

# UNDER FIRE



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 are trademarks of Taito Corporation.

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## INTRODUCTION

### Game inspection

Please take a moment to read the following before turning on your new *Under Fire*<sup>™</sup> for the first time. Your game was carefully checked at the factory before shipping.

After removing the game from its carton inspect the game carefully. Look for cracks in the cabinet, gouges, bent metal parts, etc. This shipping damage should be reported to the carrier. Remember to take photographs.

Let the machine warm to room temperature before plugging it into the socket.

### Precautions concerning the place of installation

This is an indoor game machine. Absolutely do not install it outside. Even indoors, avoid installing in places mentioned below so as to ensure proper usage:

- Places subject to rain or water leakage, or condensation due to humidity.
- In the proximity of an indoor swimming pool and/or shower.
- Places subject to direct sunlight.
- Places subject to heat sources from heating units, etc., or hot air.
- Vicinity of highly flammable/volatile chemicals or hazardous matter.
- Sloped surfaces.
- Vicinity of anti-disaster facilities such as fire exits and fire extinguishers.
- Places subject to any type of violent impact.
- Dusty places.
- Residential environment - (See F.C.C. statement which follows).

## F.C.C. Requirements

The Federal Communications Commission requires that all Class A equipment be verified and labeled as follows:

This equipment complies with the requirements in part 15 of 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.

This label must be permanently attached in a conspicuous location and the text must be legible. If this label is removed or tampered with such action is punishable under Section 503 of the Communications Act of 1934 (ACT), as amended.

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## SPECIFICATIONS

### Power

Line:	120V AC 60Hz
Consumption:	250 Watts (approximately)

### Monitor

Type:	27" Color, Raster-Scan
Inputs:	RGB, Composite Negative Sync

### Cabinet

Height:	72"
Width:	29-1/2"
Depth:	39"

**Caution:** For safe operation it is strongly recommended the cabinet be properly grounded. The game is equipped with a three conductor power cable. The round "third prong" will ground the game when plugged into a grounded. outlet. If an adaptor is used, be certain to attach the grounding lug or wire on the adaptor.

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## GAME INSTALLATION

Prior to using *Under Fire*<sup>TM</sup>, carefully follow the notes below:

- 1 Adjust the body position of UnderfireTM so that beams of lighting instruments or other lights (such as sunlight) are not directly in the line of the gun point of *Under Fire*<sup>TM</sup>.
- 2 When installing two sets of *Under Fire*<sup>TM</sup> side-by-side, provide enough space between them.
- 3 When any of the front glass, mirror, monitor, gun point or the filter section of the LED box (black plastic plate) is stained, the gun may miss-hit the targeted position during the game.

To prevent this fault, always clean these positions. Special care is required not to make any scratches while cleaning the gun point and the filter of the LED box.

- 3 Although *Under Fire*<sup>TM</sup> is adjusted to the optimum condition at the factory before delivery, there may be some deviation of image size, image display position or color fade on the monitor screen in some installed locations. Adjust the monitor by referring to the Monitor Test instructions on page 4.

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## PLAY INSTRUCTIONS

*Under Fire*<sup>TM</sup> is played as follows:

The object of the game is to score as many points as possible by shooting the enemy. When you pull the trigger once, three bullets are shot at one time. When you push the button on the side of the gun, it becomes a shotgun. You have 24 bullets in the magazine, and must reload the magazine when it's empty by aiming the muzzle of the gun toward the outside of the screen and pulling the trigger. You may reload at any time during the game.

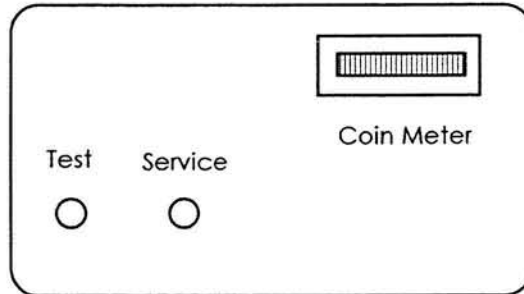
To increase your ability to get a higher score, capture bonus weapons by shooting them as they appearing during play. Your number of bullets will then increase for longer play. There are three kinds of bonus weapons. You may increase your score greatly by using the fully automatic machine gun bonus weapon.

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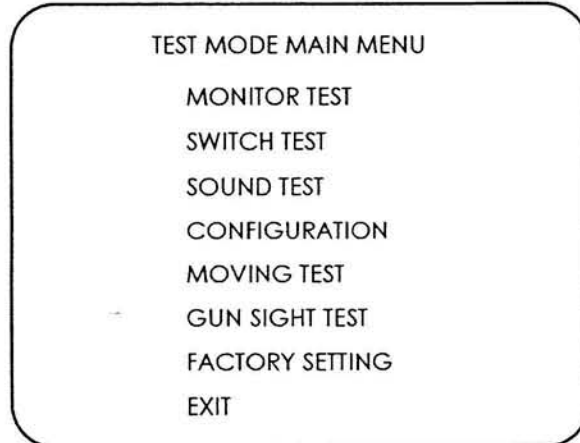
## TEST AND SWITCH SETTINGS

### Test Mode

To start the testing procedure, open the coin box door and locate the test mode switch:



Press the test mode switch and the game enters into test mode. Select any of the items using the start button of 1P or 2P, and then pull the trigger of the 1P or 2P guns. The menu screen will look like this:



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### Monitor Test

This mode is to adjust the display image on the screen. Both "cross-hatch" and "color-bar" displays are provided. To change display between these displays, pull the trigger of the 1P or 2P guns. Press the 1P or 2P start button to return to the menu screen.

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## Switch Test

This test is to check the ON/OFF operation of each switch and button. When the 1P and 2P start buttons are pressed, the respective lamp goes on. Simultaneously press both the 1P and 2P start buttons to return to the menu screen.

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## Sound Test

This test is to check the sound output and adjust the volume level of the game. Select the required item by pressing the 1P or 2P start button.

"SOUND NO" Pull the trigger of the 1P or 2P gun to change the figure. When you press the shotgun switch of the 1P or 2P gun, you can check the sound output.

