INSTRUCTIONS

GEI-25372B

SUPERSEDES GEI-25372A

TEST PLUGS

FOR DRAWOUT RELAYS AND METERS

Types

XLA12A

and

XLA13A

SWITCHGEAR DEPARTMENT

GENERAL ELECTRIC

PHILADELPHIA, PA.

Fig. 1 XLA12A Test Plug

Fig. 1 (8005524)

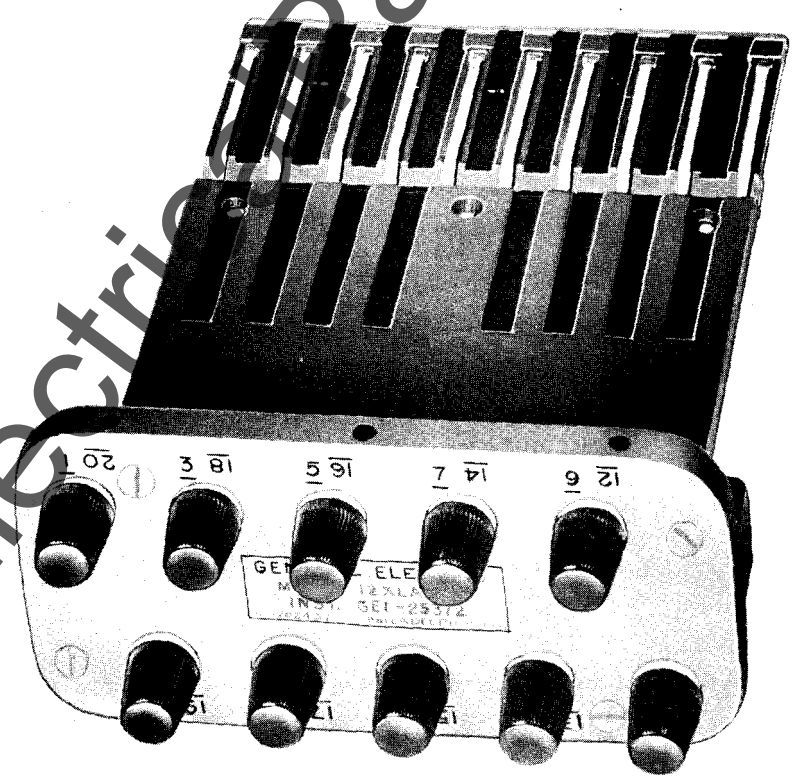

Fig. 2 XLA13A Test Plug

Fig. 2 (8024186)

TEST PLUGS
FOR DRAWOUT RELAYS AND METERS

TYPE XLA

APPLICATION

The Type XLA test plugs are used to test drawout relays and meters. The XLA12A enables power to be applied to the relay from either a separate source or the source that feeds the equipment. The XLA13A can only be used when a separate source of power is available.

CONSTRUCTION

XLA12A

The XLA12A test plug consists of a black and red Textolite* molding with twenty electrically separate contact fingers connected to ten concentric binding posts. The ten contact fingers on the black side are connected to the inside binding posts with the black thumb nuts and engage the relay internal connections. The contact fingers on the red side are connected to the outer binding posts with the red thumb nuts and engage the equipment case stud connections. See Fig. 1. The concentric binding posts are numbered on the nameplate, and the corresponding contact fingers are numbered on each side of the test plug. When using the test plug in the bottom of the relay, numbers one to ten, corresponding to the relay studs, appear upright, while numbers eleven to twenty are upside down. It is impossible, due to its construction, to insert the plug into the bottom of a relay with numbers one to ten up-side down. By the same token, numbers eleven to twenty will always appear in the up-right position when the plug is inserted in the top of a relay.

Removable test links for through connection, test clips and short-circuiting clips are furnished with each test plug. See Fig. 4.

