

INSTALLATION INSTRUCTIONS



6th Gen. Camaro

Caster/Camber Adjusting Plates

2255-1, 2255-1S, 2255-1R, 2255-2, 2255-3

Technical Support

We strive to provide the utmost pre- and post-sales support for our products. Whether you just need upgrade advice, or assistance in adjusting or installing a product, our experienced support staff is always ready to help optimize your UMI product.

CHAT WITH A UMI PROFESSIONAL TODAY

Need installation advice or clarification on the instructions? Scan the QR code (right) to chat directly with a UMI Professional or use the contact information provided to talk to customer service.

Note: UMI social media accounts do not respond to customer service questions.



CONTACT CUSTOMER SERVICE

Hours: M-F 8:00-4:30 (EST)

Email: support@umiperformance.com

Call: +1 (814) 343-6315

Address: 509 Hemlock Street
Philipsburg, PA 16866

SOCIAL MEDIA

#umiequipped #umiperformance

@umiperformanceinc

Included Parts

Tools Needed

Description	Quantity	PN
Driver's side caster/camber adjuster assy.	1	2255DR
Passenger side caster/camber adjuster assy	1	2255PA
NOTE: 2255-1S and 2255-1R are full kits that include Viking struts and springs. The part numbers below display what is included in those kits.		
2255-1S		
VIKING BERSERKER DBL ADJ STRUTS	2	
2.5" COIL SPRING	2	9DP300
TAKE UP SPRING KIT	1	90090
2255-1R		
VIKING CRUSADER DBL ADJ STRUTS	2	
2.5" COIL SPRING	2	9DP300
TAKE UP SPRING KIT	1	90090

Metric and standard sockets and ratchets
Metric and standard wrenches
Allen sockets or wrenches
Pry tools and Hammer

INSTALLATION INSTRUCTION

DISCLAIMER

UMI Performance shall not be held liable for any injuries or damages resulting from the improper installation of this product. It is the sole responsibility of the user to ensure that the product is installed correctly and in accordance with all applicable laws, codes, and regulations. The user assumes all risk and liability for any injuries or damages that may arise from the improper installation of this product. It is important to follow these steps carefully and use the proper tools to avoid damaging the vehicle or causing injury to yourself. If you are uncertain about any part of the installation process, it is recommended that you seek the assistance of a professional mechanic.

STEP 1: Preparing And Disassembling

Organize and layout all necessary parts and hardware prior to beginning the installation process. Carefully review the components and tools required to ensure that all necessary items are present. Raise the vehicle to the desired work height and support with safety stands.

STEP 2: Remove the front wheels.

If the car is equipped with Magneride suspension, locate the electrical connector in Fig.1 and disconnect it. Pop loose any attaching push pins. (Fig: 2)

NOTE: IT WILL BE NECESSARY TO INSTALL A MAGNERIDE DELETE KIT WHEN REPLACING THE STRUTS WITH NON-MAGNERIDE UNITS.

STEP 3:

Remove the bolt retaining the front brake caliper brake hose. (Fig: 3)

STEP 4:

Disconnect the top sway bar end link stud from the front strut. (Fig: 4)

STEP 5:

Using a 24mm socket and an impact tool or ratchet remove the 2 nuts and bolts that retain the strut to the front steering knuckle. (Fig: 5)



Figure 5

FIGURES FOR REFERENCE



Figure 1



Figure 2



Figure 3



Figure 4

INSTALLATION INSTRUCTION

NOTE: SPIN THE NUTS ONLY! THE BOLTS ARE SPLINED UNDERHEAD TO LOCK INTO THE ALUMINUM KNUCKLE.

It will be necessary to drive the bolts out of the steering knuckle with a brass hammer or punch. (Fig: 6, Fig: 7)



Figure 6

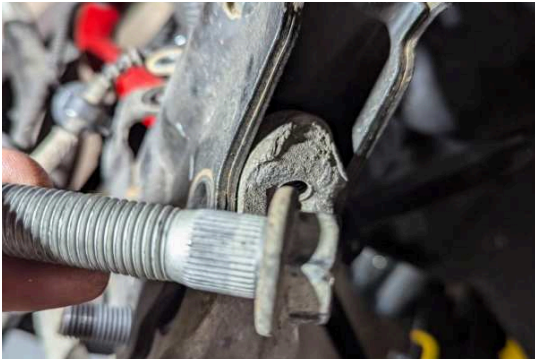


Figure 7

STEP 6:

Separate the strut from the knuckle. (Fig: 8)

STEP 7:

Now locate the top strut retaining bolts under the hood on the strut towers and remove them with a 13mm socket and impact or ratchet. This will allow removal of the complete strut assy. (Fig: 9, Fig: 10)

STEP 8:

Assemble the Viking or similar strut with sway bar end link mounts, adjuster nuts and desired coil over spring according to the manufacturer's instructions included with them. Figure 11 shows a fully assembled Viking coilover strut with all parts included in 2255-1S and 2255-1R.

