

OPERATING MANUAL

Pro-Loader II Load Frame HM-398 and HM-398F

INTRODUCTION:

The HM-398 Load Frame is one of our most versatile testing units. The Pro-Loader II can be utilized for the following soil tests: California Bearing Ratio (CBR), Unconfined Compression (UC), Triaxial Compression, and Soil Cement. In addition, the following Asphalt tests: Marshal, Lottman, TSR, IDT, SCB and Tack Coat shear can all be performed. This unit also features strain rates – 0.02-2.0in/min (0.508-50.8mm/min) – controlled to ±1% of set point. Front panel controls allow the operator to adjust the direction and speed of the platen, as well as select the strain rate. Sliding the cross-arm up or down the coarse-threaded 1.25in (32mm) diameter rods and tightening the nuts makes adjustment for the wide variety of testing components quick and easy.

FEATURES:

- Strain rate of 0.02-2.0in/min (0.508-50.8mm/min) allows for multiple testing options (calibration chart included)
- Powerful 3/4hp DC drive motor
- Load capacity up to 10,000lbf (44kN)
- Durable 14-gauge steel cabinet and precision loading screw with protective boot
- Standard 8in (203mm) diameter platen
- 1.25in (31.8mm) diameter vertical rods with coarse threads
- Front panel controls
- Upper and lower limit indicator lights
- Three-position control switch has built-in hesitation to prevent damage to the motor when reversing direction
- · Corrosion-resistant components

UNPACKING & SET UP:

- 1. Inspect your HM-398 for damage, remove it from the pallet
- 2. Adjust the crossarm to the appropriate height
- 3. Install any accessories needed for the test



HM-398 shown with HM-413, HMA-517 and HMA-94

(Continued on back.) Rev: 04/25/2018

CONTROLS:

- 1. Main Power On/Off: Includes an indicator light to show when the power is on
- 2. Platen Direction: Three-position switch (up, down and off) includes built-in hesitation to prevent motor damage when reversing direction
- 3. Limit Lights: Indicate when upper and lower limits are attained
- 4. Strain Rate: Three-segment thumbwheel selector (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:

- 1. Read all safety and operating instructions before operating the unit.
- 2. Power the unit with the Main Power switch (indicator light will show that the unit is on).
- 3. Based on the calibration chart (included), set the desired strain rate for the test using the three-segment thumb-wheel selector.
- 4. Use the Platen Direction and High-Speed Jog switches to adjust the direction and speed of the platen for testing.
- 5. Center the Platen Direction switch to the off position when the test is complete.
- 6. Refer to ASTM and/or AASHTO test methods for specific test instructions.