XLA13A

The XLA13A test plug consists of a black Textolite* molding with ten electrically separate contacts. Each contact terminates at a separate binding post. See Fig. 2. When the relay connecting plug is withdrawn any current transformer secondaries will be short circuited by shorting bars in the case. The insertion of the XLA13A test plug does not disturb the current transformer shorting arrangement. The diagonally staggered binding posts are numbered. Numbers one to ten, corresponding to the relay stud connections, appear up-right when using this plug in the bottom of a relay, while number eleven to twenty appear up-side down. Because of its design, the XLA13 test plug cannot be inserted into the bottom of a relay with numbers one to ten up-side down. Thus, the contacts of the inserted plug will always be toward the relay.

TESTING

Routine testing can be accomplished by removing the relay cover and substituting either test plug for the connecting plug.

XLA12A

Several pieces of hardware are supplied with this test plug (See Fig. 6). The U-shaped link is used to make through connections, relay stud to case terminals. The long, open end link is used to short circuit any current transformers and any normally closed contacts. This link must be inserted in the proper place under the red thumb nuts before the test plug is inserted in the unit. Two sizes of corregated end links are provided so standard test clips can be used. These links are also provided with a hole so that a secure bolted connection may be obtained.

Typical separate source test connections and wiring diagram for TYPE IAC overcurrent relays are shown in Fig. 3.

A conventional representation of test connections used on wiring diagrams is shown in Fig. 9. An outline of this plug is shown in Fig. 11.

XLA13A

No external provisions need be made for shorting current transformer secondaries or any normally closed contacts because the plug is so designed that the side away from the relay to be tested does not come into contact with any of the connecting fingers in the case. Power source connections can be secured to the studs of the plug by the black thumb nuts.

* Reg. Trade-Mark of General Electric Company

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

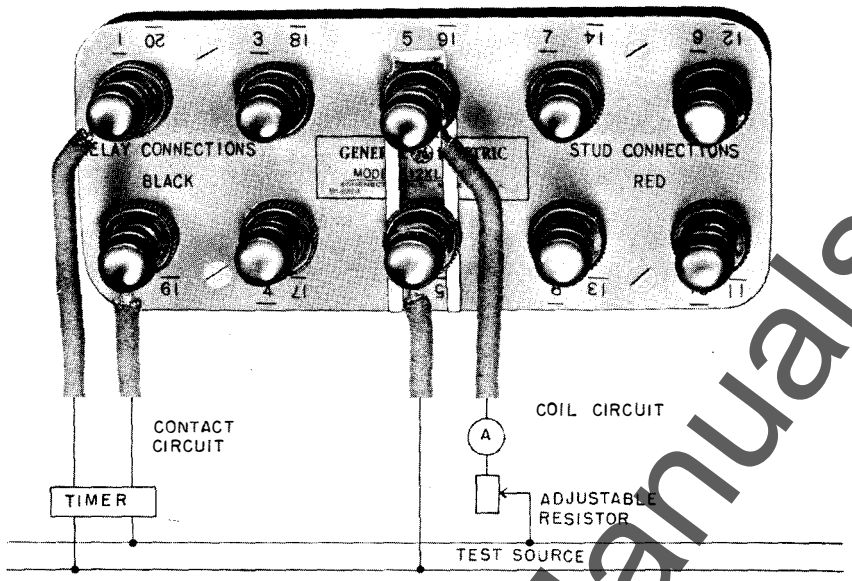

Fig. 3 (8004359)

Fig. 3 Typical Separate Source Connections and Wiring Diagram for Testing an IAC Overcurrent Relay Using the XLA12A Test Plug

