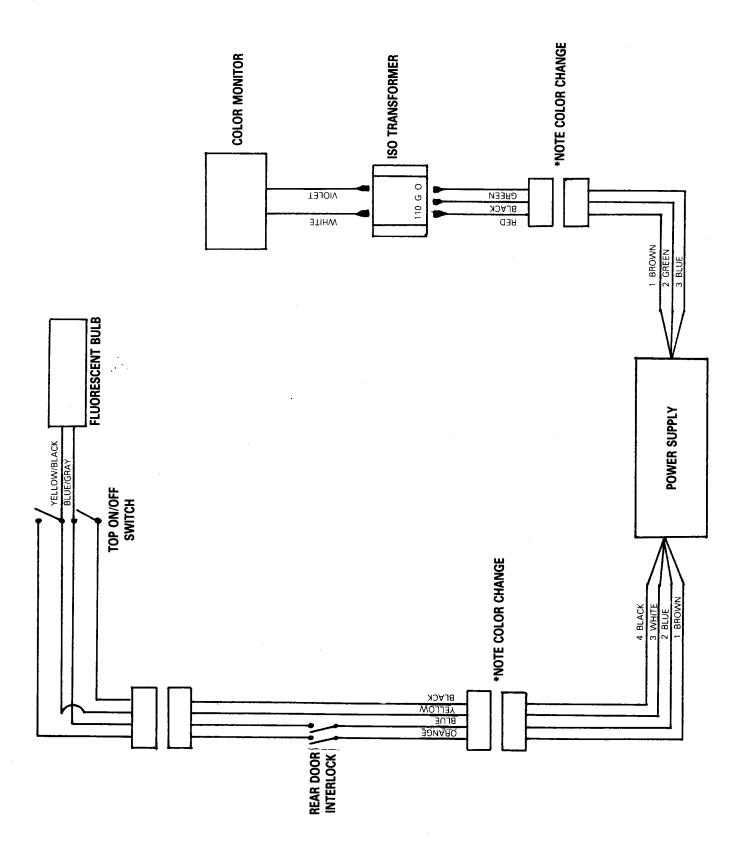
LETHAL ENFORCERS A.C. WIRING HARNESS



LETHAL ENFORCERS PARTS LIST

	Part #	Description
	191003	Lethal Enforcers PCB
	191011	Lethal Enforcers DC Harness
	191010	Lethal Enforcers AC Harness
	191100	Lethal Enforcers CPO
	191101	Lethal Enforcers Instruction Decal
	191102	Lethal Enforcers Bullet Hole
	191103	Lethal Enforcers Bezel Panel
	191200	Lethal Enforcers Marquee
	191300	Lethal Enforcers U/R Side Decal
	191301	Lethal Enforcers U/L Side Decal
	191302	Lethal Enforcers M/R Side Decal
	191303	Lethal Enforcers M/L Side Decal
*	191304	Lethal Enforcers L/R Side Decal
	191305	Lethal Enforcers L/L Side Decal
	191400	Lethal Enforcers Manual
	191605	Lethal Enforcers Cabinet
	191800	Red Gun
•	191801	Blue Gun
	191900	Gun Holster
	191901	Cable Clamp
	191902	Gun Extention Cable
	191903	3mm Alan Wrench
	30255	Test Button
	30261	Switches
	30262	Palnuts
	30282	Red 2" Clear Button
	30283	Blue 2" Clear Button
	35205	ISO Trans
	35405	Power Supply
	40101	Coin Door with Mirror
	40211	109 Degree Brackets
	40356	Monitor Glass
	40357	Marquee Glass
	40361	Mirror Glass
	40525	25" Monitor HV Cap
	40700	Light Fixture
	40702	Light Bulbs
	602628	Button Plate

LETHAL ENFORCERS WIRING HARNESS

	Solder Side ←			→ Parts Side	
BLACK	GND	Α	1	GND	BLACK
BLACK	GND	В	2	GND	BLACK
RED	+5V DC	C	3	+5V DC	RED
RED	+5V DC	D	4	+5V DC	RED
	NOT USED	E	5	NOT USED	
ORANGE	+ 12V DC	F	6	+ 12V DC	ORANGE
	*KEY	Н	7	*KEY	
BROWN/YELLOW	COIN COUNTER	j	-8	COIN COUNTER	GREEN/VIOLET
	(EMPTY)	K	9	(EMPTY)	
	(EMPTY)	L	10	(EMPTY)	
	(EMPTY)	М	11	(EMPTY)	
WHITE/GREEN	VIDEO GREEN	Z	12	VIDEO RED	RED/WHITE
WHITE	VIDEO SYNC	Р	13	VIDEO BLUE	BLUE/WHITE
	(EMPTY)	R	14	VIDEO GROUND	BLACK
	(EMPTY)	S	15	TEST SWITCH	GRAY/WHITE
WHITE/VIOLET	COIN 2	Т	16	COIN 1	BLUE/VIOLET
RED/GREEN	START 2	J	17	START 1	RED/YELLOW
	(EMPTY)	٧	18	(EMPTY)	
	(EMPTY)	8	19	(EMPTY)	
	(EMPTY)	X	20	(EMPTY)	
	(EMPTY)	Y	21	(EMPTY)	
	(EMPTY)	Z	22	(EMPTY)	
	(EMPTY)	а	23	(EMPTY)	
	(EMPTY)	Ь	24	(EMPTY)	
	(EMPTY)	C	25	(EMPTY)	
	(EMPTY)	d	26	(EMPTY)	
BLACK	GND	е	27	GND	BLACK
BLACK	GND	f	28	GND	BLACK

