

RACECOMP ENGINEERING

2005-2007 WRX/STI (5x114) SS2 Coilovers Installation Instructions

DISCLAIMER: PLEASE READ

We (Racecomp Engineering) are not responsible for any issues resulting from improper installation. Removal and installation of suspension components may be dangerous, as parts may be under compression and are likely to shift unexpectedly, causing serious injury or death. Installation should be performed by an ASE certified Subaru technician. Unless you are a technician by trade, you should not attempt installation of this part. Please use caution when driving your vehicle after installation, as handling characteristics may have changed dramatically.

Before installation, please read the following manual carefully

1. Check the package for shipping damage. If damaged, please take the following steps ASAP:

- A. Take pictures before unpacking
- B. Unpack the box and check for damaged parts
- C. Take pictures of damaged parts
- D. Contact Racecomp Engineering

2. Check the contents of the package ensuring everything is received. If any of these items are missing, please contact us.

- A. x2 Racecomp Engineering SS2 front struts w/ top mounts
- B. x2 Racecomp Engineering SS2 rear struts w/ top mounts
- C. x1 Spanner Wrench
- D. x1 Allen key (2mm)



Racecomp Engineering products are produced and assembled with the highest quality ensuring an easy install. However, sometimes complications arise during installation. In that case, please contact Racecomp Engineering.

Rebound Adjustment

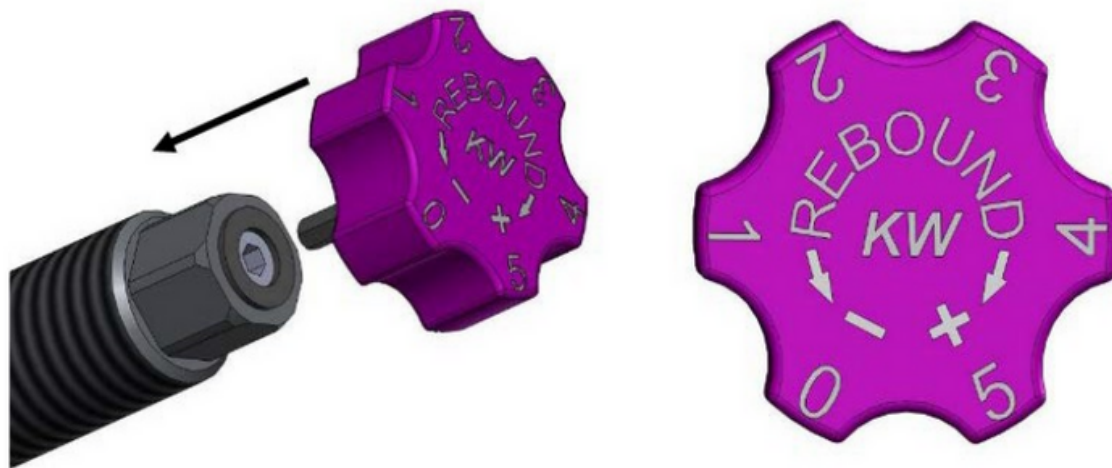


Never apply force to the adjusting mechanism of the shock absorber. As soon as you reach the end of the adjustment range, you will recognize a certain resistance. STOP turning to avoid damage to the bottom valve.

Rebound controls how the damper extends back over bumps and during body roll. Adding rebound reduces excessive movement of the chassis and improves stability. Too much rebound can reduce overall grip in cornering, transitions, and traction coming out of slow speed corners.

The adjustment knob included with the kit must be inserted in the top of the piston rod. A 2mm allen wrench can also be used.

With clockwise rotation of the adjustment wheel the rebound damping will become harder. With anti-clockwise rotation the rebound damping will become softer. The click directions are labeled with "+" (harder) and "-" (softer) on the adjustment wheel



IMPORTANT NOTES:

1. We recommend the use of a vehicle hoist or lift when installing the suspension. If a lift is not available and jacking equipment is used, make sure that the vehicle is secured with jack stands to ensure safety.
2. The suspension components may only be installed by a trained and certified technician using proper tools.
3. Never use impact wrenches or guns to install or remove shock absorber piston hardware. **A strap wrench is highly recommended to secure shock shaft.**
4. It is imperative that you do not damage the piston rod surface, through the use of pliers, etc. as the smallest damage will result in seal damage and **will not be covered under warranty.**
5. Never disassemble or cut open shock absorbers and/or shock absorber inserts. They contain oil under pressure. Danger of explosion.
6. Ensure that the set screw on each spring collar is tightened to prevent movement of the spring perch after install. Do NOT over tighten set screws on spring perches.
Maximum torque is 0.74 - 1.47 ft-lbs
7. After assembly and installation is complete, the vehicle should be rolled onto level ground. Once on level ground, measure the vehicle height and adjust to your specifications, within the lowering range specified earlier.
8. Examine the clearance between the tires and the suspension over the full range of motion of the wheel. **The minimum clearance between the suspension and the tire is 5mm.**
9. Use OEM strut bolts. We do not recommend the use of aftermarket camber bolts.
10. Have the car aligned to ensure camber and toe are corrected (caster if available)

Ride Height

Before installation, roll the vehicle onto level ground. Then measure the ride height and note the measurements in the table below.