"SOUND VOLUME" Pull the trigger of the 1P or 2P gun to change the figure. When you press the shotgun switch of the 1P or 2P gun, you can check the sound output.

"EXIT" Press the trigger of the 1P or 2P gun and the confirmation screen appears. When you want to change the sound volume level, select "YES" (pull 1P gun trigger) and press the start button of 1P or 2P to make the sound volume level return to the previous setting. After pressing the start button, the screen returns to the menu screen.

## Configuration

This mode is to determine the various settings. Select the required items by pressing the start button of 1P or 2P and change the set contents by pressing the trigger of the 1P or 2P gun. The screen will appear as follows:



CONFIGURATION	
CABINET TYPE	:UP
MONITOR TYPE	:NORMAL
SIGHT MODE	:REVERSE
VIOLENCE MODE	:NONE
ATTRACT SOUND	:ON
DIFFICULTY	:NORMAL
* BUY-IN PRICE	:SAME AS PLAY
* PLAY PRICE	:1 COIN 1 CREDIT
EXIT	

Lines marked with an asterisk (\*) are for the North American Market. For product specifications for markets other than North America, these two lines become:

COIN-A	:1 COIN :1 CREDIT
COIN-A	:1 COIN :1 CREDIT



## Configuration Settings

Item	Set Contents	
Cabinet Type	*UR	No alternative
Monitor Type	*Normal	Use mirror (image is symmetrical for left & right)
	Mirror	Don't use mirror (normal display of image)
Sight Mode	*Reverse	When a bullet mark remains on the reverse side from that targeted, set this as "Reverse"
	Normal	
Violence Mode	*None	No blood scatter display even when shooting enemies or civilians
	Normal	Display one blood scatter for each hit of enemy or civilian
	Hard	Display the same amount of blood scatter as the number of shots
Attract Sound	*On	Emit demonstration sound
	Off	Do not emit demonstration sound
Difficulty	Easy	<div style="text-align: center;">   Easier               Harder         </div> (Difficulty level)
	*Normal	
	Hard	
	Very Hard	
Buy-In Price (Note 1)	*Same as Play	Settings of the continue play fee
	1 Coin Continue	
	2 Coins Continue	
	3 Coins Continue	
Play Price (Note 1)	1 to 4 Coins	Settings of the play fee
	1 to 6 Credits	*1 coin, 1 credit
Coin-A (Note 2)	1 to 4 coins	Settings of the play fee (Coin slot A)
	1 to 6 credits	*1 coin, 1 credit
Coin-B (Note 2)	1 to 4 coins	Settings of the play fee (Coin slot B)
	1 to 6 credits	*1 coin, 1 credit

*(See notes 1 through 3 on next page.)*

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## Configuration Setting Notes

**Note 1:** The specifications for the North American market.

**Note 2:** The specifications for other than the North American market.

Select "EXIT" and press the trigger of the 1P or 2P gun and the confirmation screen appears. When you want to change the settings, select "YES" (pull 1P gun trigger) and press the 1P or 2P start button. When you want to cancel the setting, select "NO" (pull the 2P gun trigger) and press the start button of 1P or 2P. The settings return to the previous condition. After pressing the start button, the screen returns to the menu screen.

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## Moving Test

This is to check the vibration mechanism of the guns. Both "Manual" and "Automatic" are provided. Select one of them by pressing the start button of 1P or 2P.

### "PULL 1P AND 2P TRIGGER" (Manual)

The vibration mechanism of the gun is functioning while pulling the trigger.

### "AGING MODE" (Automatic)

Pull the trigger of the 2P gun and turn on the display. The screen terminates the test mode and begins repeating 5 seconds of vibration and 2 seconds of no vibration alternately in the demonstration screen. The lamps of the 1P and 2P start buttons also repeat 5 seconds of lighting and 2 seconds off accordingly. To quit this mode, pull the trigger of the 1P gun and change the display to "OFF."

### "EXIT"

Select "EXIT" and press the trigger of the 1P or 2P gun. The confirmation screen appears. When you want to change the settings, select "YES" (pull the 1P gun trigger) and press the 1P or 2P start button. When you want to cancel the setting, select "NO" (pull the 2P gun trigger) and press the start button of 1P or 2P and the settings return to the previous condition. After pressing the start button, the screen returns to the menu screen.

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## Gun Sight Test

This mode is to adjust the position of a gunlayer. During the actual game, the gunlayer is not displayed. This adjustment is required when the bullet mark deviates from the targeted point.

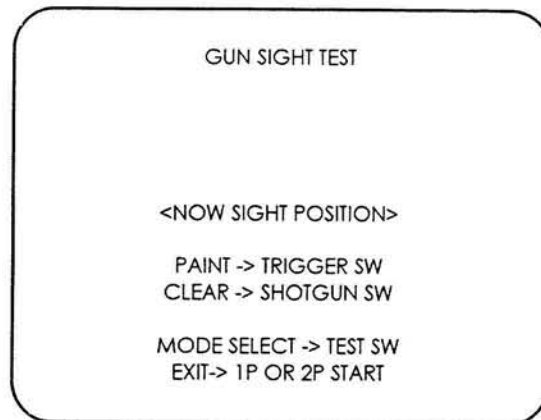
### Point 1

In the first menu screen, point the 1P or 2P gun at the screen. The message "NOW SIGHT POSITION" will appear in the center of the screen. The 1P gun will produce a red movable dot. The 2P gun will produce a blue dot on the screen. Use these dots for sight positioning.

To confirm whether or not any adjustment of the gun sight is required, pull the trigger so that the bullet mark appears and press the shotgun button so that the bullet mark disappears.

