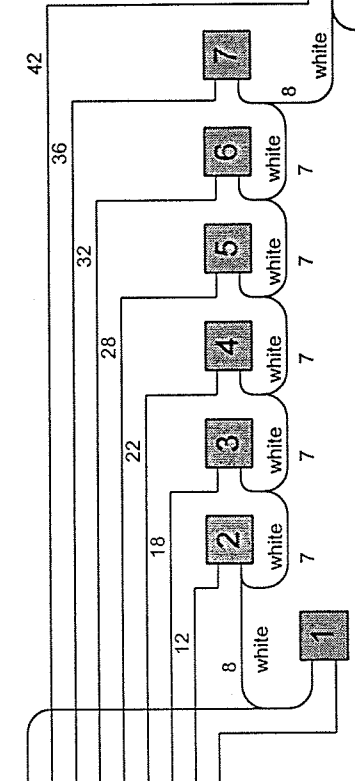
HARDWARE - Periodically check to see that all hardware is tight.

PARTS LISTINGS

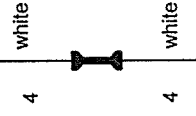
1008	BULB, #555 - 5 VOLT (COIN DOOR & BUTTON LIGHTS)
2005	BULB, #906 - 12 VOLT (MARQUEE LIGHTS)
209	T-MOLD, BROWN 3/4"
211	SWITCH, LOW TICKET
2132	BULB, GE BRIGHT STICK FLORESCENT (MARQUEE SIGN)
5006	CASH BOX
5014F	DOOR LOCK
AR2007	SPEAKER, HIGH POWER 6" X 9"
EV2009	AUDIO POWER AMPLIFIER
FF1006	HINGE, CABINET DOOR
FF2010	POWER SUPPLY, 250 WATT SWITCHING
FF2034X	MAIN P.C. BOARD, FRANTIC FRED
FF2036X	MARQUEE P.C. BOARD, FRANTIC FRED
FF3001	CONTROL BASE (LOG) PLASTIC
FF3002	ROOF, PLASTIC
FF3003	MARQUEE HOUSING
FF3010	SQUIRREL
FF3028	MONITOR COVER GLASS (DOOR WINDOW)
FF4001	STEERING WHEEL ASSEMBLY
FF7001	DECAL, SIDE PANEL - LEFT
FF7002	DECAL, SIDE PANEL - RIGHT
FF7003	DECAL, MONITOR (WINDOW FRAME)
FF7004	DECAL, INSTRUCTION
FF7005	DECAL, DOOR (LOWER)
FF7006	DECAL, LOG (SMALL END)
FF7007	DECAL, LOG (BIG END)
FF7008	DECAL, BONUS BUTTON
FF7009	DECAL, KICK PLATE (CLEAR)
FF7010	DECAL, PROGRAMMING
FF7026	DECAL, FIREFLY (SET OF 16)
FF7027	MARQUEE SIGN
FF9001	SERVICE MANUAL
HH1006	CASH BOX LID
HH20224MX	COUNTER
HH5005	TICKET DISPENSER
HR1019	LEVELER FEET
HR2005	PUSH BUTTON, LARGE WHITE
MON27C	29" CGA MONITOR
UC2006X	POWER ENTRY MODULE

9
8
7
6
5
4
3
2
1
9 PIN PLUG #2292
SPLIT PIN #2100

white
black
violet
blue
green
yellow
orange
red
brown
7
6
5
4
3
2
1

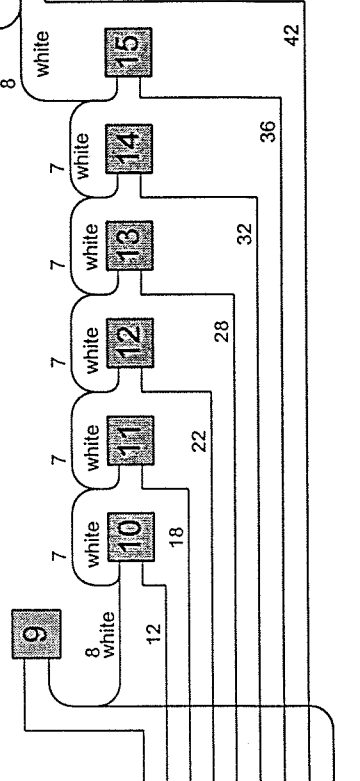


*WEDGE SOCKET #1011
WEDGE PIN #2515



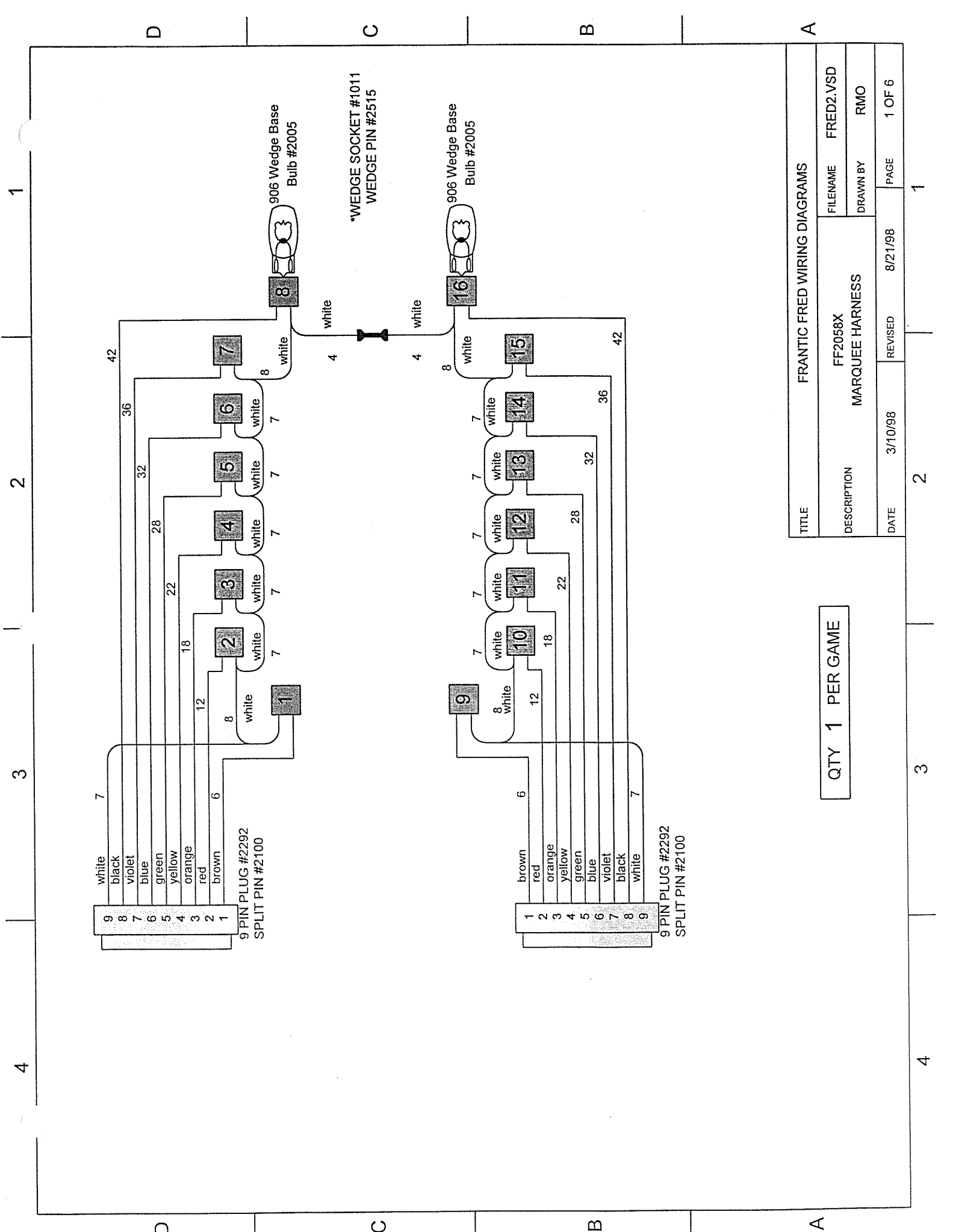
1
2
3
4
5
6
7
8
9
9 PIN PLUG #2292
SPLIT PIN #2100

