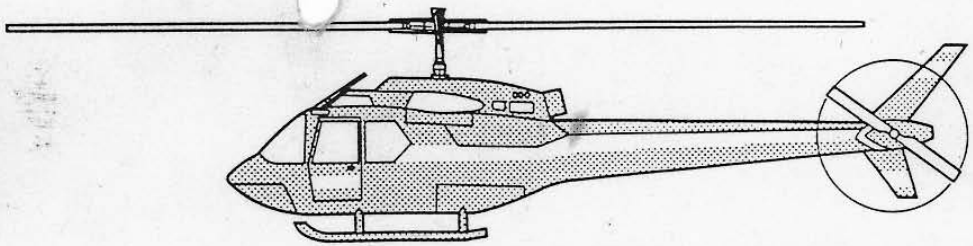
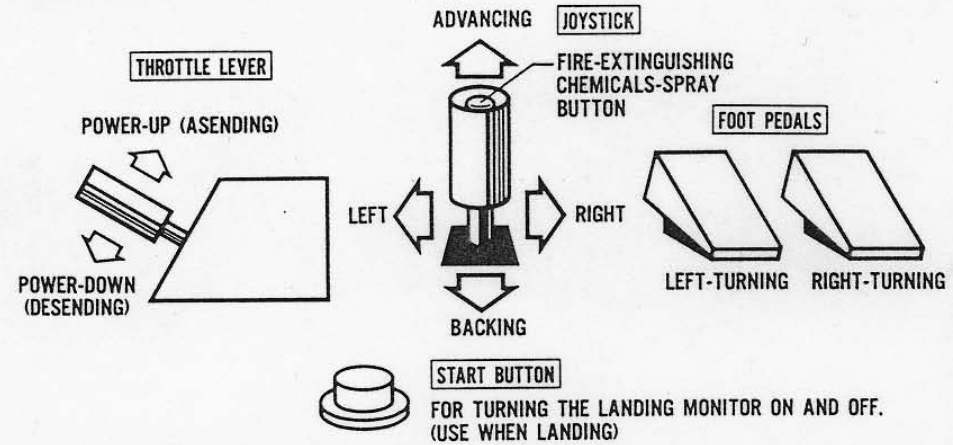
AIR INFERNO

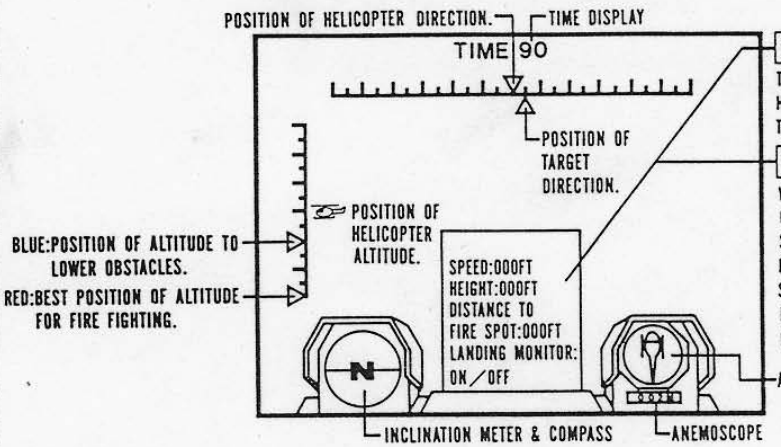


CONTROLS



FOR TURNING THE LANDING MONITOR ON AND OFF. (USE WHEN LANDING)

EXPLANATION FOR METERS AND H. U. D. (HEAD-UP DISPLAY)



BASIC ROUNDS

☆ IN THIS GAME, THERE ARE BASIC ROUNDS AND RESCUE ROUNDS. BEGINNERS ARE RECOMMENDED PLAYING THE BASIC ROUNDS FIRST.

BASIC TRAINING:

① ACCORDING TO INFORMATION, RISE ALTITUDE.
② MOVE FORWARD TO A MARKER-LIGHT IN FRONT.
③ WHEN TOUCHING THE MARKER, THE NEXT MARKER LIGHTS AS A NEW TARGET.
④ IN THE SAME MANNER AS ③, WHEN PASSING 2 MARKERS, A MARKER LIGHTS IN A LANDING SPOT.
⑤ LAND ON THAT LANDING SPOT.

FIRE-EXTINGUISHING TRAINING:

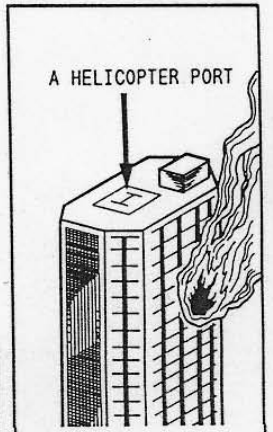
① ACCORDING TO INFORMATION, RISE ALTITUDE.
② PUT OUT A FIRE ON THE FIELD BY USING FIRE-EXTINGUISHING CHEMICALS.
③ WHEN PUTTING OUT THE FIRE, ANOTHER FIRE APPEARS IN ANOTHER PLACE.
④ WHEN PUTTING OUT A CERTAIN NUMBER OF FIRES, LANDING INSTRUCTIONS ARE DISPLAYED.
⑤ WHEN LANDING. THIS TRAINING ENDS.

RESCUE ROUNDS

① APPROACH A FIRE WITH THE SMOKE FOR A GUIDE.
② ACCORDING TO INFORMATION, PUT OUT THE FIRE.
③ LAND ON A (WHITE H-MARKED) HELICOPTER PORT.

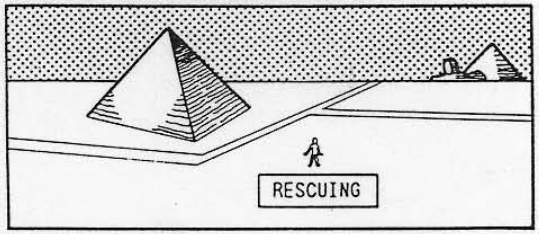
(WHEN LANDING, THE PLAYER SUCCEEDED IN RESCUING.)

A TANKER IS ON FIRE. DECK HEIGHT:32FT



A MULTISTORY BUILDING IS ON FIRE.
ROOF HEIGHT:28FT
SPOT HEIGHT:230~240FT

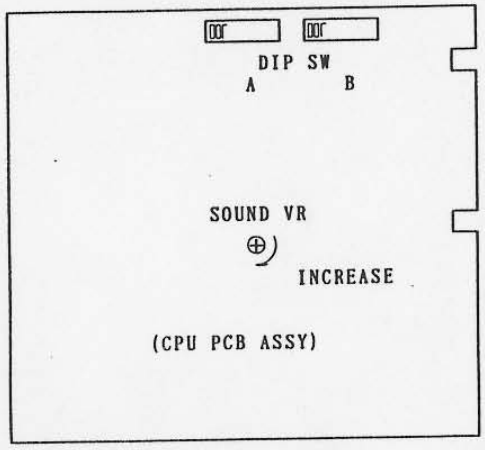
IN VOLCANO AND DESERT SCENES, NO FIRE-EXTINGUISHING ACTION IS NEEDED, AND ONLY RESCUING ACTION IS REQUIRED.



ADJUSTMENT OF GAME PC BOARD (AIR INFERNO G25 00609A)

T-CONNECTOR

1	GND	5	GND	9	+5V
2	GND	6	NOT USE	10	+5V
3	GND	7	NOT USE	11	+5V
4	GND	8	POST	12	+5V



☆ CONTROL OF THIS GAME USES 2 LEVERS AND 2 BUTTONS.

J-CONNECTOR

SOLDER SIDE		COMPONENTS SIDE	
GND	A	1	GND
GND	B	2	GND
+5V	C	3	+5V
+5V	D	4	+5V
-5V	E	5	-5V
+13V	F	6	+12V
POST	H	7	POST
COIN METER B	J	8	COIN METER A
COIN LOCKOUT 2	K	9	COIN LOCKOUT 1
SP/CH1(-) F	L	10	SP/CH1(+) F
SP/CH2(-) F	M	11	SP/CH2(+) F
VIDEO G	N	12	VIDEO R
H-SYNC	P	13	VIDEO B
SERVICE SW	R	14	VIDEO GND
NOT USE	S	15	V-SYNC
COIN SW 2	T	16	COIN SW 1
NOT USE	U	17	1P SELECT
SP/CH3(-) F	V	18	SP/CH3(+) F
PULSE 1Y	W	19	PULSE 1X
PULSE 2Y	X	20	PULSE 2X
POS SW 1	Y	21	PULSE 3X
POS SW 2	Z	22	PULSE 3Y
POS SW 4	a	23	POS SW 3
POS SW 6	b	24	POS SW 5
LINE OUT	c	25	R SW A
GND	d	26	R SW B
NOT USE	e	27	R SW C
NOT USE	f	28	NOT USE

NOTE) BEFORE SETTING OF THE DIP SWITCH, TURN THE POWER SWITCH OFF.

