

## Camber Plate Kit – G-Series BMW

### Installation Manual



Author: E. Hazen Release Date: 02/06/25 Approvals: T. Nguyen

#### **Document Revisions**

Rev	Date	Author	Description
1	02/06/25	E. Hazen	Initial Release
2	11/06/25	M. Villano	Add radial bearing step, clarify L/R orientation



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#### 1. Introduction

- **1.1. Overview:** Detailed instructions on installing the Verus Engineering Camber Plates for the G-Series BMW.
- 1.2. Difficulty: Novice
- 1.3. Time Required: 2-4 hours

#### 1.4. Tools Needed:

- **1.4.1.** Panel Popper Tool
- 1.4.2. E14 Female Socket
- **1.4.3.** 12 Point 18mm Socket
- **1.4.4.** 5mm Allen Wrench with Wobble (5mm Deep Wobble Socket Works as well)
- **1.4.5.** 13mm Impact Socket
- 1.4.6. 16mm Impact Socket
- **1.4.7.** 17mm Impact Socket
- **1.4.8.** 27mm Impact Socket
- 1.4.9. Floor Jack and Jack Stands OR Vehicle Lift and Floor Jack



#### 1.5. Camber Plate Kit Components

- 1.5.1. (2) Preassembled Camber Plate w/ Adjuster
- **1.5.2.** (2) Camber Plate Adapter Sleeve
- 1.5.3. (2) Camber Plate Adapter Sleeve Lock Nut
- 1.5.4. (2) Camber Plate Top Nut
- **1.5.5.** (1) Hardware Bag
  - **1.5.5.1.** (8) M8 Washer, Stainless
  - **1.5.5.2.** (8) M8 Nut, Stainless



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#### 2. Installation:

- **2.1.** We are not responsible for damage to your vehicle by following this manual.
- **2.2.** Jack the front half of the vehicle up by your favorite method and let the car down on jack stands ensuring the front wheels remain in the air. Use of a lift is acceptable as well.
- **2.3.** Remove both front wheels from the vehicle.
- **2.4.** To get access to the strut tower, pull off the top cover by twisting the unlock button and removing the cover, as shown below.





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**2.5.** Remove the camber plate cover by using dikes or plastic rivet removal tool and pull upward on this to fully remove. The plastic rivets are circled in yellow.



**2.6.** With the covers removed, this is what you are left with.



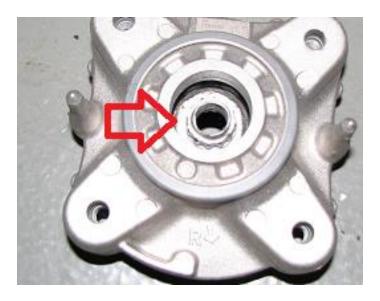
**2.7.** From the knuckle assembly, we will want to disconnect the electrical lines to allow the knuckle to droop without causing any damage. The sway bar mount nut needs to be removed in order to increase the range of motion for the knuckle to droop. The sway bar nut is a 16mm nut.



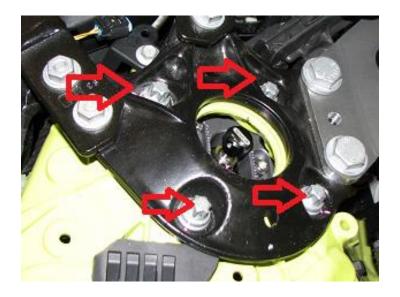


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2.8. Place the jack underneath the knuckle assembly prior to removing the factory camber plate lock-nut, in order to contain the components as we move on to the next step. We recommend removing the lock nut on the camber plate, and slowly letting the damper come out of the camber plate, by gradually letting the jack down. This allows the damper to stay \*in\* the knuckle (which we found to be more efficient). This nut is located below and is 18mm 12-point. With the OEM spring, this can be difficult and using a way to compress the spring may improve removal of damper from chassis.



