

**INSTRUCTION MANUAL**  
**FOR**  
**AIR FIGHTER**

*Kasco*

**KANSAISEIKI SEISAKUSHO CORP.**

**KYOTO JAPAN**

A I R F I G H T E R

To remove the front glass and the sign board, this panel should be removed.

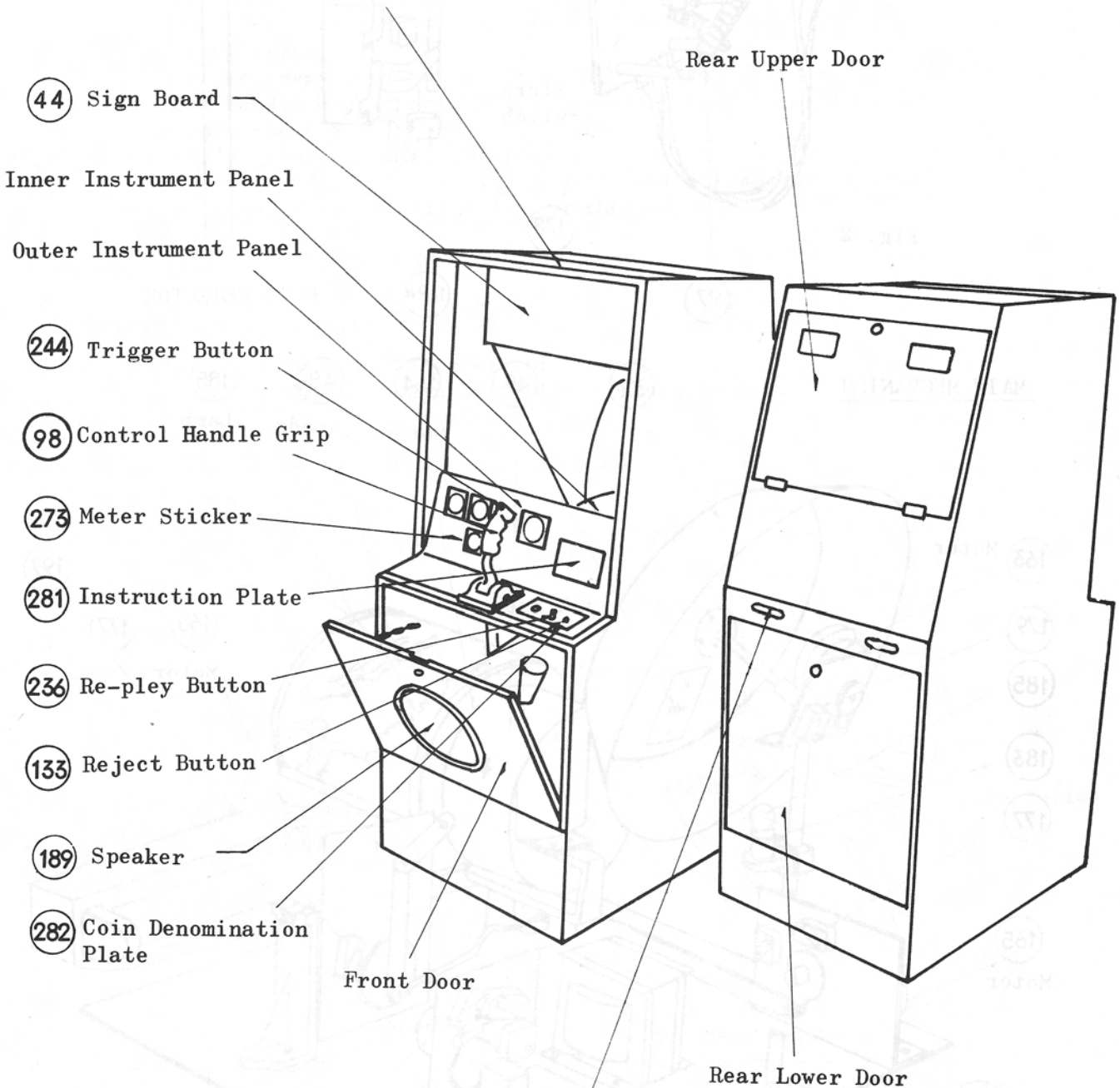


Fig. 1

Put your fingers in these openings and lift the machine a little before moving it, the machine glides forward or backward on the rollers attached at the bottom.

