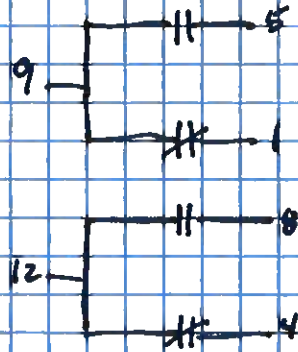


RELAY WIRING

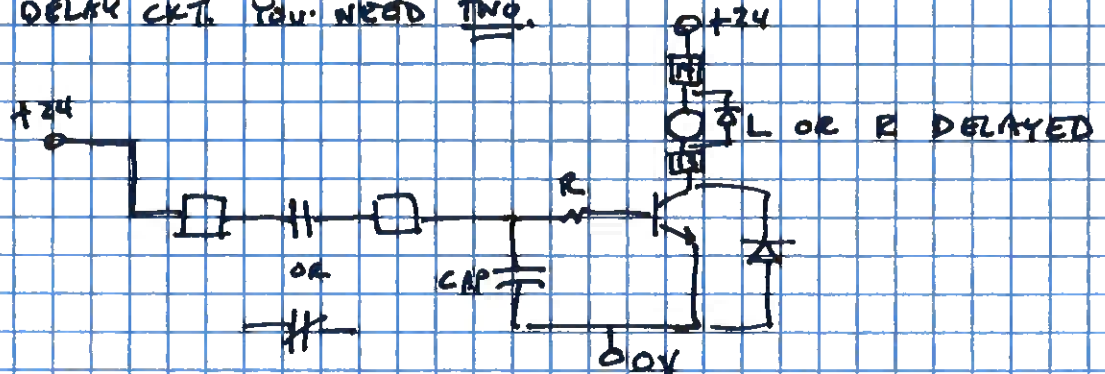


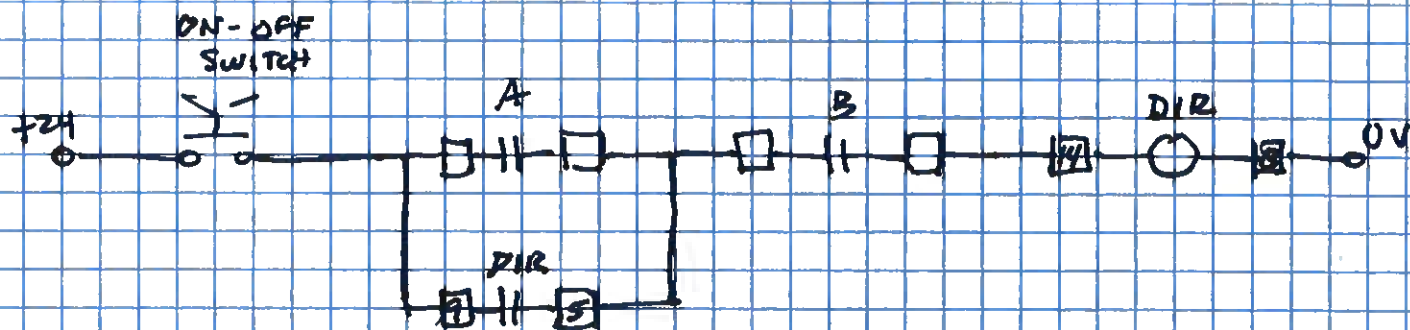
WIRE LIMIT SWITCHES EACH TO A RELAY



TRY THEM OUT. MAKE SURE THEY SWITCH.

FIND CONTACT FROM EACH RELAY ABOVE THAT DROPS OUT (TURNS OFF) WHEN LIMIT SWITCH ENGAGED. USE THIS CONTACT IN THE CIRCUIT BELOW FOR EACH TIME DELAY CKT. YOU NEED TWO.



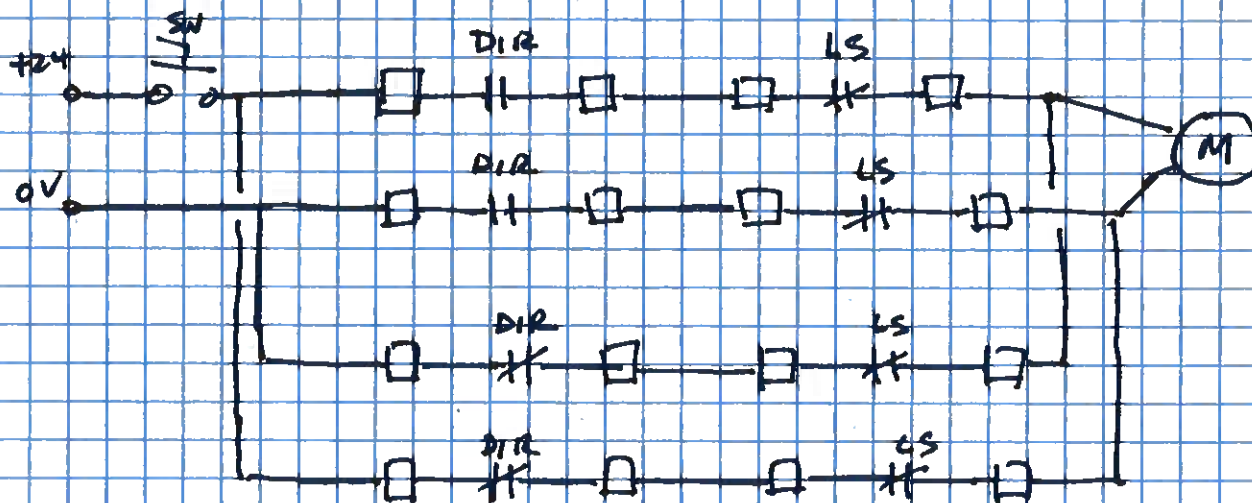


THIS CIRCUIT DETERMINES DIRECTION OF ARM: DIR = ON MOVE ONE DIR
 DIR = OFF MOVE OTHER DIR
 USE THE DELAYED SIGNALS FOR THE "A" AND "B" SIGNALS.
 IF DIR ON WHEN GOING LEFT, USE RIGHT DELAY FOR "A". SIGNAL MUST
 TURN ON WHEN DELAY HAPPENS. PICK CORRECT CONTACTS FOR THIS, WRITE THEM
 IN AND SHOW CONTACT AS EITHER NO OR NC. THE "B" SIGNAL IS THE
 OTHER TIME DELAY RELAY AND MUST BE A CONTACT THAT TURNS OFF
 WHEN THE TIME ELAPSES. AGAIN, PICK CORRECT CONTACT FOR THIS.

THEN TRY THE LIMIT SWITCHES A NUMBER OF TIMES WITH
 THIS CIRCUIT AND SEE IF "DIR" TURNS ON AND OFF CORRECTLY.
 DO NOT GO FURTHER UNTIL THIS CIRCUIT WORKS.

NEXT FIND A CONTACT FRAMEWORK LS THAT TURNS OFF WHEN THE
 LIMIT SW. IS ENERGIZED. THIS IS THE CONTACT USED BELOW.

YOU MAY USE TWO ADDITIONAL RELAYS TO TURN ON MOTOR OR CHOOSE
 NOT TO. EITHER WAY WORKS. BOTH ARE DRAWN BELOW



OR

