

PAC-LAND U.R. GENERIC FIELD CONVERSION KIT

Bally

MIDWAY MFG. CO.

10601 W Belmont Avenue
Franklin Park, Illinois 60131
U S A



Phone (312) 451-9200 Cable Address MIDCO Telex No.: 72-1596

M051-00C95-A010

WARNING

THIS GAME MUST BE GROUNDED. FAILURE TO DO SO MAY RESULT IN DESTRUCTION TO ELECTRONIC COMPONENTS.

WARNING: This equipment generates, uses, and can radiate radio frequency energy and if not used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a CLASS A computing device pursuant to SUBPART J of PART 15 of FCC RULES, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

ELECTRICAL BULLETIN: FOR ALL APPARATUS COVERED BY THE CANADIAN STANDARDS ASSOCIATION (CSA) STANDARD C22.2 NO. 1, WHICH EMPLOYS A SUPPLY CORD TERMINATED WITH A POLARIZED 2-PRONG ATTACHMENT PLUG.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

Bally MIDWAY

Invites You To Use

OUR TOLL FREE NUMBERS FOR SERVICE INFORMATION CONCERNING THIS GAME, OR ANY OTHER BALLY MIDWAY GAME YOU NOW HAVE ON LOCATION.

CALL US FOR PROMPT, COURTEOUS ANSWERS TO YOUR PROBLEMS.

VIDEO

PINBALL

Continental U.S. 1-800-323-7182

Bally MIDWAY

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W A R N I N G

The parts contained in this field conversion kit must be installed without deviation from the instructions contained in this manual and kit. Failure to follow these instructions in every detail may result in the creation of illegal interference to radio and TV reception.

BALLY MIDWAY MFG. CO. has verified that this field conversion kit, when installed in the games(s) specified in this manual, complies with the requirements in Part 15 of the FCC rules for a Class A computing device. Operation of this equipment in a residential area may cause unacceptable interference to radio and TV reception, requiring the operator to take whatever steps are necessary to correct the interference.

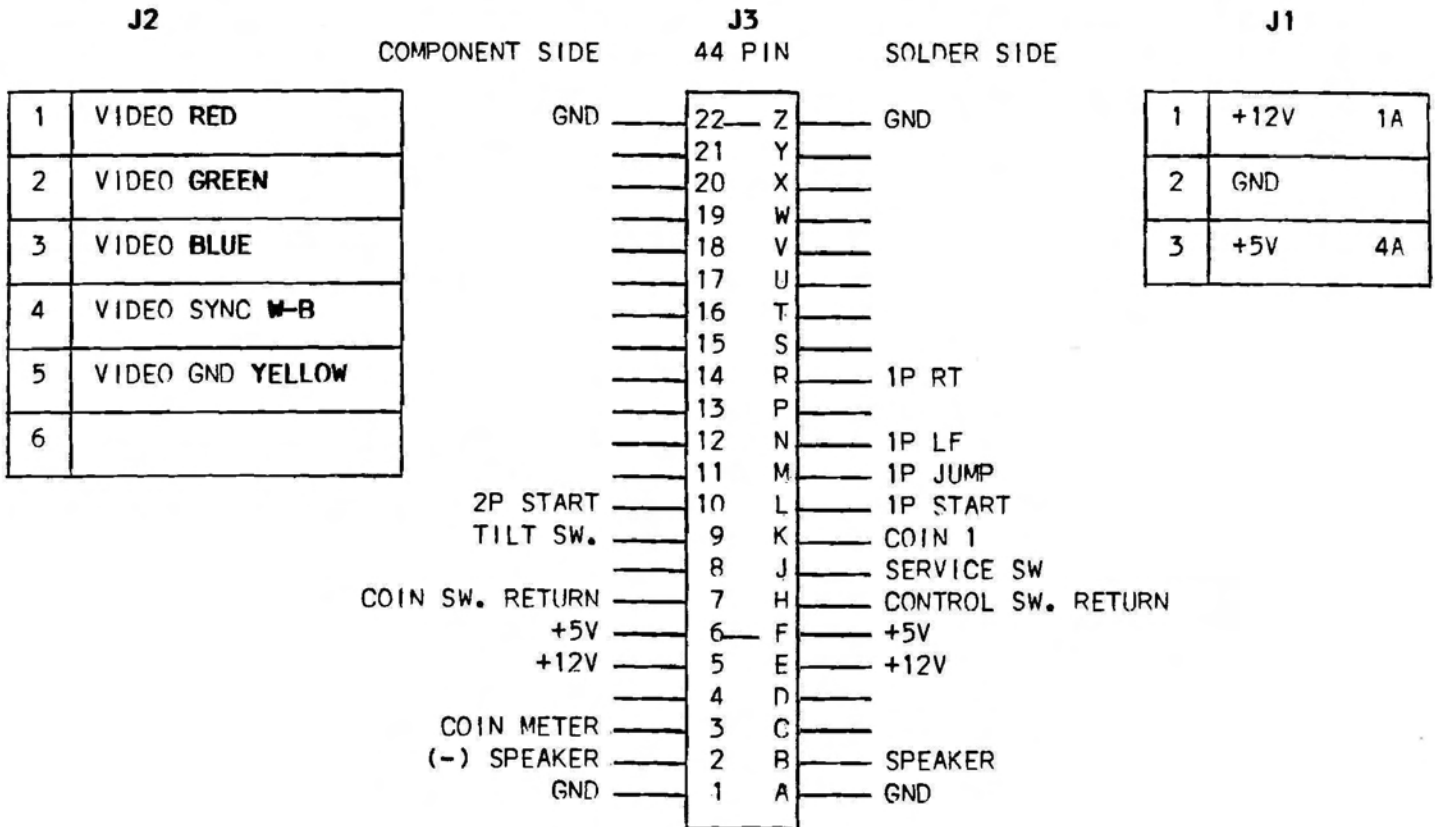
BALLY MIDWAY MFG. CO. will not be responsible for incomplete or improper conversions, or installation in a game for which this field conversion kit is not intended. If this field conversion kit is installed in a game that is not specified in this manual or in a previously converted game, the operator is required to take whatever steps are necessary to insure compliance with the requirements in Part 15, Subpart J, of the FCC rules for a Class A computing device.

