

COILOVER INSTALLATION STEPS

1. With the car parked on level ground and the e-brake engaged, lift the front of the car so that both front wheels are off the ground and place jack stands in the appropriate locations.
2. Lower the vehicle onto the jack stands and remove the wheels. Place a floor jack under the spindle to support the suspension.
3. Uninstall the coilover by first removing the sway bar end link from the coilover body. Remove the coilover from the top hat/camber plate by loosening the shock nut. When the shock nut is unthreaded, the suspension assembly can be lowered using the floor jack.
4. Then unbolt the top hat/camber plate from the strut tower by removing the 3 strut tower bolts.
5. Remove the t-nuts, tower bolts, tower washers from CasCam and set them side. Place some grease on the top of the plate where it would touch the underside of the strut tower. Remove the camber bolts and camber washers. Place grease on the tabs of the bearing housing that faces the underside of the base plate. Place blue Loctite on the camber bolt threads and reinstall the bearing housing into the base plate using the camber bolts and washers.
6. Clean the underside of the strut tower where the base plate would reside. Install the CasCam into the strut tower by lining the strut tower holes up with the slots in the base plate so you can install the t-nuts with the tower washers and tower bolts. Put some grease on top of the t-nuts where they engage with the bottom of the base plate and blue Loctite on the tower bolt threads. You'll need to hold the t-nut from the bottom to hand-thread the tower bolts and tower washers from the top of the strut tower. Snug tighten the tower bolts for now.
7. Slide the Raceseng spring perch onto the coilover shock shaft. Make sure the spring perch is seated onto the shoulder of the coilover shock shaft. See the "Section View" image for reference.
8. Use the floor jack under the spindle to slowly pass the coilover shock shaft up and into the CasCam bearing housing. There is a stainless steel shoulder bushing pressed into the spring perch, that bushing will go into the spherical bearing in the bearing housing. See the "Section View" image for reference. Keep upward pressure on the spindle so the coilover assembly stays pressed into the CasCam.
7. Thread the included shock nut onto the shock shaft. Before reaching the spherical bearing, place some blue Loctite onto the shock shaft threads and tighten the shock nut.
8. Reinstall the sway bar end link.
9. Adjust your camber by loosening the 4 camber bolts and sliding the bearing housing towards the engine to gain negative camber and away from the engine to gain positive camber. Each camber graduation mark on the base plate represents approximately .25° degrees. Tighten the camber bolts to 13 ft/lbs. once your desired camber is achieved.
10. Adjust caster by loosening the 3 tower bolts. Slide the base plate to the rear of the car to gain positive caster and towards the front to decrease caster. Tighten and torque the tower bolts to 20 ft/lbs.
11. Once your suspension is reassembled, double check all hardware and components for proper tightness and installation.
12. Repeat process on other side of vehicle then reinstall your wheels, torquing the lugs to the manufacturer specs.
13. Once the car is back on the ground, make sure the fender isn't contacting your tires during suspension travel. If additional caster or camber adjustments need to be made, lift the front of the car so both wheels are off the ground. This allows making adjustments easier because the load is released from the suspension.



CASCAM CASTER + CAMBER PLATES

2012+ SCION FR-S / SUBARU BRZ

COILOVER INSTALLATION

WHAT'S IN THE BOX?

- » (2) Bearing Housings (Left and Right)
- » (2) Base Plates (Left and Right)
- » (2) Shock Nuts
- » (2) Spring Perches
- » (6) T-Nuts
- » (6) Tower Bolts
- » (6) Tower Washers
- » (8) Camber Washers
- » (8) Camber Bolts

