



Detroit Speed, Inc.
Front Coilover Kit Single Adjustable
2010-15 Camaro
P/N: 030320

The Detroit Speed, Inc. 2010-15 Camaro Street Front Coilover Kit provides bolt-on replacement strut assemblies that are fully adjustable. The adjustable spindle bracket allows ride height to be adjusted without affecting strut travel. The ride height can still be "fine tuned" with a coilover adjusting nut on the strut body as well. The top spindle mounting holes uses removable camber slugs to positively change camber without any worry of movement or slippage like a traditional slot. In addition, the DSE strut can achieve more negative camber than the OEM strut.



LH - Driver Side

RH - Passenger Side

Item	Description	Quantity
1	Front Strut Assembly (Single Adjustable)	2
2	Coilover Spring 250# x 2.5"ID x 8"L	2
3	Spring Adapter	2
4	Camber Slug, 0	2
5	Camber Slug, 1/16"	2
6	Camber Slug, 1/8"	2
7	Camber Slug, 3/16"	2
8	Camber Slug, 1/4"	2
9	Coilover Nut Bearing	2
10	Coilover Nut Bearing Race	4
11	Endlink Adapter Sleeve	2
12	M16 x 70 Flange Bolt	4
13	M16 Flange Lock Nut	4
14	M6 Flange Lock Nut	2

1. With the car safely up on jack stands remove the front wheels.
2. Disconnect the front brake line and ABS wire from each respective tab on the OEM strut. Save the M6 bolt from the brake line tab to be re-used later. Disconnect the front sway bar end link from the OEM strut.
3. Place a floor jack under the spindle or lower control arm to support the suspension while the strut is removed. Remove the two M16 nuts & bolts attaching the strut to the spindle. At this time the spindle should swing clear of the strut assembly. (Figure 2)

