Receiver Troubleshooting

Preventative Measures:

- Standby Battery: A standby battery should be used to compensate for short interruptions in AC power. (A 55AH battery is mandatory for UL central Stations)
- 2. Phone Line Filter Box: The filter box (LF465), supplied with the 685, must be used. Terminals 9 and 10 should be connected common to the 685 Chassis ground using a minimum of 16AWG copper wire. DO not connect ground to the earth ground terminals on the 685! Use the Chassis Ground.
- 3. Front Panel Grounding: The paint sometimes prevents proper grounding of the front panel of the 685. Do the following to remedy this situation:
 - a. Remove the 4 front panel screws, and pull the panel out slightly
 - b. At the rear of the panel, scrape the paint away from around the screw holes, 3/8" Diameter.
 - c. Insert a #10 star washer between the front panel and chassis at each screw, then re-assemble the panel
 - d. If Rack Mounted, the rack should be grounded as well.
- 4. Printer Cable: The printer cable must be shielded. In some cases where extreme electrical noise exists, the connector may have to be grounded to the printer chassis. (Parallel Cables Must not exceed 10 feet!)
- 5. RS232 Cables: Must Be shielded
- Line Card Snubber Circuits: Newer line cards have a "Snubber circuit" Built onto the PC board. This circuit consists of a 180 Ohm resistor in series with a .1uF, 250 Volt capacitor, and is connected across the phone line relay (K1) on the line card. However, older cards may not have this circuit.
- 7. Line Card Relays: Older line cards have been known to have their relays weld shut intermittently. This would cause a constant busy signal on that line, with possible transmission errors occurring. These relays are easily identified because they are black in color, and their part number is P3370-1. These line cards should not be used.
- 8. AC Power: The 685 should be powered from an isolated AC line. Devices Such as time clocks, etc. can cause spiking which may cause the 685 to lock up or reset. For severe cases a transient filter can be used.
- 9. Temperature: Keep the 685 away from extreme heat.