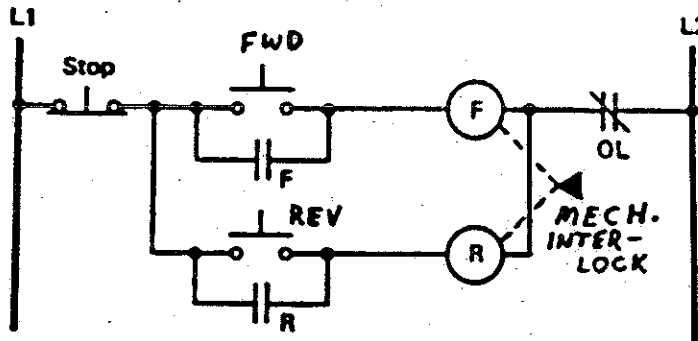
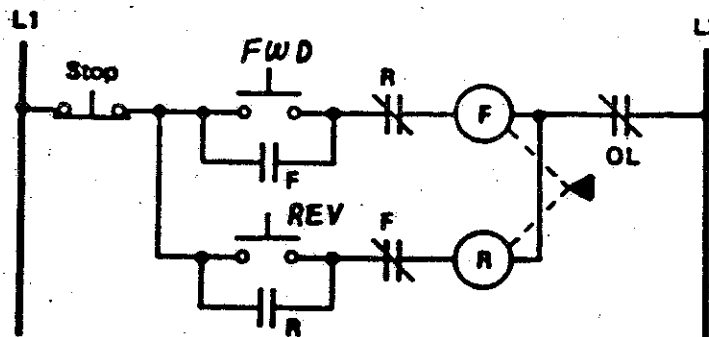


(a)



(b)

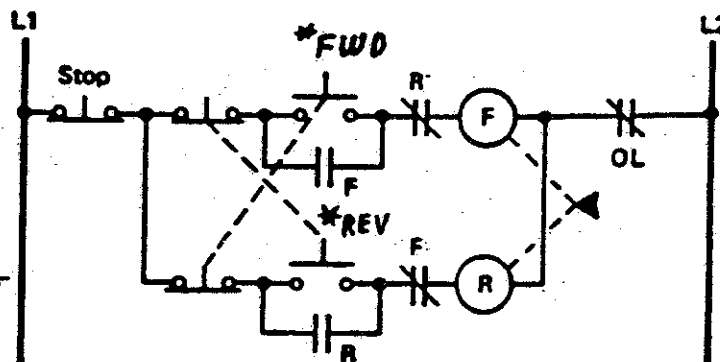


(c)

