Chopper module is located on right side of Shunt on back of positive or panel behind upper control panel. IGBT'S, FLYBACK DIODES AND CHOPPER PC BOARD output terminal FILTER CAPACITORS ARE INTEGRAL TO CHOPPER MODULES AND NOT SHUNT POSITIVE INDIVIDUALLY REPLACEABLE. 50MV=400 AMPS +COM OUTPUT 🕂 👷 B2 B5 10,000 F x4 **TERMINAL** CURRENT LEVEL R4 is located above 204S FEED BACK SIGNAL  $\geq$  R4 rectifier on upper left 206S interior panel behind 50 OHM 206B - FLYBACK 206A  $\leq$  100 W 十 upper control panel. DIODES (6) BY-PASS (SHOWN IN "+" POSITION) FILTER PC BOARD B3 +0 0 | WIREFEEDER .ocated on back of 21<del><|</del>Q Q VOLTMETER CAPACITORS (4 outpupanel 208  $\square$ POLARITY - 208A + A d IGBT (8) SWITCH B1 B4 NEGATIVE . ------O-B6 OUTPUT CHOKE PWM Signal to Chopper 208C 206B 15 volt @ 20 kHz TERMINAL Choke mounted behind 208B B70 B80 GATE SIGNAL output terminal panel. 14C VRD "OFF" **Open Circuit Volts:** Max Min 
 CC
 58
 58

