Part	Part Name	Quantity
1	Front Strut	2
2	Main Spring	2
3	Helper Spring	2
4	Lower Spring Seat	2
5	Locking Perch	2
6	Helper Guide (This may be black or blue depending on spring size)	2
7	Camber/Caster Plate	2
8	Strut Adapter Sleeve	2
9	Thrust sheet (2x Delrin & 3x Stainless per side - possibly substituted for Torrington Bearing)	10
10	Upper Spring Perch	2

Photo of parts with components labeled according to part number in table above

Note: Right side assembly shown. Sway bar mount (A) faces rear of car with adapter index (B) facing inboard



1



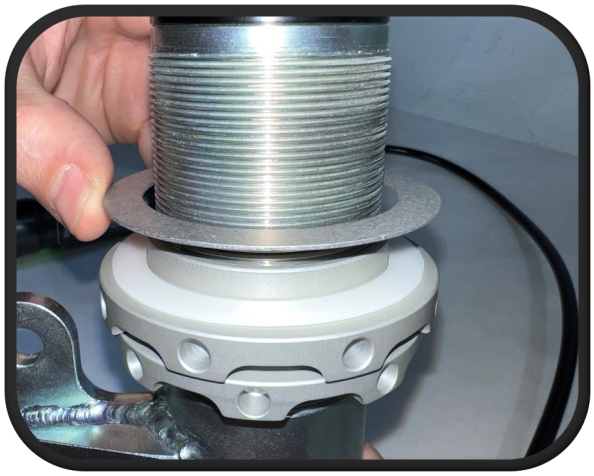
- Note: Do not disconnect the quick disconnect without discharging the system first. Refer to instructions provided by MCS.

2



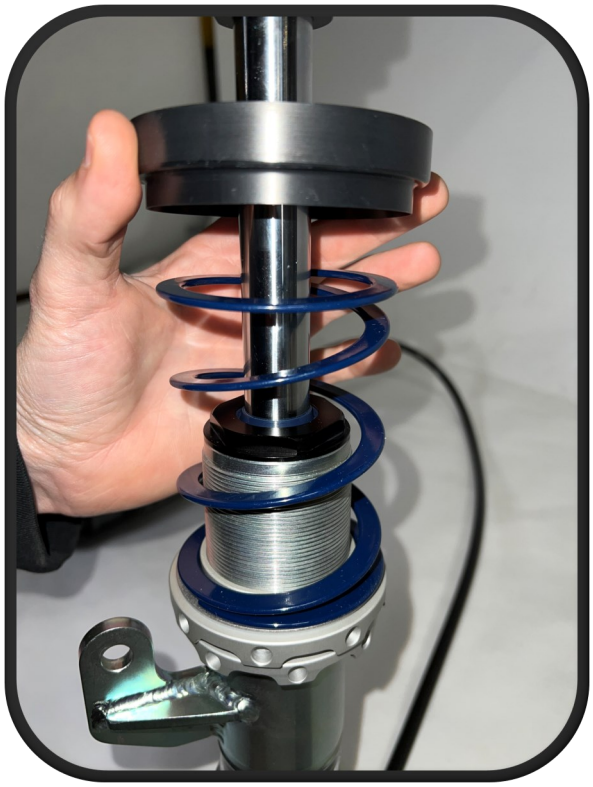
- Thread the locking perch and the spring seat onto the front shock as shown. Note the orientation shown in the photo.

3



- Install the thrust sheets onto the face of the spring seat.
- The delrin thrust sheet is installed first and is sandwiched between the spring seat and the stainless thrust sheet.

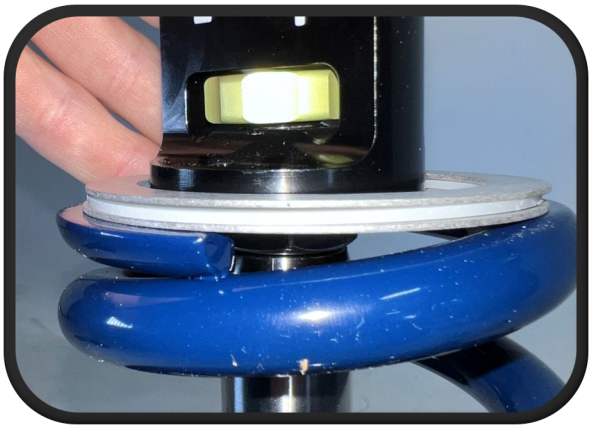
4



- The helper spring is next to go on the assembly, sitting on top of the stainless thrust sheet.
- The helper guide is then placed onto the helper spring, note the orientation as shown in the photo.

