#### OEM STRUT INSTALLATION STEPS

**1.** With the car parked on level ground and e-brake engaged, lift front of car so that both front wheels are off the ground and place jack stands in appropriate locations.

2. Lower vehicle onto jack stands, remove wheels and support suspension with floor jack.

**3.** Uninstall the strut by first removing the brake line mount and ABS sensor from the strut. Unbolt the sway bar end link from the strut, then remove the bolts which hold the strut to the spindle. Unbolt the strut from the strut tower by removing the 3 strut tower bolts while supporting/holding the strut with one hand.

4. Secure the OEM strut in a vise and compress the spring using the strut spring compressor.

**5.** Once the spring perch is relieved from any spring pressure, us the 6mm t-handle allen wrench and 17mm Max Axess Ratchet to remove the strut nut.

6. Remove the t-nuts, tower bolts, tower washers from CasCam. Place some grease on the camber 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.

With the factory strut top and spring perch removed, slide your Raceseng spring perch onto the strut shaft, then place the CasCam onto the spring perch.

7. Thread the included shock nut, NOT the factory 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. Evenly and slowly relieve the spring compressors to engage your spring into the spring perch.

**9.** Install the assembled strut back into the car by bolting it to the spindle. Remember to attach the brake line anchor, ABS sensor wire onto the strut body. Reinstall the sway bar end link.

**10.** Clean the underside of the strut tower where the base plate would reside. Use the floor jack to lift the strut assembly into place by jacking on the bottom of the spindle. Line 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 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.

**11.** 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.

**12.** 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.

**13.** Once your suspension is reassembled, double check all hardware and components for proper tightness and installation.

**14.** Repeat process on other side of vehicle then reinstall your wheels, torquing the lugs to the manufacturer specs.

**15.** Once the car is back on the ground, make sure the fender isn't contacting your tires during suspension travel.



# **Raceseng**

# CASTER + CAMBER PLATES

2012+ SCION FR-S / SUBARU BRZ

# **OEM STRUT 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

NOTES

- » (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

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





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