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SAFETY AND WARNINGS

BEFORE YOU BEGIN

WARNING: WHEN INSTALLING THIS GAME, A GROUNDED A.C. RECEPTACLE MUST BE USED. FAILURE TO DO SO COULD RESULT IN 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 REASON AS GIVEN ABOVE. USING AN IMPROPERLY GROUNDED GAME COULD VOID YOUR WARRANTY.

HAVE A QUALIFIED ELECTRICIAN CHECK YOUR A.C. RECEPTACLE TO BE SURE THE GROUND IS FUNCTIONING PROPERLY.

INSTALLATION

Please see assembly booklet insert for instructions on how to assembly the game.

 Once the game is assembled plug the game into the A.C. outlet and turn on power to the game. The switch for the game is located on a power module on the outside rear of the game.

THIS GAME IS DESIGNED TO DISSIPATE STATIC ELECTRICITY THROUGH THE GROUNDING PLANE OF THE GAME. IF THE A.C. GROUND DOES NOT WORK, THE GAME COULD DISCHARGE STATIC ELECTRICITY THROUGH THE GAME CIRCUITRY, WHICH COULD CAUSE DAMAGE.

- 2. Make sure the game is level after installation. It is necessary to make sure the game is level for safety concerns.
- 3. Check that the A.C. voltage rating on the back of the game matches the A.C. voltage of your location.

THE POWER SUPPLY IS NOT VOLTAGE ADJUSTABLE. TO OPERATE THE GAME AT VOLTAGES OTHER THAN THOSE IT WAS DESIGNED FOR. PLEASE CONTACT OUR SERVICE DEPARTMENT FOR VOLTAGE CONVERSION INFORMATION.

WARNING

DO NOT remove any of the components on the main board (e.g. compact flash and EPROMS) while the game is powered on. This may cause permanent damage to the parts and the main board. Removing any main board component part while powered on will void the warranty.

NOTE: THIS GAME IS INTENDED FOR INDOOR USE ONLY.
ON THE BACK PANEL OF THE GAME: WARNING: SHOCK HAZARD - DO NOT OPEN. REFER SERVICING TO SERVICE PERSONNEL.

GAME SETUP AND FEATURES

Introduction

NFL TWO MINUTE DRILL™ is a revolutionary concept in Coin Operated football games. You will see that this game includes many features which make it the obvious choice for your location.

NFL™ incorporates both pop out targets as well as stationary targets that are user friendly and realistic. Fun and easy to play for players of all ages, yet challenging enough for even the expert football players. Practice your football skills and try to better your last score or compete against your friends.

CONTROL PANEL. Attractive LED displays are used to display all scoring and vital information such as time, credits and high score. The control panel is laid out in a convenient user friendly fashion, making it easy for players to operate.

HEAVY DUTY CONSTRUCTION is incorporated throughout the game by using only heavy gage metals and plastics. The game can be assembled and disassembled many times without any harm to the game. You will appreciate this feature if you move your games often.

HIGH TECH GAME ELECTRONICS. Solid state electronics are used throughout the game for their rugged reliability as well as making it virtually impossible to connect harnessing the wrong way. Heavy duty optical sensors are used throughout.

Digital sound effects are used for optimum dependability. Over twenty sound effects are incorporated into the sound effect circuitry. The game electronics have been highly integrated into the Main PC Board assembly, making it easy to repair games. The game has a full feature self-test system to make troubleshooting easier.

OPTIONS. A ticket dispenser and/or a dollar bill acceptor can be ordered with your game.

Game Play

NFL™ is an interactive coin operated amusement game.

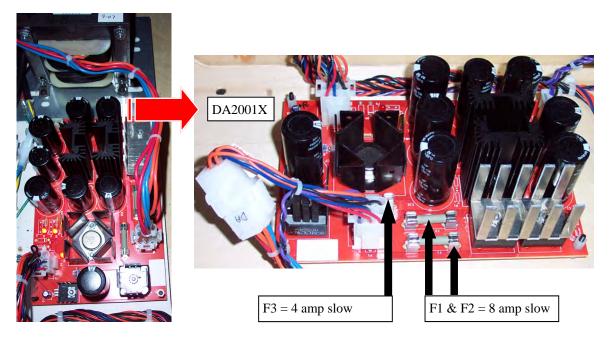
Linking is a popular option used in locations where more than one game is to be used. The games are linked with the marquee option to add direct head to head action between the game players. This option is built into each main PC board but requires the marquee to activate, and it is as easy as connecting a phone cord and setting a number between 1-9 on the main circuit board.

Assembly - See insert.

Programming - See insert.

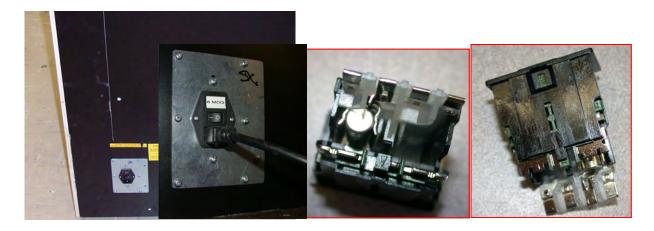
Power Supply & Transformer

The power supply and transformer are located in the back of the game. To access them, you must open the bottom back access door and located on the left is the power assembly. See pictures below



AC Main Power Fuse

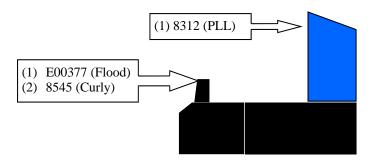
Located in the power module is a 3 amp slow blow fuse. To check or replace the fuse pull the tab with the label out. There is only one fuse installed. See diagram below.



General illumination

Location of bulbs

There are two 8545's (Compact fluorescent bulbs) located in the control panel, one E00377 (Flood Bulb) and located above the Playfield area is one 8312 (PLL 18 bulb).



Control panel bulbs

To access the three bulbs located in the control panel you will need to remove the bracket holding the control panel. Use a 5/32 Allen and 7/16 wrench to remove the 3 bolts holding the top bracket of the control panel. See page 13 for bracket diagram and see pages 8 through 12 for assembly diagrams of the control panel.

Playfield bulb

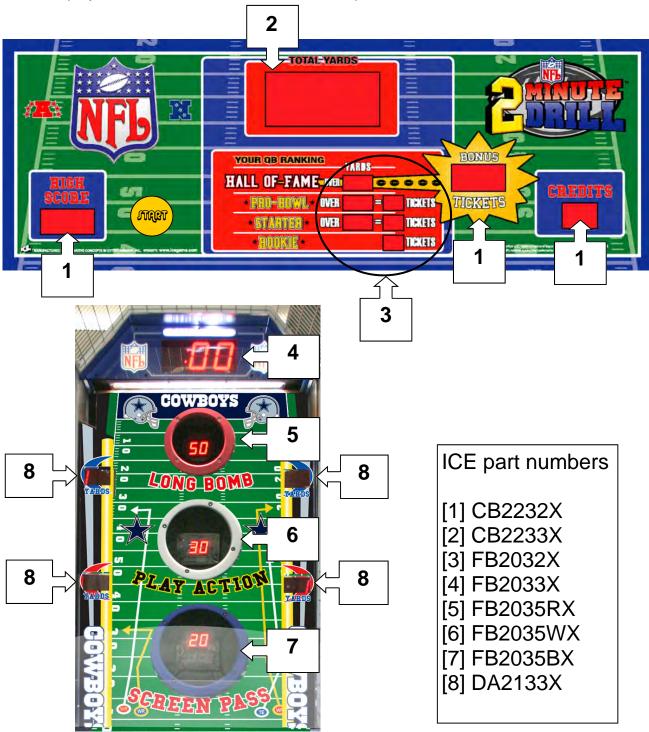
Open the top back door and remove the #2 square head screws that hold the upper cover plate. You can now access the top PLL bulb. It is also possible to access the bulb from the front if access to the back is limited. See diagram on page 14.

LED Lights

There are two LED strips to illuminate the word GAME CLOCK located at the top of the playfield in the marquee. You will need to remove the front marquee to replacement the LED strips. See the assembly diagram on page 14 for removal. There are also four strips located in the control panel to illuminate the player's ranking. See diagram on page 13 for access. The LED Strips located in the target area are part of the display assemblies and cannot be replaced alone. See display location on the next page.

Display Board locations

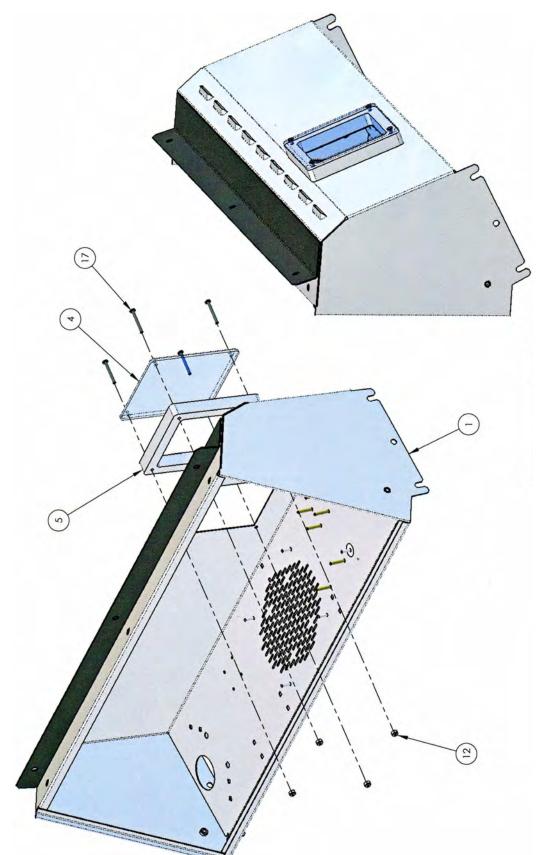
Control panel display boards are located below. FB2032X is a display that includes six display boards and five mini footballs. See picture below.



