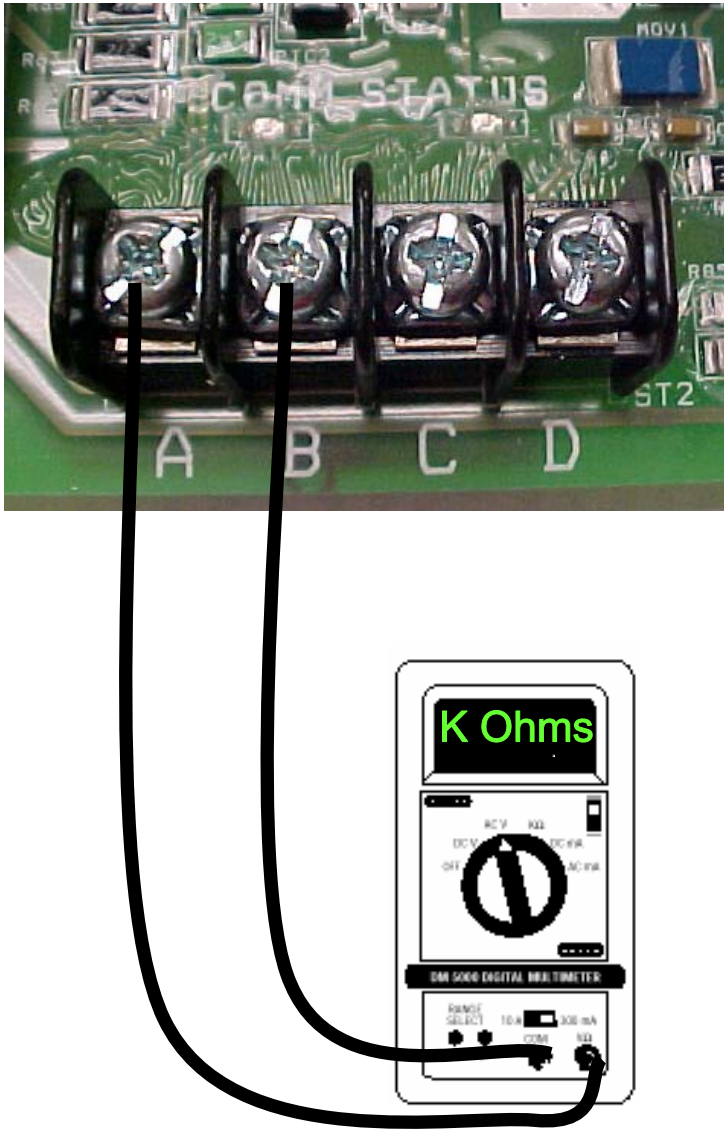
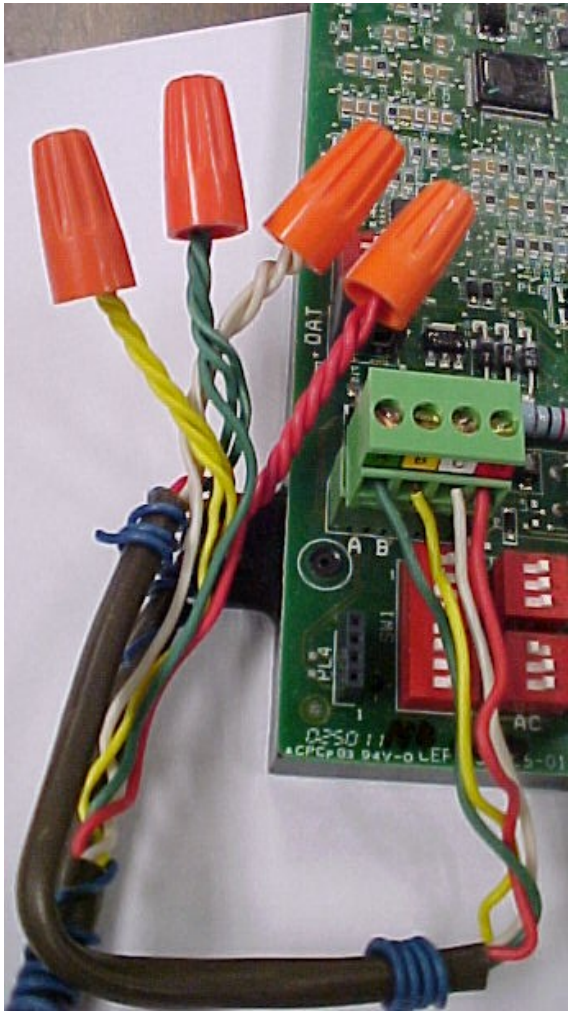
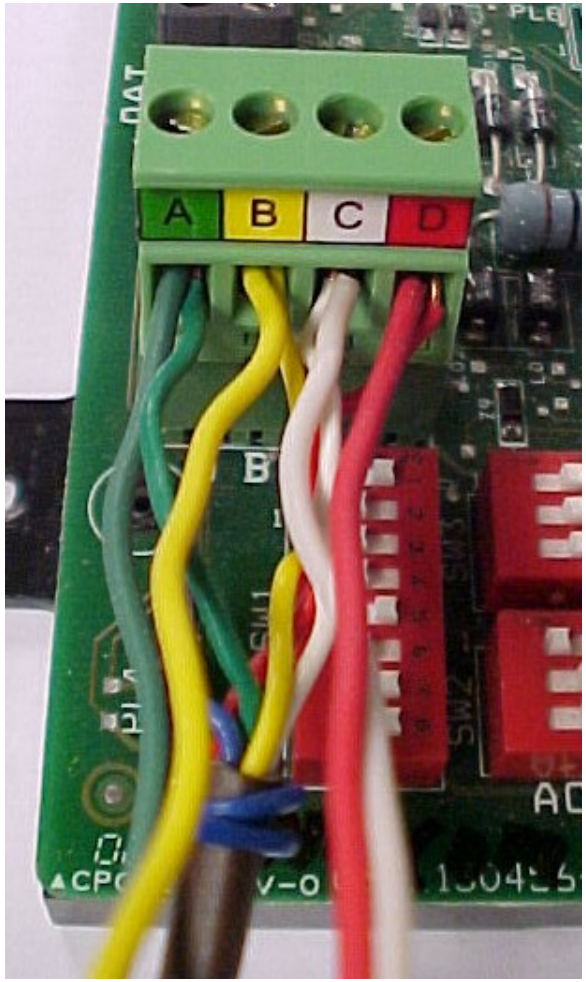
Communication Faults (Infinity/Evolution)

