Ohmmeter Tests

**QD, Solid State Control Box (Power Off)**

**A. START CAPACITOR AND RUN CAPACITOR IF APPLICABLE (CRC)**
1. Meter setting: R x 1,000.
2. Connections: Capacitor terminals.
3. Correct meter reading: Pointer should swing toward zero, then back to infinity.

**B. Q.D. (BLUE) RELAY**
**Step 1. Triac Test**
1. Meter setting: R x 1,000.
2. Connections: Cap and B terminal.
3. Correct meter reading: Infinity for all models.

**Step 2. Coil Test**
1. Meter setting: R x 1.
2. Connections: L1 and B.
3. Correct meter reading: Zero ohms for all models.

**C. POTENTIAL (VOLTAGE) RELAY**
**Step 1. Coil Test**
1. Meter setting: R x 1,000.
2. Connections: #2 & #5.
3. Correct meter readings:
   - For 115 Volt Boxes: 0.7-1.8 (700 to 1,800 ohms).
   - For 230 Volt Boxes: 4.5-7.0 (4,500 to 7,000 ohms).

**Step 2. Contact Test**
1. Meter setting: R x 1.
2. Connections: #1 & #2.
3. Correct meter reading: Zero for all models.

**Ohmmeter Tests**

**Integral Horsepower Control Box (Power Off)**

**A. OVERLOADS** (Push Reset Buttons to make sure contacts are closed.)
1. Meter setting: R x 1.
3. Correct meter reading: Less than 0.5 ohms.

**B. CAPACITOR** (Disconnect leads from one side of each capacitor before checking.)
1. Meter setting: R x 1,000.
2. Connections: Capacitor terminals.
3. Correct meter reading: Pointer should swing toward zero, then drift back to infinity, except for capacitors with resistors which will drift back to 15,000 ohms.

**C. POTENTIAL (VOLTAGE) RELAY**
**Step 1. Coil Test**
1. Meter setting: R x 100.
2. Connections: Coil terminals.
3. Correct meter reading: 1.8-14.0 (180 to 1,400 ohms)

**Step 2. Contacts**
1. Meter setting: R x 1.
2. Connections: L1 & T1 or L2 & T2
3. Manually close contacts
4. Correct meter reading: Zero ohms

**D. CONTACTOR**
**Step 1. Coil**
1. Meter setting: R x 100
2. Connections: Coil terminals
3. Correct meter reading: 1.8-14.0 (180 to 1,400 ohms)

**Step 2. Contacts**
1. Meter setting: R x 1.
2. Connections: L1 & T1 or L2 & T2
3. Manually close contacts
4. Correct meter reading: Zero ohms

**CAUTION:** The tests in this manual for components such as capacitors, relays, and QD switches should be regarded as indicative and not as conclusive. For example, a capacitor may test good (not open, not shorted) but may have lost some of its capacitance and may no longer be able to perform its function.