AMERI
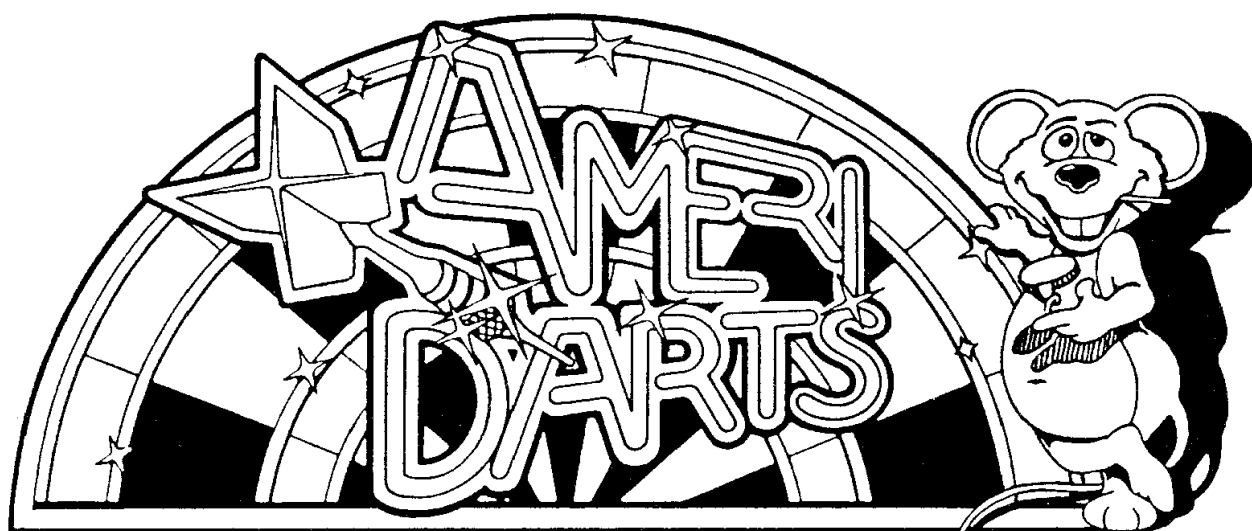## CORPORATION

3955 SUFFOLK
HOFFMAN ESTATES, IL 60195

CONVERSION KIT MANUAL
HORIZONTAL OR VERTICAL
UPRIGHT OR COCKTAIL

![AMERI CORPORATION logo]

WE AT AMERI CORPORATION THANK YOU
FOR BUYING OUR PRODUCT.

WE'RE PROUD OF AMERI DARTS. NOT ONLY BECAUSE OF THE QUALITY OF ALL ASPECTS IN THE AUDIO-VISUAL PRESENTATION, BUT ALSO, AMERI DARTS IS BY FAR THE MOST INNOVATIVELY DESIGNED CONVERSION KIT EVER PRODUCED. IT HAS BEEN DESIGNED WITH YOU THE OPERATOR IN MIND. HERE ARE JUST A FEW EXAMPLES OF THE RESULTS FROM A COMMITMENT TO KEEPING YOUR NEEDS AS OUR MAIN OBJECTIVE.
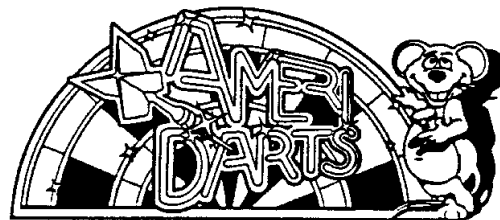
AMERI DARTS IS THE FIRST AND ONLY "TRUE" (100% ACTIVE,NO LOSS- NO GAIN PICTURE) VERTICAL/HORIZONTAL VIDEO GAME. THE PRESS OF A BUTTON AND THE ROLL OF A TRACKBALL INSTANTLY CHANGES THIS GAME FROM HORI-ZONTAL TO VERTICAL AS WELL AS UPRIGHT TO COCKTAIL.

AMERI SUPPLIES YOU WITH A "UNIVERSAL"(FULLY LOADED) 56-PIN JAMMA KIT WIRING HARNESS. (A HARNESS IS NOT UNIVERSAL IF IT IS MISSING "SPARE" WIRES THAT MAY BE NEEDED ON THE NEXT GAME YOU WISH TO INSTALL.)

AMERI SUPPLIES YOU WITH A PRINTED MARQUEE AND A CLEAR PLEXIGLASS HEADER THAT IS A FULL 25"X9" AS WELL AS TWO CONTROL PANEL OVERLAYS WHICH ARE A FULL 25"X17 1/2". (TRY CONVERTING SOME OF YOUR OLD HORIZONTAL CABINETS WITH ANYTHING LESS.)

AMERI DARTS ON SCREEN STATISTICS INCLUDE A POWER-UP CLOCK THAT SHOWS YOU HOW LONG THE GAME HAS BEEN PLUGGED IN AND OPERATING SINCE YOUR LAST VISIT.

SPECIFICATIONS SUCH AS THESE (AND THE MANY OTHERS YOU WILL WILL NOTICE AS YOU INSTALL AND OPERATE THIS GAME) ARE THE DIRECT RESULTS OF OPERATOR INPUT. IN ORDER FOR US TO ACHIEVE OUR GOAL OF BEING **"THE COIN-OP COMPANY YOU CAN COUNT ON"** FOR BEST RETURN ON INVESTMENT,BEST QUALITY,BEST SERVICE AND BEST IN RESPONSIVENESS–WE NEED YOUR INPUT. PLEASE SEND IN YOUR WARR-ANTY REGISTRATION CARD ALONG WITH YOUR COMMENTS/SUGGESTIONS TO HELP US CONTINUE TO PRODUCE **"PRODUCTS TO BE PROUD OF"**.

CONVERSION KIT MANUAL

CONTENTS

PARTS LIST

*AMERI DARTS PCB

*56-PIN CUSTOM CONNECT WIRING HARNESS
> Jamma compatible with:
> PRE-WIRED OPERATOR
> CONTROL ASSEMBLY:
> ***SERVICE SWITCH**
> ***TEST SWITCH**
> ***VOLUME CONTROL** (potentiometer)
> ***MOUNTING BRACKET**

*3" TRACKBALL Smaller model can be used.

*ILLUMINATED BUTTON

*LED BOARD Used to illuminate trackball.

*METAL CONTROL PLATE
> 14 gauge steel with:
> 6 1/4-20 inch mounting studs
> and 4 1/4" pem nuts. Mounted in plate

*MOUNTING HARDWARE
> 6 plated hex nuts
> 6 1/4" flat washers
> 6 1/4"split lock washers
> 6 1/2" SCREWS (4 to mount PCB legs,2 for operator control bracket)
> 4 10-32 x 2 1/4" slotted machine screws
> 4 #10 external tooth lock washers
> 12 Wire wraps
> 4 LEGS FOR PCB

*CARDBOARD TEMPLATE

*MARQUEE

*SIDE DECALS (2)

*PRINTED MAIN CONTROL PANEL OVERLAY

*BLACK LOWER CONTROL PANEL OVERLAY

*COINAGE-PLAY/PAY STICKERS (3 STYLES)

*ACRYLIC HEADER

*SERVICE MANUAL

POWER REQUIREMENTS (MINIMUM)

+5 VOLTS DC	2 AMPS
+12 VOLTS DC	2 AMPS
–5 VOLTS DC	1 AMP

MONITOR REQUIREMENTS
> COMPOSITE NEGATIVE SYNC
> HORIZONTAL OR VERTICAL MOUNT

SECTION 1: EXTERIOR GRAPHICS
APPLICATIONS

THE SUPPLIED GRAPHICS (MARQUEE, SIDE DECAL, CONTROL AND PANEL OVERLAYS) HAVE BEEN DESIGNED FOR EASY APPLICATION TO MOST ANY CABINET YOU WISH TO CONVERT.

