Test and LVDT Setup:

1. For an IDEAL test, the unit should be set up in the load frame according to the diagram above. If an LVDT is used, it is important that the LVDT is setup in the optimum measurement range.

2. Align the jig in the load frame centered under the load point. Alignment screws are provided with the Smart-Jig to allow easy alignment with the Pine Marshall Press.

3. Set up and align the LVDT with the metal rod
   a. Insert a 150 mm diameter specimen into the jig and raise the jig until it is within 3 mm (1/8 inch) of the load point.
   b. Use the magnetic base (item 4) to align the metal rod (item 2) with the tip of the LVDT (item 3).
   c. Loosen the bolt (item 1) on the magnetic base. Then, move the rod down until the LVDT (item 3) makes contact with the metal rod (item 2). The LVDT should be compressed by at least 3 mm but not more than 6 mm as indicated in the calibration screen of the tablet. To access the calibration screen, select MENU and then Calibration Values. The calibration screen will be displayed, as in the figure below. Lastly, tighten the bolt (item 1) firmly.
4. Confirm proper operation of the Smart-Jig
   a. Insert a 150 mm diameter specimen into the jig with softest mixture available. 
      NOTE: A mix design specimen with the highest asphalt content generally should 
      be a soft mixture. 
      
      **Important:** Always have the application open and press ‘Start Test’ prior to testing 
      a sample in the load frame. 

   b. Run a test with the load frame. 
   c. Verify the results with the examples below. 
      i. Smooth Curve that starts at 0. 
      ii. Final load is less than 0.5 kN (115 lbs) 
      iii. Final displacement is greater than 8 mm. 

   d. Solutions if verification fails. 
      i. On Pine Marshall Press, hold “Limit Overide” Switch during test. Switch is on 
         the bottom of the machine. 
      
      **Important/Caution- incorrect use of the Limit Switch can damage the motor on the 
      load frame. Do not hold the UP or DOWN switch on the Pine Marshal Press, while 
      holding the Limit switch. Refer to manufacturer’s manual for operation of the Limit 
      switch.** 
      
      ii. Readjust the height of the metal rod following instructions in Step 3.