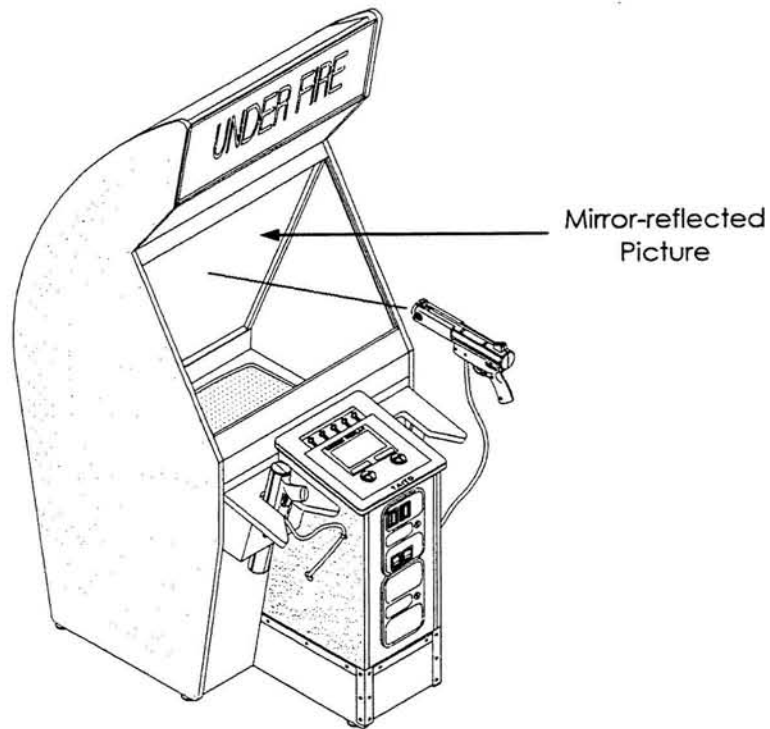
The numbers displayed on left and right of the screen show the coordinate that has been targeted.

One press of the test switch will change to the 1P gun. Two presses of the test switch will change to the 2P gun. Three presses of the test switch will change to the display shown below:



The 1P gun side will display the message "PLAYER 1 OFFSET" at the center of the screen. The 2P gun side will display the message "PLAYER 2 OFFSET" at the center, respectively.

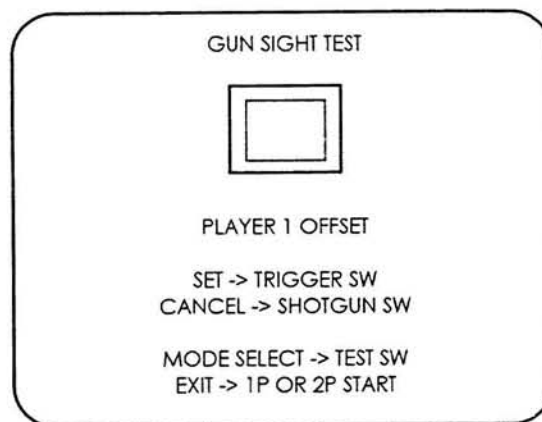
Pull the trigger while sighting on the center of the screen. During this sighting, the gun end should point to the center of the screen (see next page):



## Point 2

Aim at the center of the flashing green square and pull the trigger. Then shoot all 12 square targets.

After you shoot all 12 targets successfully, the "1P NEW DATA SAVE?" message will appear just below the screen center. Pull the trigger again. The new data is stored. To return to the green flashing square screen, pull the shotgun button.



To return to the menu screen, press the start buttons 1P or 2P.

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## Factory Setting

This mode is to return all the settings, except the positional setting of gunlayer, to the default values (set conditions at delivery).

Pull the trigger of the 1P gun to select "YES" or pull the trigger of the 2P gun to select "NO." Confirm this setting by pressing the start button of 1P or 2P.

The SOUND VOLUME figure of "SOUND TEST" : 30.

Factory settings are marked by the asterisks (\*) in "CONFIGURATION."

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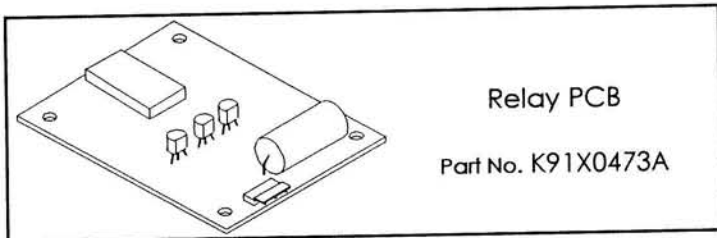
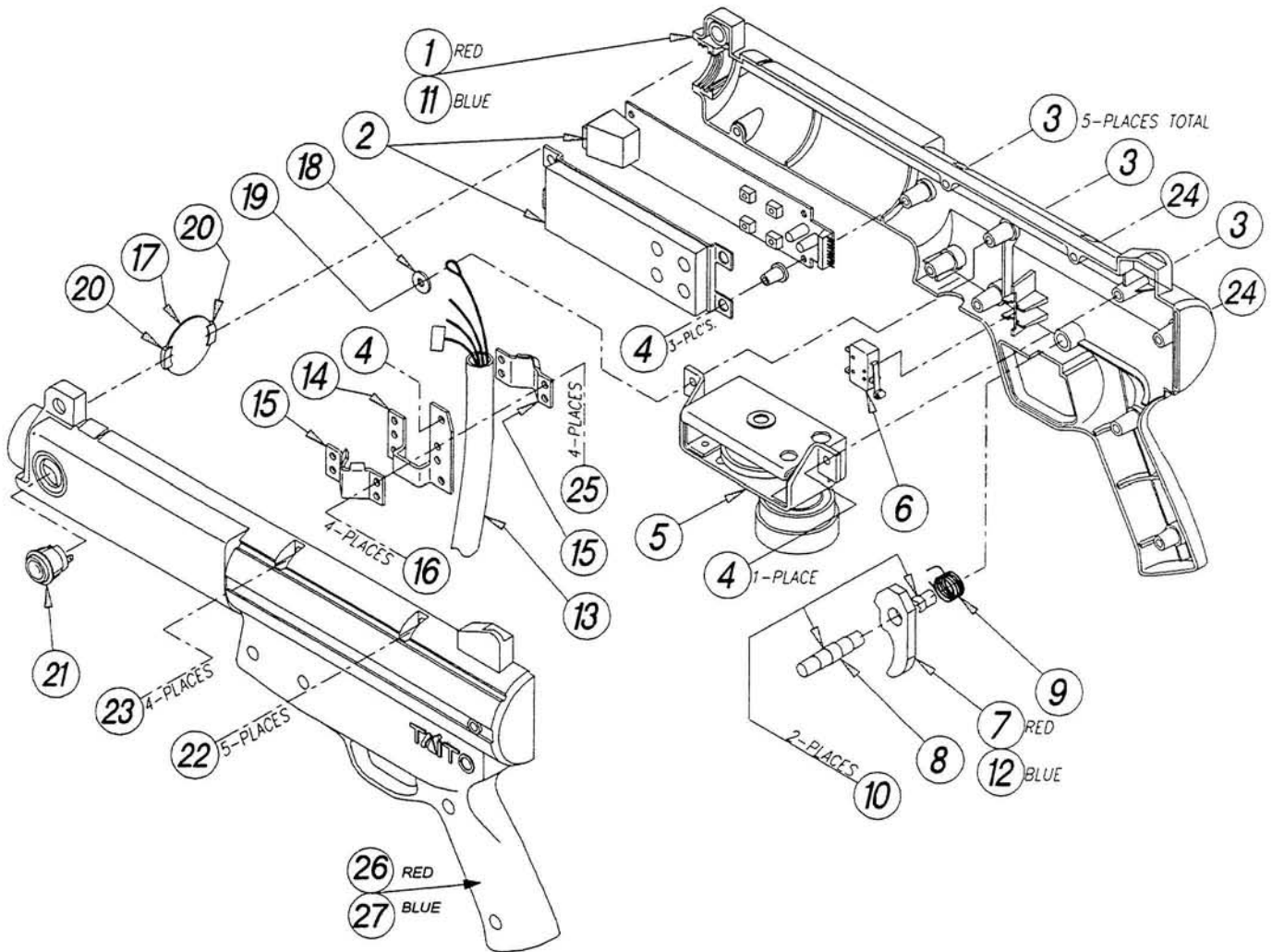
## Exit

