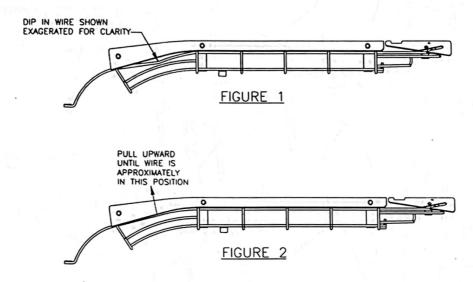
MEDIEVAL MADNESS CATAPULT WIREFORM ADJUSTMENT

Option #1 - Bend the wire

- 1) Remove the catapult wire from the game
- 2) You need to bend the top two wires right after the first big ring (about 2 inches past it) UP out of the path of the ball. The ball may be hitting them too soon. They may actually dip inside the path of the ball. (See Fig. 1) Give them a good pull up...use pliers (with a rag covering them to prevent damage to the finish) or two people (one holds & one pulls) or put both thumbs on the inside of each wire and push outward. (See Fig. 2.)



- 3) Replace the wire. You should have to "stretch" it a bit to make it fit since it will be a bit shorter because of the bend you made. Do not worry just carefully screw it down into place. Start with the top mount, then middle, and finally the entrance.
- 4) Throw 2, 3, 4 balls in to test it out. If this doesn't fix the problem try option #2

Option #2 - Snip out a section of the wire form

1) Using a bolt cutter or large side cutters, cut out the right side of the wire only, as shown. (See Fig.3)

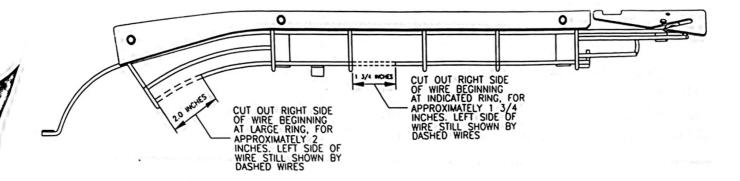
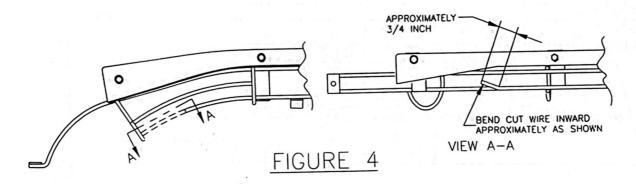


FIGURE 3

2) After cutting the wire that is approximately 2.0 inches long, bend the cut end inward to the approximate position shown. (See Fig.4)



3) Throw 2, 3, 4 balls in to test it out. If this doesn't fix the problem try option #3

Option #3 - Remove the one way gate wire

This option is exactly what it sounds like; remove the wire (P/N 12-7379.1) from the one way gate (P/N 01-14661.1) at the entrance of the catapult. This will allow multiple balls to exit the catapult area but it will also effect gameplay because shots to the catapult may now bounce out instead of staying in (the one way gate wire hold balls in).

NBA® FASTBREAK[™] LINKING KIT INSTALLATION INSTRUCTIONS

FOR LINKING KIT #58030

The NBA FASTBREAK LINKING KIT allows two NBA Fastbreak games to be connected in order to allow head to head competitive linked game play.

PARTS

Part Number	Description	Quantity
A-5343-50053-1	G11, EPROM	2 (1 used per game)
A-5343-50253-S2	S2, EPROM	2 (1 used per game)
5430-14585-00	IC-linear max239	2 (1 used per game)
5430-14586-00	IC-16c450 uart	2 (1 used per game)
31-2950.1-1	Right -side marquee	1
31-2950.1-2	Left-side marquee	1
H-21982	Linking cable assembly	1.
4808-01175-08	e-p #8x1/2" ind pl-hwh	8 (4 used per game)

LEFT-SIDE MARQUEE PANEL 31-2950.1-2 (VIEWED FROM THE FRONT OF THE GAME.)	RIGHT-SIDE MARQUEE PANEL 31-2950.1-1 (MEWED FROM THE FRONT OF THE GAME.)

INSTALLATION

- 1. Turn off and unplug the games. Unlock and remove the insert panel from each game.
- 2. Push the games together. Adjust the leg levelers so that the backboxes are the same height.
- Unfold the gussets on the left-side marquee. Tape the marquee to the top of the left backbox. Then, unfold the gussets on the right-side marquee and tape it to the top of the right backbox.
- 4. Unscrew the metal vent screen on the rear of the left backbox. Move the screen to the left in order to open the far-right vent hole. Secure the vent screen into place.
- 5. Unscrew the metal vent screen on the rear of the right backbox. Move the screen to the right in order to open the far-left vent hole. Secure the vent screen into place.

NOTE: The two open vent holes should be next to each other.

- 6. From the outside of the backboxes, insert one end of the linking cable into each of the open vent holes. Push the cable in until the plates are flush against the backboxes. Screw the plates to the backboxes.
- 7. Plug the linking cable connectors into J607 of each game's Audio/Visual board. The connectors only plug in one way and should slide on easily. DO NOT force the connectors.

