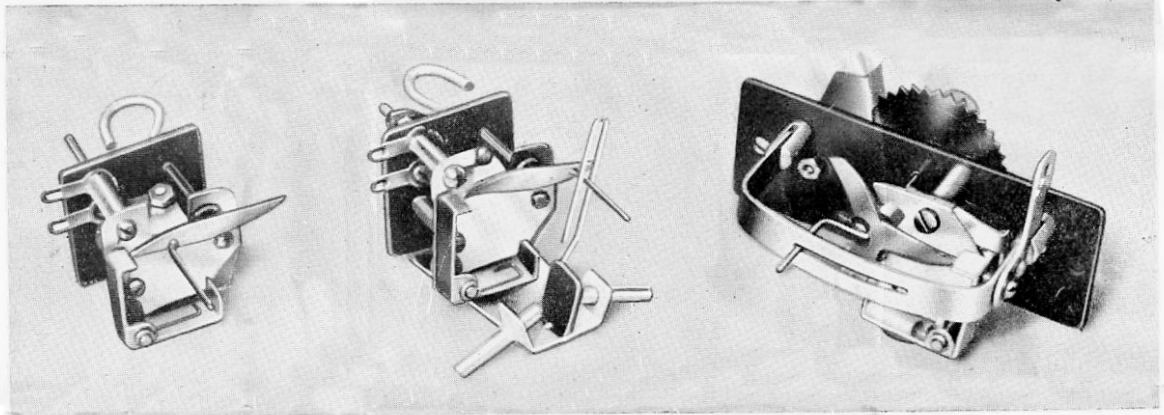


# INSTRUCTIONS

## O S MINITRON ESCAPEMENT



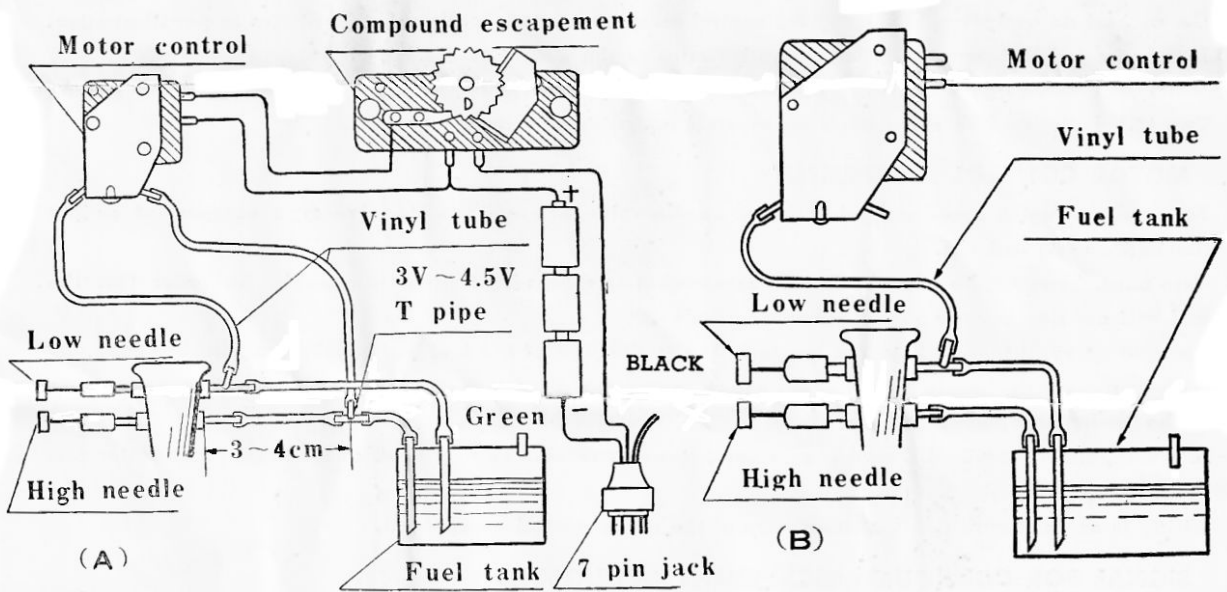
Standard 2 claw

Motor control

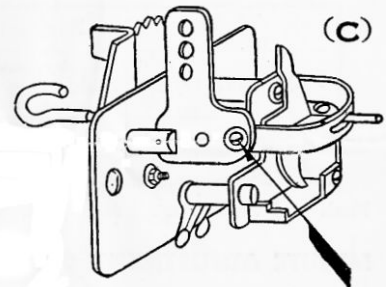
Compound

4 claw and push-pull type motor control escapement (not illustrated) are also available.