(BASE COLOR/LINE COLOR)

LETHAL ENFORCERS TECHNICAL INFORMATION

TECHNICAL INFORMATION

- (1) Required power capacity GND-Vcc 5V 4A or more GND-(+12V)
 - *See the Wiring Diagram.
- (2) Output
 - R (red) analog, positive
 - G (green) analog, positive
 - B (blue) analog, positive
 - SYNC. H-V complexed, negative
- (3) The monitor should be horizontal and face up installed.
- (4) There is no sound volume knob on the PCB. Sound level should be adjusted in the "GAME OPTIONS" in the Manual Test mode. (See page 6.)
- (5) Handle with care.

DIP SWITCH SETTINGS AND CABINETS AVAILABLE

This game is equipped with a 4-bit DIP SWITCH on the PCB (position Q1); Switching an Arcade type game to a Street type game and other changes will easily be done with these DIP switches.

	CONTENTS	ON	OFF
SW1	SOUND OUTPUT	MONAURAL	STEREO
SW2	COIN MECHANISM	INDEPENDENT	COMMON
SW3	GAME TYPE	ARCADE	STREET
SW4	LANGUAGE	SPANISH	ENGLISH

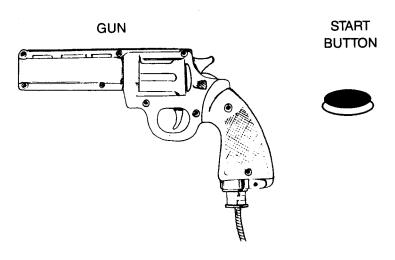
^{*}Bold letters show default settings.

Note:

- 1) On the STEREO cabinet, set SW1 at "ON" so that you can get better music and sound effects.
- 2) Regarding other game options and coin options, refer to "Manual Test" on page 3.

CONTROL PANEL INFORMATION

Use a dual control panel with a gun and a start button for each player.



LETHAL ENFORCERS TECHNICAL INFORMATION (cont.)

PLAY INSTRUCTION

(STARTING ARCADE TYPE GAME)

- 1 or 2 people can play at the same time. Second player can join in at any time.
- Deposit coins and press START button.

(STARTING STREET TYPE GAME)

- 1 or 2 players can play at the same time. Second player can join in at any time.
- Deposit coins and press START button, and the stage select screen will appear. Aim and shoot the screen to select stage. If you are playing with another player, the first selection is accepted.
- (HOW TO PLAY)
- Aim and shoot the enemies to kill them.
- Don't shoot innocent people. If you shoot them, you lose one life.
- Reload your gun by shooting off screen at any time.
- Shoot power up weapons for that power.
 - Magnum: Large caliber bullets. You can shoot 6 bullets without reload.
 - Automatic: 12 round bullets. You can shoot 6 bullets without reload.
 - Assault Rifle: 3 shot burst. You can shoot 12 bullets without reload.
 - Shot Gun: Large gauge. You can shoot 6 bullets without reload.
 - Machine Gun: Full automatic. You can shoot 36 bullets only.
 - Grenade Gun: Explosive. You can shoot 8 bullets only.
- You lose your life by enemy's shots, or shooting innocent people.
- You can get extra lives with high scores.
- When you set the game mode to Arcade type, there are 5 stages and shooting range as bonus stage. And each stage consists of 3 or 4 scenes. When you defeat the boss enemy in each stage, you can go on to the next stage.
- When you set the game mode to Street type, you can choose the stage out of 5 stages and shooting range, total 6 stages.
- Continuation is available. (The operator can change the settings in the "GAME OPTIONS.")

SELF TEST

Normal: "OK" will be displayed. Then the game will start.

Abnormal: "BAD" will be displayed and self test will repeat.

MANUAL TEST

(1) HOW TO START

After switching on the power, press the TEST SWITCH on the PCB or on the cabinet, and you will get the MAIN MENU of the Manual Test.

NOTE: Switching on with TEST SWITCH pressed causes the program in the EEPROM to be initialized to default.

(2) HOW TO RETURN TO THE GAME MODE

Select "GAME MODE" on the MAIN MENU with START BUTTON, then pull gun trigger to return to the game mode.

(3) ITEMS AND HOW TO SELECT

Press player 1 START BUTTON to move up the menu, and press player 2 START BUTTON to move down the menu, then pull either player 1 or player 2 gun trigger to initiate testing. Press player 1 START BUTTON during or at the end of each test to return to the MAIN MENU.

LETHAL ENFORCERS TECHNICAL INFORMATION (cont.)

