

Westinghouse

—37 LINE—

MINIATURE PANEL INSTRUMENTS

FOUR AND ONE-HALF-INCH CLASSIFICATION

INSTRUCTIONS

Cases

The first letter in type designates the form of case used.

- N—Round Flush Case $4\frac{1}{8}$ " dia.
- R—Rect. Flush Case $3\frac{1}{2}$ " x $4\frac{1}{2}$ ".
- S—Round Proj. Case $4\frac{1}{8}$ " dia.
- Q—Rect. Flush Case $4\frac{1}{2}$ " x $3\frac{1}{2}$ ".
- U—Rect. Proj. Case $3\frac{1}{2}$ " x $3\frac{1}{2}$ ".

All cases are moulded plastic composition.

Mechanisms

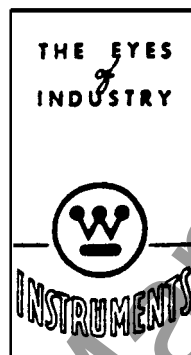
The second letter in type designates the principle of operation.

- A—Repulsion Moving Iron.
- X—Permanent Magnet Moving Coil
- T—Thermocouple plus X
- C—Rectifier plus X

Dial Notes

References to type, style number, use of external shunts, etc., are marked on the dial.

Magnetic Panels—Instruments are calibrated for use on non-magnetic panels unless otherwise specified. Types with mechanisms A read about 1% high and types with mechanisms X, T or C read from 1% to 6% low when mounted on $\frac{1}{8}$ to $\frac{1}{4}$ inch magnetic panels unless calibrated for such panels.



Field Influence—These instruments being unshielded, certain precautions must be taken to prevent undue influence from external fields.

1. With type A mechanism above 15 amperes, the leads should be brought straight down from the terminals at least 6 inches before bending. All leads carrying currents of the order of 50 amperes or more should be spaced at least 6 inches from the instruments.
2. All instruments should be mounted at least 5 inches between centers. Instruments with very high sensitivity have very strong permanent magnets and should be spaced at

least 8 inches from other instruments.

Special Precautions

All type 37 instruments with moulded plastic cases are insulated for 750 volts. Above this voltage one terminal should be kept at ground potential.

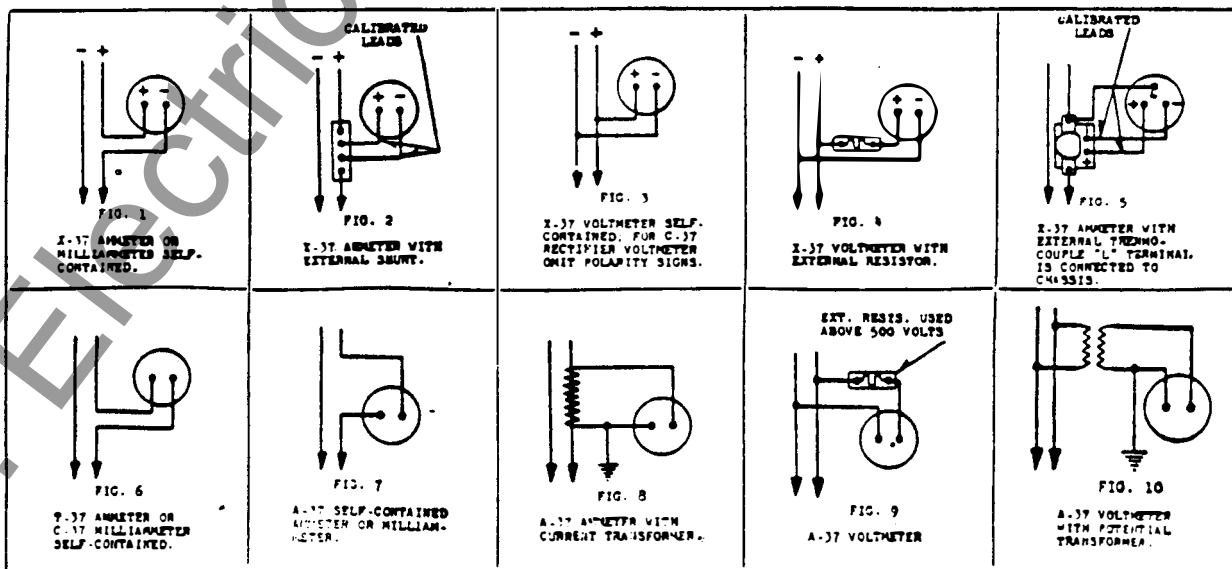
Ammeters with external shunts must use specified leads.