THE MARQUEE:
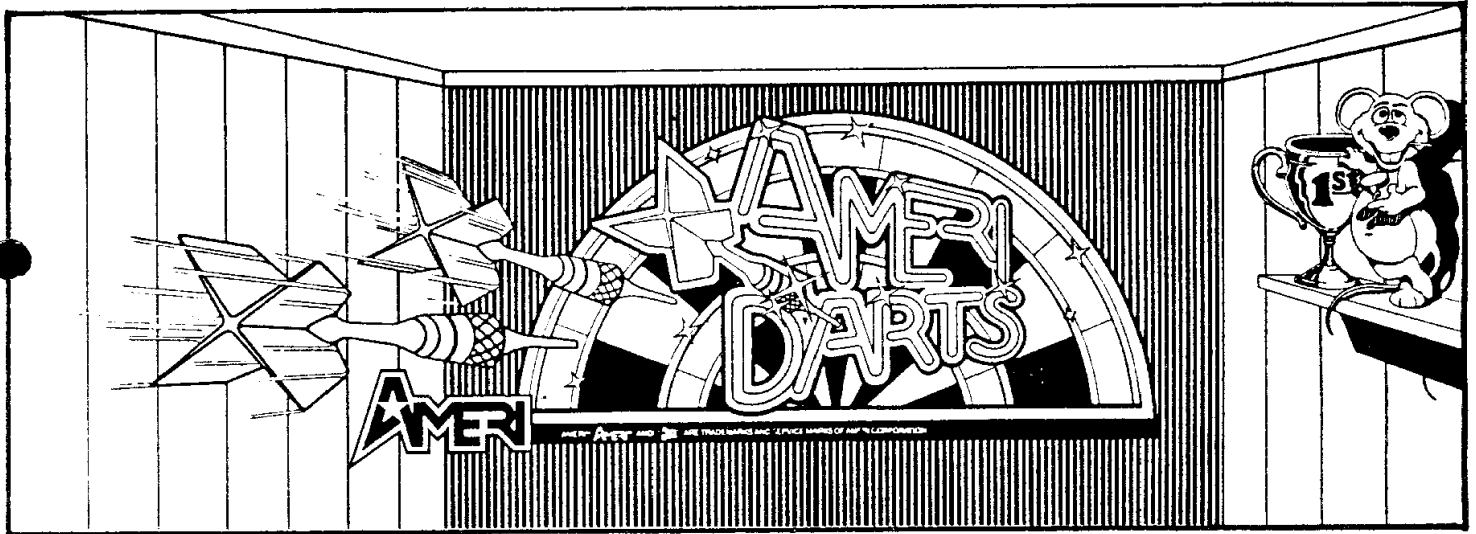
IF YOU FIND THE MARQUEE NEEDS TRIMMING, USING A RAZOR BLADE OR AN X-ACTO, ALWAYS CUT IN EQUAL INCREMENTS FROM TOP AND BOTTOM (FOR HEIGHT) AND **FROM THE LEFT-DART SIDE ONLY**-(FOR WIDTH). NOTE THAT THE MAIN FOCUS OF THE ART REMAINS VISIBLE EVEN WHEN TRIMMED TO THE SMALLEST OF UPRIGHT CABINETS.
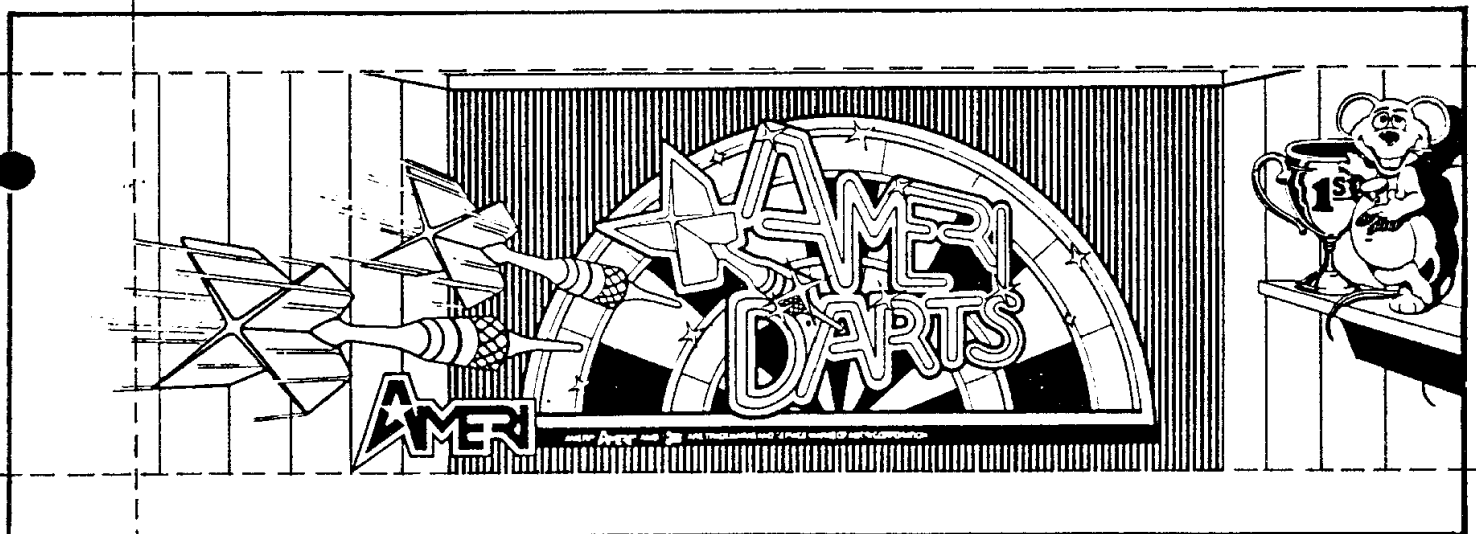
TRIMMING THE PLEXIGLASS HEADER:
(WEAR PROTECTIVE GLASSES)
THE BEST WAY TO TRIM PLEXIGLASS TO SIZE IS MUCH LIKE CUTTING GLASS. LEAVE THE PROTECTIVE COVERING ON UNTILL FINISHED. SCRIBE THE CUT SEVERAL TIMES, ALONG A STRAIGHT EDGE, WITH YOUR KNIFE. YOU CAN THEN NEATLY BREAK THE SHEET ALONG THE EDGE OF A TABLE. TO FINISH SCRAPE THE EDGES SMOOTH. (SEE DIAGRAM).
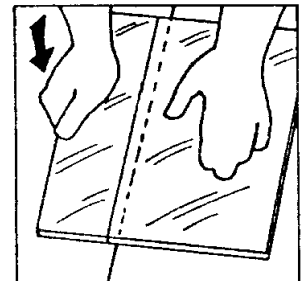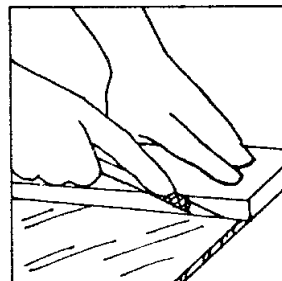
EXTERIOR GRAPHICS
APPLICATIONS

SIDE DECAL:(TWO PROVIDED)
FOR UPRIGHT CABINETS YOU CAN OF COURSE USE THE ENTIRE DECAL. FOR BAR TOPS & COCKTAIL MODELS SIMPLY CUT THE AMERI DARTS AND AMERI LOGOS OUT AND PLACE THEM AS SHOWN.
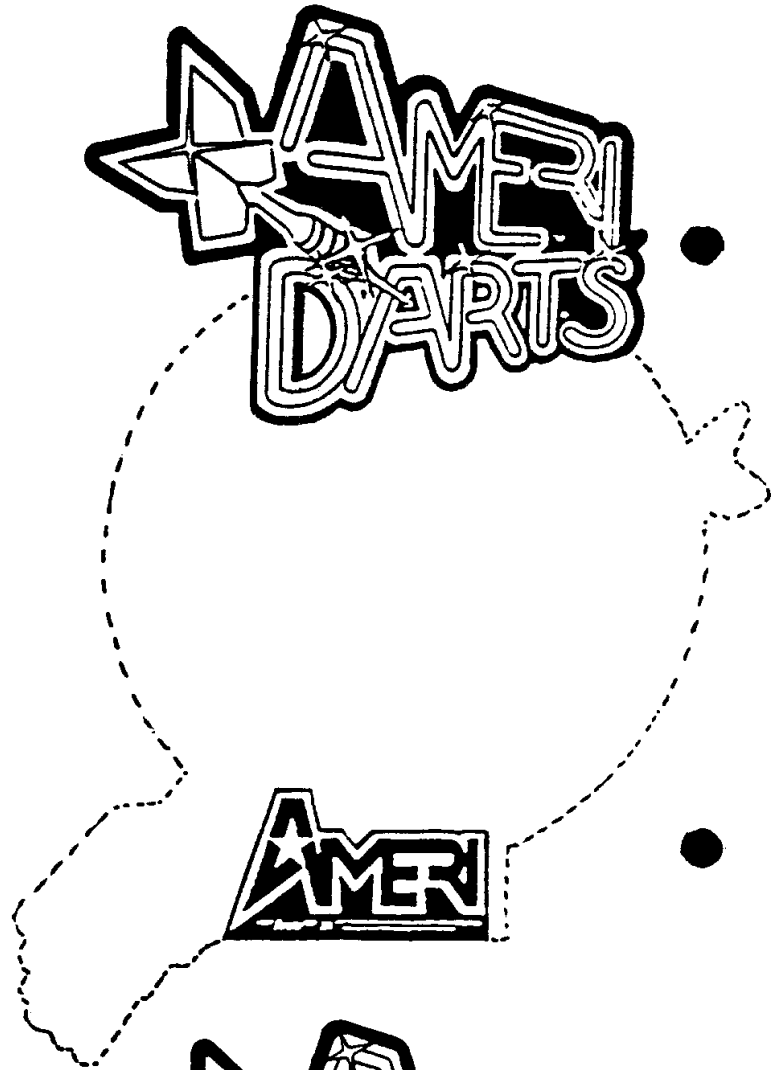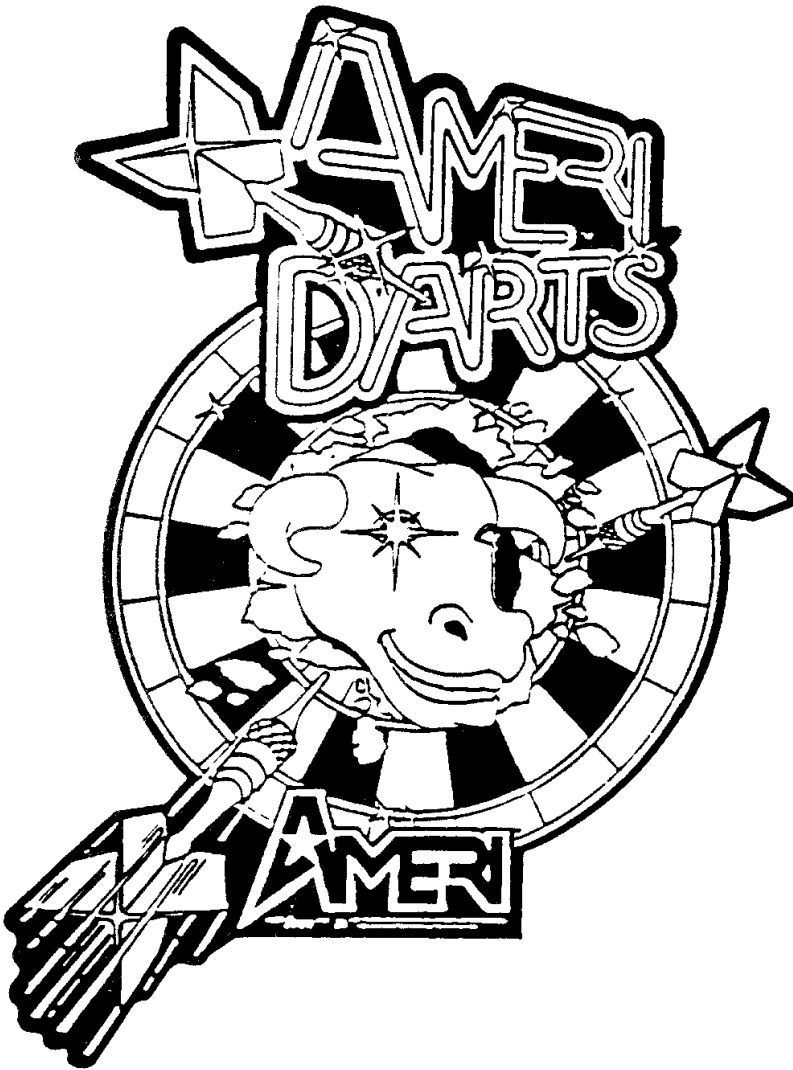
APPLICATION HINTS:
AFTER YOU'VE REMOVED OLD GRAPHICS AND RE-PAINTED THE CABINET. SPRAY THE AREA YOU'RE GOING TO PLACE THE DECAL WITH A FOAMING SPRAY SUCH AS WINDEX. REMOVE THE BACKING. PUT THE DECAL IN PLACE. WITH A SOFT SQUEEGEE,BEGINNING FROM THE CENTER, SLOWLY PRESS OUT EXCESS FOAM UNTIL YOU HAVE A SMOOTH FINISH. ALLOW 2 TO 3 HOURS BEFORE HANDLING. MAXIMUM DRYING WILL BE ACHIIEVED IN 48-72 HOURS
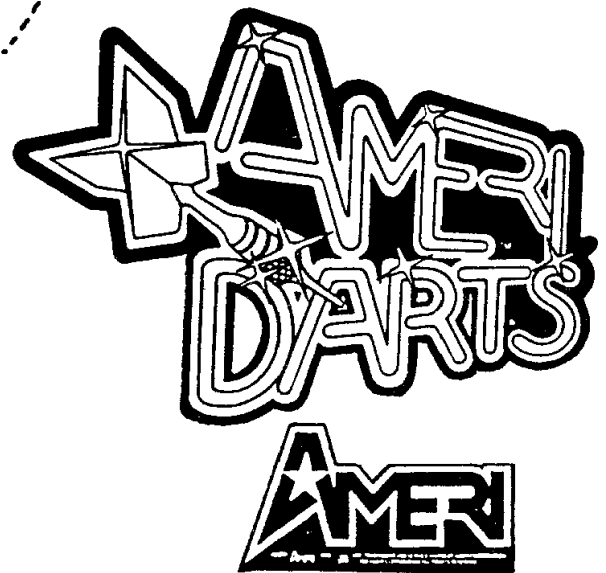
EXTERIOR GRAPHICS
APPLICATIONS