◇ SETTING OF DIP SWITCH A

(*):FACTORY SETTINGS

SETTINGS	POSITIONS	1	2	3	4	5	6	7	8
MOVING CONTROL	UPRIGHT/COCKPIT	OFF							
	DX"MOVING" ONLY	ON							
CHANGEOVER OF TEST MODES ☞	* NORMAL TEST MODE		OFF						
	MOTION TEST MODE		ON						
TEST MODE	* NORMAL GAME			OFF					
	TEST MODE			ON					
ATTRACT SOUND	* WITH				OFF				
	WITHOUT				ON				
PLAY PRICING COIN A	* 1 COIN 1 PLAY					OFF	OFF		
	2 COINS 1 PLAY					ON			
	3 COINS 1 PLAY					OFF	ON		
	4 COINS 1 PLAY					ON			
PLAY PRICING COIN B	* 1 COIN 2 PLAYS							OFF	OFF
	1 COIN 3 PLAYS							ON	
	1 COIN 4 PLAYS							OFF	ON
	1 COIN 6 PLAYS							ON	

☞ THIS CHANGEOVER OF TEST MODES WILL BE OF EFFECT ONLY WHEN THE POSITION-3 OF THE DIP SW-A IS TURNED ON.

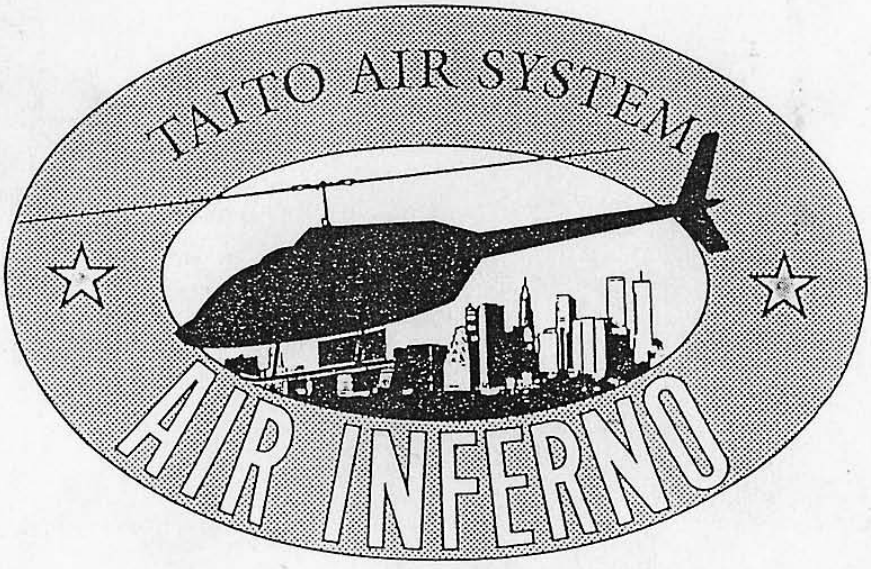
◇ SETTING OF DIP SWITCH B

SETTINGS	POSITIONS	1	2	3	4	5	6	7	8
GAME DIFFICULTY (WIND SPEED) EASY(A)→DIFFICULT(D)	* RANK B	OFF	OFF				OFF		
	RANK A	ON							
	RANK C	OFF	ON						
	RANK D	ON							
GAME DIFFICULTY (TIMER LENGTH)	* RANK B			OFF	OFF				
	RANK A			ON					
	RANK C			OFF	ON				
	RANK D			ON					
RUDDER PEDAL	WITHOUT(UPRIGHT)					OFF			
	WITH(COCKPIT/DX)					ON			

ELECTROCOIN AUTOMATICS LTD

SITDOWN

SERVICE MANUAL



TAITO CORPORATION

PART NO 64077

SPECIFICATIONS:

1. Power Supply	240/220VAC (HANTAREX US250 P.S.U)
2. Power Consumption	140w
3. Play Pricing	Adjustable on Dip switches
4. TV Monitors	25" Wells Gardener colour monitor
5. Dimensions	Width : 820mm (950 including coin box)
	Depth : 1710mm
	Height : 1400mm
6 Weight	Approximately: 130kg

* The specifications and appearance may be changed for improvement.

Table of Contents

PRECAUTIONS TO BE OBSERVED WHEN INSTALLING MACHINE

THIS VIDEO GAME IS FOR INDOOR USE ONLY.
WHEN INSTALLING AVOID PLACES MENTIONED BELOW

1. PLACES SUBJECT TO CONDENSATION DUE TO HUMIDITY.
2. IN THE PROXIMITY OF AN INDOOR SWIMMING POOL OR SHOWER.
3. PLACES SUBJECT TO DIRECT SUNLIGHT.
4. VICINITY OF HIGHLY INFLAMMABLE/VOLATILE CHEMICALS.
5. UNEVEN SURFACES.
6. VICINITY OF FIRE EXITS AND FIRE EXTINGUISHERS.
7. DUSTY ATMOSPHERE.

INSTALLATION

IT IS IMPORTANT TO AVOID ROUGH HANDLING OF THIS MACHINE AS CERTAIN PARTS ARE FRAGILE.
UPON REMOVAL OF THE SHIPPING CARTON EXAMINE THE EXTERIOR OF THE CABINET FOR DENTS, CHIPS OR BROKEN PARTS.
ACCESS TO THE APPLIANCE SHOULD ONLY BE MADE BY QUALIFIED PERSONNEL FOR ANY PURPOSE.
INSPECT THE INTERIOR OF THE CABINET AS FOLLOWS:

A) CHECK THAT ALL THE PLUG IN CONNECTORS ARE FIRMLY SEATED i.e. THE EDGE CONNECTOR ON THE CPU BOARD. IF ANY CONNECTORS ARE FOUND UNPLUGGED IT IS IMPORTANT WHEN RE-PLUGGING NOT TO FORCE THE CONNECTORS TOGETHER. AS SOME MAY BE KEYED AND ONLY GO ON IN THE PROPER ORIENTATION.

B) CHECK THAT ALL PLUG-IN INTEGRATED CIRCUITS AND SUB BOARDS ON THE GAME PCB ARE FIRMLY SEATED IN THEIR SOCKETS.

C) CHECK ALL SUB ASSEMBLIES SUCH AS THE POWER SUPPLY FOR SECURE MOUNTING.

ENSURE THE MAINS SUPPLY IS CORRECT FOR OPERATION OF THE MACHINE, AND THAT THE SUPPLY HAS A GOOD EARTH CONNECTION.

SAFETY/MAINTENANCE

THIS VIDEO GAME REQUIRES CERTAIN MAINTENANCE TO KEEP IT IN GOOD WORKING ORDER.
IT IS ADVISED THAT THE SITE MANAGER CHECKS THE SERVICEABILITY OF THE MACHINE DAILY.

WARNING

HIGH VOLTAGES EXIST WITHIN THE MACHINE SO IT IS ADVISABLE THAT ONLY QUALIFIED SKILLED PERSONNEL SHOULD TOUCH ANY INTERNAL PARTS OF THE MACHINE. THE HIGH VOLTAGES PRESENT MAY CAUSE SHOCK OR EVEN FATALITY WITH MISUSE. ALWAYS TURN THE MACHINE OFF BEFORE COMMENCING ANY WORK.

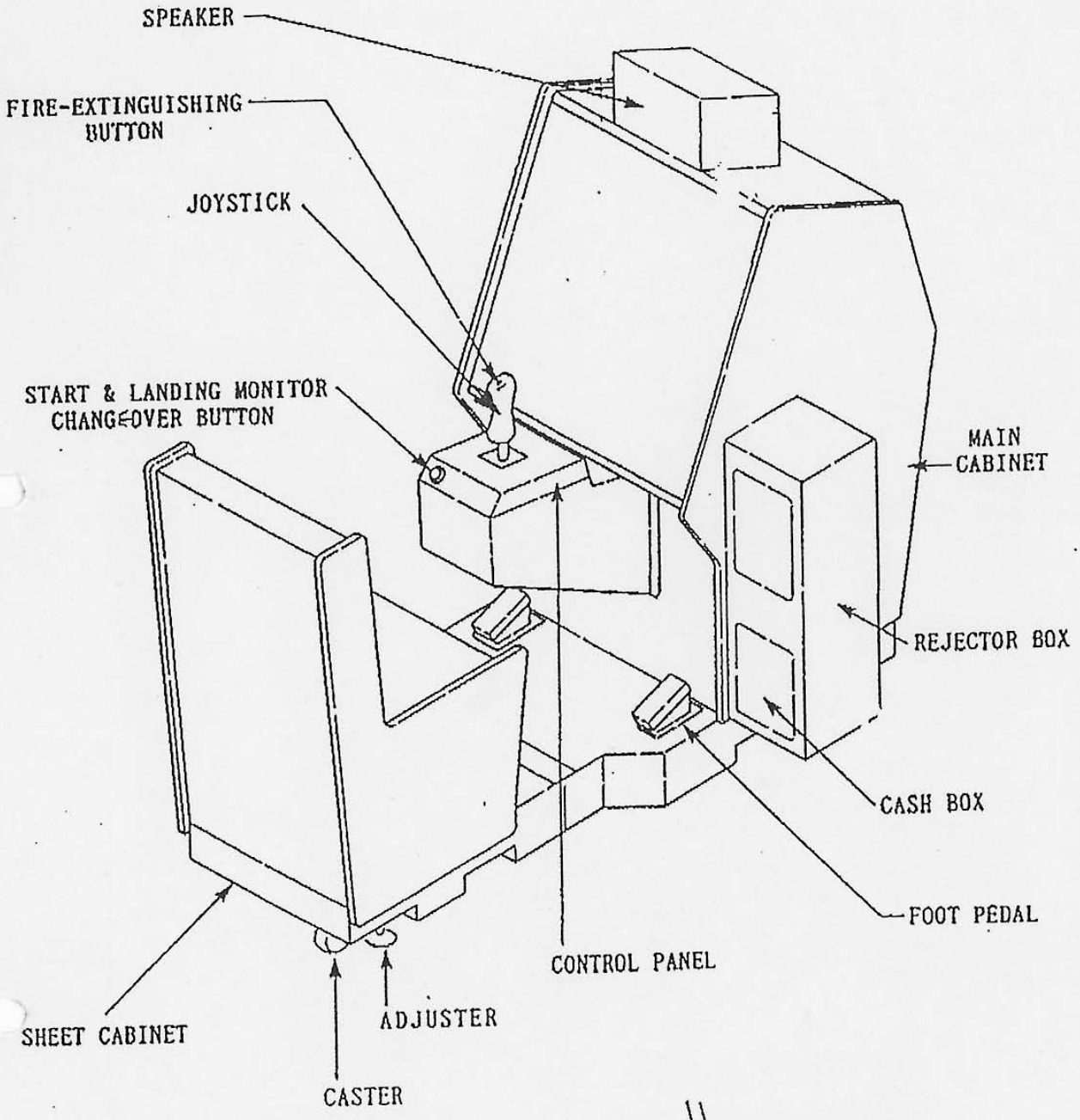
HIGH VOLTAGES MAY EXIST IN ANY MONITOR UNIT, EVEN WITH THE POWER DISCONNECTED. USE EXTREME CAUTION AND DO NOT TOUCH ELECTRICAL PARTS, OR THE YOKE WITH YOUR HANDS OR WITH METAL OBJECTS HELD IN YOUR HANDS. INFORMATION ON THE MONITOR FUSES ARE CONTAINED IN THE MONITOR MANUAL SUPPLIED WITH THIS MACHINE.

