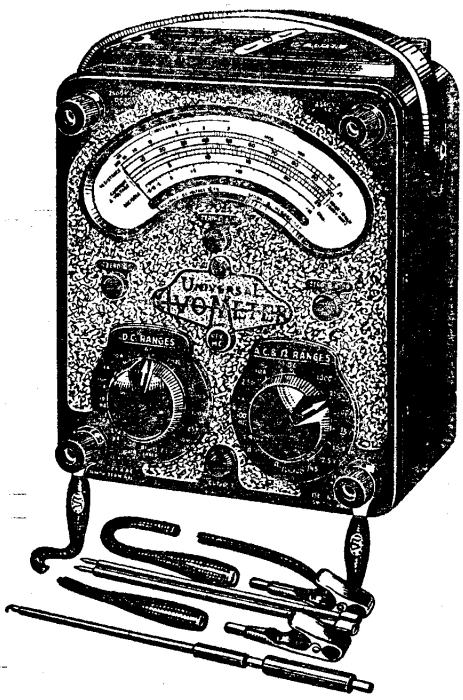
 M. WRIGHT. 052410

20,000 ohms per volt

MODEL 8 UNIVERSAL

AVO METER

Produced in response to a demand for a high sensitivity version of the world-famous Universal AvoMeter, this model incorporates the traditional design features of its predecessors, so highly valued for simplicity of operation and compact portability.



It has a sensitivity of 20,000 ohms per volt on all D.C. voltage ranges and 1,000 ohms per volt on A.C. ranges from 100V. upwards. A decibel scale is provided for audio frequency tests. In addition, a press button has been incorporated which reverses the direction of current through the moving coil, and thus obviates the inconvenience of changing over test leads when the current direction reverses. It also simplifies the testing of potentials, both positive and negative, about a common reference point. A wide range of resistance measurements can be made using internal batteries, separate zero adjustment being provided for each range.

It is of importance to note that this model incorporates the "AVO" automatic cut-out for protection against inadvertent overloads.

Size 8½" × 7½" × 4½"
Weight 6½ lbs. (including leads)

Fully descriptive literature — available on request.

The following accessories are available to widen still further the ranges of the instrument:— A resistance Range Extension Unit to extend the limits of measurement from 0·025 ohm to 200MΩ, a 25kV. D.C. multiplier and a number of A.C. current transformers.

D.C. VOLTAGE	D.C. CURRENT	A.C. VOLTAGE	A.C. CURRENT	RESISTANCE (First indication 0.5Ω, Maximum Indication 20MΩ)	
2.5V.	50μA.	2.5V.	100mA.	0—2,000Ω	using internal batteries
10V.	250μA.	10V.	1A.	0—200,000Ω	using internal batteries
25V.	1mA.	25V.	2.5A.	0—20MΩ	using internal batteries
100V.	10mA.	100V.	10A.		
250V.	100mA.	250V.	—		
500V.	1A.	1,000V.	—	0—200MΩ	using external batteries
1,000V.	10A.	2,500V.	—		using external batteries
2,500V.					

Sole Proprietors and Manufacturers :—

THE AUTOMATIC COIL WINDER & ELECTRICAL EQUIPMENT CO. LTD.

AVOCET HOUSE . 92-96 VAUXHALL BRIDGE ROAD . LONDON . S.W.1 *Telephone : VICtoria 3404 (9 lines)*

