TYPE ET-5 & ET-6 INDICATING LAMP FOR PANEL MOUNTING

INTRODUCTION

The Types ET-5 and ET-6 indicating lamps consist of a receptacle, resistor, lamp, escutcheon and color cap (see Figs. 1 and 2). The Type ET-5 receptacle is for panels up to and including 2-inches thick. The Type ET-6 receptacle is for panels up to and including 1/4-inch thick. The dimensions are listed under Figs. 1 and 2. The color caps are available in five colors -- red, green, yellow, clear, white, and blue.

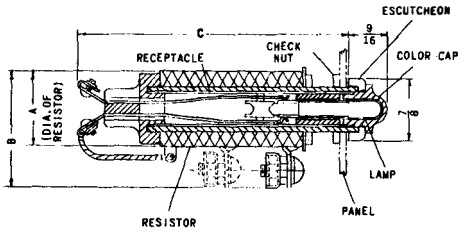

Fig. 1 Cross-Sectional View of Type ET-5 Indicating Lamp

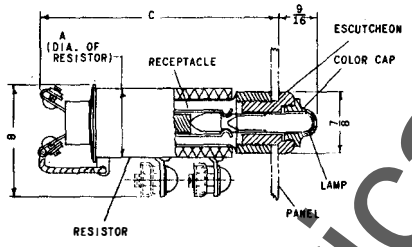

Fig. 2 Cross-Sectional View of Type ET-6 Indicating Lamp

Type	Voltage Range	Dimensions in Inches A	B	C	Panel Thickness
ET-5	24-250 251-660	1-1/8 2	1-11/16 2-9/16	5-15/16	Up to 2-in. thick
ET-6	24-250 251-660	1-1/8 2	1-11/16 2-9/16	3-11/16	Up to 1/4-in. thick

APPLICATION

These lamp units can be used wherever a panel mounted signal or indicating lamp is desired, at either one or two brilliances. For two-brilliancy or dim-bright operation, a resistor with an intermediate tap is used. Otherwise, for single-brilliancy operation, the resistor has only one external terminal.

RATINGS

The lamp for the Type ET-5 receptacle is a special T-2 bulb, telephone switchboard slide base with prick punches, rated 24 volts, 0.032 to 0.038 amperes. Code 24X (Cat. 59X243).

The lamp for the Type ET-6 receptacle is a standard T-2 bulb, telephone switchboard lamp rated 24 volts, 0.032 to 0.038 amperes, code 24E. The Type ET-6 receptacle can also use the 24X lamp used in the Type ET-5 receptacle.

Receptacles with proper series resistors are available for use in any circuit within the voltage range listed below:

Rating	Circuit Voltage Min.	Max.	Series Resistor Ohms	Brilliancies
24 D-C	22	28	110	1
48 D-C	44	56	900	1
115 A-C	95	125	2800	1
125 D-C	110	140	3300	1
220 A-C	190	250	6300	1
250 D-C	220	280	7200	1
440 A-C	380	500	13000	1
550 A-C	500	630	17000	1
48 D-C	44	56	1300 with 580 tap	2
125 D-C	110	140	4300 with 2450 tap	2
250 D-C	220	280	9400 with 5600 tap	2

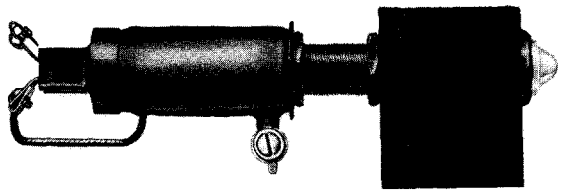

Fig. 3 Type ET-5 Indicating Lamp Mounted On 1 1/2-Inch Panel

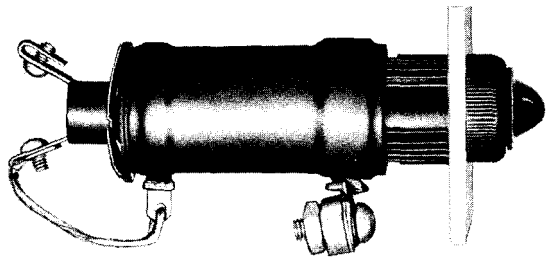

Fig. 4 Type ET-6 Indicating Lamp Mounted On 1/8-Inch Panel

INSTALLATION

For installation of either the ET-5 or ET-6 unit, a 21/32-inch diameter hole is required in the panel. Figs. 3 and 4 show the ET-5 and ET-6 lamp units in place on 1-1/2-inch and 1/8-inch panels, respectively.

