

APPLICATION NOTE 070

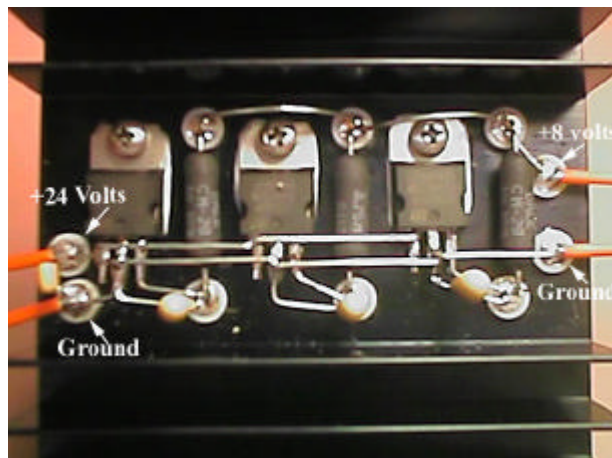
TITLE: DC Voltage Regulator (24 vdc to 8 vdc) for IC-20 radio modems (xxxxx-xxx-201)

The voltage regulator assembly, Part Number 10132-000-003, can be used to drop the voltage from a 24 volt dc source to a voltage compatible with the IC-20 2 watt radio modems ending in part number -201, which require a 7.5 to 8 volt input.

The regulator has three (3) three terminal voltage regulators with balancing resistors, adequate for supplying the peak currents required during the transmit period of the radio. The regulators are not spike protected, so care should be used to provide a relatively "clean" 24 volts dc to the input.

Components are mounted directly on the heat sink, so care should be taken to prevent any accidental shorting of the elements while power is applied (Caution label on regulator).

The inputs and outputs are described in the following photo:



The 24 volt input and ground is shown on the left, and has a 12" twisted red and black wire, red being 24 volts.

The 8 volt output and ground is shown on the right, and has a 36" twisted red and black wire, red being 8 volts and the black being the ground.

Connect the output wires, the red 8 volt wire to Pin 7 and the black ground wire to Pin 5 of the DB-9 connector to the radio.