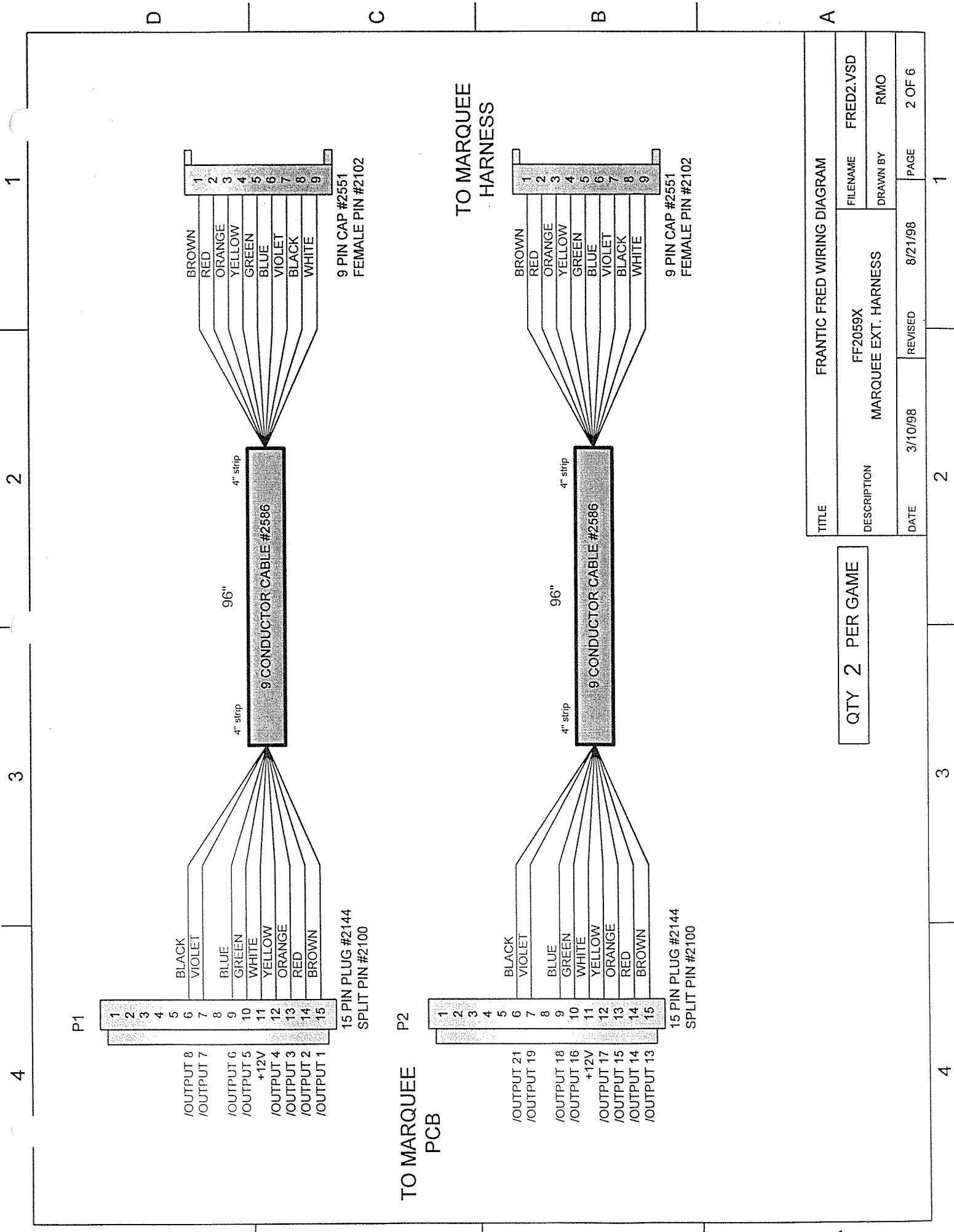
brown
red
orange
yellow
green
blue
violet
black
white
6
5
4
3
2
1



TITLE		FRANTIC FRED WIRING DIAGRAMS	
DESCRIPTION		FF2058X MARQUEE HARNESS	FRED2.VSD RMO
DATE	REVISED	PAGE	1 OF 6
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QTY 1 PER GAME





P1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

- /OUTPUT 8
- /OUTPUT 7
- /OUTPUT 6
- /OUTPUT 5
- +12V
- /OUTPUT 4
- /OUTPUT 3
- /OUTPUT 2
- /OUTPUT 1

- BLACK
- VIOLET
- BLUE
- GREEN
- WHITE
- YELLOW
- ORANGE
- RED
- BROWN

15 PIN PLUG #2144
SPLIT PIN #2100

96"

9 CONDUCTOR CABLE #2586

4" strip

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

- BROWN
- RED
- ORANGE
- YELLOW
- GREEN
- BLUE
- VIOLET
- BLACK
- WHITE

9 PIN CAP #2551
FEMALE PIN #2102

TO MARQUEE
PCB

P2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

- /OUTPUT 21
- /OUTPUT 19
- /OUTPUT 18
- /OUTPUT 16
- +12V
- /OUTPUT 17
- /OUTPUT 15
- /OUTPUT 14
- /OUTPUT 13

- BLACK
- VIOLET
- BLUE
- GREEN
- WHITE
- YELLOW
- ORANGE
- RED
- BROWN

15 PIN PLUG #2144
SPLIT PIN #2100

96"