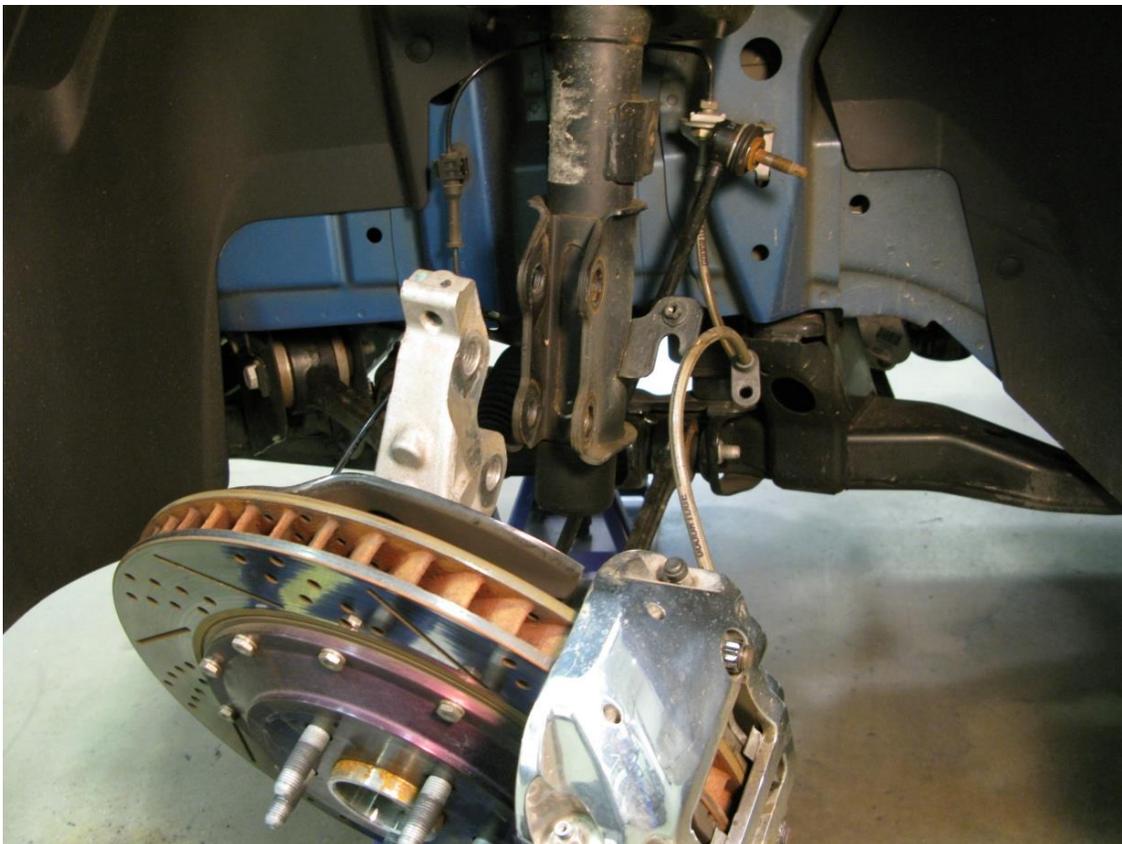


Figure 2

4. Remove the plastic nut cover on top of the strut tower. The nut holding the rebound plate to the strut should now be exposed. Break the rebound plate nut loose, but don't fully remove yet. Remove this nut and the rebound plate with one hand while holding the strut assembly with your other hand so it doesn't fall. Remove the OEM strut assembly from the wheel house.
5. Remove the OEM upper strut mount from the stock strut assembly. If your car has stock springs an external spring compressor will be necessary to relieve the spring load. The upper nut can now be removed along with the cone washer and upper mount. These parts will be transferred onto the DSE strut. The upper spring isolator will not be necessary and can be removed. (Figures 3 and 4)



Figure 3 - Stock Strut Assembly



Figure 4 - Upper Mount, Cone Washer and Nut

6. The DSE strut comes pre-assembled up to the point of loading the spring. Grease and place the coilover nut bearing assembly onto the coilover nut followed by the coilover spring and spring adapter. At this point transfer the upper mount, cone washer, and nut from the stock strut to the DSE strut. Snug the upper nut then turn the coilover nut to remove any free play in the spring assembly. Using a 3/4" wrench, hold the shaft at the provided flats just below the spring adapter to final torque the upper nut to 52 ft/lbs. (Figures 5 and 6)