LOWER PART OF CONTROL HANDLE

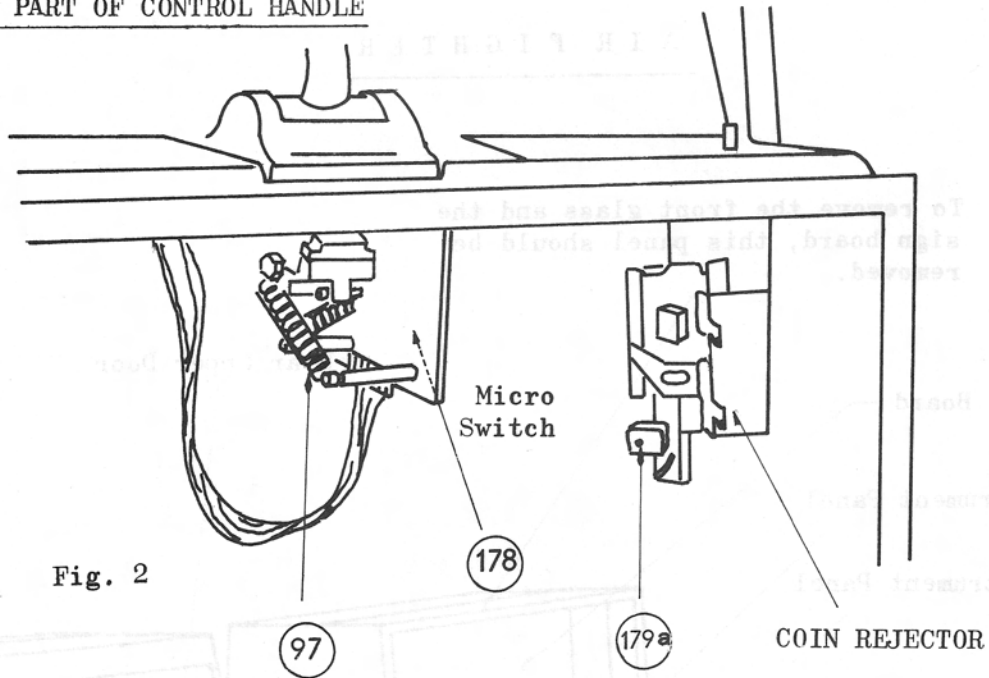


Fig. 2

MAIN MECHANISM

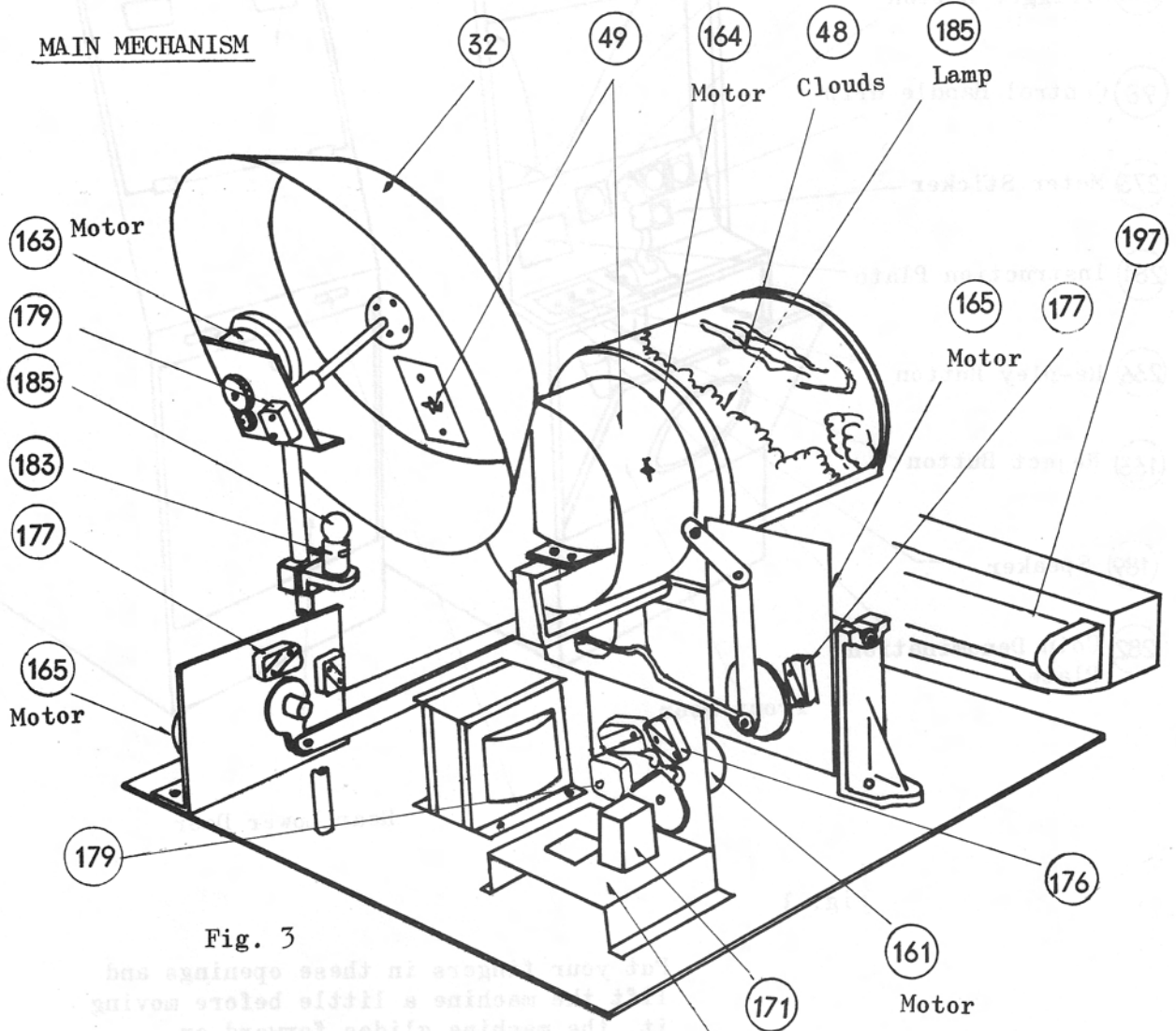


Fig. 3

CAUTION Don't revolve the motors by hand: Things may go wrong if you do so. Airplane Programmer