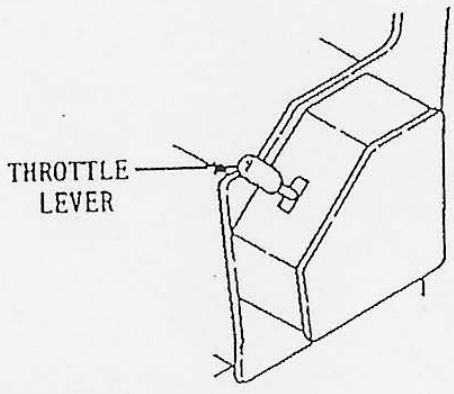
CAUTION

DO NOT USE FUSES OTHER THAN THOSE SPECIFIED, FOR THE CONTINUED PROTECTION OF YOUR GAME.

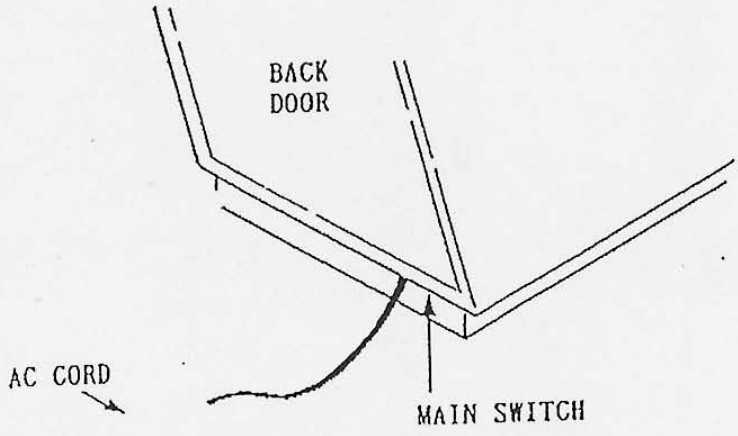
NEVER CONNECT OR DISCONNECT ANY CONNECTORS OF THE PCB, OR RESET THE DIP SWITCH SETTINGS WHILE THE POWER IS ON.

REGULARLY CLEAN THE OUTSIDE OF THE CABINET. DO NOT DRY WIPE ANY OF THE ACRYLIC PANELS, BECAUSE ANY DUST CAN SCRATCH THE SURFACE AND RESULT IN FOGGING THE PLASTIC. ACRYLIC SURFACES MAY BE CLEANED WITH ANY NON-ABRASIVE HOUSEHOLD CLEANER.





(THE PART OF SHEET)



(THE BACK SIDE OF MAIN CABINET)

DESCRIPTION

This game is a realistic helicopter simulation game. Using high class 3.D graphics, in which the player can enjoy the action of fire fighting and the reality of life saving.

HOW TO PLAY

1. Insert coin(s) and press the start button. The screen button is used to change over to the landing monitor and selecting continued play (when machine has credits).

2. After selecting "BASIC ROUNDS" or "RESCUE ROUNDS". Press the start button once again.
   * BASIC RONDS (2 rounds):- for learning the controls and for practising fire fighting.
   * RESCUE ROUNDS (4 rounds):- for actual fire fighting and life saving.

3. Control the helicopter by looking at the instruments and the other information shown on the screen.

   NOTE: On landing, take off or when approaching the spot where the fire is, and life saving, press the "start button" to change over to the zoom in camera which is under the helicopter.

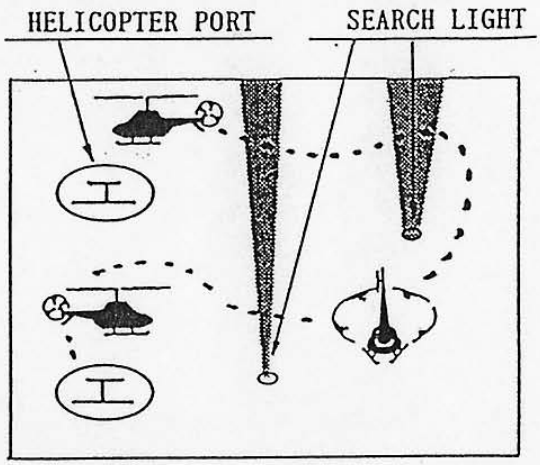
4. When the time reaches "00" the game ends.

5. If the total score is ranked within the top 3, the name entry can now be registered upto 3 letters.

BASIC ROUNDS

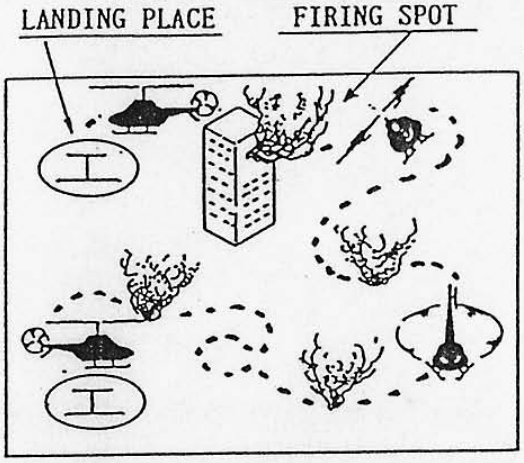
1) Flight Training

Pass through 2 search light places and land the helicopter on a helicopter port.



2) Fire-Extinguishing Training

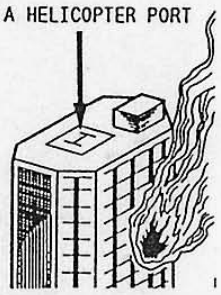
After extinguishing 4 firing spots, land the helicopter on a place where the search light is flashing.



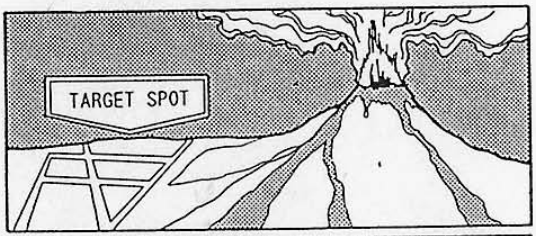
RESCUE ROUNDS

1) A Tanker is on Fire.
After extinguishing the fire, land the helicopter on the helicopter port on the tanker.
Note: It is impossible to land it on the surface of the sea.

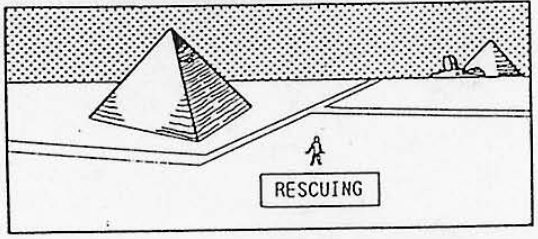
2) A Multistory Building is on Fire.
After extinguishing the fire, land the helicopter on the helicopter port of the roof building.
Note: As a strong wind is blowing, care must be taken.



3) A Volcanic Eruption (Lifesaving)
After flying over the volcano, land the helicopter on the port located on the other side of the Island.
Note: Whilst flying, watch out for volcanic rock.



4) An Archaeologist has disappeared in the desert (Rescuing)
Find and rescue an archaeologist who loses his way in the desert.
Note: Whilst flying pay attention to sand column.
Also trouble with instruments, fly manually.



CONTROLLING METHOD

Control the helicopter by moving the joystick back and forth as well as left and right.

By stepping on the left or right pedal the helicopter turns accordingly (left/right) at that spot.

By stepping on the left or right pedal whilst turning the joystick (left/right) the helicopter turns widely.

