



INSTRUCTIONS

GEI-88760A
SUPERSEDES GEI-88760

CAPACITOR TRIP DEVICE

SWITCHGEAR DEPARTMENT

GENERAL  ELECTRIC

PHILADELPHIA, PA.

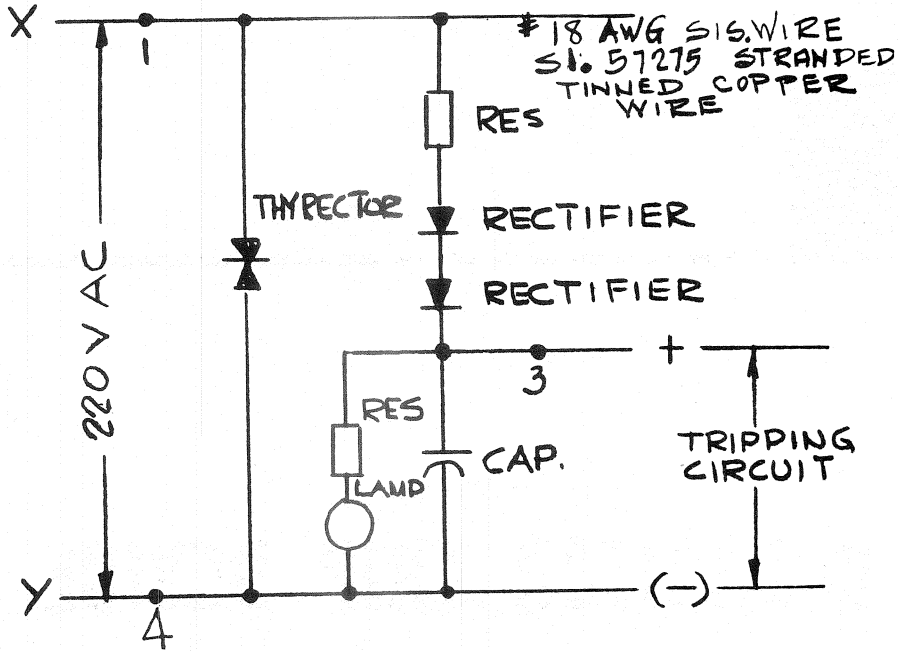


Fig. 1 Elementary Diagram

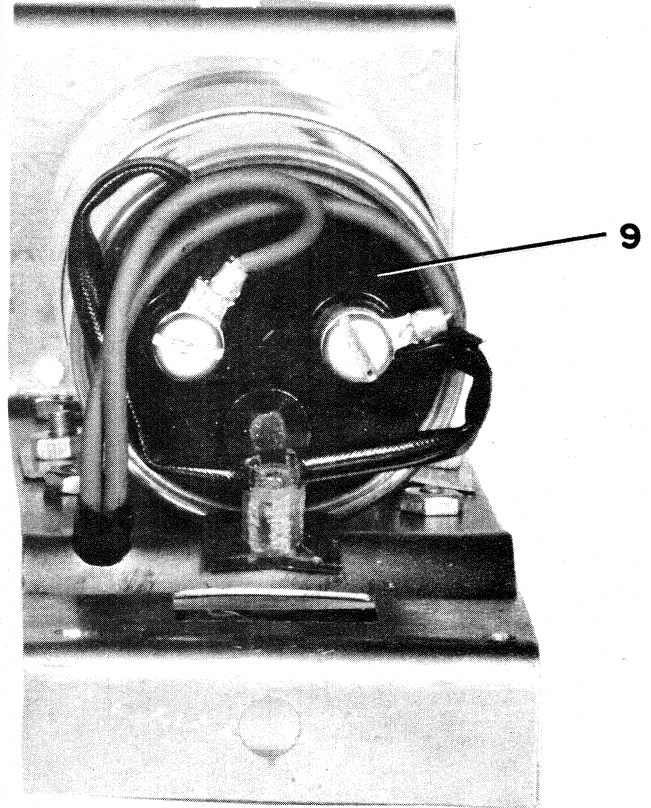
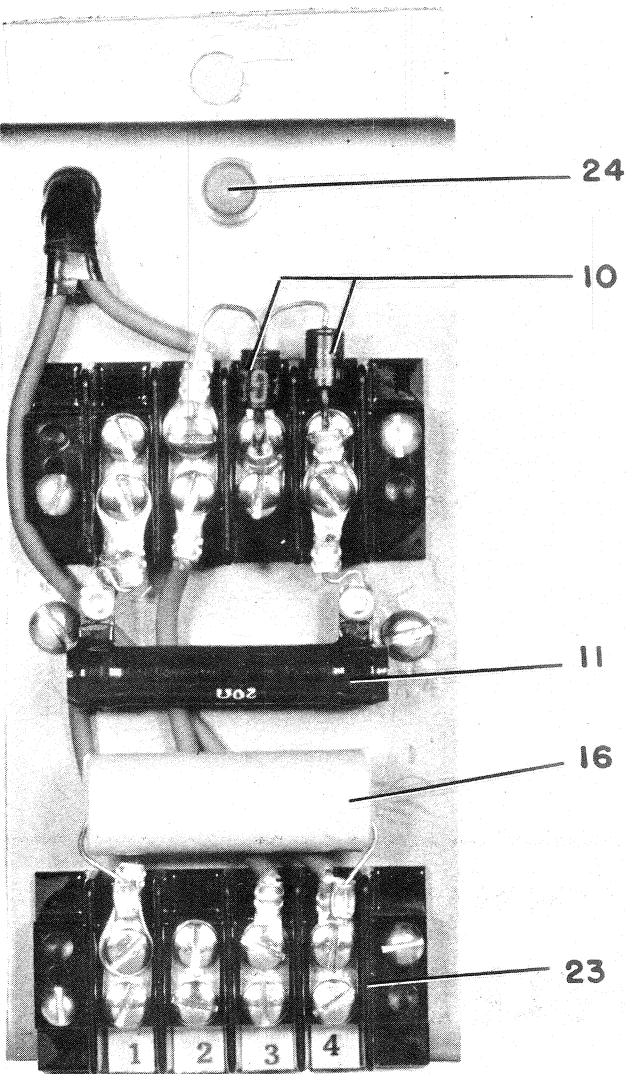