ADMIRALTY, S.W.1

D.N.L.D. 133/51

1st January 1953

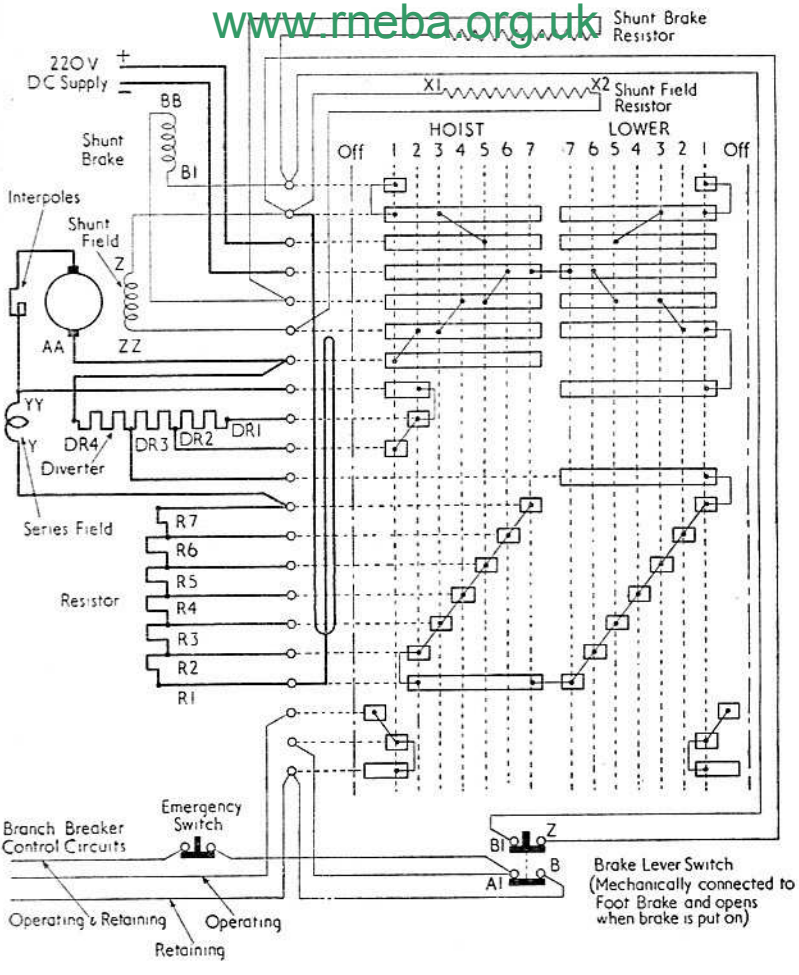
B.R. 157, *Naval Electrical Pocket Book*, 1953, having been approved by My Lords Commissioners of the Admiralty, is hereby promulgated.

This publication supersedes B.R.157/1933 with Addenda 2 and 3.

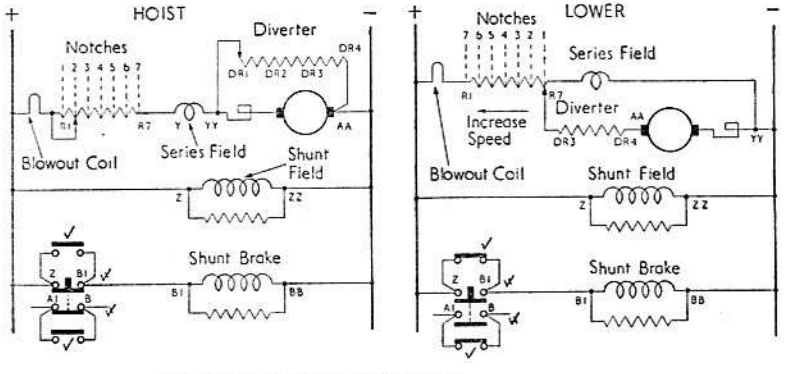
By Command of Their Lordships,

D. E. Lang

Contents



SCHEMATIC DIAGRAM



✓ Drum contacts made on first step only
✓ Brake Switch contacts may be open on first speed, hoist or lower, without opening Branch Breaker