Select this mode to return to the game screen after terminating the test mode. After selecting "EXIT," pull the trigger of the 1P gun to select "YES" (quit test mode), or pull the trigger of the 2P gun to select "NO" (cancel quit of test mode). Press the start button of 1P or 2P to confirm this selection.

### ATTENTION

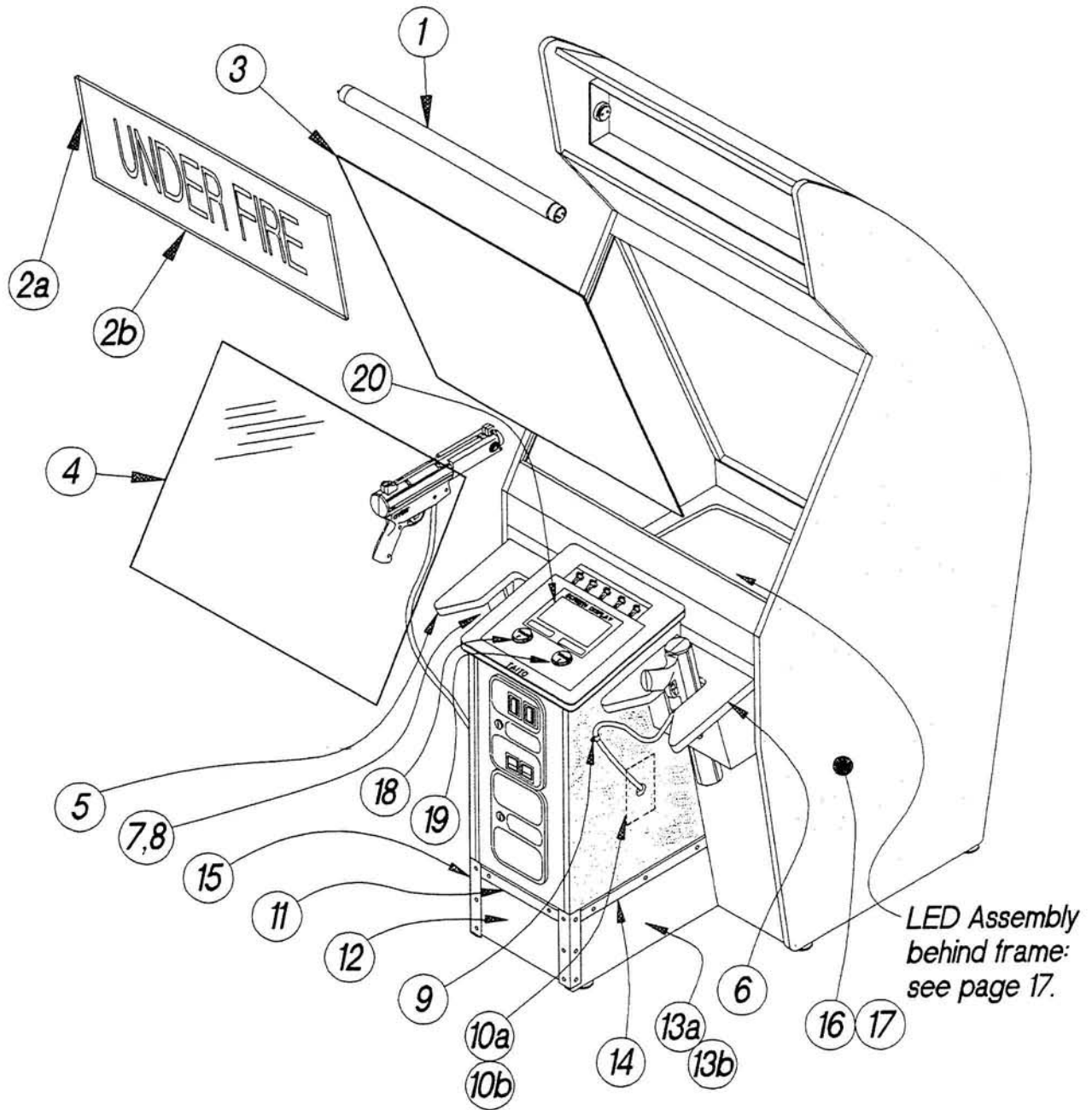
Each day the Operator should check that ALL warning labels are legible and affixed to this equipment in their proper locations.

