

## **OPERATING MANUAL**

# Model 7790 Marshall Stability Load Frame

#### **INTRODUCTION**

The 7790 Marshall Stability Load Frame has a 20,000lbf (89.0kN) capacity and loading rate is fixed at 2in (50.8mm) per minute specified for Marshall testing. The loading rate is maintained at  $\pm$ 1% by the 1hp AC, 230V/50-60Hz.

A 8in (203mm) diameter lower platen is included and the load frames have a vertical clearance of 19.5in (495mm) and horizontal clearance of 11.0in (279mm). Cross-head heights are quickly and accurately changed using the adjusting nuts. Cabinet construction is 14-gauge steel with a durable enamel finish. The 1.25in (32mm) diameter vertical threaded rods are plated for corrosion resistance. Malleable boots protect the precision loading screws from dust and dirt.

#### **FEATURES**

- Built for Marshall Testing with fixed 2in (50.8mm) per minute loading rate
- 20,000lbf (89.0kN) capacity
- Consistent loading rate maintained at  $\pm 1\%$  by the 1HP AC motor and controller
- Standard 8in diameter platen
- · Easily changeable cross heads with adjusting nuts
- · Front panel direction switch with limit lights

### **UNPACKING & SET UP**

- 1. After inspecting your 7790 for shipping damage, remove it from the pallet.
- 2. Set cross bar to appropriate height.
- Install component set (ordered separately)
  3.1 Load Ring and Dial Indicator
  - Or
  - 3.2 Digital readout box, load cell, LVDT.

The 6572-28 Digital Component Set displays asphalt load and flow measurements, transfers ASC11 file-formatted data, and must be connected to a user supplied PC.



Model 7790

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### **OPERATING INSTRUCTIONS**

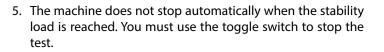
## **ELECTRIC SHOCK WARNING - 230V**



DISCONNECT AND LOCKOUT POWER SUPPLY WHEN SERVICING THE UNIT



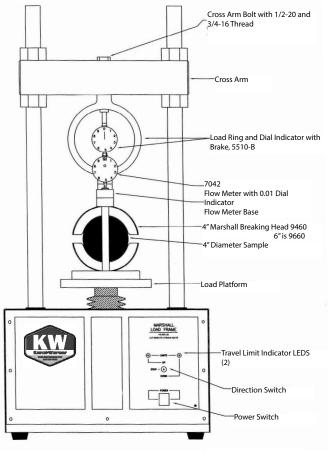
- 1. Please read and understand all operating instructions for the Karol Warner 7790 Marshall Load Frame before placing it into service.
- 2. The controls are located on the front right side of the panel. The main power switch has an indicator light to show when power is on.
- 3. The three position toggle switch controls the platen direction of travel; up, off (in the center position), and down. The switch has a built-in hesitation to prevent damage to the motor when reversing direction.
- 4. The red limit lights indicate the maximum travel limits of the platen. The platen can travel 3.0 inches (76.2 mm).



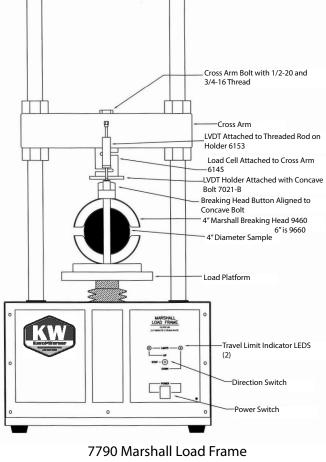
- 6. Refer to the following specifications for full test procedures:
  - ASTM D5581 / D6927 Marshall Stability and Flow
  - ASTM D6931 Indirect Tensile (IDT) Strength
  - ASTM D4867 Effect of Moisture on Asphalt
  - AASHTO T 283 Resistance of Asphalt to Moisture-Induced Damage
  - AASHTOT 245 Resistance to Plastic Flow of Asphalt Mixtures

#### ACCESSORIES

7699 Rolling Cart for Load Frames



7790 Marshall Load Frame with Load Ring and Flow Meter



with Load Cell and LVDT