MAIN MENU

I/O CHECK
GUN CHECK
SCREEN CHECK
COLOR CHECK
SOUND CHECK
MASK ROM CHECK
GAME OPTIONS
COIN OPTIONS
GAME AUDITS
GAME MODE

P1 START=UP/P2 START=DOWN GUN TRIGGER=DO CHECK

(4) EXPLANATION OF THE ITEMS

1. I/O CHECK

Check both START buttons and Triggers to see "ON" when switched on. DIP SWITCH SETTINGS show the present settings. To modify settings, turn ON/OFF the DIP switches on the PCB (position Q1). Press player 1 and 2 START BUTTONS at the same time to return to MAIN MENU.

2. GUN CHECK

Check gun and monitor's condition. The screen is filled with boxes outlined in red. You aim and shoot these boxes first with player 1 gun, then with player 2 gun. The boxes will disappear when they are shot at. If you cannot shoot some boxes, you need to adjust the monitor or gun. You can see "HELP" screen by pressing player 2 START BUTTON. It suggests how to troubleshoot problems.

3. SCREEN CHECK

Adjust focus, alignment, size, etc. using the cross-hatch screen.

4. COLOR CHECK

In color bar screen, you can adjust color brightness so that the specified area will be colorless. Improper adjustment causes the problems in game play. When you press player 2 START BUTTON, the screen will be filled with red, green, blue, white then back to color bar screen.

5. SOUND CHECK

When "SOUND SCALE CHECK" is selected, a music scale sounds. At "SOUND CODE," pull player 1 trigger to increase code value, player 2 trigger to decrease code value respectively.

6. MASK ROM CHECK

Roms will be checked one after another, and the message "OK" or "BAD" will be displayed on the screen.

7. GAME OPTIONS

The following screen will appear. Push player 1 START BUTTON to move the arrow up, player 2 START BUTTON to move the arrow down, and pull gun trigger to modify setting. Factory settings are shown in green, and modified results in red. (Settings below are not always the factory settings.) After modification is completed, select "SAVE AND EXIT" and pull player 1 (2) trigger to save and return to MAIN MENU.

LETHAL ENFORCERS TECHNICAL INFORMATION (cont.)

GAME OPTIONS									
PLAYER'S LIFE EXTRA LIFE	1 CREDIT 5 LIVES 1ST AT 2000 POINTS 2ND AT 2000 POINTS								
CONTINUATION	YES (NO LIMIT)								
DIFFICULTY LEVEL VIDEO SCREEN	4/MEDIUM FLIP MIRROR								
VOLUME SOUND IN ATTRACT MODE	40 ALL THE TIME								
FACTORY SETTINGS SAVE AND EXIT EXIT									
P1 START=UP/P2 ST GUN TRIGGER=MODI									

- ... Select from 1 to 9 lives.
- ...Select out of "1st/1000, 2nd/1000," "1st/1000, 2nd/2000" "1st/2000, 2nd/2000," "1st/2000, 2nd/3000,"
- "NO EXTRA LIFE"
- ... Select out of YES (NO LIMIT), NO CONTINUE, YES (1-9 times)
- ... Select out of 8 levels.
- ... "MIRROR," "UPSIDE DOWN," "NO MIRROR."
 - "MIRROR FLIP"
- ...Sound volume from 1 to 59.
- ... "ALL THE TIME," "COMPLETELY OFF," "ONCE EVERY 4 CYCLES"
- ... All the settings return to default.
- ... Save the modified settings.

*If you select "EXIT" instead of "SAVE AND EXIT" after modifying some settings, the message appears: "YOU DID NOT SAVE. DO YOU WANT TO SAVE? YES/NO." When you choose "YES." the screen shows "NOW SAVING" and returns to MAIN MENU. If you select "NO," "NO MODIFICATION" is shown and then MAIN MENU appears.

(8) COIN OPTIONS

- 1. When the "COIN MECHANISM" is set at "COMMON" on the DIP SWITCH on the PCB (SW2 is "OFF"), on the cabinet with 2 coin slots, coin setting must be done for each coin slot.
- 2. When the "COIN MECHANISM" is set at "INDEPENDENT" on the DIP SWITCH on the PCB (SW2 is "ON"), the left coin slot will be for player 1, the right one for player 2.
- 3. When you want "PREMIUM START" setting, choose the number of extra coins necessary for starting, then decide the coin setting for continuation. The number of coins for starting will be the sum of both numbers. If you do not set premium start, the number of coins necessary for start and continuation will be the same.

COIN OPTIONS

FREE PLAY COIN MECHANISM

COIN SLOT 1

COIN SLOT 2

1 COIN 1 CREDIT 1 COIN 1 CREDIT YES 1

PREMIUM START

NO

COMMON

2 CREDITS TO START 1 CREDIT TO CONTINUE

FACTORY SETTINGS SAVE AND EXIT EXIT

> P1 START=UP/P2 START=DOWN GUN TRIGGER=MODIFY SETTINGS

... "NO," "YES."

...You can change this with DIP SWITCH on the PCB (SW2).

... "NO" or "YES 1" to "YES 4." (You can set the play fee for starting higher than the play fee for continuation.)