9 CONDUCTOR CABLE #2586

4" strip

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

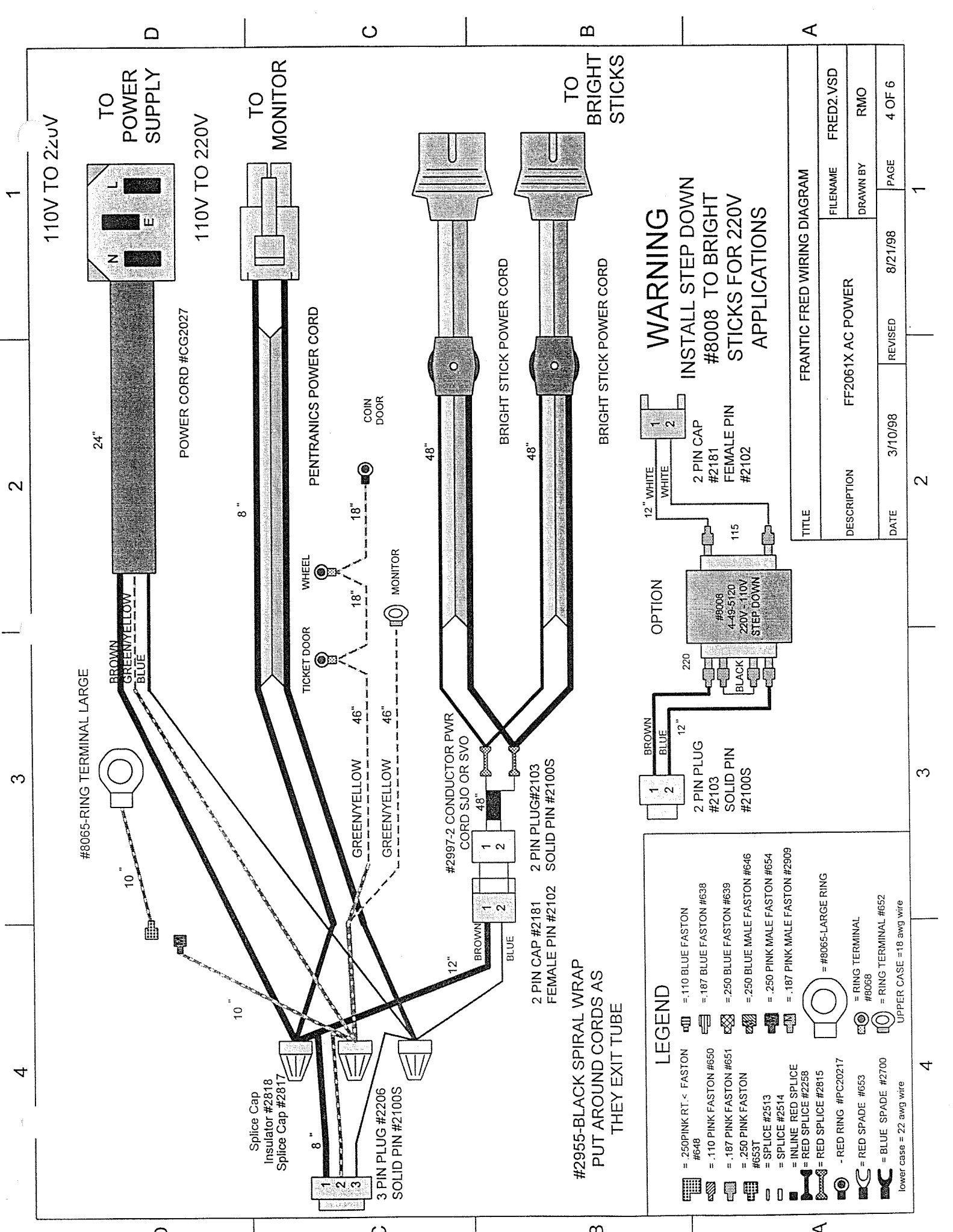
- BROWN
- RED
- ORANGE
- YELLOW
- GREEN
- BLUE
- VIOLET
- BLACK
- WHITE

9 PIN CAP #2551
FEMALE PIN #2102

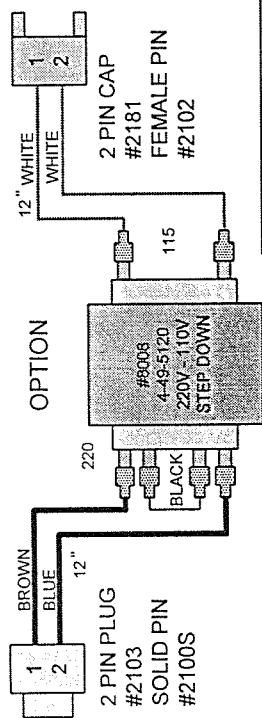
TO MARQUEE
HARNESS

QTY 2 PER GAME

TITLE		FRANTIC FRED WIRING DIAGRAM	
DESCRIPTION	FF2059X MARQUEE EXT. HARNESS	FILENAME	FRED2.VSD
DATE	3/10/98	DRAWN BY	RMO
	REVISED	8/21/98	PAGE 2 OF 6



WARNING
 INSTALL STEP DOWN
 #8008 TO BRIGHT
 STICKS FOR 220V
 APPLICATIONS



LEGEND

	= 250PINK RT. < FASTON #648		= 110 BLUE FASTON #638
	= 110 PINK FASTON #650		= 187 BLUE FASTON #639
	= 187 PINK FASTON #651		= 250 BLUE FASTON #646
	= 250 PINK FASTON #653T		= 250 BLUE MALE FASTON #654
	= SPLICE #2513		= 250 PINK MALE FASTON #654
	= INLINE RED SPLICE		= 187 PINK MALE FASTON #2909
	= RED SPLICE #2258		= RED SPLICE #2815
	= RED SPLICE #2815		= RED RING #PC20217
	= RED RING #PC20217		= RING TERMINAL #653
	= RED SPADE #653		= RING TERMINAL #652
	= BLUE SPADE #2700		= BLUE SPADE #2700

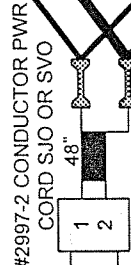
lower case = 22 avg wire
 UPPER CASE = 18 avg wire

TITLE		FRANTIC FRED WIRING DIAGRAM	
DESCRIPTION	FF2061X AC POWER	FILENAME	FRED2.VSD
DATE	3/10/98	DRAWN BY	RMO
REVISED	8/21/98	PAGE	4 OF 6

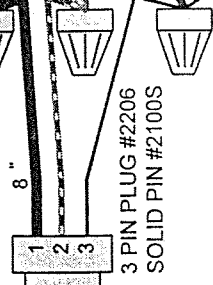
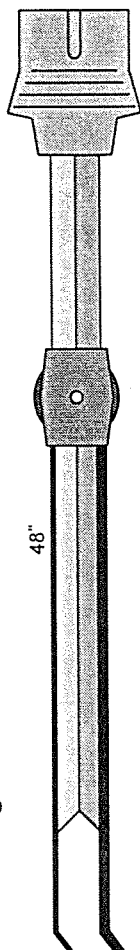
#2955-BLACK SPIRAL WRAP
 PUT AROUND CORDS AS
 THEY EXIT TUBE