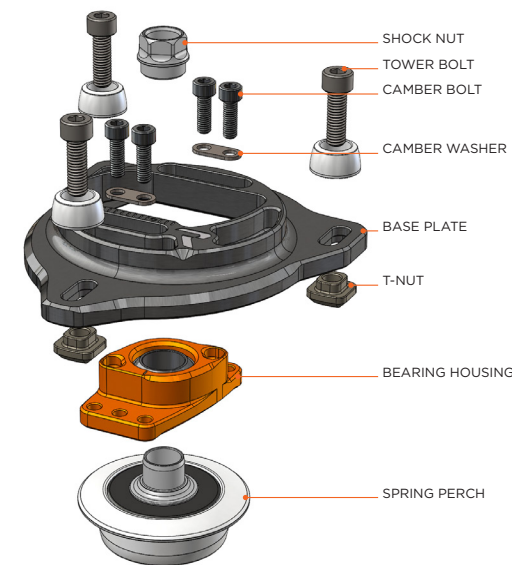
TOOL YOU WILL NEED

- » 5mm & 6mm Allen Socket and Ratchet
- » 100+ ft/lbs. Torque Wrench
- » Adjustable Wrench
- » 18mm Combination Wrench
- » 6mm T-Handle Allen Wrench
- » 17mm Max Axess Socket and Ratchet
- » Strut Spring Compressor
- » Short Extension 3/8" Drive
- » Grease
- » Blue Loctite

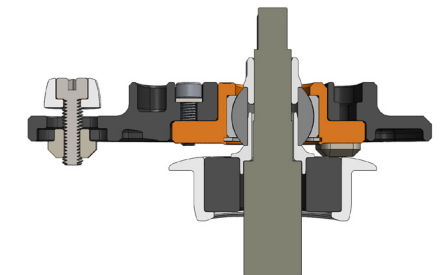
NOTES

If you are not a certified technician or aren't confident in doing this work yourself, it is strongly recommended to have a certified technician perform the work. Serious injury and/or property damage will result from not using proper tools and techniques. Don't try it, if you've never done it before, it is not worth the risk.

EXPLODED VIEW



SECTION VIEW



NEED TECH HELP?

E-mail us at tech@raceseng.com
Call our tech team 610.336.0206
RACESENG.COM



COILOVER INSTALLATION STEPS

1. With the car parked on level ground and the e-brake engaged, lift the front of the car so that both front wheels are off the ground and place jack stands in the appropriate locations.
2. Lower the vehicle onto the jack stands and remove the wheels. Place a floor jack under the spindle to support the suspension.
3. Uninstall the coilover by first removing the sway bar end link from the coilover body. Remove the coilover from the top hat/camber plate by loosening the shock nut. When the shock nut is unthreaded, the suspension assembly can be lowered using the floor jack.
4. Then unbolt the top hat/camber plate from the strut tower by removing the 3 strut tower bolts.
5. Remove the t-nuts, tower bolts, tower washers from CasCam and set them side. Place some grease on the top of the plate where it would touch the underside of the strut tower. Remove the camber bolts and camber washers. Place grease on the tabs of the bearing housing that faces the underside of the base plate. Place blue Loctite on the camber bolt threads and reinstall the bearing housing into the base plate using the camber bolts and washers.
6. Clean the underside of the strut tower where the base plate would reside. Install the CasCam into the strut tower by lining the strut tower holes up with the slots in the base plate so you can install the t-nuts with the tower washers and tower bolts. Put some grease on top of the t-nuts where they engage with the bottom of the base plate and blue Loctite on the tower bolt threads. You'll need to hold the t-nut from the bottom to hand-thread the tower bolts and tower washers from the top of the strut tower. Snug tighten the tower bolts for now.
7. Slide the Raceseng spring perch onto the coilover shock shaft. Make sure the spring perch is seated onto the shoulder of the coilover shock shaft. See the "Section View" image for reference.
8. Use the floor jack under the spindle to slowly pass the coilover shock shaft up and into the CasCam bearing housing. There is a stainless steel shoulder bushing pressed into the spring perch, that bushing will go into the spherical bearing in the bearing housing. See the "Section View" image for reference. Keep upward pressure on the spindle so the coilover assembly stays pressed into the CasCam.
7. Thread the included shock nut onto the shock shaft. Before reaching the spherical bearing, place some blue Loctite onto the shock shaft threads and tighten the shock nut.
8. Reinstall the sway bar end link.
9. Adjust your camber by loosening the 4 camber bolts and sliding the bearing housing towards the engine to gain negative camber and away from the engine to gain positive camber. Each camber graduation mark on the base plate represents approximately .25° degrees. Tighten the camber bolts to 13 ft/lbs. once your desired camber is achieved.
10. Adjust caster by loosening the 3 tower bolts. Slide the base plate to the rear of the car to gain positive caster and towards the front to decrease caster. Tighten and torque the tower bolts to 20 ft/lbs.
11. Once your suspension is reassembled, double check all hardware and components for proper tightness and installation.
12. Repeat process on other side of vehicle then reinstall your wheels, torquing the lugs to the manufacturer specs.
13. Once the car is back on the ground, make sure the fender isn't contacting your tires during suspension travel. If additional caster or camber adjustments need to be made, lift the front of the car so both wheels are off the ground. This allows making adjustments easier because the load is released from the suspension.



