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\*\*\*\*\*START\*\*\*\*

## [CLAIMS]

[CLAIM 1] A jig for measuring resilient force of a coil spring comprising

a cylindrical holder and a guide cylinder slidably disposed within the holder, the guide cylinder having an inner diameter substantially equal to an outer diameter of the coil spring being measured.

[CLAIM 2] A jig as set forth in claim 1, wherein a resistence force to the sliding between the holder and the guide cylinder is such that the guide cylinder does not fall by the action of gravity alone.

## [DETAILED DESCRIPTION OF THE INVENTION]

[0001]

[FEALD OF THE INVENTION] The invention relates to a jig for keeping a coil spring upright in measurement of a designated load at a designated height of the coil spring. [0002]

[DESCRIPTION OF PRIOR ART] Prior art will be described in reference to Figs. 6 and 7. On a testing table 101 of a load measuring device is placed a fixed cylinder 112 for keeping a coil spring 111 upright. The coil spring 111 is inserted in the cylinder 112. A load measuring part 114 compresses the coil spring 111 down to a designated height, whereupon a designated load (resilient force) is measured.

[0003]

[PROBLEM TO BE SOLVED BY THE INVENTION] In the foregoing prior art, the coil spring 111 protrudes above the upper end of the fixed cylinder 112 by more than half of its length. Therefore, lowering of the load measuring part 114 can cause the coil spring 111 to buckle as shown in Fig. 7, making the measuring impossible. In the case where the designated height is sufficiently high, the length of the fixed cylinder 112 may be extended accordingly. In the case where the designated height is relatively low, however, the length of the fixed cylinder is limited, which can cause the aforementioned problem.

\*\*\*\*\*END\*\*\*\*\*

## \*\*\*\*\*START\*\*\*\*

## [0005]

[FUNCTION] The slidable and telescopic arrangement of the holder and the guide cylinder results in a lesser extent of protrusion of the coil spring from the upper end of the guide cylinder irrespective of the designated height of the coil spring being measured, which eliminates the buckling of the coil spring.

[0006]

**[EMBODIMENT]** A guide cylinder 3 is slidably disposed within a cavity 2 of a metal-made cylindrical holder 1. A clearance 4 is formed between the guide cylinder 3 and the holder 1. An innder diameter of an inner surface 5 of the guide cylinder 3 is substantially equal to an outer diameter of the coil spring being measured. Annular grooves 6 and 7 are formed in an outer circumferential surface of the guide cylinder 3. O-rings 8 and 9 of an elastic material such as rubber are attached to the grooves, respectively, and come in contact with the inner surface 2 of the holder 1. A resistance force to the sliding of the guide cylinder 3 with respect to the holder 1 is set at a value such that the guide cylinder does not fall by the action of gravity alone and that it can be lowered by the action of a certain external force.

\*\*\*\*\*END\*\*\*\*\*