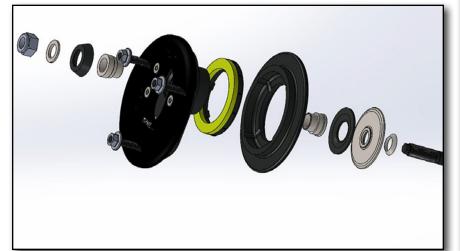


# BMW E9x M3 Front Hybrid Adjustable Camber Plates Installation Instructions











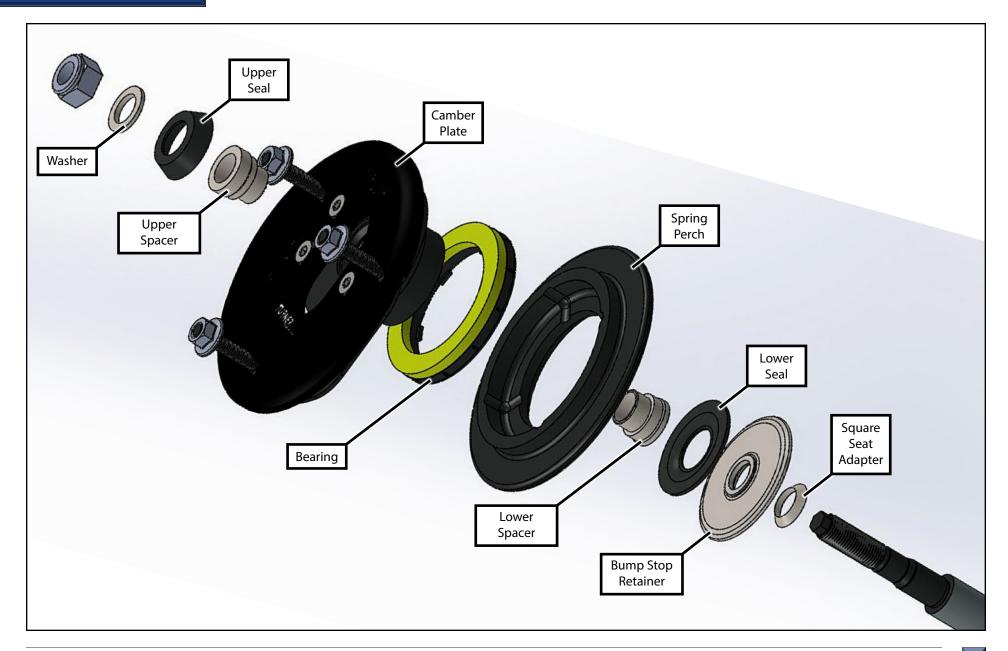


# TABLE OF CONTENTS

Kit Contents	<u>pg.3</u>
Installation and Safety Information	<u>pg.4</u>
Removing the Stock Intake	<u>pg.5</u>
Installing the New Intake System	<u>pg.7</u>
Torque Specifications	pg.12



## KIT CONTENTS





#### **INSTALLATION NOTES**

- **RH** refers to the *passenger side* of the vehicle.
- **LH** refers to the *driver side* of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process **BEFORE** you begin.

### GENERAL PREPARATION AND SAFETY INFORMATION

Turner Motorsport cares about your health and safety, please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- **ALWAYS** wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- Whether lifting a vehicle using an automotive lift or a hydraulic jack, be sure and utilize the factory specified lift points.
- Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- **ALWAYS** support the vehicle with jack stands.
- **ALWAYS** read and follow all safety information and warnings for the equipment you are using.



NEVER get underneath a vehicle that is supported only by a jack, and **ALWAYS** make sure that the vehicle is securely supported on jack stands.



## REMOVING THE ORIGINAL PLATES

#### Step 1:

Remove the strut assembly from the vehicle by doing the following:

- Safely raise and support the vehicle and remove the front wheels.
- Remove the brake caliper and hang it safely out of the way.
- Remove the rotor and set it aside.
- Remove the nut which secures the end link to the strut.
- Remove the pinch bolt from the spindle housing.
- Spread the spindle housing and pull the strut out of the housing.
- Remove the three nuts which secure the strut to the strut tower.
- Carefully guide the strut out of the fender well.



#### Step 2: **Coil Spring Compressor Tool**

Place the strut assembly into a bench vise and compress the spring until there is a gap between the spring and the upper spring pad.



This installation procedure is being shown on our M3 equipped with aftermarket coilovers and our camber plates installed.





## REMOVING THE ORIGINAL PLATES

Step 3:

10mm Socket, Ratchet & 21mm Wrench

Counter hold the shaft of the strut while you remove the upper strut nut.



We found that on stock applications a 21mm strut nut socket (T#362741) and an allen key work well to remove/install this nut.



#### Step 4:

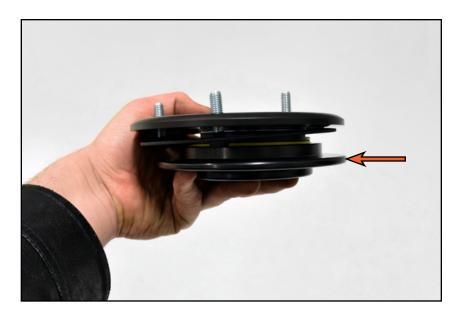
Slide the entire upper strut mount off the strut shaft.





