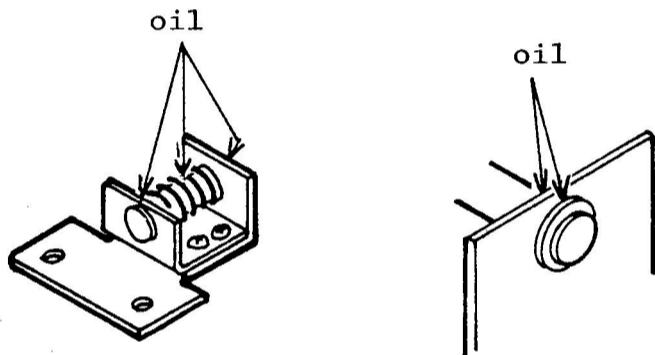# CAUTIONS

1. Turn the power off before exchanging and removing the P.C.Board and connectors.

2. Do not touch IC, LSI and other electronic parts on P.C.Boards. Do not use a tester or the like on them.

3. P.C.Board to be stored or transported should be wrapped by a conductive pouch or aluminum foil.

4. P.C.Board should not be exposed direct to the sun.

5. When soldering, use soldering iron of which end is grounded.
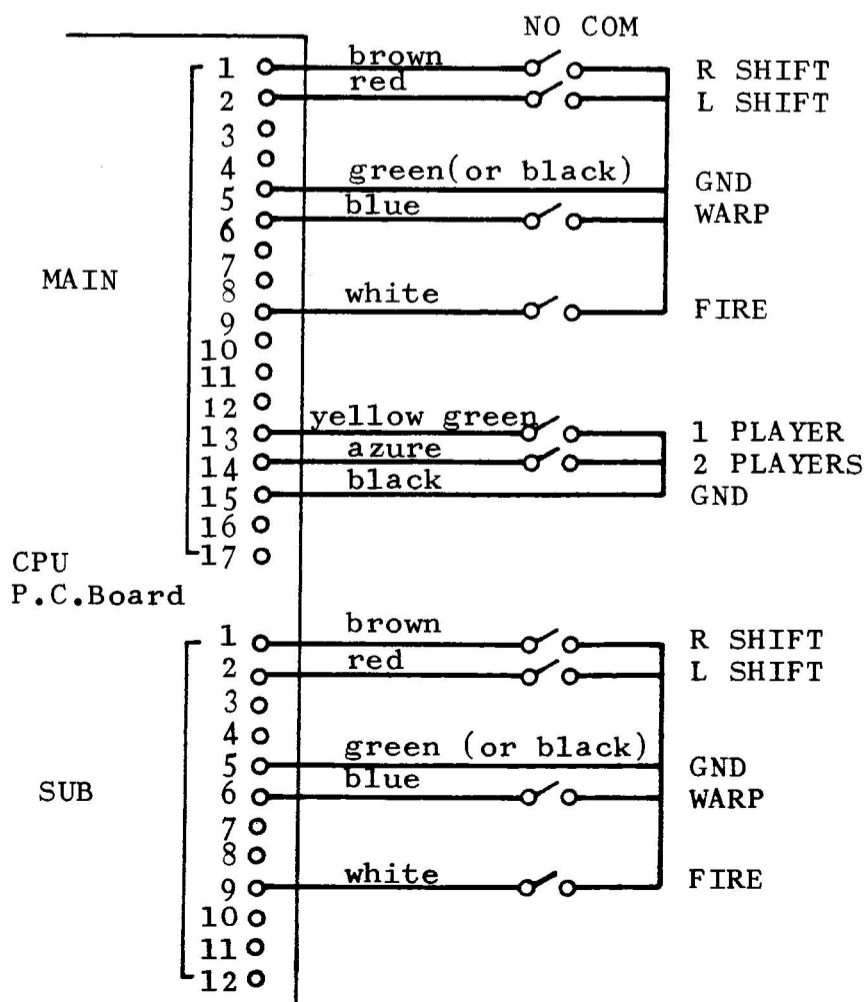
OILING

Add oil to the following part of the control box when control lever is not smooth in operation.
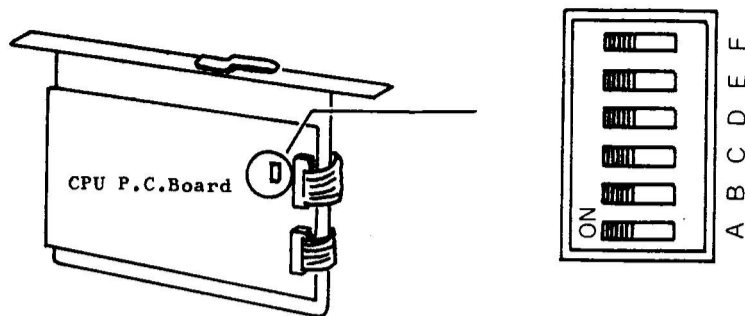
(Use sillicon grease "SILICOLUBE G-31L".)
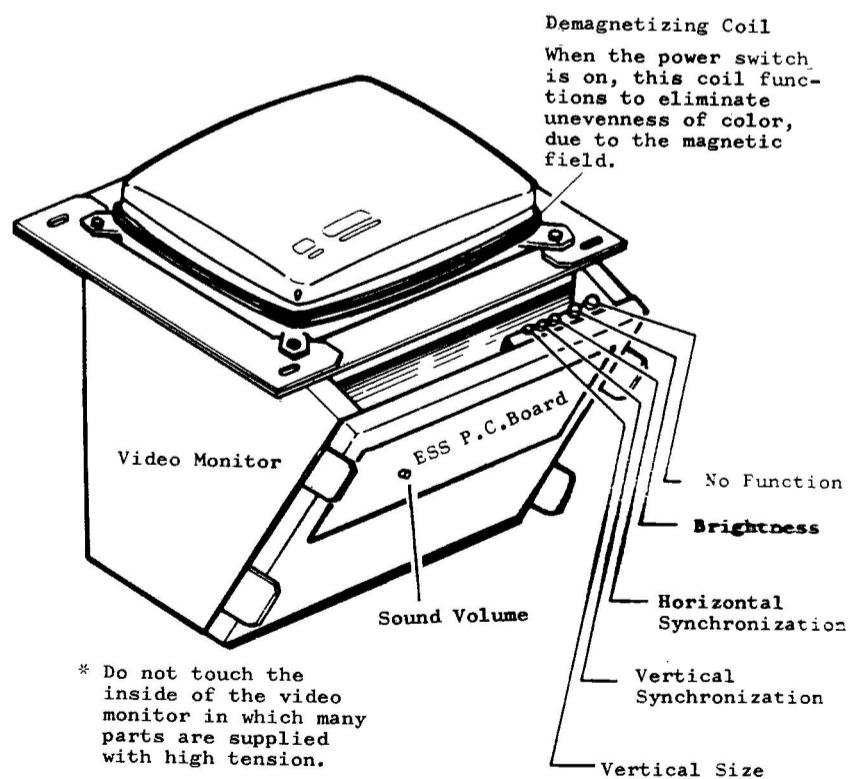
oil   oil

WIRING

(Control Box)

MAIN

No.	color		function
1	brown	R SHIFT
2	red	L SHIFT
4	green(or black)	GND
5	blue	WARP
8	white	FIRE
13	yellow green	1 PLAYER
14	azure	2 PLAYERS
15	black	GND

NO COM

CPU P.C.Board

SUB

No.	color	function
1	brown	R SHIFT
2	red	L SHIFT
5	green (or black)	GND
6	blue	WARP
9	white	FIRE

ADJUSTMENTS

1. Number of space ship, coinage, score level and type.