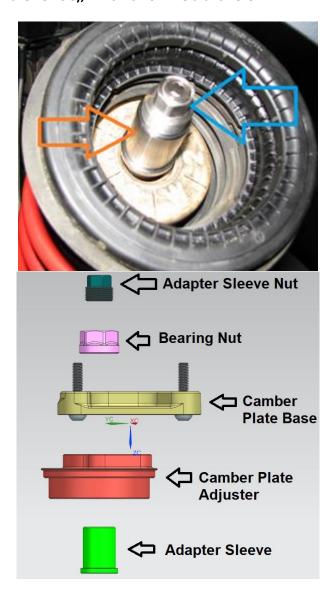
- **2.9.** Once this nut is removed, the damper assembly can come out of the car. \*SLOWLY\* release the pressure in the jack and gently let the assembly come out of the car. You can push down on the knuckle. **Be careful not to stretch or break any wires/sensors/lines.**
- **2.10.** Remove the (4) E14 bolts that hold the factory camber plate to the chassis.





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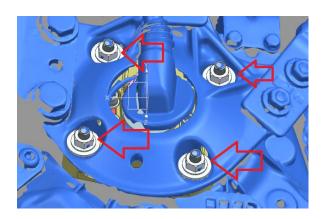
- **2.11.** Remove the black radial bearing from the underside of the factory camber plate and reinstall this bearing on the underside of the Verus Engineering camber plate adjuster. This bearing helps the assembly rotate on the camber plate base to eliminate spring bind.
- 2.12. We can now install the adapter sleeve and lock nut onto the car. The adapter sleeve is indicated by the orange arrow and the lock nut is indicated by the blue arrow. The lock nut should be tightened with an impact until the shaft spins, then a few further clicks without spinning the shaft excessively. Note the bump stop is installed currently. Also to note, the adapter sleeve lock nut can be installed after the damper is reinstalled into the camber plate (from the top of the vehicle), which is how we did it here.





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2.13. Using the supplied M8 nuts and washers, install the Verus Engineering camber plate base and adjuster onto the chassis (as shown below). The camber plates are left-right specific and are engraved with L and R. To correctly orient each side, the "Verus Engineering" logo should be outward on the chassis for both left and right side, with the L on the LH side of the vehicle and the R on the RH side. The camber adjustment should also be completely lateral (left to right) on the vehicle with no longitudinal (forward and rearward) adjustment.



- 2.14. We can now install the damper assembly into the camber plate base similar to how we removed the factory setup. With the jack under the knuckle assembly, begin pushing the damper upward into the spherical housing/adjuster. NOTE: If you are using the OEM springs, a spring compressor or another method of compressing the spring may be necessary.
- 2.15. If you are met with any resistance, STOP to ensure the bearing and adapter bushing are properly aligned. With a flat head screw driver and tape or socket **very gently** align the spherical bearing, so that the adapter bushing assembly can fit into the spherical bearing. It is normal that the bearing is tight and requires force to move. The spherical bearing and the adapter bushing are a very tight fit. Be gentle so that you do not mar the inside of the bearing or unnecessarily load the bearing.
- 2.16. Once the assembly fits into the spherical bearing, you can install the large bearing nut (tightened with the electric impact similar to step 2.11). This is a 27mm nut.





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- **2.17.** Tighten all nuts and bolts. The M8 nuts can be torqued to 12-16 ft-lbs. The M6 SHCS that attaches the base to the adjuster should be torqued to 5-6 ft-lbs.
- **2.18.** Reinstall the sway bar mount and torque it to factory specs.
- **2.19.** Reconnect all the electrical components that were removed at the beginning of the install (along with torquing the front wheels), in order to get the car back on the ground and check what the camber is. The furthest location outboard for the adjuster should be near factory camber.
- 2.20. It is recommended to get an alignment after installing the camber plates. \*During alignment, be VERY cautious about damaging the electrical connector that goes on the top of the damper! This can and will break easily! Ensure full range of motion (turn the wheel lock to lock).
- **2.21.** Enjoy the freshly installed camber plates. Please contact Verus Engineering with any comments, concerns, or questions via e-mail at **support@verus-engineering.com**!