Note : Ensure that your helper guide is the correct size for your main spring. The main spring should fit loosely within the ID of the helper guide, and sit flat against the helper guide.

5



- Prepare your second set of thrust sheets, this stack has two stainless rings with a delrin sheet between them.
- One stainless ring will be in contact with the spring and the other with the spring perch.

6



- With the thrust sheets sitting on top of the main spring, compress the spring assembly and feed the spring perch around the shock shaft and set it into place.

  Note: While this is doable with one person, having a second set of hands will make this process smoother. You can also adjust the spring perch down to make installation easier.



- See second photo as a reference for a fully seated spring perch and thrust sheet assembly.

7



- You will now have a full front coil over assembly.

Part	Part Name	Quantity
1	Camber Plate	2
2	Camber Adjustment “Pills”	14
3	Caster Adjustment Spacers	8

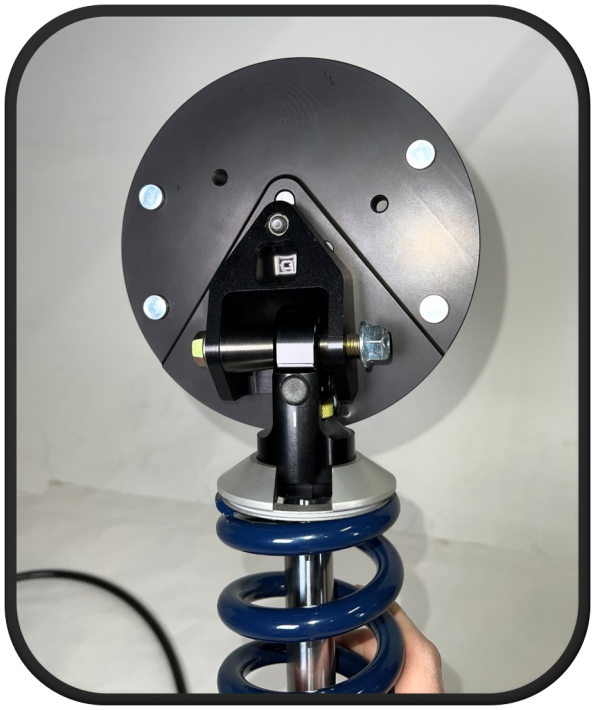
Photo of parts with components labeled according to part number in table above

Note: The Camber Plates come with an assortment of Camber Pills that are used to lock in 1 of 13 camber settings.

The Caster Spacers allow you to choose 1 of 3 caster settings.

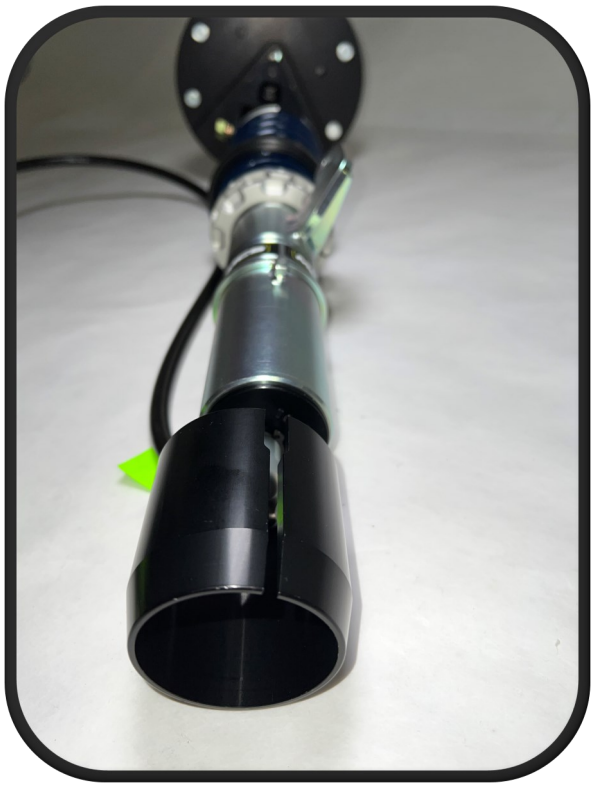


8



- Install the camber plate onto the top of the assembly.
- Maximum caster is a good starting setup, do this by using the offset spacers to angle the strut so it is leaning towards the rear of the car.
- Torque hardware to 72 N·m [53 lbf·ft]

9



- Slip on the strut adapter sleeve to match the index on the strut. You will need to discharge the system and disconnect the quick disconnect to do this.