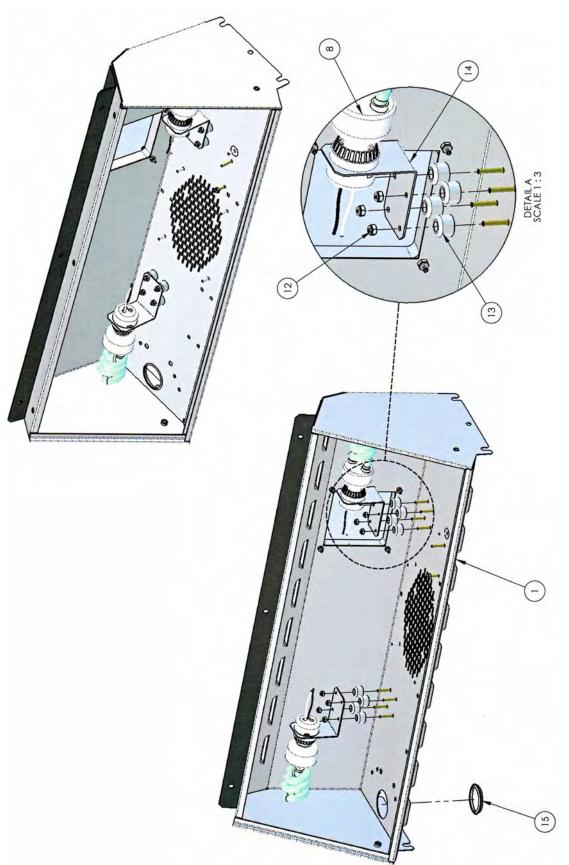


Control Panel Assembly FB1001X

ITEM NO. PART NUMBER	DESCRIPTION	QTY.
FB1001	CONTROL PANEL HOUSING	-
FB1002	CONTROL PANEL RETAINER	-
FB3013	REBOUND GUARD	-
FB3016	CONTROL PANEL LIGHT SHIELD	-
FB3018	C. P. LIGHT COVER SPACER	-
FB7002x	CONTROL PANEL ASSEMBLY	-
AR2007	6 X 9 SPEAKER	-
AR2130X_8545	PIG TAIL LIGHT W/ AR2130X SOCKET	2
BB2022	SOCKET FLOOD LAMP	-
BT1049	BRACKET (LIGHT SOCKET MTG)	-
E00377	BULB CF FLOOD PAR 30 (MAXLITE SKR3015FLDL, 33020) (15W=75W)	-
6072	8-32 NYLOCK NUT	18
4002	BUMPER (#2953w) 9540K53	10
TG1021	LIGHT BRACKET	2
3039	GROMMET (BP2 - PUNCHED)#853118	-
6212	1/4 x 3/4 FLAT WASHER BLACK (USS)	9
6331	#8-32 x 1-1/2" LG PPHMS	4
6426	1/4-20 x 5/8 BHCS (BLACK) SECURITY	8
PC60604	1/4-20 NYLOCK NUT	က
PC60622	1/4-20 x 1.00" LG. BSHCS	c