2 PIN CAP #2181
 FEMALE PIN #2102

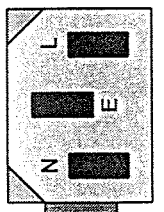
2 PIN PLUG #2103
 SOLID PIN #2100S



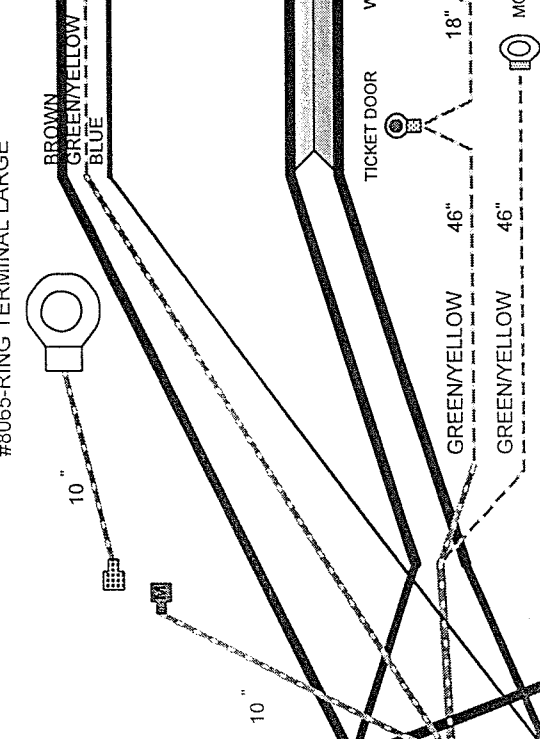
#2997-2 CONDUCTOR PWR
 CORD SJO OR SVO



Splice Cap
 Insulator #2818
 Splice Cap #2817



24"
 POWER CORD #CG2027



110V TO 220V
 TO POWER SUPPLY

110V TO 220V
 TO MONITOR

TO BRIGHT STICKS

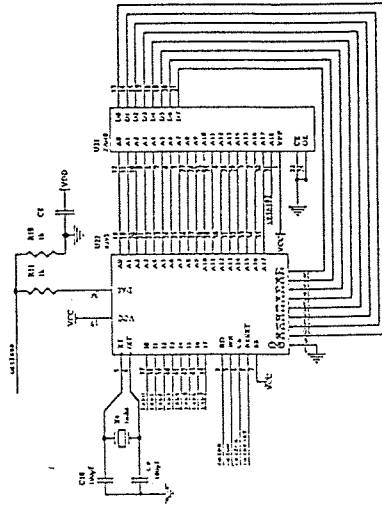
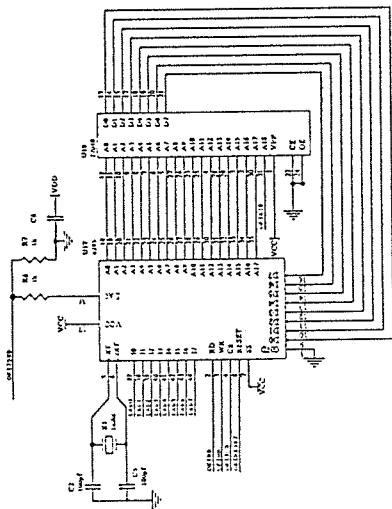
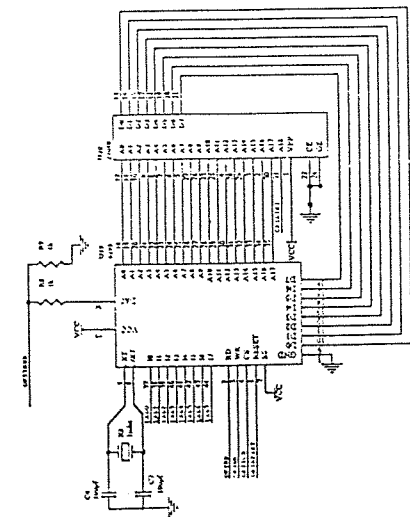
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1 2 3 4

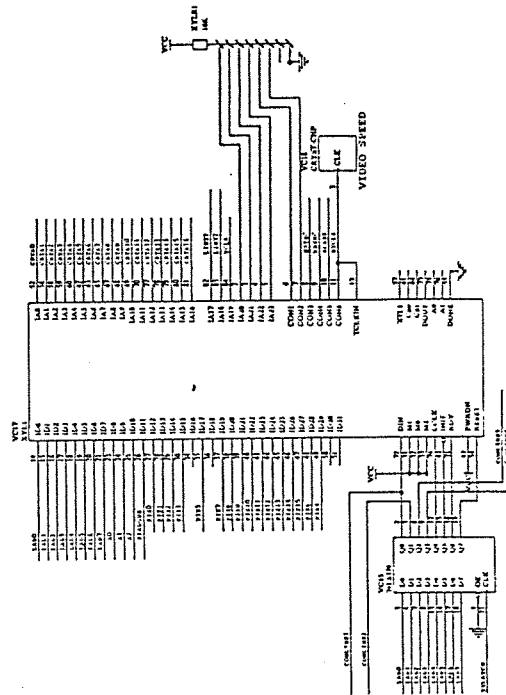
JAMMA CONNECTOR WIRE COLOR ASSIGNMENTS

WIRE COLOR	SOLDER SIDE	PIN	PIN	PARTS SIDE	WIRE COLOR
BLACK	Ground	A	1	Ground	black-black
BLACK	Ground	B	2	Ground	black
RED	+ 5 Volts	C	3	+ 5 Volts	red-red
red	+5 Volts	D	4	+ 5 Volts	red
YELLOW	+12 Volts	E	5		
	KEY	F	6	+12 Volts	yellow-yellow
	KEY	H	7	KEY	
brown/red	Ticket Counter	J	8	Coin Counter	brown
tan	Marquee	K	9	Tix Mot	brown/green
		L	10		
bare RCA	Right Speaker (-)	M	11	Right Speaker (+)	insulated RCA
yellow/green	Video Green	N	12	Video Red	yellow/red
yellow/white	Video Sync	P	13	Video Blue	yellow/blue
DUMMY PIN		R	14	Video Ground	yellow/black
DUMMY PIN		S	15	Tix Sense	black/blue
black/red	Coin 2	T	16	Coin 1	black/brown
		U	17		
		V	18		
		W	19		
DUMMY PIN		X	20	Bonus Button	white/red
		Y	21		
DUMMY PIN		Z	22	Wheel	white/yellow
DUMMY PIN		a	23	Wheel	white/green
		b	24		
		c	25		
		d	26		
black	Ground	e	27	Ground	black
black	Ground	f	28	Ground	black

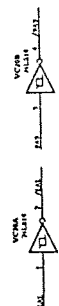
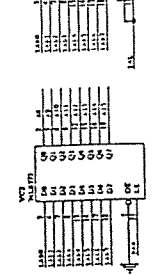
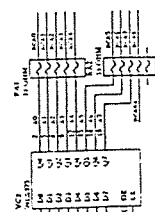
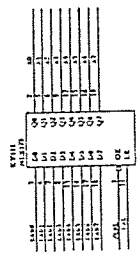
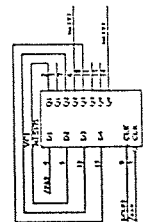
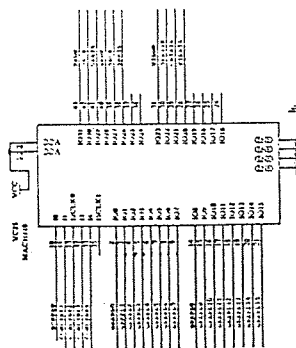
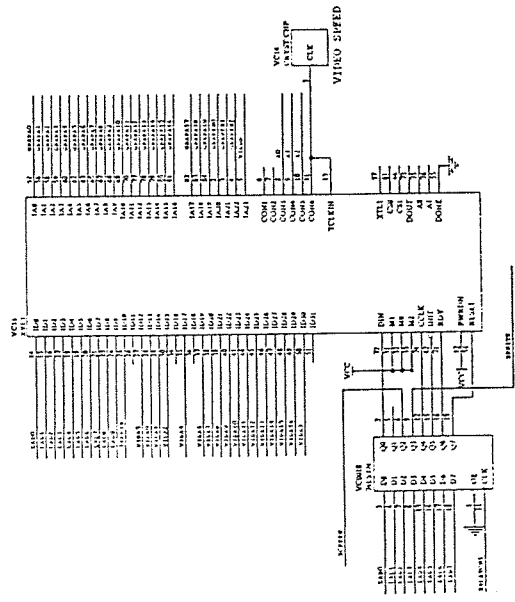
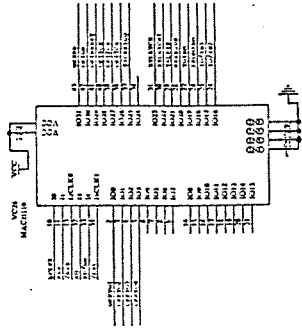
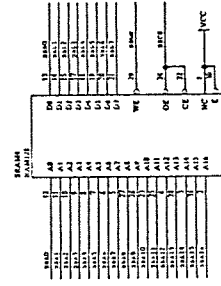
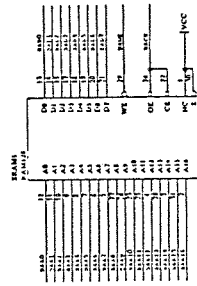
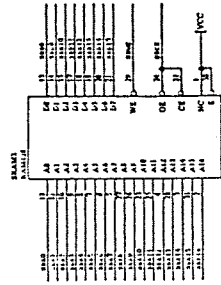
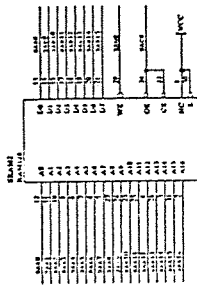
OKI SOUND CHIPS



