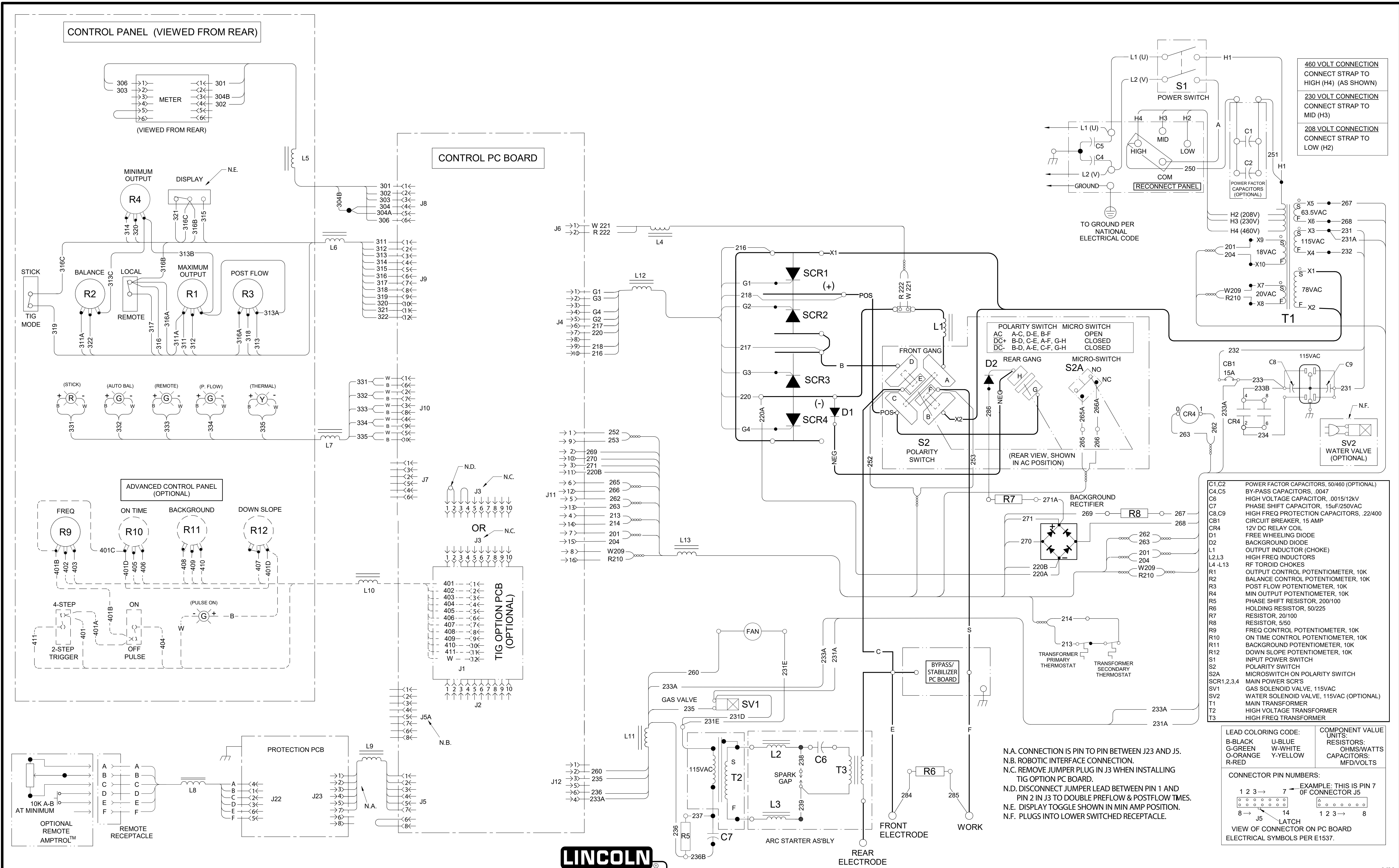


PRECISION TIG 275 WIRING DIAGRAM G4031 REV: B



460 VOLT CONNECTION  
CONNECT STRAP TO  
HIGH (H4) (AS SHOWN)

230 VOLT CONNECTION  
CONNECT STRAP TO  
MID (H3)

208 VOLT CONNECTION  
CONNECT STRAP TO  
LOW (H2)

POLARITY SWITCH MICRO SWITCH  
AC A-C, D-E, B-F OPEN  
DC+ B-D, C-E, A-F, G-H CLOSED  
DC- B-D, A-E, C-F, G-H CLOSED

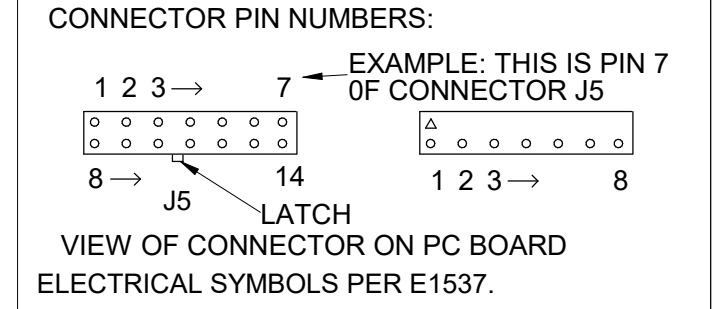
FRONT GANG  
REAR GANG  
MICRO-SWITCH  
S2A NO NC

(REAR VIEW, SHOWN  
IN AC POSITION)

- C1, C2 POWER FACTOR CAPACITORS, 50/460 (OPTIONAL)
- C4, C5 BY-PASS CAPACITORS, .0047
- C6 HIGH VOLTAGE CAPACITOR, .0015/12KV
- C7 PHASE SHIFT CAPACITOR, 15uF/250VAC
- C8, C9 HIGH FREQ PROTECTION CAPACITORS, .22/400
- CB1 CIRCUIT BREAKER, 15 AMP
- CR4 12V DC RELAY COIL
- D1 FREE WHEELING DIODE
- D2 BACKGROUND DIODE
- L1 OUTPUT INDUCTOR (CHOKE)
- L2, L3 HIGH FREQ INDUCTORS
- L4-L13 RF TOROID CHOKES
- R1 OUTPUT CONTROL POTENTIOMETER, 10K
- R2 BALANCE CONTROL POTENTIOMETER, 10K
- R3 POST FLOW POTENTIOMETER, 10K
- R4 MIN OUTPUT POTENTIOMETER, 10K