FIG. 5-32 3 TON WINCH CONTROLLER

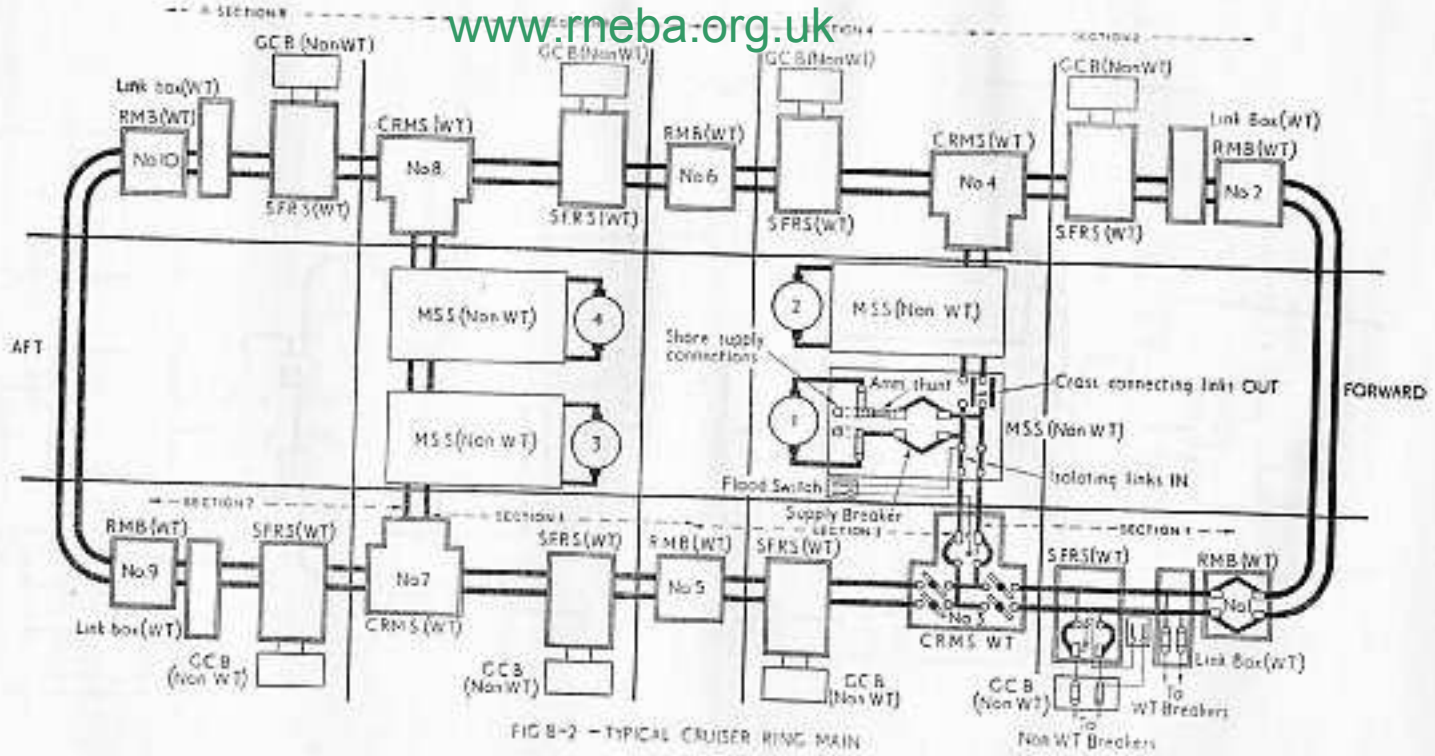