CONTROL PANEL OVERLAY:(TWO PROVIDED- 1 PRINTED & 1 BLACK)
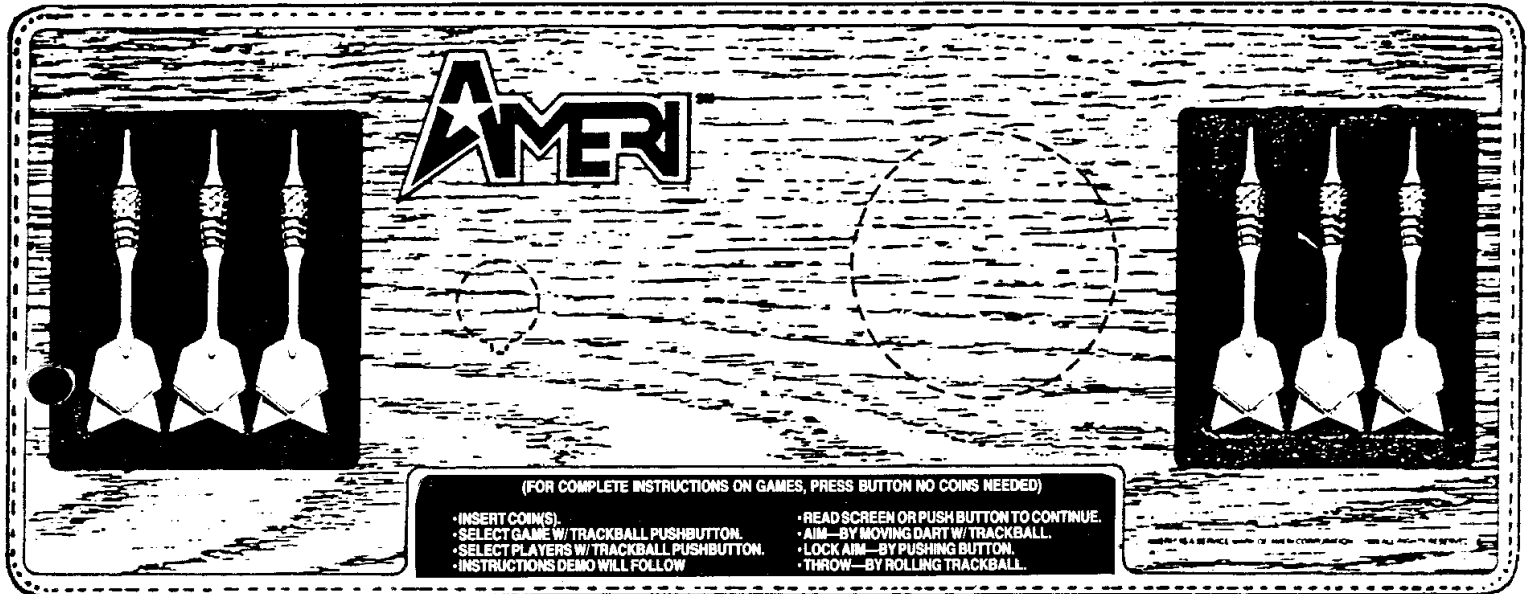
(DOTTED LINES ABOVE INDICATE PLACEMENT OF THE METAL TEMPLATE.)

USING CONTROL PLATE DECAL: CUT THE COLOR PORTION OUT OF THE OVERLAY.
BY PLACING THE CONTROL PLATE WITHIN THE GOLD TRIM (YOU HAVE A 1/16" PLAY AROUND THE
PLATE IN WHICH TO CENTER IT BEFORE CUTTING). WITH AN X-ACTO KNIFE CUT ALONG THE EDGE
OF THE PLATE (YOU CAN PLACE IT UPSIDE DOWN FOR THIS STEP).

ADHERING THE DECAL: WE RECOMMEND REMOVING APPROX.1/4 OF THE BACKING. POSITION THE
DECAL TO THE EDGES OF THE PLATE, ADHERE THE 1/4, BE SURE IT IS PROPERLY POSITIONED THEN
PEEL BACK THE 3/4 OF REMAINING BACKING AND FINISH THE APPLICATION. (TRIM IF NECESSARY-DO
NOT LEAVE EDGES THAT CAN BE PEELED BACK).

TRIM THE MOUNTING HOLES OUT. TAKE CARE ON THE TRACKBALL HOLE TO TRIM VERY CLOSE TO
THE METAL (DO NOT LEAVE EVEN A TINY EDGE THAT CAN BE PEELED BACK). USE THE PLAIN BLACK
LEXAN SHEET TO COVER THE CONTROL PANEL UNDERNEATH IN THE SAME 1/4-3/4 METHOD AS
ABOVE.

SMALL CONTROL PLATE APPLICATION:

SECTION 2: INSTALLATION
CONTROL PANEL

IMPORTANT:TRACKBALL SPECIFICATIONS.
IMPROPER TRACKBALL INSTALLATION WILL GREATLY INHIBIT
THE PLAYABILITY AND THE EARNING POTENTIAL OF AMERI DARTS.

PROPER INSTALLATION REQUIRES THE TRACKBALL TO BE MOUNTED IN A DIFFERENT POSITION THAN HAS BEEN THE STANDARD (SEE DIAGRAMS). OUR SOFTWARE IS DESIGNED TO READ THE TRACKBALL IN THIS NEW POSITION WITH GREATER ACCURACY AND MORE SENSITIVITY THAN ANY GAME USING THE OLD MOUNTING POSITION. THIS IS ESSENTIAL FOR THE "ULTIMATE FEEL" IN GAME PLAY.

THE TRACKBALL ROLLERS (INTERNAL) WILL MAKE IT NECESSARY TO MOUNT WITH THE WIRES TOWARDS OR AWAY FROM THE SCREEN, DEPENDING ON THE CONTROL PANEL BEING LEVEL OR TILTED,AS ON SOME CABINETS (SEE DIAGRAMS).

FOR BEST GAME-PLAY WE SUGGEST THAT WHEN INSTALLING THE CONTROL PANEL YOU ALIGN THE CENTER OF THE TRACKBALL WITH THE CENTER OF THE ROOM (ON SCREEN) TO GIVE THE PLAYER PROPER ORIENTATION.(e.g. WHEN CONVERTING A 19" HORIZONTAL MONITOR,CENTER IS 6 1/4" FROM RIGHT SIDE OF THE MONITOR, APPROXIMATELY 1/3 OF THE HORIZONTAL MEASURE-MENT OF THE MONITOR-SEE DIAGRAMS).

NOTE: IF IT BECOMES NECESSARY TO SUBSTITUTE A SMALLER TRACKBALL, USE ONLY A NEW UNIT. A USED TRACKBALL WILL BE WORN-IN UNEVENLY, DUE TO THE OLD MOUNTING POSITION,OR MAY HAVE BEEN ALTERED ELECTRONICALLY FOR A PREVIOUS GAME AND WILL NOT RUN PROPERLY WITH AMERI DARTS SOFTWARE. THE RELATIVELY SMALL EXPENSE OF PURCHASING ANOTHER TRACKBALL WILL BE RECOVERED IN THE COIN BOX.
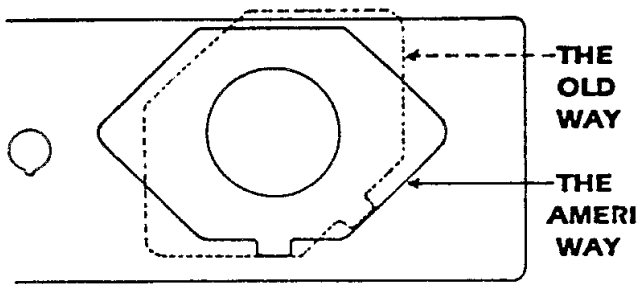
MOUNTING TRACKBALL
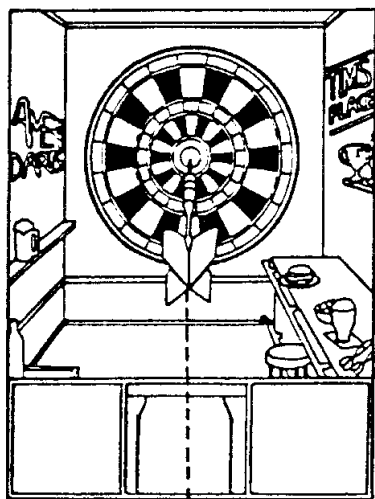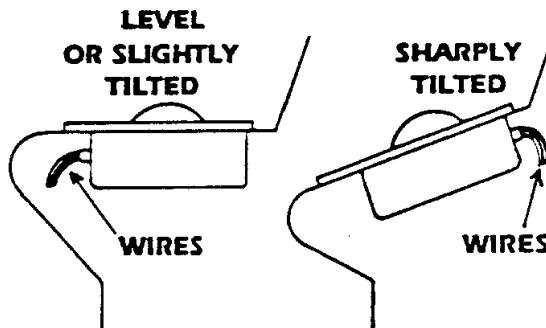
VERTICAL PLACEMENT
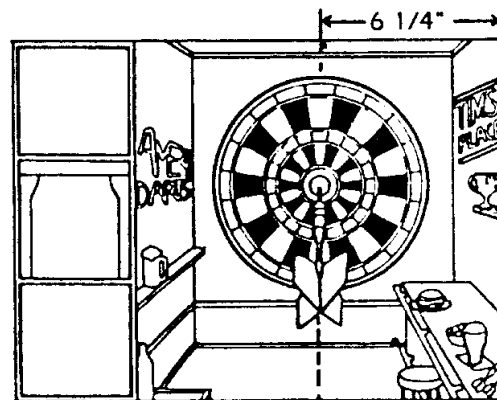
HORIZONTAL PLACEMENT

INSTALLATION
CONTROL PANEL (CONT.)