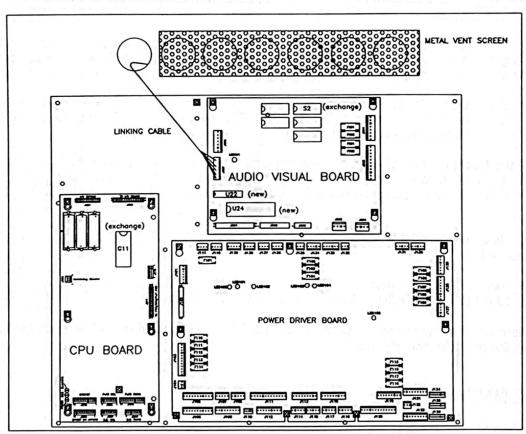
- 8. Next, there are two IC chips that must be exchanged in each game, and two that must be added (for a total of eight IC chips). The IC chips that must be exchanged are G11 on the CPU board and S2 on the Audio/Visual board. The new IC chips that must be added are U22, and U24 on the Audio/Visual Board.
- 9. Use an IC chip extractor or a small Flathead screwdriver to remove G11 from the CPU board and S2 from the Audio/Visual board, one at a time, from their sockets. Take care not to remove the sockets along with the chips by mistake. Replace each chip with the corresponding one from the Linking Kit.
- 10. Add U22 and U24 to the Audio/Visual board.

NOTE: Both games must have the new linking software to play in the linked mode. However, a linked game can also be played alone.

CAUTION!

Be sure to line up the notch in the chip with the notches in the socket and the white masking. DO NOT plug a chip in backwards. DO NOT bend the pins under the chip.

Change each of the chips one at a time. DO NOT plug chips into the wrong sockets.



BACKBOX OF RIGHT-SIDE GAME VIEWED FROM THE FRONT.

- 11. Replace and lock the insert panel in each game and open the coin doors. Plug in and turn on the left game. Enter the Utilities Menu and enable U.9 29 INSTALL LINK 1. Plug in and turn on the right game. Enter the Utilities Menu and enable U.9 30 INSTALL LINK 2.
- 12. Exit the Menu System and enter to the Attract mode on both games. Close and lock the coin doors. The displays on both games should show the same screens. Pressing a flipper button on either game should cause the displays on both games to change together.

GAME PLAY

When credit(s) are available on both games (during game over) and one of the START buttons is pressed, the display will change on both games. The game on which START was pressed will indicate it is waiting for the other game to begin. The other game will indicate that pressing START will being linked play.

A non-linked game can be started on the first machine by either pressing both flippers together or by waiting for the timer to expire.

Once both games have pressed the START button, both games proceed to the same team selection display as with non-linked game play. The number of players indicated on each display will however be two, along with a timer.

Linked game play consists of 4 quarters of timed play, with a break at the half and a sudden death period at the end of a tied game. The time per quarter is equal to one fourth that of the time set in the A.2 23 LINKED GAME TIME adjustment.

As each player completes a shot and/or starts a mode, the shot completed lamp is lit on both machines and/or the mode begins on both games and both players play the mode. During the modes, each player works to score the most points during the mode.

While the players compete head to head for points, they may also work together to complete all of the features of the game. If successful, they will both play TROPHY MULTIBALL in head to head competition and the winner will be awarded a RING and 1 credit. (Note: a tie awards both players a RING and 1 credit.)

At half time, all currently running modes, etc. are terminated and all of the balls are drained for the half time show. The half time show consists of both players playing PIZZA POWER SHOTS (the backbox game). At the end of the half time show, the third quarter is started.

At the end of the fourth quarter, all currently running modes, etc. are again terminated, and the winner is announced. In the case of a tie game, a SUDDEN DEATH timed round is started during which the first player to be ahead of the other player by two points (or more) wins. If the timer expires, then the game ends in a tie.

Extra balls are lit as they are in non-linked games. When an extra ball is collected the time for the current quarter is extended.

The following non-linked game modes and/or features are excluded during linked play: TRIVIA QUIZ, MILLION DOLLAR SHOT, INBOUND PASS, MIDNIGHT MADNESS

A plumb tilt terminates the game for the player who tilted. The other player finishes the timed game. A slam tilt terminates the game for both players.

FEATURE ADJUSTMENTS

A.2 22 LINKED GAME ID

This adjustment enables linked play on the machine and identifies the machine as the left hand (PLAYER 1) or the right hand (PLAYER 2) machine.

Settings:

OFF, PLAYER 1, PLAYER 2

Factory Default:

OFF

A.2 23 LINKED GAME TIME

This adjustment is only present if the A.2 22 LINKED GAME ID adjustment is enabled. This adjustment controls the time (displayed as MM:SS, where MM = minutes and SS = seconds) of linked game play. The actual playtime will be slightly longer than the time set here due to time extensions, the half time show, and sudden death.

Settings:

0:40 - 6:00 in 0:20 second increments

Factory Default:

2:00

UTILITY PRE-SET ADJUSTMENTS

U.9 29 INSTALL LINK 1

This pre-set installs all of the adjustments necessary for the left-hand machine of a linked pair. The affected adjustments are as follows:

A.2 22	Linked Game ID	Player 1
A.2 23	Linked Game Time	2:00
A.5 04	Printer Type	Serial
A.5 05	Serial Baud Rate	9600
A.5 06	Serial DTR	Ignore
A.5 07	Auto Printout	Off

U.9 30 INSTALL LINK 2

This pre-set installs all of the adjustments necessary for the right-hand machine of a linked pair. The affected adjustments are as follows:

A.2 22	Linked Game ID	Player 2
A.2 23	Linked Game Time	2:00
A.5 04	Printer Type	Serial
A.5 05	Serial Baud Rate	9600
A.5 06	Serial DTR	Ignore
A.5 07	Auto Printout	Off

FEATURE AUDIT

B.441 LINKED GAMES 00

00% 00

The number of linked games started.