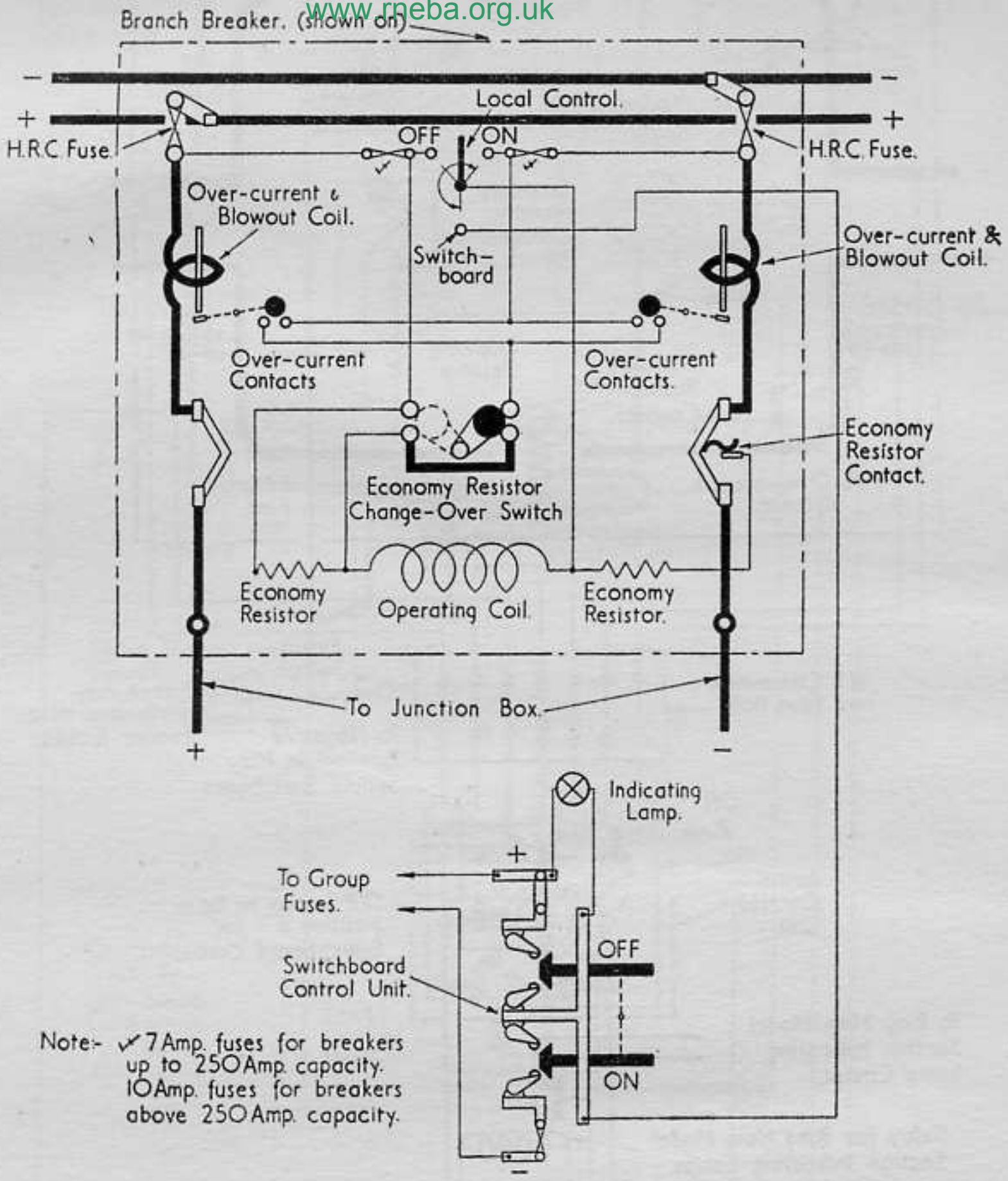