\*FWD/REV



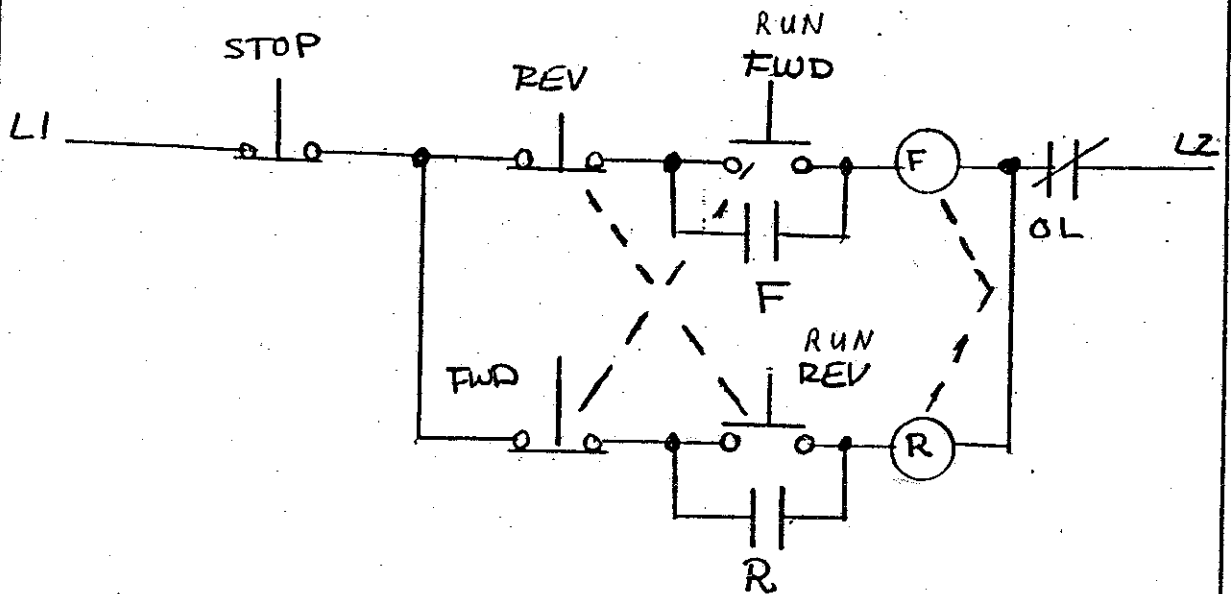
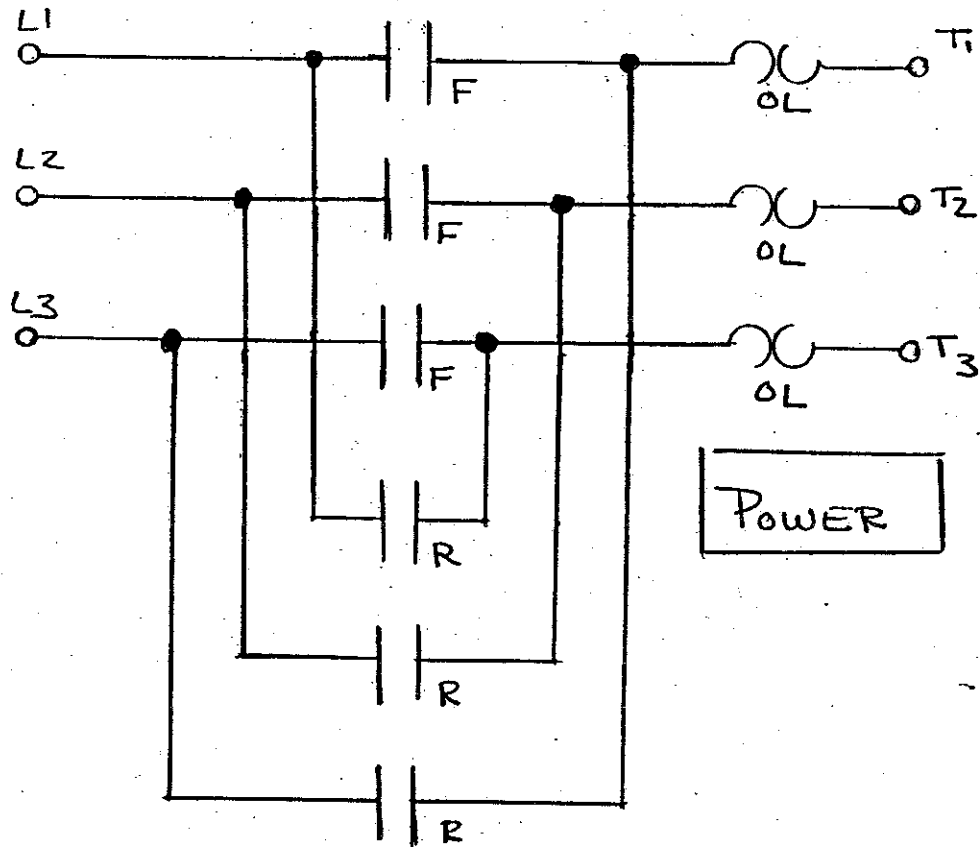
PB ELECTRICAL  
INTERLOCK  
DOUBLE CIRCUIT  
PUSH BUTTON



(d)