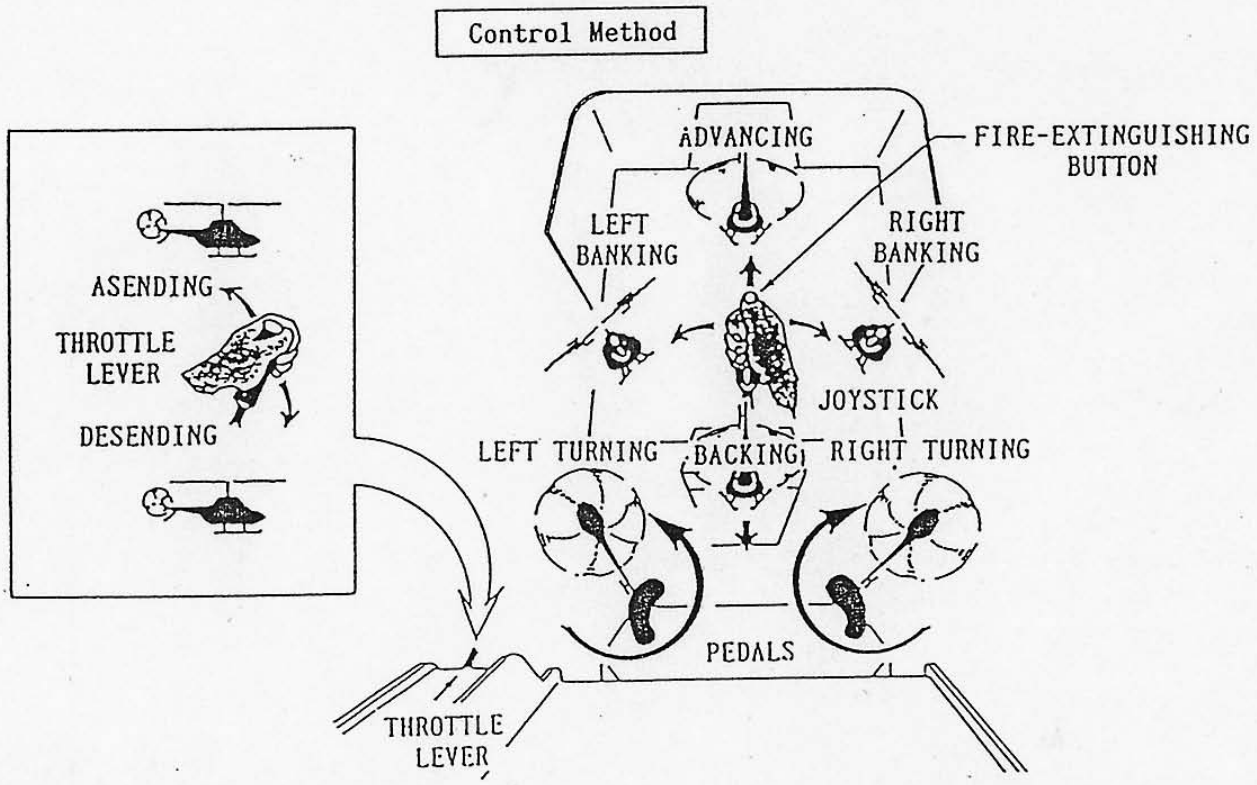
Examples

By stepping on the right pedal whilst turning the joystick to the right the helicopter turns to the right.

Using the throttle lever moves the helicopter up and down. When this lever is positioned in the middle, the helicopter hovers on the spot.

Move the helicopter to the firing place by using the joystick, pedals and the throttle lever.

By pressing the fire-extinguishing button located on the joystick, chemicals are ejected to extinguish the fire.

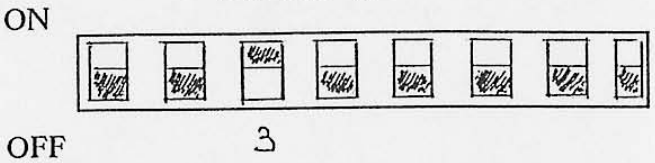


NOTE: When position 5 of the DIP SW (located on the Main PC Board) is turned on, the helicopter can be turned and banked by using the joystick only.
(Left banking <-- Left turning <-- 0 --> Right turning --> Right banking)
Therefore the pedals have no effect when turning.

TEST MODE

1) After turning on position 3 of DIP SW A, turn the power on.

DIP SW A-3



Test Mode

(1)

NOW SRAM CHECKING

(displayed for 1 or 2 seconds)

(2)

TEST MODE
NOW RAM CHECKING

(flashing for 15-20 seconds)

(3)

CROSSHATCH

With this screen adjust the TV monitor

= I/O Test Screen =

(4) TEST MODE

1 COIN A : OFF COIN B : OFF
SERVICE : OFF TILT : OFF
START : OFF FIRE : OFF

2 HANDLE X : OFF LEVER : OFF
Y : OFF

3 PEDAL L: OFF R : OFF

4 COUNTER 1 : F F F E
2 : F F F F
3 : 0 0 0 0

	8	7	6	5	4	3	2	1	
DIP SW A:	H	H	H	H	H	L	H	H	L: ON
B:	H	H	H	H	H	H	H	H	H: OFF

SOUND CODE 0 0

RAM OK RAM OK

Explanation of Screen Display:

1 When each SW is pressed, this changes ON <--> OFF

2 This is for detecting the positions of the joystick and the throttle lever "OFF" is normal

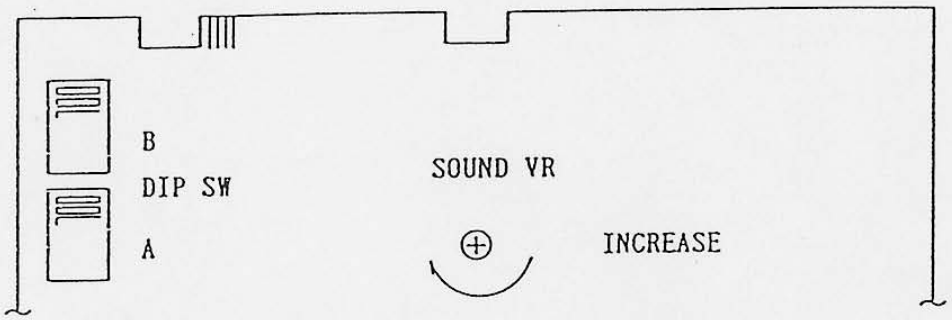
3 "PEDAL" means foot pedal

4 "COUNTER 1-3" shows the pulse cam value, which is for engineers use.

Test Mode So Far
Before checking play, turn power off. After turning off position 3 of DIP SW A (located on the Main PCB) turn power on again.

ADJUSTMENTS OF MAIN PC BOARD

When adjusting the PC board, never forget to turn the power off first.



SOUND VR . . . The sound volume can be increased by turning in the same direction as shown by the arrows. However, these volume controls are not used in normal conditions as the sound volume control is equipped within the rejector door, as is the central control.

CHANGING THE DIP SW SETTINGS

<> Setting of Dip Sw A

* Factory Settings

SETTINGS	POSITIONS	1	2	3	4	5	6	7	8
MOVING CONTROL	UPRIGHT/COCKPIT DX "MOVING" ONLY	OFF ON							
Changeover Of Test Modes	* Normal Test Mode Motion Test Mode		OFF ON						
TEST MODE	* Normal Game Test Mode			OFF ON					
ATTRACT SOUND	* WITH WITHOUT				OFF ON				
PLAY PRICING COIN A	* 1 COIN 1 PLAY 2 COINS 1 PLAY 3 COINS 1 PLAY 4 COINS 1 PLAY					OFF ON OFF ON	OFF OFF ON ON		
PLAY PRICING COIN B	* 1 COIN 2 PLAYS 1 COIN 3 PLAYS 1 COIN 4 PLAYS 1 COIN 6 PLAYS							OFF ON OFF ON	OFF OFF ON OFF

<> Setting of Dip Sw B

SETTINGS	POSITIONS	1	2	3	4	5	6 7 8
GAME DIFFICULTY (WIND SPEED) EASY (A) DIFFICULTY (D)	* RANK B RANK A RANK C RANK D	OFF ON OFF ON	OFF OFF ON ON				
GAME DIFFICULTY (TIMER LENGTH)	* RANK B RANK A RANK C RANK D			OFF ON OFF ON	OFF OFF ON ON		OFF
FOOT PEDAL	WITHOUT (Upright) WITH (Cockpit/DX)					OFF ON	

HOW TO REMOVE EACH UNIT OR PART

1. How to remove the Control Panel
2. How to remove the Front Panel
3. How to remvoe the TV Monitor
4. How to remove the Pedals (on each side)
5. How to remove the Speaker (in the Seat Unit)
6. How to remove the Throttle Lever

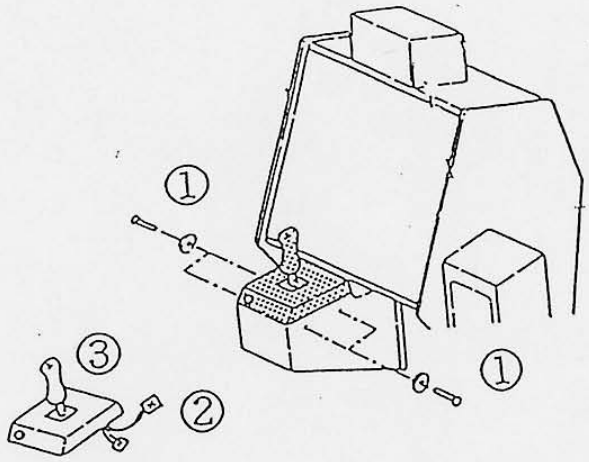
1. How to Remove the Control Panel

The Control Panel should be removed when:
The joystick and the start button is replaced
The monitor is adjusted
The monitor is replaced

(1) Remove the Button Head Screws. M6 x 20 (SILVER) and the Plain Washer. M6
(2 pieces on each side = 4 pieces in total)