OPTIONS: 1. **PREFERRED:** METAL CONTROL PLATE WITH BLACK LOWER PANEL.
      2. PRINTED MAIN OVERLAY ONLY
      3. USING SMALLER THAN 3" TRACKBALL

1. METAL CONTROL PLATE: THE CONTROL PLATE IS DESIGNED TO PROVIDE A FIRM MOUNT FOR THE CONTROLS AS WELL AS TO COVER THE OLD HOLES. THE PLATE (WITH PRE-MOUNTED HARDWARE) ALONG WITH IT'S DECAL,WHEN INSTALLED PROPERLY, GIVES AMERI DARTS THE LOOK OF A DEDICATED GAME - **NOT JUST ANOTHER CONVERSION.**

DETERMINE WHETHER OR NOT YOU CAN USE THE CONTROL PLATE BY MEASURING THE CON-TROL PANEL ON THE GAME YOU ARE CONVERTING.(USE THE CARDBOARD TEMPLATE TO HELP IN THIS STEP). MAKE SURE YOU HAVE ENOUGH SURFACE AREA TO MOUNT THE PLATE AS WELL AS DEPTH FOR TRACKBALL CLEARANCE. THE CONTROL PLATE WAS DESIGNED TO AID IN CONVERTING WOODEN CONTROL PANELS AS WELL AS METAL ONES.
NOTE: IT IS ESSENTIAL FOR GAME PLAY THAT YOU FOLLOW OUR SPECIFICATIONS FOR TRACKBALL PLACEMENT.(METAL PANELS,WITH PRE-CUT HOLES,GENERALLY HAVE THE TRACKBALL HOLES IN A POSITION NOT IDEALLY SUITED FOR AMERI DARTS GAME PLAY NOR CABINET APPEARANCE).

OPTION 1.
PREFERRED
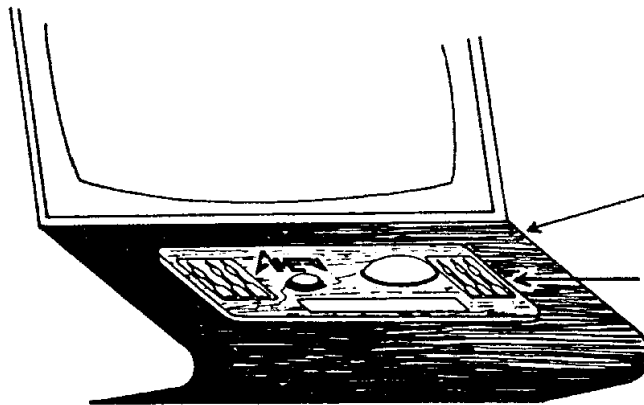
BLACK LOWER CONTROL PANEL OVERLAY

METAL CONTROL PLATE WITH PLATE DECAL
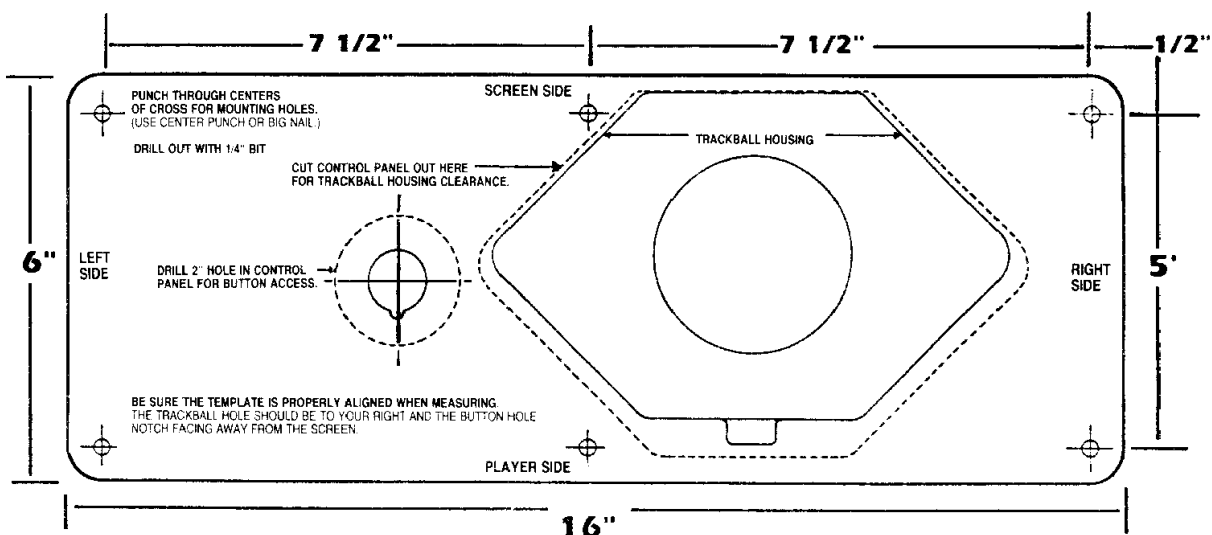
BE SURE THE TEMPLATE IS PROPERLY ALIGNED WHEN MEASURING.
THE TRACKBALL HOLE SHOULD BE TO YOUR RIGHT AND THE BUTTON HOLE NOTCH FACING AWAY FROM THE SCREEN.

INSTALLATION
CONTROL PANEL 1. METAL CONTROL PLATE (CONT).

POSITION THE CARDBOARD TEMPLATE. MAKE SURE THE TRACKBALL IS ALIGNED PROPERLY-(SEE DIAGRAMS). TAPE IN PLACE. USING A CENTER PUNCH (OR A BIG NAIL),SET THE HOLES FOR DRILLING AS MARKED ON THE TEMPLATE. MARK AND CUT THE OPENINGS FOR THE TRACKBALL AND BUTTON. (SEE CUTTING GUIDES ON CARDBOARD)
NOTE: BE SURE THE TEMPLATE IS PROPERLY ALIGNED.

NEXT- LOOSELY MOUNT THE TRACKBALL AND BUTTON TO THE CONTROL PLATE. CHECK TO BE SURE EVERYTHING FITS PROPERLY. NOTE WHICH OF THE OLD HOLES ARE NOT COVERED BY THE CONTROL PLATE. **REMOVE THE CONTROLS FOR APPLICATION OF THE DECAL.**

COVER THE CABINET CONTROL PANEL WITH THE BLACK LOWER PANEL OVERLAY (SEE EXTERIOR GRAPHICS APPLICATIONS). CUT OUT THE MOUNTING HOLES AND RE-RUB THE OVERLAY TO INSURE A GOOD BOND. NOW FROM THE BACK SIDE YOU CAN FILL THE OLD HOLES.WE RECOMMEND A GOOD QUALITY EPOXY FILLER (5 MIN.TYPE WORKS WELL) **GENEROUSLY** FILL IN AND AROUND THE HOLES WITH THE EPOXY AND ALLOW TO SET IN A LEVEL POSITION.

FOR LEVEL(OR SLIGHTLY TILTED) CONTROL PANEL
ASSEMBLE THE CONTROL PLATE. FIRST ADHERE THE PLATE DECAL .(SEE EXTERIOR GRAPHICS APPLICATIONS) NEXT ATTACH THE TRACKBALL AND BUTTON FIRMLY TO THE CONTROL PLATE.
CAUTION: TAKE CARE WHEN INSTALLING THE TRACKBALL; OVER-TIGHTENING THE NUTS MAY DAM-AGE THE HOUSING OR INHIBIT PROPER TRACKBALL OPERATION. (THE STAR WASHERS PROVIDED AND A DROP OF **LOC-TITE** IN THE PEM NUTS WILL KEEP TRACKBALL SECURELY MOUNTED.)
NOTE:SEE TRACKBALL SPECIFICATIONS. ON TILTED PANEL TRACKBALL WIRES FACE TOWARDS SCREEN.

NOW YOU MAY INSTALL THE ASSEMBLED CONTROL PLATE
AS ONE COMPLETE CONTROL PANEL UNIT

CONTROL PLATE WITH DECAL
& PRE-MOUNTED HARDWARE

1/4" FLAT WASHER
1/4" SPLIT LOCK WASHER
PLATED HEX NUT

EXTERNAL TOOTH WASHER
2 1/4" SLOTTED MACHINE SCREW
(DROP OF LOC-TITE IN PEM NUTS
FOR A SECURE MOUNT)
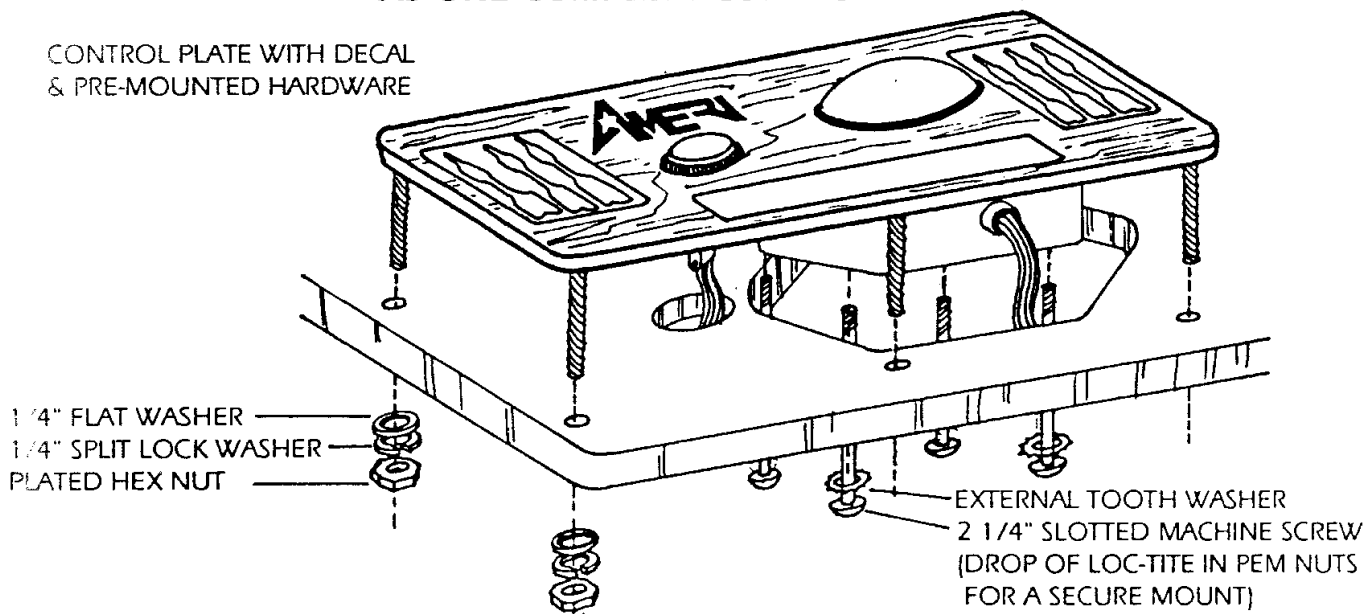
FOR TILTED CONTROL PANEL
ASSEMBLY WILL REQUIRE INSTALLING THE TRACKBALL AFTER THE CONTROL PLATE HAS BEEN MOUNTED (DUE TO THE POSITION OF THE WIRES-SEE TRACKBALL SPECIFICATIONS.). INSTALL THE PLATE WITH THE DECAL AND BUTTON ONLY. NOW INSTALL THE TRACKBALL FROM UNDER-NEATH (USE SAME CAUTION AS ABOVE FOR TIGHTENING THE BOLTS).

