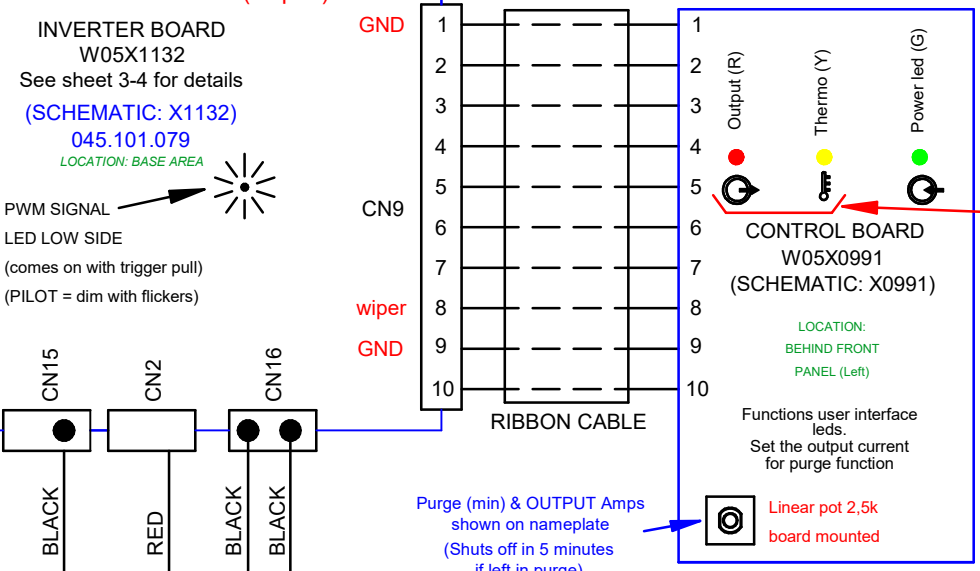
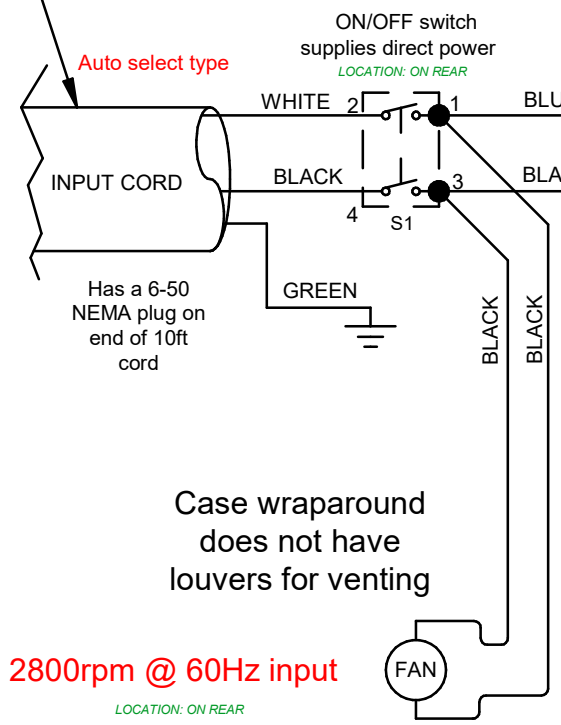
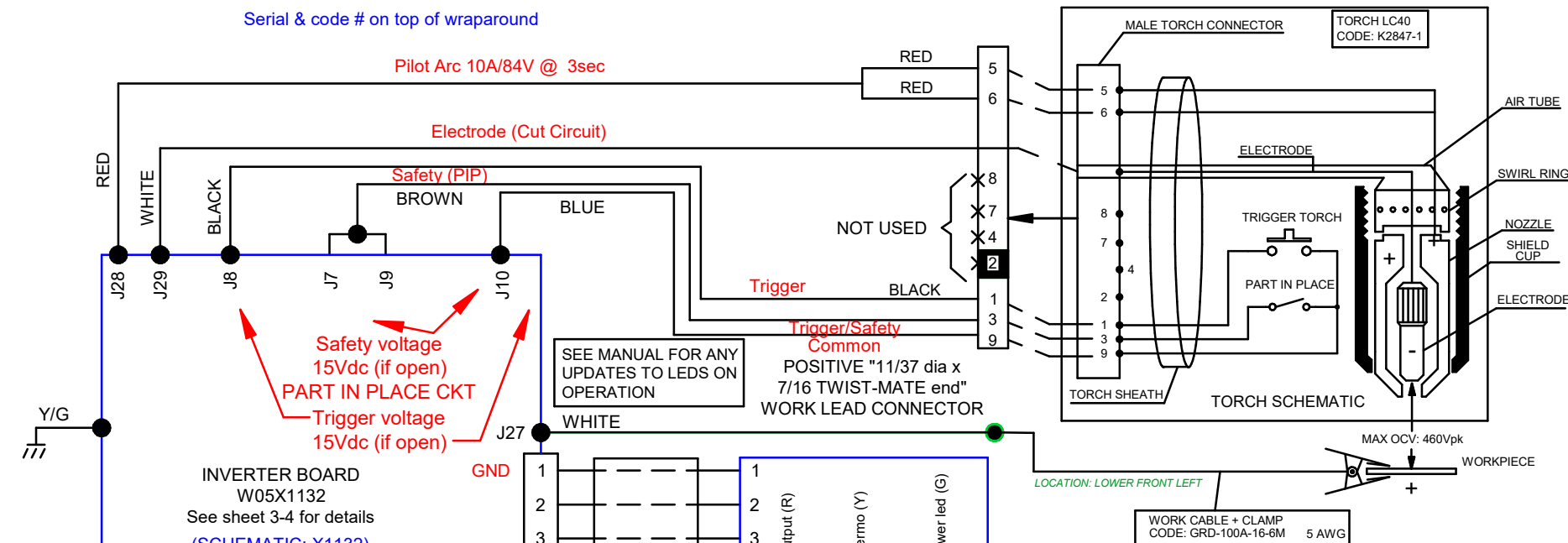