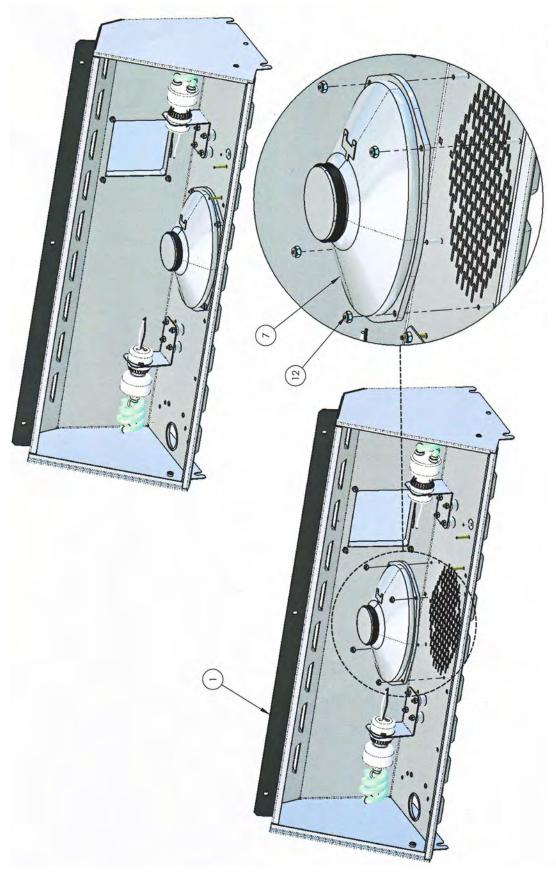


Control Panel Assembly FB1001X

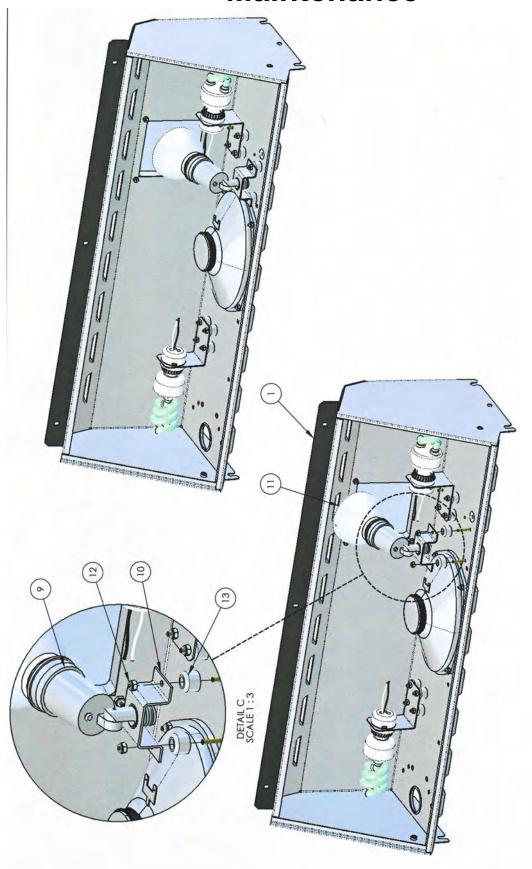


Control Panel Assembly FB1001X

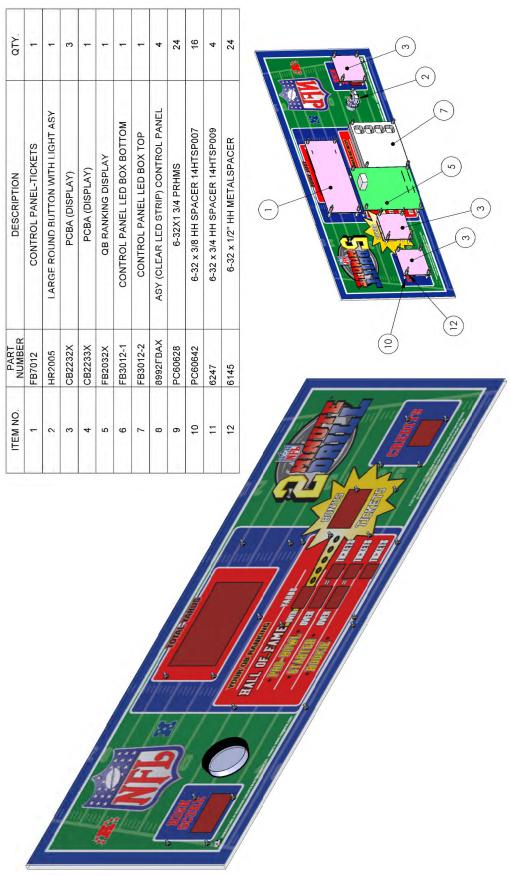
Control Panel Assembly FB1001X

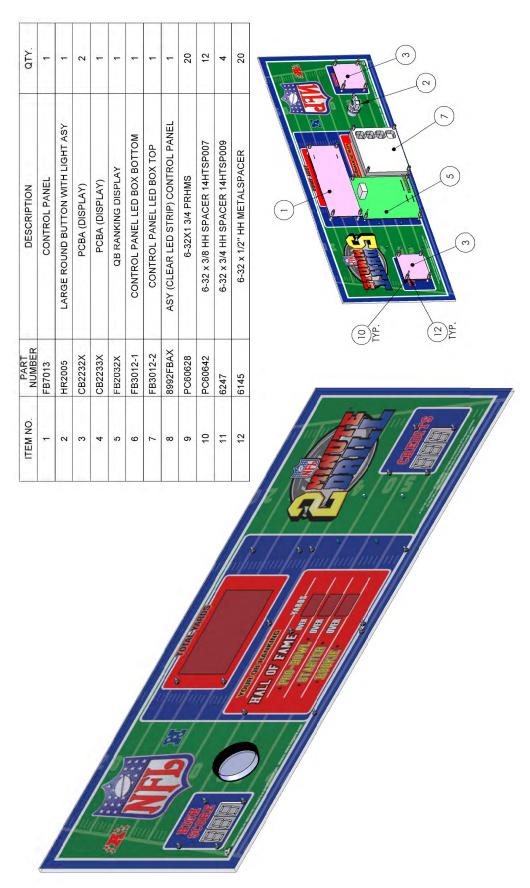


Control Panel Assembly FB1001X



Maintenance Control Panel Assembly FB1001X **ASSEMBLY STEP 5**



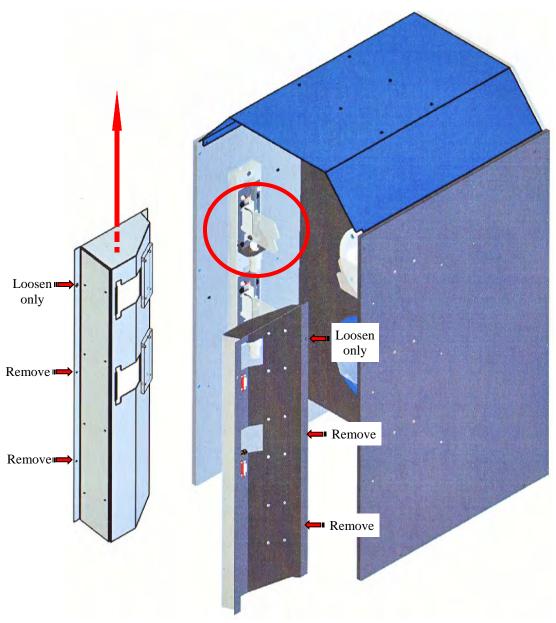


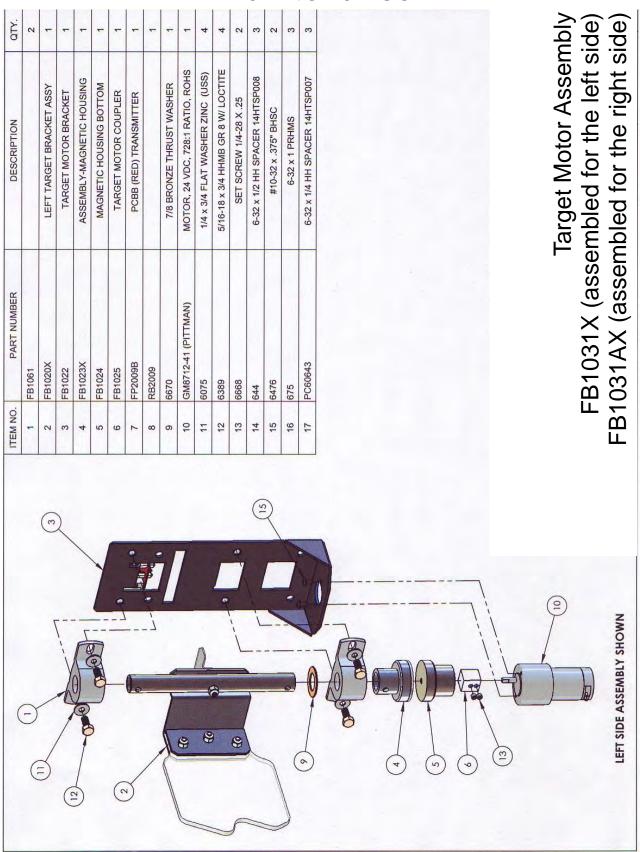
Marquee light box assembly

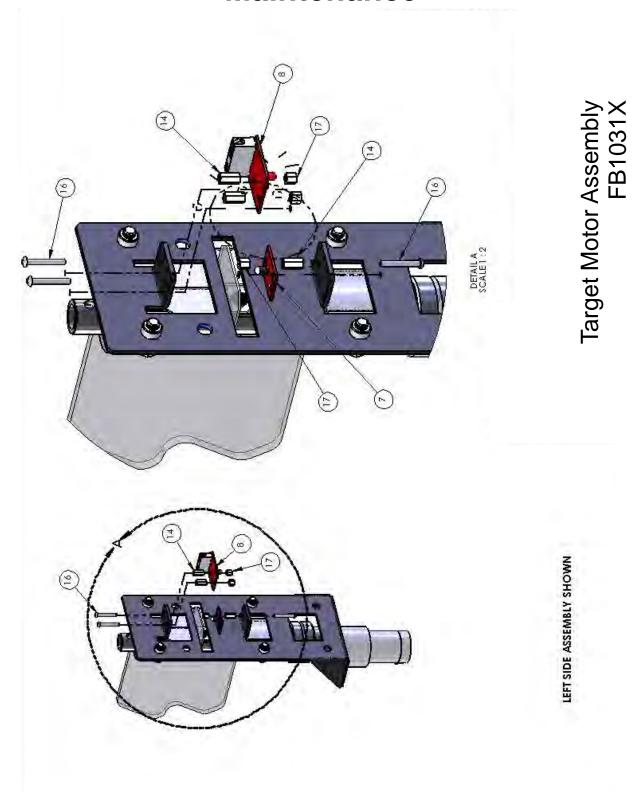
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1 FB7029 2 FB3079 3 FB3081 3 FB3081 4 FB3081 4 FB3081 6 6430 6 6430 6 6430 10 FB3081 11 6166 11 6166 12 8449 14 6189

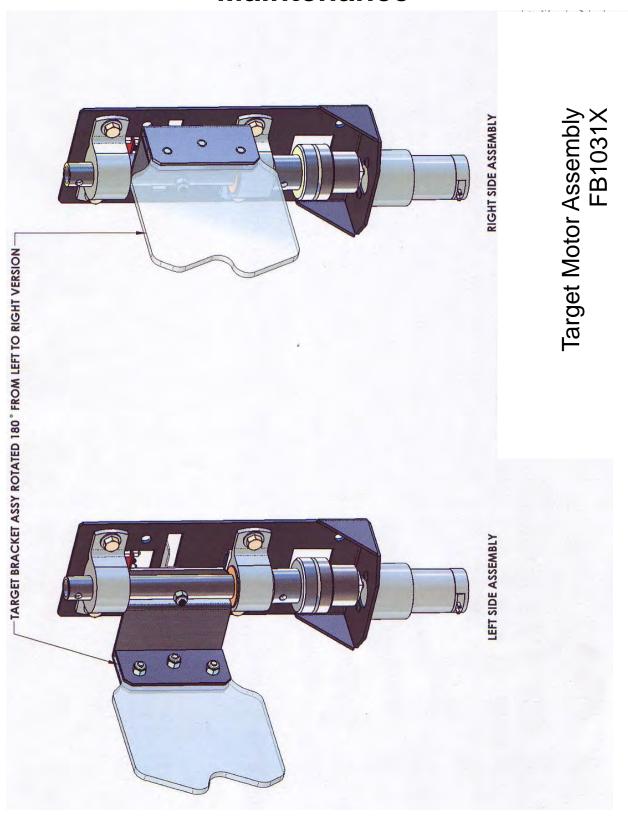
Target Covers

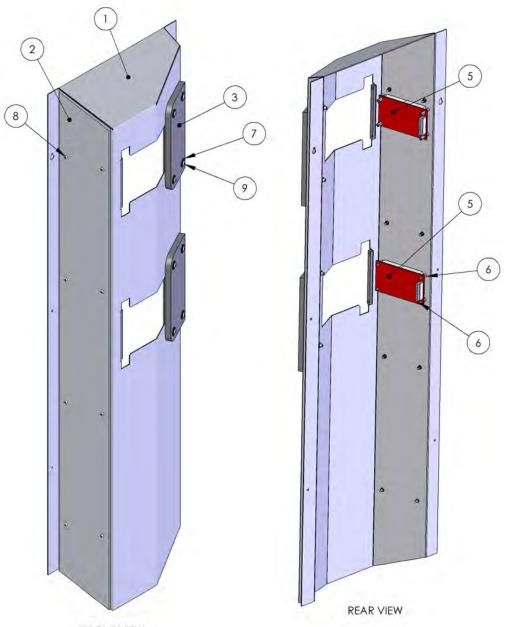
To access the target motors you will need to remove the display housing. You also will need to ensure the targets are protruding out as shown below. Unlatch the harness clamps located in the back side of the game first. Remove the four mounting screws at the bottom back of the game in order to gain access to remove the back door. This will allow you enough slack in the wires to lift the covers off and lay them on their side. It is not necessary to fully remove the target covers to access the target motors. Only remove the four lower bolts and loosen the two top bolts. Slide the cover up until the top bolts heads can slide out the slotted holes. The diagram shows the location of the bolts. Bolt locations are shown on two different covers but exists on both sides of the cover.