INSTALLATION
CONTROL PANEL (CONT.)

OPTIONS:

2.PRINTED MAIN OVERLAY ONLY: YOU MAY BE FORCED TO CONVERT WITHOUT USING THE CONTROL PLATE SUPPLIED IF:
THERE IS LESS THAN 6" X 16" ON THE FLAT SURFACE OF CONTROL PANEL

USE THESE GUIDELINES:

METAL PANEL WITH NO MOUNTING PLATE FOR TRACKBALL: UNLESS YOU HAVE A TRACK-BALL HOLE IN THE PROPER POSITION (IN WHICH CASE YOU MUST RE-DRILL THE TRACKBALL MOUNT-ING HOLES AS THEY'LL BE OFF 45 -SEE DIAGRAM) YOU'LL BE CUTTING YOUR OWN. **FOLLOW OUR TRACKBALL SPECIFICATIONS FOR PLACEMENT.** BE CAREFUL TO CUT A NEAT HOLE AND BE SURE TO FILE THE EDGES SMOOTH (REMEMBER THE PLAYERS HAND WILL BE IN CONTACT HERE) YOU CAN USE THE PRINTED MAIN OVERLAY TO COVER THE CONTROL PANEL AND THE CARDBOARD TEMPLATE TO POSITION THE CONTROLS.
YOU ARE NOT ABLE TO POSITION THE TRACKBALL WITH THE PRINTED OVERLAY:
(YOU POSITION THE TRACKBALL AND THE SURROUNDING BLACK AREA DOES NOT COVER THE CON-TROL PANEL). IN THIS CASE YOU CAN USE THE BLACK OVERLAY AND THE CONTROL PLATE DECAL AS TWO SEPARATE DECALS.(SEE EXTERIOR GRAPHICS APPLICATIONS FOR CUTTING OUT DECAL).

3: USING SMALLER THAN A 3" TRACKBALL: (IF YOU ARE CONVERTING A CABINET IN WHICH THE 3" TRACKBALL DOES NOT FIT-- e.g. A SMALL UPRIGHT,COCKTAIL OR COUNTER TOP).
MOUNTING THE SMALLER TRACKBALL: YOU CAN PURCHASE A SMALLER VERSION OF THE CONTROL PLATE DESIGNED FOR THIS APPLICATION FROM YOUR AMERI DISTRIBUTOR USE THE BLACK OVERLAY TO COVER THE CONTROL PANEL. A CUT-OUT FROM THE PRINTED OVERLAY CAN BE USED TO COVER THE SMALL CONTROL PLATE AND TREAT THE PRINTED INSTRUCTIONS AS A SEPARATE DECAL.(SEE EXTERIOR GRAPHICS APPLICATIONS)

COCKTAIL OPTIONS: FOR CONTROLS AND GRAPHICS. YOU CAN OBTAIN 2 SMALL CONTROL PLATES (ONE FOR EACH CONTROL PANEL)AND PLACE THE CUT-OUT INSTRUCTIONS ON TOP OF THE CABINET. ANOTHER PRINTED OVERLAY CAN ALSO BE OBTAINED FROM YOUR AMERI DISTRIBUTOR TO CONVERT BOTH PANELS WITH GRAPHICS.

OLD TRACKBALL MOUNTING HOLES ARE OFF 45°

SMALL CONTROL PLATE

4 5/8"

8 1/2"

INSTALLATION
ELECTRICAL (CONT.)
AMERI DARTS WIRING HARNESS PIN-OUT

SOLDER SIDE		POSITION		COMPONENT SIDE	
FUNCTION	**WIRE COLOR**			**WIRE COLOR**	**FUNCTION**
GROUND	BLACK	A	1	BLACK	GROUND
GROUND	BLACK	B	2	BLACK	GROUND
+5 VOLTS	RED	C	3	RED	+5 VOLTS
+5 VOLTS	RED	D	4	RED	+5 VOLTS
– 5 VOLTS	GREY	E	5	GREY	– 5 VOLTS
+12 VOLTS	YELLOW	F	6	YELLOW	+12 VOLTS
KEY		H	7		KEY
COIN COUNTER#2	BLUE/ORANGE	J	8	BLUE/YELLOW	COIN COUNTER#1
(NOT USED)	BLUE/BLACK	K	9	BLUE/GREEN	(NOT USED)
SPEAKER –	BROWN/BLACK	L	10	BROWN	SPEAKER +
VOLUME CNTRL.A	PURPLE/WHITE	M	11	PURPLE/BROWN	VOLUME CNTRL.B
VIDEO GREEN	WHITE/GREEN	N	12	WHITE/RED	VIDEO RED
VIDEO SYNC	WHITE	P	13	WHITE/BLUE	VIDEO BLUE
SERVICE SWITCH	GREEN/ORANGE	R	14	WHITE/BLACK	VIDEO GROUND
(NOT USED)	GREEN/WHITE	S	15	GREEN/RED	TEST SWITCH
COIN SWITCH 2	BLUE/WHITE	T	16	BLUE/RED	COIN SWITCH 1
PLYR #2 BUTTON	ORANGE/BLACK	U	17	YELLOW/BLACK	PLYR #1 BUTTON
*#2 Y(a)-Trackball	ORANGE/BLUE	V	18	YELLOW BLUE	#1 Y(a)-Trackball
*#2 Y(b)-Trackball	ORANGE/RED	W	19	YELLOW/RED	#1 Y(b)-Trackball
*#2 X(a)-Trackball	ORANGE/GREEN	X	20	YELLOW/GREEN	#1 X(a)-Trackball
*#2 X(b)-Trackball	ORANGE/PURPLE	Y	21	YELLOW/PURPLE	#1 X(b)-Trackball
(NOT USED)	ORANGE/BROWN	Z	22	YELLOW/BROWN	(NOT USED)
(NOT USED)	ORANGE/WHITE	a	23	YELLOW/WHITE	(NOT USED)
(NOT USED)	ORANGE/YELLOW	b	24	YELLOW/ORANGE	(NOT USED)
TRACKBALL LIGHT	PURPLE/ORANGE	c	25	PURPLE/GREEN	TRACKBALL LIGHT
BUTTON LIGHT	PURPLE/YELLOW	d	26	PURPLE/RED	BUTTON LIGHT
GROUND	BLACK	e	27	BLACK	GROUND
GROUND	BLACK	f	28	BLACK	GROUND

* "COCKTAIL MODE" ONLY.

POWER SUPPLY

JAMMA CONNECTOR		
5 VDC @ 2 AMPS	3, 4, C, D	+5 VOLTS
-5 VDC @ 1 AMP.	5, E	-5 VOLTS
12 VDC @ 2 AMPS	6, F	+12 VOLTS
GROUND	1, 2, 27, 28	GROUND
	A, B, E, F	GROUND

ON/OFF SWITCH

FUSE

3 AMP. SLO-BLO

MOV

EMI FILTER

A.C.

A.C.

110 vac

POWER LINE GROUND AND FRAME GROUND
MUST CONNECT TO A GOOD EARTH GROUND
TO REDUCE STATIC EFFECTS

POWER SUPPLY GROUND MUST CONNECT TO FRAME GROUND

#44 BULBS

COIN DOOR LAMPS

COIN COUNTER #1 #2

COIN SWITCHES

4 OR 8 OHM SPEAKER

GROUND

MONITOR

RGB COLOR

RED
GREEN
BLUE

HORIZONTAL   - SYNC

VERTICAL   VIDEO GROUND

OR

TABLE

PLAYER #1
PLAYER #2

TEST

SERVICE

GROUND

PLAYER #1 LAMP

PLAYER #2 LAMP

JAMMA CONNECTOR	
8	COIN COUNTER #1
J	COIN COUNTER #2
16	COIN INPUT #1
T	COIN INPUT #2
L	AUDIO -
10	AUDIO +
12	VIDEO RED
N	VIDEO GREEN
13	VIDEO BLUE
P	COMPOSITE SYNC (-)
14	VIDEO GROUND
17	PLAYER #1
26	LAMP PLAYER #1
U	PLAYER #2
D	LAMP PLAYER #2
15	TEST SWITCH
R	SERVICE SWITCH
25	TRACK BALL LED
18	TRACK BALL #1 XA
19	TRACK BALL #1 XB
20	TRACK BALL #1 YA
21	TRACK BALL #1 YB
V	TRACK BALL #2 XA
W	TRACK BALL #2 XB
X	TRACK BALL #2 YA
Y	TRACK BALL #2 YB
C	TRACK BALL #2 LED
11	VOLUME POT.
M	AUDIO GROUND

ADD ON BOARD

	LED		
3	XA	VIOLET
4	XB	BLUE
5	YA	GREEN
6	YB	YELLOW

TRACK BALL #1

1
2 +5 VDC

TRACK BALL #2

3	XA	VIOLET
4	XB	BLUE
5	YA	GREEN
6	YB	YELLOW

1
2 +5 VDC

ADD ON BOARD   LED

25K

VOLUME CONTROL

TICKET DISPENSER

HOLE DETECT	1
GROUND	2
MOTOR ENABLE	3
+12 VDC	4

JP1 TICKET CONNECTOR

1	HOLE DETECT
2	GROUND
3	MOTOR ENABLE
4	+12 VDC

AMERI CORPORATION

Title: DARTS WIRING DIAGRAM

Size: B   Document Number   REV

Date: November 15, 1989   Sheet 1 of 1

INSTALLATION
ELECTRICAL (CONT.)

