



## TYPE KD AND KE CIRCUIT BREAKERS, MODEL A (DRAWOUT)

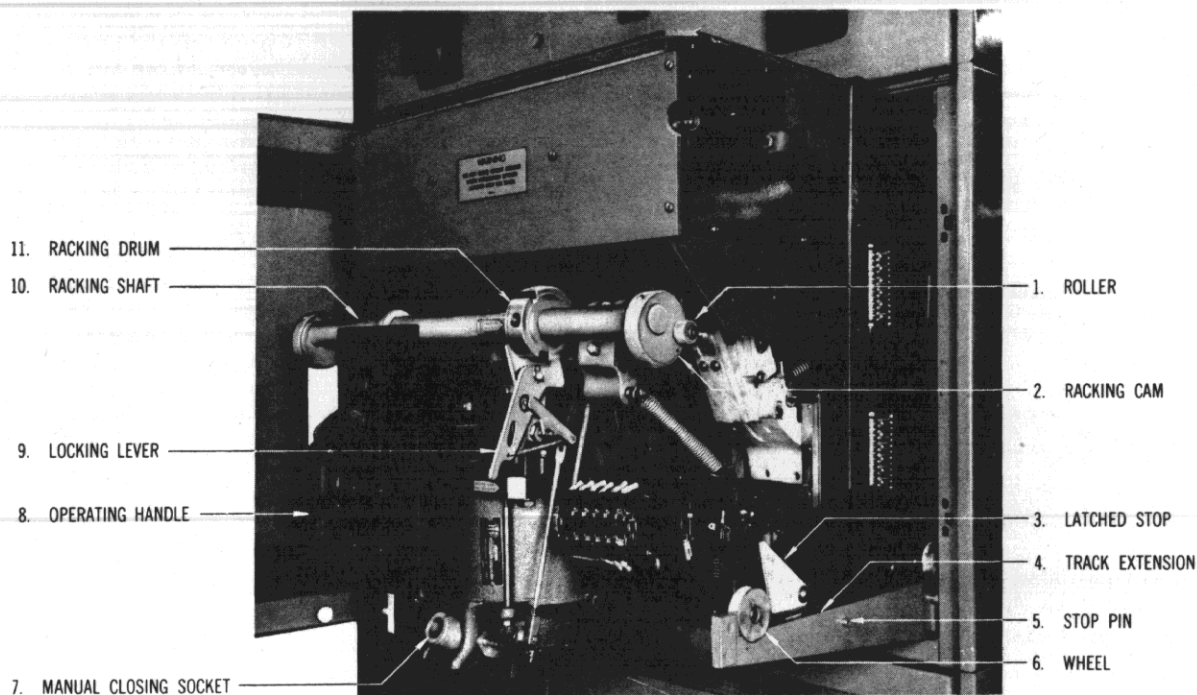


Photo 25430-R-A

Fig. 1. Type KD Circuit breaker shown in the Withdrawn Position, Front View Showing Right Side

### TRANSPORTATION DAMAGE

If damage or loss is evident, file claim at once with carrier and promptly notify I-T-E Circuit Breaker Company.

### INSTALLATION

**CAUTION:** For initial installation, de-energize primary and control circuits before inserting breaker into compartment.

Inserting Breaker Into Compartment (Refer to Fig. 1)

1. Breaker should be in the "OPEN" position and racking drum (11) in the "UNLOCKED" position as indicated by nameplate on racking shaft (10).
2. Lower track extensions (4).
3. Using lifting yoke, lower breaker so that wheels (6) ride on track extensions.
4. Push breaker into compartment until rollers (1) on racking cams (2) stop against their guides.
5. Insert racking rod in racking drum (11). Push down on racking rod until the locking lever (9) drops into slot in racking drum. The circuit breaker is now in the "TEST" position as indicated by nameplate on racking shaft (10).
6. Raise track extensions into compartment.
7. **PRE-OPERATIONAL INSPECTION:**
  - a. Close breaker manually as described under "MAINTENANCE OPERATION" and manually trip by turning operating handle (8) counter-clockwise.
  - b. Refer to instruction card on Type OD overcurrent trip device.
  - c. Megger out all circuits.

d. Energize the control circuit and electrically close and manually trip breaker with operating handle (8).

e. Close and trip by remote control switches and check each auxiliary device, such as under-voltage trip, for proper operation.

8. With breaker in the "OPEN" position, insert racking rod, unlock locking lever (9) and push down on racking rod. Continue to rotate racking drum until locking lever drops into slot. The breaker is now in the "CONNECTED" position.
9. Remove racking rod, close switchboard doors, energize primary circuit and breaker is ready for service.

### Removing Circuit Breaker (Refer to Fig. 1)

To move the circuit breaker to the "TEST" position or from its compartment, proceed as described below:

1. Trip breaker by remote mounted control switch or operating handle.
2. Open compartment door, insert racking rod, unlock locking lever (9) and rack the breaker until locking lever drops into slot in racking drum (11). The breaker is now in the "TEST" position as indicated by nameplate on racking shaft (10).
3. To remove breaker, insert racking rod, unlock locking lever (9), and rack the breaker to the "UNLOCKED" position.
4. Lower track extensions (4).
5. Pull breaker forward against stop pin (5).
6. Release latched stop (3) on right hand track extension (4) and pull breaker forward to stops on ends of track extensions (4).
7. Remove breaker from tracks by means of lifting yoke.



### OPERATION

These breakers are designed primarily for electrical operation. They are mechanically and electrically trip free. That is, the breaker mechanism will be tripped in any part of the closing stroke by operation of any tripping device with which it is equipped as soon as the contacts touch under short circuit or severe overload conditions, the breaker will immediately trip open.

#### Connected Position

Electrical closing and tripping—A remote mounted control switch must be used.

Manual Tripping—Turn operating handle (8) counter-clockwise.

#### Test Position

Electrical closing and tripping—as described for connected position, with the addition of closing by turning the operating handle (8) clockwise.

#### To Lock in Open Position

Turn operating handle counter-clockwise, raise locking hasp and insert one to three padlocks.

### MAINTENANCE OPERATION

**CAUTION:** *Never close breaker manually when connected to a live circuit or when withdrawn beyond latched stop (3) on track extension.*

To manually close the breaker, insert the maintenance closing handle in socket (7). Push down on the handle until you feel a solid resisting force (the contact spring load). At this point, slightly release the pressure on the closing handle and with a downward force, using a snap action to overcome the contact spring load, complete the closing stroke.

### MAINTENANCE

It is recommended that a maintenance program be established for inspecting breakers at least every six months and as soon as possible after a short circuit or severe overload interruption.

Check condition of contacts, arc chutes, and electrical and mechanical connections.

Main and arcing contacts can be exposed for inspection by removing the interphase and roof barrier assembly and arc chutes.

*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 I-T-E Circuit Breaker Company.*