RELAY UNIT

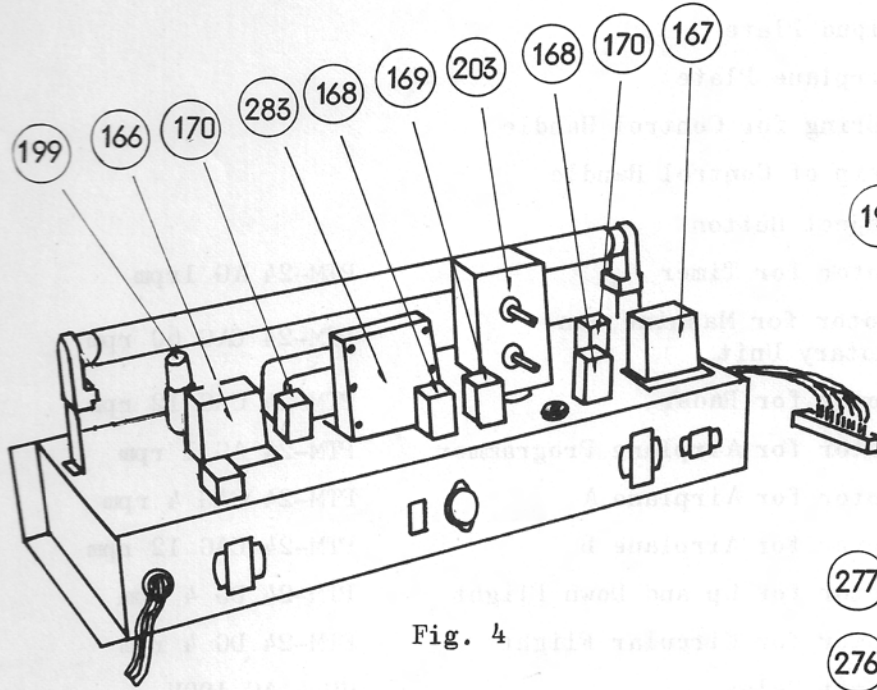


Fig. 4

STEPPING UNIT

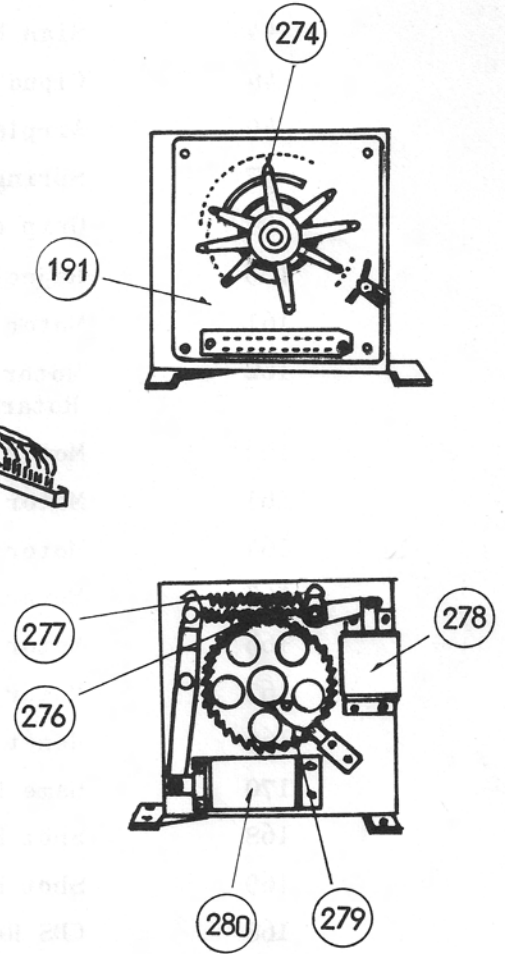


Fig. 5

204 AMPLIFIER

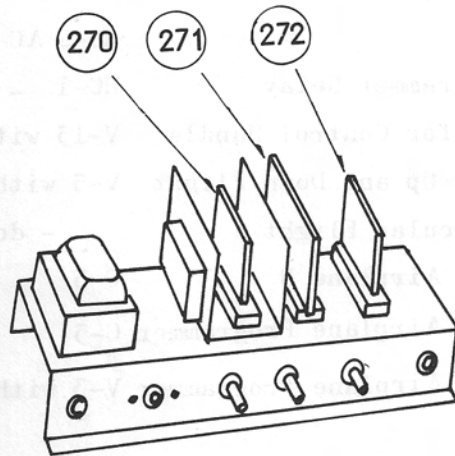


Fig. 6

EXPENDABLE PARTS LIST

<u>Item No.</u>	<u>Item</u>	<u>Description</u>
32	Aluminum Disc	
44	Sign Board	
48	Cloud Plate	
49	Airplane Plate	
97	Spring for Control Handle	
98	Grip of Control Handle	
133	Reject Button	
161	Motor for Timer	PTM-24 AG 1rpm
162	Motor for Mashine Gun Rotary Unit	PTM-24 CAG 60 rpm
163	Motor for Radar	PTM-24 CAG 12 rpm
161	Motor for Airplane Programmer	PTM-24 AG 1 rpm
164	Motor for Airplane A	PTM-24 CAG 4 rpm
163	Motor for Airplane B	PTM-24 CAG 12 rpm
165	Motor for Up and Down Flight	PTM-24 DG 4 rpm
165	Motor for Circular Flight	PTM-24 DG 4 rpm
166	Reset Relay	HP-4 AC 100V
170	Game Relay	HC-2 -- do. -
168	Shot Relay A	HC-1 DC 24V
169	Shot Relay B	NK-4 2100 $\Omega$
168	CDS Relay	HC-1 DC 24V
167	Score Relay	HP-4 - do. -
170	Re-play Relay	HC-2 AC 100V
171	Airplane Programmer Relay	HC-1 - do. -
178	Micro Switch for Control Handle	V-15 with Actuator
177	Micro Sw. for Up and Down Flight	V-5 with Actuator
177	Micro Sw. Circular Flight	- do. -
179	Micro Sw. for Airplane B	C-5
179	Micro Sw. for Airplane Programmer	C-5
176	Micro Sw. for Airplane Programmer	V-3 with Actuator

176	Micro Sw. for Timer	V-3 with Actuator
179a	Micro Sw. for Coin Acceptor	C-5G3
185	Projection Lamp for Airplane	
185	Projection Lamp for Clouds	
188	Lamp for Gun Fire	
186	Lamp for Explosion	
187	Baby Lamp for Radar	
187	Baby Lamp for Skill Indicator	
187	Baby Lamp for Re-play	
183	Lamp Socket	
184	Baby Lamp Socket	
197	Fluorescent Lamp ( Blue )	
199	Glow Starter	
236	Re-play Button	
244	Trigger Button	
189	Speaker	
270	Sound System A	Printed Circuit for Noise
271	- do. - B	P.C. for Gun and Explosion
272	- do. - C	P.C. for Engine
273	Meter Sticker	
281	Instruction Plate	
282	Coin Denomination Plate	