QUALITY BY DESIGN

WE STRONGLY URGE YOU TO REPLACE YOUR EXISTING D.C. HARNESS WITH THE ONE WE HAVE SUPPLIED FOR THREE MAIN REASONS:
(NOTE: LEAVE THE A.C.-110 VOLT HARNESS INTACT)

1: OUR HARNESS IS "FULLY LOADED"
NO "UN-NEEDED" WIRES ARE MISSING OR CUT SHORT. IF YOU WISH TO CONVERT THIS CABINET AGAIN ALL 54 WIRES (56 LESS THE 2 KEY SLOTS) ARE THERE.

2: FAST INSTALLATION
YOU WILL FIND THIS TO BE THE FASTEST INSTALLING HARNESS YOU'VE EVER USED. ALL MAIN CONTROLS, POWER SUPPLY AND SERVICE CONTROL TERMINALS ARE EITHER PRE-SOLDERED AND MOUNTED OR HAVE "QUICK CONNECTS" OR MULTI-PIN SNAP-ON CONNECTORS. THE HARNESS IS PRE-BUNDLED FOR YOUR CONVENIENCE WHEN INSTALLING AMERI DARTS.

3: UNIQUE COLOR CODING
A: NO TWO COLOR COMBINATIONS ARE USED FOR MORE THAN ONE DESIGNATED PURPOSE. (THE FEW PENNIES WE WOULD HAVE SAVED IS NOT WORTH THE POSSIBILITY OF YOU DAMAGING YOUR EQUIPMENT).

B: THE BASE COLORS ARE CONSISTENT IN THEIR GENERAL PURPOSE PER THE UNIVERSAL 56-PIN JAMMA EDGE CONNECTOR.

BASE COLORS:

YELLOW	(WITH COLORED STRIPES)	PLAYER 1 CONTROLS
ORANGE	(WITH COLORED STRIPES)	PLAYER 2 CONTROLS
WHITE	(SOLID & WITH COLORED STRIPES)	MONITOR
BROWN	(SOLID & WITH COLORED STRIPES)	SPEAKERS
BLUE	(WITH COLORED STRIPES)	COIN DOOR
GREEN	(WITH COLORED STRIPES)	OPERATOR CONTROLS
PURPLE	(WITH COLORED STRIPES)	NON-SPECIFIED BY JAMMA

POWER FEEDS:
(NOTE THAT VIDEO GROUND AND SPEAKER GROUND HAVE A BLACK STRIPE FOR CONSISTENCY. HOWEVER,THESE SHOULD NOT BE TIED IN DIRECTLY TO THE FIELD OR EARTH GROUND).

SOLID BLACK	GROUND
SOLID RED	+ 5 VOLTS
SOLID GREY	– 5 VOLTS
SOLID YELLOW	+12 VOLTS

FOR YOUR CONVENIENCE:
WE HAVE INCLUDED AN EXTRA COPY OF THE AMERI DARTS WIRING HARNESS PIN-OUT CHART FOR YOU TO ATTACH TO THE INSIDE OF YOUR CABINET. ON THE BACK OF THIS SHEET YOU WILL FIND A COPY OF THE JAMMA STANDARD SPECIFICATIONS FOR EASY CROSS REFERENCE ON FUTURE GAMES.

> **READING THE SECTION ABOVE** SHOULD GIVE YOU A BASIC UNDERSTANDING OF OUR WIRING AND WILL THEREFORE SPEED-UP YOUR INSTALLATION TIME.

INSTALLATION
ELECTRICAL (CONT.)

1.SAFETY
VERIFY THAT NO BUILT-IN CABINET SAFETY FEATURES HAVE BEEN BY-PASSED OR REMOVED. (e.g. INTERLOCK SWITCHES, ISOLATION TRANSFORMERS,GROUNDING STRAP THROUGHOUT THE GAME–MONITOR/CONTROL PANEL/etc., 3-PRONG PLUG–CHECK CONTINUITY FROM 3rd PRONG TO VARIOUS GROUND POINTS IN THE GAME,FUSES,etc.,etc.) IF ONE OF THESE FEATURES IS MISSING,OR NOT WORKING PROPERLY, BE CERTAIN TO INSTALL NEW PARTS OR CORRECT THE PROBLEM. IF YOU HAVE ANY DOUBTS OR QUESTIONS, CONTACT YOUR DISTRIBUTOR'S TECHNICIANS FOR ASSISTANCE.

2.MOUNT THE PCB
ON THE SIDE OF YOUR CABINET USING THE PCB LEGS AND SCREWS PROVIDED. **NOTE:** POSITION THE PCB, SO THAT LIQUID SPILLS WILL NOT DRIP ON IT THROUGH ANY JOINTS OR CRACKS IN THE CABINET AND THAT STRAY COINS DO NOT LAND ON IT.

3. UN-WRAP THE WIRING HARNESS
AND LAY IT OUT IN FRONT OF YOU

4.NON-COCKTAIL
IF YOU ARE CONVERTING A ONE CONTROL PANEL TYPE CABINET TAKE THE **"CONTROL PLAYER 2"** BUNDLE (MOSTLY ORANGE) COIL IT UP AND TIE-WRAP IT WITH THE WIRE WRAPS PROVIDED. IF YOU ARE CONVERTING A COCKTAIL CABINET OMIT THIS STEP.

5. POWER
CONNECT THE **"POWER"** BUNDLE TO YOUR POWER SUPPLY. DOUBLE CHECK YOUR CONNECTIONS. (RED) +5 VOLTS   (GREY) –5 VOLTS   (YELLOW) +12 VOLTS

6. VIDEO
CONNECT THE **"VIDEO"** BUNDLE TO YOUIR MONITOR. DOUBLE CHECK YOUR CONNECTIONS.

VIDEO RED (WHITE/RED)   VIDEO GREEN (WHITE/GREEN)   VIDEO BLUE (WHITE/BLUE)

VIDEO GROUND (WHITE/BLACK)   VIDEO SYNC (WHITE)

7. COIN DOOR/OPERATOR CONTROLS
      A: RUN THE **"COIN DOOR"** BUNDLE TO THE COIN DOOR.
      B: MOUNT THE PRE-ASSEMBLED OPERATOR CONTROL PANEL–SERVICE SWITCH, TEST SWITCH
        AND VOLUME CONTROL, JUST INSIDE THE COIN DOOR.
      C: CONNECT THE REMAINING WIRES AS PER OUR BLOCK DIAGRAM.
        COIN SWITCHES: BLACK (GROUND) AND BLUE/RED OR BLUE/WHITE
        COIN DOOR LIGHTS: GREY (–5 VOLTS) AND BLACK (GROUND)
        COIN COUNTERS: YELLOW (+12 VOLTS) AND BLUE/ORANGE OR BLUE/YELLOW
        USE A DIODE ACROSS EACH COIN COUNTER. (NOTE: COIN COUNT IS AUTOMATICALLY
        TABULATED ON SCREEN WITH NO SPECIAL HOOK-UPS).

8. SPEAKER
RUN THE **"SPEAKER"** BUNDLE UP TO THE SPEAKER. SOLID BROWN IS POSITIVE (MARKED WITH A + SIGN OR A RED DOT ON THE SPEAKER). BROWN/BLACK IS THE SPEAKER NEGATIVE (NOT EARTH GROUND).

INSTALLATION
ELECTRICAL (CONT.)

9. CONTROL PANEL CONNECTIONS
RUN THE "**CONTROL PANEL**" BUNDLE (MOSTLY YELLOW) UP TO YOUR CONTROL PANEL

    A: CONNECT THE 6-PIN PLUG TO THE TRACKBALL

        NOTE: IF YOU DO NOT USE OUR HARNESS MAKE CERTAIN THAT THE TRACKBALL IS WIRED
        EXACTLY AS SPECIFIED. INCORRECT WIRING MAY SEEM TO WORK BUT GAME PLAYABILITY
        WILL BE GREATLY HINDERED.

    B: SNAP ON THE "**PLAYER 1**" BUTTON WIRE (YELLOW/BLACK) AND GROUND WIRE (BLACK)
        TO THE BUTTON MICRO-SWITCH

    C: SNAP ON THE "**5 VOLTS**" WIRE TO THE LED BOARD AND BUTTON LIGHT.

    D: SNAP ON THE "**GROUND LIGHT**" WIRE RETURNS

     TRACKBALL LED (PURPLE/GREEN)

     BUTTON LIGHT (PURPLE/RED)

     NOTE: POLARITY MUST BE CORRECT ON LED. IF IT DOES NOT LIGHT DURING GAME PLAY
     SIMPLY SWITCH THE 5 VOLT AND LIGHT GROUND POSITIONS.

    COCKTAIL (TWO CONTROL PANELS)

        RUN THE CONTROL "**PLAYER 2**" BUNDLE TO THE SECOND CONTROL PANEL AND HOOK-UP
        USING THE WIRING DIAGRAM. (USING PLAYER 1 FOR REFERENCE WILL HELP SINCE THE SAME
        FUNCTIONS ARE SIDE BY SIDE ON THE EDGE CONNECTOR) AND THE STRIPES MATCH ON
        THE P1 & P2 CONTROLS..

     TRACKBALL LED (PURPLE/GREEN)

     BUTTON LIGHT (PURPLE/YELLOW)

     NOTE: IF PLAYER 2 CONTROLS CAUSE THE DART TO HOOK RIGHT OR LEFT, THAN THE
     WIRING ON TRACKBALL HAS BEEN SCRAMBLED RE-CHECK AND WIRE TO MATCH PLAYER 1.

    TRACKBALL WIRING:

PLAYER 1		PLAYER 2	
PIN	TRACKBALL WIRE COLOR	PIN	TRACKBALL WIRE COLOR
18	VIOLET	V	VIOLET
19	BLUE	W	BLUE
20	GREEN	X	GREEN
21	YELLOW	Y	YELLOW

10.DOUBLE CHECK:
YOUR WIRING. MAKE CERTAIN THAT NO UNUSED WIRE ENDS ARE BARE OR ARE IN CONTACT WITH
ANYTHING INSIDE THE CABINET. TURN THE GAME ON AND CHECK THE "SHOW INPUTS" SCREEN
(UNDER **SET UP CABINET** IN THE MAIN MENU) BY PUSHING THE TEST BUTTON TO GET INTO THE
"TEST SCREENS" **NOTE:** IF IT DOESN'T WORK-BEAT IT WITH A HAMMER.(JUST CHECKING TO SEE IF
YOU'RE READING THE MANUAL).

