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# DANGER-HIGH VOLTAGE USE EXTREME CAUTION PHYSICAL CONTACT WITH THE HIGH VOLTAGE TEST POINTS CAN BE LETHAL, CAUSE SEVERE SHOCK AND BURNS.

#### **INSTRUCTIONS FOR INSULATION TESTER**

CROWN MODEL 2110 (115VAC) & 2130 (230VAC)

Model 2110 and 2130 are impedance limited Insulation Testers. **CONNECT TO PROPER VOLTAGE SOURCE BEFORE OPERATING.** When a breakdown in insulation occurs, the pilot light will dim or go out. Dim light indicates a high resistance short, and when the light goes totally out, this indicates a direct short. **REMOVE PRODS IMMEDIATELY TO PREVENT DAMAGE TO TESTER**.

Crown high voltage, transformer type Insulation testers are easy to use, for quick, positive determination of grounds, shorts, and broken wires in motors, transformers, and other low voltage equipment or wiring.

NEMA recommendation for insulation test is twice normal voltage plus 1000 volts. Since this instrument has a capacity of 2500 volts, it readily accommodates all normal requirements.

#### **TEST**

#### General:

- 1. Connect power cord to grounded electrical outlet per voltage specified on label at entrance of power cord.
- 2. Before Performing any testing, make sure all ground connections are proper and secure.
- 3. Before Performing any test, perform a thourough examination of both prods and the high voltage cable to verify proper and safe condition with no damage.
- 4. Set dial pointer (Selector Knob) to desired test voltage. Place power switch to "ON". Pilot light will light indicating high voltage on the test prods and unit ready for testing.
- 5. Hold prod handles at the knurled portion and slide buttons forward with thumbs until contact test points are exposed.
- 6. Apply test points to work being tested. If voltage breakdown occurs, pilot light will dim or turn off.

CAUTION: Turn power switch "OFF" before changing test voltage.

#### To test insulation between conductor and ground:

Apply one point to a clean portion of the frame so good contact is made and the other point to one end of each coil in the apparatus. If insulation withstands the test of voltage successfully, the indicating lamp is not affected. However, if a breakdown of the insulation occurs, the pilot light on the tester will dim or turn off.

#### To test insulation between coils:

Touch one point to the cleaned end of one coil and then touch the other point to one cleaned end of each of the other coils. Be sure that this test is made between each pair of coils.

On complete products (motors, lamps, appliances, etc.), which contain a power cord, the test is normally made from each of the prongs on the cord set plug to any exposed metal parts. Switch on unit under test in the "ON" position.

#### MAINTENANCE AND STORAGE

When not in use, store unit within a plastic bag. Unit must undergo yearly calibration.

#### WARRANTY

Crown's Motor Repair Equipment is warranted to the original owner against defects in materials and workmanship for ninety (90) days from date of purchase. Any part found to be defective (except by overloading, misuse, neglect, fire, accident, tampering with by unauthorized serviceman, or other cause beyond the manufacturer's control), will be replaced or repaired free of charge.

# SPECIFICATIONS FOR INSULATION TESTER CROWN MODEL 2110 and 2130

**Primary power:** 50/60Hz, 1 phase, 115VAC (2110), 230VAC (2130). Test to 2500VAC in seven (7) steps: 500, 1080, 1250, 1500, 1750, 2000 & 2500. Range: 500 - 2500VAC (NEMA recommendation for insulation test is twice normal voltage plus 1000 volts) ±5% accuracy. Calibration is traceable to the National Institute of Standards and Technology.

**Construction (packaging):** Metal, corrosion protected.

**Transformer:** Completely sealed to reduce the possibility of shorting to the case. High capacity (500va), capable of testing motors 200HP and above.

**Test Prods & Leads:** Self-retracting test points. They retract into fiber sleeves under spring tension to minimize chance of accidental contact with the Points. Six (6)-foot long Leads are high voltage insulated.

**Spare Parts:** To be recommended on request.

Enclosures: Operating Instructions & equipment repair/replacement parts list.

## **HIPOT Insulation Testers**

\*SAFETY TRAINING REQUIRED TO OPERATE THESE HIPOT INSULATION TESTERS

PART LIST			
ITEM	P/N	DESCRIPTION	QUANT
1	C802019	Case subassy.	1
2	C802020	Cover	1
3	C500024	Shutdown relay board assembly	1
4	C802011	Transformer, 115/230VAC	1
5	C500036	Volt meter board	1
6	C809004	Power Cord	1
7	C802021	Lead Wire (6 Feet)	2
8	C802003	Cord Bushing	3
9	C802007	Power Switch	1
10	C802032	Pilot Light	1
11	C802005	Selector Switch Knob	1
12	C500033	Voltage Selector Switch subassy.	1
13	C802205	Volt meter	1
14	C802025	Button screw	2
15	C802027	Spring	2
16	C802024	Inner prod sleeve	2
17	C802026	Prod point	2
18	C802023	Outer prod sleeve	2
19	C502160	Model #2160 Prod and Lead subassy.	2
20	C803002	Buzzer	1
21	C803003	Reset Button	1
N/A	C802039	Front Label	1

CAUTION: Turn power switch "OFF" before changing test voltage.

Remove prods immediately to prevent damage to tester.

NEMA recommendation for insulation test is twice normal voltage plus 1000 volts.