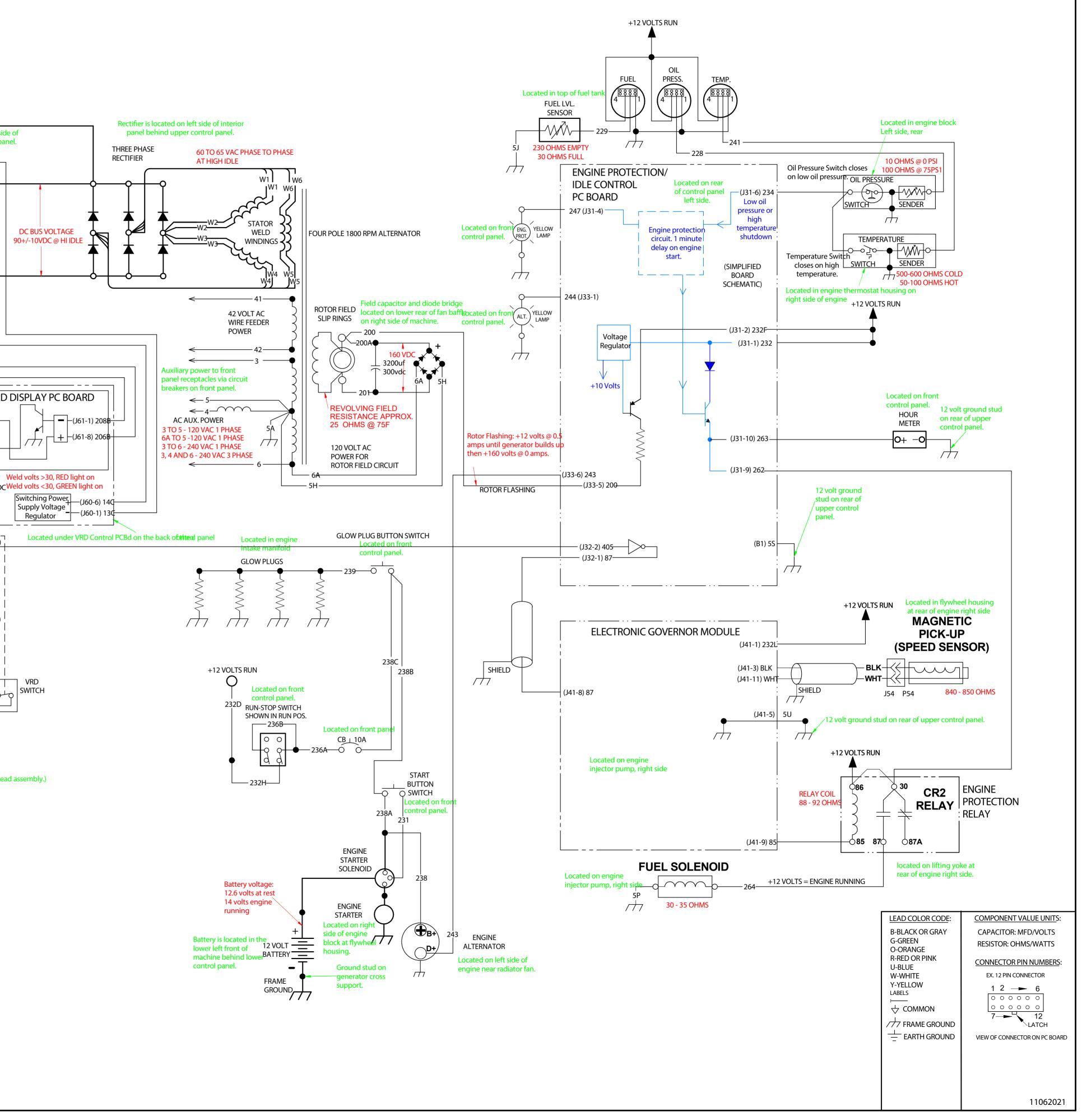
 CV
 58
 58

 Pipe
 58
 26

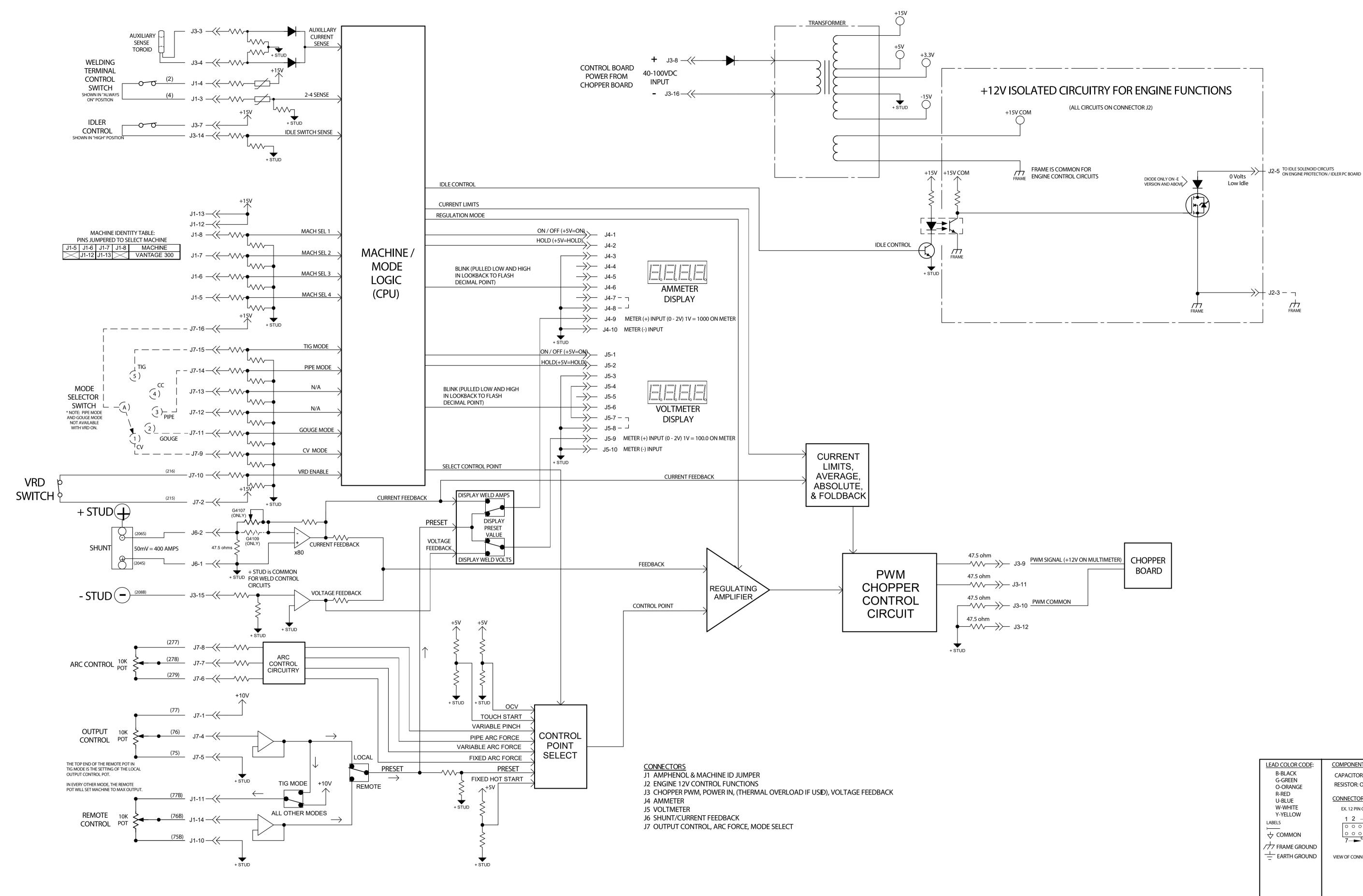
 Tig
 12
 12
 \_\_\_\_ VRD DISPLAY PC BOARD Power Supply -296-(RED)to Control Boar 299 (J61-4)-Gouge 58 42 VRD "ON"  $\square$ • 296A GRN 297 (J61-9) Open Circuit Volts: Max Min CC 12 12 CV 58 58 TWISTED TWISTED 
 Heipe
 -- -- 