PAC-LAND GENERIC CONVERSION KIT

M051-00C95-A010

Pin-out information for Pac-Land Logic P.C.B. is as follows:

PLUG TO VIDEO SIGNAL CABLE PLUG TO ADAPTOR INTERFACE CABLE PLUG TO GAME POWER CABLE



POWER SUPPLY VOLTAGES AND CURRENT SPECS.	
VOLTAGE	CURRENT
DC 5 VOLTS	4 AMPS
DC 12 VOLTS	1 AMP

Power supply information shown at right:

GAME USES 2 "RUN" PUSHBUTTONS AND 2 "JUMP" PUSHBUTTONS, 1 "SELECT 1 PLAYER GAME" PUSHBUTTON AND 1 "SELECT 2 PLAYER GAME" PUSHBUTTON.

MODIFY YOUR CONTROL PANEL AS NEEDED TO ACCEPT THE ABOVE CONTROLS;

INSTALL THE CONTROLS TO YOUR NEWLY MODIFIED CONTROL PANEL.

REPLACE YOUR GAMES OLD HEADER WITH THE NEW HEADER PROVIDED IN YOUR KIT. IF THE NEW HEADER IS OVERSIZED, DRAW A LINE AROUND IT USING YOUR OLD HEADER, AND CUT IT TO SIZE; TRIM IT FOR PROPER FIT IN YOUR GAME. IF THE NEW HEADER IS UNDERSIZED, MODIFY IT AS NEEDED.

REPLACE YOUR GAMES OLD LOGIC P.C.B.(S) AND MOUNTING HARDWARE WITH THE PAC-LAND LOGIC P.C.B. AND IT'S MOUNTING HARDWARE.

INSTALL THE NEW CARLE ASSEMBLIES AND ADD WHATEVER WIRING IS NECESSARY TO COMPLETE THE CARLING CONNECTIONS.

SECURE 2 NEW ADHESIVE-BACKED SIDE DECALS DIRECTLY TO OLD SIDE DECALS OF YOUR GAME.