> **NOTE: TRACKBALL AND SCREEN ORIENTATION** IF MOVEMENT OF DART DOES NOT CORRES-
> POND DIRECTLY TO THE TRACKBALL AND/OR THE SCREEN IS NOT RIGHT SIDE UP -- SEE OPERATOR
> SETTINGS "**SET ORIENTATION**" AND FOLLOW DIRECTIONS.
> ### TRACKBALL MUST BE SET FOR -- UP/DOWN & LEFT/RIGHT

11.TIME IS MONEY
GO BACK AND NEATLY WRAP AND SECURE WIRES TO CABINET FOR EASE OF SERVICING AND CON-
VERTING IN THE FUTURE. A FEW EXTRA MINUTES NOW MAY SAVE YOU HOURS IN THE FUTURE.

INSTALLATION
ELECTRICAL (CONT.)

TROUBLE SHOOTING

PROBLEM	SOLUTION
1: DART HOOKS LEFT OR RIGHT	TRACKBALL WIRING IS SCRAMBLED. REFER TO THE WIRING CHART ON PAGE 14 OF MANUAL.
2. NO SOUND	**A.** CHECK VOLUME CONTROL. **B.** CHECK -5 VOLTS AT PCB. **C.** CHECK +12 VOLTS AT PCB. NOTE: BE CERTAIN BOTH SPEAKER WIRES ARE CONNECTED FROM EDGE CONNECTOR TO SPEAKER. CAUTION- DO NOT CONNECT GROUND TO SPEAKER.
DISTORTED SOUND	CHECK SPEAKER. IT MAY NEED TO BE REPLACED. USE A QUALITY SPEAKER.
3. I/O PROBLEM	**A.** CHECK THAT EDGE CONNECTOR IS PROPERLY SEATED. **B.** BE CERTAIN THAT COIN COUNTER IS NOT CONNECTED TO COIN 1 OR COIN 2 OUTPUTS.
4. VIDEO GARBAGE, NO SCREEN OR CONSTANT RESET	**A.** CHECK ALL VOLTAGES AT PCB. **B.** VERIFY THAT ALL CHIPS ARE PROPERLY SEATED ON PCB. CAUTION- BE SURE TO SUPPORT THE BACK OF PCB WHEN PRESSING DOWN ON CHIPS AS TO NOT CRACK BOARD.

SECTION 3:OPERATOR ADJUSTABLE SETTINGS

TEST SWITCH -PRESSING THE TEST SWITCH WILL BRING (ON SCREEN) ALL
GAME,OPERATOR SETTINGS AND STATISTICS UP (IN THE FORM OF MENUS)
FOR EASY SET- UP. THE LISTS THAT APPEAR ON SCREEN WILL BE IN WHITE
TYPE AND ARE HIGHLIGHTED IN RED AS YOU MOVE THE TRACKBALL (THIS
MAKES YOUR SELECTION). SIMPLY SELECT THE SETTINGS YOU WISH TO
CHANGE BY MOVING THE TRACKBALL- PUSH THE BUTTON TO CONFIRM.
THE MENUS WILL DIRECT YOU INTO ALL SETTINGS. (ALL SCREENS AUTO-
MATICALLY RETURN TO EXIT FOR EASE AND SPEED OF MOVING THROUGH
THE MENUS ONCE YOU HAVE MADE A SELECTION.)

MAIN MENU:

MAIN MENU

SET UP CABINET
DIAGNOSTICS
OPERATOR SETTINGS
SHOW STATISTICS
RESET ALL-TIME LISTS
EXIT
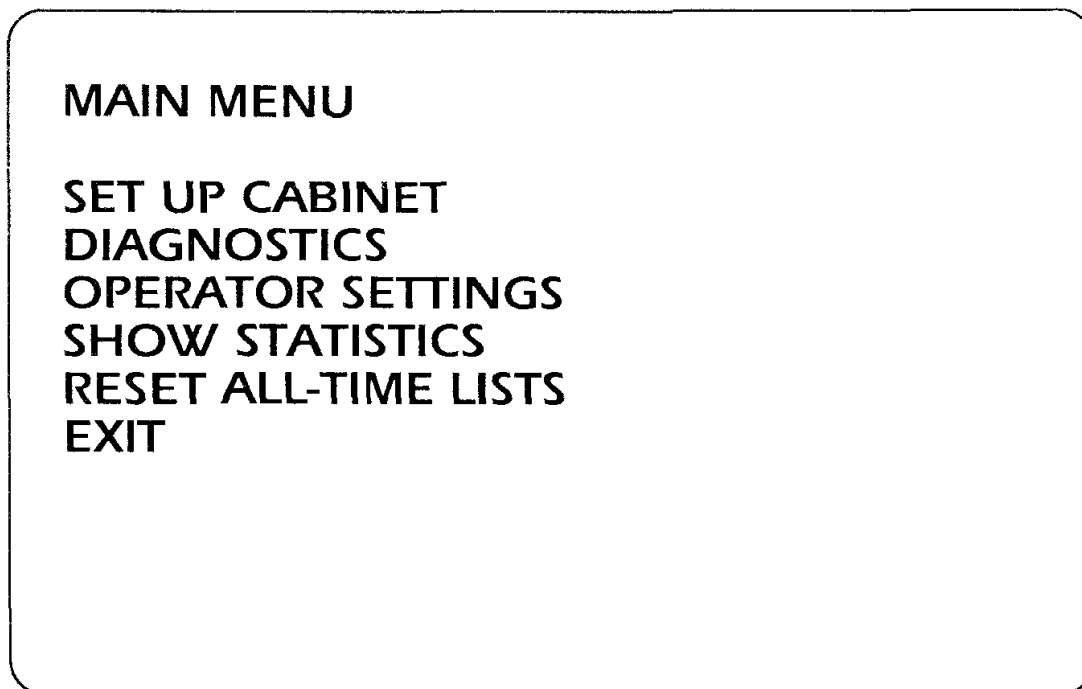
THE REST OF THIS SECTION WILL BE A LISTING ,IN ORDER,OF WHAT
EACH SELECTION OF THE MAIN MENU CONTAINS.

OPERATOR ADJUSTABLE SETTINGS

MAIN MENU

SET UP CABINET
- CABINET TYPE
- SET ORIENTATION (THIS FEATURE ALLOWS YOU TO SET THE GAME VERTICALLY OR HORIZONTALLY IN ANY OF 4 DIRECTIONS.)
  - SCREEN
  - TRACKBALL
- CHOOSE TRACKBALL TYPE
- SHOW INPUTS
- COLOR BARS
- SCREEN SIZE
- ATTRACT MODE SOUNDS (YES/NO)
- EXIT

DIAGNOSTICS
- DISPENSE TICKETS
- COIN COUNT 1
- COIN COUNT 2
- EXIT

OPERATOR SETTINGS
- SET CREDITS
- ADJUST GAME PLAY SETTINGS
  - SET DIFFICULTY
  - SET ROUNDS (PLAYED PER GAME)
- ENABLE/DISABLE GAMES (ON OFF)
- SET TICKET LEVELS (FOR REDEMPTION)
  - FLASH (BY FLASHES)
  - FLASH (BY POINTS)
  - SECTOR SHOOT-OUT (BY POINTS)
  - 301 (BY DARTS OUT)
  - HIGH SCORE (BY POINTS)
  - CRICKET (BY DARTS OUT)
- RESTORE FACTORY SETTINGS (YES NO)
  (A LIST OF FACTORY SETTINGS APPEAR ON PAGE 19)
- EXIT

(CONTINUED)

OPERATOR ADJUSTABLE SETTINGS

|MAIN MENU|
(CONTINUED)

SHOW STATISTICS ──

────── **LIST OF THE 5 GAMES**

(SELECTING A GAME CALLS UP A DISPLAY OF HOW MANY
1-4 PLAYER GAMES HAVE BEEN PLAYED, THE TOTAL PLAY
TIME FOR EACH LINE AND THE AVERAGE PLAY TIME. YOU
CAN CHOOSE TO RESET ALL STATISTICS FOR THE GAME
BEING DISPLAYED).

──── **TOTALS**

(DISPLAYS INTERVAL & CUMULATIVE VALUES FOR POWER
TIME, PLAY TIME, MECH 1 COINS, MECH 2 COINS. THE
INTERVAL SETTINGS CAN BE RESET. CUMULATIVE VALUES
ARE NON-RESETTABLE).

────── **RESET ALL**

(EQUIVALENT TO SELECTING RESET FOR EACH OF THE 5
GAMES SCREENS AND FOR THE TOTALS SCREENS).

YES
NO
EXIT

RESET ALL-TIME LISTS ──── YES
                          NO
                          EXIT

          EXIT
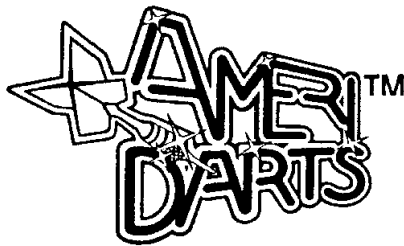
FACTORY SETTINGS

CABINET TYPE		UPRIGHT
ORIENTATION		HORIZONTAL
CREDITS	FLASH	1 PER PLAY
	SECTOR SHOOT-OUT	1 PER PLAY
	301	1 PER PLAY
	HIGH SCORE	1 PER PLAY
	CRICKET	2 PER PLAY
GAME PLAY		
A.DIFFICULTY		MEDIUM
B.ROUNDS	FLASH	7
	SECTOR SHOOT-OUT	7
	301	7
	HIGH SCORE	7
	CRICKET	14
ENABLE/DISABLE GAMES		ALL GAMES ON
ATTRACT MODE SOUNDS		ON
TICKET LEVELS		TICKETS OFF

TICKET INFORMATION
BEST POSSIBLE SCORES

FLASH	6000 PER ROUND OR 3 FLASHES
SECTOR SHOOT-OUT PER ROUNDS	(1) 3750
	(2) 5250
	(3) 7500
	(4) 8750
	(5) 10,500
	(6) 12,500
	(7) 14,000
	(8) 16,000
	(9) 19,500
	(10) 22,000
301	6 OUT
HIGH SCORE	180 PER ROUND
CRICKET	8 OUT

GAME PLAY INSTRUCTIONS

FLASH

FLASH IS A GAME OF TIMING AND ACCURACY. WHEN YOU HIT THE BULLSEYE, YOU RECEIVE THE NUMBER OF POINTS DISPLAYED AT THAT TIME ON THE FLASH BAR AT THE TOP OF THE SCREEN. HITTING THE INNER BULLSEYE DOUBLES THE NUMBER OF POINTS AWARDED. HITTING ANYWHERE ELSE ON THE BOARD EARNS ORDINARY DART POINTS.