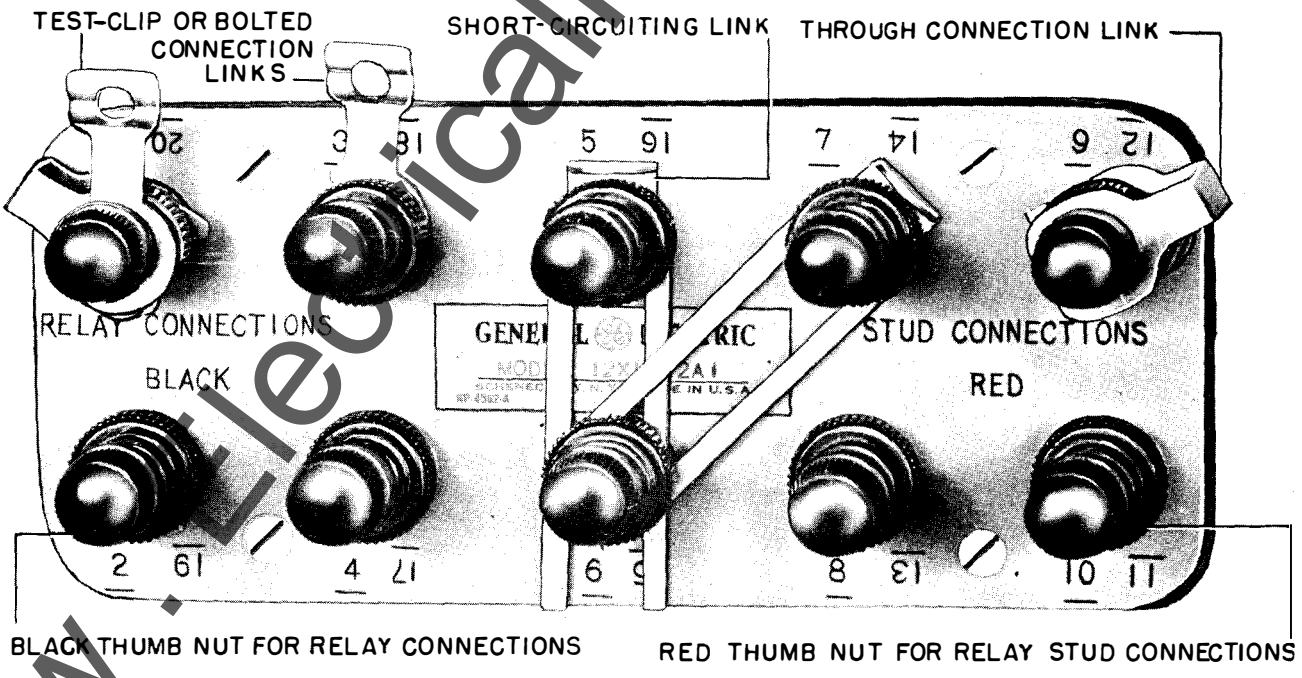

Fig. 4 (8004307)

Fig. 4 Test Links in Use on the XLA12A Test Plug

Fig. 5 (8024187)

