

# 2015-2017 WRX/STI BILSTIEN INSTALLATION GUIDE



### **Package Contents:**

- 2x Front Struts w/ Internal Bump Stops
- 2x Front Top Nuts/Washers
- 2x Rear Shocks w/ Bump Stops
- 2x Rear Top Nuts
- 2x Rear Lower Spring Perches
- 2x Front Dust Boots
- 2x Rear Dust Boots

## **Optional:**

- 2x Front springs
- 2x Rear springs

### **Tools Needed:**

19mm Socket (6 point)

19mm Open End Wrench

12mm Socket

14mm Deep Socket

14mm Open End Wrench

17mm Socket (6 point)

17mm Open End Wrench

6mm Allen key

Torque Wrench

**Spring Compressor** 

Flat Head Screwdriver

Impact Gun (Optional)

**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 drastically.

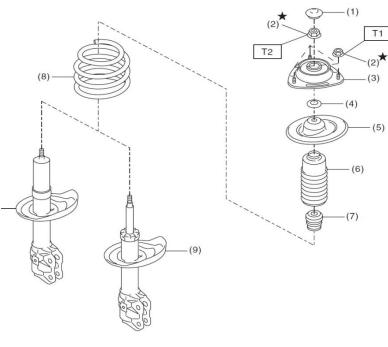
# **Installation Instructions for Front Springs:**

- 1) Jack up vehicle, place on jack stands, and remove wheels.
- 2) Remove brake line and ABS wire from front strut.
- 3) Remove two lower 19mm clevis nuts/bolts.
- 4) Remove three upper 12mm nuts that fasten strut top mounts to chassis.
- 5) Remove strut/spring assembly from vehicle.
- 6) Compress spring using wall mounted or hand operated spring compressors.
- 7) Remove center top nut and pull top mount, conical washer, upper spring perch off the strut.
- 8) Compress RCE Yellow or Black spring using spring compressors and place onto strut, making sure that it is oriented correctly in the spring seat.
- 9) Transfer the rubber spring isolator, upper spring perch, conical washer, and top mount onto the new GTWorx/Bilstein strut. Make sure that all parts are aligned correctly\*\*IMPORTANT\*\* MAKE SURE THE TOP PERCH IS ALIGNED CORRECTLY AS SHOWN BELOW

TOP PERCH ALIGNMENT

#### ORIENTATION OF FRONT STRUT

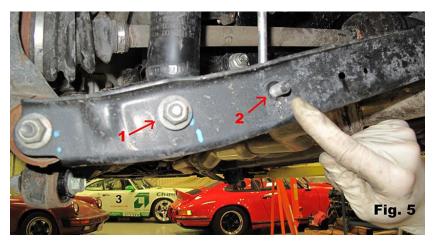




- 10) Install included Nylon top nut and torque to 41 ft-lb.
- 11) Install completed strut/spring assembly onto vehicle and torque all bolts:
  - Top mount to chassis nuts: 14.5 ft-lb
  - Lower clevis bolts/nuts: 129 ft-lb
  - ABS sensor wire: 24.3 ft-lb
  - Brake line: 23.6 ft-lb
- 12) Repeat process for other side.
- 13) Torque wheels to 89 ft-lb

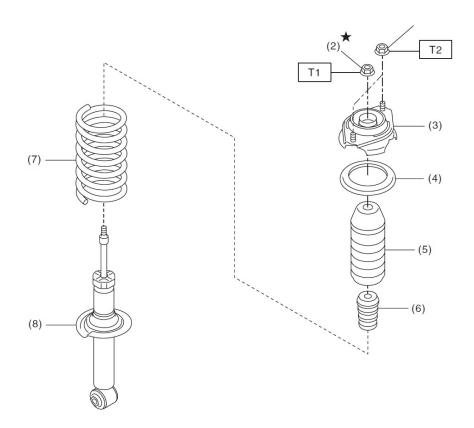
# **Installation Instructions for Rear:**

1) Remove bolt/nut that attaches shock to swingarm (1) and swaybar endlink to swingarm (2)



- 2) Remove trunk mat and plastic side covers to expose tops of rear shocks.
- 3) Remove two upper nuts that fasten top mounts to chassis.
- 4) Push down on swingarm and remove shock from vehicle.
- 5) Remove center top nut and remove top mount, dust boot, and spring from shock.
- 6) Compress RCE Yellow or Black spring using spring compressors and place onto shock, making sure that it is oriented correctly in the spring seat
- 7) Transfer rubber spring isolator, top mount onto the springs, making sure to orient the top mount so the mounting studs are parallel to the lower shock mounting hole.

#### ORIENTATION OF REAR SHOCK



- 8) Install included Nylon top nut onto shock and torque to 41 ft-lb. Pull up on the top mount as you are tightening the top nut to keep pressure on the nut and prevent the shaft from spinning.
- 9) Install completed shock/spring assembly onto vehicle and torque all bolts:
  - Top mount to chassis nuts 22.4 ft-lb
  - Shock to swingarm 89 ft-lb
  - Swaybar endlink to swingarm 33.2 ft-lb
- 11) Reinstall trunk mat and plastic side covers.
- 12) Repeat process for other side.
- 13) Reinstall wheels and torque lug nuts to 89 ft-lb.
- 14) Remove car from jack stands. Get an alignment and enjoy your new suspension!