**LIST OF PARTS
INCLUDED IN YOUR CONVERSION KIT
PACLAND GENERIC CONVERSION**

PART NO.	DESCRIPTION	QTY.
* AA64-00013-0000	CONTROL SHELF CABLE ASSY.	1
• AC94-00005-0000	VIDEO SIGNAL CABLE ASSY.	1
FORM-00041-8005	CUSTOMER REPLY POSTCARD	1
M051-00B64-R007	OPTION SWITCH SETTINGS TAG	1
M051-00C95-A001	GAME CONTROL TAG	1
0B64-00300-0000	PAC-LAND GAME CATALOG	1
• 0B64-00804-0001	PAC-LAND LOGIC BOARD	1
0C94-00900-00XF	HEADER	1
0R07-00905-0100	DECAL: RIGHT SIDE - GENERIC CONVERSION	1
0R07-00905-0200	DECAL: LEFT SIDE - GENERIC CONVERSION	1
* 0017-00032-0093	PUSHBUTTON SWITCH W/HOLDER	4
* 0017-00042-0299	SQUARE PUSHBUTTON - YEL/RED	4
* 0017-00103-0054	5/8 - 11 PAL NUT	4
• 0017-00101-0141	8 X 11 UNSLOTTED HEXWASHER SCREW	10
• 0017-00104-0037	WASHER	10
• 0624-00902-0300	P.C. SUPPORT BRACKET: 2-1/2in.	2
• 0624-00902-0500	P.C. SUPPORT BRACKET: 6-1/2in.	3

- * PARTS USED IN CONTROL PANEL MODIFICATION
- PARTS USED IN GAME LOGIC P.C.B. REPLACEMENT

**PAC-LAND GENERIC CONVERSION KIT
CONTROL PANEL MODIFICATION INSTRUCTIONS**

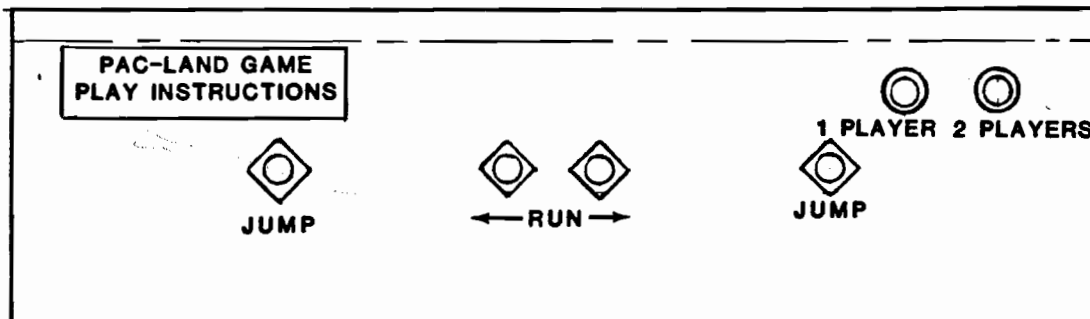
NOTE: This conversion kit provides all parts required for modification of your existing game's control panel except for: 1 PLAYER-START pushbutton assembly (and pushbutton holder w/switch), 2 PLAYER-START pushbutton assembly (and pushbutton holder w/switch) and GAME PLAY INSTRUCTIONS card (or label). Please refer to the parts list on the previous page.

1. Remove completely the existing control panel from your game cabinet.
2. Make the necessary modifications to the control panel so that the game controls and GAME PLAY INSTRUCTIONS card (or label) locations will be similar to what is illustrated below.

PLEASE NOTE: The illustration is for your reference and is suggested only.

3. Secure the parts from the conversion kit to your modified control panel (including the new cable assembly).
4. Reinstall the control panel to your game cabinet.

SUGGESTED MODIFIED CONTROL PANEL VIEW



It is suggested that the GAME PLAY INSTRUCTIONS card (or label) should read as follows:

PAC-LAND INSTRUCTIONS

Insert Coin(s)
Select 1 or 2 Player Game

Object Of Game

While avoiding Ghost Monsters and other obstacles, Maneuver Pac-Man to the door that leads beyond Pac-Land. Enter door to receive Magic Shoes. These shoes will aid Pac-Man as he returns home.

Controls:

Left Button-Use to move Pac-Man left.
Right Button-Use to move Pac-Man right.
Jump Button-Use to jump over obstacles.