Before mounting either unit, remove color cap, escutcheon, and lamp. Adjust the checknut on the ET-5 unit so its distance from the front end of the support is approximately 1/8-inch greater than the thickness of the panel. Insert either unit thru the panel from the back and screw escutcheon on tightly with the fingers. Tighten the checknut on the ET-5 unit with a suitable wrench (a wrench should not be used on the ET-6). Then, re-install the lamp and color cap. When inserting the lamp be careful to have its contacts parallel to the receptacle contact fingers.

NOTE: The contact fingers in all lamp units on one panel should be set at the same angle so the position used to insert any one lamp will apply for all lamp replacements.

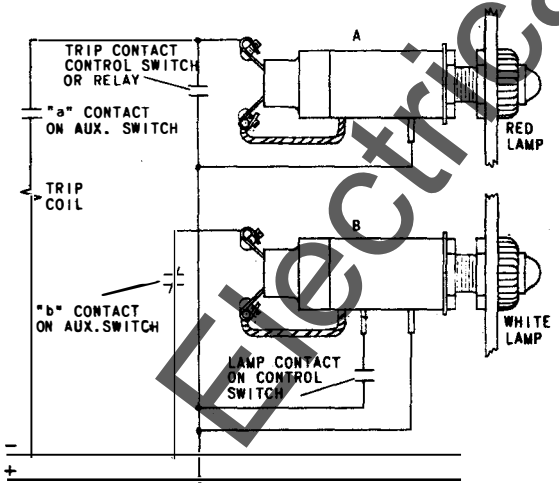

Fig. 5 Typical Tell-Tale and Dim-Bright Connections

CONNECTIONS

Connecting wires may be attached to the resistor terminal and the free terminal on the receptacle either by use of the binding screws or by soldering. The terminals are designed for No. 12 wire, with smaller sizes it may be necessary to squeeze the receptacle terminal around the wire before tightening the screw.

For one-brilliancy indication, the lamp should be connected in series with its operating contact across the power source.

For circuit-breaker CLOSED indication, a tell-tale circuit may be used (see Fig. 5A). When the breaker is closed, the lighted red lamp shows not only the breaker position but also that the trip circuit is complete.

For circuit-breaker OPEN indication, the dim-bright connection shown in Fig. 5B is often desirable, especially when a large number of lamps are located on one panel. A lamp unit with tapped resistor is required, together with a control switch having a lamp contact which remains closed in the normal position, except after the switch has been turned to the TRIP position. A white color cap on the lamp is customary. When the breaker is tripped with the control switch, the switch contact is opened, and the lamp glows with low brilliancy. If the breaker is tripped automatically, the control switch contact short-circuits part of the lamp resistor so the lamp glows brightly, and the non-manual operation can be easily located on the panel.

MAINTENANCE

For replacement of lamps, a G-E lamp puller (G.E. Cat. No. 6151027 G-1) is recommended (see Fig. 6). To remove a lamp, unscrew the color cap, using the end of the lamp puller as a wrench. Press the rubber tube of the lamp puller over the end of the lamp bulb, and pull straight out. To insert a new lamp, hold it in the fingers with the contacts parallel to the receptacle contacts and push it into place.

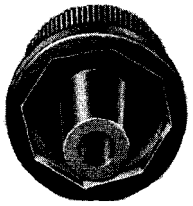

Fig. 6 Lamp Puller

RENEWAL PARTS

When ordering renewal parts, address the nearest General Electric Sales Office, specify the quantity required and describe the part (give the catalog numbers if available).