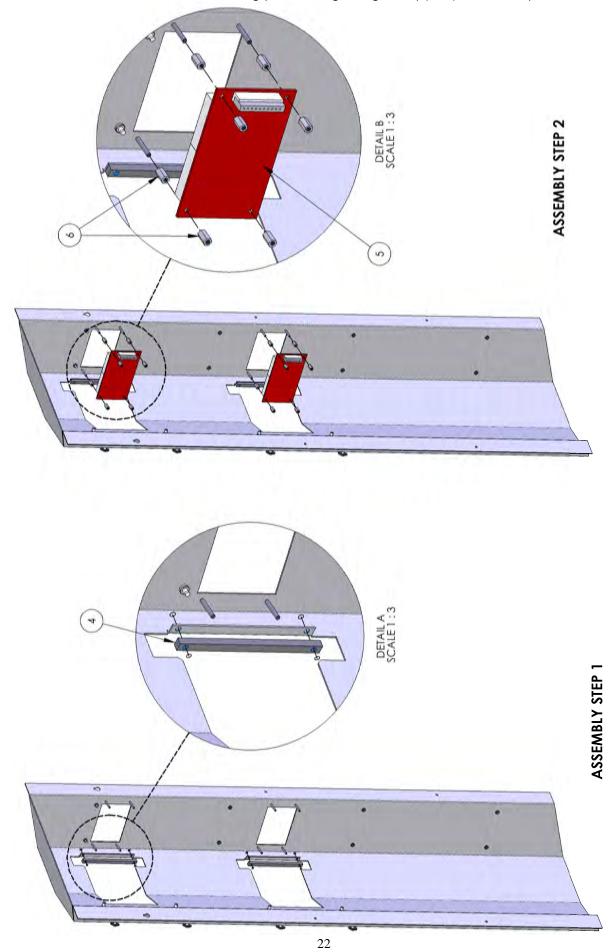


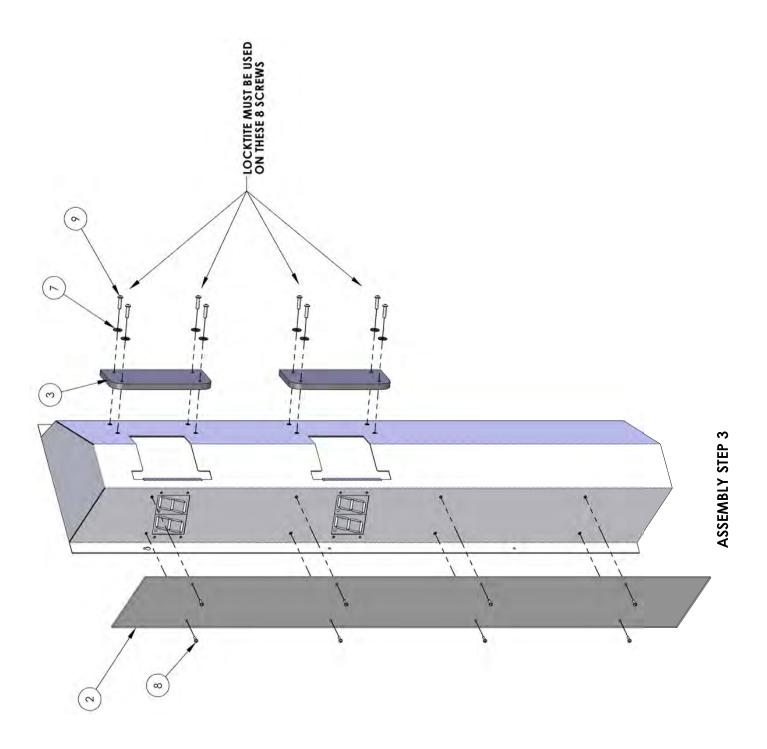




FRONT VIEW

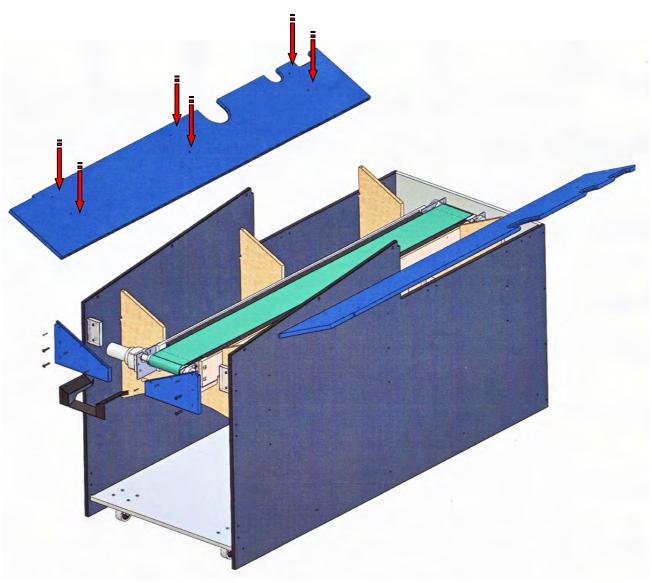
4.7			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FB1016	TARGET COVER LEFT/RIGHT	1
2	FB3014	DISPLAY STRIP LEFT/RIGHT	1
3	FB4005	TARGET COVER SPACER	2
4	FB4006	TARGET SMALL PADDING	2
5	DA2133X	PCBA (SMALL DISPLAY, BRIGHT)	2
6	6446	8-32 x 1/2 HH SPACER	16
7	6212	1/4 x 3/4 FLAT WASHER BLACK (USS)	8
8	6320	8-32 X 5/8 PRHMS W/LOCKTITE	8
9	PC60622	1/4-20 x 1" LG. BSHCS	8

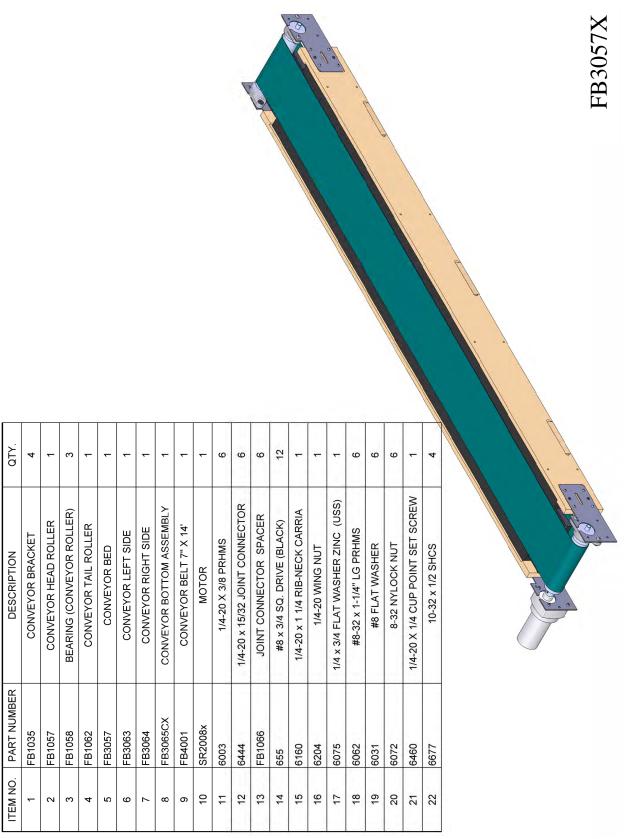


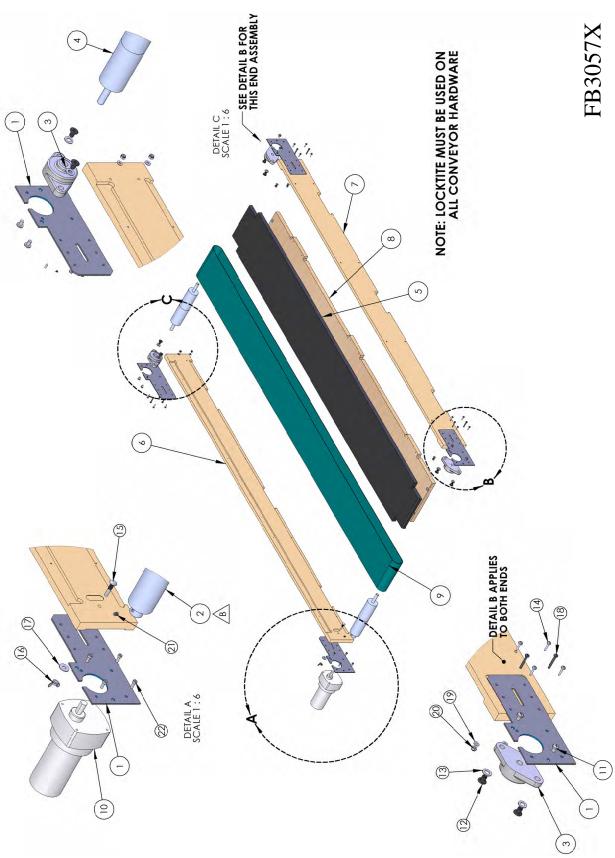


Conveyor Assembly Access

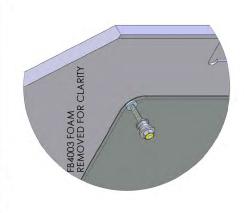
To access the conveyor assembly you will need to remove the side wall panels. It is not necessary to remove the target covers in order to remove the side wall panels but to ensure that they are not scratched it is recommended. Refer to page 15 on how to remove target covers. Remove the five bolts holding the front cover plates first and remove the finger guard as shown below. Now remove the six screws holding the side wall panels. Slide the panel down and out if the target covers are still installed.