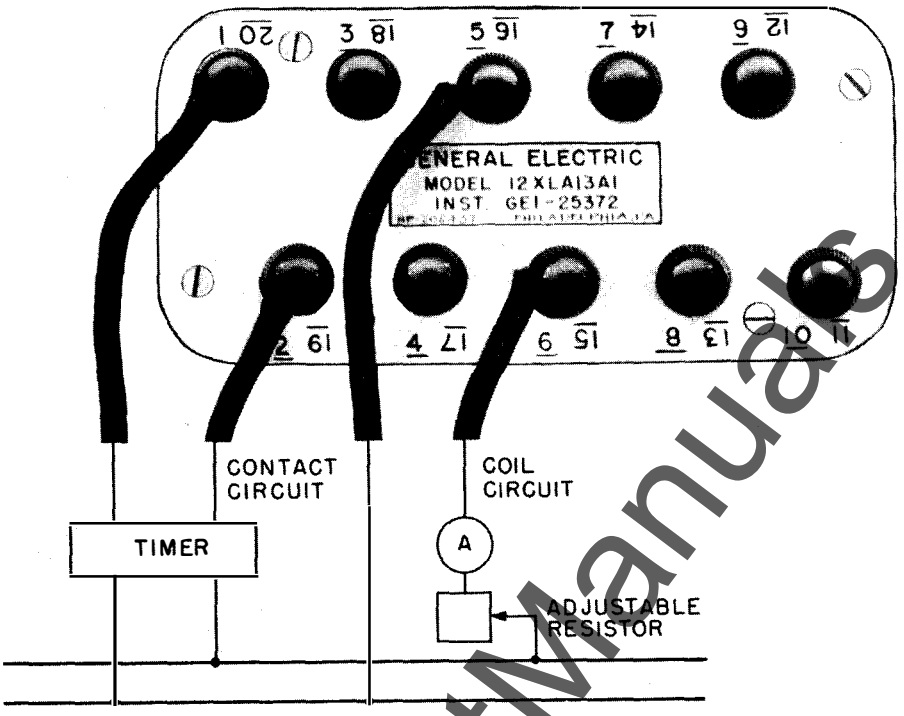

Fig. 5 Typical Separate Source Connections and Wiring Diagram for Testing an IAC Overcurrent Relay Using the XLA13A Test Plug

Typical separate source test connections and wiring diagram for Type IAC overcurrent relays are shown in Fig. 5.

A conventional representation of the XLA13A test plug connections used on wiring diagrams is shown in Fig. 10.

An outline diagram of the XLA13A test plug is shown in Fig. 12.

SHIPPING - UNPACKING

Type XLA test plugs are shipped in individual cartons which may be used for storage. All necessary hardware is packed in the individual carton.

Immediately upon receipt of the test plug, an examination should be made for any damage sustained in transit. If injury or rough handling is evident a damage claim should be filed at once with the transportation company and the nearest General Electric Sales Office should be notified.

RENEWAL PARTS

Orders for renewal parts, should be addressed to the nearest Sales Office of the General Electric Company, giving the name of part wanted, quantity required and complete nameplate data.

Fig. 6 (8005525)