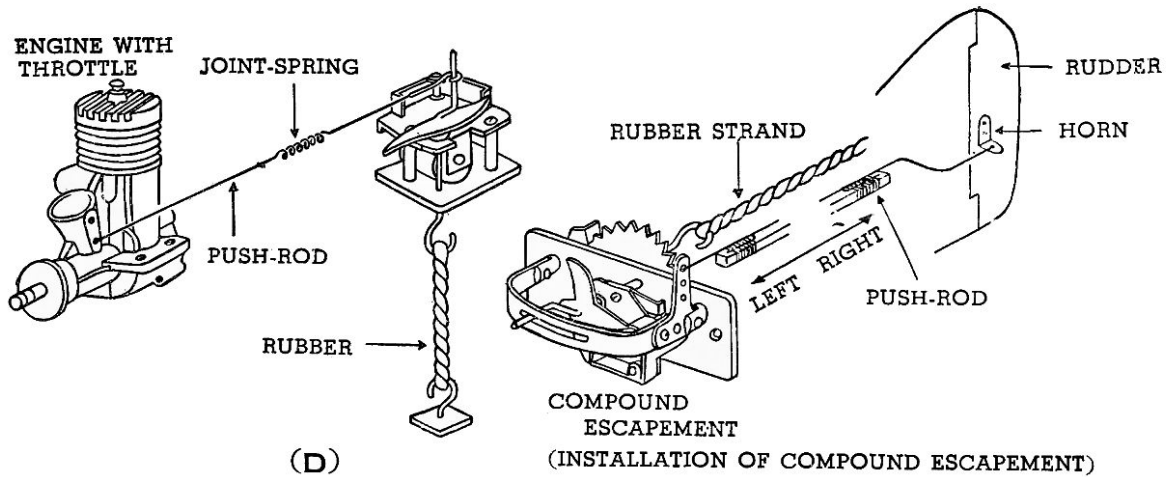
Adoption of the high-quality electro-magnetic material and precise workmanship have resulted in unsurpassed reliability and superiority of the various types of O. S. escapements.



Type	Length of rubber strand	Number of strand	Turn(approx.)
Compound	40 cm	6 strand 4 strand	250-300 300-400
Motor Control	15 cm	4 strand	100-150
Standard	40 cm	4 strand	200-300



Install your escapement properly, by fixing the plate in the balanced position in order that no strain may be caused.



### RUBBER MOTOR

Four or six strands of 3mm square rubber bands are recommended for the motor. Arrange the length of the loop about 10% above the distance between the hooks that hold it. The rubber loop must supply torque, or twisting effort, but as little tension as possible. Examples of the number of rubber strands and turns are shown in the table below. The speed of an action of the compound escapement varies according to the number of the strands. Too many strands and too much turns can often cause improper operations.

### BATTERIES

On each of an escapement and a motor control escapement, connect three 1.5V batteries as per illustration. It is suggested that you use as large size batteries as the weight allows. If the total voltage goes below 3V when metered with the switch on, replace with new ones. Two 15.V batteries (3V) are enough for separate operation of each escapement.

### MOTOR CONTROL ESCAPEMENT

For airplane engine speed control with two needle valve, arrange the air-valve type escapement as per illustrations (A) and (B).

Care must, however, be taken to fix the escapement as a higher position than tank's, in order that the fuel will not flow reverse to the escapement valve.

Transparent vynil tube is ideal for the fuel line as the flow of the fuel can be observed from outside.

With engines with throttle controls, the use of the push-pull type escapemnt or the standard escapement in the horizontal position as per illustration (D) can also be adopted.

In a ship, with a standard 4 claw escapement, forward, reverse and stop switch for the electric motor can be operated.

Wiring is as per figure (A) for either type of the motor control escapement.

### SIGNAL FOR COMPOUND ESCAPEMENT OPERATIONS

	Rud. left	Rud. right	Eng. speed change	Eng. stop
Air-valve type	hold	push & hold	three push	two push & hold
Push-pull type	hold	push & hold	three push	

Push and hold timing may differ in accordance with the number of the rubber strands and turns.

### MINUTE ADJUSTMENT OF THE COMPOUND

Push rod mount of the compound escapement can be adjusted with the screw pointed by the arrow in the illustration (C).

An oval hole is provided for this purpose. Adjust by unscrewing and fix at the desired position.