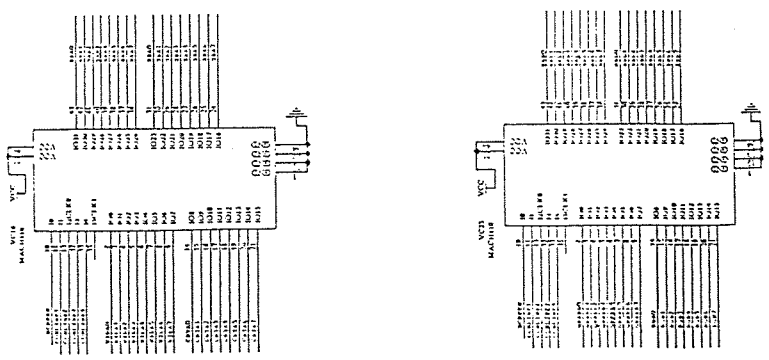
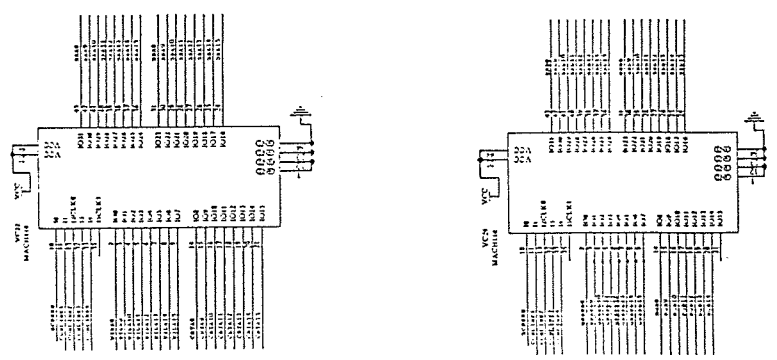
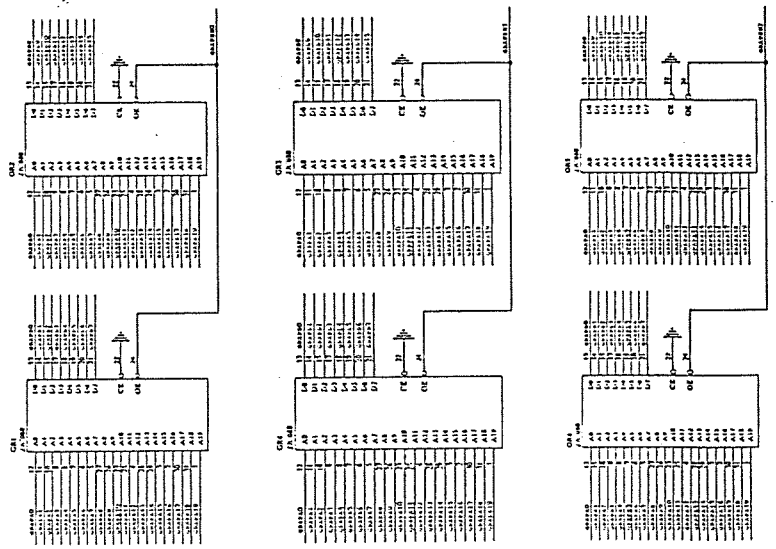
CRT CONTROLLER



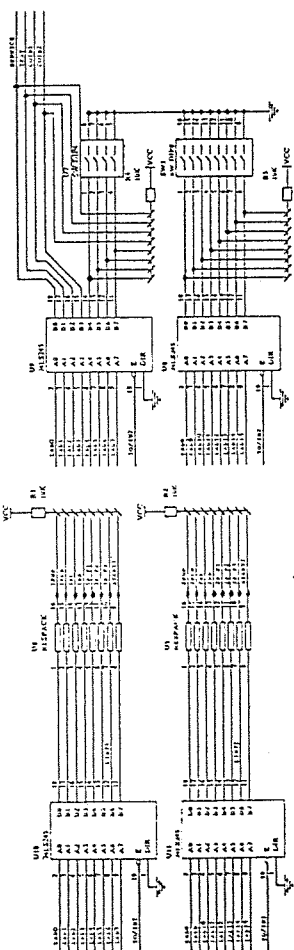
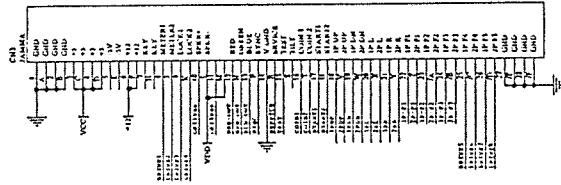
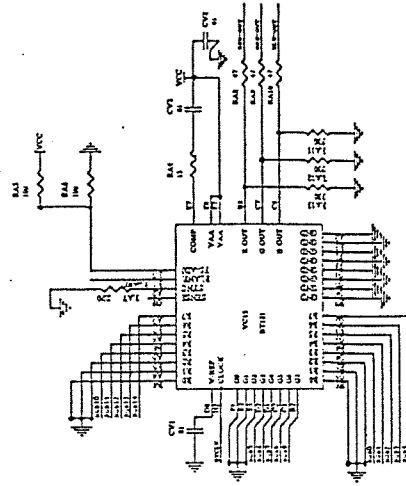
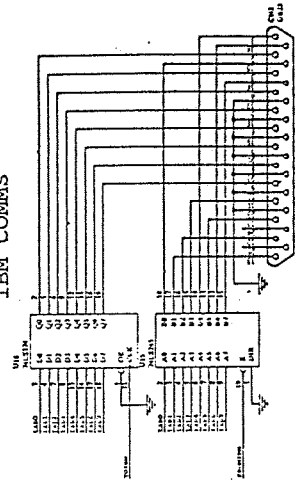
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By	11-7170-0000000000
Checked	11-7170-0000000000
Approved	11-7170-0000000000



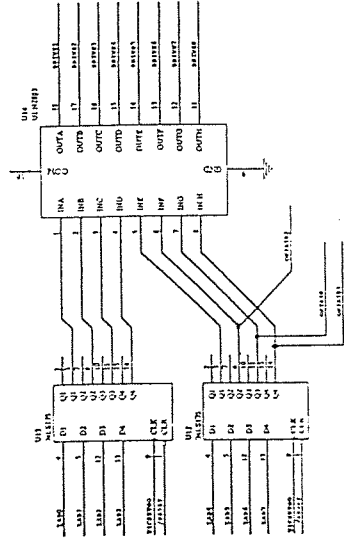
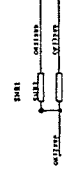
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DATE	10/10/88
DESIGNED BY	...
CHECKED BY	...
APPROVED BY	...