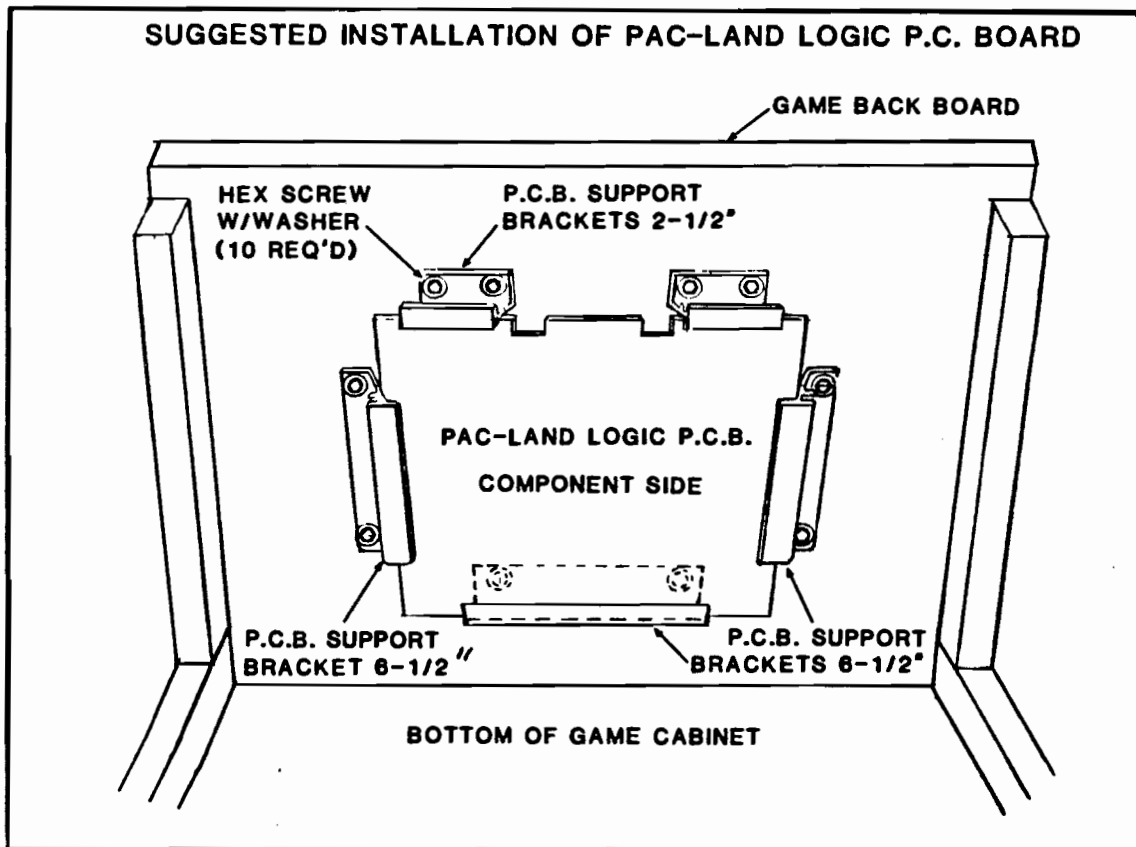
Hints:

Hit left or Right Button repeatedly to increase Pac-Man's speed.
Beware when the Pac-Timer runs out.

**PAC-LAND GENERIC CONVERSION KIT
GAME LOGIC P.C.B. CONVERSION INSTRUCTIONS**

NOTE: Please refer to the parts list on a previous page and also to the illustration below showing a suggested location in your game cabinet for the new Pac-Land logic P.C.B.

1. Remove all cabling connections to your game's logic P.C.B.(s) and then remove the P.C.B.(s) and all of it's mounting hardware.
2. Install new P.C.B. Support Brackets to your game cabinet location such that the new Pac-Land logic P.C.B. can slide into place along the edge guides.
3. Secure the rest of P.C.B. Support Brackets to your game location and connect the new cable assemblies to the Pac-Land Logic P.C.B.



P A C - L A N D

O P T I O N S W I T C H S E T T I N G S - D I P S W I T C H " A "

////////////////////////////////////SELF-TEST MODE////////////////////////////////////

* NORMAL OPERATION SELF-TEST ENGAGED	<u>SW#1</u> <u>SW#2</u> <u>SW#3</u> <u>SW#4</u> <u>SW#5</u> <u>SW#6</u> <u>SW#7</u> <u>SW#8</u>
	OFF ON

////////////////////////////////////NUMBER OF PACMEN PER GAME////////////////////////////////////

* 3 PACMEN 2 PACMEN 4 PACMEN 5 PACMEN	OFF OFF
	OFF ON
	ON OFF
	ON ON

////////////////////////////////////COIN SWITCH NUMBER 1////////////////////////////////////

* 1 COIN 1 CREDIT 1 COIN 2 CREDITS 2 COINS 1 CREDIT 3 COINS 1 CREDIT	OFF OFF
	OFF ON
	ON OFF
	ON ON

////////////////////////////////////ATTRACT MODE SOUND////////////////////////////////////

* SOUND IN ATTRACT MODE NO SOUND IN ATTRACT MODE	OFF ON
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////////////////////////////////////COIN SWITCH NUMBER 2////////////////////////////////////

