SafeTac LINC4 VRD fitted to Lincoln DC400

1. Ensure machine is disconnected from power.
2. Open front panel & remove L/H side panel
3. Mount VRD as shown is photo 1.
4. Remove 12 pin plug from Lincoln control PCB photo 1 and plug into 12 pin socket on supplied loom, plug other end of loom into PCB as shown in Photo 1 plug 8 pin plug on loom into 8 pin socket on VRD.
5. Fit current sensor to main output strap as shown in photo 2 & cable tie in place, run 4 pin plug from 16 way VRD connector through bushed hole in panel & plug into current sensor.
6. Connect VRD wire 225 to Voltmeter wire marked 225.
7. Connect wires 31 & 32 from VRD loom to terminals 31 & 32 on machine terminal strip under small service cover below remote control connector.
8. Run VRD indicator cable through bushed hole in panel push out plastic blanking plug next to remote control connector and fit supplied bush along with LED photo 3.
9. Turn machine on and turn mode selector to Stick / Tig mode with output control switch turned to on.
    Set reduced output volts to 28 or site requirements (13 to 35) using trimmer on VRD.
  In stick/tig mode LED should be green Safe (Less than 35 VDC), Red Flashing output loaded
  & solid red if output voltage exceed 36 VDC.
10. Place mode switch into CV mode LED should be Green Safe, flashing Red when machine is loaded & solid red if output is above 37 VDC, this can be tested by turning output on and increasing CV voltage above 37 VDC.
This indicator can be used to indicate when the voltage at the output terminals increases above 37 VDC.
    Note: This level can be set in software from 20 to 90 VDC.

VRD Options

Option 1.
The output on terminal 15 of 16 pin VRD connector may be used to drive a shutdown solid state relay to turn off machine in the event of failure.
As per Australia Standards AS1674.2 2003. If when in stick mode output of the machine increases to above 35 VDC for longer than 1 second the VRD should fail to safe or ultimately shut down the machine and sound alarm.

Option 2.
A press button & indicator may be fitted to 16 pin VRD connector to activate internal Duoset™ program.
This functions as follows.
When the machine is turned on the VRD turn on time is set to .3 seconds as per AS1674.2 2003.
If the button is pressed 3 times the blue LED will turn on and VRD turn on time will change to 1 second for difficult weld procedures such as Stove piping & Arc air gouging .
If the welder is not used in 15 minutes or is turned off then on again the VRD turn on time will automatically reset to .3 seconds.
Both the time out period (Time to reset if welder is not used) and VRD turn on time of 1 second can be changed via software.

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