FIGURES FOR REFERENCE



Figure 8



Figure 9

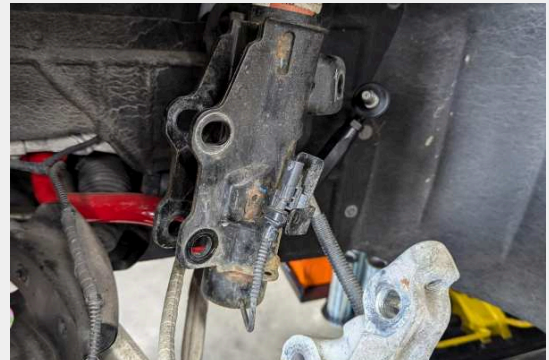


Figure 10



Figure 11

INSTALLATION INSTRUCTION

STEP 9:

Install the top spring hat and bearing assembly included with the UMI caster camber adjuster kit onto the strut shaft as shown in Figure .

STEP 10:

Slide the bearing adapter down the shaft until seated into the coilover hat bearing assembly as shown in Figure 12.

STEP 11:

Ensure that both locator bolts (Socket Head Cap Screws) are in the correct hole positions as shown in Figure 13. They should be in the same holes for both sides. Caster Camber plates are marked LF and RF. Make sure alignment bolts are installed as shown.

STEP 12:

Install the remainder of the assembled UMI Caster Camber adjuster onto the top of the strut assembly along with the shaft retainer nut as shown in Figure 14. Just hand tighten the nut; it will be torqued in a later step.

STEP 13:

Ensure that the top bearing is fully seated onto the shaft bearing adapter as shown in Figure 16.

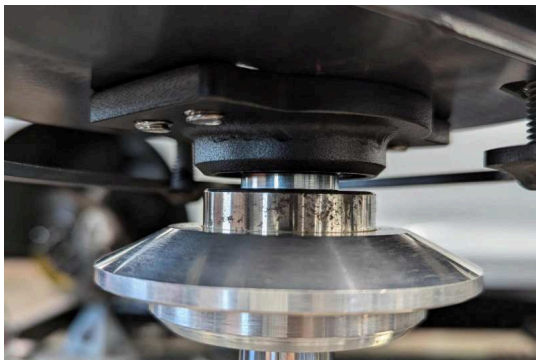


Figure 16

NOTE: If using take up springs to keep tension on the spring when the car is jacked up, make sure to install the collar and take up spring on top of the coil over spring. Also make sure the assembly has enough travel at ride height to not let the divider collar to come in contact with the strut body. FIG. 17

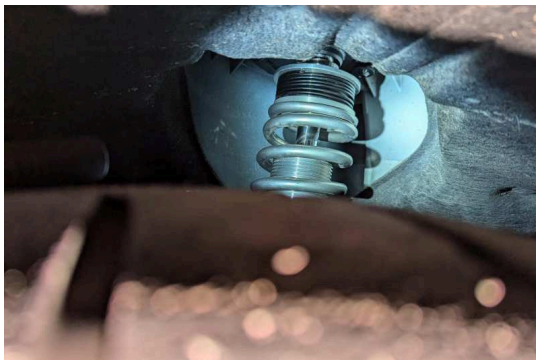


Figure 17

FIGURES FOR REFERENCE

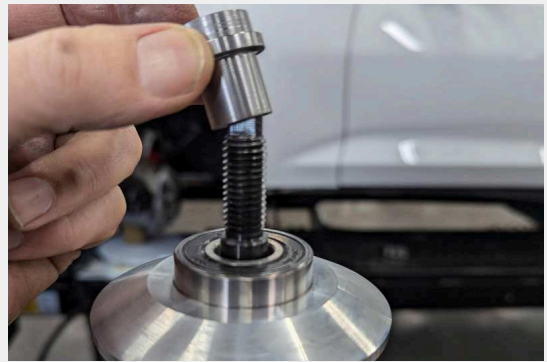


Figure 12

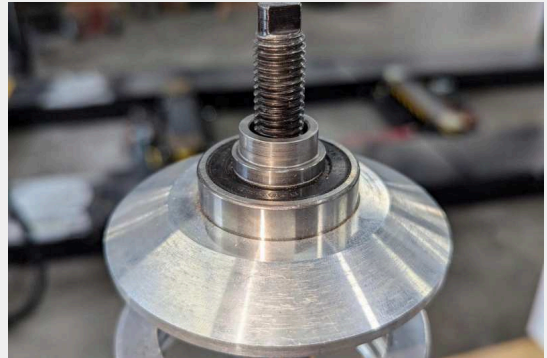


Figure 13



Figure 14



Figure 15

INSTALLATION INSTRUCTION

STEP 14:

