

REDFERN RADIO

POWER CONVERSION ENGINEERS

Makers of:

SINE WAVE INVERTERS
SQUARE WAVE INVERTERS
EMERGENCY POWER SUPPLIES
DC-DC CONVERTERS
DC POWER SUPPLIES
BATTERY CHARGER
TRANSFORMERS
VOLTAGE STABILISERS

Manager: R.F. Redfern, C Eng., MIEE

REPORT FOR POWER SUPPLY, NO 17. 95-04596-00

NOTICE. These power supplies were repaired and calibrated to restore them to serviceable condition only.

DEFECTS NOTED. No dc output voltage. Damaged power cord and attachment. Damaged positive output terminal. Broken interference suppression capacitor. Top vent grill loose. Left side vent grill not secure.

ACTION. Located faulty CA3083 integrated circuit on control PCB. This restored output voltage. Repaired power cord and attachment gland. Replaced suppression capacitor. Secured top vent grill with c/s screws. Secured LH side grill with c/s screw. Replaced positive output terminal. Tested and calibrated.

CALIBRATION. Load test and operating check showed power supply was close to specified performance. The trimmers needed slight adjustment only.

Set OP FSD volts to 32 V. Checked Volts range switch settings and found output was within 80 mV of correct setting on each range.

Ripple at zero load < 4mV pk/pk.

Differential set to 6 V.

LOAD TEST at 50 A. Ripple 5mV pk/pk.

LOAD REGULATION. At 50 A load output V was 31.94 V.

OVERLOAD. Current limit functioned at approx 65 A.

Electronic Trip. On hard mains start the electronic trip operated. This probably would not occur with field generators as they are not a hard supply. We adjusted the trip control.

TIME spent on repairs and calibration 3 Hours 35 mins.
Materials used.

1 CA3083 Integrated circuit.
1 .1 mfd X rated capacitor.
1 Positive 100 A output terminal.
Miscellaneous screws wire sleeving etc.

Signed R F Redfern. Manager 21/03/95