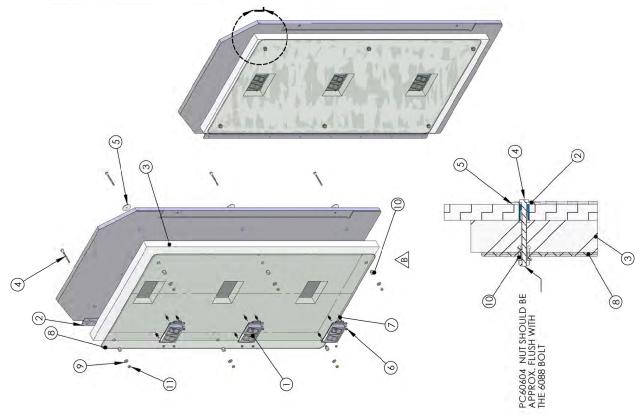




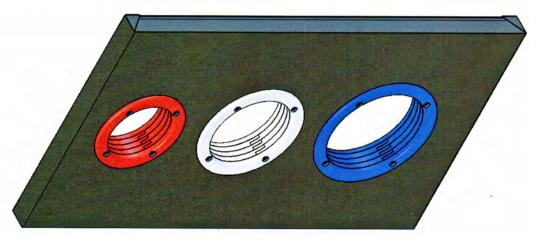


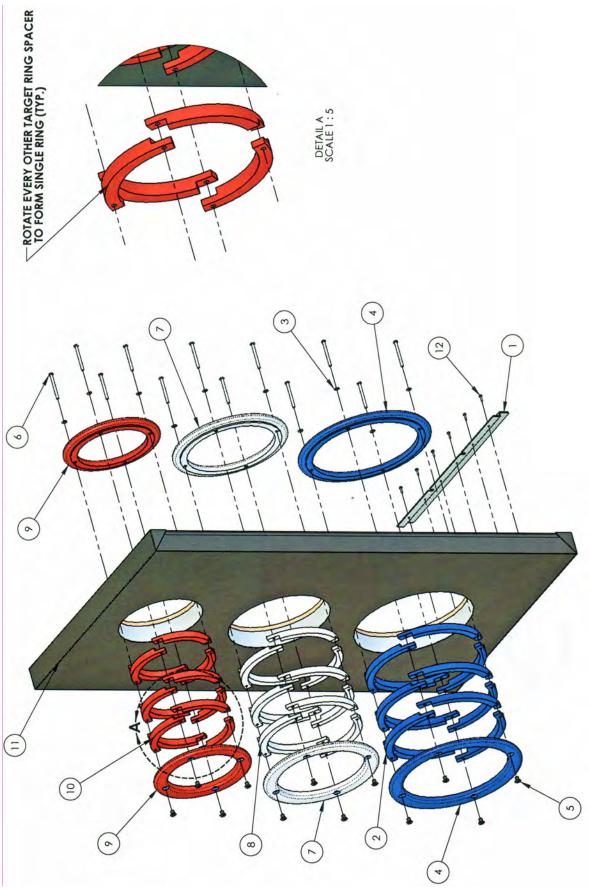
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
_	FB2035X	DISPLAY BOARD	က
2	FB3081CX	REAR ACCESS PANEL, HINGE ASSY	1
3	FB4003	REAR DOOR FOAM PAD	•
4	6088	1/4-20 X 3" HH FT BOLT	9
2	0209	1/4 x 1-1/2 OD F-WASHER	9
9	6004a	8-32 KEP NUT	12
7	6457	SHOCK MOUNT 8-32 (THD BOTH ENDS)	12
8	FB3101	REAR DOOR DISPLAY COVER	-
6	6075	1/4 x 3/4 FLAT WASHER	9
10	4028	GROMMET	9
1	PC60604	NYLOCK NUT, 1/4-20	9

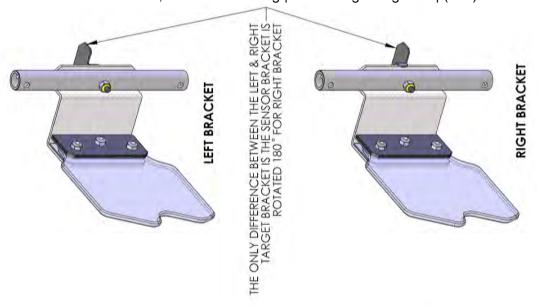




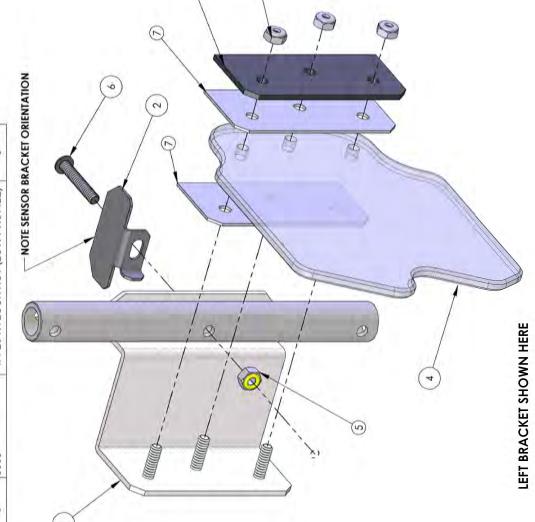
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
	CG1042	FRONT GLASS RETAINER	-
	FB3007-2	BOTTOM TARGET RING SPACER	12
	6057	1/4 X 1/2 X .062 FLAT WASHER	12
	FB3007-1	BOTTOM TARGET RING CAP	2
2	6444	1/4-20 x 15/32 JOINT CONNECTOR	12
9	6088	1/4-20 X 3" HH FT BOLT	12
	FB3008-1	MIDDLE TARGET RING CAP	2
	FB3008-2	MIDDLE TARGET RING SPACER	12
	FB3009-1	TOP TARGET RING CAP	2
0	FB3009-2	TOP TARGET RING SPACER	12
_	FB3084CX	PLAYFIELD ASSEMBLY	-
12	655	#8 x 3/4 SQ. DRIVE (BLACK)	9