- R5 PHASE SHIFT RESISTOR, 200/100
- R6 HOLDING RESISTOR, 50/225
- R7 RESISTOR, 20/100
- R8 RESISTOR, 5/50
- R9 FREQ CONTROL POTENTIOMETER, 10K
- R10 ON TIME CONTROL POTENTIOMETER, 10K
- R11 BACKGROUND POTENTIOMETER, 10K
- R12 DOWN SLOPE POTENTIOMETER, 10K
- S1 INPUT POWER SWITCH
- S2 POLARITY SWITCH
- S2A MICROSWITCH ON POLARITY SWITCH
- SCR1,2,3,4 MAIN POWER SCR'S
- SV1 GAS SOLENOID VALVE, 115VAC
- SV2 WATER SOLENOID VALVE, 115VAC (OPTIONAL)
- T1 MAIN TRANSFORMER
- T2 HIGH VOLTAGE TRANSFORMER
- T3 HIGH FREQ TRANSFORMER

LEAD COLORING CODE:  
B-BLACK U-BLUE  
G-GREEN W-WHITE  
O-ORANGE Y-YELLOW  
R-RED

COMPONENT VALUE  
UNITS:  
RESISTORS: OHMS/WATTS  
CAPACITORS: MFD/VOLTS



N.A. CONNECTION IS PIN TO PIN BETWEEN J23 AND J5.  
N.B. ROBOTIC INTERFACE CONNECTION.  
N.C. REMOVE JUMPER PLUG IN J3 WHEN INSTALLING  
TIG OPTION PC BOARD.  
N.D. DISCONNECT JUMPER LEAD BETWEEN PIN 1 AND  
PIN 2 IN J3 TO DOUBLE PREFLOW & POSTFLOW TIMES.  
N.E. DISPLAY TOGGLE SHOWN IN MIN AMP POSITION.  
N.F. PLUGS INTO LOWER SWITCHED RECEPTACLE.



CLEVELAND, OHIO