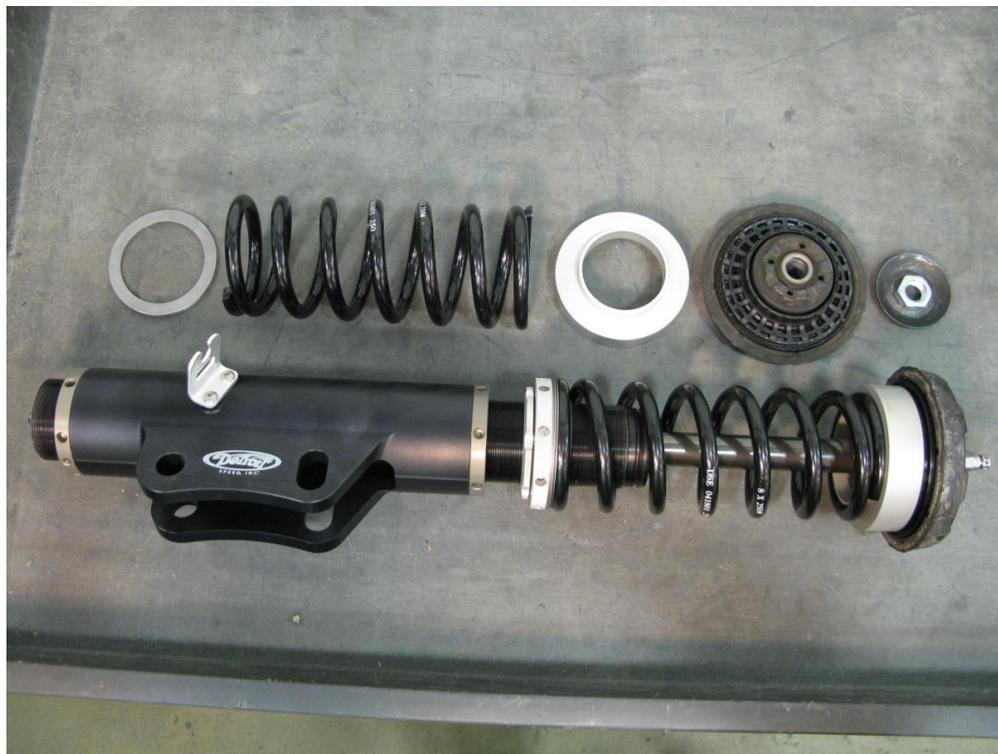


Figure 5 - LH, Driver Side



Figure 6

7. The DSE strut assembly can now be loaded into the vehicle. Start by inserting the top of strut up into the strut tower. Again, while holding the strut up into the strut tower with one hand install the rebound plate and nut on the top side of the strut tower with your other hand. Do not fully tighten the rebound plate nut at this time.
8. Insert a "0" camber slug into the recessed oval slot in the DSE strut. **WARNING:** When using the 3/16" or 1/4" camber slugs, you may be required to slightly clearance the radius on the spindle as it may interfere with the coilover shock mounting tabs. Attach the spindle to the new strut using the M16 flange head bolts and nuts provided. Torque the M16 nuts to 59 ft/lbs +180deg.
9. Go back and final torque the rebound plate nut to 52 ft/lbs.
10. Attach the front sway bar end link to the DSE strut. There are two possible end link stud sizes your car could have, M10 or M12. If you have the more common smaller M10 size, insert the provided sleeve adapter into the end link mounting hole. If you have the HD M12 version you simply omit the adapter sleeve. Torque the M10 end link nut to 36 ft/lbs. Torque the M12 end link nut to 52 ft/lbs. (Figure 7)



Figure 7 - Sleeve Adapter

11. Attach the front brake line to the tab on the DSE strut. Install the M6 bolt saved from earlier from the outboard side and secure with the provided M6 flange nut. Clip the ABS wire grommet into the provided tab on the DSE strut. (Figures 8 and 9)