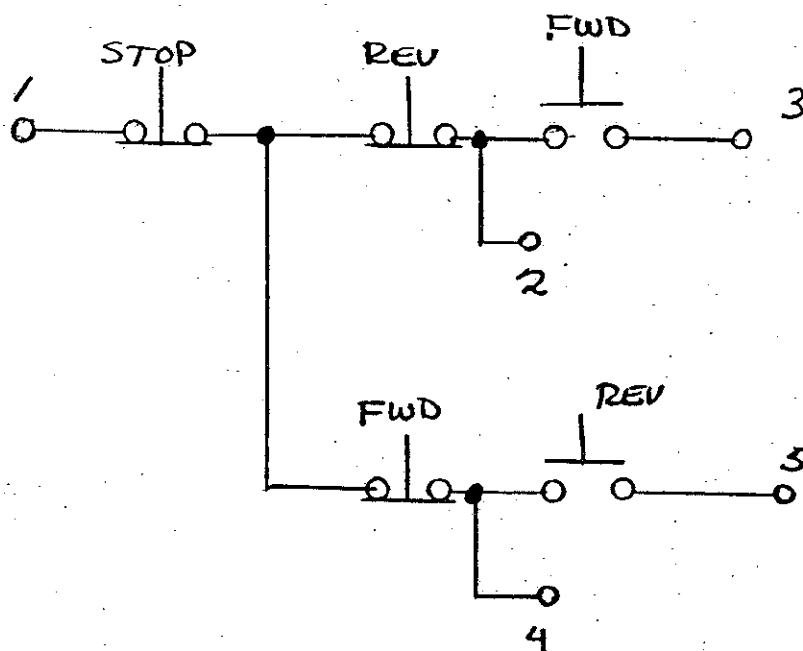
Forward and reverse control of a motor.

# REVERSING STARTER

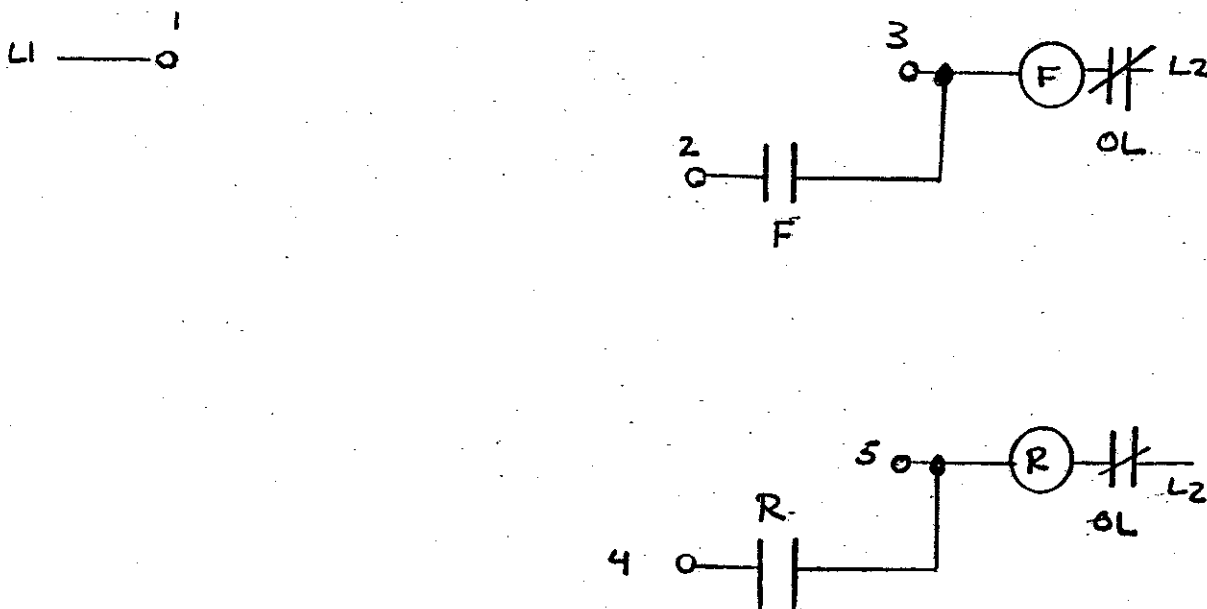


## CONTROL

FWD/REV



SWITCH CONNECTIONS (EXTERNAL WIRING)