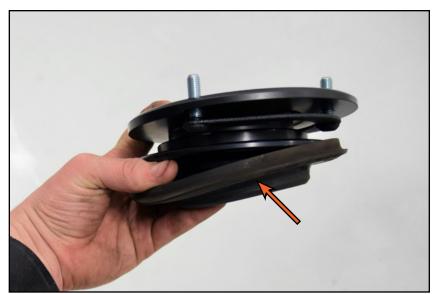
#### Step 1:

Install the spring perch (arrow) onto the underside of the camber plates as shown.



#### Step 2:

Transfer the upper spring pad (arrow) from the old strut mount to the new camber plate as shown.



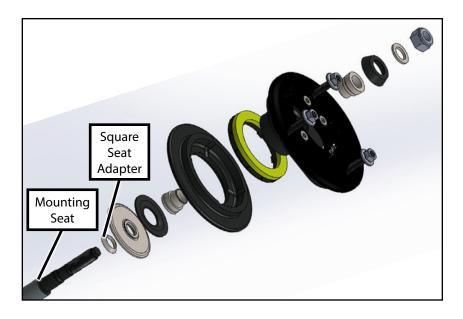


#### Step 3:

Reference the diagram on the right and install the camber plate components onto the strut shaft in the specified order.



If your strut shaft features a tapered mounting seat, omit the installation of the square seat adapter as shown on the photo on the right.



#### 10mm Socket, Torque Wrench & 21mm Wrench Step 4:

Counter hold the shaft of the strut while you torque the upper strut nut to 64 Nm (47 Ft-lbs) then carefully remove the spring compressors.



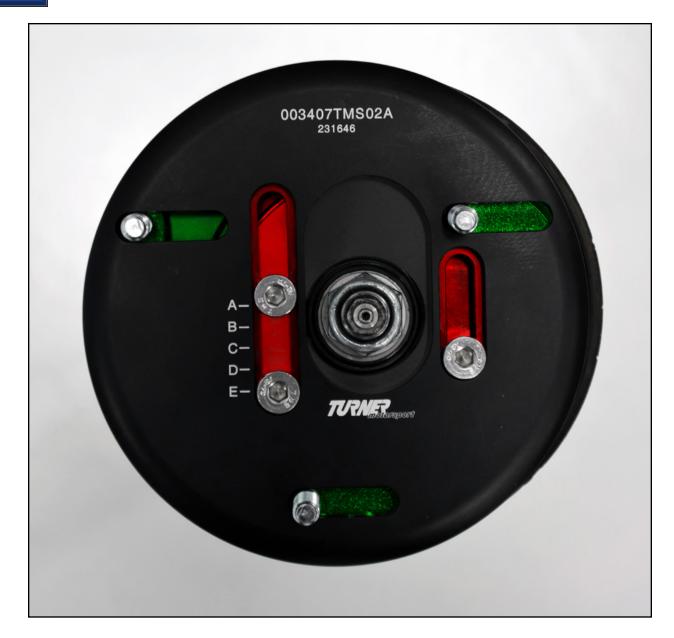


#### Step 5:

Let's take a look at the adjustment procedure for these plates. The camber and caster angles can both be adjusted with the plates installed on the vehicle, preferably on an alignment rack.

The caster angle can be adjusted a total of approximately 2.5 degrees (highlighted in **RED**). It can be easily adjusted via the allen screws on the top of the plate. With the weight of the vehicle off of the wheel simply loosen the three screws, adjust until your desired caster angle is reached, then tighten down the three screws. The plate shown here is adjusted to the LEAST aggressive caster angle (closest to OEM specification).

The camber angle can be adjusted a total of approximately 1.5 degrees (highlighted in GREEN). It can be easily adjusted via the three nuts which secure the plate to the strut tower. With the weight of the vehicle off of the wheel, loosen the three nuts and slide the plate until your desired camber angle is achieved, then tighten the nuts back down. The plate shown here is adjusted to the LEAST aggressive camber angle (closest to OEM specification).





Step 6:

5mm Hex (Allen)

Approximate your desired caster angle you would like to set and tighten down the three screws before installing the strut into the vehicle.



#### Step 7:

Reinstall the strut in the reverse order of removal, referencing the torque specifications listed on page 12. Use the three provided nuts to secure the strut to the strut tower, but leave them loose enough to allow for adjustment.



If your vehicle is equipped with a factory strut tower brace, discard the provided nuts and reuse the three original mounting nuts to secure the strut.





Step 8:

13mm Socket & Ratchet

Slide the struts back and forth until your approximate desired angle is achieved, then tighten down the three nuts to hold it in this position.



Step 9:

13mm Socket & Torque Wrench

Torque the three nuts to 34 Nm (25 Ft-lbs) then have an alignment performed on the vehicle at which point you can more precisely hone in your desired camber and caster amount.





## TORQUE SPECIFICATIONS

Spindle Housing Pinch Bolt and Nut	45 Nm (33 Ft-lbs)	(Page 10)
Sway Bar End Link Nut	58 Nm (42 Ft-lbs)	(Page 10)
Brake Rotor Screws	16 Nm (12 Ft-lbs)	(Page 10)
Brake Caliper Mounting Bolts	110 Nm (81 Ft-lbs)	(Page 10)
Top Plate to Strut Tower Nuts	34 Nm (25 Ft-lhs)	(Page 11)

#### Your Front Hybrid Adjustable Camber Plates installation is complete!



#### These instructions are provided as a courtesy by Turner Motorsport

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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