# GUN ASSEMBLY



S/A: Gun Assembly  
I9200352A

# FRONT REPLACEMENT PARTS



## Front Replacement Parts List

### Attention:

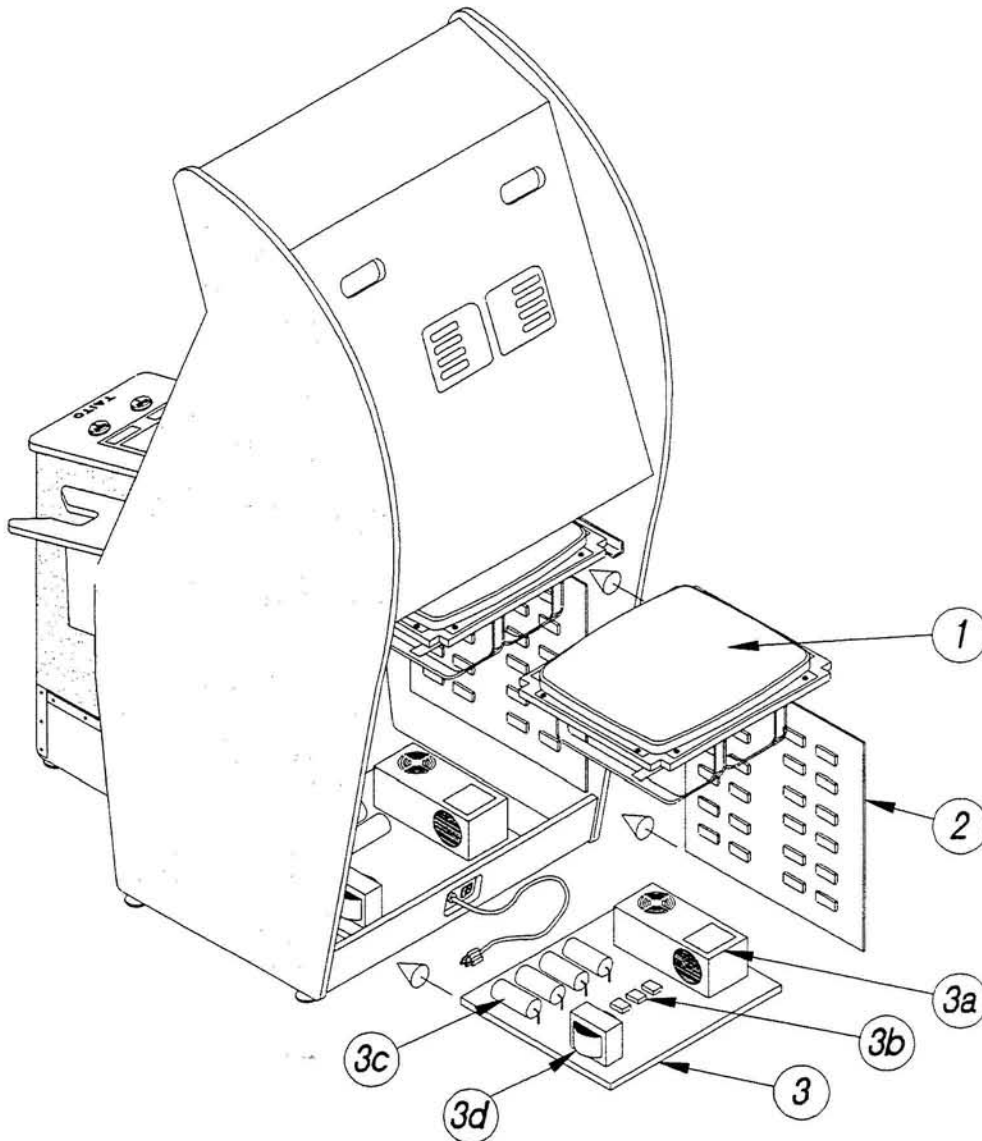
Please note the new size of the mirror  
(Sea. 3):

27.88" x 28.38" x .125"

Seq.	Description	Part No.	Qty.
1	24" Fluorescent Lamp F20T12CW	A056-009-000	1
2a	Marquis Styrene	B309-509-000	1
2b	Glass Header 27.88" x 7.75" x .187"	B309-500-000	1
3	Mirror 17.88" x 28.38" x 0.25"	B309-501-000	1
4	Viewing Glass	B309-502-000	1
5	Holster Vacuum Form (Red)	B309-504-002	1
6	Holster Vacuum Form (Blue)	B309-504-001	1
7a, 8a	Holster Front (black plastic)	B309-511-004	2 per side
7b, 8b	Holster Left Side (black plastic)	B309-511-001	1 per side
7c, 8c	Holster Right Side (black plastic)	B309-511-002	1 per side
7d, 8d	Holster Front Plate (black metal)	B309-115-000	1 per side
7e, 8e	Front (black plastic)	B309-511-003	1
9	Stirrup Eye	B309-111-000	1
10a	Gun Plate Cable (inside cabinet)	B309-106-OPA	1
10b	Strain Relief Gun Cable (inside cabinet)	0042-035-000	1
11	Mat Stopper	B309-113-000	1
12	Rubber Mat	B309-511-003	1
13a	Rubber Mat (right side)	B309-511-002	1
13b	Rubber Mat (left side)	B309-511-001	1
14	Mat stopper	B309-114-OPA	2
15	L-Shaped Rubber	B309-512-000	2
16	Decal: Cabinet (right side)	B309-507-000	1
17	Decal: Cabinet (left side)	B309-506-000	1
18	Red Start Button with light	B309-025-000	1
19	Blue Start Button with light	B309-026-000	1
20	Control Panel Overlay	B309-505-000	1