Fig. 2 (8914721A&B)

Fig. 2 Capacitor Trip Device

CAPACITOR TRIP DEVICE

INTRODUCTION

The capacitor trip device is a device designed for use in tripping the operating mechanism of a circuit breaker, its purpose being to provide sufficient electrical energy to operate the trip coil of the mechanism.

The device is primarily for use with circuit breakers which require some form of a-c power for their closing operation, i.e. circuit breakers having either a stored

energy closing mechanism with an a-c operated release coil or an a-c solenoid operated closing mechanism. It may also be used with circuit breakers employing other means of closing. However it might be necessary to observe certain operating procedures as outlined under "Operation and Checking".

In addition to circuit breaker tripping, the unit may be used to operate hand or

electric reset devices such as lockout relays.

It is recommended that each circuit breaker or other device be provided with its individual capacitor trip device. Exceptions to these recommendations are particular combinations of circuit breakers and lockout relays which tests have indicated can be operated reliably from a single tripping unit.

OPERATION AND CHECKING

The unit is connected directly to the 230 volt a-c source through the input terminals 1 and 4, and the leads to the trip circuit from terminals 3 and 4.

The operation of the unit is completely automatic and requires only an occasional check to determine if it is functioning normally. A neon light is supplied near the top of the unit. This light is energized continuously and will glow if the voltage across the capacitor is above the minimum tripping voltage. This shows the readiness

of the unit to trip the breaker and does not indicate if the a-c source is available. A constant visible check of the a-c line is available by the indicating lamp on the metal-clad door or panel.

NOTE: The energy storage capacitor used in this unit is a special high grade, low leakage, industrial type electrolytic capacitor. One characteristic of electrolytic capacitors is that they tend to unform when left de-energized for extended periods. Although these units have been completely

formed at the factory, they may have been idle for a considerable period of time. It is therefore recommended that immediately prior to putting a unit into operation, it is energized from the 230 volt a-c source for a period of at least two (2) hours or more.

NOTE: During testing of the unit with its associated circuit breaker, do not have the tripping circuit completed when applying a-c voltage to a discharged unit. Also, supervision of the trip coil in the usual manner with the red indicating light should be avoided.

MAINTENANCE

Voltage measurements should be made with a vacuum tube voltmeter to assure accuracy. The unit should be energized with a-c power for at least one hour before any measurements are attempted.