FIG 8-2 – TYPICAL CRUISER RING MAIN



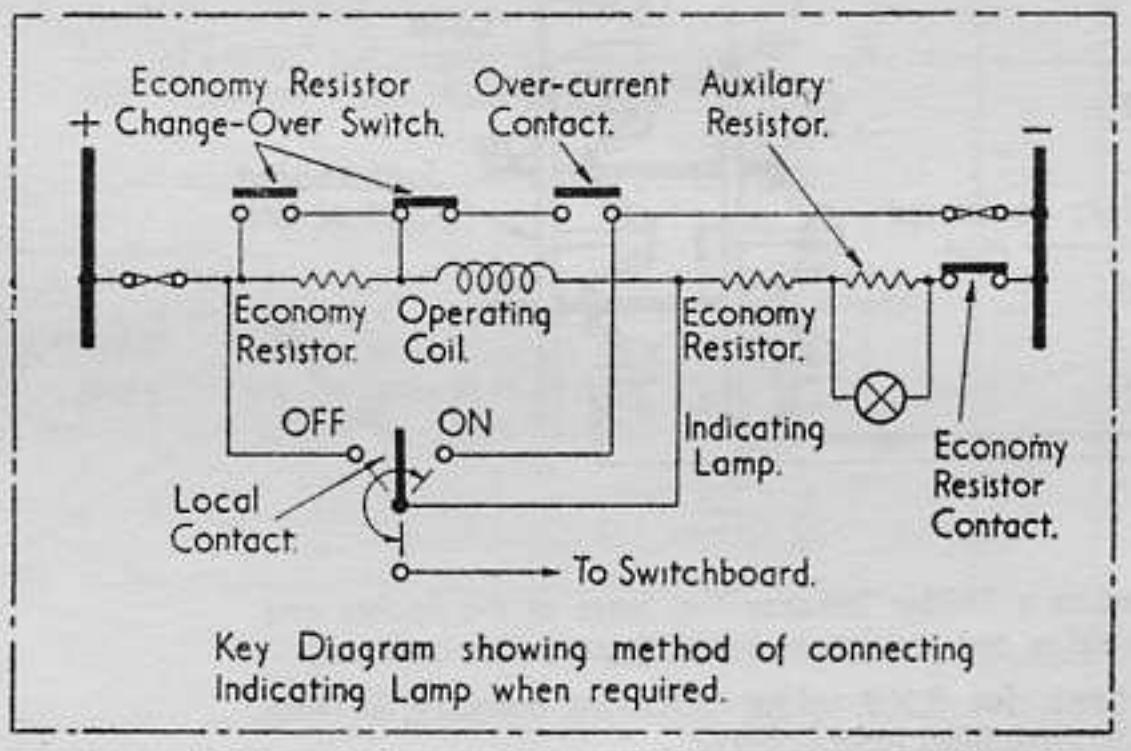


FIG. 8–6. BRANCH BREAKER WITH JUNCTION BOX CONTROL CIRCUIT.