(2) Raise the control, and remove each one of the K- and N- connectors

(3) Now, the control panel can be removed

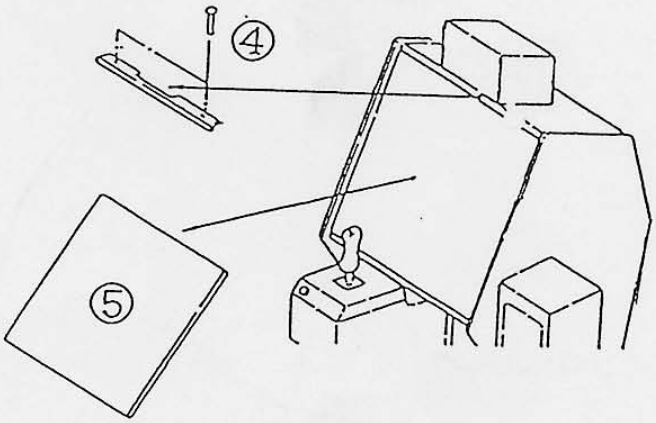


2. How to Remove the Front Panel

The Front Panel should be removed when:
The front panel is cleaned
The monitor is adjusted
The monitor is replaced

(4) Remove the Button Head Screws. M4 x 16
(2 pieces located on the upper parts of the panel support -A)

(5) Now, the front panel can be removed



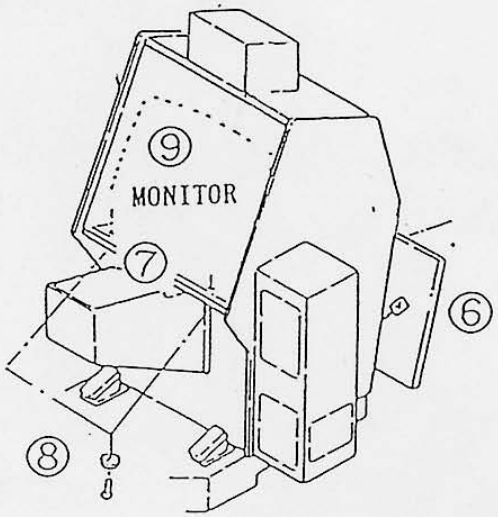
3. How to Remove the TV Monitor

(6) Remove the back door, and unplug the V- connector

(7) Remove the control panel and the front panel (See above (1) - (5))

(8) Remove the Button Head Screws. M6 x 35 and Plain washers 7 x 22 x 1.6 (each 2 pieces from the lower part)

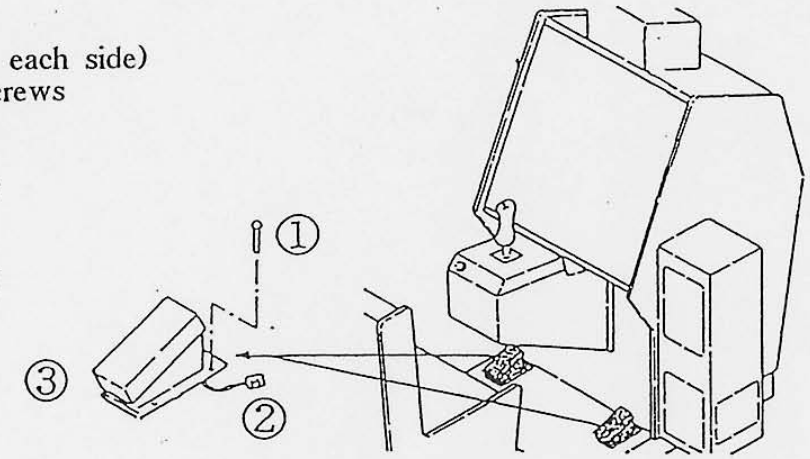
(9) Pull out the TV monitor assy.



4. How to Remove the Pedals (one each side)
(1) Remove 4 of the Button Head Screws
M5 x 20

(2) Unplug the M1- (right) connector
Unplug the M2- (left) connector

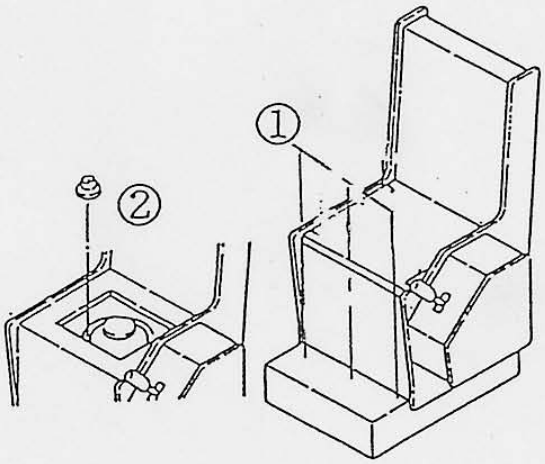
(3) Now, the pedals can be removed



How to Remove the Speaker (seat unit)
The Speaker should be removed when:
The body sonic speaker is replaced
The seat is replaced

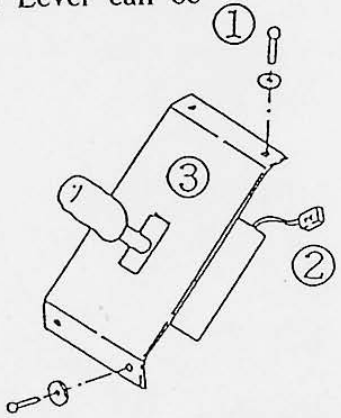
(1) By removing 4 of the Button
Head Screws M5 x 30 (SILVER)
The seat can be removed

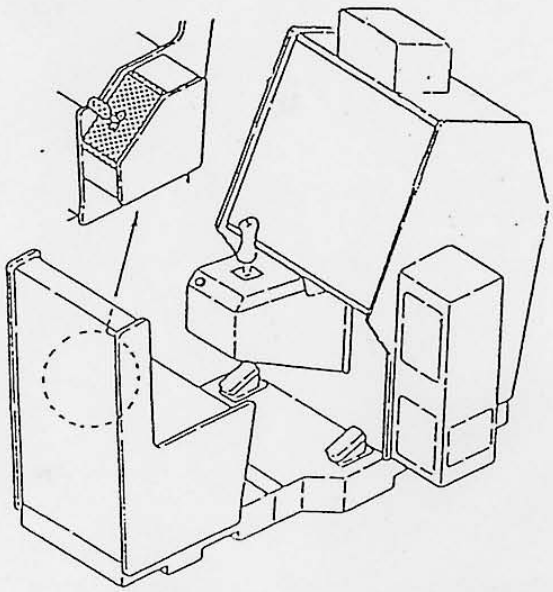
(2) By removing 2 of the Flange
Nuts M4, used for fastening the speaker
within the seat, the speaker can be removed



(6) How to Remove the Throttle Lever
(1) After removing 4 Button Head Screws
M4 x 20 (SILVER) and the plain washers M6,
the Acceleration Lever Assy can be removed

(2) Unplug the H-connector
(3) Now, the Acceleration Lever can be
removed





AUDIO AMPLIFIER

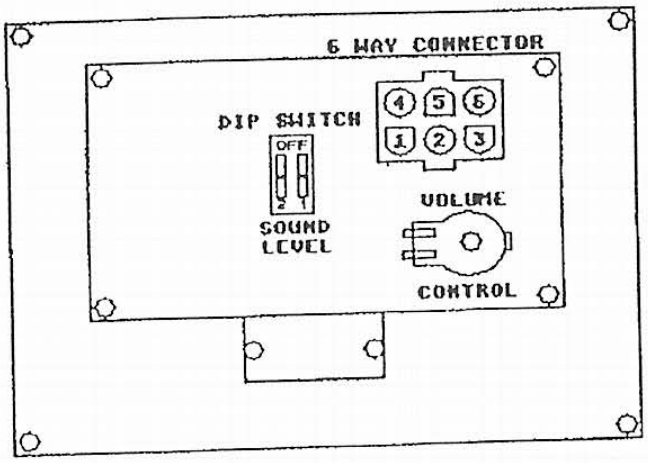


FIG. 1
Audio Amplifier
Position of board and controls

6 way amp connector

pin		
1	Screen core	AUDIO IN
2	Screen GND	AUDIO GND
3	BLK	AUDIO GND
4	GRY/BLK	SPEAKER
5	GRY/BLK	SPEAKER
6	ORG	12v DC

DIP switch sound level settings

1 & 2	OFF	LEVEL 1 (min)
1	ON	LEVEL 2
2	ON	LEVEL 3 (max)

COIN CONTROLS CCU

TECHNICAL DATA

APPLICATIONS

CCU with sentinel
The CCU is designed to work with the sentinel 30 range of validators in a single or dual currency mode. All connections to the validators are directly from the CCU. Connections to the host machine being via the 6 way connector. If it is required that the host machine controls inhibits directly then the inhibit wiring will need to be modified to suit the application.

SWITCH SETTINGS FOR CCU
Totalising switch
As each coin is accepted, the number of credits generated by the coin are calculated by dividing the coin value by the price per credit. The result is added to the credit total. In non-totalise mode, if the coin is 20p or 10p, any money remaining after the credit calculation is added to the next 20p/10p entered before the next credit calculation is performed. If the coin is £1 or 50p then the additional credits will also be added to the credit total. In totalise mode all 20p and 10p coins are added together. Whenever this total exceeds £1 - 50p then the corresponding additional credits are added to the credit toal. A time limit is placed on the totalisation to prevent the money total from being passed from one used to the next.