* 1 COIN 1 CREDIT 1 COIN 2 CREDITS 2 COINS 1 CREDIT 3 COINS 1 CREDIT	OFF OFF
	OFF ON
	ON OFF
	ON ON

* INDICATES FACTORY RECOMMENDED SETTINGS	PART NO. M051-00B64-B007
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P A C - L A N D

O P T I O N S W I T C H S E T T I N G S - D I P S W I T C H "B"

////////////////////////////////////// EXTENDED POINTS //

VARIOUS OPTIONS			SW#1	SW#2	SW#3	SW#4	SW#5	SW#6	SW#7	SW#8
*	A		OFF	OFF	OFF					
	B		OFF	OFF	ON					
	C		OFF	ON	OFF					
	D		OFF	ON	ON					
	E		ON	OFF	OFF					
	F		ON	OFF	ON					
	G		ON	ON	OFF					
	H		ON	ON	ON					

////////////////////////////////////// DIFFICULTY LEVEL //

*	RANK	A	AVERAGE			OFF	OFF			
	RANK	B	EASY			OFF	ON			
	RANK	C	HARD			ON	OFF			
	RANK	D	VERY HARD			ON	ON			

////////////////////////////////////// GAME CONTINUITY //

*	NORMAL							OFF		
	RUNNING							ON		

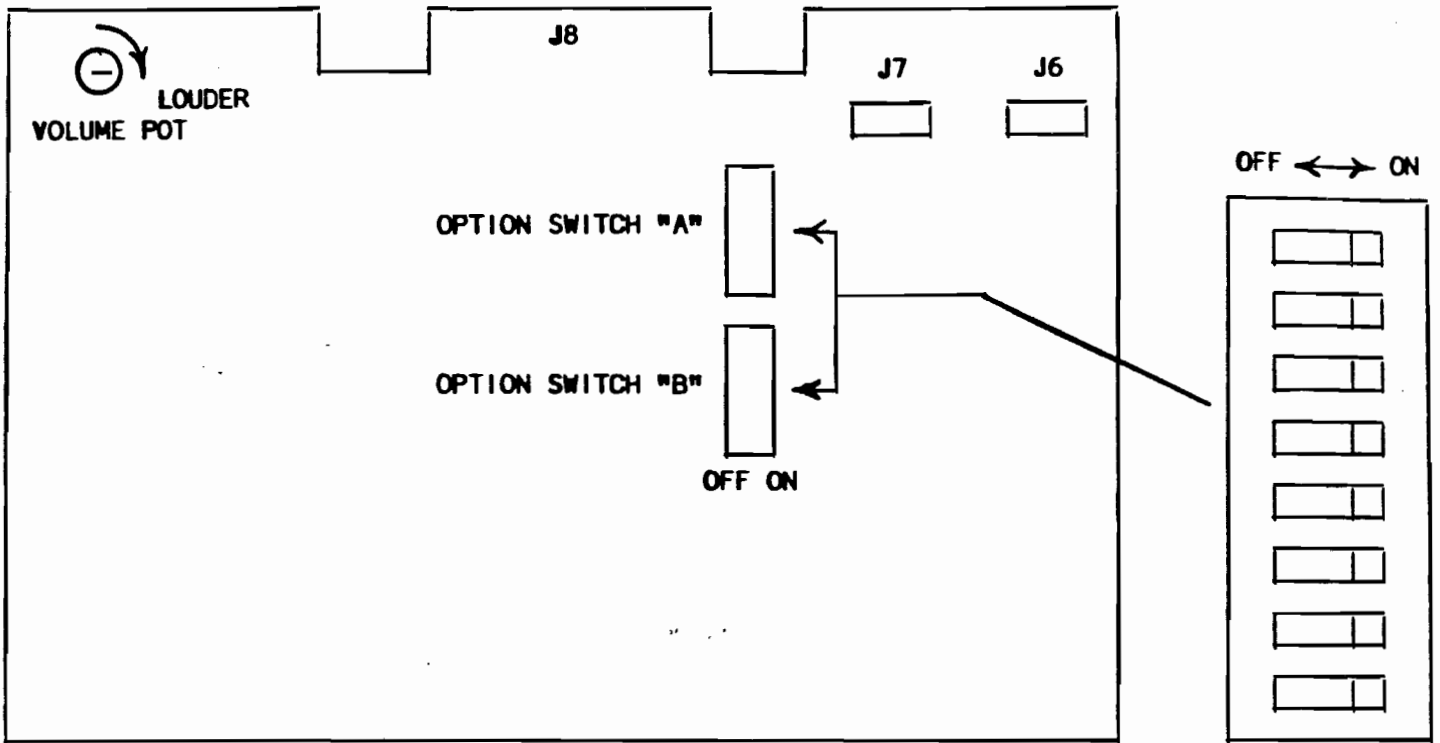
////////////////////////////////////// FREEZE VIDEO //