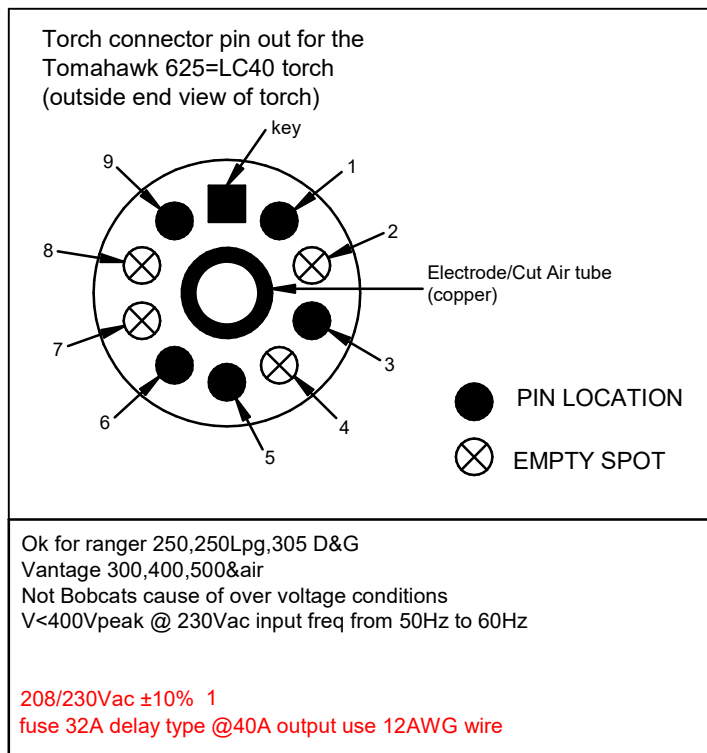
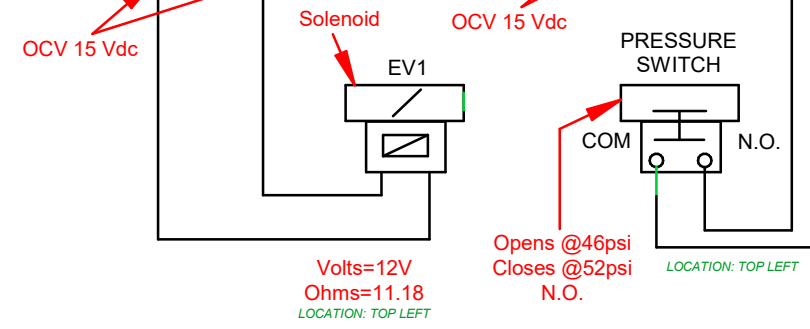