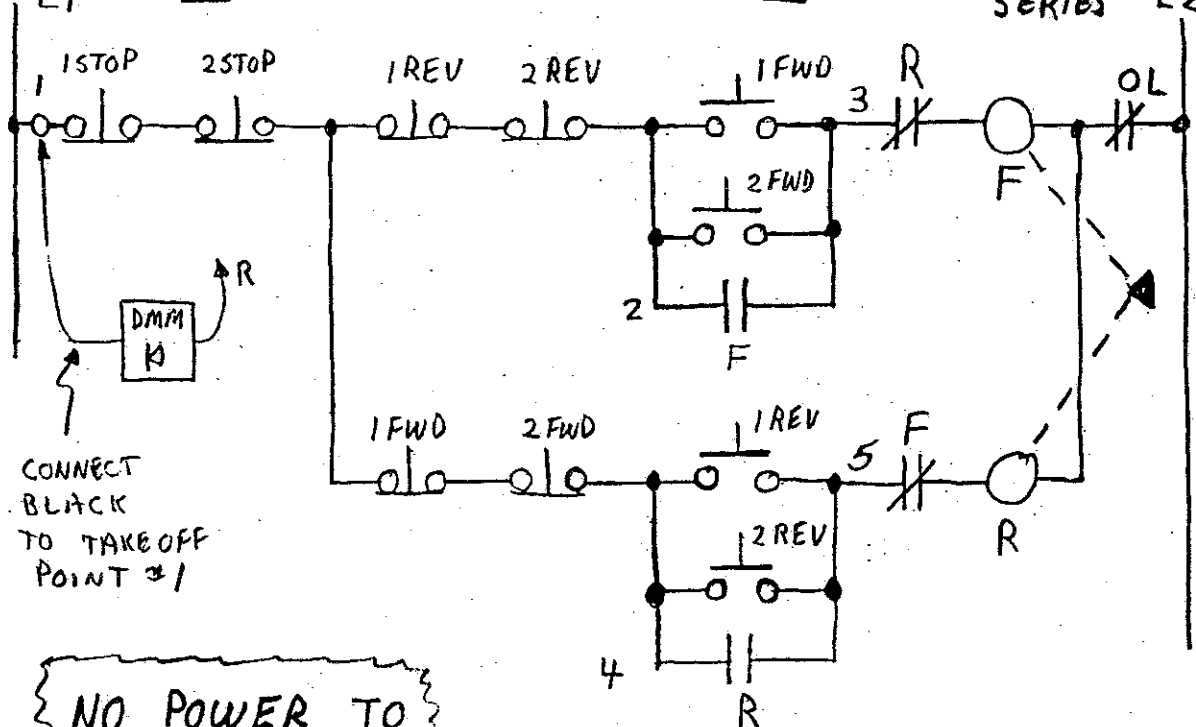
INTERNAL CONNECTIONS



## TROUBLE SHOOTING EXAMPLE :

### MULTIPLE PUSH BUTTON STATION

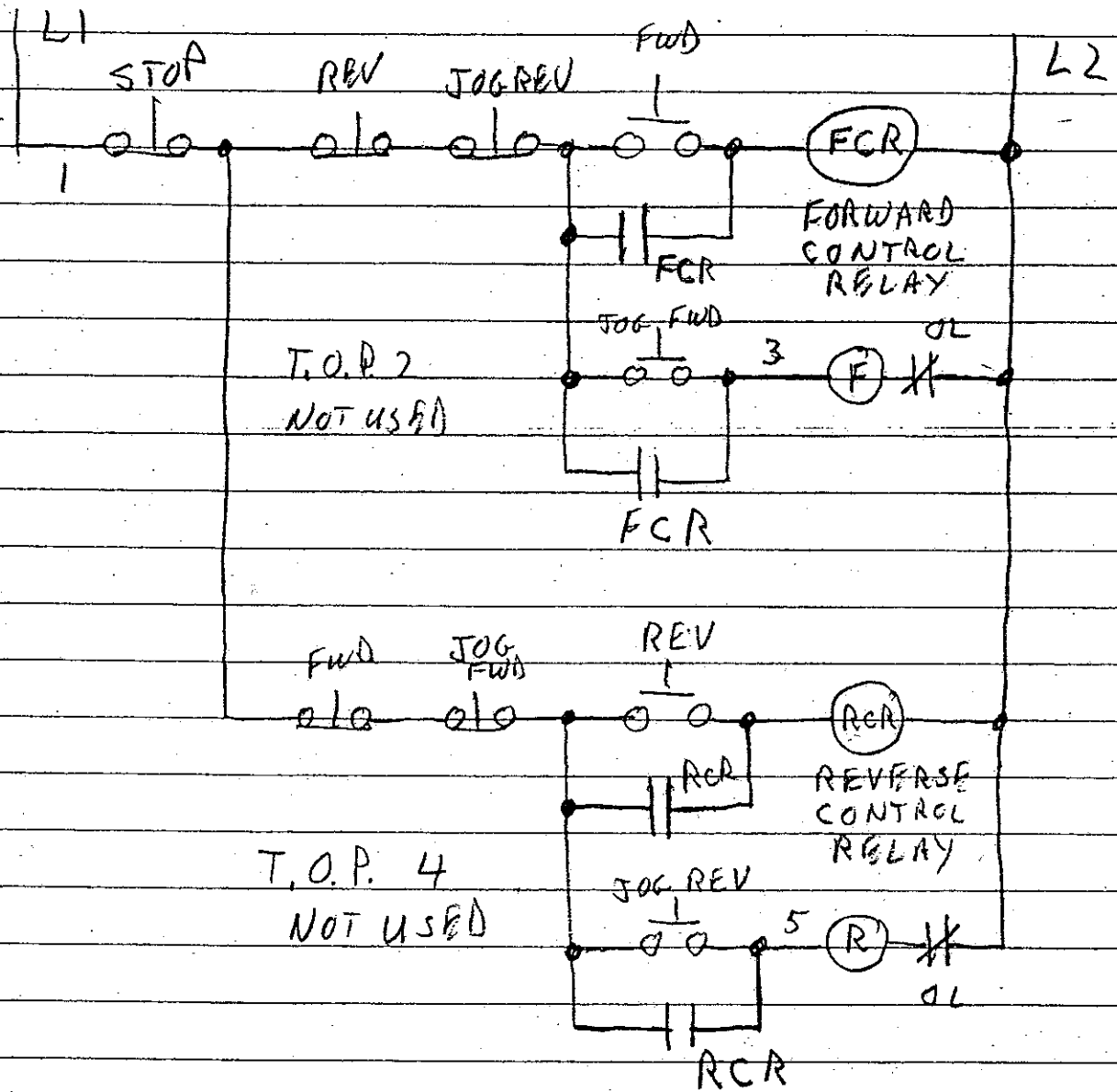
L1 ① ALL N.O.'s IN PARRALLEL ② ALL N.C.'s IN SERIES L2



NO POWER TO CIRCUIT?

1. CONNECT BLACK LEAD TO T.O.P. #1, MOVE RED LEAD TO L1, DMM SHOULD BEEP
2. MOVE RED LEAD TO LEFT OF "1STOP", DMM SHOULD BEEP. RED LEAD AT THE RIGHT OF "1STOP", DMM SHOULD BEEP. PUSH "1STOP", DMM SHOULD NOT BEEP.
3. REPEAT FOR 2STOP, 1REV, 2REV, 1FWD AND 2FWD. N.C. CONTACTS
4. CHECK CONTINUITY AT LEFT OF 1FWD, 2FWD TO T.O.P. 2. LEFT OF 1REV, 2REV TO T.O.P. N.O. CONTACT.

# FORWARD/REVERSE/STOP/JOG BOTH DIRECTIONS



DRAW THE EXTERNAL CONTROL DIAGRAM