 Tig
 12
 12
 TWISTED ∟ \_\_P<u>AIR</u> \_\_\_\_P<u>AIR</u> \_\_\_PAIR **米**Goug∉ --- | ---204S (J6-1) \* NOTE: Pipe and Gouge Modes are not 206S (J6-2) active with VRD On ARC VOLTAGE FEEDBACK SIGNAL 208B (J3-15) LOW IDLE COMMAND (0V @ LOW IDLE) Control board common is (J2-5) 405 10 V -77 (J7-1) at welder positive output OUTPUT 0-10 V (J3-14) 257 0 V Swich closed for high idle. IDLER SWITCH 76 (J7-4) and shunt CONTROL 10K<sup>R1</sup> ≤ 0 V (TO AMPHENOL) - - - - -  $\frac{10 \text{ V}}{778}$  (J1-11) PC BOARD (J1-4) 2 15 V (TO AMPHENOL) REMOTE ['] -15 V (W/O POT;) CONTROL 10K \ WELD TERM. SW. (J1-3) 4 <u>| 0 V</u> P/N G5507-2  $\rightarrow 4A$  (to amphenol) Located on back of  $^{L}$   $^{-}$  control panel. (J7-9) 214 (J7-11) 217 GOUGE (SEE SHEET 2 FOR 279 (J7-6) MODE SIMPLIFIED PIPE (J7-14) 21<del>8</del>— SWITCH ARC CONTROL BOARD 278 (J7-7) CONTROL 10K R2 SCHEMATIC) (J7-15) 220 IG O 277 (J7-8) (J7-16) 222 VRD SWITCH TOROID: Senses auxiliary power load to activate idl (J7-2) 215 - 260 (J3-4) Generator leads 3 and 6 pass through torroid **Bit**ime ( (J7-10) 21<del>6</del> opposite directions. 261 (J3-3) (J1-6) 300 Located on wiring behind 250 (J3-5) receptacles. (J1-12) 300-- 250 (J3-1) Jumper required for output. (J1-7) 30<del>0</del>-Control board circuits associated with J2 are part 5G (J2-3) (J4-1 to 10) (J5-1 to 10) (J1-13) 300 of engine electrical system and are common to I.D. JUMPER frame ground (negative battery terminal). (Part of round plug and lead assembly.) 12 volt ground stud on rear of upper control panel. Ferrite on meter leads WELD AMMETER WELD VOLTMETER Weld Voltmeter and Ammeter are standard on Vantage 400 CE 115VAC 42VAC — к ≻• work — H ≻• REMOTE REMOTE CONTROL F 76A -77B CONTROL — 76B— 75B INPUT TO G ∕ **●** 75A -—75B— CONTACTO<u>R</u> р≻⊖ AMPHENOL - D≻**● -** 4A — — 4B — E → 4B ----- $GROUND \longrightarrow F \rightarrow GND-B$ -2B-GROUND - B - GND-A-AMPHENOL AMPHENOL  $\square$  $\square$ 

## VANTAGE 300 MACHINE SCHEMATIC G6362 REV: A



## SIMPLIFIED CONTROL BOARD SCHEMATIC



LEAD COLOR CODE: B-BLACK G-GREEN O-ORANGE R-RED U-BLUE W-WHITE Y-YELLOW LABELS ↓ COMMON ↓ FRAME GROUND	<u>COMPONENT VALUE UNITS</u> : CAPACITOR: MFD/VOLTS RESISTOR: OHMS/WATTS <u>CONNECTOR PIN NUMBERS</u> :
	EX. 12 PIN CONNECTOR 1 2 - 6 $0 0 0 0 0$
	7
EARTH GROUND	VIEW OF CONNECTOR ON PC BOARD