Same as "GAME OPTIONS"

LETHAL ENFORCERS TECHNICAL INFORMATION (cont.)

*COIN SETTING OPTIONS

COIN(S)	1	1	1	1	1	1	1	2	2	2	3	3	3	4	4	4
CREDIT(S)	1	2	3	4	5	6	7	1	3	5	1	2	4	1	3	5

(9) GAME AUDITS

The Game Audits Table records the game play statistics.

GAME AUDITS

TOTAL PLAYS **GAMES STARTED GAMES CONTINUED** AVERAGE TIME/CREDIT

AVERAGE SCORE/CREDIT

200 TIMES 50 TIMES 150 TIMES

60 SEC. 800 POINTS

CLEAR AUDIT TABLE

P1 START=UP/P2 START=DOWN **GUN TRIGGER=EXECUTION**

- ... The total amount of play
- ... The amount of play started from the beginning.
- ... The amount of continued.
- ... The average play time per credit.
- ... The average scores per credit.

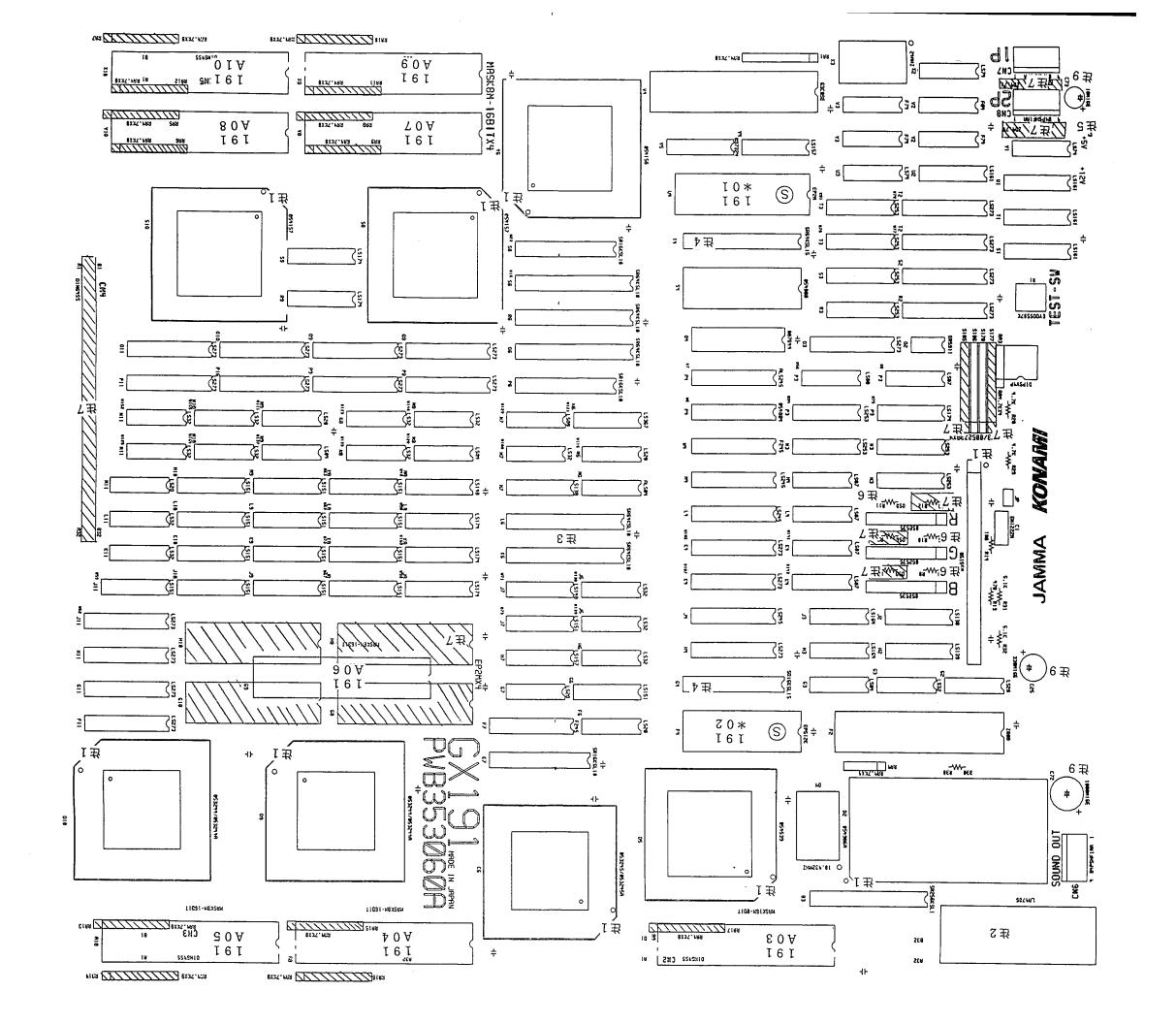
*After changing the "GAME OPTIONS" or "COIN OPTIONS," you need to clear the Audit Table to see those changes affect the game play.