TOMAHAWK 625 MACHINE SCHEMATIC M22292 REV: A

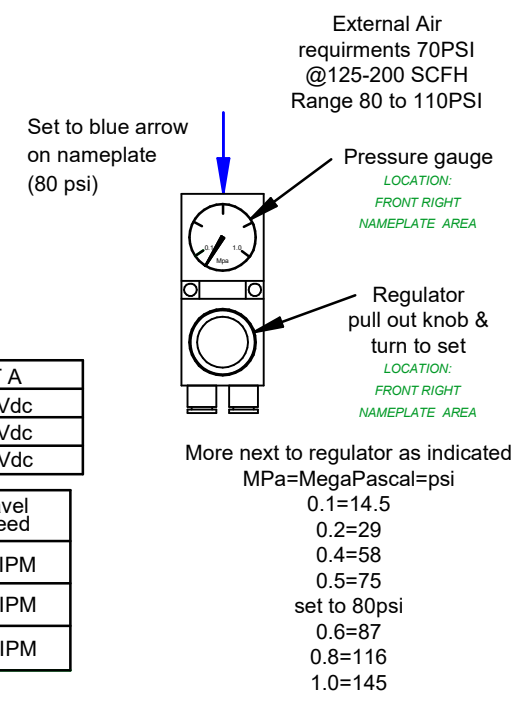


R-Y=ON=Parts in place (safety)
Y=ON=overtemp
Y=BLINK=under volt (input)
R=BLINK=low air pressure
R=ON=torch is energized



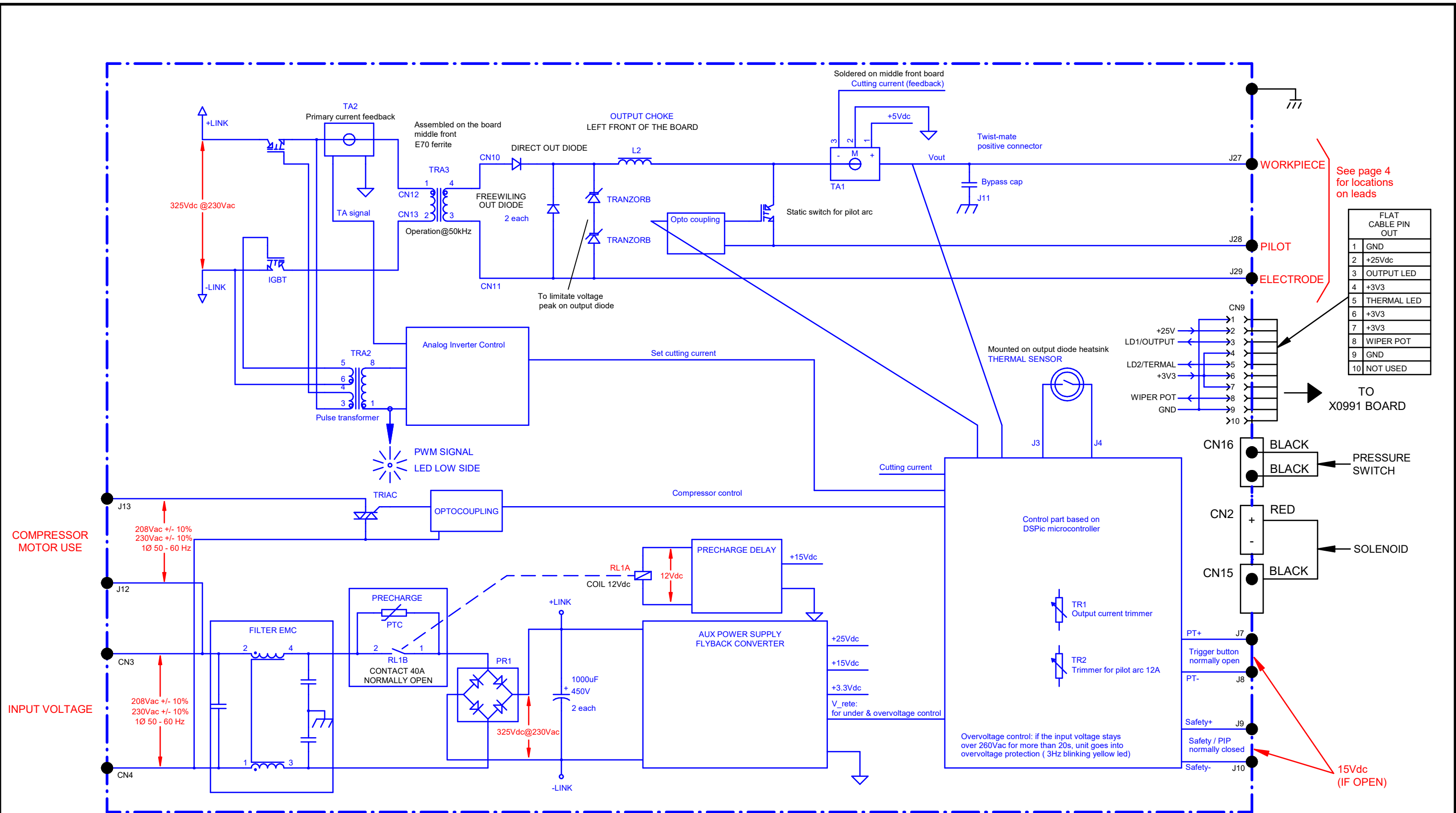
Duty	OUTPUT A
100%	24A@89.6Vdc
60%	29A@91.8Vdc
35%	40A@96.0Vdc