If the circuit voltage exceeds the insulation rating, the ammeter or shunt should be connected in the grounded side of the circuit.

Radio Frequency instruments, particularly those with external thermocouples should be arranged with effective R.F. by-pass and ground connections to minimize capacity currents.

Repairs and Renewal Parts

Orders for renewal parts should include the name of the part, and the complete identification data. Repair work can be done most satisfactorily at the factory, small instruments being readily shipped by Parcel Post. When returning an instrument for repairs obtain a returned material tag from your dealer or our Sales Office so as to facilitate identification of the shipment when received



WESTINGHOUSE ELECTRIC CORPORATION
INSTRUMENT DEPARTMENT **NEWARK, N. J.**

MINIATURE PANEL INSTRUMENTS—Continued

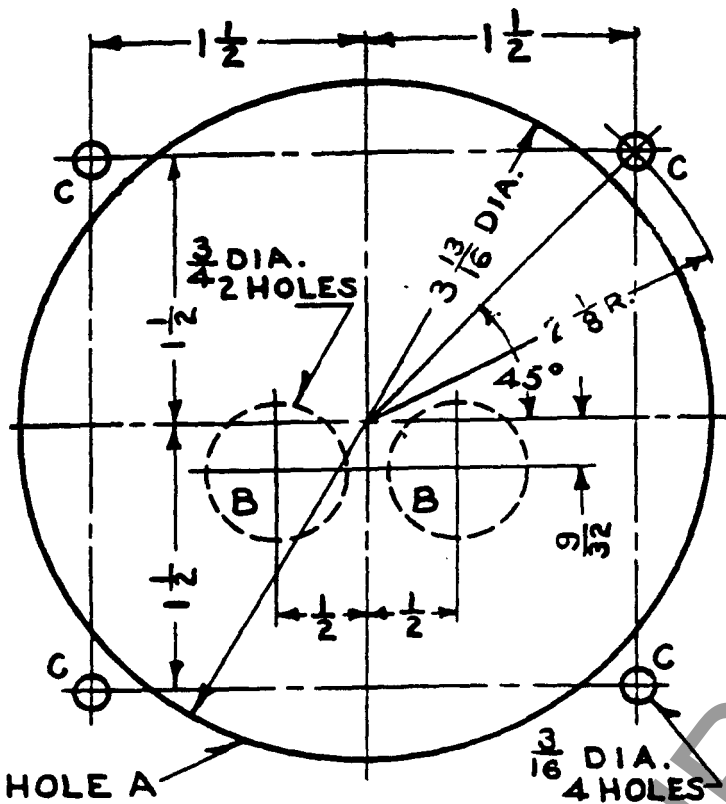


FIG. 1

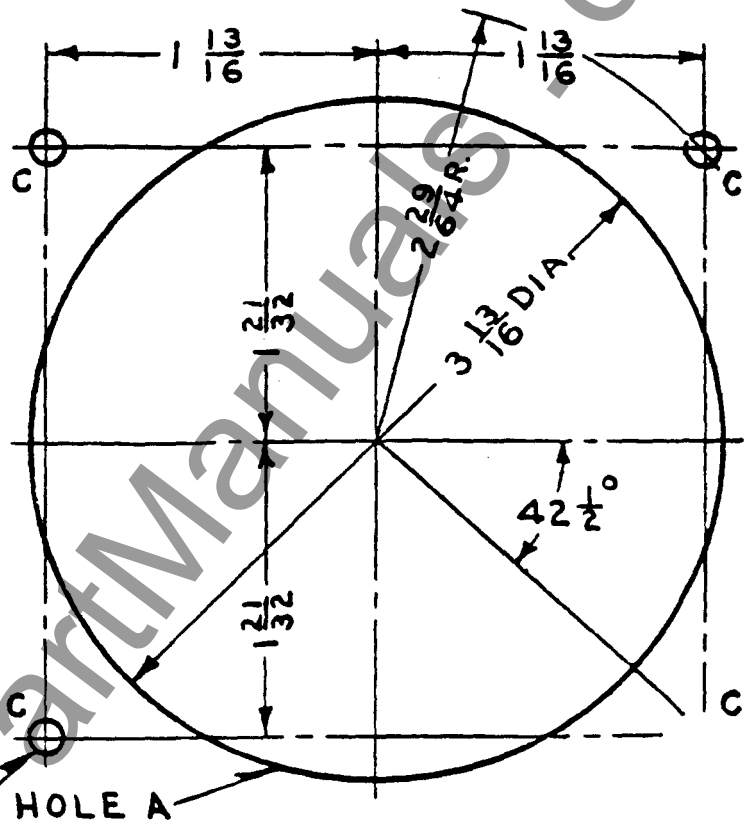


FIG. 2

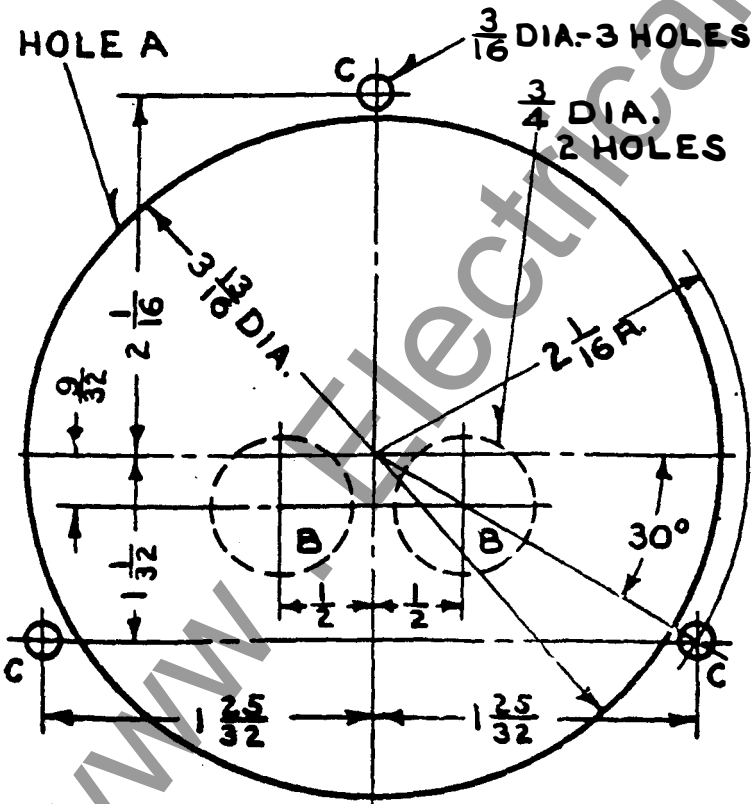


FIG. 3

Case Type	Panel	Remark	Drill Holes	Fig. No.
R-37	Any	All Inst.	A & C	1
U-37	Insul.	All Inst.	B & C	1
U-37	Metal	All Inst.	A & C	1
Q-37	Any	All Inst.	A & C	2
N-37	Any	All Inst.	A & C	3
S-37	Insul.	△	B & C	3
S-37	Metal	All Inst.	A & C	3

* - Holes B & C to be used for all Type U-37 inst. mtd. on insul. panels, except A.C. ammeters of 25 amps. or higher, in which case holes A & C must be used.

△ - Holes B & C to be used for all Type S-37 inst. mtd. on insul. panels, except A.C. ammeters of 25 amps. or higher, in which case holes A & C must be used.