274	Wipper Assembly	
191	Stepping Unit Assembly	
276	Spring A	Part of Stepping Unit
277	Spring B	- do. -
278	Reset Coil	- do. -
279	Spring	- do. -
280	Score Coil	- do. -
283	Machine Gun Rotary Unit	
108	Leaf	Part of Machine Gun Rotary Unit
109	Printed Plate	- do. -
203	CDS Amplifier	
204	Amplifier	



## MACHINE OPERATION

1. On insertion of a coin, clouds and enemy planes appear on the screen, and the engine sounds. Soon our plane changes its direction and the scene declines, moving horizontally as if we were looking at it on a real plane. Occasionally enemy planes appear from where you expect them least.
2. Player can control his plane by Control Handle. When he pulls the Handle, the plane ascends and the scene goes down, and when he pushes it, the plane descends and the scene goes upward.
3. By controlling the Handle, place the enemy plane in the middle of Range Finder, and then push the Trigger Button on the Handle. The machine gun will sound and fire on the screen. When it hits explosion fire and a loud noise arise.
4. When the game is over, the scene will fade, and the score is indicated according to the number of enemy planes shot down. The player's skill is also indicated on the Sign Board. When player wins the ACE, he can play again by pushing the Re-play Button on the Instrument Panel.

## SOUND AMPLIFICATION ADJUSTMENT

Three Volume Controller knobs of amplifire control three kinds of sounds respectively.

Please refer to Fig. 7.

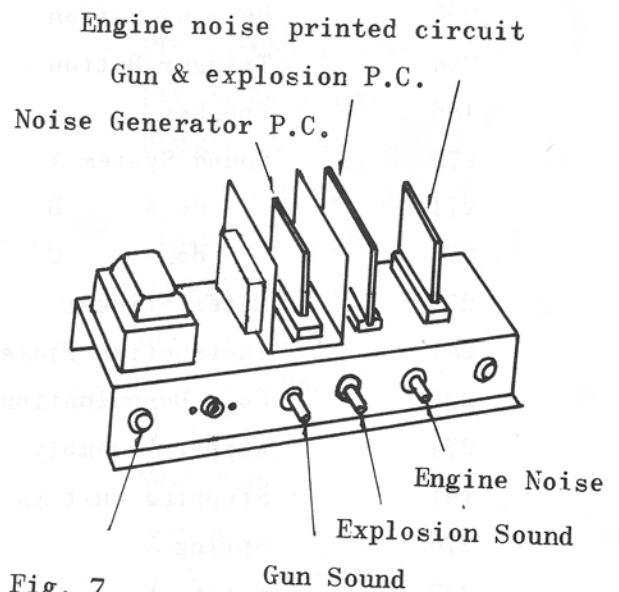


Fig. 7

## CDS ELECTRIC CELL ADJUSTMENT

As shown in Fig.8, the Finder on the screen has a CDS Light-conducting Cell. When the light of an enemy plane strikes the cell, resistance value of the cell is changed, then enlarged by the Amplifire, it causes the CDS Relay being tripped.

Due to the sensitivisty of the CDS Cell, the Relay might move with the least change of lighr, such as a cloud or even by the room light.