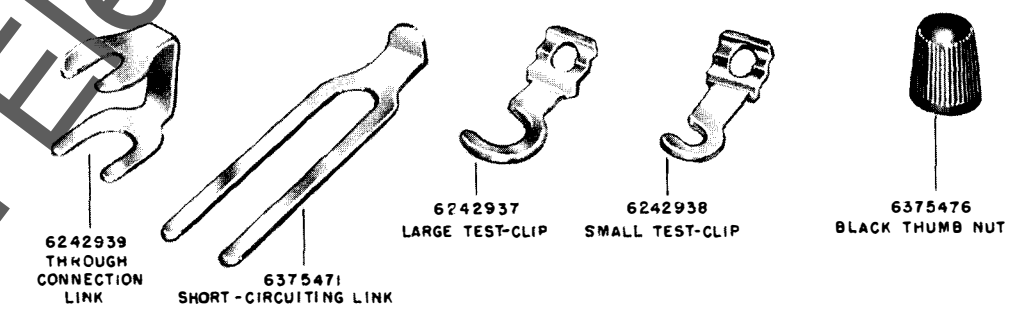

Fig. 6 Accessory Links for the XLA Test Plugs

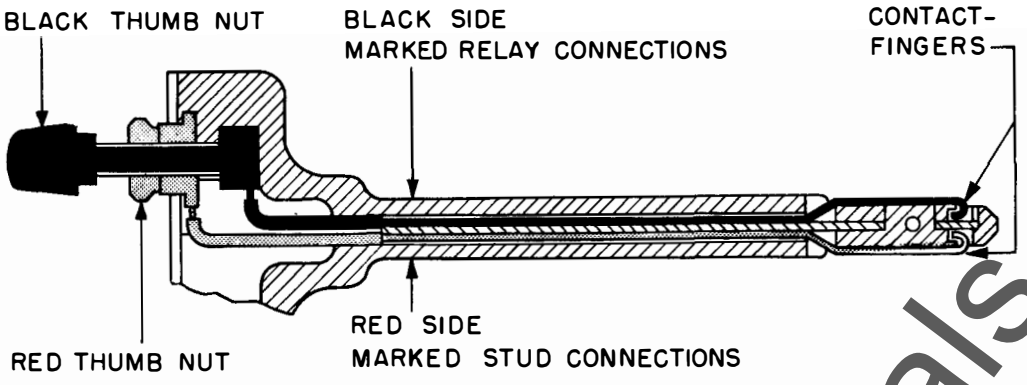

Fig. 7 Sectional View of XLA12A Test Plug Showing Internal Wiring

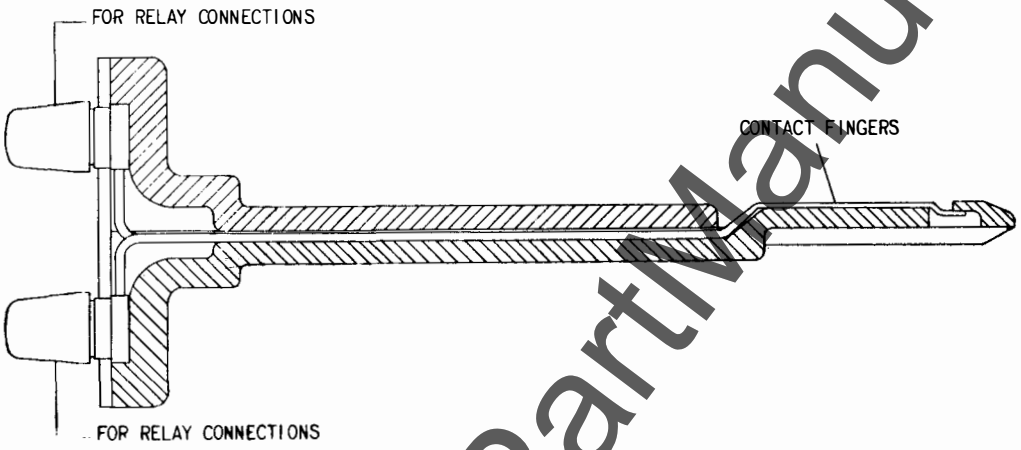

Fig. 8 Sectional View of XLA13A Test Plug Showing Internal Wiring

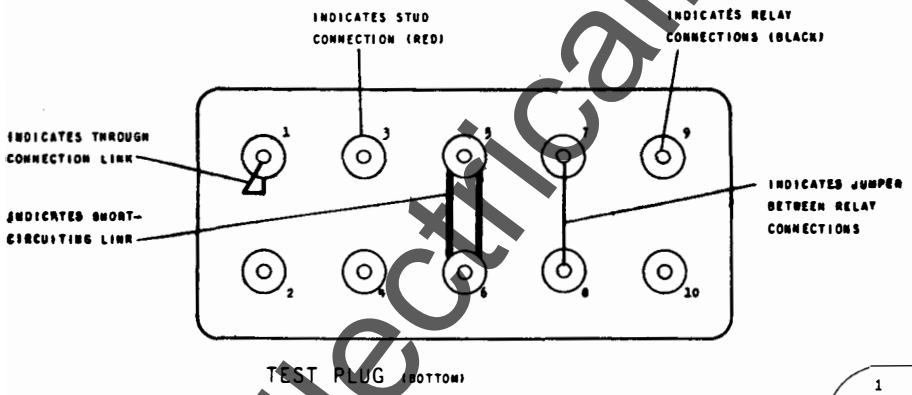

Fig. 9 Conventional Representation of XLA12A Test Plug Connections

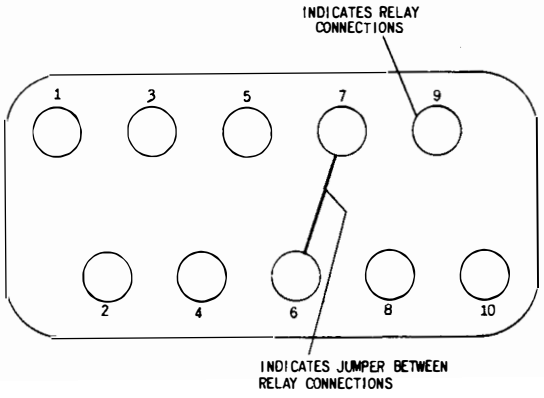

Fig. 10 Conventional Representation of XLA13A Test Plug Connections

Fig. 11 (K-6305856)