S11 ON - TOTALISE MODE
S11 OFF - NON TOTALISE MODE

CURRENCY SELECT SWITCH
Most coin sets have a fixed ratio of 100, 50, 20, 10 eg. 100p, 50p, 20p, 10p, but a small number of coin sets possess a different ratio eg. 100 cents, 25 cents, 10 cents, 5 cents. On the CCU an option switch is available to allow an operator to select the coin set required. When the standard coin set is selected, the meter output pulses are in units of 10p. For the non-standard coin set, the meter output pulses are in units of 5c.

S12 ON - NON-STANDARD COIN SET (100, 25, 10, 5)
S12 OFF - STANDARD COIN SET (100, 50, 20, 10)

INHIBIT SWITCHES
The inhibit switches are connected directly to the sentinel. There are individual switches for 11-14 and 15,6 and 17,8.
NOTE: When sentinel is used in dual currency mode, and 15,6 and 17,8 are enabled by setting SW17 and 18 on. Then both currencies must have the same coin ratios.

4.4 PRICE SETTING
The price settings switches are arranged in three groups:- 5 switches for the basic price per credit, 3 switches for the number of additional credits bought by the highest value coin eg. £1.
2 switches for the number of additional credits bought by the second highest value coin eg. 50p.

PROGRAMMING INFORMATION

PRICE PER GAME FOR 100, 50, 20, 10 COIN SET

SW1	SW2	SW3	SW4	SW5	UNITS/GAME
X	ON	ON	ON	ON	5
X	OFF	ON	ON	ON	10
X	ON	OFF	ON	ON	20
X	OFF	OFF	ON	ON	30
X	ON	ON	OFF	ON	40
X	OFF	ON	OFF	ON	50
X	ON	OFF	OFF	ON	60
X	OFF	OFF	OFF	ON	70
X	ON	ON	ON	OFF	80
X	OFF	ON	ON	OFF	90
X	ON	OFF	ON	OFF	100
X	OFF	OFF	ON	OFF	110
X	ON	ON	OFF	OFF	120
X	OFF	ON	OFF	OFF	13/0
X	ON	OFF	OFF	OFF	140
X	OFF	OFF	OFF	OFF	150

X = DON'T CARE

ADDITIONAL GAMES FOR HIGHEST VALUE COIN(COIN 1)

SW6	SW7	SW8	FUNCTION
ON	ON	ON	NO ADDITIONAL GAMES
OFF	ON	ON	1 ADDITIONAL GAME
ON	OFF	ON	2 ADDITIONAL GAMES
OFF	OFF	ON	3 ADDITIONAL GAMES
ON	ON	OFF	4 ADDITIONAL GAMES
OFF	ON	OFF	5 ADDITIONAL GAMES
ON	OFF	OFF	6 ADDITIONAL GAMES
OFF	OFF	OFF	7 ADDITIONAL GAMES

ADDITIONAL GAMES FOR SECOND HIGHEST COIN (COIN 2)

SW9	SW10	FUNCTION
ON	ON	NO ADDITIONAL GAMES
OFF	ON	1 ADDITIONAL GAME
ON	OFF	2 ADDITIONAL GAMES
OFF	OFF	3 ADDITIONAL GAMES

TOTALISING SWITCHES

S11 ON TOTALISE MODE
S11 OFF NON-TOTALISE MODE

CURRENCY SELECT SWITCHES

S12 ON NON-STANDARD COIN SET (100, 25, 10, 5)
S12 OFF STANDARD COIN SET (100, 50, 20, 10)

INHIBIT SWITCHES

ON = ACCEPT OFF = INHIBIT

S13	COIN 1
S14	COIN 2
S15	COIN 3
S16	COIN 4
S17	COIN 5/6
S18	COIN 7/8

EDGE CONNECTOR

J CONNECTOR

		COMPONENT SIDE
GND	A 1	GND
GND	B 2	GND
+5v	C 3	+5v
+5v	D 4	+5v
+13v	E 5	-5v
+13v	F 6	+12v
KEYWAY	H 7	KEYWAY
METER 2	J 8	METER 1
COIN LOCKOUT 2	K 9	COIN LOCKOUT 1
SP/CH1 (-)	L 10	SP/CH1 (+)
SP/CH2 (-)	M 11	SP/CH2 (+)
VIDEO GREEN	N 12	VIDEO RED
H-SYNC	P 13	VIDEO BLUE
SERVICE SW	R 14	VIDEO GROUND
NOT USED	S 15	V-SYNC
COIN SW2	T 16	COIN SW1
NOT USED	U 17	1 P START
SP/CH3 (-)	V 18	SP/CH3 (+)
PULSE 1 Y	W 19	PULSE 1 X
PULSE 2 Y	X 20	PULSE 2 X
POS SW 1	Y 21	PULSE 3 X
POS SW 2	Z 22	PULSE 3 Y
POS SW 4	Aa 23	POS SW 3
POS SW 5	Ab 24	POS SW 6
LINE OUT	Ac 25	R SW A
GND	Ad 26	R SW B
NOT USED	Ae 27	R SW C
NOT USED	Af 28	NOT USED

CONNECTOR INFORMATION

CONNECTOR A (9P AMP M + L MALE HSNG)

PIN	COLOUR	FUNCTION
1	PNK	+5VDC
2	PNK	+5VDC
3	NOT USED	
4	BLK	GROUND
5	BLK	GROUND
6	BLK	GROUND
7	BLK	GROUND
8	ORG	+12VDC
9	VIO	-5VDC

CONNECTOR B (4P AMP M + L MALE HSNG)

PIN	COLOUR	FUNCTION
1	BRN	0VAC
2	RED	135VAC
3	ORG	0VAC
4	YEL	220VAC

CONNECTOR C (9P AMP MINI M + L FEMALE HSNG)

PIN	COLOUR	FUNCTION
1	ORG/BLK	COIN A
2	YEL/BLK	COIN B
3	BLK	GROUND
4	PNK	+5VDC
5	ORG	+12VDC
6	WHT/RED	Credit Bd METER
7	NOT USED	
8	NOT USED	
	GRN/YEL	EARTH

CONNECTOR M1 (4P AMP MINI M + L FEMALE HSNG)

PIN	COLOUR	FUNCTION
1	BLK	GROUND
2	ORG/PNK	RUDDER R
3	NOT USED	
4	GRN/YEL	EARTH

CONNECTOR M2 (4P AMP MINI M + L FEMALE HSNG)

PIN	COLOUR	FUNCTION
1	BLK	GROUND
2	ORG/BLU	RUDDER L
3	NOT USED	
4	GRN/YEL	EARTH

CONNECTOR N (6P AMP MINI M + L FEMALE HSNG)

PIN	COLOUR	FUNCTION
1	BLK	GROUND
2	BLK	GROUND
3	PNK	+5VDC
4	ORG/GRY	FIRE SW
5	GRN/BLK	START SW
6	NOT USED	

CONNECTOR S (9P AMP MINI M + L MALE HSNG)

PIN	COLOUR	FUNCTION
1	ORG/RED	SERVICE SW
2	BLK	GROUND
3	GRY/WHT	5" SPEAKER
4	YEL/GRN	SP CH 2(+)
5	YEL/BRN	SP CH 2(-)
6	GRN/YEL	EARTH

CONNECTOR T1 (0.187" FASTONS + BOOTS)

COLOUR	FUNCTION
GRY/WHT	5" SPEAKER (+)
YEL/BRN	5" SPEAKER (-)

CONNECTOR T (12P MOLEX INLINE WITH RAMP KEYWAY PIN 8)

PIN	COLOUR	FUNCTION
1	BLK	GROUND
2	BLK	GROUND
3	BLK	GROUND
4	BLK	GROUND
5	BLK	GROUND
6	NOT USED	
7	NOT USED	
8	KEYWAY	
9	PNK	+5VDC
10	PNK	+5VDC
11	PNK	+5VDC
12	PNK	+5VDC

CONNECTOR V (12P AMP M + L MALE HSNG RED)

PIN	COLOUR	FUNCTION
1	BLK/BLU	VIDEO GND
2	YEL	H-SYNC
3	BLU	VIDEO BLUE
4	WHT	V-SYNC
5	RED	VIDEO RED
6	GRN	VIDEO GRN
7	BRN	0VAC
8	NOT USED	
9	YEL	220VAC
10	RED	135VAC
11	NOT USED	
12	ORG	0VAC

CONNECTOR E (4P AMP MINI M + L FEMALE HSNG)

PIN	COLOUR	FUNCTION
1	WHT/ORG	METER A
2	WHT/YEL	METER B
3	PNK	+5VDC

CONNECTOR K (9P AMP MINI M + L FEMALE HSNG)

PIN	COLOUR	FUNCTION
1	ORG/BLU	CENTRE OUT R
2	ORG/PNK	CENTRE OUT E
3	GRY/BLU	OUT (+)
4	GRY/YEL	OUT (-)
5	GRY/BLK	OUT (+)
6	ORG/BRN	OUT (-)
7	PNK	+5VDC
8	BLK	GROUND
	GRN/YEL	EARTH

CONNECTOR D (9P AMP MINI M + L MALE HSNG)

PIN	COLOUR	FUNCTION
1	GRY/BRN	PULSE 1Y
2	GRY/RED	PULSE 1X
3	GRY/GRN	POS SW 1
4	PNK	+5VDC
5	BLK	GROUND
6	NOT USED	
7	WHT/GRY	SPEAKER +
8	BLK/GRY	SPEAKER -
9	GRN/YEL	EARTH

CONNECTOR V (12 AMP M + L MALE HSNG RED)

