

TECMO STRATO FIGHTER™

Service Instruction Manual

TECMO

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Before You Begin !!!

'STOP'

Read this entire manual before beginning work on this new video conversion! We have carefully included EVERYTHING needed to make this kit more than just a conversion! When finished, this kit should look, play and earn like a brand new, dedicated, video game. We have prepared a FIRST-CLASS complete kit. First things first. Using the KIT CONTENTS page of this manual, inventory

ALL the parts. Make sure you have them all! Next, carefully read all the various sections of this manual because it is filled with very IMPORTANT information. We want this new game to earn money for you as much as you do! So please, read through all the sections and proceed **ONLY** after you fully understand them all.

Kit Contents

- 2 — 8 Way Joysticks
 - 1 — STRATO FIGHTER™ Printed Circuit Board
 - 1 — STRATO FIGHTER™ Marquee Plex
 - 1 — Control Panel Overlay
 - 2 — Side Decals
 - 1 — Wiring Harness
 - 2 — Red Micro Switch "Fire" Buttons
 - 4 — Leaf "Start" and "Reverse" Buttons
 - 1 — STRATO FIGHTER™ Monitor Card
 - 2 — "Fire" stickers
 - 2 — "Reverse" stickers
 - 1 — "Side I" sticker
 - 1 — "Side II" sticker
 - 1 — Point of Purchase Card "New Game"
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Cabinet Preparation

Cabinet

Inspect your old cabinet for any gouges or objects stuck on the extremity such as chewing gum. Remove all foreign objects and fill in the gouges with any type of quick-hardening wood putty. Sand to make sure the surface is smooth and wipe clean the outside of the old cabinet.

If the decal of this kit does not cover all of the old games graphics, we recommend repainting the outside of your cabinet with an acrylic based semi-gloss paint. This can be applied by either paint brush, roller or spray can. In games that have woodgrain sides, please remove old decals and clean the surface so there is no glue residue remaining on the cabinet.

To apply your new side graphics take a straight edge and make a top guideline roughly where the old graphic started on your game. Lightly moisten the cabinet with spray window cleaner and begin to apply the decal starting at the top working your way to the bottom. After the decal is in place, use a piece of the foam strip that comes in the packing as a squeegee and smooth the sticker down on the surface to remove excess moisture. Please allow 12 hours for your sticker to become permanently adhered to the sides before use.

Marquee Plex

Enclosed in this kit you will find one universal size Marquee plex. This should be ideal for the cabinet you are converting. Using the old marquee from the previous game, lay it on top of the new one. Be sure that none of the title "STRATO FIGHTER™" is excluded before marking it to the proper size. Once this is done, proceed to cut it. Unless you have the equipment to cut the plexi-glass safely, we recommend taking it to a local plastics supply to do the job. They usually charge no more than a couple of dollars, and you can insure it will be done right and without breakage. After the plexi is cut, install it!

Now is also a good time to inspect the lighting system. If the bulb(s) is old, replace it! This will insure a 'shining' and bright advertisement to lure paying customers to your newest game.