1. Open the front door and switch off the Plane Motor Switch shown in Fig.9.
2. Start the machine.

3. By controlling the control handle and Push Button Switch shown in Fig. 9, place the enemy plane in the middle of the Finder on the screen. By using the Push Button Switch, you can move the plane horizontally.
4. Shown in Fig. 10, the CDS Amplifier on the Relay Unit has two Controller knobs. Turn knob A 50% of the travel, and knob B extremely at the right. Pushing the Test Trigger Button repeatedly, turn the Knob gradually counterclockwise until the CDS Relay come to trip and stop turning at once.
5. Push the Test Trigger Button several times and make sure the CDS Relay trips.
6. Locate the enemy plane apart from the Finder by controlling the Control Handle and then push the Test Trigger Button and make sure that the CDS Relay does not trip. Now the machine is ready for play.
7. Switch on the Plane Motor Switch, and test the machine several times. Knob A is available for further adjustment.

#### RE-PLAY SCORE ADJUSTMENT

Adjustable from 23rd to 26th position.  
 For adjustment, push the Adjustment Lever shown in Fig. 11, and then slide it to the position required.

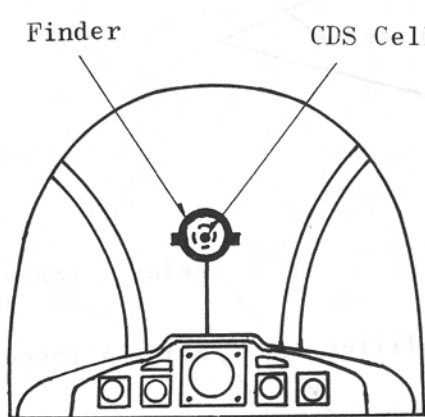


Fig. 8

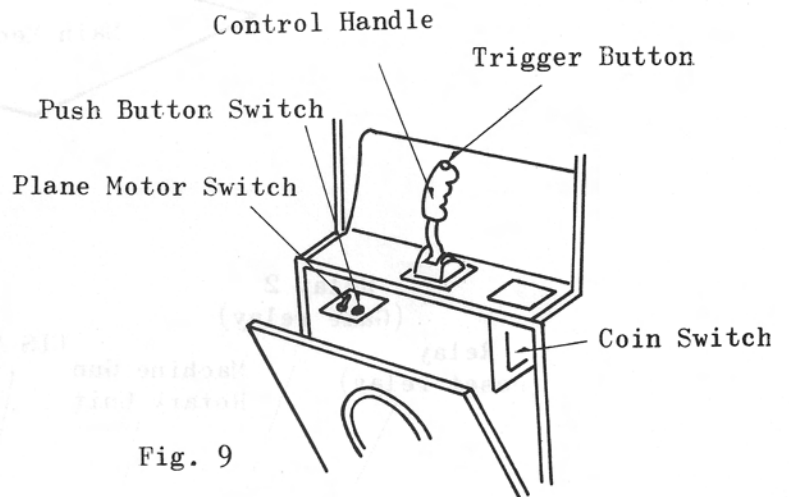


Fig. 9

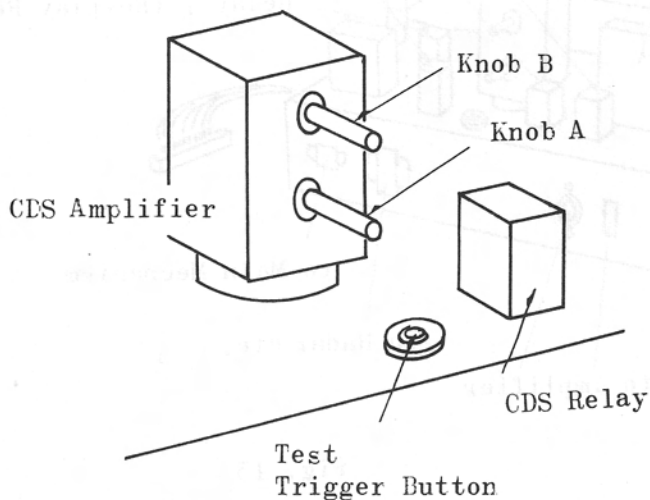


Fig. 10

Re-play Score  
 Adjustment Lever  
 The top - - 26th position  
 The Bottom - 23rd position