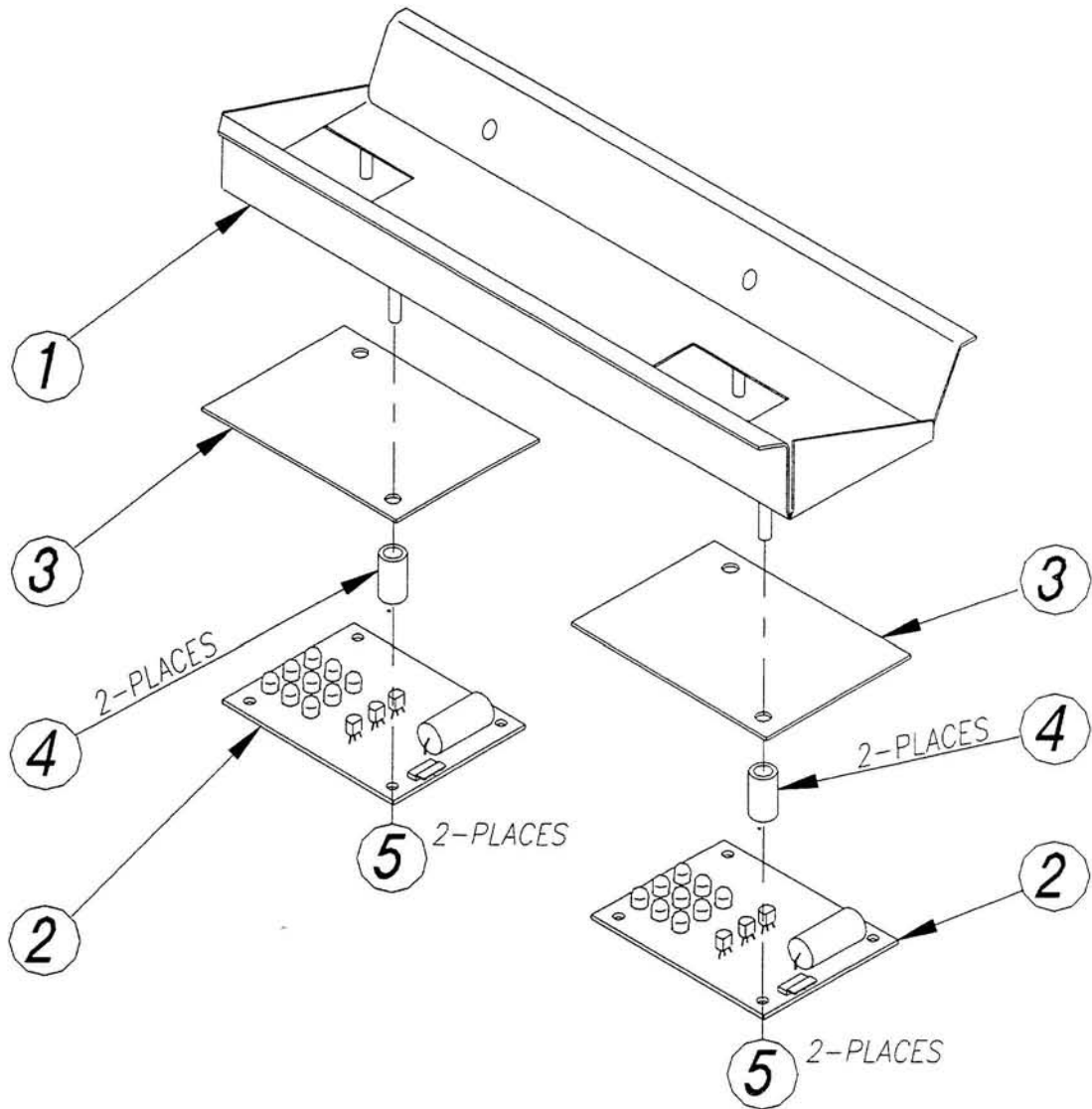


## REAR REPLACEMENT PARTS

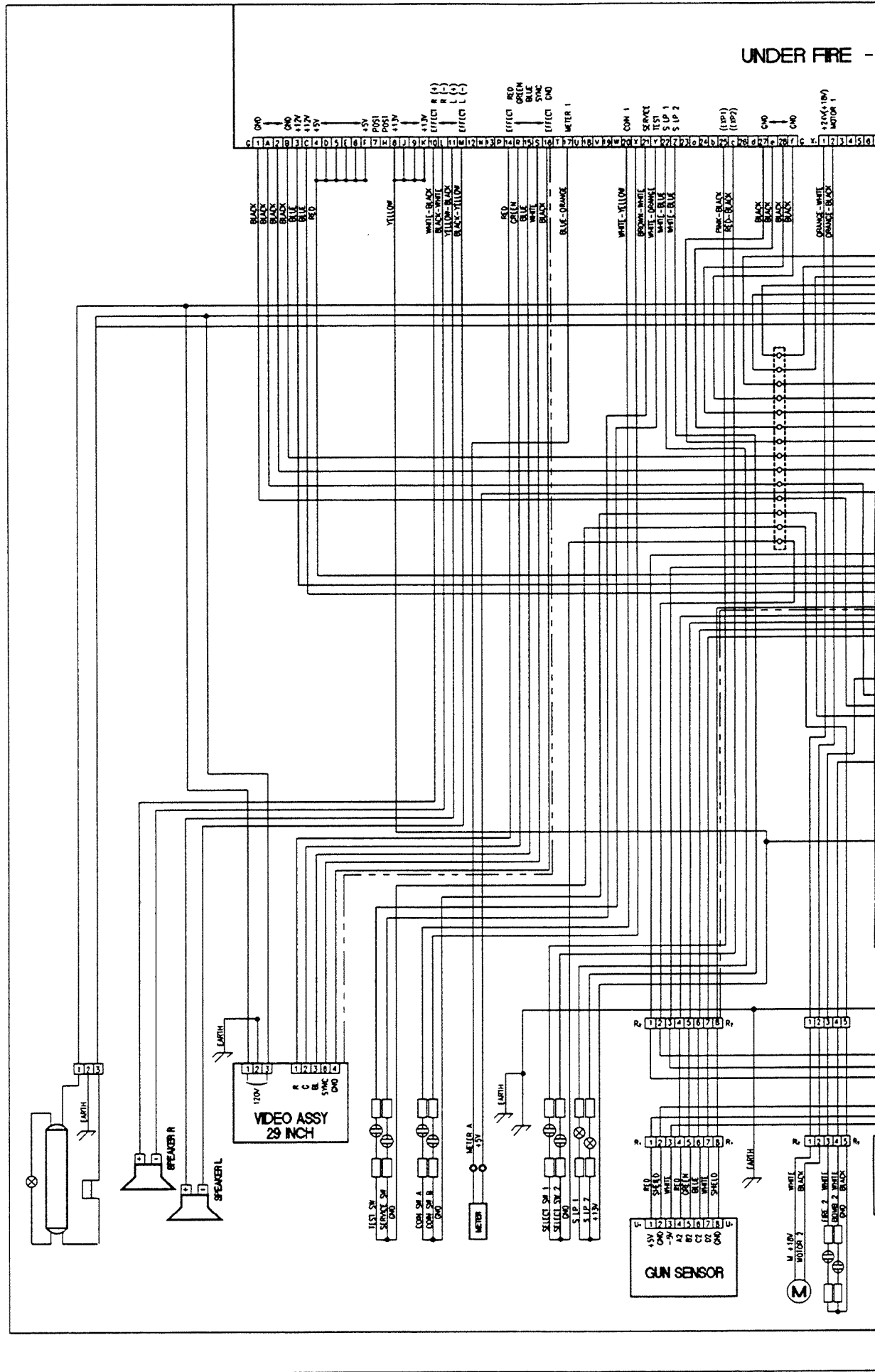


Seq.	Description	Part No.	Qty.
1	27" Monitor Hantarex Polo Model	0056-067-000	1
2	Main PC Board Assy	K11T0777A	1
3	S/A Power Supply Board	B309-014-000	1
3a	Power Supply Switching 11-150XT	0052-429-000	1
3b	Rectifier Bridge 35 amp 600v	0052-366-100	3
3c	Capacitor 20,000MF 30v	0052-429-000	4
3d	Transformer	0053-098-000	1