- NO COMMUNICATION? (Proving if board(s) are good or bad)
- Board must have 24vac to C & D and Status & Comm. LED's illuminate. If 24vac to C & D but no LED's illuminate, then change board
- Turn Power 24vac & 230vac Off. Disconnect **all** ABCD wires at **all** boards before checking the resistance (K-ohms) across **A-B of each board**.
- UI, ZUI, Zone board, Smart Sensor, NIM=71-75K ohms
- Furnace & Fan Coil =17-19K ohms
- 1 & 2-Spd. Outdoor=28-32K ohms
- If ALL boards in system are good, then problem will be bad ABCD connections or wire(s).
- Mis-wiring protection for comm. drivers are protected up to 60 volts as of Oct. 2003.



Communication problem? Crowed plug? You may pigtail all ABCD connections

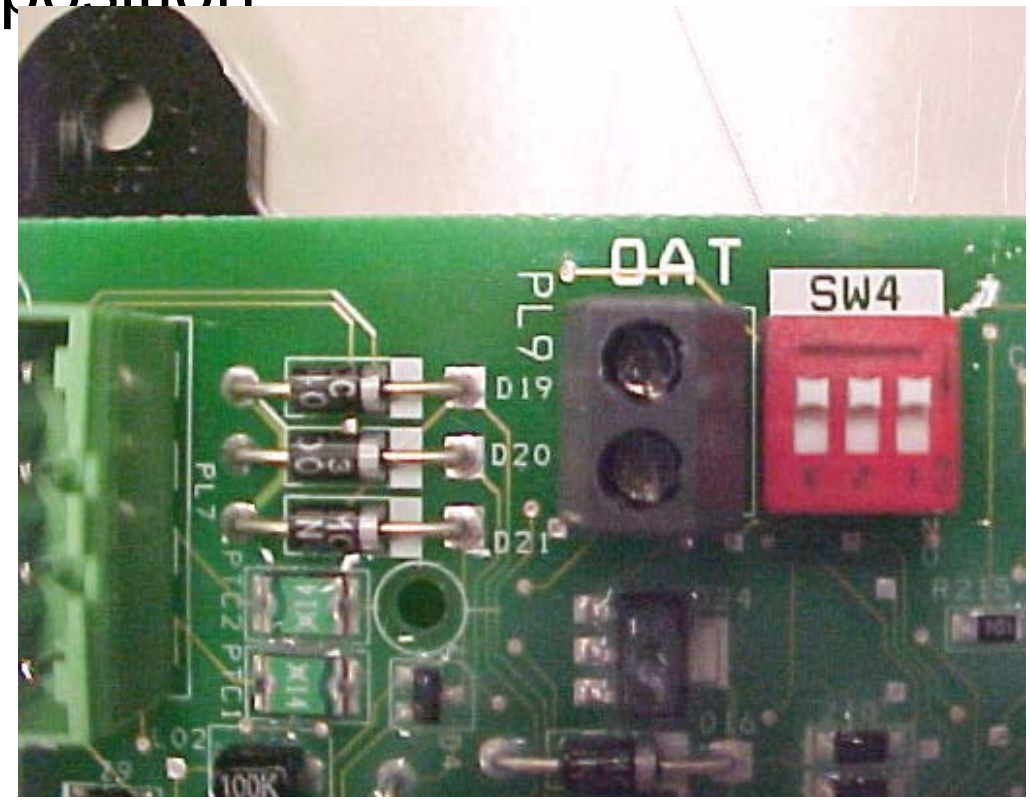




Communication Faults (Infinity/Evolution)

- HK42FZ022 & 023 switch #4 (3-DIP's) must be all in

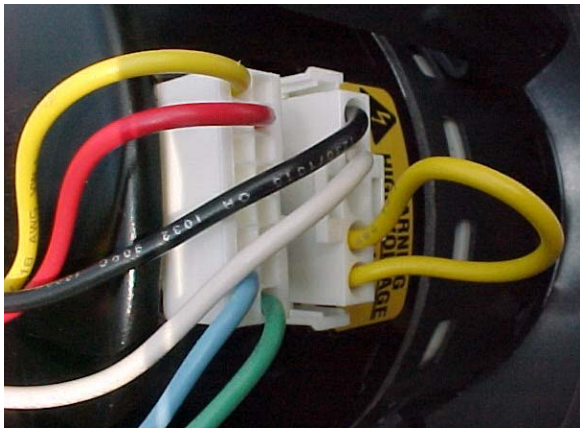
  the "Off" position



Communication Faults (2.5 ICM Motor Checks)