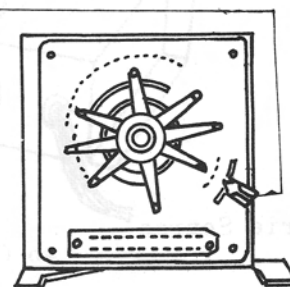


Fig. 11



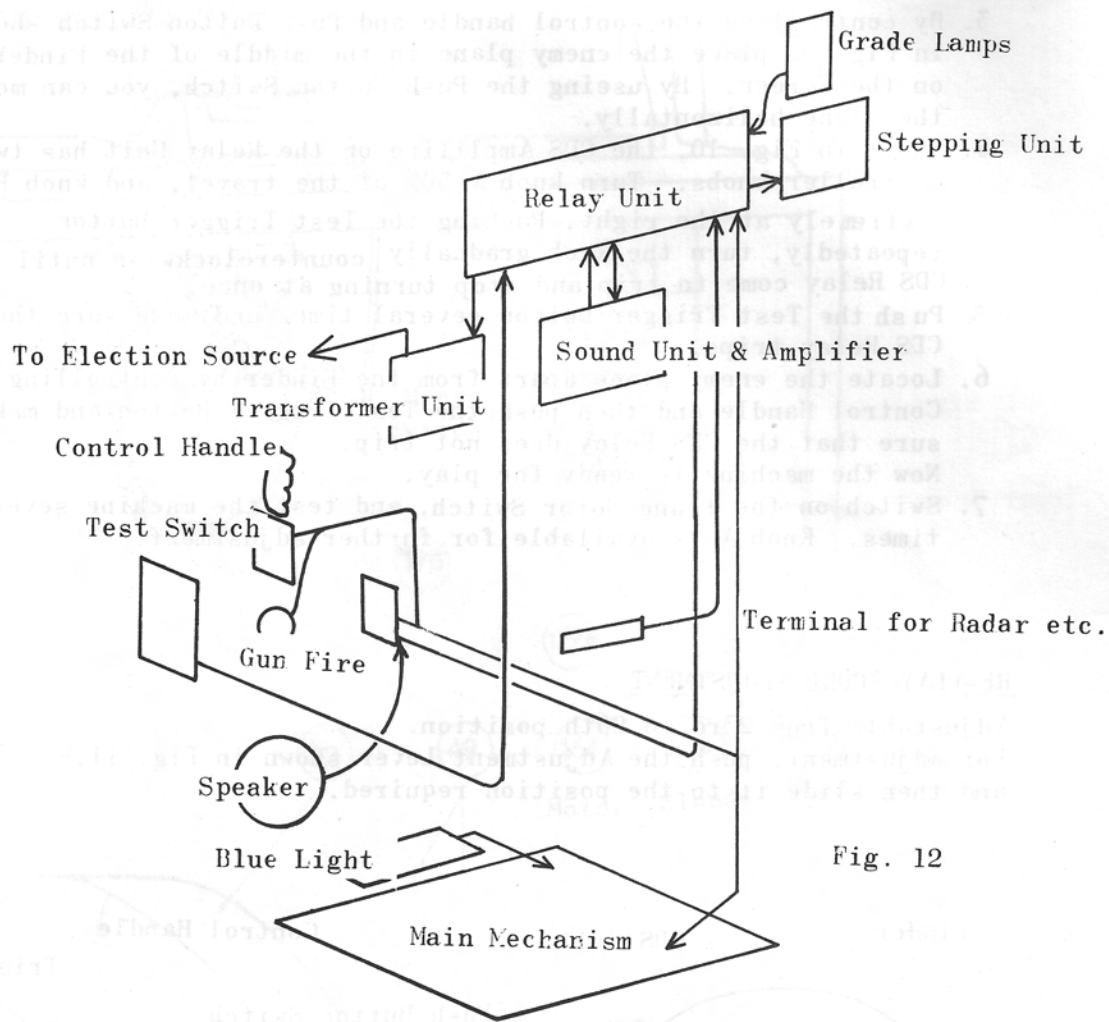


Fig. 12

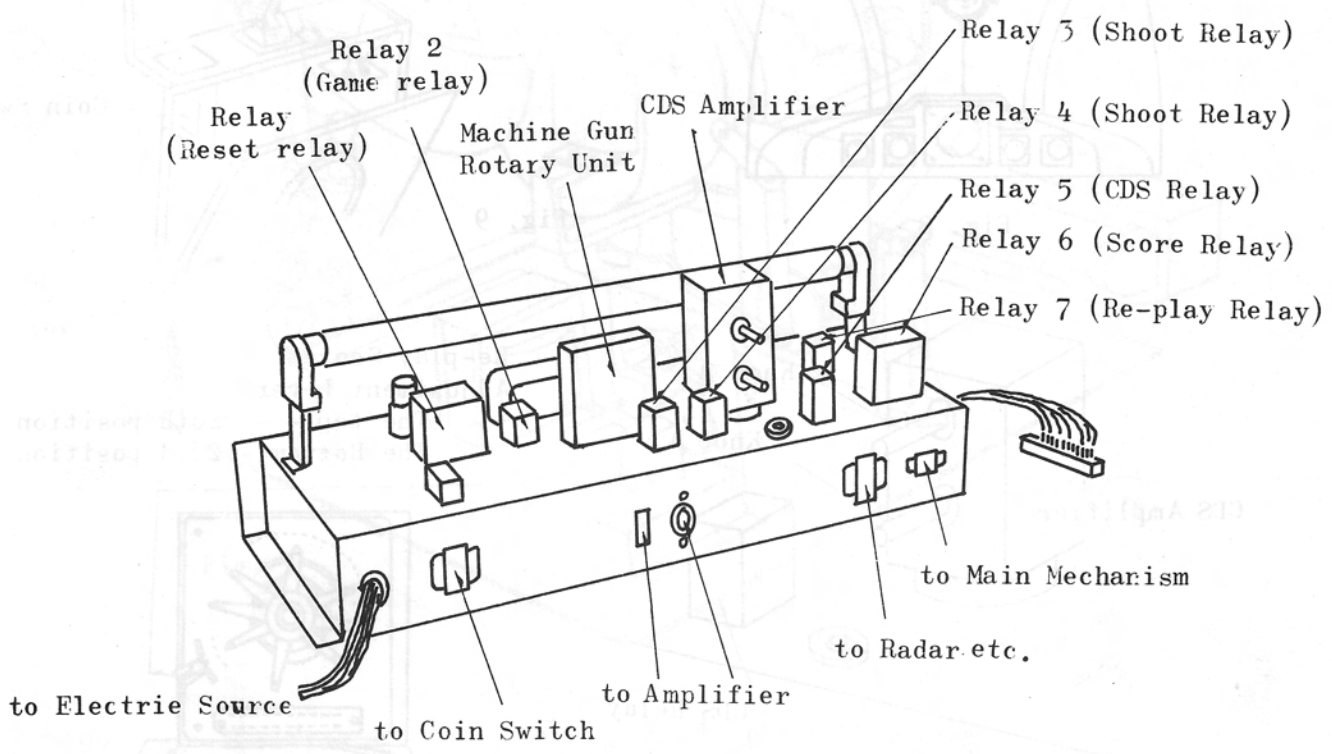
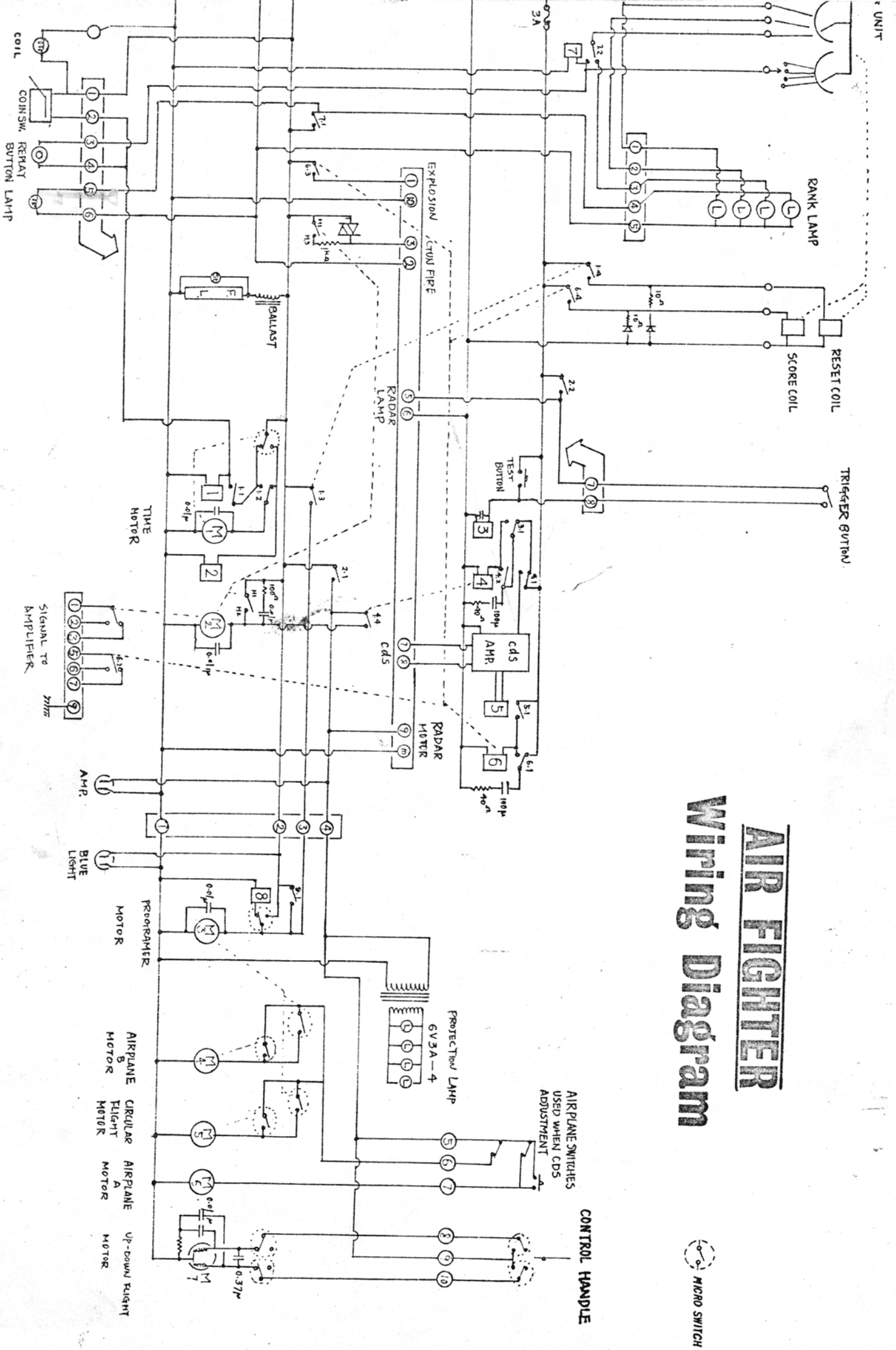


Fig. 13



# AIR FIGHTER Wiring Diagram



MICRO SWITCH

CONTROL HANDLE

AIRPLANE SWITCHES  
USED WHEN CDS  
ADJUSTMENT

PROTECTION LAMP  
6V3A-4

UP-DOWN FLIGHT  
MOTOR  
AIRPLANE  
MOTOR A  
CIRCULAR  
FLIGHT  
MOTOR  
AIRPLANE  
MOTOR B

REARVIEWER  
MOTOR

BLUE  
LIGHT

AMP.

SIGNAL TO  
AMPLIFIER

TIME  
MOTOR

CDS

RADAR  
MOTOR

AMP.

