



INSTRUCTIONS

RIMAC SPRING TESTER

This instrument comes to you carefully packed and under tension of approximately 100 lbs., which helps avoid damage from jars or blows while in transit.

1. Upon opening up loosen set screw at head of instrument to remove tension. But if for any reason machine is reshipped put it under tension and tighten screw to hold it during transit.

2. Instrument should be mounted solidly on bench and kept free from dust and moisture.

Testing Springs

Practically all motor manufacturers now list necessary data as to valve spring tension in their service bulletins showing in addition to normal length, diameter and number of coils, the working tension of spring when compressed to a given length, the actual conditions under which spring operates in motor.

On new springs manufacturers usually allow a tolerance of 3% over or under values given in their charts. *Defective springs and springs that have been in service a long time* often show greater variation and should be replaced.

How to Operate

Place spring in approximate center of lower platform. By using lever handle, bring upper platform down until spring is compressed to specified length as indicated by reading on side scale. Pointer on front dial then indicates pound pressure required to compress spring to this particular length. That is what is commonly referred to as "tension" in valve spring data.

On very heavy springs "tension" is very sensitive to slight variations in length. So it is very important to have indicator show exact length on scale.

Use of Adjustable Stop . . . Caution

Machine comes equipped with an adjustable stop to facilitate the comparison of a number of springs at the same length.

Important caution: Bear in mind that as the spring is compressed lower platform moves down but stop holds upper platform at a fixed position. Therefore, do not make error in testing springs by first "fixing" length by means of stop and then inserting spring between upper and lower platform. Rather first put spring on platform, compress it to desired length then tighten stop for comparing the other springs.

But where extreme accuracy is important it is best not to use stop but to check each spring separately both as to length and tension.

Minor Adjustments

Zero is adjustable within a range of 5 pounds by moving small lever at bottom of dial.

Occasionally through accident or jar in transit pointer on dial face is loosened and falls into incorrect position showing wrong reading at zero. Just remove glass front by prying with a screw driver, place pointer in correct position and tap gently and firmly into correct position.

It is advisable to frequently check and make sure that length indicating pointer is correct. Lower the upper platform until it rests on lower platform. Then see to it that end of pointer coincides with zero on side scale. If it has been bent up or down from its correct reading position, it will cause incorrect reading at length. A small difference in reading length will, on stiff springs, cause variation of many pounds in tension reading.

RINCK-McILWAINE, Inc.

89 ARMOUR PLACE

DUMONT, N.J. 07828