

# VISION<sup>1</sup>RACING

## Shift Selector Springs – Street Kit Nissan FWD 6spd (F51)

Congratulations on your new V1R Shift Selector Springs!

From the factory, Nissan uses two springs to 'center' the shift lever in the 3<sup>rd</sup>/4<sup>th</sup> gear position. You will notice, upon install of your V1R SSS, a much quicker centering motion when shifting from 2<sup>nd</sup> to 3<sup>rd</sup> gear. This will permit faster 2/3 shifting, and greatly reduce the chance of dreaded 3<sup>rd</sup> gear lockout.

Before you begin, you'll need the following tools: Hammer, 2 pairs vice grips, 1/8" punch, 3/16" or 1/4" punch, 14mm wrench, 10mm socket w/ ratchet and extension



First step is to disconnect the battery, and remove any intake piping to permit access to the shift cables.

You'll need to remove the retaining clip that attaches each shift cable to the transmission, and slide the cables off of the shift selector assembly.



Next, you'll use a 14mm wrench to remove the shift change pin on the driver side of the transmission just below the shift selector assembly. This simply looks to be a 'plug' with a 14mm hex head.



Now, there are 4 bolts that attach the shift selector assembly to the transmission. They can all be accessed from the top with a 10mm socket and extension. You may need to move the shift arm to various positions in order to gain access to every bolt.



After the four 10mm bolts and the 14mm plug are removed, you'll be able to pop the shift selector assembly out the top of the transmission.

Once you have the assembly removed, you'll want to use a marker to indicate the correct orientation of the cast part between the two springs. Photographs always help! After you take note of that, use your smaller 1/8" punch to drive out the center roll pin. This is a double roll pin so it's easiest to remove the center pin first; then use your larger punch to remove the outer roll pin.

**DO NOT LOSE EITHER OF THESE ROLL PINS**

Once the cast portion slides freely on the shaft, pull the lower spring retainer upward- compressing both springs to reveal a C-Clip toward the bottom of the shaft. Clamp a vise grip on the shaft to hold the springs compressed.

Use your second vise grip to **FIRMLY** grasp the C-Clip 180deg opposite the opening. Pull straight back to remove the clip from the shaft.

**BE CAREFUL NOT TO LOSE THIS C-CLIP**

Now you'll be able to remove the lower spring retainer, lower (1-2) spring, lower spring seat, center cast portion, upper spring seat, and upper (5-6-R) spring



Replace the upper 5-6-R spring (longer of the two) with the white 5-6-R spring (longer of the two) provided

Reinstall the upper spring seat, center cast portion (assuring same orientation as before), and lower spring seat onto the shaft

Replace the lower 1-2 spring (shorter of the two) with the blue 1-2 spring (shorter of the two) provided

Reinstall lower spring retainer and compress entire assembly. Use vise grip to hold compression and use a pliers to carefully reinstall the C-Clip. (That little guy likes to fly so be careful not to lose it)

Remove the vise grip, align center cast portion with indicator marks, and reinstall the roll pins. Outer pin first, then inner pin. Make sure both pins fully engage through to both sides of that cast piece.

Reinstall everything in the vehicle, including your shift select pin in the side of the case. You may need to finesse it all back in, but don't force anything. It will fall into place once everything is lined up.

Enjoy your improved shifting quality!

NOTE: It is highly recommended to install aftermarket shifter bushings as factory bushings will not hold up well to the added pressure

Keep an eye out for the install video on my YouTube channel "VisionOneRacing Peter"

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Thank you for your support!

Any questions can be directed toward VisionOneRacing@gmail.com

I will respond as soon as possible