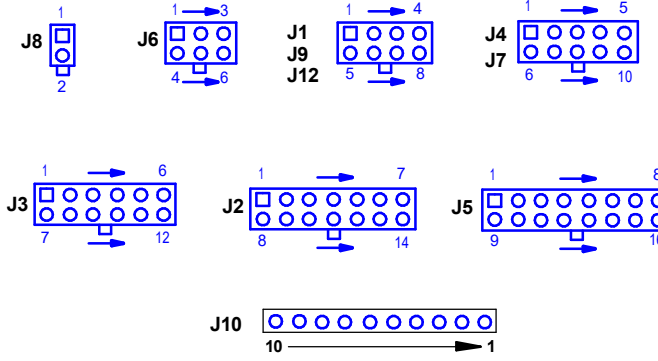


POWER MIG 255XT MACHINE SCHEMATIC G4752-1 REV: C

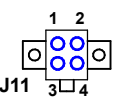
CAVITY NUMBERING SEQUENCE
(COMPONENT SIDE OF P.C. BOARD)



COLOR CODE:
B - BLACK
W - WHITE
R - RED
U - BLUE

INDICATES CONNECTOR CAVITY NO.

CAVITY
NUMBERING SEQUENCE
(NON-LEAD SIDE OF CONNECTOR)



NOTES:

- N.A. WELDING CABLE MUST BE OF PROPER CAPACITY FOR THE CURRENT AND DUTY CYCLE OF IMMEDIATE AND FUTURE APPLICATIONS.
- N.B. THIS DIAGRAM SHOWS THE "ELECTRODE" POLARITY "POSITIVE". TO CHANGE POLARITY, TURN THE UNIT OFF AND REVERSE LEAD CONNECTIONS AT CABLE CONDUCTOR STRAP AND WORK STUD.
- N.C. THIS MACHINE IS WIRED TO USE A PRINCE XL SPOOL GUN DIRECTLY. A K2445-1 ADAPTER IS NEEDED TO USE A MAGNUM SPOOL GUN.

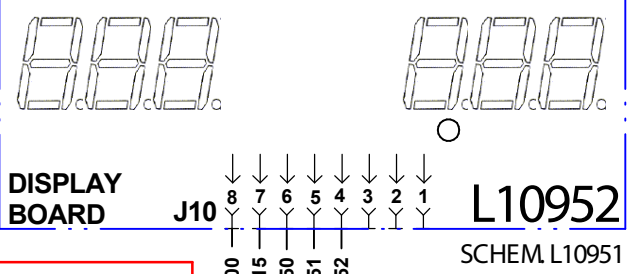
OUTPUT RATING

The POWER MIG 255XT is rated at 250 amps @ 26 volts at a 40% duty cycle based on a ten minute cycle limit is capable of higher duty cycles at lower outputs and capable of up to 300 Amps at lower duty cycles.

PROCEDURES

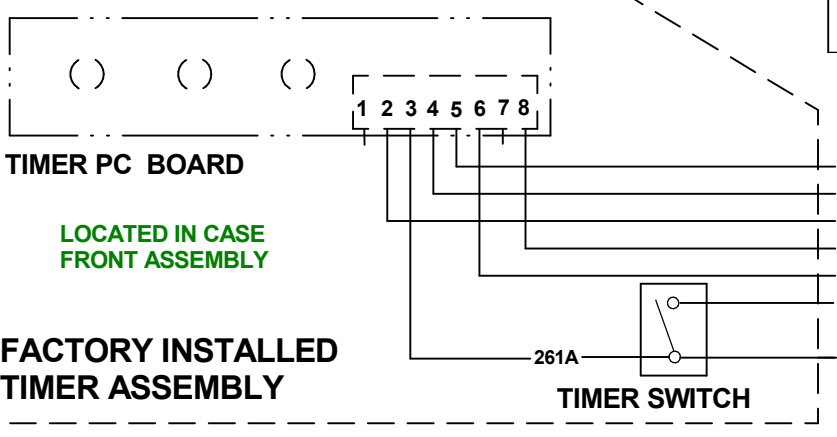
Weld procedures are listed on the hinged flip up of the machine, or consult Procedure Chart G3681.

ERRORS DISPLAYED
"Too HOT" - Thermostat is open; allow machine cool.
"Too HI" - Input voltage is too high; verify reconnect or obtain lower input voltage.
"Too Lo" - Input voltage is too low; verify reconnect or obtain higher input voltage.