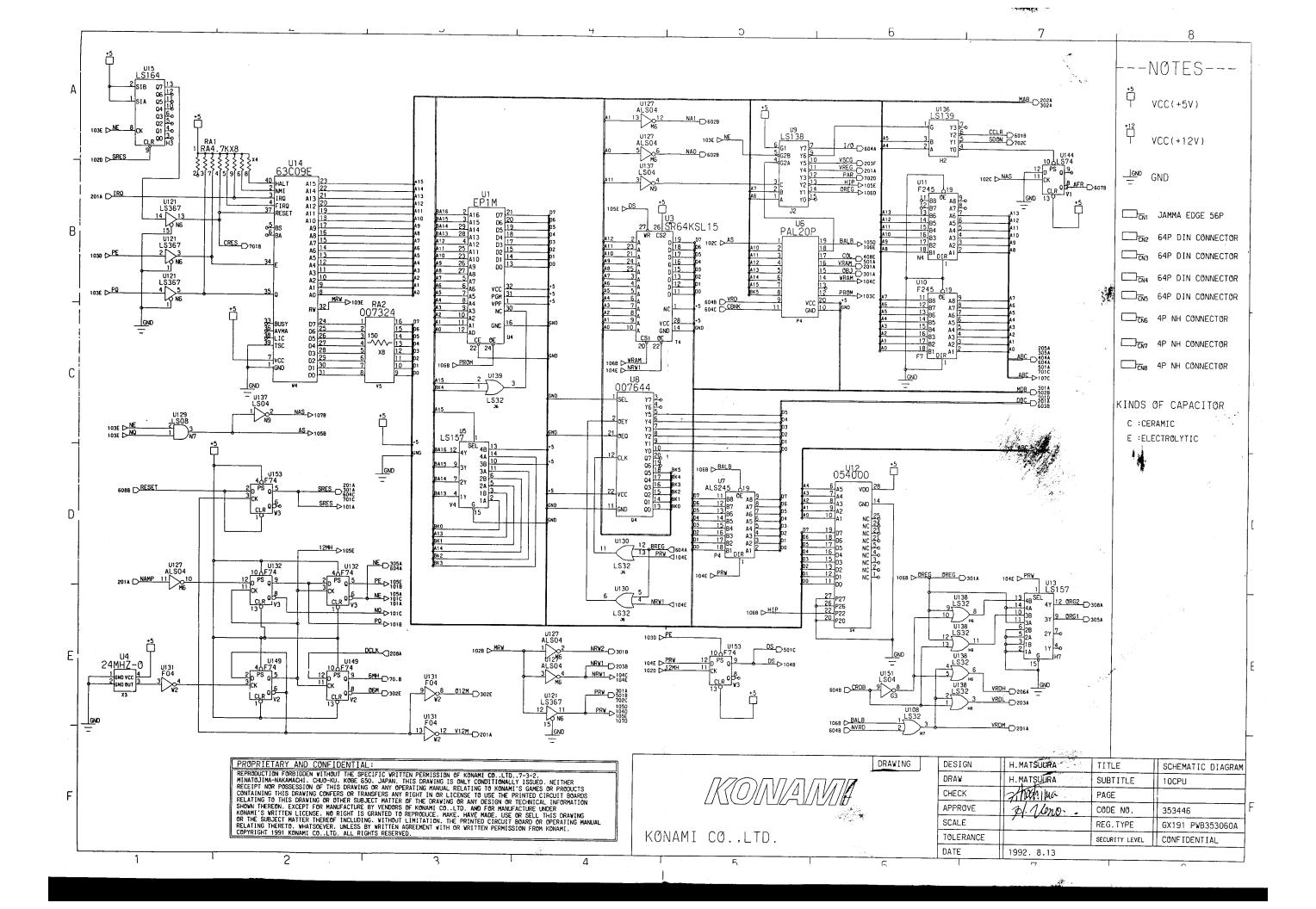
TROUBLESHOOTING ABOUT GUN AND MONITOR

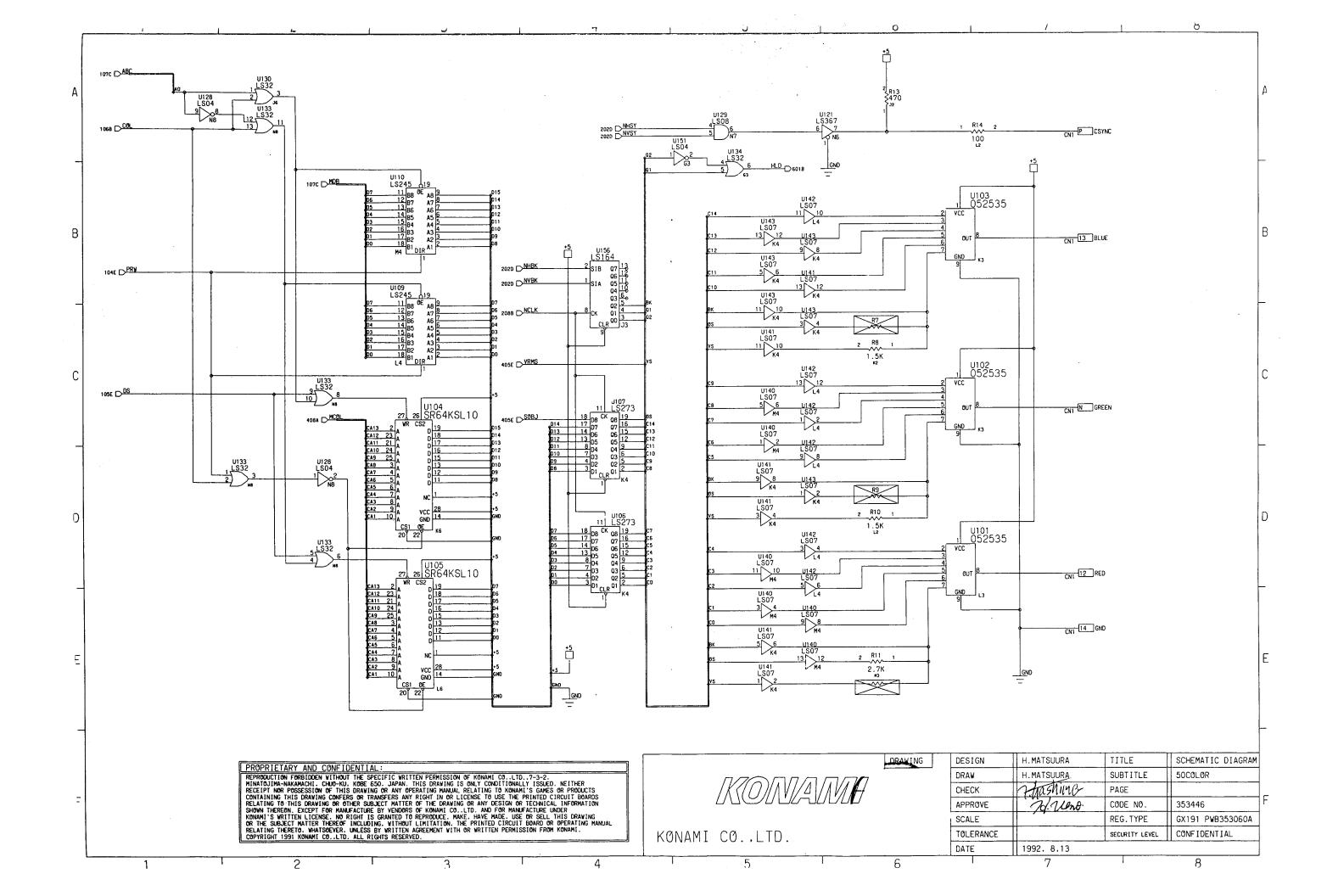
Here is a list of commonly found problems and their possible solutions.

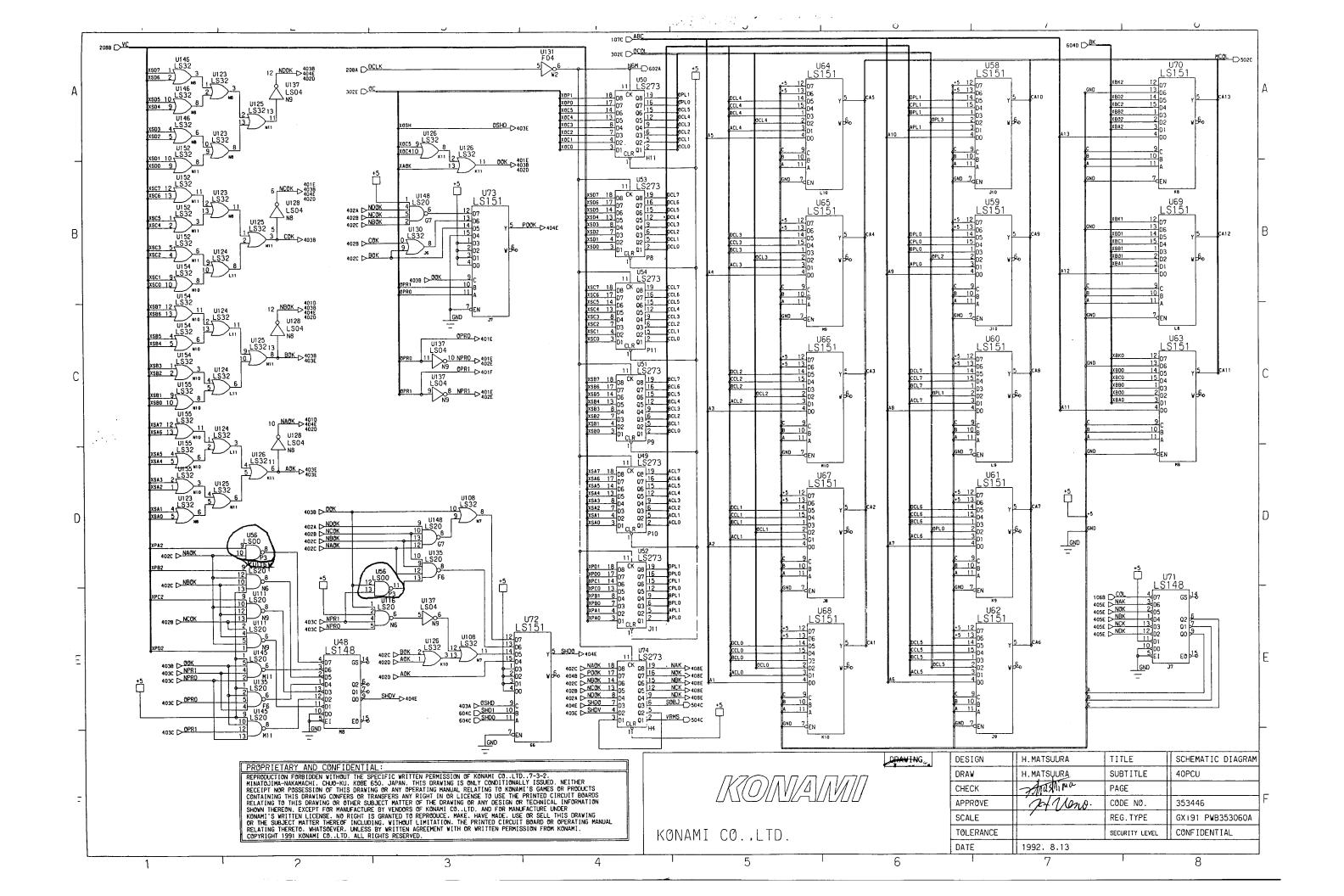
- Erratic gun shot placement.
- —Check to see that there is no reflected light from fluorescent or neon lights bouncing off of the screen. Strong sunlight also affects the shot placement.
- You cannot shoot a certain area in the screen.
- -Check to see the monitor's purity with red, blue, green, and white screen in the "COLOR CHECK" in the Manual Test. If you find purity problems, you should degauss the monitor.
- -Check to see there is no magnetic equipment around the cabinet. This may also cause the monitor to become magnetized.
- -After degaussing the monitor, you can check the gun and monitor in the "GUN CHECK" in the Manual Test.
- Screen flashes when trigger is pulled but no shot is made.
- -Check to see the gun lens inside of the barrel is clean.
- -Adjust the monitor's brightness with color bar screen in the "COLOR CHECK" of the Manual Test.