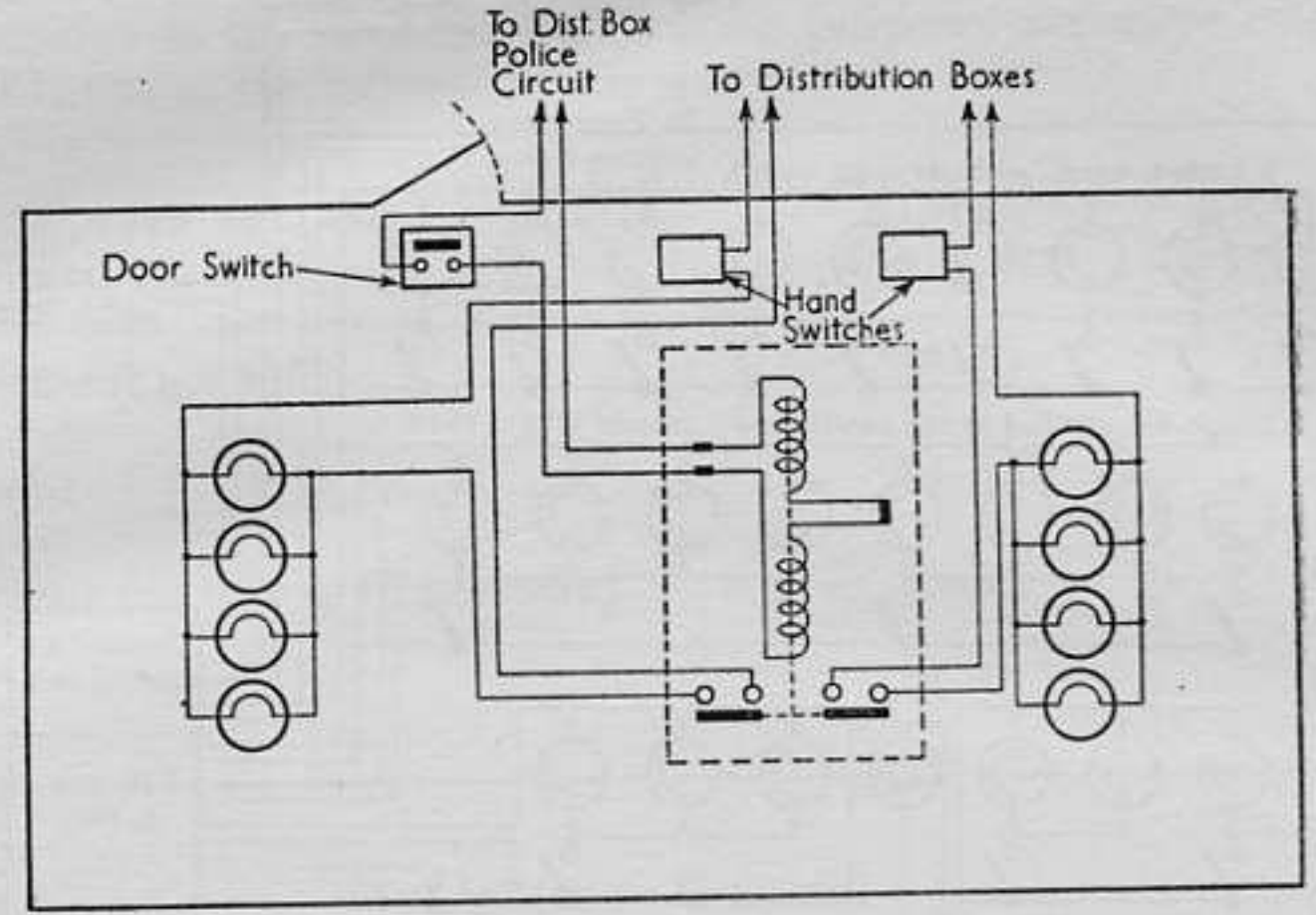
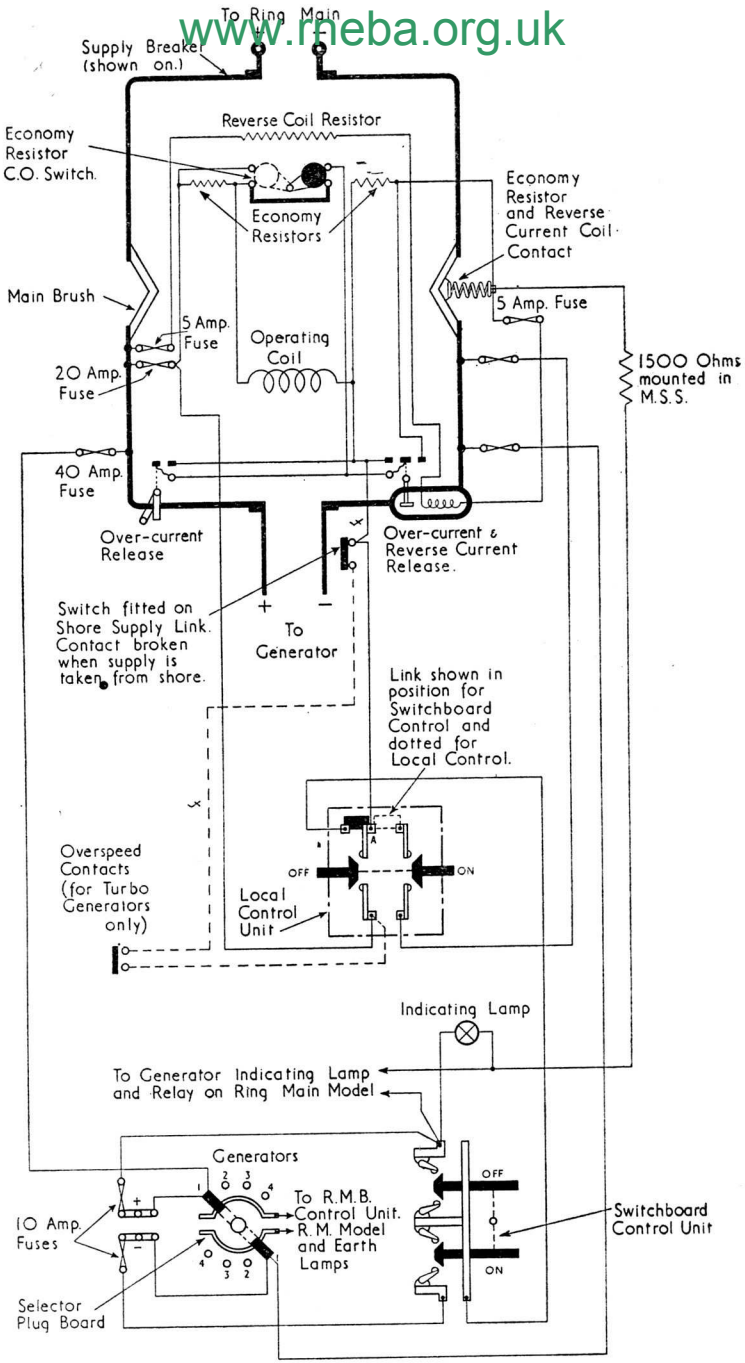


