



#19824 Spring Set

Installation Instructions



Thank you for choosing HSport Performance Springs. Professional installation is recommended but not required.

Start With the Front

- 1/ Raise the vehicle using a four-wheel lift, ramps or jack stands. Only use a level surface and only use the manufacturer's named jack points.
- 2/ Once raised, start with either side. In this case, we will start with the passenger side first. Remove wheel, allowing access to the strut. Free any brake or ABS sensor lines from the strut body itself (you may remove the bracket). Then, disconnect end link from sway bar.
- 3/ Disconnect Ride Stability bracket from lower control arm.
- 4/ Remove large bolt attaching strut to spindle as shown.



- 5/ Free strut from spindle by applying pressure downward on the spindle.

6/ Once strut bottom is free, remove the three strut tower nuts attaching strut top to tower.



7/ Place the strut in a spring compressor and compress the spring away from the top seat. Then remove the dust cap to expose the strut nut.



8/ Now, remove the strut nut. Using an impact gun may spin the shaft. A handy way to remove the nut is to use a standard spark plug socket, wrench and allen as shown.



8/ With the nut removed, pull the plate exposing the washer. Pull the washer and the upper spring seat along with the bump stop and boot as shown in this sequence.



9/ Place the HSport spring onto the lower seat and clock it so that it fits the rubber isolator contour.

10/ Before replacing the stock strut items in the order they were removed, you must shorten the bump stop by cutting exactly 1-1/8" (one inch and one-eighth) **from the top portion of the bump stop**. The picture below shows the cut piece to be removed.



11/ After the stock strut pieces have been re-installed on the shaft (including the trimmed bump stop), place the upper spring seat and washer onto the spring and locate the seat so that the rubber isolator will fit the spring end.



12/ Reinstall the strut top along with the nut and tighten using the same method as you removed it. Then slowly unwind the spring compressor and watch the spring/isolator location for exact fit.



13/ Remove the strut from the compressor and reinstall the assembly to the vehicle. Start with the upper nuts and hand tighten before installing strut bottom. **Remember, the strut top is keyed (a small nipple); be certain that it is clocked correctly!** Install strut shaft into spindle using same oe bolt, then re-attach all lines to strut shaft. Finally, re-attach sway bar end to end link.

Now For the Rear

1/ Raise the vehicle using a four-wheel lift, ramps or jack stands. Only use a level surface and only use the manufacturer's named jack points.

2/ Once raised, start with either side. In this case, we will start with the passenger side first. Remove wheel, giving you access to the spring. Free the Stability System arm from the upper a-arm. Then, disconnect end link from sway bar.

3/ Remove lower bolt connecting shock to spindle. Once the above items have been disconnected, the lower (cast) arm will have enough downward travel to free the coil itself. It is ok to use force on the cast arm as long as no other suspension components have been loosened.

4/ Once the spring has been removed and before the HSport coil is installed, you must shorten the rear bump stops by cutting them at a certain point. To do this correctly, pull down on the shock boot (black) while holding the bump stop itself in place. This will separate the two. Remove exactly 13/16" of material from the bottom half of the stop by slicing through the stop making sure not to cut unevenly as shown below.



5/ Once the horizontal line is cut, make a vertical cut through the portion to be removed from the shaft, then remove it.



6/ Finally, make four vertical cuts on the top of the boot in order to re-attach it to the remaining bump stop portion as shown. Then, attach boot to bump stop using supplied tie wraps and trim tie wrap end once tightened.



7/ Once the bump stop has been shortened, re-install shock bolt, sway bar end link and the Stability Sensor arm. Then mount wheel and torque stud bolts.

8/ Repeat this process for the opposite side.

Enjoy the ride quality and more aggressive stance of your lowered BMW. HSport is available for any questions or comments you may have regarding this installation or the performance of the above HSport product. Thank you for choosing HSport and enjoy!

Hotchkis Sport, LLC
12035 Burke Street
Suite 13
Santa Fe Springs, CA
90670

Tel: 562.907.7757

Email: info@h-sport.com or www.hotchkis.net

