Model 7691 Load Frame
10,000lbf (44.5kN) Capacity
0.02 to 2.0in/min (0.508 to 50.8mm/min) Strain Rate

INTRODUCTION

The versatile Karol-Warner 7691 Load Frame is ideal for multiple loading applications around the lab. The 7691 features adjustable strain rates from 0.02 to 2.0in/min (0.508 to 50.8mm/min) ±1%, and total load capacity of 10,000lbf (44.5kN). When configured with appropriate components, this load frame can perform several test methods on hot-mix asphalt samples:

- Marshall Stability
- Indirect Tensile (IDT/Lottman)
- Tack Coat Shear
- Semi-Circular Bend (SCB)

Soil testing applications include:
- Unconfined Compression (UC)
- California Bearing Ratio (CBR)
- Triaxial Shear (Unconsolidated, Undrained or UU)

Front panel controls allow the operator to adjust the direction and speed of the platen, as well as select the strain rate. The cross-arm is easily adjusted on the coarse-threaded 1.25in (32mm) diameter rods to control opening height for various testing fixtures.

FEATURES

- Strain rate is adjustable from 0.02 to 2.0in/min (0.508 to 50.8mm/min). Calibration chart is included.
- Three-segment thumbwheel to select strain rate
- Powerful 3/4hp DC drive motor controls strain rate to ±1% of set point
- Load capacity up to 10,000lbf (44.5kN)
- Durable 14-gauge steel cabinet and precision loading screw with protective boot
- Standard 8in (203mm) diameter platen
- Heavy-duty steel 1.25in (31.8mm) diameter vertical rods with coarse threads
- Maximum frame opening of 11.9 x 37.3in (302 x 947mm)
- Upper and lower limit indicator lights
- Three-position control switch has built-in hesitation to prevent motor damage when reversing
- Corrosion-resistant components

Model 7691

> **CAUTION:** Shipping weight of the Load Frame is approximately 250lb (113kg). To avoid personal injury or machine damage, use proper equipment and technique when unpacking and moving the unit.

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1. Inspect your Load Frame carefully for damage and report any damage to the shipper.
2. Remove the unit from the pallet using proper lifting equipment.
3. Adjust the crossarm to the appropriate height for the test fixture to be used.
4. Install components required for the specific test method.

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CONTROLS

1. **Main Power On/Off:** Includes an indicator light to show when the power is on.
2. **Platen Direction:** Three-position switch (up, off and down) includes built-in hesitation to prevent motor damage when reversing direction.
3. **Limit Lights:** Indicates upper and lower limits of travel.
4. **Strain Rate:** Three-segment thumb wheel to select speed (strain rate calibration chart included).
5. **High-Speed Jog:** Increases the speed of the platen when the switch is pushed to the up position.

OPERATING INSTRUCTIONS

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ELECTRIC SHOCK WARNING

DISCONNECT AND LOCKOUT POWER SUPPLY WHEN SERVICING THE UNIT

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1. Read all safety and operating instructions before operating the unit.
2. Connect the three-pronged plug to a properly-wired, grounded receptacle with appropriate electrical current for the machine.
3. Kits or individual components are available separately and may be installed on the load frame to measure load, displacement or other properties according to the specific test method.
4. Mount the selected test fixture on the machine platen and insure it is centered.
5. Power the unit on with the Main Power switch (indicator light will show that the unit is on).
6. Based on the included calibration chart, set the desired strain rate for the test using the three-segment thumbwheel selector.
7. Use the Platen Direction and High-Speed Jog switches to adjust the direction and speed of the platen for testing.
8. Center the Platen Direction switch to the off position when the test is complete.
9. Refer to ASTM and/or AASHTO test methods for specific test protocol and procedures.

Accessories	
Model 7699	Rolling Load Frame Cart