

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

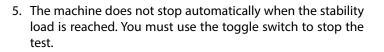
ELECTRIC SHOCK WARNING - 230V



DISCONNECT AND LOCKOUT POWER SUPPLY WHEN SERVICING THE UNIT



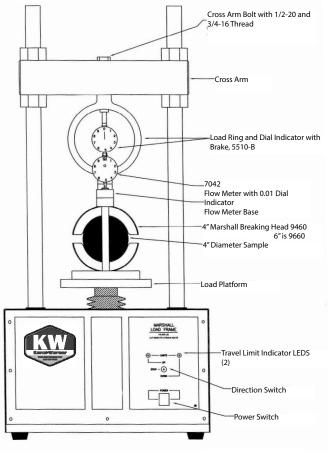
- 1. Please read and understand all operating instructions for the Karol Warner 7790 Marshall Load Frame before placing it into service.
- 2. The controls are located on the front right side of the panel. The main power switch has an indicator light to show when power is on.
- 3. The three position toggle 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).



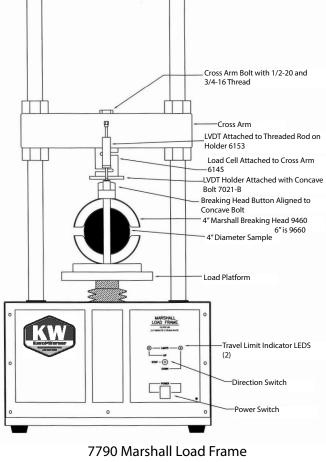
- 6. Refer to the following specifications for full test procedures:
 - ASTM D5581 / D6927 Marshall Stability and Flow
 - ASTM D6931 Indirect Tensile (IDT) Strength
 - ASTM D4867 Effect of Moisture on Asphalt
 - AASHTO T 283 Resistance of Asphalt to Moisture-Induced Damage
 - AASHTOT 245 Resistance to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