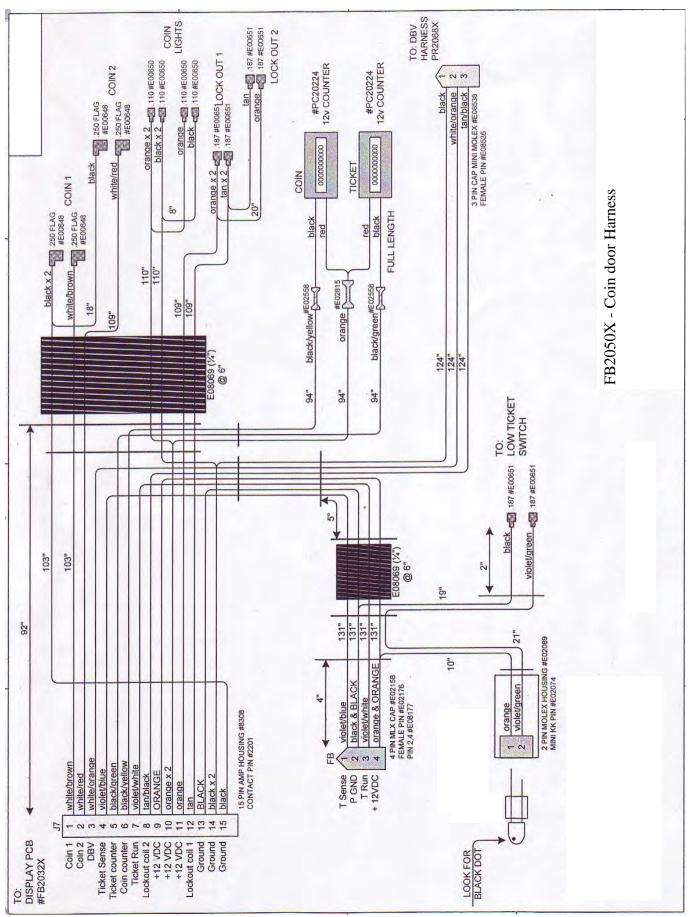


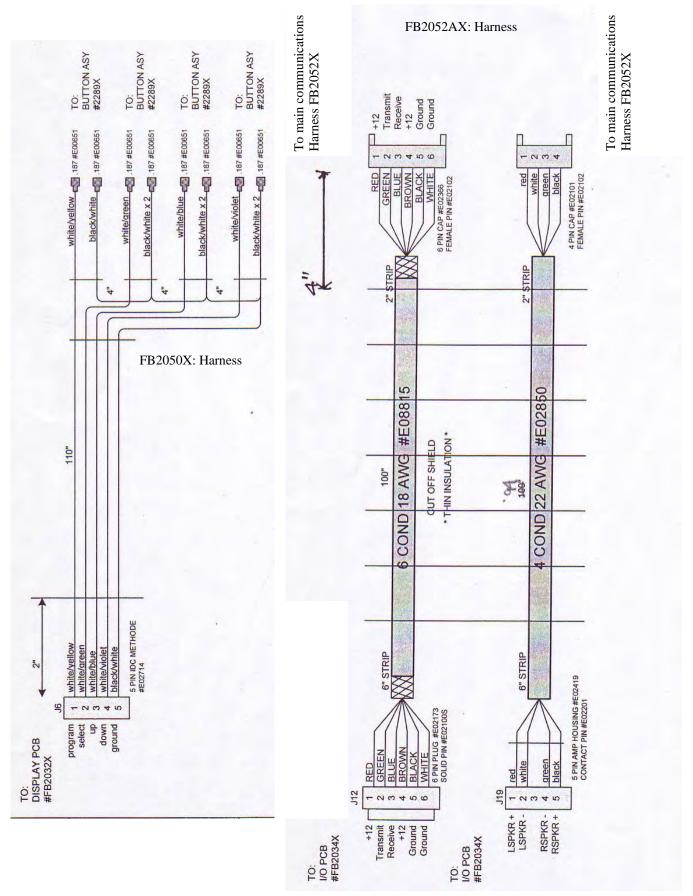


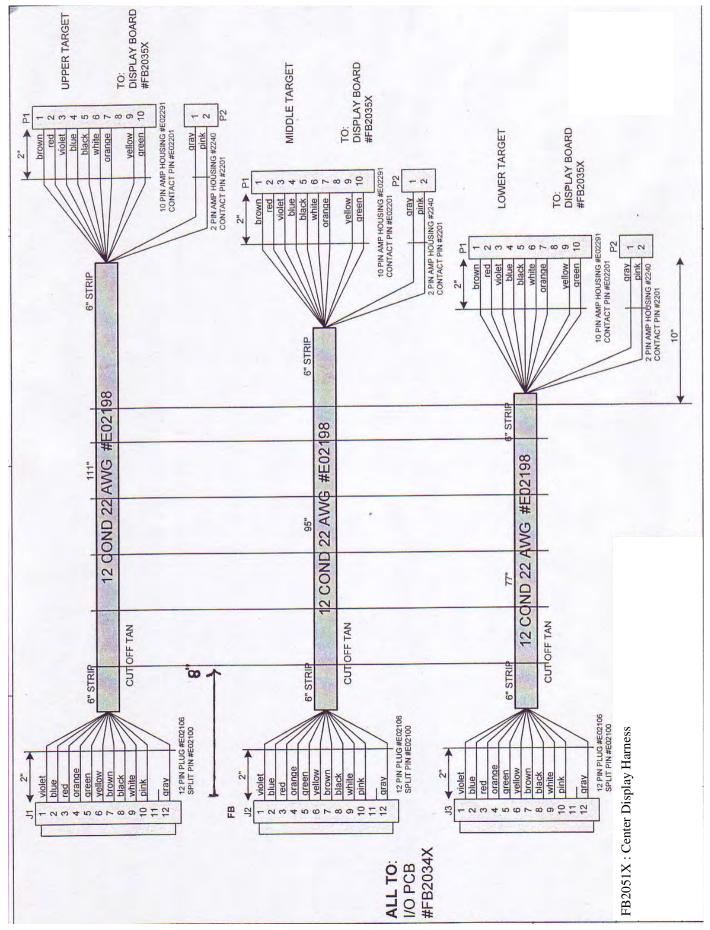


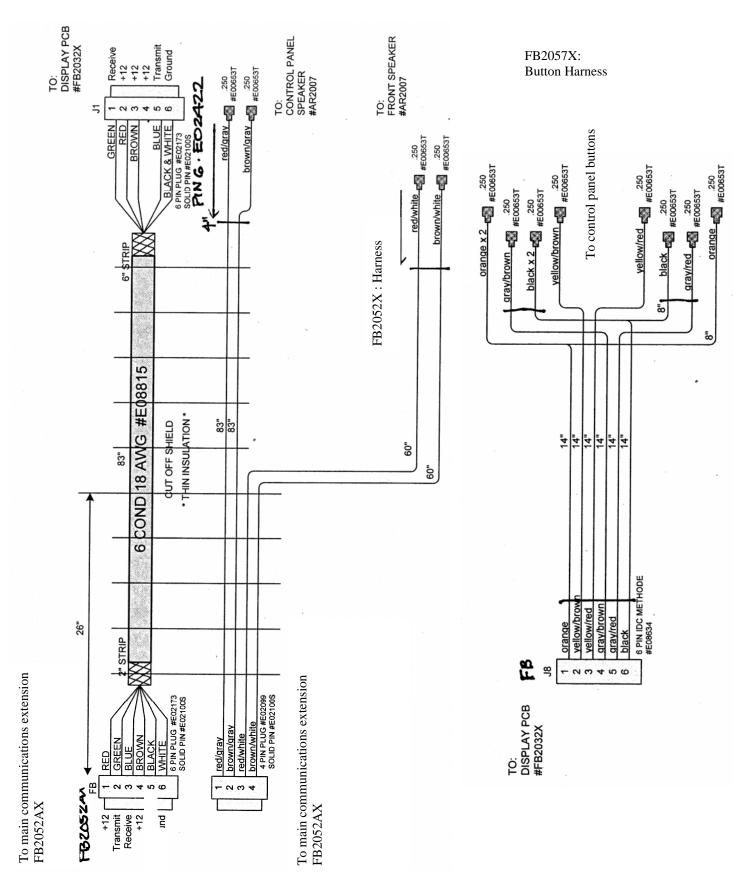
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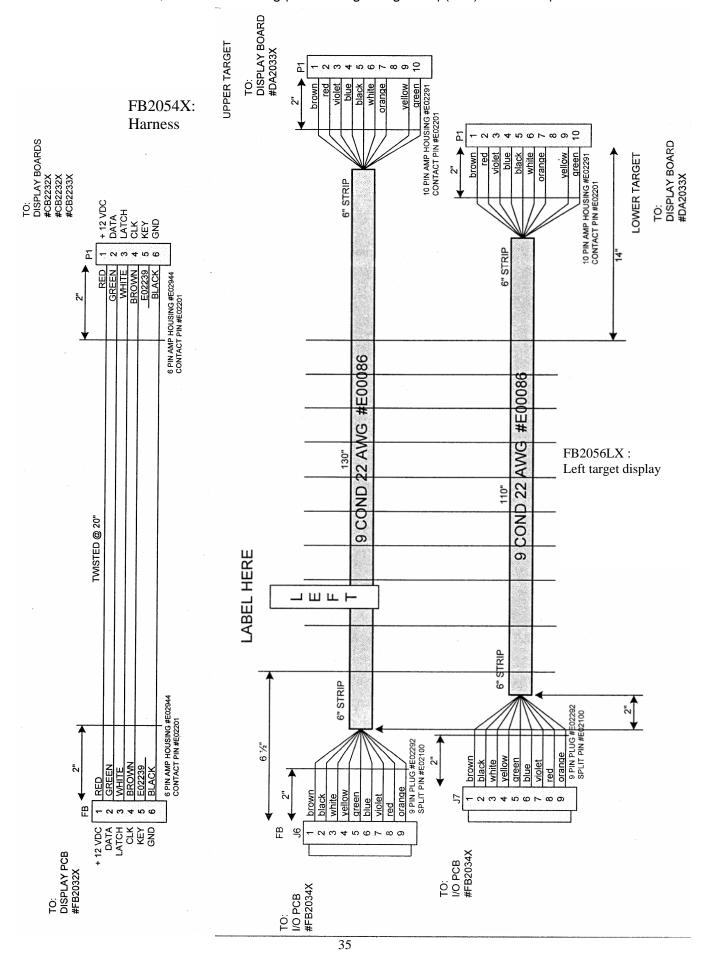
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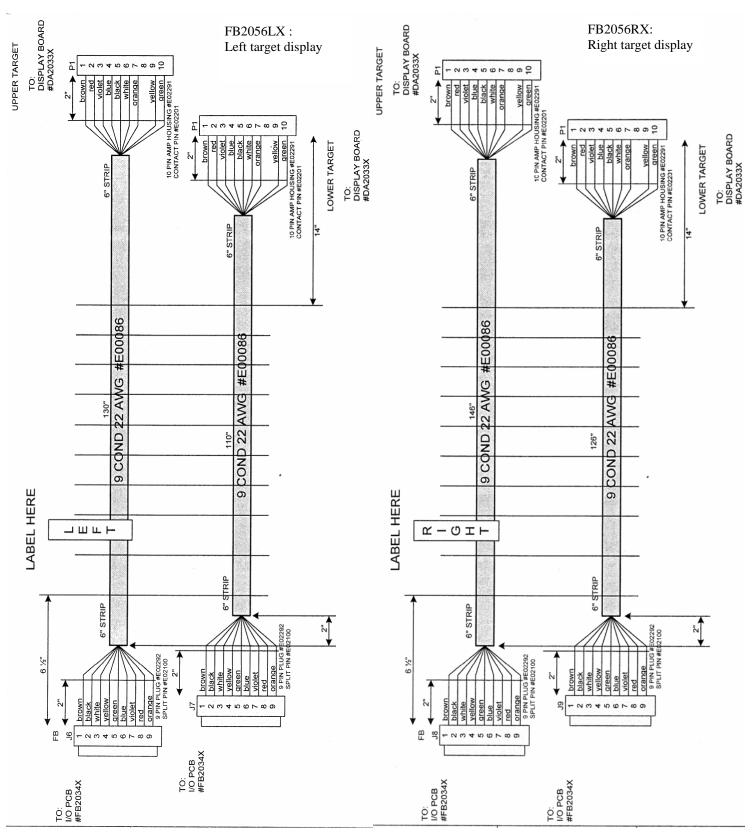