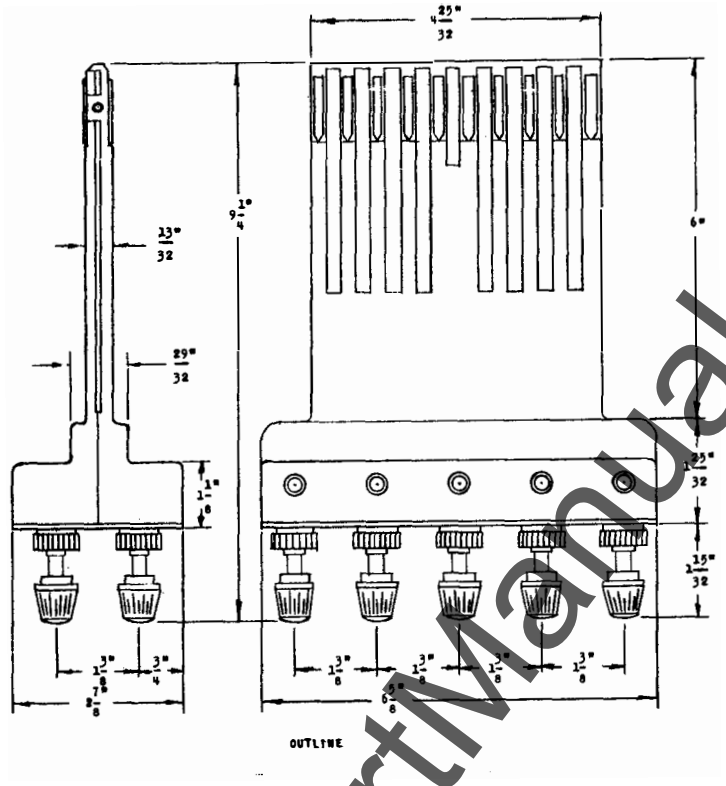

Fig. 11 Outline of the XLA12A Test Plug

Fig. 12 (459A230)

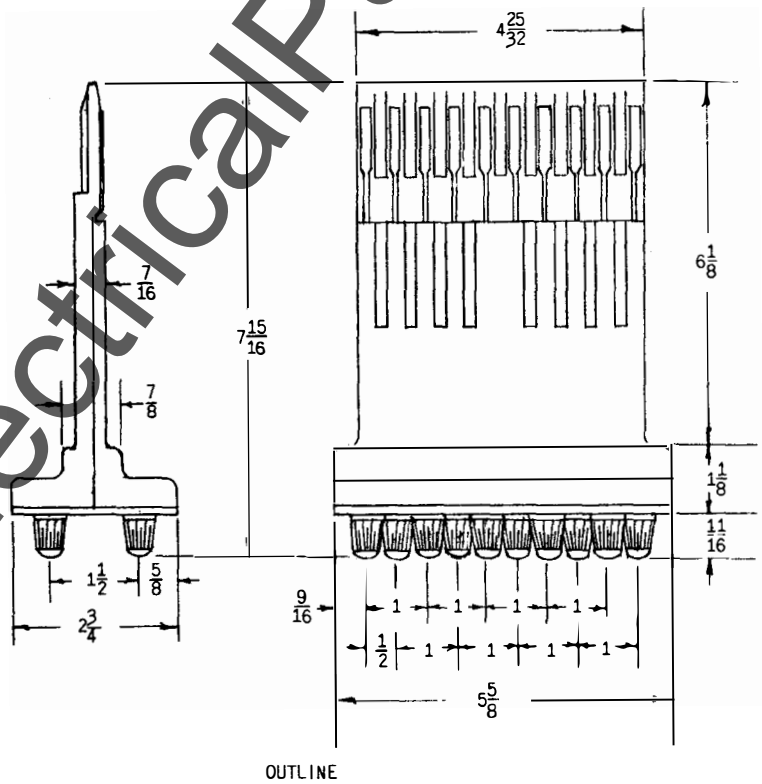

Fig. 12 Outline of the XLA13A Test Plug

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