IBM COMMS

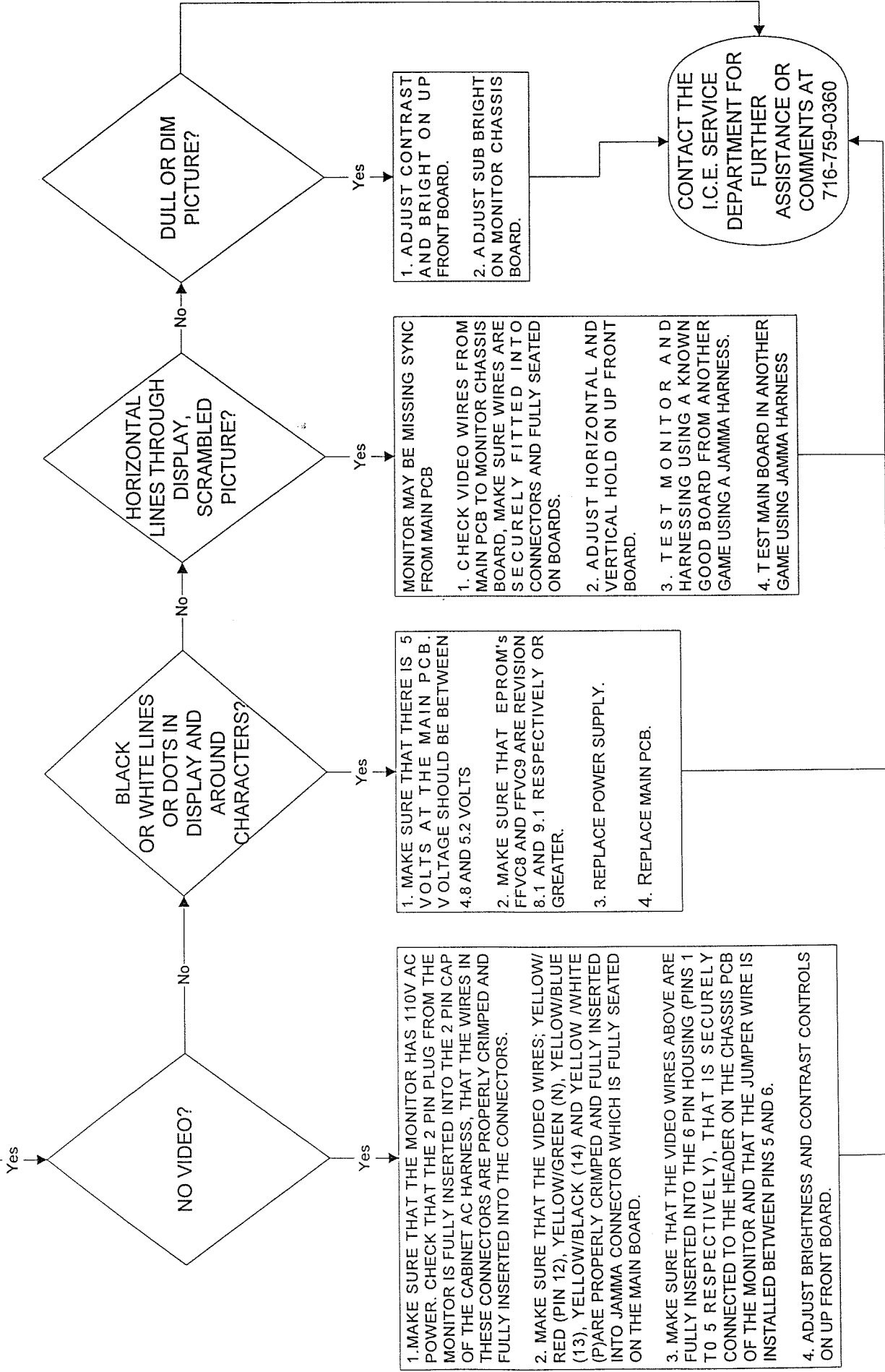


I/O FROM JAMMA



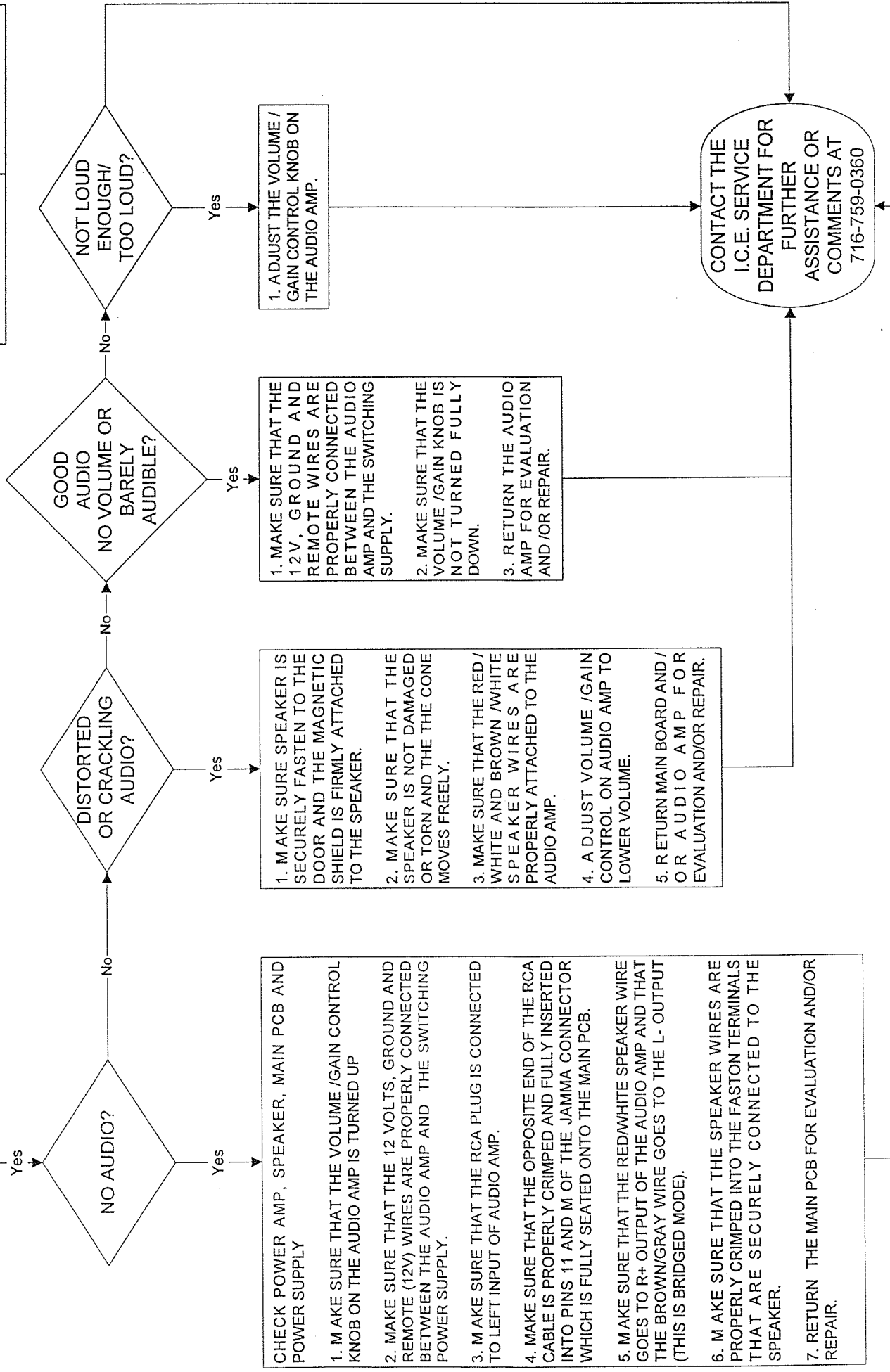
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Date	10/1/74
By	JMM
Appr	JMM
Part	74181, 74180
Sheet	1 of 1

BAD VIDEO

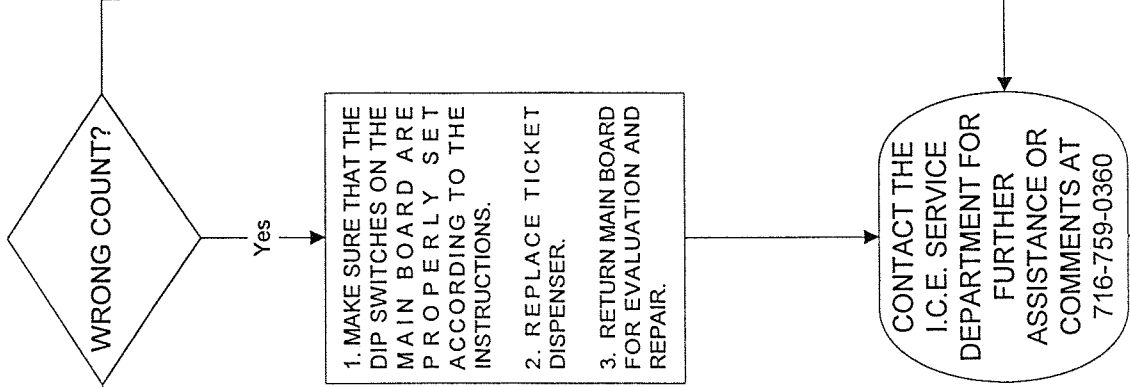


TITLE FRANTIC FRED TROUBLESHOOTING GUIDE		
DESCRIPTION AUDIO	DRAWN BY RMO	PAGE 2 OF 5
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BAD AUDIO

