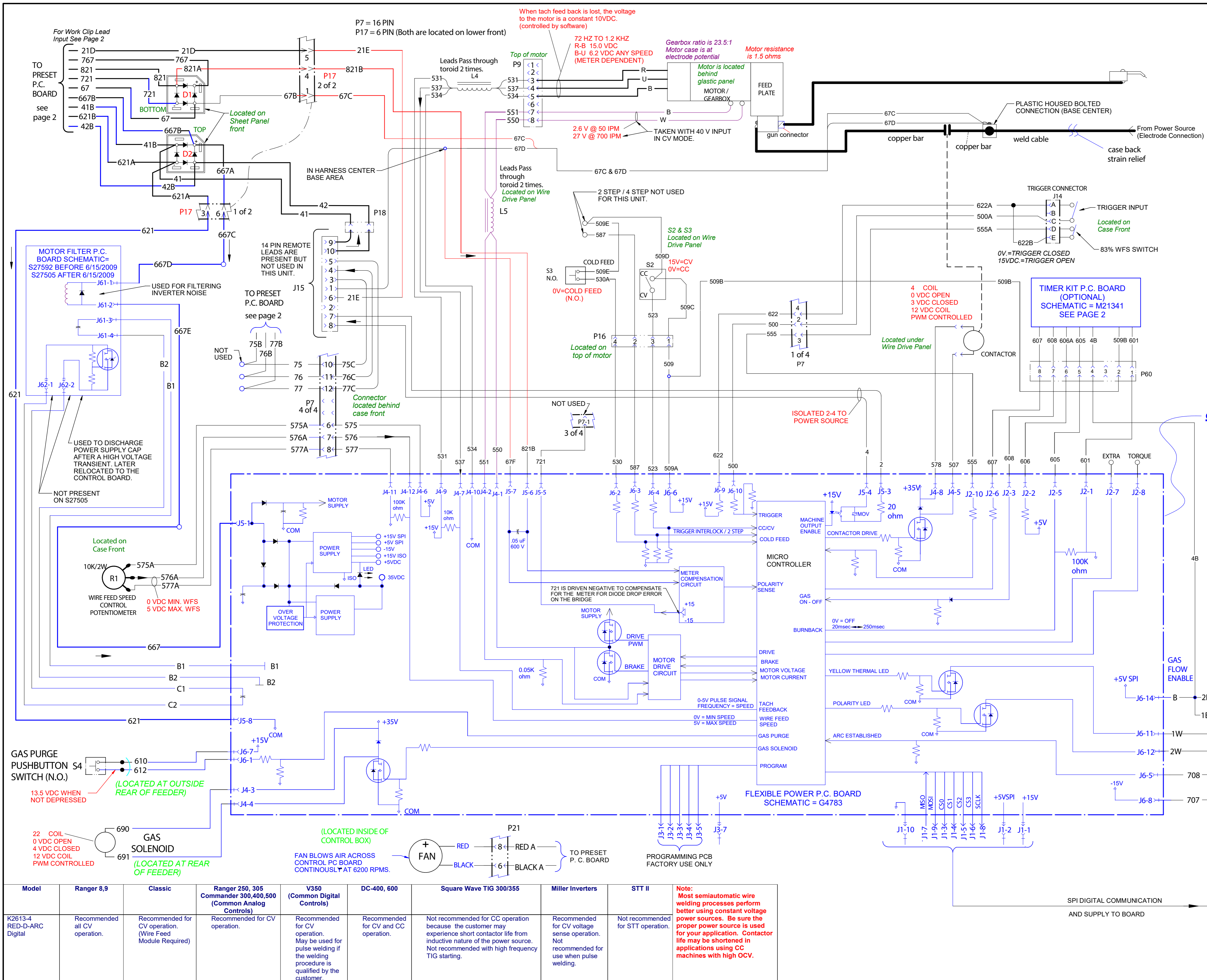
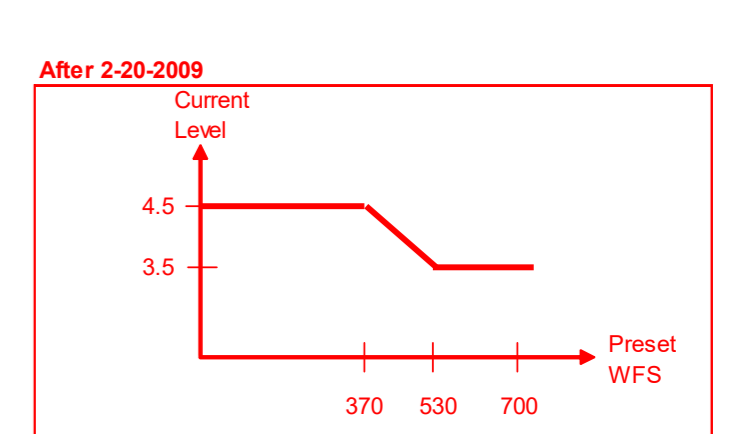
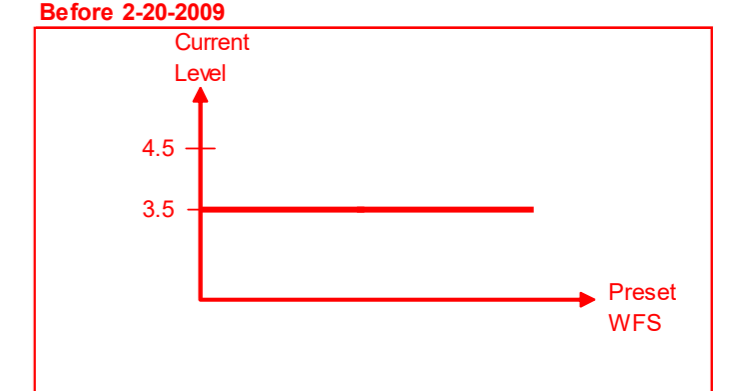


