Installation of Bilstein Spec-B Struts/Shocks w/STi Pink Springs on a 2005 Subaru Legacy 2.5GT (USDM)

List of necessary tools:

Floor Jack Jack Stands (2) Air Impact Air Ratchet 19mm, 17mm & 14mm standard sockets 12mm deep socket 19mm combination wrench 14mm ratcheting combination wrench 1/2" Drive Breaker Bar 1/2" Drive Breaker Bar 1/2" Drive Torque Wrench 1/2" Drive 6" extension 3/4" Torque Wrench

Front Struts:

The front JDM Bilstein Struts **WILL** require a new JDM upper strut mount to be installed in the USDM cars, the USDM front upper strut mount **WILL NOT WORK** with the **Bilstein** struts. These are JDM part number: 20320AG000 you will also need the upper strut mount dust seal, these are JDM part number: 20326AG000. Both of these can be sourced from either: <u>http://www.japanparts.com</u> or <u>http://www.avoturboworld.com</u>. Without at least the strut tops...you won't be installing these struts... Basically there is a spacer built on to the top to accommodate the bearing size in the upper strut mount, USDM uses a much larger size than the JDM, See below:



The parts you **WILL** be able to use off the USDM front struts are: the dust boot, the upper spring cushion, the upper perch and the nut to hold it all together. You **WILL NOT** be able to use the USDM bump stop...but that's OK, inverted struts (like these Bilstein's) don't use one.

Here are some more picture's of the differences between the USDM (On the Left) & JDM (On the Right) upper strut mounts:





USDM Side View



JDM Side View



Start the assembly as any other by removing the front strut and disassembling it:



Out of all those parts you will only need a few things off the USDM front struts to use on the new front Spec B struts. Parts needed are the dust boot, the spring, the top perch and the nut:



Start by snapping the USDM dust boot down into position on the Spec B strut:



Then put the spring in place (you will need to use a spring compressor at this point), place the USDM upper spring perch in place (position it properly) with the rubber isolator in place, place the Spec B strut mount in place and secure it all together with the 17mm nut and your all set! Position it in the car and secure all the bolts to the specified torque.



<u>Rear Shocks:</u>

Good news! The rear JDM **Bilstein** shocks mount identically as the USDM versions, the dust boot, rubber cushion and top mount can all be used without any issues.

<u>STi Pink Springs:</u>

As Racecomp has already told us, these springs fit perfectly with the USDM setup, since I had the suspension apart anyway, I went ahead and installed the springs on the new Bilstein Struts/Shocks.

The STi springs claim to lower the JDM 2.0GT about 15mm front & rear, that equals about 1/2" inch. The USDM 2.5GT with the Bilstein Spec-B struts gets the same 1/2" inch front and rear. It sits very level.

The ride and handling:

I installed these at Mastro Subaru so I got to take a 30 mile ride home on several different types of roads on the way home to give them a pretty good evaluation.

The car still rides exceptionally well. The Spec-B struts are, in my opinion, perfectly matched for the STi Pink Springs. The car is still quiet and very well mannered on city streets and at speed on the interstate. Acceleration from a stop feels much, much better as the rear end does not have the "sagging" feeling anymore on hard acceleration it pretty much stays flat.

That being said, on spirited romps through curves the car feels much more nimble, turn-in has improved and there is a bit less lean on sweepers. The car feels much more planted and stable than it was before and has lost the "floaty" feel at highway speeds all while maintaining it's comfort. The car feels much closer to what I thought it should feel like from the factory. The ride is firm and controlled no bounciness and not jarring. There is a slight increase in NVH, but it's not bad. As a comparison, the LegGT is still quieter than my wife's '03 Legacy. All in all, the car feels and rides wonderful, much more like a performance sedan than an everyday family sedan while still being very livable and easy to get along with.

The Spec-B struts are much, much better matched to the STi springs than the stock struts were. Body roll is almost non-existent now and the car feels much more toss able and stable, more-so than the STi pinks on the stock struts.

If I were to rate the three suspension setups I've tried: OEM Struts / springs: 6 out of 10 OEM Struts / STi Springs: 7 out of 10 **Bilstein** Spec-B Struts / STi Springs: 9 out of 10





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