

# **POWER SUPPLY ASSEMBLY**

## **DESCRIPTION**

The 1A8 Power Supply Assemble is the source of power for charging the batteries. The 1A8 Power Supply Assembly output is applied to the 1A5 Charger. The power supply itself is a Motorola Micor base station supply. The Supply is capable of providing up to 22 volts at 30 amps. The supply has been modified for operation in the Power Backup System.

Details of the supply are provided in the Motorola tech manual as part of this section. The following modifications have been made to the supply:

- 1). The 9.6 volt regulator has been removed. It is now mounted on the Control Chassis and is the 1A4 9.6 volt regulator for the system.
- 2). The low current filter section has been removed. Most of the parts where reused in the 1A7 Battery Fuse/Filter Assembly.
- 3). The supply no longer supplies the A-, A+, Audio A+, and +9.6 outputs as labeled on the Motorola schematic at P1003.
- 4). The crowbar circuit has been disabled with the removal of SCR1001 and R1018. Removal of these components allowed the output voltage to be set beyond the 18 volt limit imposed by the these components. This is necessary because the 1A5 Charger requires a +19 volt input.

All other circuitry remains in tack and operational. The supply will current limit at 30 amps.

See the tech manual for theory of operation and maintenance.

## **19V OUTPUT VOLTAGE ADJUSTMENT**

- 1). Connect a voltmeter to the 1A5 Charger PCB at 1A5TB1-4, this is the 19 volt monitor point.
- 2). Adjust the Power Supply Output Voltage Adjust pot (R1091) for a reading of 19 volts.

Full counterclockwise rotation will cause output voltage to drop to a point where the power supply will not run but will continuously recycle through start attempts.

Full clockwise rotation will increase voltage. Power line fuses will not blow because the crowbar circuit has been disabled.

- 3). Disconnect the voltmeter from 1A5TB1-4.