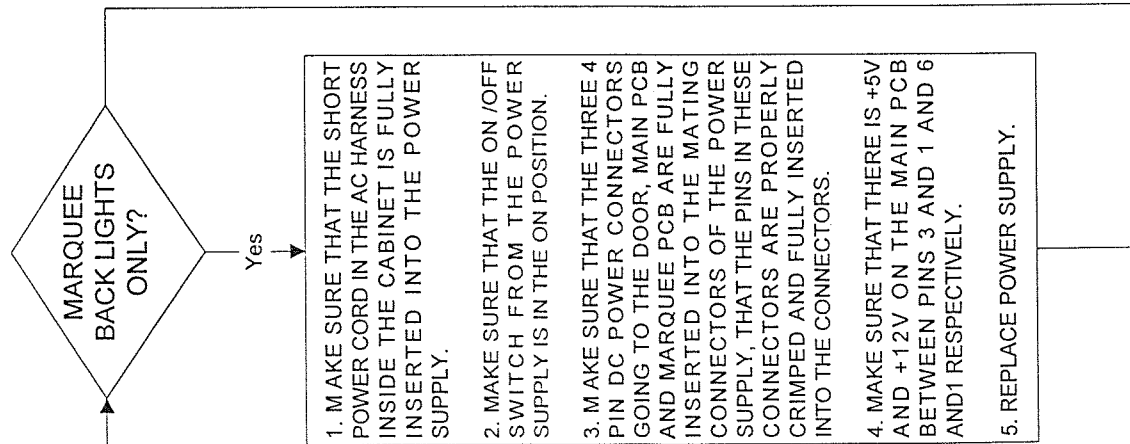


**BAD TICKET
DISPENSE**



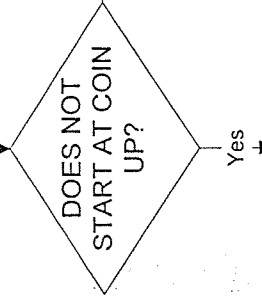
1. MAKE SURE THAT THE DIP SWITCHES ON THE MAIN BOARD ARE PROPERLY SET ACCORDING TO THE INSTRUCTIONS.
2. MAKE SURE THAT THE 4 PIN PLUG IN THE GAME HARNESS (PINNED 1-BLACK/YELLOW, 2-BLACK, 3-BROWN/GREEN AND 4-YELLOW) IS FULLY INSERTED INTO THE 4 PIN CAP COMING FROM THE TICKET DISPENSER, THAT THE WIRES IN THESE CONNECTORS ARE PROPERLY CRIMPED AND FULLY INSERTED INTO THE CONNECTORS.
3. MAKE SURE THAT THERE IS +12V BETWEEN PINS 4 AND 2 OF THE 4 PIN CAP OF THE DISPENSER AND ON THE DISPENSER PCB BY MEASUREMENT OR BY PRESSING THE TEST BUTTON ON THE DISPENSER AND DISPENSING TICKETS.
4. MAKE SURE THAT THE JAMMA CONNECTOR IS FULLY SEATED ONTO THE MAIN PCB, THAT THE BLACK/BLUE WIRE IS PROPERLY CRIMPED INTO THE PIN THAT IS FULLY INSERTED INTO LOCATION 15 ON THE JAMMA CONNECTOR AND THAT THE BROWN / GREEN WIRE IS PROPERLY CRIMPED AND FULLY INSERTED INTO LOCATION 9.
5. REPLACE TICKET DISPENSER.
6. RETURN MAIN BOARD FOR EVALUATION AND REPAIR.

GAME DOES NOT TURN ON

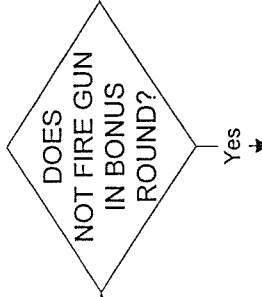


1. MAKE SURE THAT THE POWER CORD IS NOT DAMAGED AND IS FULLY INSERTED INTO THE POWER ENTRY MODULE IN THE BACK OF THE GAME.
2. MAKE SURE THAT THE 3 PIN PLUG ON THE AC POWER HARNESS INSIDE THE GAME IS PLUGGED INTO THE 3 PIN CAP FROM THE BACK OF THE POWER ENTRY MODULE WORK BOX THAT THE WIRES ARE PROPERLY CRIMPED AND FULLY INSERTED INTO BOTH CONNECTORS.
3. CHECK THE MAIN FUSE LOCATED INSIDE THE POWER ENTRY MODULE. GAIN ENTRY BY REMOVING THE POWER CORD, PRYING OPEN THE FLAP COVERING THE FUSE WITH A SCREWDRIVER IN THE SLOT JUST ABOVE THE SWITCH AND REMOVING THE FUSE BLOCK - NOTE THE WHITE ARROW DIRECTION FOR REASSEMBLY. REPLACE WITH 3AMP SLOW BLOW FUSE ONLY.

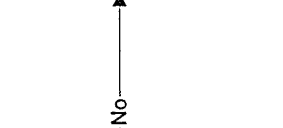
TITLE FRANTIC FRED TROUBLESHOOTING GUIDE			
DESCRIPTION INPUTS	DRAWN BY RMO	PAGE 4 OF 5	
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1. MAKE SURE THAT THE COIN MECH. IS PROPERLY SEATED IN THE MECH. HOLDER AND THAT THE COIN IS PASSING THROUGH THE MECH. FULLY WITHOUT GETTING STUCK.
2. MAKE SURE THAT THE ACTUATOR OF THE MICRO SWITCH IS MOVING FREELY IN THE COIN PATH AND NOT BENT OR BROKEN.
3. MAKE SURE THAT THE BLACK / BROWN, THE BLACK / RED AND BLACK WIRES GOING TO THE COIN MECH. ARE PROPERLY CRIMPED INTO THE FASTONS WHICH ARE SECURELY ATTACHED TO THE MICRO SWITCHES BETWEEN THE N.O. AND COM. TABS.
4. MAKE SURE THAT THE BLACK / BROWN, THE BLACK / RED AND BLACK WIRES GOING TO THE JAMMA CONNECTOR IN PIN LOCATIONS 26, T AND GROUND ARE PROPERLY CRIMPED INTO THE JAMMA PINS WHICH ARE FULLY INSERTED INTO THE JAMMA CONNECTOR WHICH IS SECURELY ATTACHED TO THE MAIN BOARD.
5. RETURN THE MAIN BOARD FOR EVALUATION AND /OR REPAIR.



