



Bilstein Sport Shock Absorber Installation

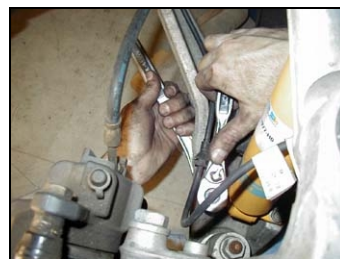


Installing Bilstein Sport Shocks (or any other for that matter) is relatively straightforward on the C5 Corvette. It requires a good set of tools, patience, and a lot of muscle. An assistant is nice to have but not required. Plan on taking at least two to four hours for all four shocks.

In addition to a jack, jack stands, and a good set of hand tools, you'll also need some specific items to complete this installation. A TORX-30 bit is needed for the tops of the new shocks. A pair of Vise Grips is also required, as is a rather large 24mm socket and wrench. Unless you have a shock compressor, a small crowbar or large screwdriver, and several large wire ties will also be needed.

We'll start with the front. First jack up the front end and support with jack stands. Next, remove both wheels and get ready to work. Use a pair of Vise Grips and a 13mm wrench to unbolt the top of the shock. The Vise Grips prevent the shock core from turning. It takes some time so be patient. Once the top is free, the bottom is pretty easy. Use a 13mm socket and your 13mm wrench to remove the bolts.

Now the fun begins. The shocks aren't that strong, but it's hard to compress them in such a tight space. Some people might be strong enough, or two people together may be able to do it. Another method is to use something to pry the shock bottom upwards to a new perch, compressing it as you go. Looping a large wire tie around the shock and shortening it as you compress the shock is also helpful. Any way you do it, it's a struggle and takes a good deal of muscle work. Take your time and it'll go well. Get frustrated, and you'll wish you never tried this installation. If you use a pry bar of some type expect some scratches, but don't worry about them, no one can see this part of the car when you're done. Once the shock is compressed and secured, pull it out from the control arm and move on. If you don't secure the shock with a wire tie, it's possible to remove it as it expands if you move very quickly.





Installing the new shocks is just the reverse. It's important to make sure the hardware is installed correctly on the top of the shock. The Bilstein shock hardware goes on in the same manner and order and the stock shock you removed. Next, compress the shocks and secure them with a good strong wire tie (or two). It's very easy to compress the shocks outside of the car.

To install the new shock, simply position it inside the control arms and cut the wire tie. Make sure you guide both ends into the proper position as the shock expands. Bolt up the bottom mount with the same hardware and tools used for removal. The top installation is similar except you'll need to put a TORX-30 bit in the top of the shock in order to have something to clamp onto.

It's hard to get a torque wrench on these bolts but you can get by without one. Tighten the bottom bolts until it takes moderate effort with hand tools. The top should be tightened until the bushing expands to the diameter of the metal retainer. Repeat for the other side, put the wheels back on, lower the front and then move on to the rear.

Jack up the rear of the car and support with jack stands. Remove both wheels and move in. The rear shocks call for a slightly different procedure. First remove the two 15mm bolts which hold the shock top mounting plate to the chassis. Once this plate is free, use the same 13mm wrench and Vise Grips from the front to unbolt the shock from the mounting plate. It's pretty tight working up there so take you time and it'll go easy (just like the front). Next use a 24mm socket and wrench to remove the bottom bolt. Once everything is free, use whatever method worked well for you on the front to remove the shock.

Installation is just like the front. Compress the shock with wire ties and put it in place. Cut the wire tie and guide the shock ends into position. Install the top mounting plate on the shock making sure you put it on the right way (with the bulge facing down) and tighten with the TORX-30 bit, Vise Grips and 13mm wrench. As with the front, tighten the bolt until the bushing expands to the diameter of the retainer. Next bolt the mounting plate up to the chassis and tighten until moderate effort is required. Reinstall the bottom bolt and tighten to the same criteria. Repeat for the other side, put the wheels back on and lower the rear.





Congratulations, you're done! Make sure to properly torque your lug nuts to 100 pounds. It's also a good idea to retighten the shock mounting bolts next time you have the wheels off.

When all said and done, this is a straightforward job. It does take some muscle, but there's no reason to pay someone else to do it.

Bilstein Sport Shocks

Approximate Street Price: \$279.95

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