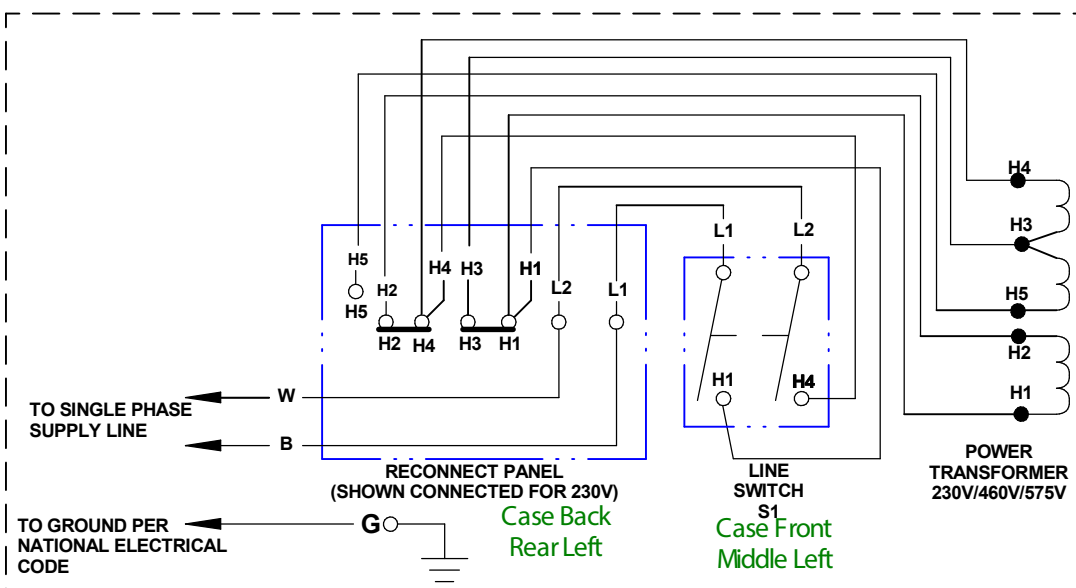
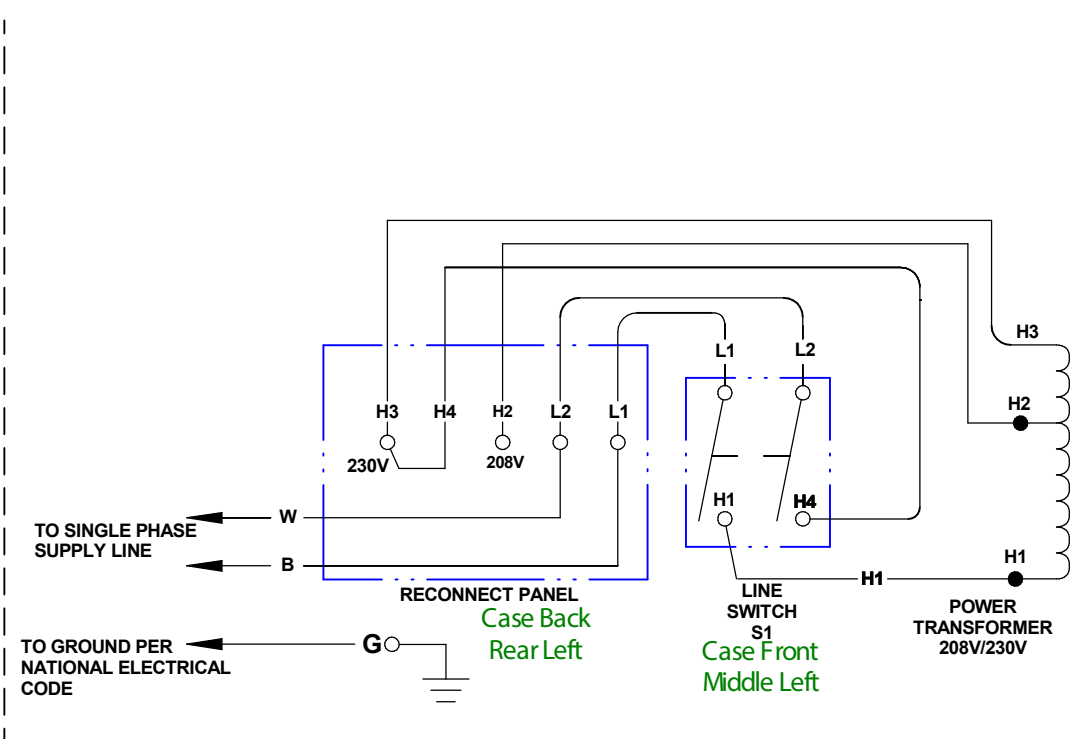


Displays show SET and ACTUAL values. After a weld, actual values are "held" for 5 seconds (while LED flashes) before returning to set values. When using Prince XL spool gun, display will show Volts and VFS.

TIMER BD FEATURES
Automatically SENSES if board is present.
Adjustable SPOT TIME from 0 to 5 sec.
Adjustable BURNBACK TIME from 0 to 250 msec.
Adjustable RUN-IN speed from 50 to 250 IPM
Convenient 4 STEP TRIGGER INTERLOCK



THIS SECTION APPEARS ON 208V/230V MACHINE ONLY



THIS SECTION APPEARS ON 230V/460V/575V MACHINE ONLY

LIMITATION

The Power MIG 255XT WILL NOT operate satisfactorily powered with a portable or in-plant generating system including engine welders.

Receptacle is intended for non-complex loads (i.e. lights, drills, saws, grinders, tool battery chargers).

SECONDARY VOLTAGES SHOWN ARE NO LOAD RMS VALUES

OPEN = 9 VDC
CLOSED = 0 VDC

J11 **
Located inside control box

TACH RANGE
115Hz @ 50 IPM
to
1600Hz @ 700 IPM

6VDC @ 333Hz
21 ohms
MAIN
GAS SOLENOID
Case Back
Upper

DIRECT CONNECTION FOR PRINCE XL SPOOL GUN, K2445-1 ADAPTER NEEDED FOR MAGNUM SPOOL GUN

6VDC @ 333Hz
21 ohms
SPOOL
GAS SOLENOID
Case Back
Lower

AUTO SENSING SPOOL GUN CONNECTOR (MOVED FROM REAR)

OUTPUT CHOKE THERMOSTAT Embedded in windings

SCR HEATSINK THERMOSTAT Center of Heatsink

FAN ON DEMAND - FAN STARTS AFTER THE MACHINE OUTPUT EXCEEDS 40 AMPS AND ENDS 6 MINUTES AFTER WELD

G4824-1