### TROUBLESHOOTING THE MOTOR

# **AWARNING**



Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

NOTE: Refer to the "Motor Failure Modes Chart" at the bottom of the page.

- Motor does not hum or rotate.
  - a) 1, 2, 3, 5, 6.
  - b) Make sure refrigerator is plugged in.
  - c) Make sure freezer door is completely
  - d)Make sure selection button is in UN-LOCK position.
  - e) Wait 1 minute after an ice jam occurs for motor's surge protector to automatically reset.

- f) Disconnect/reconnect the 6-pin hamess to the motor 3 - 5 times to remove any oxidation buildup on the connector pins.
- g) Check power in the circuit (see "Checking The Switch Pack on page 5-14).
- 2. Motor hums but does not rotate.
  - a) Clear ice jam in ice bin.
  - b) Possible broken gear inside motor assembly.
- Motor starts but heats rapidly. a) 2, 3, 5.
- Motor runs too hot after extended operation.
   a) 3, 4, 6, 9.
- Reduction in power—motor overheats.
   a)2,5,6.
- High no-load speed (30 RPM is nominal).a)2
- Excessive noise (mechanical).
   a) 2, 7, 8.
- Jerky operation—severe vibration. a)2.

#### Motor Failure Modes Chart

- Open circuit in connection to line (e. g. house fuse is blown or motor is defective).
- Defective motor.
- Overloaded motor (mechanical failure in load).
- Ventilation blocked.
- 5. Wrong connection to motor.
- Improper or low line voltage.
- Poor alignment between motor and load (e. g. loose motor mounting).
- 8. Amplified motor noise due to mounting conditions.
- 9. High ambient temperature.

## **♠WARNING**

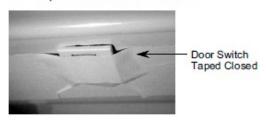


Electrical Shock Hazard Voltage is present during these tests.

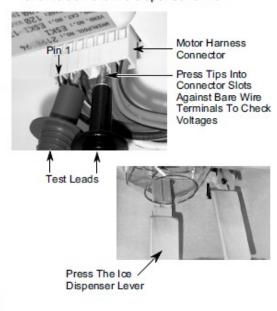
#### CHECKING THE MOTOR

To check voltages\* at the motor for crushed or cubed ice operation:

- Open the freezer door and remove the ice bucket from the door.
- Tape the door switch closed.



 Voltage readings may vary, depending on the supply voltage, and the type of test equipment being used. NOTE: When you are instructed to make a reading at the motor connector, press the tips of the red and black test leads into the indicated harness connector slots so they touch the bare metal wire connectors. Reach around the front of the door and press the ice dispenser lever to activate the dispenser switch.



- Press the Unlocked button on the ice and water dispenser front panel.
- Touch the AC meter test leads to wire harness pins 3 and 5, then press the ice dispenser lever. The meter should read 115 VAC.
- Touch the DC meter's black test lead to wire hamess pin 6, and the red test lead to pin 7, then press the ice dispenser lever. The meter should read +115 VDC ±10%.
- Press the Crushed ice button on the ice and water dispenser front panel.
- Touch the DC meter's black test lead to wire harness pin 1, and the red test lead to pin 2, then press the ice dispenser lever. The meter should read +115 VDC ±10%.
- Press the Cube ice button on the ice and water dispenser front panel.
- Touch the DC meter's red test lead to wire hamess pin 1, and the black test lead to pin 2, then press the ice dispenser lever. The meter should read +115 VDC ±10%.
- 10. Remove the tape from the door switch.