CASCAM CASTER + CAMBER PLATES

2012+ SCION FR-S / SUBARU BRZ

COILOVER INSTALLATION

WHAT'S IN THE BOX?

- » (2) Bearing Housings (Left and Right)
- » (2) Base Plates (Left and Right)
- » (2) Shock Nuts
- » (2) Spring Perches
- » (6) T-Nuts
- » (6) Tower Bolts
- » (6) Tower Washers
- » (8) Camber Washers
- » (8) Camber Bolts

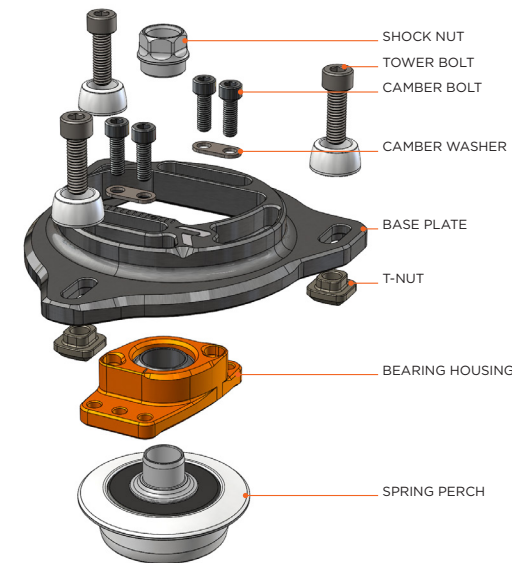
TOOL YOU WILL NEED

- » 5mm & 6mm Allen Socket and Ratchet
- » 100+ ft/lbs. Torque Wrench
- » Adjustable Wrench
- » 18mm Combination Wrench
- » 6mm T-Handle Allen Wrench
- » 17mm Max Axess Socket and Ratchet
- » Strut Spring Compressor
- » Short Extension 3/8" Drive
- » Grease
- » Blue Loctite

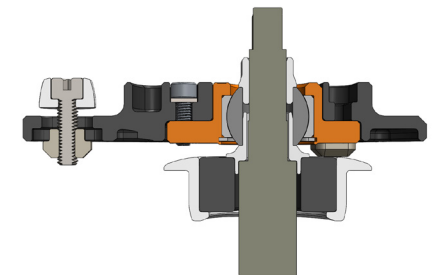
NOTES

If you are not a certified technician or aren't confident in doing this work yourself, it is strongly recommended to have a certified technician perform the work. Serious injury and/or property damage will result from not using proper tools and techniques. Don't try it, if you've never done it before, it is not worth the risk.

EXPLODED VIEW



SECTION VIEW



NEED TECH HELP?

E-mail us at tech@raceseng.com
Call our tech team 610.336.0206
RACESENG.COM