*	NORMAL							OFF		
	FREEZE							ON		

////////////////////////////////////// TRIP SELECT //

*	YES							OFF		
	NO							ON		

* INDICATES FACTORY RECOMMENDED SETTINGS	PART NO. M051-00B64-B007
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////////////////////////////////////// EXTENDED POINTS TABLE //

OPTION SWITCH SETTING	1ST EXTENSION AT:	2ND EXTENSION AT:	3RD EXTENSION AT:	4TH EXTENSION AT:	5TH EXTENSION AT:	6TH EXTENSION AT:
A	30,000	80,000	150,000	300,000	500,000	1,000,000
B	30,000	100,000	200,000	400,000	600,000	1,000,000
C	40,000	100,000	180,000	300,000	500,000	1,000,000
D	30,000	80,000	EVERY 100,000			
E	50,000	150,000	EVERY 200,000			
F	30,000	80,000	150,000			
G	40,000	100,000	200,000			
H	40,000					

DECAL INSTALLATION INSTRUCTIONS

I M P O R T A N T N O T E:

READ THE FOLLOWING INSTRUCTIONS THROUGH COMPLETELY AT LEAST ONCE **BEFORE** ATTEMPTING TO INSTALL THE DECAL(S) THEY CONCERN!!

THE DECAL(S) ARE COMPOSED OF THREE (3) PARTS: 1)A HEAVY WAXED BACKING SHEET WHICH COVERS THE STICKY SIDE OF THE DECAL, 2) THE DECAL ITSELF, AND 3)A THIN MASKING SHEET WHICH IS ON THE FRONT SIDE OF THE DECAL TO PROTECT IT AND TO AID IN ITS INSTALLATION.

******* TO INSTALL THE DECAL(S), PROCEED AS FOLLOWS: *******

1. **BE SURE** THE AREA WHERE YOU ARE GOING TO APPLY THE DECAL IS CLEAN AND FREE OF ALL DIRT, GREASE, AND GRIME.
2. USING ANY **SPRAY-ON GLASS CLEANER**, THOROUGHLY WET DOWN THE AREA WHERE YOU INTEND TO PUT THE DECAL.
3. REMOVE THE **HEAVY WAXED BACKING SHEET** FROM THE DECAL BY POSITIONING IT FACE UP ON A FLAT SURFACE; GOING TO **ANY CORNER**; AND BENDING THIS CORNER UP SLIGHTLY TO SEPARATE THE DECAL AND THIN MASKING SHEET FROM THE **HEAVY WAXED BACKING SHEET**.
4. **SLOWLY** AND **CAREFULLY** PEEL THE HEAVY WAXED BACKING SHEET AWAY FROM THE DECAL AND MASKING SHEET.
5. PLACE THE DECAL ON THE GAME CABINET **OVER** THE **WET** GLASS CLEANER YOU JUST APPLIED. (THIS WILL ALLOW A **SMALL** AMOUNT OF FINAL POSITIONING TO BE DONE AFTER THE DECAL IS APPLIED TO THE GAME CABINET.)
6. SMOOTH THE DECAL.
7. ALLOW THE DECAL TO BECOME FIRMLY AFFIXED TO THE GAME **BEFORE** PROCEEDING TO THE NEXT STEP.
8. REMOVE THE **THIN MASKING SHEET** FROM THE DECAL AT THIS TIME BY MOISTENING IT WITH A WET CLOTH OR SPONGE. RUB WITH FINGER TIPS (**NOT NAILS**) FROM A CORNER EDGE TOWARD ITS CENTER. PEEL THE THIN MASKING SHEET BACK OVER ITSELF TO REMOVE IT. **DO NOT** PULL IT STRAIGHT AWAY FROM THE CABINET.