SECTOR SHOOT-OUT

TRY TO HIT THE LIT-UP TARGET SECTOR SELECTED FOR EACH DART. BONUS POINTS ARE AWARDED IF THE TARGET SECTOR IS HIT WHILE IT REMAINS LIGHTED. HITTING AN UNLIGHTED SECTOR EARNS ORDINARY DART POINTS. IN A MULTIPLE PLAYER GAME EACH PLAYER WILL BE OFFERED THE SAME TARGETS BUT NOT IN THE SAME ORDER.

301

IN 301 EACH PLAYER THROWS 3 DARTS PER ROUND, BEGINNING WITH 301 POINTS, ATTEMPTS TO REDUCE HIS SCORE TO EXACTLY ZERO WITH AS FEW DARTS AS POSSIBLE. IF A PLAYER HITS MORE POINTS THAN ARE NEEDED TO GET DOWN TO ZERO, HE IS SAID TO HAVE "BUSTED" AND HIS SCORE RETURNS TO ITS VALUE AT THE START OF THE ROUND.

HIGH SCORE

IN HIGH SCORE EACH PLAYER THROWS 3 DARTS PER ROUND. THE HIGHEST TOTAL SCORE AT THE END OF THE GAME WINS.

CRICKET

CRICKET IS WON BY THE FIRST PLAYER WHO CLOSES OUT IN ANY ORDER INNINGS 15 THROUGH 20, THEN THE BULLSEYE AND HAS THE TOP SCORE. A PLAYER CLOSES OUT AN INNING BY SCORING 3 MARKS IN THAT NUMBER.

INNER & OUTER SINGLE RINGS	1 MARK
DOUBLE RINGS	2 MARKS
TRIPLE RINGS	3 MARKS
OUTER BULL	1 BULL MARK
INNER BULL	2 BULL MARKS

AFTER A PLAYER CLOSES OUT AN INNING HE CAN SCORE ORDINARY DART POINTS IN THAT NUMBER UNTIL ALL HIS OPPONENTS HAVE CLOSED THAT INNING.

F.C.C. WARNING

THE PC BOARD SUPPLIED WITH YOUR CABINET MUST BE UTILIZED AND TERMINATED TO GROUND AT THE TIME OF INSTALLATION.THE "FOIL LINED" CARDBOARD TYPES ARE NOT OF SUFFICIENT QUALITY. YOU MAY PURCHASE A GOOD QUALITY CASE AT YOUR DISTRIB-UTOR'S PARTS COUNTER.

THIS IS TO AVOID RADIO FREQUENCY RADIATION AND COMPLY WITH THE LIMITS FOR A CLASS "A" COMPUTING DEVICE PURSUANT TO SUB-PART "J" OF PART 15 OF FCC RULES WHICH ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST INTERFERENCE WHEN OPERATING IN A COMMERCIAL ENVIRONMENT.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE INTERFER-ENCE IN WHICH CASE THE USER, AT HIS OWN EXPENSE, WILL BE REQUIRED TO TAKE WHATEVER MEASURES MAY BE REQUIRED TO CORRECT THE INTERFERENCE.

THE FCC WARNING STICKER INCLUDED IN THIS PACKAGE MUST BE DISPLAYED ON THE BACK OF YOUR CABINET.

AMERISM
CORPORATION

PLACE INSIDE CABINET FOR FUTURE REFERENCE
AMERI DARTS WIRING HARNESS PIN-OUT

SOLDER SIDE			COMPONENT SIDE		
FUNCTION	**WIRE COLOR**	**POSITION**		**WIRE COLOR**	**FUNCTION**
GROUND	BLACK	A	1	BLACK	GROUND
GROUND	BLACK	B	2	BLACK	GROUND
+5 VOLTS	RED	C	3	RED	+5 VOLTS
+5 VOLTS	RED	D	4	RED	+5 VOLTS
– 5 VOLTS	GREY	E	5	GREY	– 5 VOLTS
+12 VOLTS	YELLOW	F	6	YELLOW	+12 VOLTS
KEY		H	7		KEY
COIN COUNTER#2	BLUE/ORANGE	J	8	BLUE/YELLOW	COIN COUNTER#1
(NOT USED)	BLUE/BLACK	K	9	BLUE/GREEN	(NOT USED)
SPEAKER –	BROWN/BLACK	L	10	BROWN	SPEAKER +
VOLUME CNTRL.A	PURPLE/WHITE	M	11	PURPLE/BROWN	VOLUME CNTRL.B
VIDEO GREEN	WHITE/GREEN	N	12	WHITE/RED	VIDEO RED
VIDEO SYNC	WHITE	P	13	WHITE/BLUE	VIDEO BLUE
SERVICE SWITCH	GREEN/ORANGE	R	14	WHITE/BLACK	VIDEO GROUND
(NOT USED)	GREEN/WHITE	S	15	GREEN/RED	TEST SWITCH
COIN SWITCH 2	BLUE/WHITE	T	16	BLUE/RED	COIN SWITCH 1
PLYR #2 BUTTON	ORANGE/BLACK	U	17	YELLOW/BLACK	PLYR #1 BUTTON
*#2 Y(a)-Trackball	ORANGE/BLUE	V	18	YELLOW BLUE	#1 Y(a)-Trackball
*#2 Y(b)-Trackball	ORANGE/RED	W	19	YELLOW/RED	#1 Y(b)-Trackball
*#2 X(a)-Trackball	ORANGE/GREEN	X	20	YELLOW/GREEN	#1 X(a)-Trackball
*#2 X(b)-Trackball	ORANGE/PURPLE	Y	21	YELLOW/PURPLE	#1 X(b)-Trackball
(NOT USED)	ORANGE/BROWN	Z	22	YELLOW/BROWN	(NOT USED)
(NOT USED)	ORANGE/WHITE	a	23	YELLOW/WHITE	(NOT USED)
(NOT USED)	ORANGE/YELLOW	b	24	YELLOW/ORANGE	(NOT USED)
TRACKBALL LIGHT	PURPLE/ORANGE	c	25	PURPLE/GREEN	TRACKBALL LIGHT
BUTTON LIGHT	PURPLE/YELLOW	d	26	PURPLE/RED	BUTTON LIGHT
GROUND	BLACK	e	27	BLACK	GROUND
GROUND	BLACK	f	28	BLACK	GROUND

* "COCKTAIL MODE" ONLY.

FOR CROSS REFERENCE ON FUTURE GAMES
THE UNIVERSAL AMERI WIRING HARNESS

AMERI COLORS	JAMMA STANDARD SOLDER SIDE			PARTS SIDE	AMERI COLORS
BLACK	GROUND	A	1	GROUND	BLACK
BLACK	GROUND	B	2	GROUND	BLACK
RED	+5 VOLTS	C	3	+5 VOLTS	RED
RED	+5 VOLTS	D	4	+5 VOLTS	RED
GREY	-5 VOLTS	E	5	-5 VOLTS	GREY
YELLOW	+12 VOLTS	F	6	+12 VOLTS	YELLOW
	KEY	H	7	KEY	
BLUE/ORANGE	COIN COUNTER2	J	8	COIN COUNTER1	BLUE/YELLOW
BLUE/BLACK	COIN LOCK OUT2	K	9	COIN LOCK OUT1	BLUE/GREEN
BROWN/BLACK	SPEAKER NEG.	L	10	SPEAKER POS.	BROWN
PURPLE/WHITE	N.C.	M	11	N.C.	PURPLE/BROWN
WHITE/GREEN	VIDEO GREEN	N	12	VIDEO RED	WHITE/RED
WHITE	VIDEO SYNC	P	13	VIDEO BLUE	WHITE/BLUE
GREEN/ORANGE	SERVICE SWITCH	R	14	VIDEO GROUND	WHITE/BLACK
GREEN/WHITE	TILT SWITCH	S	15	TEST SWITCH	GREEN/RED
BLUE/WHITE	COIN SW 2	T	16	COIN SW 1	BLUE/RED
ORANGE/BLACK	START SW 2	U	17	START SW 1	YELLOW/BLACK
ORANGE/BLUE	PLAYER 2 UP	V	18	PLAYER 1 UP	YELLOW BLUE
ORANGE/RED	PLAYER 2 DOWN	W	19	PLAYER 1 DOWN	YELLOW/RED
ORANGE/GREEN	PLAYER 2 LEFT	X	20	PLAYER 1 LEFT	YELLOW/GREEN
ORANGE/PURPLE	PLAYER 2 RIGHT	Y	21	PLAYER 1 RIGHT	YELLOW/PURPLE
ORANGE/BROWN	PLAYER 2 PUSH 1	Z	22	PLAYER 1 PUSH 1	YELLOW/BROWN
ORANGE/WHITE	PLAYER 2 PUSH 2	a	23	PLAYER 1 PUSH 2	YELLOW/WHITE
ORANGE/YELLOW	PLAYER 2 PUSH 3	b	24	PLAYER 1 PUSH 3	YELLOW/ORANGE
PURPLE/ORANGE	N.C.	c	25	N.C.	PURPLE/GREEN
PURPLE/YELLOW	N.C.	d	26	N.C.	PURPLE/RED
BLACK	GROUND	e	27	GROUND	BLACK
BLACK	GROUND	f	28	GROUND	BLACK

AMERI™ CORPORATION
WARRANTY

COMPANY NAME _____

YOUR NAME _____ TITLE _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE (_____) _____

NAME OF GAME _____ SERIAL# _2 /37_

DISTRIBUTOR WHERE PURCHASED _____

INSTALLED BY: (CHECK ONE) ☐ SELF   ☐ EMPLOYEE   ☐ DISTRIBUTOR

☐ OTHER _____

DATE PURCHASED _____ DATE INSTALLED _____

-------------------------------------FOLD-------------------------------------

INCLUDE YOUR COMMENTS PLEASE

* PRICE OF KIT _____

* INSTALLATION OF KIT _____
_____
_____

* OVERALL QUALITY _____
_____
_____

* COMMENTS/ SUGGESTIONS _____
_____
_____
_____
_____
_____

USE BACK SIDE FOR ADDITIONAL COMMENTS

AMERI™

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