Note: Ensure that the system has been discharged before disconnecting. This will help to prevent issues when reconnecting the fitting.

- The strut assembly is now ready to be installed into the car. Once completed, reconnect the quick disconnect and charge damper to 150psi as a baseline.

  Note: For charging and discharging please refer to the MCS instructions

Part	Part Name	Quantity
1	Rear Shock	2
2	Helper Spring	2
3	Clevis Mount with Spacers	2
4	Locking Perch (Spring Seat and Locking Perch may be substituted for a single perch and set screw)	2
5	Helper Guide (This may be black or blue depending on spring size)	2
6	Main Spring	2
7	Shock Mount Spacers	2
8	Spring Seat	2
9	Thrust sheet (2x Delrin & 3x Stainless - possibly substituted for Torrington Bearing)	10
10	Spring Perch (Tall or short perch may be used depending on setup)	2

Photo of parts with components labeled according to part number in table above

Note: Rear Shocks are not side dependent. Mount shock with banjo fitting (A) inboard for both Inverted and non-inverted setups.



10



- The tall spring perch is to be used with an inverted rear configuration and when a GTMore rear sway bar is installed - which provides additional clearance against the spring.
- Inverted rear shock shown in photo.

11



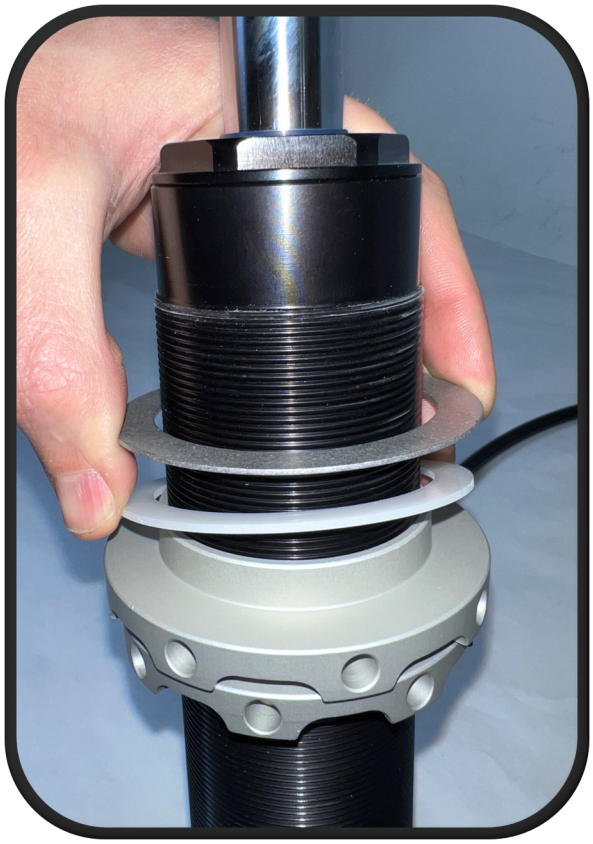
- The flat perch is to be used with a non-inverted rear shock configuration and when a non-GTMore rear sway bar is installed. This will position the spring slightly above the rear sway bar.
- Non-Inverted rear shock shown in Photo.

12



- Thread the locking perch and the spring seat onto the rear shock. Note the orientation as shown in the photo.

13



- Install the thrust sheets onto the face of the spring seat.
- The delrin thrust sheet is installed first and is sandwiched between the spring Seat and the stainless thrust sheet.

14



- The helper spring is next to go on the assembly, sitting on top of the stainless thrust sheet.
- The helper guide is then placed onto the helper spring, noting the orientation as shown in the photo.