Material thick	Travel speed
1/2"	20IPM
5/8"	12IPM
3/4"	5IPM



AIR FLOW: INTAKE IS FROM THE REAR;
EXHAUST IS FROM THE FRONT AND SIDE
LOUVERS NEAR FRONT
(Case wrap around can not be put on backwards)

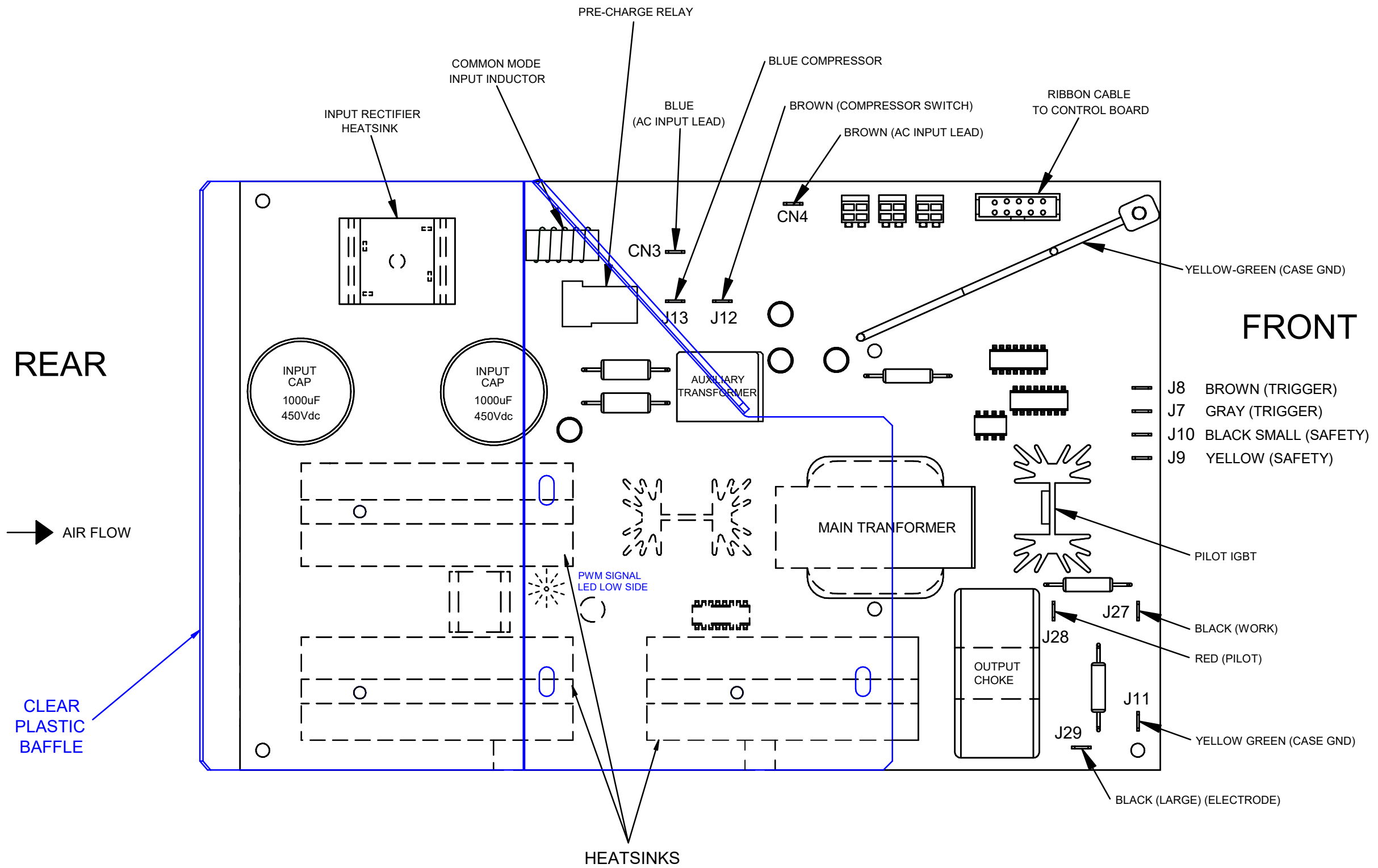
TOMAHAWK 625 MACHINE SCHEMATIC M22292 REV: A PAGE 2



Inverter Board functions:

- The board manage the precharge system; create a 325Vdc for the half bridge inverter configuration; create by flyback conf all auxiliary voltage supply;
- receive a PWM control signal for output cutting current; manage lift torch strike and avoid the arc to switch off when you're going out of the work piece;
- Manage all errors and alarms signals; manage air compressor working;