PIN	COLOUR	FUNCTION
1	BLK/BLU	VIDEO GND
2	YEL	H-SYNC
3	BLU	VIDEO BLU
4	WHT	V-SYNC
5	RED	VIDEO RED
6	GRN	VIDEO GRN
7	BRN	0 VAC
8		
9		
10		
11		
12		

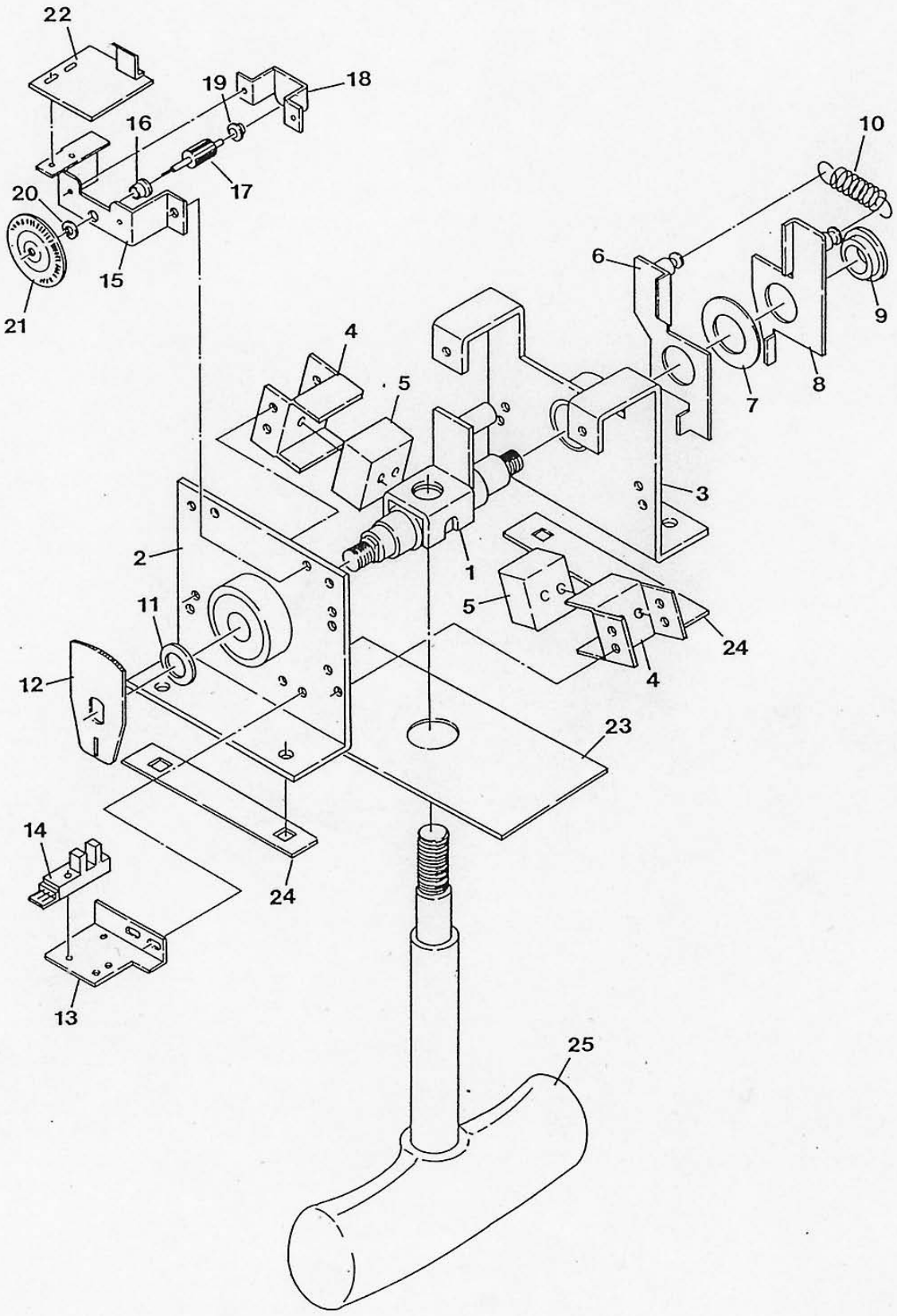
CONNECTOR E (4P AMP MINI M + L FEMALE HSNG)

PIN	COLOUR	FUNCTION
1	WHT/ORG	METER A
2	WHT/YEL	METER B
3	PNK	+5VDC
4	NOT USED	

CONNECTOR K (9P WAY MINI M + L FEMALE HSNG)

PIN	COLOUR	FUNCTION
1	ORG/BLU	CENTRE OUT R
2	ORG/PNK	CENTRE OUT E
3	GRY/BLU	OUT (+)
4	GRY/YEL	OUT (-)
5	GRY/BLK	OUT (+)
	ORG/BRN	OUT (-)
7	PNK	+5VDC
8	BLK	GROUND
9	GRN/YEL	EARTH

【ACCEL ASSY - KIT】



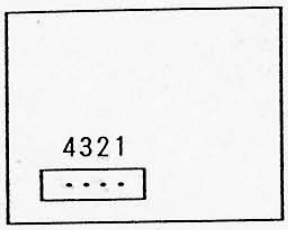
AIR INFERNO

PARTS No	PARTS	QTY
21206	ACCEL ASSY-KIT	1
	PHOTO SENSOR PC BOARD ASSY	1
31202	WASHER HD TAP TIGHT(S) M3x8	2
31203	MASK C	1
31204	SPACER B	2
31205	CARRIAGE BOLT M6x20	4
31206	SELF-LOCKING NUT U M6	4
31207	ACCEL LEVER	1
31208	SOCKET CAP BOLT M5x10	1
31209	SPRING WASHER 12M	1
31210	SELF LOCKING NUT U M12	1

ACCEL ASSY - KIT (M01 00165A)

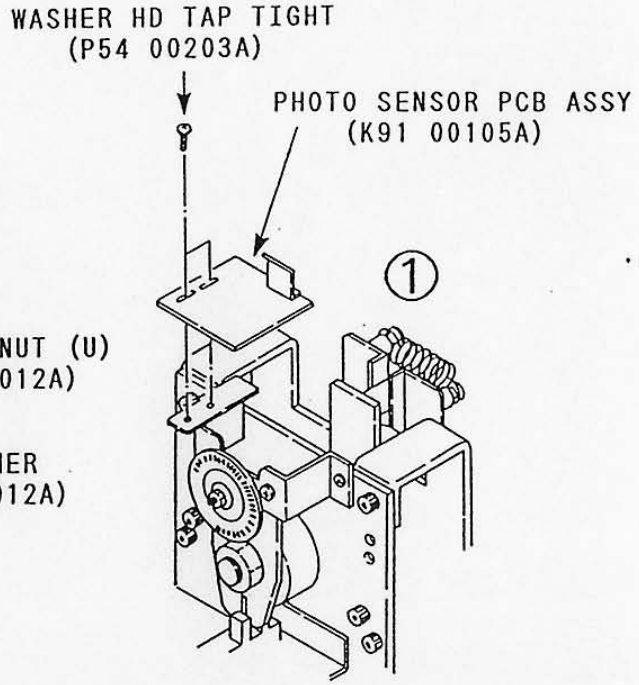
ITEM	PARTS No	DESCRIPTION
1	31211	ACCEL SHAFT
2	31212	ACCEL BRACKET
3	31213	ACCEL BASE
4	31214	STOPPER HOLDER B
5	31215	STOPPER BLOCK
6	31216	RETURN ARM B
7	31217	THRUST WASHER NTN TW2040
8	31218	RETURN ARM A
9	31219	RETURN SPACER
10	31220	RETURN SPRING
11	31221	SHAFT SPACER
12	31222	SENSOR GEAR
13	31223	PHOTO SENSOR BRACKET
		PHOTO SENSOR TLP 1200
15	31224	SENSOR PCB BRACKET
16	31225	OILES FLANGE BUSH 80F-0404
17	31226	GEAR SHAFT
18	31227	GEAR BRACKET
19	31228	OILES FLANGE BUSH 80F-0303
20	31229	PLAIN WASHER 3M
21	31230	PULSE CAM
22		PHOTO SENSOR PC BOARD ASSY (MAIN PARTS)
23		MASK C (MAIN PARTS)
24		SPACER B (MAIN PARTS)
25		ACCEL LEVER (MAIN PARTS)