Measure from top of the fender (A) to center of the hub (B)

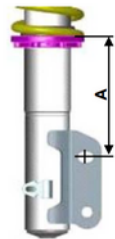


	Left	Right
Front		
Rear		

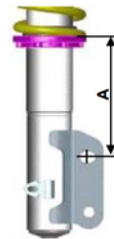
RECOMMENDED HEIGHT SETTINGS

Ride height should be set AFTER coilovers are fully assembled

FRONT STRUT



REAR STRUT



Approximate adjustment range* A in mm	min:	max:	min:	max:
	25 mm / 1 inch	55 mm / 2,2 inch	50 mm / 2 inch	80 mm / 3,1 inch

⚠ GOING BELOW THE MINIMUM COULD VOID WARRANTY CLAIM ⚠

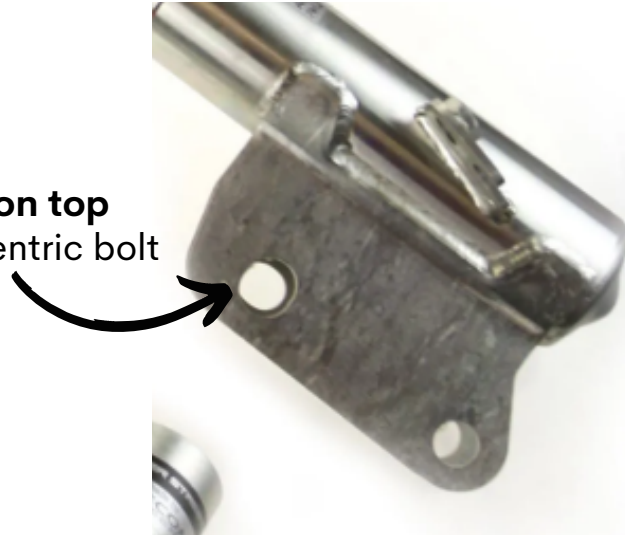
Approximate wheel hub center to fender edge measurement** B in mm	min:	max:	min:	max:
	340 mm / 13,4 inch	370 mm / 14,6 inch	325 mm / 12,8 inch	355 mm / 14 inch



Camber Adjustment

Racecomp Engineering's Super Street 2 coilovers provide two points of camber adjustment.

(1) Slotted strut tab on top
With use of OEM eccentric bolt



(2) Adjustable camber plates

To adjust front camber, loosen the 4 Torx bolts on the top of the plate and slide the bearing carrier to achieve desired specs.

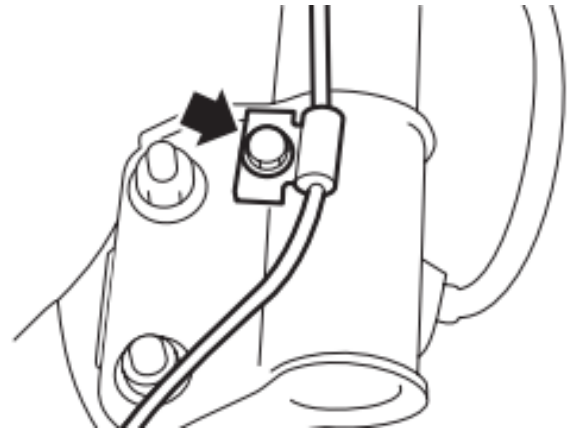
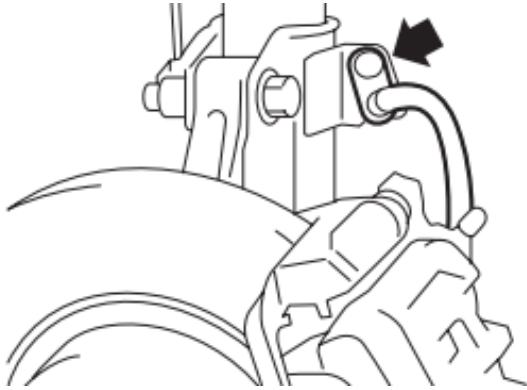


Torque Spec
Torx Bolt: 17 ft-lbs

NOTE: Always begin with the eccentric bolt on the lower strut when adjusting camber. Fine adjustments can be made via camber plates

Front Strut Installation

1. Carefully remove the bolt securing both the brake line and ABS line from the front strut.



2. Remove the two 19mm nuts/bolts that attaches the front strut to the hub



3. While having the strut supported or held in place, carefully remove three upper 12mm nuts that fasten strut top mounts to chassis.



4. Once all three 12mm top nuts are removed, ensure the abs and brake line are out of the way and remove the strut from the car.

5. Install assembled Super Street 2 coilovers by guiding the shock up ensuring the camber plate is situated correctly (see below). Secure the three bolts on the top mount to the car.



6. Carefully guide the bottom of the strut to the hub and insert the two 19mm bolts.
****Top clevis tab is slotted; bolt can only go in one direction****

7. Attach brake and ABS line to strut. Be careful not to pinch or tangle the ABS and brake lines.

8. Repeat step 1-7 for the other side.

TORQUE SPECS

- **ABS line: 24 ft-lbs**
- **Brake line: 24.3 ft-lb**
- **Wheel lug nuts: 74 ft-lb**
- **Lower clevis bolts/nuts: 129 ft-lb**
- **Top mount to chassis nuts: 15 ft-lb**



Rear strut Installation

1. Remove rear seats to access the three 12mm top nuts on the rear struts for both sides. Remove 3 top nuts.
2. Remove the clamp connecting the brake line to the strut.
3. Remove two 19mm bolts connected to the hub and carefully remove strut from vehicle.
4. Carefully install the rear struts by guiding up the top mount and securing the three top nuts to the vehicle
5. Reinstall the two 19mm bolts to the hub. Reinstall brake line via clamp.
6. Repeat step 1-5 for the other side.
7. Install and torque wheels. Roll the car on level ground and check ride height. Adjust if needed



TORQUE SPECS

- **Wheel lug nuts: 74 ft-lb**
- **Lower clevis bolts/nuts: 129 ft-lb**
- **Top mount to chassis nuts: 15 ft-lb**