TOMAHAWK 625 MACHINE SCHEMATIC M22292 REV: A PAGE 3

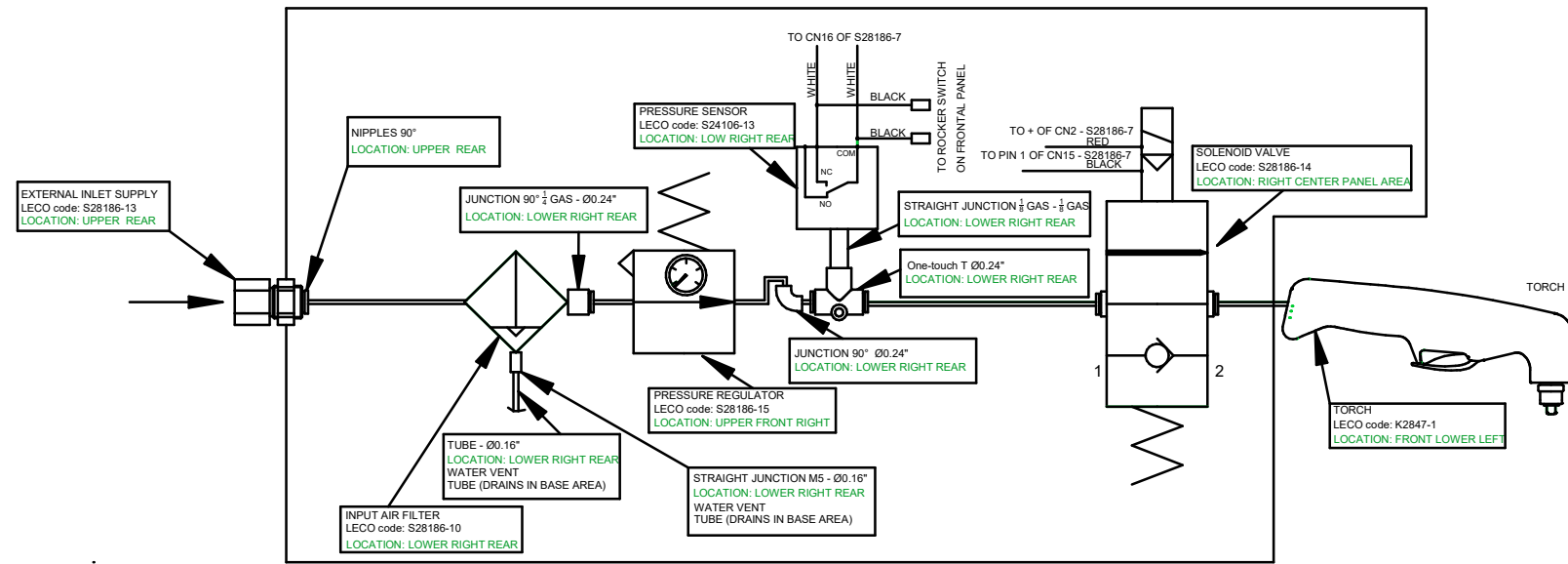


TOMAHAWK 625 MACHINE SCHEMATIC M22292 REV: A PAGE 4

AIR SYSTEM PATH

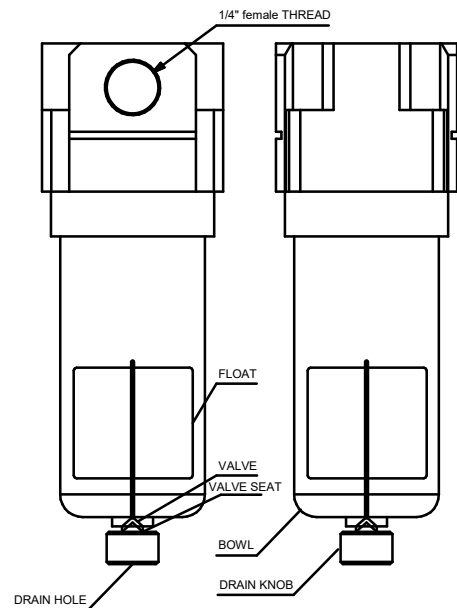
AIR TUBE: POLYURETANE TUBE Ø6 x 4
LEI code: W8800320

DRAIN TUBE: POLYURETANE TUBE Ø4 x 2.5mm
LEI code: W8800205



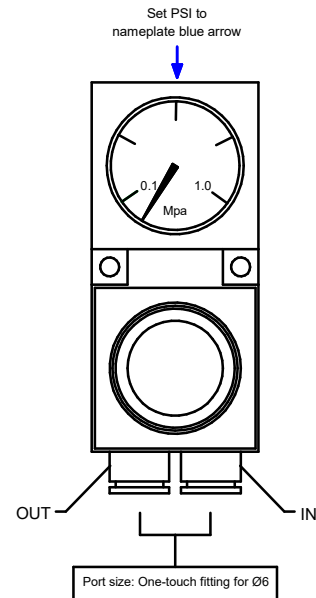
INPUT FILTER FUNCTIONS AND REQUIREMENTS

Nominal filtration rating: 5µm
Maximum input pressure: 1Mpa (145 psi); set pressure range: 0.05 - 0.8Mpa (7.2 - 116 psi)
Drain off; normally close type (see below)
The input filter has double function: filter the dust and dry the water present into the air supply, auto drain system.
Working principle: float type auto drain. When there is an accumulation of the condensate water inside the bowl the FLOAT rises due to its own buoyancy and the seal at valve seat is interrupted. The condensate inside the bowl drains out through the knob
Turning knob manually ccw lowers it causes the sealing action of valve seat to be interrupted, thus allowing the condensate to drain off.



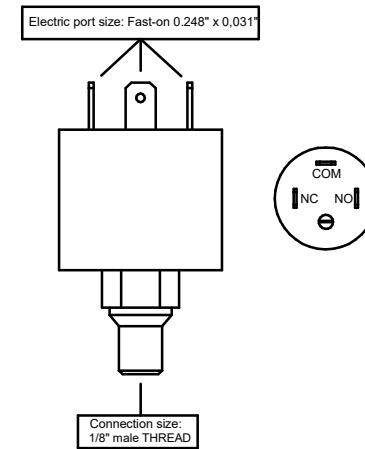