LN-25 PRO EXTREME RED-D-ARC MACHINE SCHEMATIC G6154 REV: C



Start-Up
 On power-up, the LN-25 PRO will light all LED's and displays 2-3 seconds.
 If the feeder is powered-up with the trigger depressed, welding will not start until the trigger is released and then depressed again.

Notes:
 Motor overcurrent limit varies with WFS.
 The WFS range of the LN-25 PRO Normal Speed = 40- 700 IPM.



WFS limited by arc voltage when operating across the arc.

Feeder Input Volts	Maximum WFS
15	280
17	340
21	440
24	520
27	600

Control Board Summary

- Converts arc power to a usable control circuit voltage.
- Receives switch signals from Trigger, Cold Feed, Gas Purge
- Reads WFS potentiometer.
- Communicates with optional timer kit.
- Controls motor speed with PWM.
- Turns Gas Solenoid on, off, PWM.
- Reads the motor tachometer.
- Operating Voltage= 15-110 VDC.
- Shut down Voltage= 130 VDC.

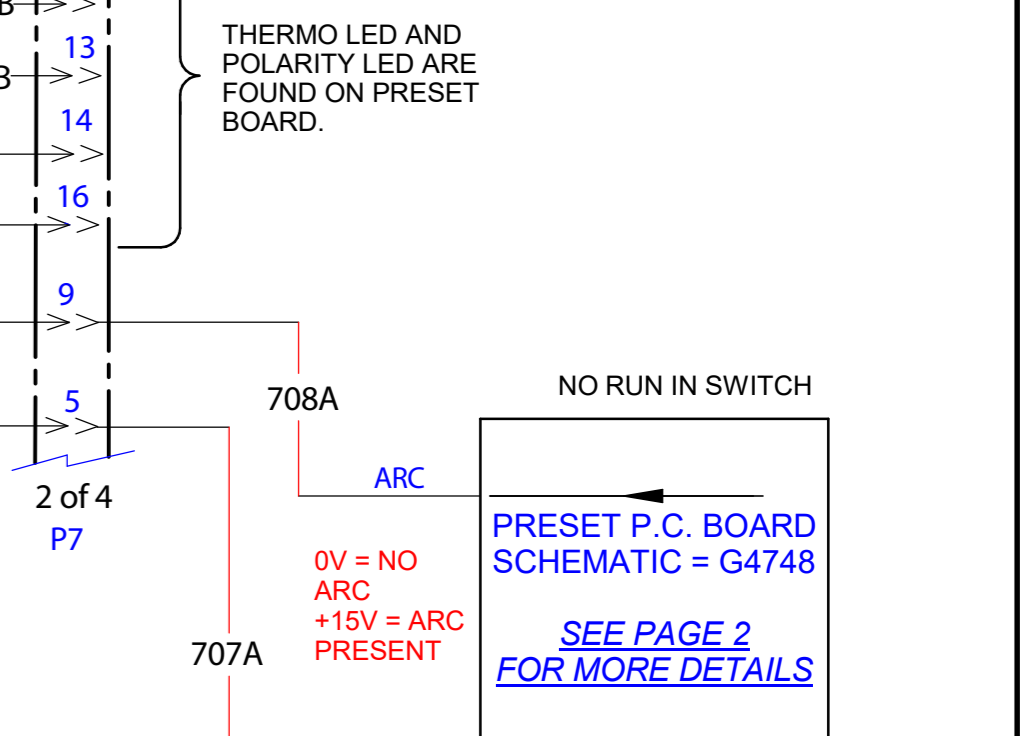
Code and Serial numbers are below Wire Drive on plastic housing Nameplate.

Thermal "Yellow" Light (ERR 82)

- Motor Over-Current**
 Motor and trigger disabled for 30 seconds.
 Must retrigger to start welding after 30 seconds pass.
- Shutdown Voltage exceeded**
 May occur with some inverters.
 May occur with some CC machines with high inductance.

Polarity Indicator

When operating in negative polarity, a "-" (minus) sign will appear in the voltmeter display.