**** Control Panel***

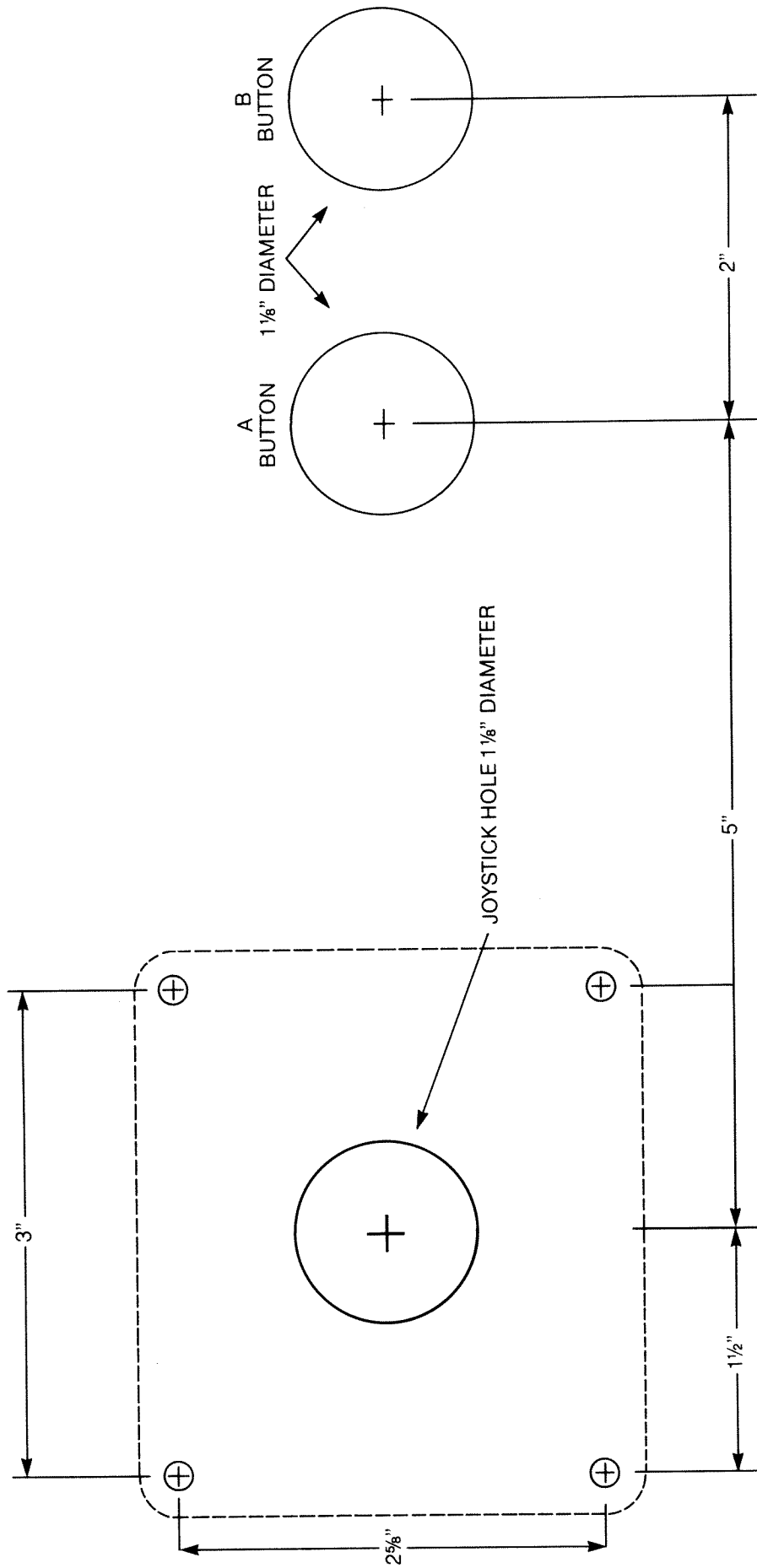
From the control panel previously removed, take off the old buttons, switches, joysticks, and wiring. Strip off the older lexan overlay and any vinyl button stickers. Using sandpaper, prepare the control panel surface until all remains of the previous material are gone. Lacquer thinner may be necessary if glue is still present.

Use the CONTROL PANEL TEMPLATE included in this kit to determine the placement of the necessary JOYSTICKS and push buttons on the control panel. Use the same template for both the 1 player and 2 player controls. Leave your existing 1 or 2 player start button holes where they are. Mark the necessary holes, then drill as needed. We suggest plugging any hole that is no longer needed with wood blocks, putty, etc. Remove the backing from the rear and carefully place the control panel overlay over the control panel, being careful not to get any air bubbles in the vinyl when it's applied.

After the control panel is securely on, with an exacto knife or razor blade carefully cut out holes on the control panel. Next install the button stickers on the control panel in their proper locations. Replace the buttons on the control panel and tighten them down. Return the control panel to the game for the next step in the kit process.

Control Panel Template

The following dimensions are for metal control panels; For wood control panels drill a $\frac{1}{8}$ " hole completely through, then drill a $1\frac{1}{8}$ " hole completely through, being careful not to splinter the wood.