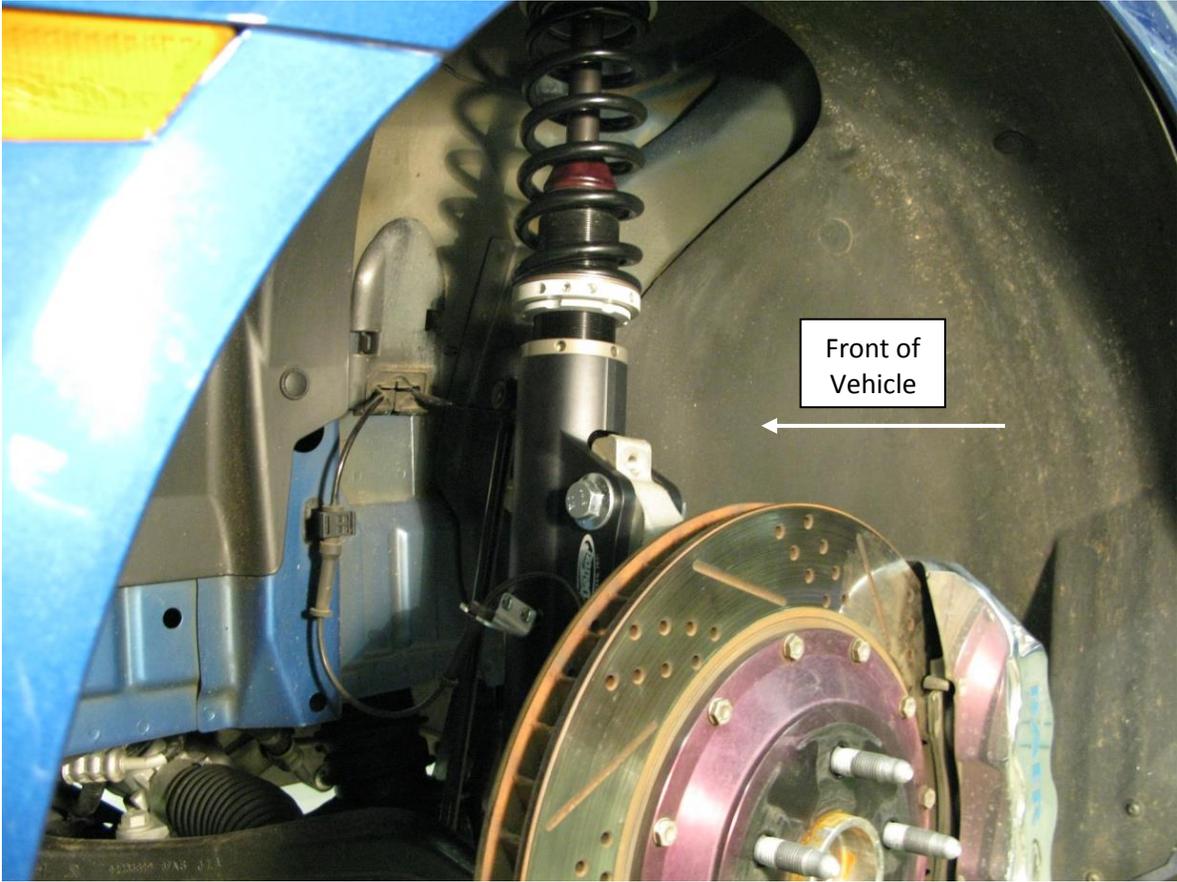


Figure 8

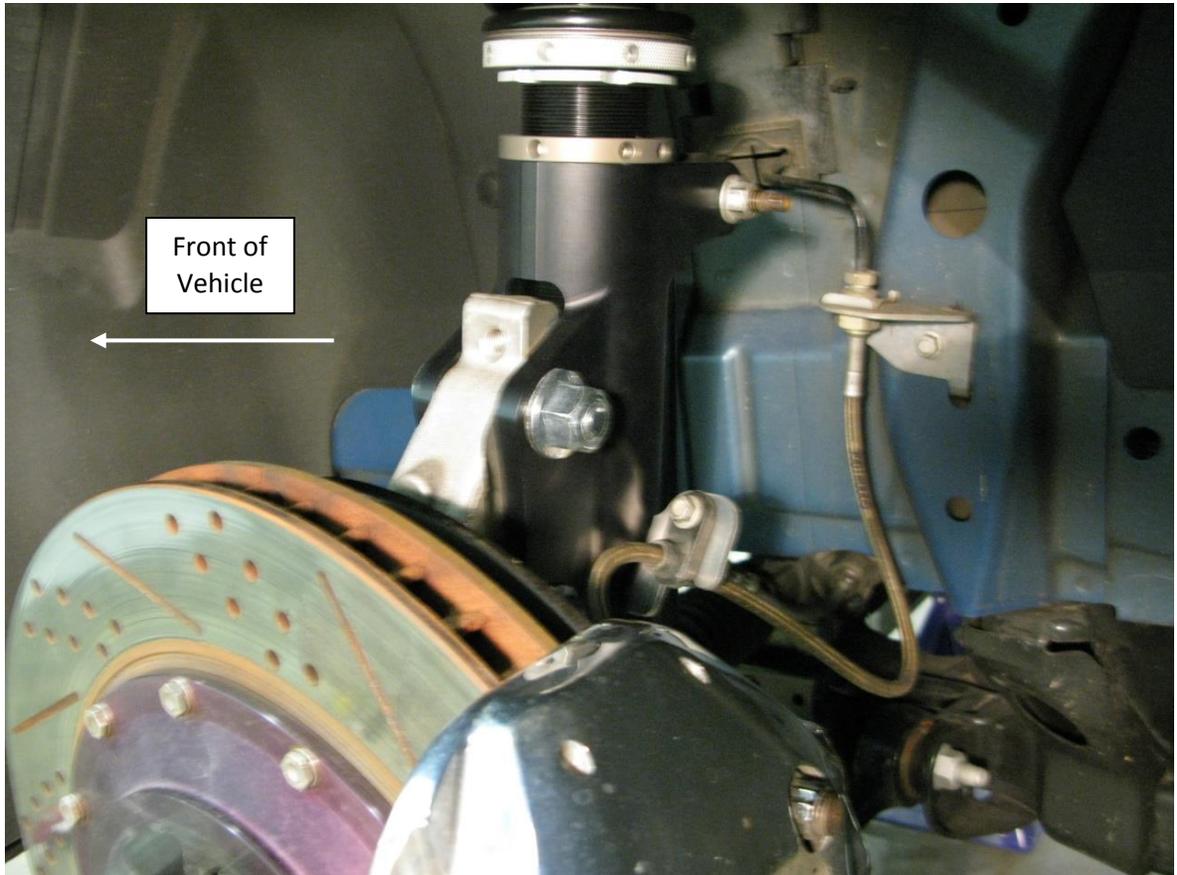


Figure 9

12. Repeat these steps for the other side of the vehicle.
13. Put the front wheels back on and torque the lug nuts to proper OEM specs.
14. Final set the ride height using the coilover nuts. Lock the coilover jam nut when finished.
 - a. With the vehicle assembled with all components installed, adjust the vehicle ride height. Before adjusting the ride height, DSE recommends cleaning the threads of the shock. Once the threads are clean, DSE recommends applying dry bicycle chain lube to the threads of the shock body before adjusting the spanner nut and compressing the coilover spring. Allow the chain lube to dry before adjusting the spanner nut. If you have the non-adjustable shocks, the spanner nut has a soft tip set screw that will need to be tightened before the vehicle is driven.
 - b. Detroit Speed does include a Spanner Tool (P/N: 031060) to adjust ride height as shown in Figure 10.



Figure 10 - DSE Spanner Tool

Figure 11 below shows recommend alignment settings for performance street use.

Alignment Specifications	
Front	
Camber	-0.50° (-0.25° to -0.75°)
Caster	6.25° (Can be adjusted with DSE caster kit)
Toe	1/16" Toe-in (1/32" to 3/32")

Figure 11 - Specifications are listed as nominal with a range in parentheses