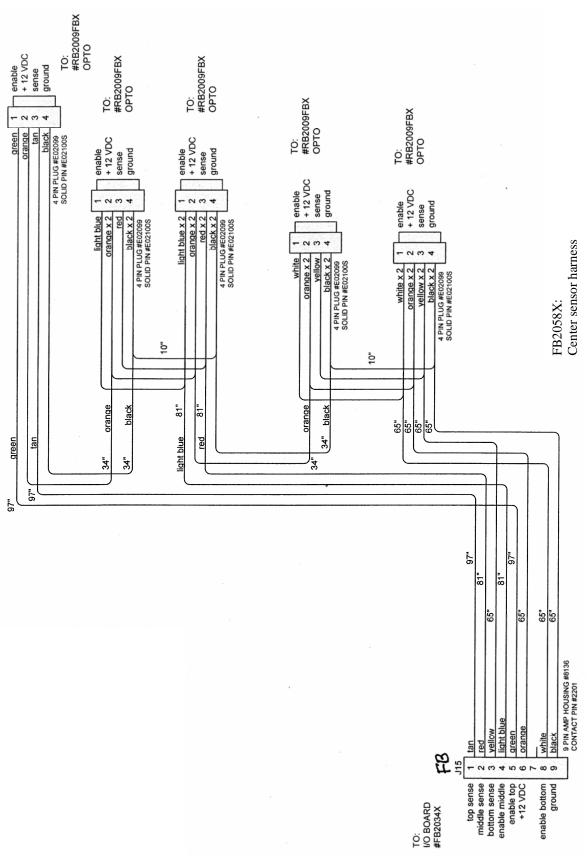


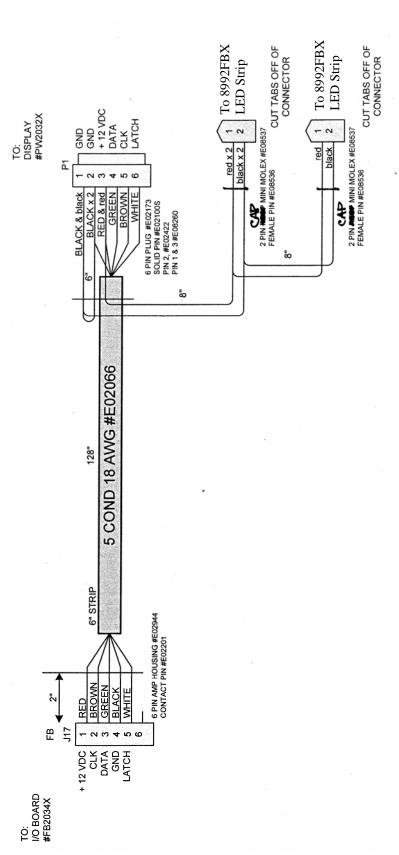




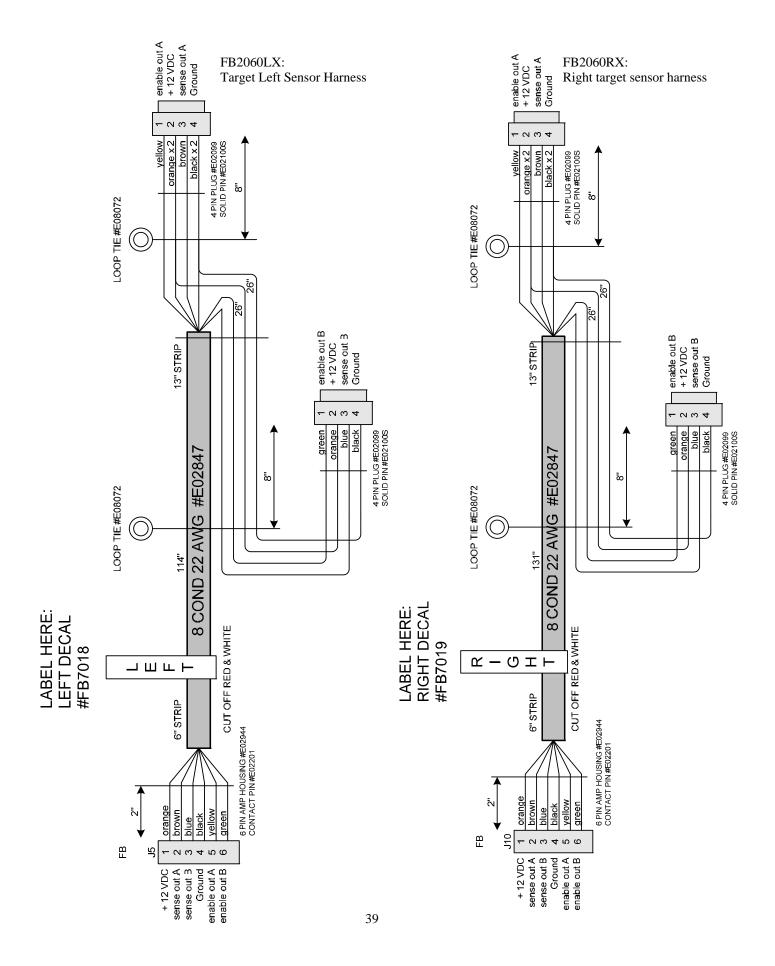


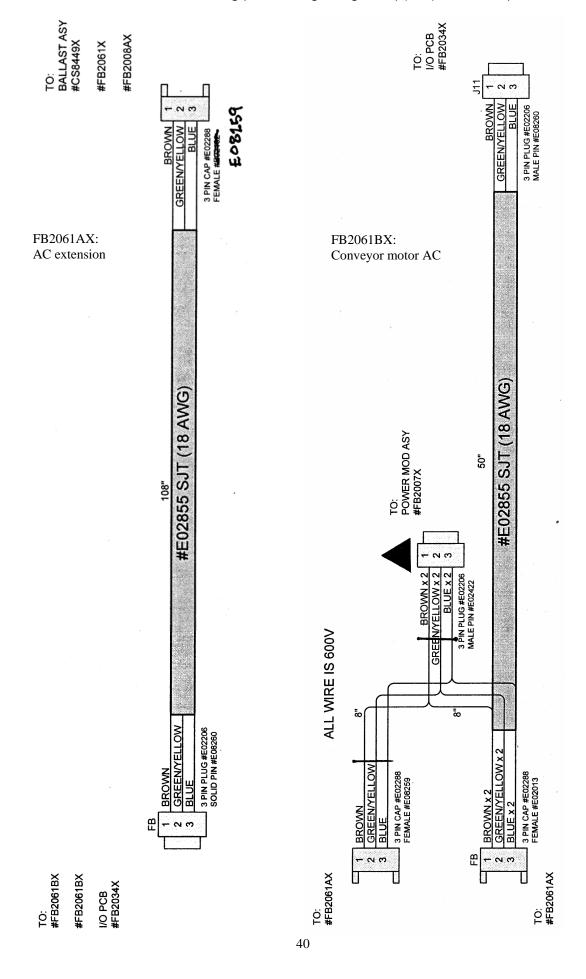


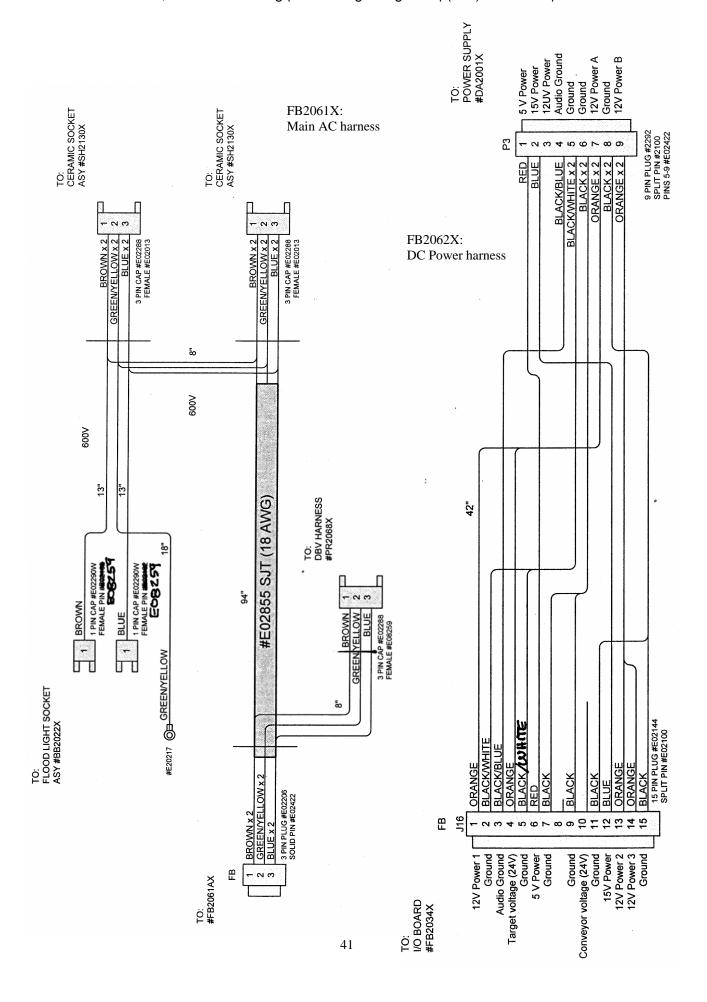


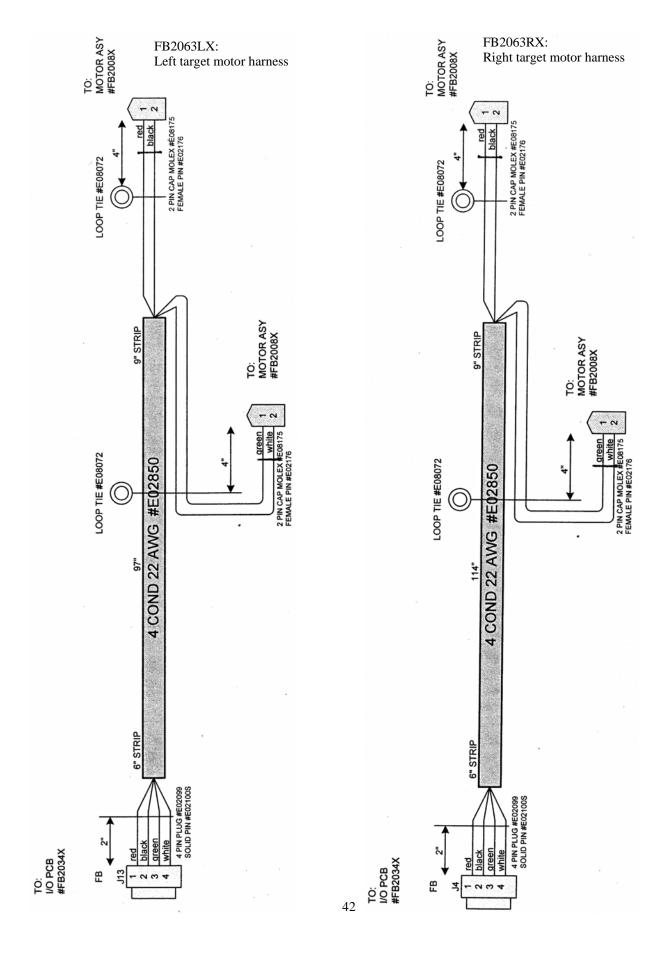


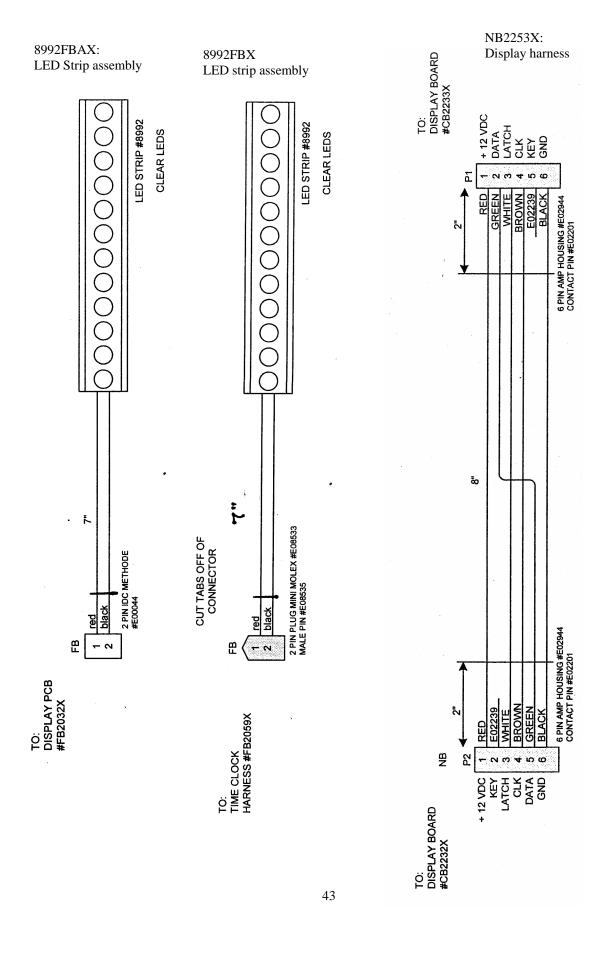
FB2059X: Time Clock Harness

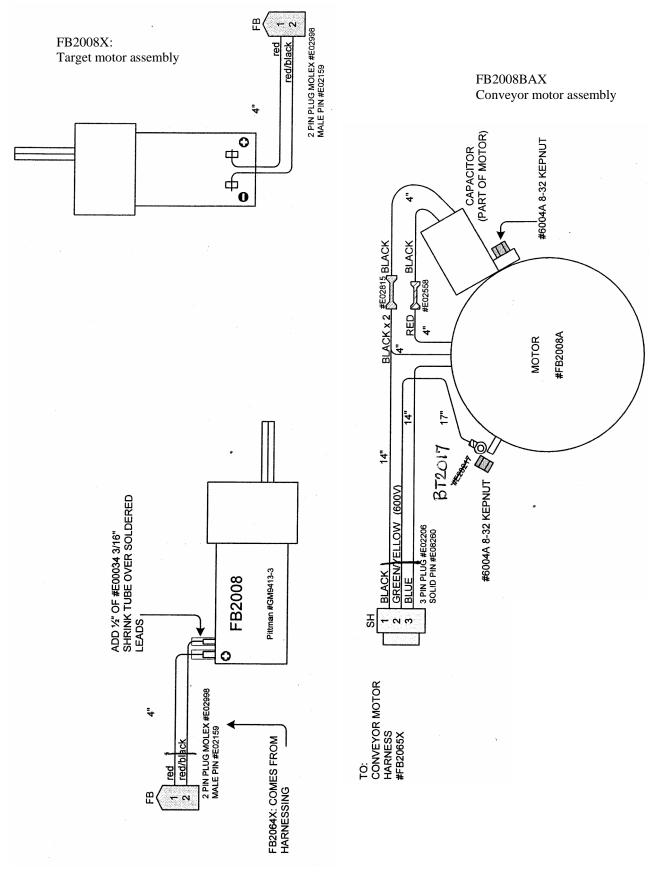


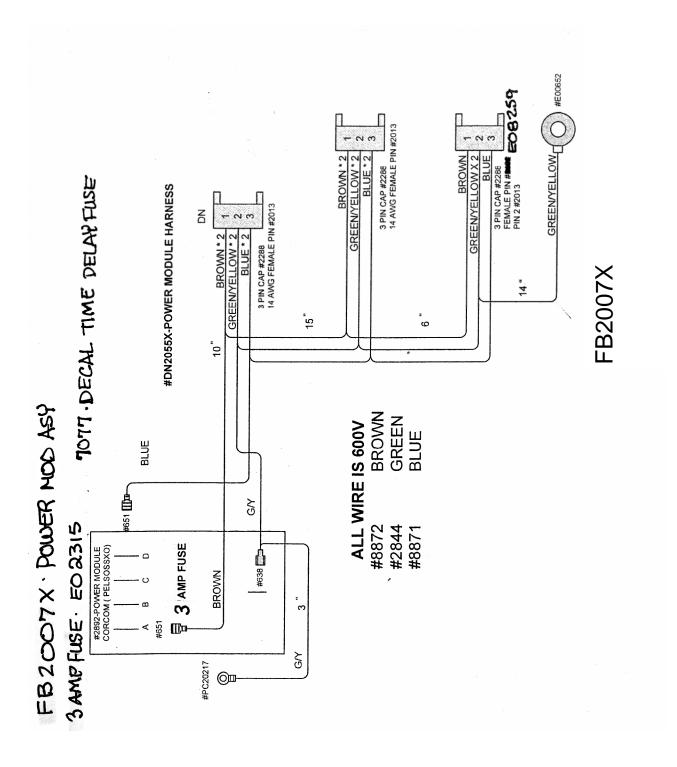












Spare Parts Listing

Electronics:

FB2002X Isolation Transformer (for TUV games)

1029WSX ASY RESET BUTTON

8992FBAX ASY (CLEAR LED STRIP for control panel) 8992FBX ASY (CLEAR LED STRIP for game clock)

AR2007 6X9 SPEAKER

BB2022X ASY FLOOD LAMP SOCKET

CB2232X PCBA (DISPLAY) CB2233X PCBA (DISPLAY) CS8449X ASY (BALLAST)

DA2001X PCBA (POWER SUPPLY)
DA2002X ASY (TRANSFORMER)
DA2133X PCBA (SMALL DISPLAY)
FB2007X ASY (POWER MOD 3 MDQ)

E00377 BULB OF FLOOD

FB2008AX ASY (CONVEYOR MOTOR)

FB2008X ASY (TARGET MOTOR) included in FB1031X

FB2032X PCBA (DISPLAY) FB2033X PCBA (TIME CLOCK)

FB2034X PCBA (MAIN I/O) ** Cannot be purchased separate E08716 FLASH CARD ** Cannot be purchased separate

E2034X PCBA (BRAIN BOARD) ** Cannot be purchased separate

FB2035BX PCBA (DISPLAY, BLUE LEDS)
FB2035RX PCBA (DISPLAY, RED LEDS)
FB2035WX PCBA (DISPLAY, WHITE LEDS)
HR2005 BUTTON LG ROUND WHITE

PP250X ASY (SOCKET)

RB2009FBX ** PCBA (OPTO SENSE FOOTBALL)

RB2009BX ** PCBA (OPTO SENSE) included in FB1031X

RB2009EX * (OPTO SENSE FOOTBALL)

FP2009EX * PCBA (OPTO SENSE) included in FB1031X

Mechanical:

FB1031X ASY, TARGET MOTOR LEFT SIDE FB1031AX ASY, TARGET MOTOR RIGHT SIDE

FB1061 PILLOW BLOCK BEARING

FB3013 REBOUND GUARD

FB3014 DISPLAY STRIP LEFT/RIGHT

FB3015 NUMBER GUARD

FB3039 TARGET

NOTE:

**Games manufactured before June 2008
*Games manufactured after June 2008

Spare Parts Listing

Decals:

START BUTTON FB7001 FB7003 BALL RETURN DECAL Target Top Left FB7005 FB7006 **Target Top Right** Target Bottom Left FB7007 Target Bottom Right FB7008 **CONTROL PANEL** FB7013 FB7029 MARQUEE-GAME CLOCK

Miscellaneous:

FB3001	8.5" FOOTBALL
FB4001	ENDLESS CONVEYOR BELT
FB4002	FRONT TARGET PAD
FB4003	REAR DOOR FOAM PAD
FB7011	NFL BLACK SCRIM VINYL
RR5001-P802	COIN DOOR (TRIPLE) SINGLE MECH Black