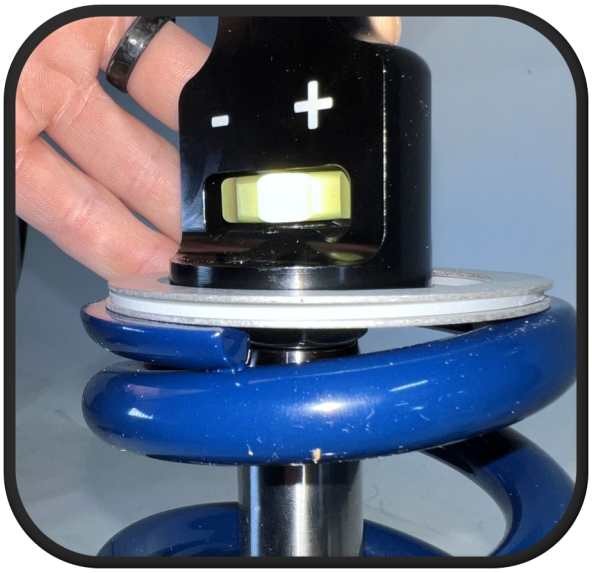
Note : Ensure that your helper guide is the correct size for your main spring. The main spring should fit loosely within the ID of the helper guide, and sit flat against the helper guide.

15



- Install the main spring into the helper guide

16



- Prepare your second set of thrust sheets, this stack has two stainless rings with a delrin sheet between them.
- One stainless ring will be in contact with the main spring, and the other with the spring perch.

17



- With the Thrust sheets sitting on top of the main spring, compress the spring assembly and feed the spring perch around the shock shaft and set it into place.

  Note: While this is doable with one person, having a second set of hands will make this process much smoother. You can also adjust the spring perch down to make installation easier.

- See photo as a reference for a fully seated spring perch.

18



- Insert the clevis mount spacers into the spherical bearings as shown in photo

19



- The clevis mount gets installed with the single hole facing towards the front of the car. You can think of this piece as an arrow pointing forward.
- Torque hardware to 53N·m [41 lbf·ft]

20



- The shock mount spacers are inserted on the bottom of the assembly.

- You will now have a completed inverted rear assembly.

ON CAR INSTALLATION

21

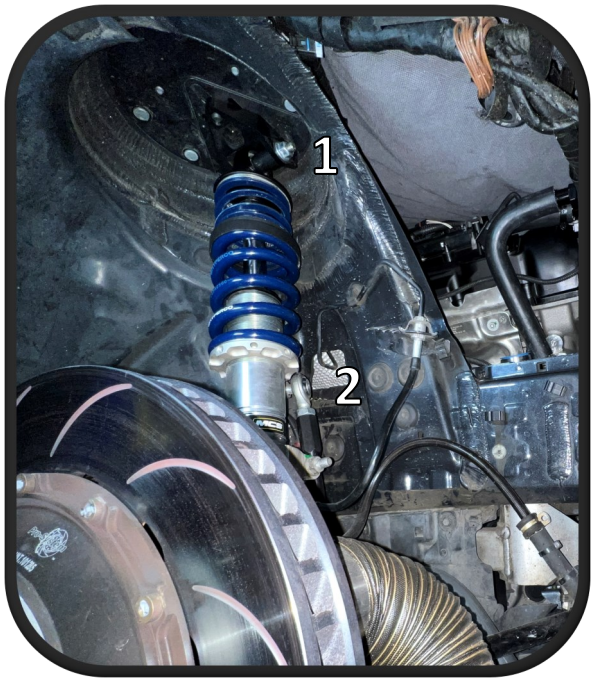


- The SPL arms can be adjusted and used as a tuning tool. The following measurements can be used as a baseline setup. Measurements are center to center of ball joint.

Note: Follow the included SPL instructions for proper installation and torque specifications of these arms.

	FRONT (MM)	SPL PART
Forward Trailing Arm	362	BW TR F8X
Lower Control Arm	284	BW FLCA F8X

22



When installing the front strut assembly there are a few things to note.

- We recommend using the maximum caster positioning on the camber plates as a baseline. Positioning the strut on the camber plate offset towards the rear of the car increases caster. (Labeled 1)
- Note the orientation of the strut. The end link should mount on the inside of the strut opposite of the wheel. (Labeled 2)

23



- With the wheels straight, mount the sway bar end link. Check that the link is centered on the heim joint and length is adjusted properly. This will ensure clearance to pivot and not bind when turning the wheels.
- To properly set end link length:

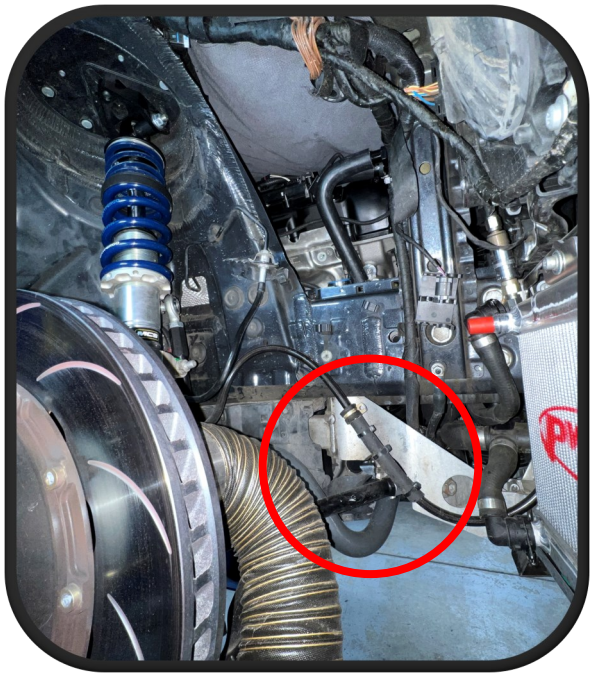
  Connect 3 of the 4 heim joints, leaving the easiest to access end loose. Set the car down to have the car fully weighted at static ride height .

  With the wheels straight, adjust the fully connected link by spinning the center rod so that the end of the sway bar is level to the pivot point where the bar is mounted to the chassis.

  Adjust the partially connected link by spinning the center rod until the stud freely slides into the end of the swaybar.

  Tighten the jam nuts once lengths are set and the final heim joint is connected.

24



- Mount the remote line for the strut on the frame away from the wheel.

  Note: Use supplied rubber hose and some zip ties to create a rub guard on the remote line. The adel clamp can be used to secure the hose to the frame rail at a fender liner mount point. Check this periodically for wear.

25



- Some alignment and tire combinations will require clearance of back side of the fenders.

26



- Note the direction of the rear clevis mount.

27



- Inverted coilover setup used with GTMore Rear Sway Bar.
- If not using GTMore rear sway bar, a non inverted setup with a flat spring perch will be required for clearance.
- Install the rear sway links and adjust them so the sway bar has clearance against both the axle boot and the damper through the intended range of motion.

  Removal of the rear spring perch will be required to properly test through the entire motion range.

28



- Drill a hole in the rear fender liner to route the remote line. Rear bumper removal may be required. Use supplied rubber hose and some zip ties to create rub guard between the line and fender liner. Check this periodically for wear.

29



- Run the line through the rear vents in the trunk to mount the canisters.
- Use supplied rubber hose and some zip ties to create a rub guard between the battery terminal and quick disconnect. Check this periodically for wear.

30



- Cut a section of the carpet to accept the canister mounts.





31

- Front canisters on early cars without headlight cooling fins can be mounted on top of the headlights.

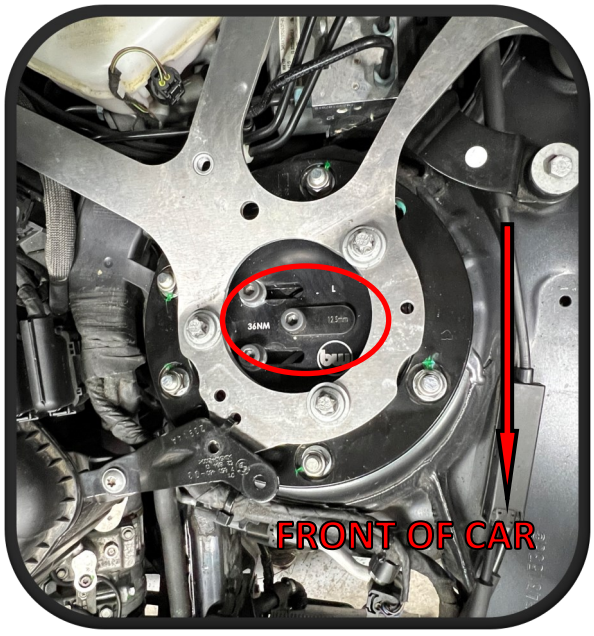


32



- On late model cars you can tuck the canister in the fender with the mounts on the frame rail.

33



- Camber is adjusted with the supplied pill inserts. For more camber use a pill with a larger offset towards the center of the car. These lock the adjustment and do not allow movement in the system once set.
- We recommend starting with the 7.5mm pills offset towards the center of the car as a baseline setting.