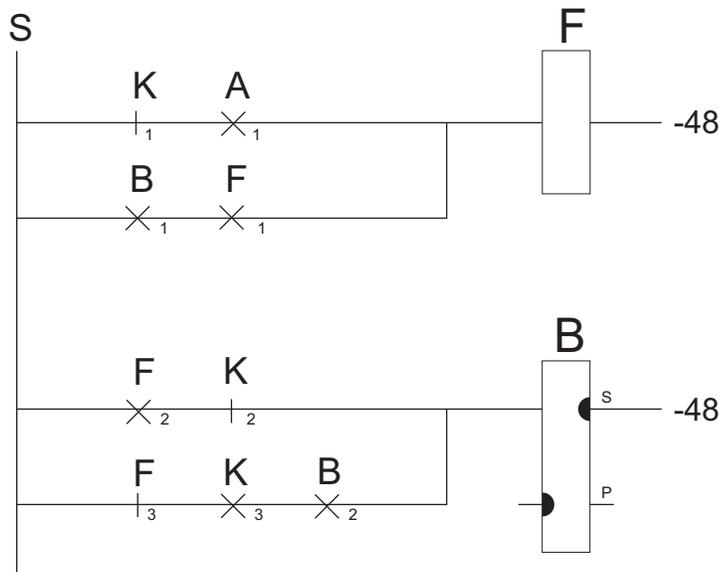


# Figure 1

Alternate circuit for relays B and F  
 Provides improved holding for relays B and F  
 Canonical implementation



## Circuit description

The switch is seized with a T-R bridge and by grounding of the incoming sleeve (S).

The T-R bridge operates relay A. F is operated through K1B (K being non-operated at this time) and A1M. B is operated through F2M and K2B.

A locking path for F is established through B1M and F1M.

If at the end of dialing the second digit the line is found idle, K is operated from the line sleeve. K2B opens, releasing B. B1M opens and releases F.

F3B closes and prepares a locking path for B (through K3M). The sequence prevents this locking path from impeding the release of B.

B released combined with K operated applies ringing. When the called station answers, B is operated through winding P. B2M closes, locking B operated (through K3M and F3B).

B operated disconnects ringing from the called line, and combined with K operated, provides a clear path through the switch from the incoming T-R to the line T-R.

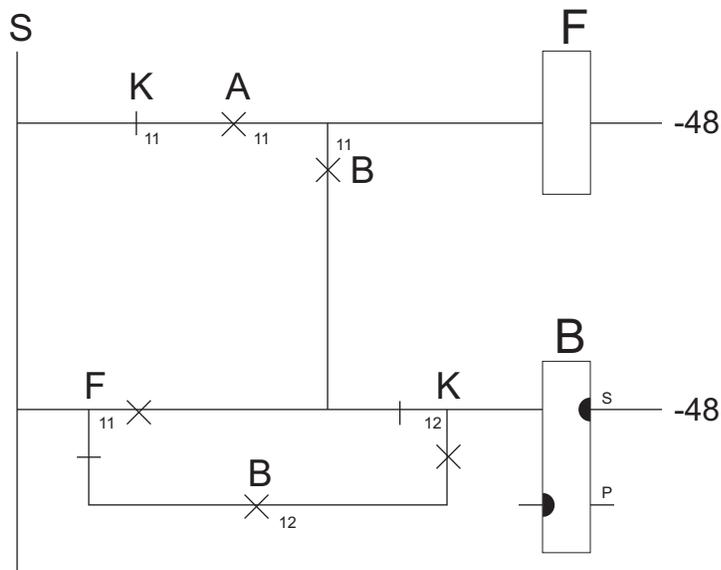
ED-31327-33 G13 switch  
 Special toll connector  
 Alternate circuit doodles

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## Figure 2

Alternate circuit for relays B and F  
 Provides improved holding for relays B and F  
 Consolidated implementation



### Circuit description

The switch is seized with a T-R bridge and by grounding of the incoming sleeve (S).

The T-R bridge operates relay A. F is operated through K11B (K being non-operated at this time) and A11M. B is operated through F11M and K12B.

A locking path for F is established through B11M and F11M.

If at the end of dialing the second digit the line is found idle, K is operated from the line sleeve. K12B opens, releasing B. K11B and B11M open and release F.

F3B closes and prepares a locking path for B (through K3M). The sequence prevents this locking path from impeding the release of B.

B released combined with K operated applies ringing. When the called station answers, B is operated through winding P. B12M closes, locking B operated (through F11B and K12M).

B operated disconnects ringing from the called line, and combined with K operated, provides a clear path through the switch from the incoming T-R to the line T-R.

ED-31327-33 G13 switch  
 Special toll connector  
 Alternate circuit doodles

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