WEVD Shifter Spring Kit

The WEVO shifter spring kit includes 4 pairs of springs and 8 pre-load shims.

Two of the springs will be duplicates of parts already used in your shifter – this is a universal kit.

All WEVO shifter's (901, 915, 930) are of modular design, with the design flexibility to allow the user to change the lateral feel of the spring centering of the shift lever.

The table below will help to understand the variation available using the parts in this kit, the illustration will help to identify the components and the installation limitations.

As a general rule, a higher value of initial load will give the clearest definition of the center plane of the shift pattern. The highest value of full deflection will give the greatest assistance to return the lever to the center plane of the shift pattern.

Example;

To make the $1^{st}/2^{nd}$ plane of a 915 shifter softer, you can use the 12.2 x 1.8 spring – with one pre-load shim, this will have a similar initial load value, but the load at full deflection will only be 78% of the standard 915 shifter.

Alternatively, use the 14.0 x 2.8 spring – with no preload shim and the initial load value will be again be similar, although the full deflection load will be about 215%.

Further trimming of the feel can be achieved with the pre-load shims, although these make relatively modest changes – as can be seen in the table.

Installing the springs is simple: - Remove the top plate from the shifter base casting. Working on a bench - use a 10mm or 3/8" wrench to hold the hex of the brass plunger and a 3mm Hex key to remove the M5 Stainless Steel button head screw from the opposite end of the plunger.

Remove the existing spring and install the new spring. If using any pre-load spacers, install them against the hex end of the brass plunger, and then install the spring. We always assemble the spring and plunger with a small amount of synthetic grease to ensure the spring will slide on the plunger and the plunger will slide freely in the top plate.

The M5 Stainless Steel button head screws were originally installed with Loctite 242 (blue - removable) we no longer use the Loctite in an effort to simplify the change of springs and have found no issues with these screws coming loose.

SPRING	# of	Open Length	Initial Load	Full deflection
	shims	mm	lbs.	lbs.
12.2 x 1.6	0	25.4	13.0	19.3
12.2 x 1.6	1	25.4	14.8	21.0
12.2 x 1.6	2	25.4	16.6	22.7
12.2 x 1.6	3	25.4	18.5	24.5
12.2 x 1.6	4	25.4	20.3	26.4
12.2 x 1.8	0	25.4	24.0	35.0
12.2 x 1.8	1	25.4	27.5	38.5
12.2 x 1.8	2	25.4	31.0	41.8
12.2 x 2.0	0	22.2	20.6	42.5
12.2 x 2.0	1	22.2	27.0	49.0
12.2 x 2.0	2	22.2	33.5	55.5
14.0 x 2.8	0	20.5	23.0	106.0
14.0 x 2.8	1	20.5	45.0	128.0

All forces in pounds, at the spring plunger – not at the shift knob.



It is not recommended to use more than 1 shim with the 14.0 x 2.8 spring.

The amount of travel required becomes critical and the spring might become coil bound, in which case the shift lever will become rigidly linked to the shifter base and any lateral travel of the lever will be only due to flexing of the shift tunnel and other shifter components.

The original springs installed in your shifter were the result of testing and polling among the drivers who used and tested the product prior to general release. The O.E. spring configurations have varied for each shifter over time as we collected more feedback – now from over 1000 customers. The O.E. configuration may or may not suit you and the modular design of the WEVO shifters allow you to experiment to suit your feel and driving style.

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