1. MAKE SURE THAT THE BONUS BUTTON MICRO SWITCH IS FULLY INSERTED IN THE BUTTON SUCH THAT WHEN THE BUTTON IS DEPRESSED THE MICRO SWITCH IS ACTIVATED AND NOT BEING PUSHED AWAY BY THE ACTUATOR BAR.
2. MAKE SURE THAT THE WHITE / RED WIRE AND THE BLACK WIRES GOING TO THE N.O. AND COM. TABS ON THE MICRO SWITCH ARE PROPERLY CRIMPED INTO THE FASTONS WHICH ARE FULLY SEATED ONTO THE SWITCH TABS.
3. MAKE SURE THAT THE WHITE / RED WIRE AND THE BLACK WIRE GOING TO THE JAMMA CONNECTOR IN PIN LOCATIONS 20 AND GROUND ARE PROPERLY CRIMPED INTO THE JAMMA PINS WHICH ARE FULLY INSERTED INTO THE JAMMA CONNECTOR WHICH IS SECURELY ATTACHED TO THE MAIN BOARD.
4. RETURN THE MAIN BOARD FOR EVALUATION AND /OR REPAIR.



1. MAKE SURE THAT THE ENCODER DISC IS TURNING PROPERLY IN THE SLOT OF THE SENSOR ON THE ENCODER PCB AND THE MESHING GEARS ARE NOT DAMAGED OR LOOSE.
2. MAKE SURE THAT THE WHITE / GREEN (PIN 1), RED (2), BLACK(3) AND WHITE / YELLOW (4) WIRES ARE PROPERLY CRIMPED INTO THE PINS WHICH ARE FULLY INSERTED INTO THE 4 PIN HOUSING WHICH IS FULLY SEATED ONTO THE 4 PIN HEADER ON THE ENCODER PCB.
3. MAKE SURE THAT THERE IS 5 VOLTS ON THE ENCODER PCB. MEASURE BETWEEN PINS 2 (5V) AND 3 (GROUND) ON THE BOARD.
4. MAKE SURE THAT THE WHITE / GREEN (LOCATION 23), RED (+5V), BLACK (GROUND) AND WHITE /YELLOW WIRES (22) GOING TO THE JAMMA CONNECTOR ARE PROPERLY CRIMPED INTO THE PINS OF THE JAMMA CONNECTOR AND ARE FULLY INSERTED INTO THE CONNECTOR WHICH IS SECURELY ATTACHED TO THE MAIN BOARD.
5. REPLACE THE ENCODER PCB.
6. RETURN THE MAIN BOARD FOR EVALUATION AND /OR REPAIR.

CONTACT THE I.C.E. SERVICE DEPARTMENT FOR FURTHER ASSISTANCE OR COMMENTS AT 716-759-0360

TITLE FRANTIC FRED TROUBLESHOOTING GUIDE			
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Yes

FIRE-
FLIES LIGHT
PROPERLY
BACK LIGHTS
DON'T TURN
ON?

Yes

1. MAKE SURE THAT THE 2 PIN PLUG AT THE END OF THE BRIGHT STICK CORDS IS FULLY INSERTED INTO THE 2 PIN CAP THAT IS PROVIDED IN THE AC HARNESS INSIDE THE GAME CABINET. THAT THE WIRES IN THESE 2 PIN CONNECTORS ARE PROPERLY CRIMPED INTO THE PINS THAT ARE FULLY INSERTED INTO THE CONNECTORS.

2. MAKE SURE THAT THE BRIGHT STICK CORDS ARE FULLY INSERTED INTO THE ENDS OF THE BRIGHT STICKS LOCATED INSIDE THE MARQUEE.

No

BACK
LIGHTS WORK
FIRE FLIES
DON'T
LIGHT?

Yes

1. MAKE SURE THAT THE TWO 15 PIN PLUGS IN THE GAME CABINET WHICH GO TO THE MARQUEE ARE FULLY SEATED INTO THE 15 PIN HEADERS ON THE MARQUEE PCB, THAT EACH OF THE WIRES ARE PROPERLY CRIMPED INTO THE PINS WHICH ARE FULLY INSERTED INTO THE CONNECTORS. THE ORDER IN WHICH THE PLUGS ARE PLUGGED INTO THE MARQUEE PCB IS NOT IMPORTANT.

2. MAKE SURE THAT THE MARQUEE PCB HAS +12V. CHECK THAT THE TWO RED LED'S ON THE PCB ARE ON. IF THE LED'S ARE NOT BOTH LIT, CHECK THAT THE YELLOW (1) AND BLACK (3) WIRES IN THE 3 PIN PLUG ARE PROPERLY CRIMPED AND FULLY INSERTED INTO THE CONNECTOR AND THAT THE CONNECTOR IS FULLY SEATED INTO THE HEADER ON THE MARQUEE PCB. CHECK THE OPPOSITE END OF THIS POWER HARNESS THAT THE 4 PIN CAP IS FULLY CONNECTED WITH THE 4 PIN PLUG COMING FROM THE POWER SUPPLY. THAT THE WIRES ARE PROPERLY CRIMPED AND FULLY INSERTED INTO THE CONNECTORS AND THAT THE WIRES LINE UP FROM CONNECTOR TO CONNECTOR. IF NO 12V PERSISTS REPLACE POWER SUPPLY.

3. MAKE SURE THAT THE INPUT FROM THE MAIN BOARD TO THE MARQUEE BOARD IS GOOD, CHECK THAT THE TAN WIRE IN PIN 3 OF THE 6 PIN PLUG AND THE BLACK WIRE IN PIN 6 ARE PROPERLY CRIMPED AND FULLY INSERTED INTO THE CONNECTOR WHICH IS FULLY SEATED IN THE 6 PIN HEADER ON THE MARQUEE PCB. CHECK THAT THE OTHER END OF THE TAN WIRE GOES TO PIN K OF THE JAMMA CONNECTOR AND THAT THE BLACK WIRE GOES TO GROUND. CHECK THAT THE WIRES ARE PROPERLY CRIMPED AND FULLY INSERTED INTO THE JAMMA CONNECTOR WHICH IS FULLY SEATED ON THE MAIN PCB.

4. REPLACE THE MARQUEE PCB

No

FIRE
FLIES LIGHT
BUT DON'T
FLASH

Yes

1. MAKE SURE THAT THE INPUT FROM THE MAIN BOARD TO THE MARQUEE BOARD IS GOOD, CHECK THAT THE TAN WIRE IN PIN 3 OF THE 6 PIN PLUG AND THE BLACK WIRE IN PIN 6 ARE PROPERLY CRIMPED AND FULLY INSERTED INTO THE CONNECTOR WHICH IS FULLY SEATED IN THE 6 PIN HEADER ON THE MARQUEE PCB. CHECK THAT THE OTHER END OF THE TAN WIRE GOES TO PIN K OF THE JAMMA CONNECTOR AND THAT THE BLACK WIRE GOES TO GROUND. CHECK THAT THE WIRES ARE PROPERLY CRIMPED AND FULLY INSERTED INTO THE JAMMA CONNECTOR WHICH IS FULLY SEATED ON THE MAIN PCB.

2. REPLACE THE MARQUEE PCB

CONTACT THE
I.C.E. SERVICE
DEPARTMENT FOR
FURTHER
ASSISTANCE OR
COMMENTS AT
716-759-0360

WARRANTY

I.C.E. Warrants all components in the FRANTIC FRED™ game to be free of defects in material and workmanship for a period of ninety (90) days from the original date of purchase. In addition, the video monitor will be covered for a period of one hundred eighty (180) days from the original date of purchase.

This warranty does not cover items damaged due to normal wear and tear, those items subjected to abuse, or those that have been improperly assembled, modified, repaired, or operated in a manner contrary to those in this service manual.

If your FRANTIC FRED™ game fails to conform to the above mentioned warranty, I.C.E.'s sole liability shall be at it's 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 responsibility 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 UPS ground (or equivalent carrier), 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 the warranty only when:

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

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 can not be responsible for the quality, suitability, or safety of any non- I.C.E. supplied part, or any modification, including labor, which is performed by such distributor.