RADAR  
LAMP

EXPLOSION  
(GUN FIRE)

SCORE COIL

RESET COIL

TRIGGER BUTTON

RANK LAMP

UNIT

## A I R F I G H T E R

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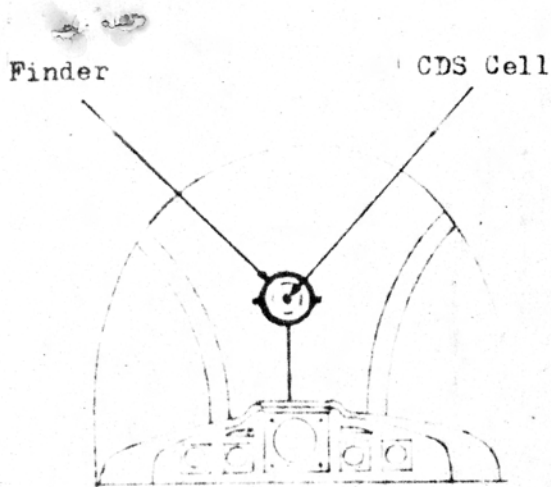


Fig. 8

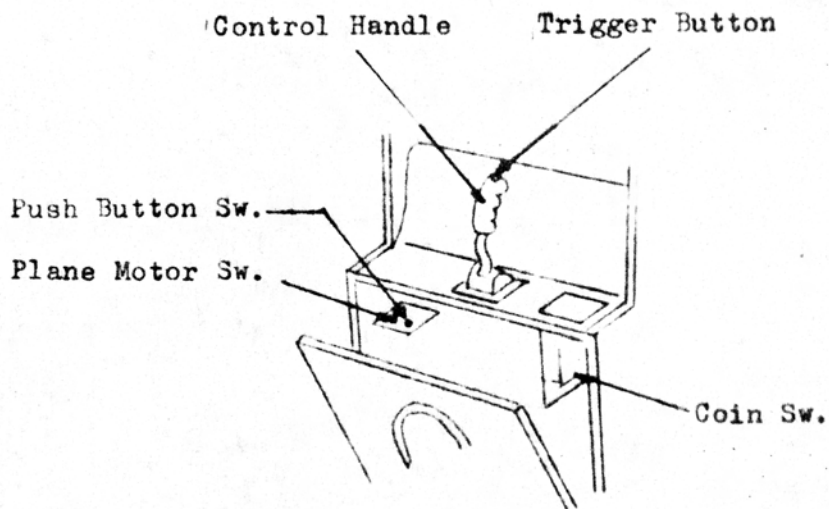


Fig. 9

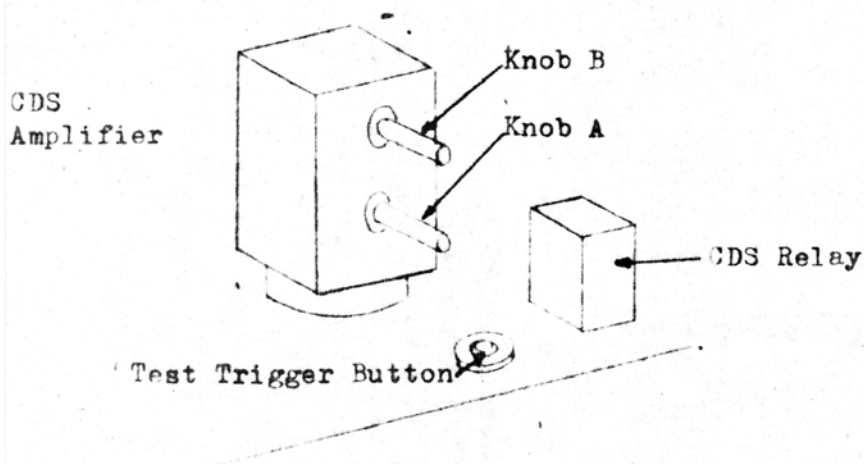


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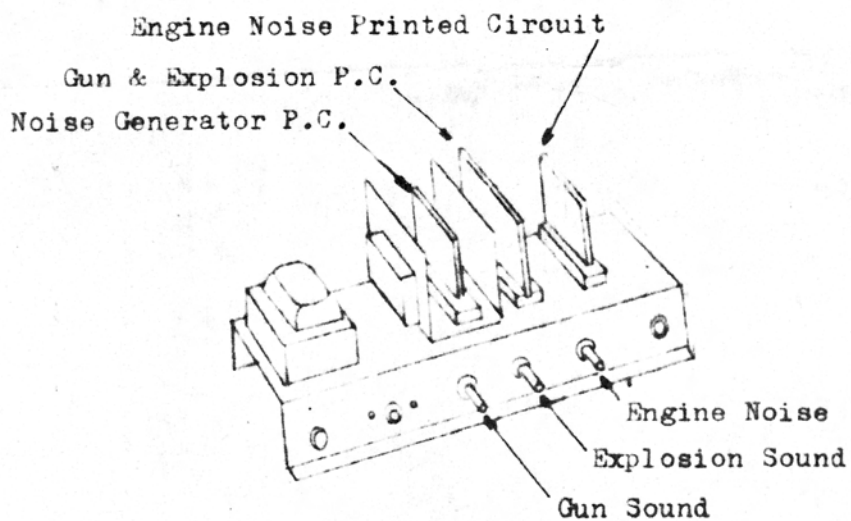


Fig. 7