PRESSURE REGULATOR FUNCTIONS AND REQUIREMENTS

Compact manifold regulator with adj. relief mechanism and manometer
Maximum input pressure: 1Mpa (145 psi); set pressure range: 0.05 - 0.7Mpa (7.2 - 101 psi)
Ambient and operating fluid temperature: +5 to 60°C
Typical flow rate with inlet 0.7Mpa (101 psi); outlet: 0.4Mpa (58 psi) @ 115 l/min
Mpa = Mega Pascal
PSI = pound per square inch
Mpa = PSI see page1 for conversion



PRESSURE SWITCH FUNCTIONS AND REQUIREMENTS

Type: N.O. and N.C. contacts - USED COM + N.O.
Max. electric ratings: N.C. 15A 250Vac N.O. 9A 250Vac
Electrical entry: FAST-ON 6.3 X 0.8 mm
Max. working temperature: + 90°C (UL)
Pressure range: 0.2 - 0.8 Mpa (29 - 116 psi)
High setting pressure: 0.36 Mpa (52 psi) ± 5%
Low setting pressure: 0.32 Mpa (46 psi) ± 5%



SOLENOID VALVE FUNCTIONS AND REQUIREMENTS

Type: 2 way
Nominal electric ratings: For typical Ohms see page 1, Holding: 0.6W
Electrical entry: Grommet + AWG 22 red and black wire.
Coil insulation type: Class B
Ambient and fluid temperature working: -10 + 50°C
Min. operating pressure: 0.01Mpa (1.45 PSI)
Max. operating pressure: 0.6 Mpa (87 PSI)