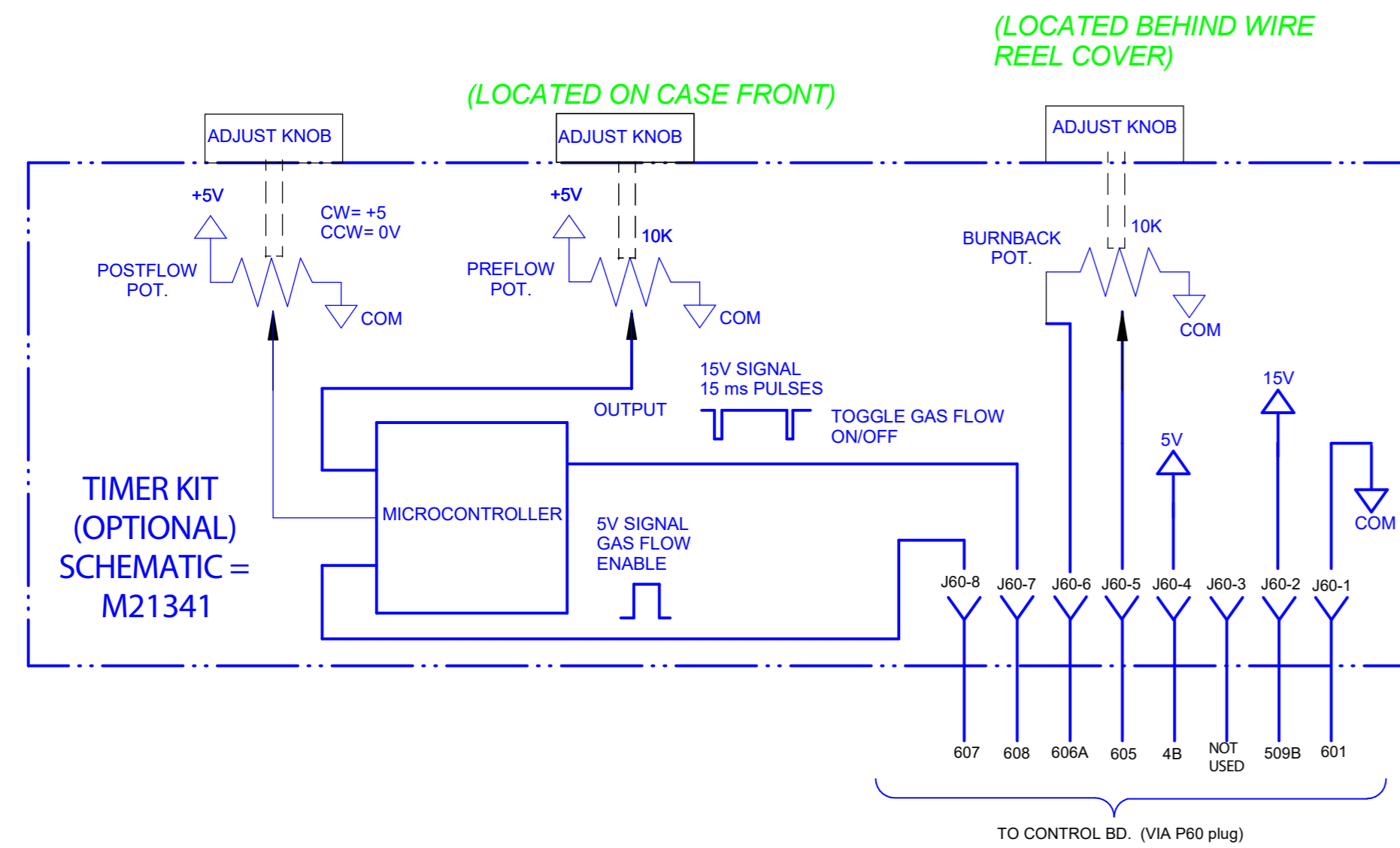
Model	Ranger 8,9	Classic	Ranger 250, 305 Commander 300,400,500 (Common Analog Controls)	V350 (Common Digital Controls)	DC-400, 600	Square Wave TIG 300/355	Miller Inverters	STT II	Note:
K2613-4 RED-D-ARC Digital	Recommended for all CV operation.	Recommended for CV operation. (Wire Feed Module Required)	Recommended for CV operation.	Recommended for CV operation. May be used for pulse welding if the welding procedure is qualified by the customer.	Recommended for CV and CC operation.	Not recommended for CC operation because the customer may experience short contactor life from inductive nature of the power source. Not recommended with high frequency TIG starting.	Recommended for CV voltage sense operation. Not recommended for use when pulse welding.	Not recommended for STT operation.	Most semiautomatic wire welding processes perform better using constant voltage power sources. Be sure the proper power source is used for your application. Contactor life may be shortened in applications using CC machines with high OCV.

LN-25 PRO EXTREME RED-D-ARC

TIMER P. C. BOARD CIRCUIT

Timer Board Summary

- Has potentiometers for burnback, postflow and preflow.
- Preflow range is 0 to 10 sec.
- Burnback range is 0 to 0.25 sec.
- Postflow range is 0.25 to 10 sec.
- Receives "Gas Flow Enable" signal.
- Outputs 100 msec pulses to turn Gas Flow On, Gas Flow Off.



PRESET P. C. BOARD CIRCUIT