FIG. 9-2. SIMPLE DOOR SWITCH CIRCUIT.



NOTE:-
When Shore Supply is not fitted cables ⟋ are connected direct to terminal 'A' in Local Control Unit.

FIG. 8-4. SUPPLY BREAKER.

Three-element chain

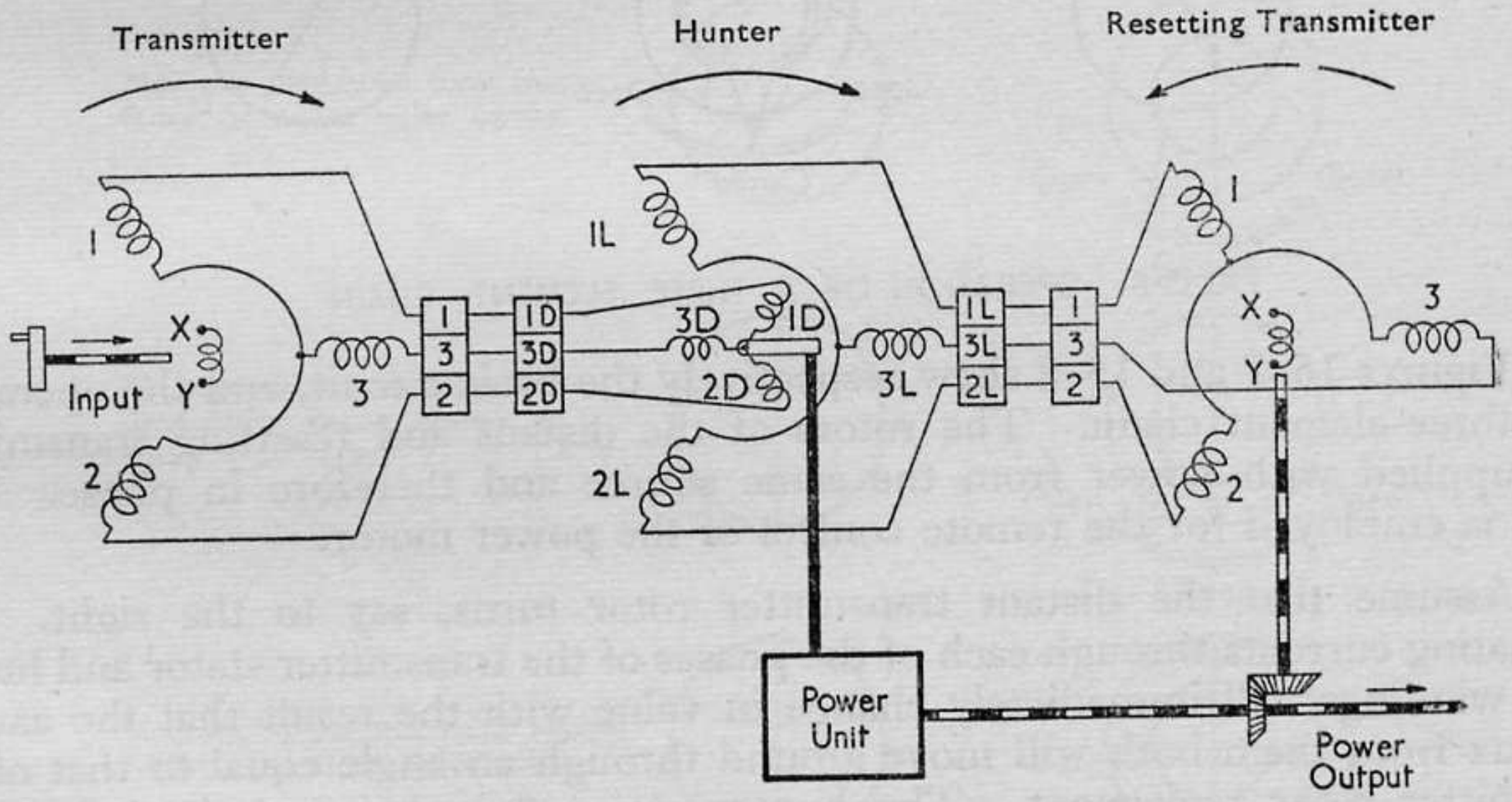


FIG. 15-7 POWER MAGSLIP THREE ELEMENT CHAIN.

Gun circuit components

35. Figure 16–7 shews a typical gun circuit at the mounting. From the siding C.O.S. only one lead is shewn but in many mountings the duplication is continued as far as the interceptor. In such cases that component is the point where the side run selection is made.