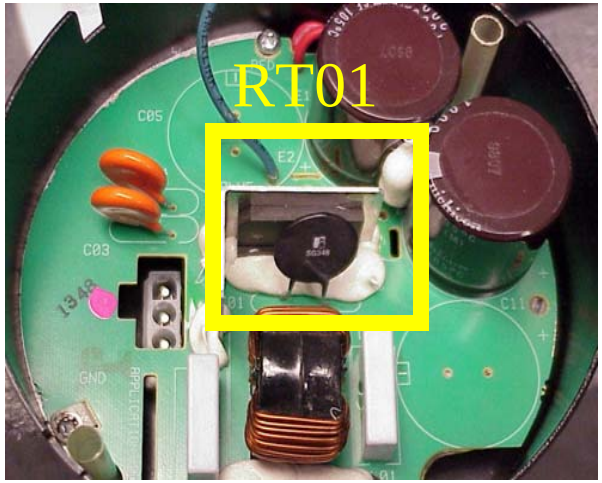
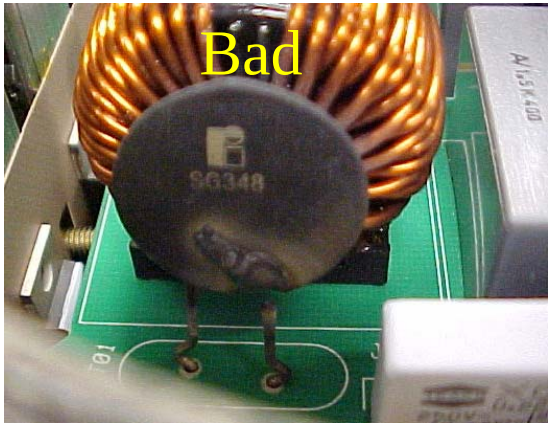
Fan Coil board communicates to ICM motor all the time. Motor comm. light should be flashing. If not, **Disconnect all wires** to ICM motor (16 & 5 pin connections). Check the resistance across the blue (RS-) & yellow (RS+) **on motor**. It should measure 102-105 K Ohms on ½ & 1 h.p. modules. 3-5K Ohms on ¾ h.p. modules.

- Plug both 16 & 5 pin connectors into motor & turn power on. You should have:
- 12 vdc between red & green (powering up ICM processor)
- 2.5-4 pulsating vdc between blue & yellow (serial comm)
- between pins 4 & 5 of the 5-pin connector 115vac (furnace) or 208/230vac (fan coil).



Communication Faults (2.5 ICM Motor Checks)

- **Turn Power Off**
- **Disconnect all wires** to ICM motor (16 & 5 pin connections).
- Remove motor module from motor and inspect for a damaged RT01.
- If it is damaged……. change the motor module.
- ½ hp=HK44EA120
- 3/4hp=HK46EA120
- 1-hp=HK52EA120



Bad