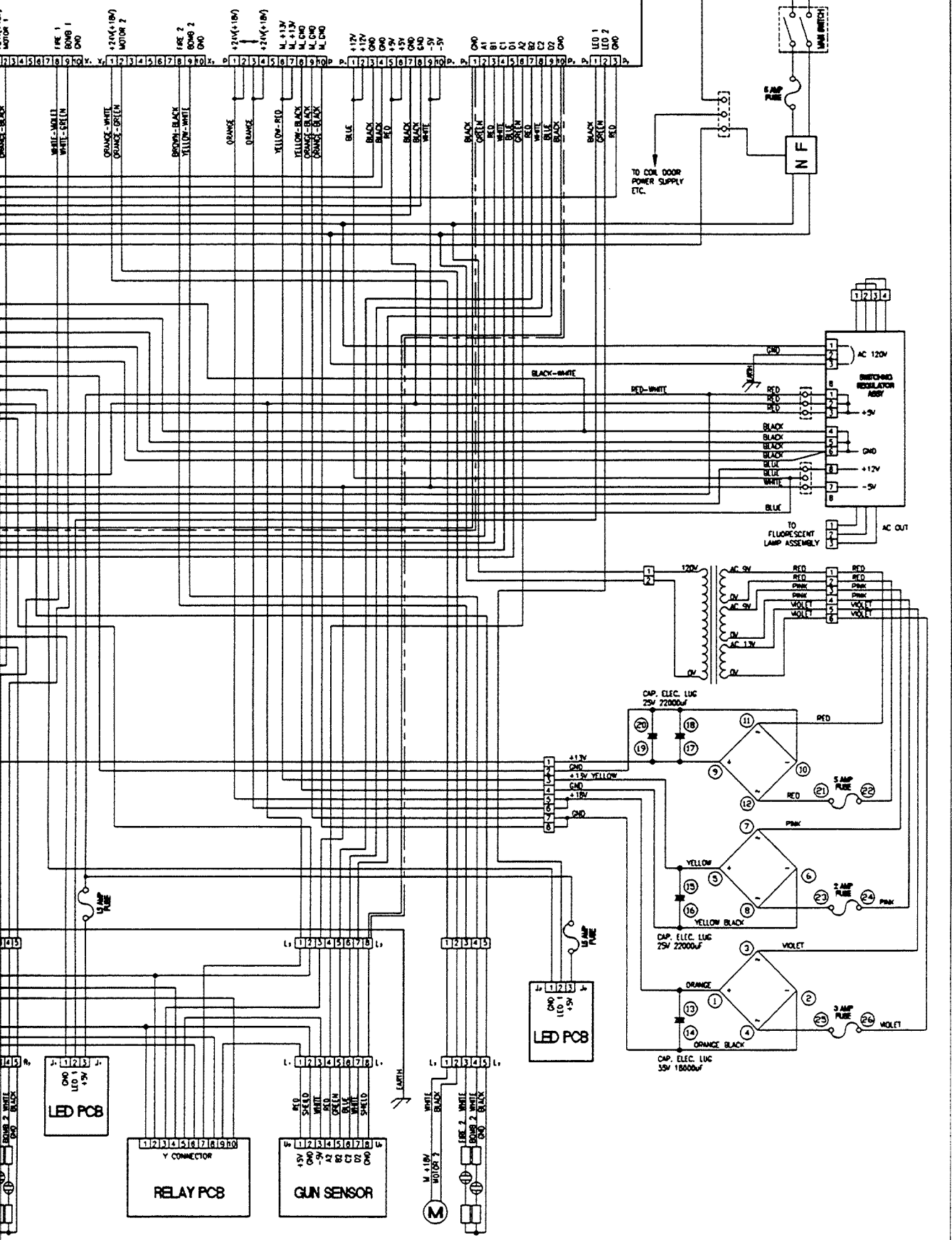
# LED BOX ASSEMBLY



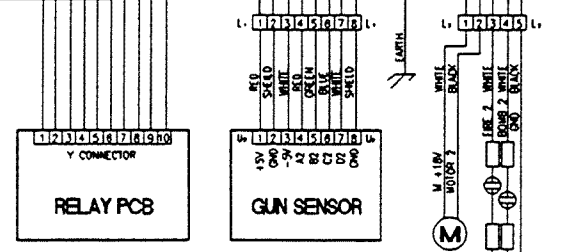
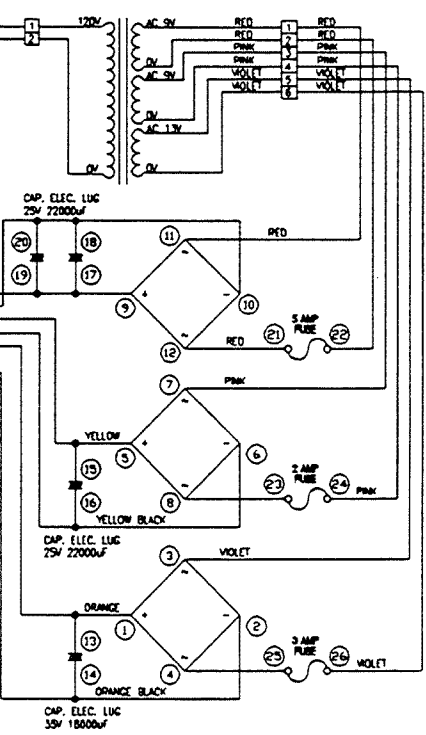
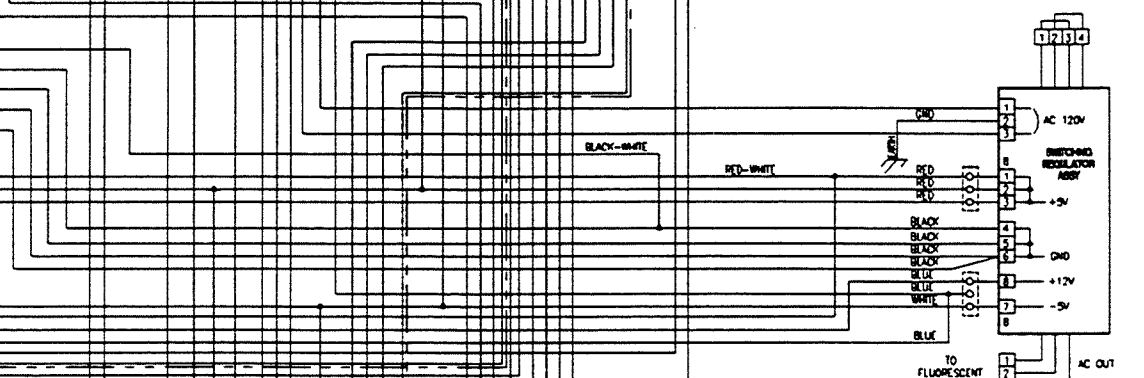
Seq.	Description	Part No.	Qty.
1	LED Box	E3011643	1
2	LED PC Board Assy	K91X0464	2
3	Filter Cover	F9003510	2
4	Plastic Spacer 4 x 8 x 12	F9000923	4
5	Flange Nut M4		4



**RE - MAIN PCB**



- MOTOR 1  
 WIRE 1  
 WIRE 2  
 +12V(+18V)  
 MOTOR 2  
 WIRE 1  
 WIRE 2  
 +12V(+18V)  
 +12V  
 +13V  
 M. GND  
 M. GND  
 M. GND  
 +12V  
 +12V  
 GND  
 GND  
 +2V  
 +2V  
 -5V  
 -5V  
 GND  
 A1  
 B1  
 C1  
 A2  
 B2  
 C2  
 D2  
 GND  
 LED 1  
 LED 2  
 GND