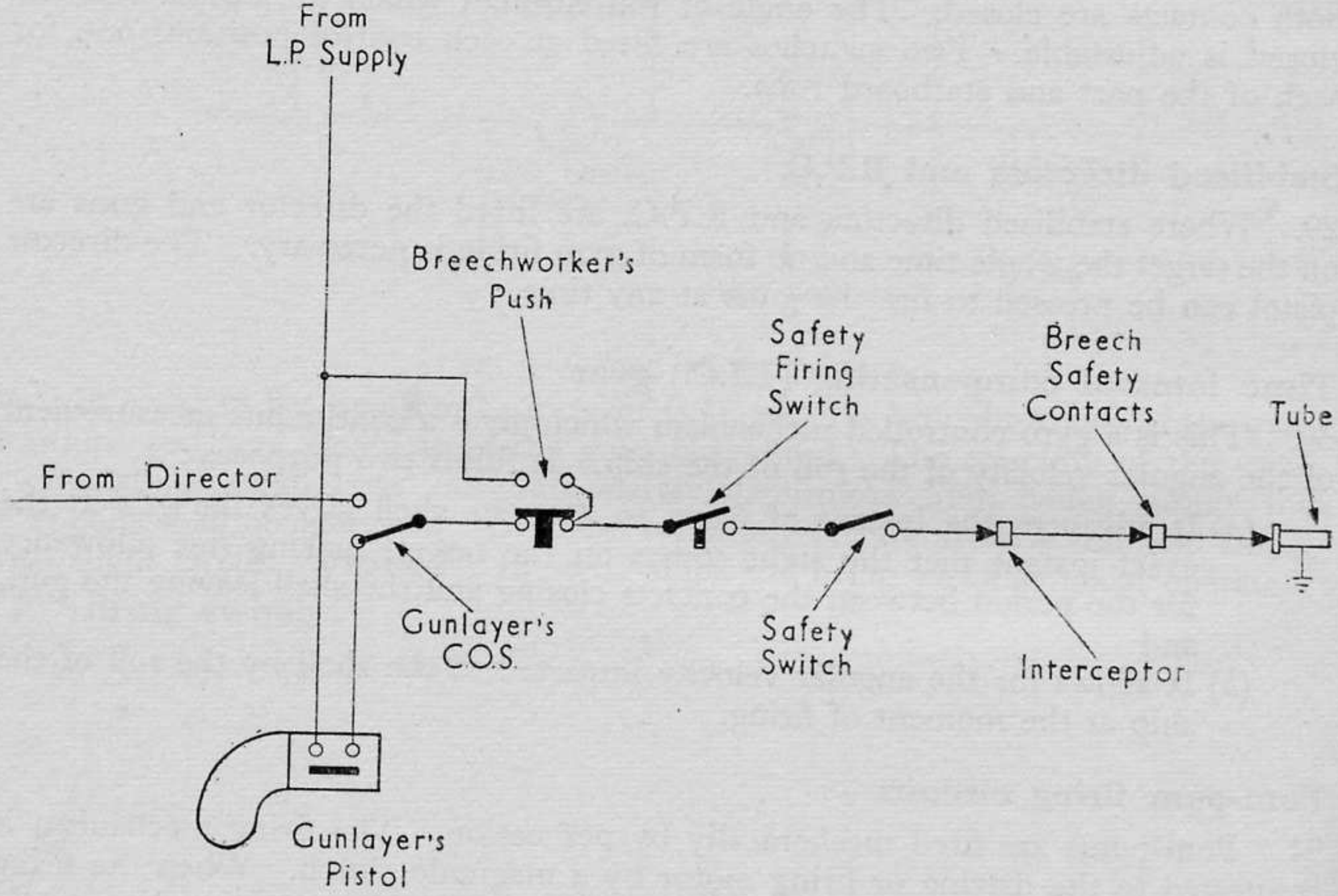


FIG. 16-7 A TYPICAL FIRING CIRCUIT AT A MOUNTING.

Ward Leonard Set

90. This is a system of speed control which differs widely from those already mentioned. It is used for some forward capstans and crane hoist motors, where a powerful motor with a wide and sensitive speed control and reversal is required. The circuit in a simplified form is shewn in Figure 5–33.

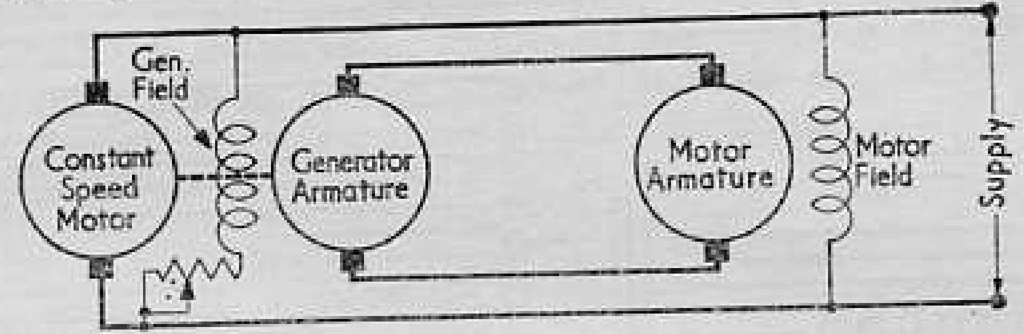


FIG. 5–33

91. A constant speed motor drives a separately excited generator which supplies current to the armature of a separately excited motor. Speed control is obtained by varying the strength of the generator field and thus applying a varying voltage to the motor armature. Reversal is obtained by reversing the current through the generator field. Its advantages are :

(*a*) economy of power
(*b*) a good torque at all loads and speeds
(*c*) absence of large, heavy current carrying resistors.