Remove the 3 - M8 flanged lock nuts from the top of the UMI Caster Camber adjuster to allow removal of the bolt plate that will secure the strut and adjuster assembly to the strut tower in the car. (Fig: 18)

NOTE: Bolt plate needs to be oriented so that it seats flat against the bottom aluminum adjuster plate when reinstalled. Note orientation when removing in case it is dropped out completely.

STEP 15:

Reinstall the strut with the installed UMI Caster Camber adjuster assembly in the car. While holding the bolt plate from the bottom, feed the mounting lugs up through the strut tower.

STEP 16:

Once the strut is in position, the M8 locknuts that were removed in Step 14 can be reinstalled. Lightly snug the nuts. (Fig: 19)

STEP 17:

Connect the lower strut to the aluminum steering knuckle assembly with the factory bolts that were removed earlier. Position the top bolt in the slotted hole centered to start. Install the included 16mm washers on the nut side. The washer will keep the nut from gouging into the aluminum bodied Viking coilover. Torque both bolts to 140ft/lbs. Because the bolt is splined to fit the spindle, it should not rotate when tightening, just the nut. (Fig: 20, Fig: 21)

STEP 18:

Torque the top M8 flange nuts were instilled in step 16 to 25ft/lbs. (Fig:19)

STEP 19:

Torque top center shaft nut to 50ft/lb's using a $\frac{7}{8}$ " socket. Fig 22



Figure 22

FIGURES FOR REFERENCE



Figure 18



Figure 19

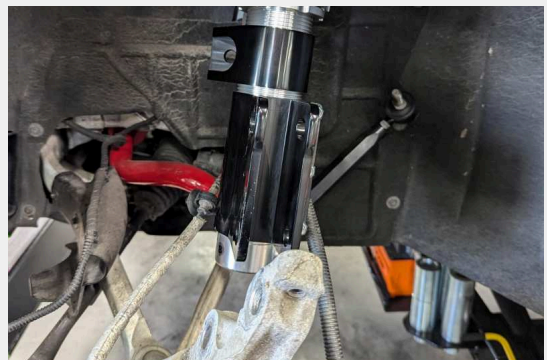


Figure 20

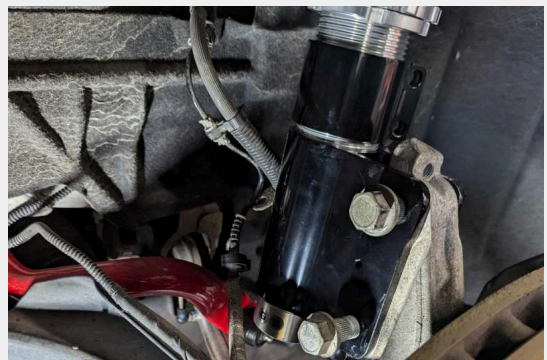


Figure 21

STEP 20:

The sway bar end link mount can now be rotated into position and locked down with the provided hardware. Torque to 35ft/lb's. Connect the sway bar end link and torque to 55ft/lb's. (Fig: 23, Fig: 24, Fig: 25, Fig:26)

STEP 21:

The front wheels can now be installed, ride height can be adjusted and the alignment verified.

Caster Camber Adjustment:

All adjustments should be made while the front of the car is raised off the ground to remove the weight off the front suspension.

To adjust camber, loosen the 3 nuts in Figure 28 and slide the top of the strut inwards for more negative camber or slide it outward for more positive camber. Retorque after adjustment. This is a great fine tune adjustment outside of factory capability to help even side to side or stagger your camber settings.

To adjust the caster, remove the 4 flat head bolts in Figure 29 and slide the strut to the forward holes for less caster. Moving the strut towards the rear of the car, will add caster. These are fine tune adjustments beyond factory capability to help even out or add a slight stagger to your caster settings.

When adjusting camber, you must check and reset toe alignment according to your specs.



Figure 27



Figure 28



Figure 23



Figure 24



Figure 25



Figure 26