CPU P.C.Board

Operate change-over switch after discontinuing power.

	A	B	C	D	E	F
Number of space ship						
3	ON	ON				
4	OFF	ON				
5	ON	OFF				
6	OFF	OFF				
Coinage						
1 coin / 1 play			ON	ON		
2 coins / 1 play			OFF	ON		
1 coin / 2 plays			OFF	OFF		
USA						
3 coins/ 1 play			ON	OFF		
Other territories						
1 coin / 3 plays			ON	OFF		
Score level for extra space ship						
5,000 points					ON	
8,000 points					OFF	
Table / Up-Right						
Table						ON
Up-Right						OFF

2. Video Monitor and ESS P.C.Board

Demagnetizing Coil

When the power switch is on, this coil functions to eliminate unevenness of color, due to the magnetic field.

Video Monitor

ESS P.C.Board

No Function

Brightness

Horizontal Synchronization

Vertical Synchronization

Vertical Size

Sound Volume

* Do not touch the inside of the video monitor in which many parts are supplied with high tension.

3. Service Switch

Cash Box
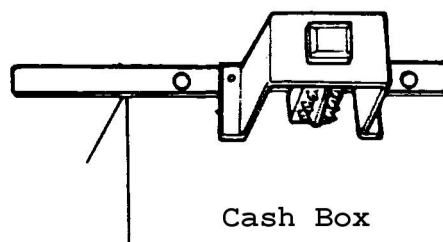
* The service switch is used for adjustment. When this switch is depressed, game can be played while the game counter does not work.

TST

TST