1. The a-c input voltage can be measured at terminals 1 and 4 and should be from 190v to 250v a-c.
2. The d-c output voltage should be

measured at terminals 3 and 4. With the a-c line energized, the output voltage should be from 260v to 350v d-c.

RENEWAL PARTS

It is recommended that sufficient renewal parts be carried in stock to enable the prompt replacement of any worn, broken or damaged parts.

ORDERING INSTRUCTIONS

1. ALWAYS SPECIFY THE COMPLETE NAMEPLATE DATA.

2. SPECIFY THE QUANTITY, CATALOG NUMBER (IF LISTED), REFERENCE NUMBER (IF LISTED), AND DESCRIPTION OF EACH PART ORDERED, AND THIS BULLETIN NUMBER.

3. STANDARD HARDWARE, SUCH AS SCREWS, BOLTS, NUTS, WASHERS,

ETC., IS NOT LISTED IN THIS BULLETIN. SUCH ITEMS SHOULD BE PURCHASED LOCALLY.

4. FOR PRICES, REFER TO THE NEAREST OFFICE OF THE GENERAL ELECTRIC COMPANY.

PART NUMBERS

(Ref. to Figures 1 and 2)

Ref. No.	Catalog No.	Description
9	0456A0864 P102	Capacitor
10	0456A0864 P128	Rectifier
11	0456A0864 P034	Resistor
16	0456A0864 P106	Thyrector
23	0456A0864 P032	Terminal Board
24	0456A0864 P109	Indicator Light

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.

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GEZ-2500-P

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ARKANSAS	A C I	N. Little Rock 72119	120 Main St.	A C I U	Pine Bluff 71602	P. O. Box 1033																																	
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COLORADO	A C I U	Denver 80206	201 University Blvd.																																				
CONNECTICUT	I U	Hamden 06518	2905 Dixwell Ave.	A C U	Hartford 06105	764 Asylum Ave.																																	
DISTRICT OF COLUMBIA	I M U	Washington 20005	777-14th St., N. W.																																				
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GEORGIA	A C I U	Atlanta 30309	1860 Peachtree Rd. N. W.	A	Macon 31201	682 Cherry St.	A I U	Savannah 31405	5002 Paulsen St.																														
IDAHO	A U	Boise 83701	1524 Idaho St.																																				
ILLINOIS	A I M U	Chicago 60680	840 S. Canal St.	C	Oakbrook 60621	1200 Harger Rd.	A I U	Peoria 61603	2008 N. E. Perry Ave.	A I	Rockford 61108	4223 E. State St.	U	Springfield 62701	607 E. Adams St.																								
INDIANA	A C U	Evansville 47714	2709 Washington Ave.	C	Fort Wayne 46804	1825 Broadway	A U	Fort Wayne 46806	6001 S. Anthony Bldg.	A I U	Indianapolis 46207	3750 N. Meridian St.	A C	Indianapolis 46240	1010 E. 88th St.	C	South Bend 46601	430 N. Michigan St.																					
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MICHIGAN	A C I U	Detroit 48202	700 Antoinette St.	I	Flint 48502	801 S. Saginaw St.	A C I	Grand Rapids 49508	2821 Madison Ave., S. E.	A U	Jackson 49201	210 W. Franklin St.	I	Saginaw 48601	805 2nd National Bank Bldg.	A	Saginaw 48601	1230 S. Washington Ave.																					
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MISSOURI	A	Joplin 64802	310 Wall St.	A I U	Kansas City 64105	911 Main St.	A C I U	St. Louis 63101	1015 Locust St.																														
MONTANA	A	Billings 59101	312 Transwestern Life Bldg.	A I U	Butte 59701	103 N. Wyoming St.																																	
NEBRASKA	A I U	Omaha 68102	409 S. 17th St.																																				
NEVADA	U	Las Vegas 89106	1711 S. 8th St.																																				
NEW HAMPSHIRE	U	Manchester 03104	46 Bay St.																																				
NEW JERSEY	C	East Orange 07017	56 Melmore Gardens	A I U	Millburn 07041	25 E. Willow St.																																	
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OREGON	A I U	Eugene 97401	1170 Pearl St.	A U	Medford 97501	107 E. Central Ave.	A C I U	Portland 97210	2929 N. W. 29th Ave.																														
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RHODE ISLAND	A	Providence 02904	1006 Charles St., N.																																				
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