



Hydraulic Coil Spring Tester Assembly & Operating Instructions

WARNING:

Compressed coil springs are dangerous! If the spring comes out of the tester while compressed it can cause serious injury or death.

- Always use the tester as shown here and per instructions.
- Never test a spring that bows sideways when compressed.
- Be sure that the spring is properly seated in the tester.
- Never exceed the capacity of the machine.

To Unpack & Assemble:

- Remove clear shrink film by carefully cutting.
- Remove TOP pin ONLY (with black ball handle).
- Slide top assembly over top and off. (This is actually the bottom assembly – they are reversed for shipping.)
- Hold bottom assembly, remove pin, and slide over the top and off.
- Reinstall the assembly with the gauge facing the same side as the jack handle. It will slide down and rest on the jack. Install the other assembly using the 2 pins.
- Remove the packing material from around the gauge and tighten the 5/16" bolt in the back.
- Install the dial indicator and holder as shown. The aluminum holder simply slips over the lower sliding assembly and the magnet holds it in place.

To Test A Spring:

- Install the spring in the tester, remove the 2 large pins (with black handles), lower the upper spring seat until it rests on the spring. Install the 2 pins until fully seated. It may be necessary to move the upper seat up until the first available holes line up.
- Using the jack compress the spring until the force gauge just begins to move.
- Preload the spring by .500" (1/2"). This is very important and should be done accurately. You may use 1.000" or some other amount as long as you always use the same number.
- Record the preload force on the gauge.
- Slide the dial indicator and aluminum holder all the way to the bottom so that the indicator is compressed completely. It is held in place by a magnet and will slide fairly easily. Rotate the outer dial so the pointer reads 0.
- Using the dial indicator to measure, compress the spring 1.000" (10 revs of the pointer). Note that the indicator is extending. This will avoid damage if you go beyond 1.000"
- Record the new force on the gauge. Subtract the preload force and you have the spring rate in lbs/in of compression.

CAUTION: The enclosed 3/4 – 16 x 2 inch bolt is to be used to secure the lower spring cup when used in the inverted position (as used with coil-over springs). Use of the 3/4 – 16 x 3 inch long bolt in this inverted spring cup position may result in damage to the hydraulic cylinder.