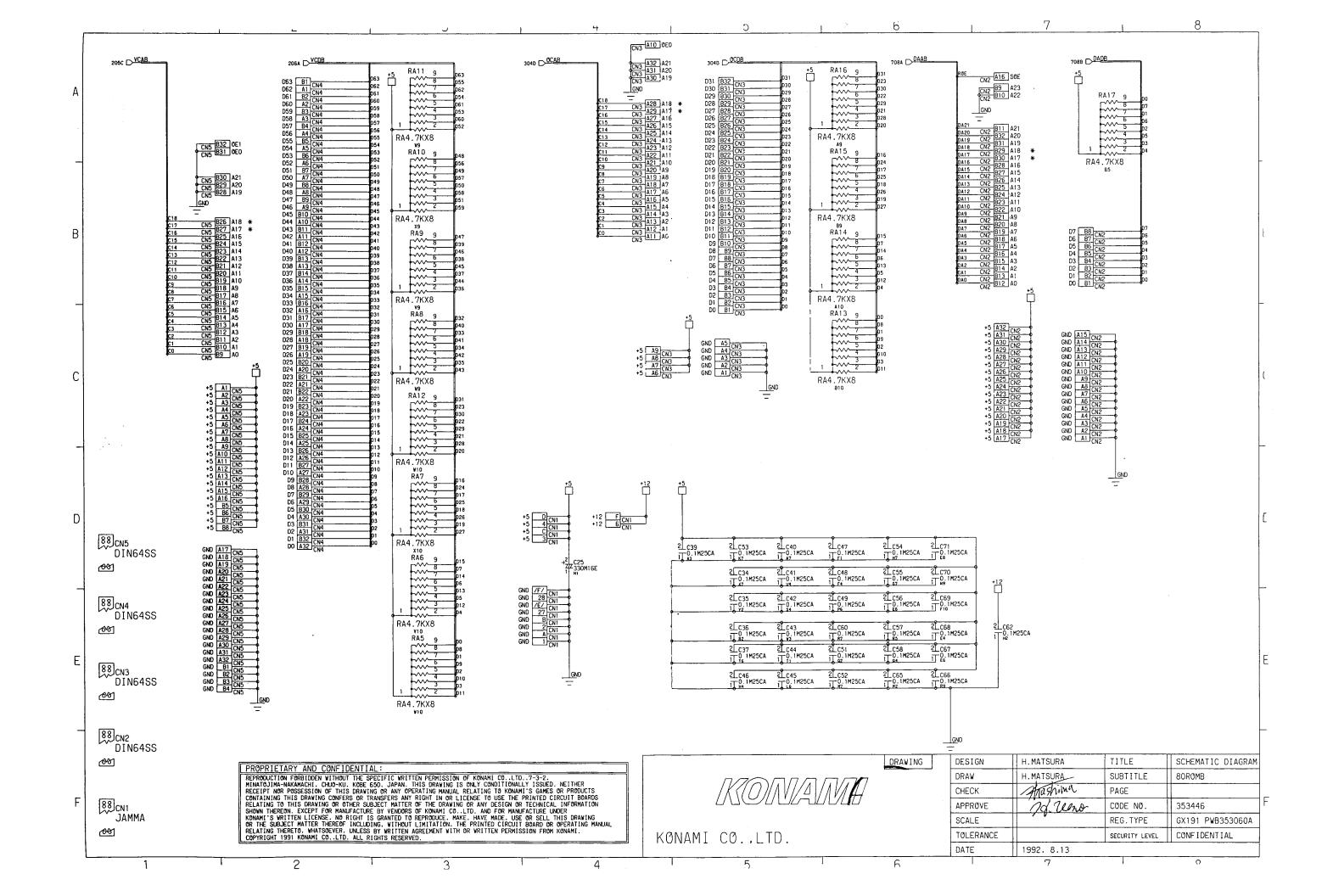
CLEAN MONITOR AND MIRROR REGULARLY.

