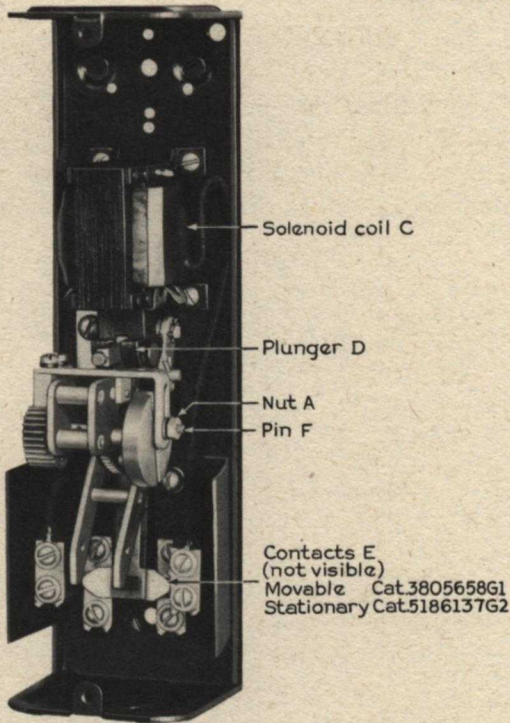


INSTRUCTIONS

**TIME DELAY RELAY**  
**CR2820-1731A AND 1731B**

Also for Form.....Switch



Movable Contact  
Cat. 4929723G6  
for CR2820-1713A  
  
Cat. 5346421G1  
for CR2820-1731B

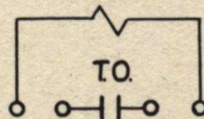
Stationary Contact  
Cat. 5186137G2  
for CR2820-1731A  
  
Cat. 5346423G1  
for CR2820-1731B

**Fig. 1. CR2820-1731A Time-delay Relay (Cover Removed)**

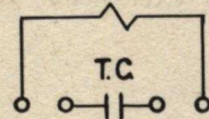
The CR2820-1731 time-delay relay provides either an instantaneous-closing time-delay opening (1731A), or an instantaneous-opening time-delay closing (1731B) device, for use in control circuits. The relay is designed for applications that require only infrequent operation; for example, as an under-voltage relay.

**INSTALLATION**

The switch should be mounted on a vertical surface as free from vibration as possible, with the solenoid coil (C) mounted at the top.



**Fig. 2. Internal Connections (CR2820-1731A)**



**Fig. 3. Internal Connections (CR2820-1731B)**

Check the voltage and frequency stamped on the nameplate of the relay with that of the panel to which it is connected. The relay is designed for alternating-current circuits only.

**ADJUSTMENTS**

These relays are adjusted in the factory, and under ordinary conditions the time adjustment need not be disturbed. However, if this time interval is not correct, it can be changed by loosening nut (A), Fig. 1, and moving pin (F) down for increased time or up for decreased time. The time may be adjusted from 1 to 4 seconds.

**OPERATION**

When the CR2820-1731A solenoid coil (C) is energized, plunger (D) is lifted and contacts (E) are closed instantly.

Upon removal of voltage to the coil, plunger (D) starts to drop but is retarded by the escapement mechanism. As the rack nears the end of its travel, it drops off the pinion and releases the arm, opening contacts (E). Contacts (E) will not reclose until the solenoid coil (C) is re-energized.

If voltage is reapplied before the arm is released, contacts (E) remain closed.

**GENERAL ELECTRIC**  
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When the CR2820-1731B solenoid coil (C) is energized, plunger (D) is lifted and contacts (E) are opened instantly.

Upon removal of voltage to the coil, plunger (D) starts to drop but is retarded by the escapement mechanism. As the rack nears the end of its travel it drops off the pinion and releases the arm, closing contacts (E). Contacts (E) will not reopen until solenoid coil (C) is re-energized.

If voltage is reapplied before the arm releases, contacts (E) remain open.

#### **CARE OF RELAY AND CONTACTS**

The switch is lubricated in the factory and

should require no further lubrication during its life.

In general, the contact tips do not require attention during their normal life. The silver contacts must be replaced before they are completely worn down to their supports. The renewal contacts consist of the silver tips assembled on their supports.

#### **RENEWAL PARTS**

Renewal parts should be ordered by the Cat. No. given in Fig. 1. For other parts not identified by Cat. No. refer to the nearest Sales Office of the General Electric Company giving the complete nameplate rating of the relay and describing the part in detail.