RR5001-P200	COIN DOOR (TRIPLE) SINGLE MECH Orange Gloss
RR5001-P901	COIN DOOR (TRIPLE) SINGLE MECH Gold Metallic
RR5001-P903	COIN DOOR (TRIPLE) SINGLE MECH Powder Gray

MARQUEE:

E02016 25' PHONE CORD 2770 7' PHONE CORD

Spare Parts Listing

Options (continued):

FB2002CX Option: 220v

FB2600X DBV

FB1000CX Option: Competition mode FB1000TD Option: Ticket dispenser RR5001FBX Option: Blank triple door

FB1000ARIX Arizona Cardinals
FB1000ATLX Atlanta Falcons
FB1000BALX Baltimore Ravens

FB1000BUFX Buffalo Bills

FB1000CARX Carolina Panthers FB1000CINX Cincinnati Bengal's FB1000CLEX **Cleveland Browns** FB1000DALX Dallas Cowboys **Denver Broncos** FB1000DENX FB1000DETX **Detroit Lions** FB1000GENX Generic Game FB1000GREX Green Bay Packers FB1000HOUX **Houston Texans** FB1000INDX Indianapolis Colts Jacksonville Jaguars FB1000JACX Kansas City Chiefs FB1000KANX FB1000MIAX Miami Dolphins FB1000MINX Minnesota Vikings **New England Patriots** FB1000BEOX FB1000NOSX **New Orleans Saints**

FB1000NOSX
FB1000NOSX
New Orleans Saints
New York Giants
New York Jets
Oakland Raiders
Philadelphia Eagles
FB1000PITX
FB1000SDCX
FB1000SEAX
New Orleans Saints
New York Giants
Oakland Raiders
Philadelphia Eagles
Pittsburg Steelers
Saints
New York Jets
Oakland Raiders
Philadelphia Eagles
Pittsburg Steelers
Saints
New York Jets
Oakland Raiders
Philadelphia Eagles
Pittsburg Steelers
Saints
New York Jets

FB1000SF4X San Fran Cisco 49ers FB1000STLX Saint Louis Rams

FB1000TAMX Tampa Bay Buccaneers

FB1000TENX Tennessee Titans

FB1000WASX Washington Red Skins

WARRANTY

I.C.E warrants all components in the **NFL 2 Minute Drill™** 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 **NFL 2 Minute Drill™** game fails to conform to the above-mentioned warranty, our sole responsibility shall be at our 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.

Our 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. A RMA number has been issued by an I.C.E. technical representative.
- · The serial number of the defective part, if applicable, is given..
- 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.



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

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