# UNDER FIRE

TM

*SAVE CITIZENS IN THE CITY  
WHICH IS ATTACKED RIOTERS!!*

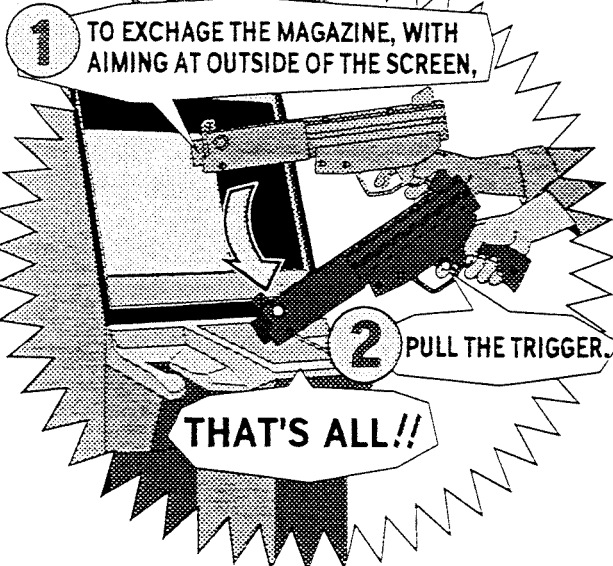
**2-PLAYER SIMULTANEOUS(COOPERATIVE)PLAY &  
BUY-IN POSSIBLE!!**

ITEMS

	<b>POLICE BADGE</b>	POINTS INCREASE.
	<b>FULL FIRE SHOT</b>	BY KEEPING THE TRIGGER PULLED, BULLETS CAN BE FULLY SHOT. (BULLETS ARE LIMITED IN NUMBER.)
	<b>SHOT GUN CARTRIDGE</b>	THE NUMBER OF SHOTGUN BULLETS IS INCREASED BY ONE.

*IF YOU SHOOT PRIVATE CITIZENS, YOUR LIVES DECREASE!!  
IF YOU SHOOT POLICEMEN(COLLEAGUES), YOUR LIVES ALSO DECREASE!!*

*WHEN SHOOTING ALL BULLETS AWAY,  
EXCHANGE THE MAGAZINE!!*



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