



## **M500 OPERATION**

- 1) **READ THE M500 INSTRUCTIONS CAREFULLY TO GET A FULL UNDERSTANDING OF THE M500 AND HOW IT OPERATES.**
- 2) **REMOVE THE BACK COVER AND CONNECT TWO "C" SIZE ALKALINE BATTERIES.**
- 3) **REMOVE ALL WIRES FROM THE COMPRESSOR THAT ARE CONNECTED TO THE TERMINALS THAT ARE TO BE TESTED. ATTACH ONE TEST LEAD FROM THE M500 TO ANY WINDING TERMINAL AND THE OTHER TEST LEAD TO THE BARE METAL CASE OF THE COMPRESSOR.**
- 4) **DEPRESS THE "POWER" BUTTON, WAIT APPROXIMATELY 10 SECONDS THEN PROCEED TO READ THE INSULATION VALUE SHOWN ON THE CORRESPONDING ILLUMINATED LED LAMP.**
- 5) **ILLUMINATED BELOW 20 LAMP INDICATES LOW INSULATION OR A SHORT CIRCUIT IN THE UNIT BEING TESTED.**
- 6) **IF THE "ON" LAMP IS ILLUMINATED BUT NO LIGHT APPEARS ON THE M500 SCALE THEN THE INSULATION VALUE IS MORE THAN 1000 MEGOHMS.**
- 7) **IF THE "ON" LIGHT IS NOT ILLUMINATED WHEN THE "POWER" BUTTON IS DEPRESSED THEN THE BATTERIES ARE INSTALLED IMPROPERLY OR THE BATTERIES ARE WEAK AND SHOULD BE REPLACED.**
- 8) **REMEMBER THAT ALL TESTS ARE MADE FROM THE COMPRESSOR OR MOTOR TERMINAL TO THE METAL CASE.**

### **"RULES OF THUMB"**

**NEW COMPRESSORS HAVE A RESISTANCE VALUE OF MORE THAN 100 MEGOHMS. READINGS OF 50 MEGOHMS OR LESS WOULD INDICATE THAT EITHER THE WINDING INSULATION IS DETERIORATING OR THE OIL OR REFRIGERANT IS CONTAMINATED.**

**THE ODOR OF BURNT INSULATION IS EASILY RECOGNIZED AND A LOW RESISTANCE VALUE OF 20 MEGOHMS OR LESS WILL VERIFY THAT THE MOTOR INSULATION MAY BE SEVERELY DAMAGED.**

**MOTORS AND APPLIANCES THAT SHOW A MEGOHM READING BETWEEN 20 AND 50 MAY BE SUFFERING FROM LACK OF PREVENTIVE MAINTENANCE WHERE THE WINDING IS DIRTY. A GOOD CLEANING MAY RAISE THE INSULATION RESISTANCE.**

**ALWAYS TEST THE MOTOR WINDING INSULATION WHEN THE MOTOR TEMPERATURE IS ABOVE THE ROOM AMBIENT TEMPERATURE. MOISTURE ON THE INSULATION WHEN THE MOTOR IS COOL CAN GIVE YOU FALSE LOW LEVEL READINGS.**

### **SEALED UNIT PARTS CO., INC.**

P.O. Box 21, 2230 Landmark Place, Allenwood, NJ 08720 USA (732) 223-6644 Fax: (732) 223-1617