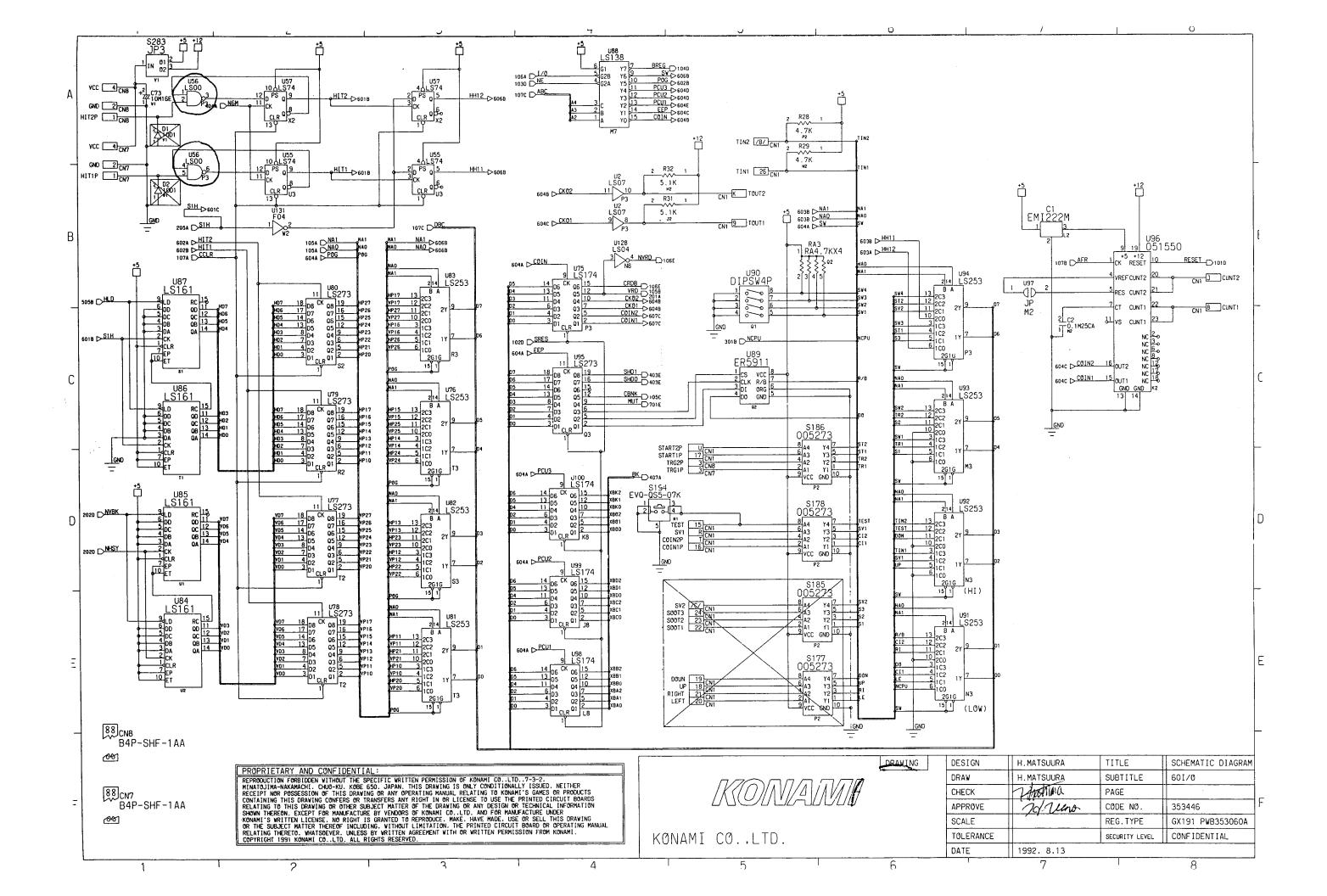












WIRING DIAGRAM

ENFORCERS

ETHAL