THIS IS ONLY AN APPROXIMATION.
USE YOUR OWN DISCRETION CONSIDERING FEASIBILITY AND COMFORT.

Wiring Procedures

Wiring Procedure (Universal Cabinet)

Disconnect the old wiring harness from the CPU board. Using the schematic drawings from your old game, carefully note the function of each wire. Label the wires if this helps.

Carefully remove all circuitboards and the metal circuitboard panel from the game. Leave the transformer chassis and the power supply braid in the game.

To wire your STRATO FIGHTER™ kit into a Universal upright cabinet, the following steps are suggested:

Leaving several inches of wire from the old wiring harness at each connector, cut the wires near the game's coin door, monitor, player panel, power supply, and speaker. **DON'T** cut the other side of these same wires (that is, at the CPU-board end).

Following the "Edge Connector" schematic drawings for your kit located in this manual, solder the coin door, monitor, control panel, power supply and speaker wires to the new CPU-board harness. Using electrical tape, be sure to insulate all splices.

Wiring To Power Supply

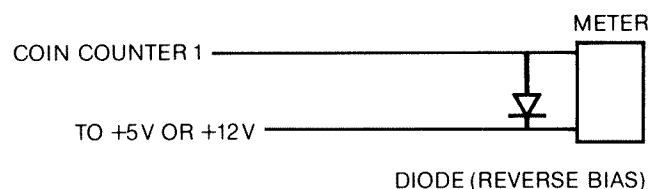
As mentioned in the section POWER REQUIREMENTS, this game uses +5V and +12V DC. Chances are the cabinet you are converting has a properly working power supply that is able to supply these voltages. If not, it is a good idea to install a new, inexpensive 'switching' power supply available from your local distributor. Locate the +5V leads, color coded RED, and install them to the proper position on the power supply. Next, locate the +12V leads, and install them to the proper position on the power supply as well. Last, position a BLACK ground wire from the harness and connect it. The game is now wired for power.

Ground System

It is highly recommended that a parallel GROUND wire be installed that is connected to every electronic chassis from earth ground to PCB to, power supply to, coin door to, control panel to, etc.

Notice

If you wish to use a coin meter for your STRATO FIGHTER™ kit, you may use a +5V or +12V coin meter. See the coin control wiring diagram for suggested wiring below.



Setting the Dip Switches

Now is a good time to set the STRATO FIGHTER™ dip switches. Refer to the "Dip Switch Settings" included in this manual and adjust the game as desired. The PCB is now ready to install into the cabinet.

NOTE: If you have a FCC cage to install, you may wish to adjust the sound level. This can be accomplished by turning the VR located on the top board either clockwise or counter-clockwise.

F. C. C. Regulations

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the F.C.C. Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTE: Any changes or modifications made by the user, to an intentional or non-intentional radiator, not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Thank you for your purchase of a TECMO Inc. STRATO FIGHTER™ kit.

Edge Connector

SOLDER SIZE	NO.	NO.	PARTS SIDE
GND	A	1	GND
GND	B	2	GND
+5V	C	3	+5V
+5V	D	4	+5V
	E	5	
+12V	F	6	+12V
	H	7	
COIN COUNTER 2	J	8	COIN COUNTER 1
COIN L. OUT 2	K	9	COIN L. OUT 1
SPEAKER(-)	L	10	SPEAKER(+)
	M	11	
VIDEO GREEN	N	12	VIDEO RED
VIDEO SYNC	P	13	VIDEO BLUE
SERVICE SW	R	14	VIDEO GND
RESET SW	S	15	TEST SW
COIN SW 2	T	16	COIN SW 1
SIDE II START	U	17	SIDE I START
2P UP	V	18	1P UP
2P DOWN	W	19	1P DOWN
2P LEFT	X	20	1P LEFT
2P RIGHT	Y	21	1P RIGHT
2P FIRE (A) BUTTON	Z	22	1P FIRE (A) BUTTON
2P REVERSE (B) BUTTON	a	23	1P REVERSE (B) BUTTON
	b	24	
	c	25	
	d	26	
GND	e	27	GND
GND	f	28	GND