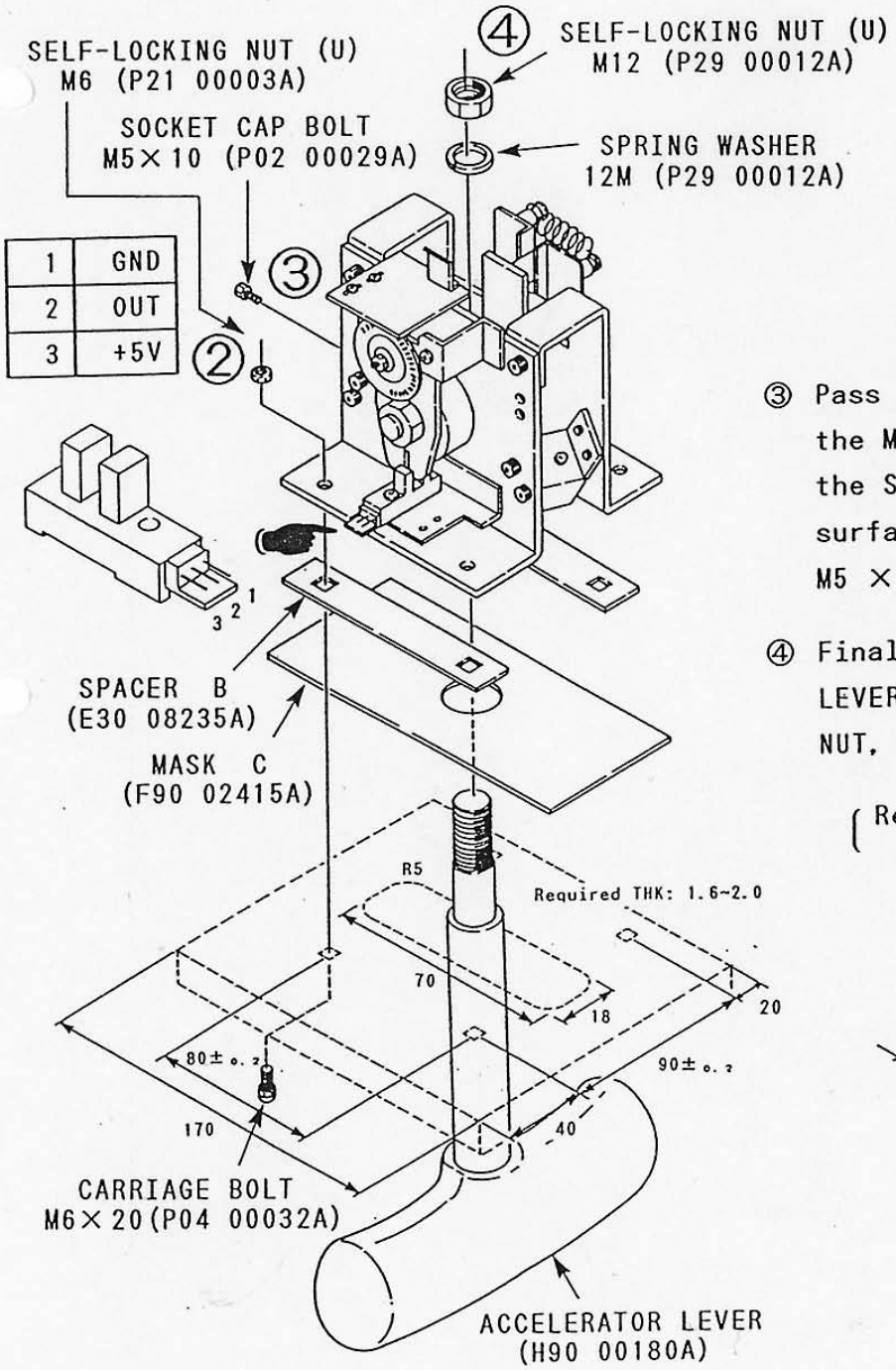
① Fasten the PHOTO SENSOR PCB ASSY (K91 00105A) by using 2 pieces of WASHER HD TAP TIGHTs (P54 00203A), M3 × 8.



1	OUT(+)
2	+5V
3	GND
4	OUT(-)

② Fasten the control panel onto the mechanism by using the CARRIAGE BOLTs, M6×20, the SELF-LOCKING NUT, M6 and the SPACER-B being inserted.

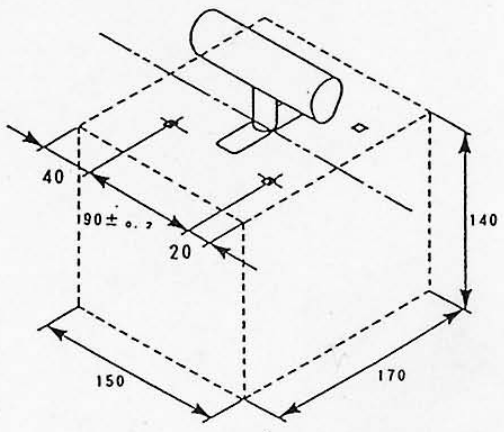




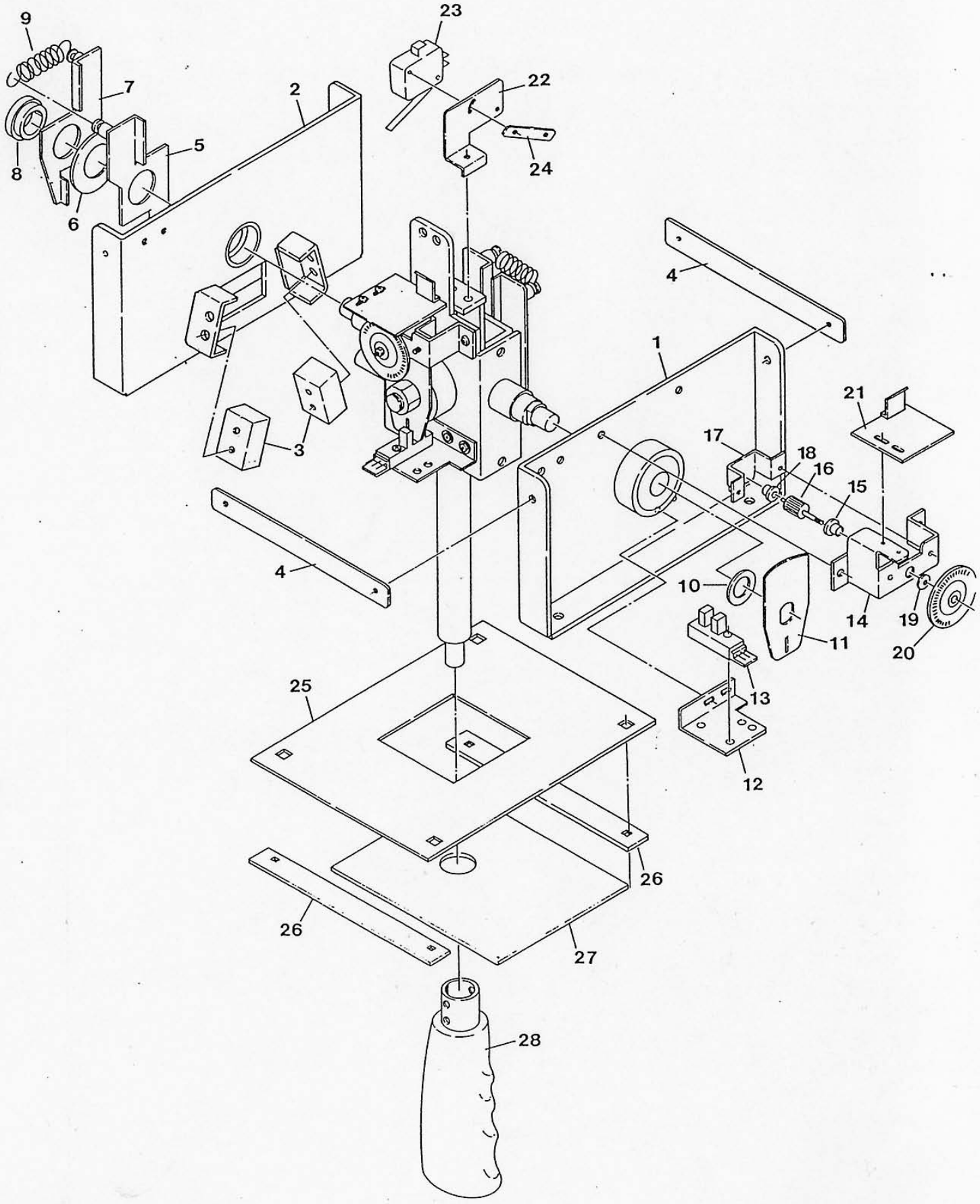
③ Pass the ACCELERATER LEVER through the MASK-C, and insert it into the SHAFT. And fasten the D-cut surface using the SOCKET CAP BOLT, M5 × 10.

④ Finally, fasten the ACCELERATOR LEVER by using the SELF-LOCKING NUT, M12 and SPRING WASHER, 12M.

{ Required Space for Attachiment of Accel Assy - Kit }



[JOYSTICK ASSY - KIT]



ITEM	PARTS No	DESCRIPTION
	Joystick Assy - Kit (M01 00164A)	
1	E90 00629A	SIDE BRACKET L
2	E90 00630A	SIDE BRACKET R
3	F90 02417A	STOPPER BLOCK
4	E30 08233A	SIDE FENCE
5	E90 00635A	RETURN ARM B
6	F90 01990A	THRUST WASHER NTN TW2040
7	E90 00353A	RETURN ARM A
8	E10 00945A	RETURN SPACER
9	E40 00346A	RETURN SPRING
10	E30 08247A	SHAFT SPACER
11	E70 00161A	SENSOR GEAR
12	E30 08232A	PHOTO SENSOR BRACKET
13	A90 00146A	PHOTO SENSOR TLP 1200
14	E30 08231A	SENSOR PCB BRACKET
15	F90 00644A	OILES FLANGE BUSH 80F-0404
16	E70 00160A	GEAR SHAFT
	E30 08237A	GEAR BRACKET
18	F90 00902A	OILES FLANGE BUSH 80F-0303
19	P27 00004A	PLAIN WHASER 3M
20	F90 00877A	PULSE CAM
21	K91 00105A	PHOTO SENSOR PC BOARD ASSY (MAIN PARTS)
22	E30 08236A	SWITCH BRACKET
23	C02 00081A	MICRO SWITCH VL-105
24	E30 00153A	TAP PLATE
25	E30 08240A	MASK BASE
26	E30 08234A	SPACER A
27	F90 02413A	MASK A
28	H90 00297A	KNOB