

#### Corvette C6 Pro Angle Kit

\*Always use certified licensed technician/s for installation

#### **Introduction:**

- This kit will fit Corvette C6
- Drift car angle kit is designed to increase the steering angle of the front wheels, allowing for greater maneuverability during drifting. It helps the car achieve higher steering angles and smoother transitions, essential for drifting techniques.
- This kit has been tested with both BC Racing and Feal Coilovers. These 2 coilovers work when installed inverted
  (with the spring at the bottom of the coilover instead of the top) the upper control arm is designed this way to
  maximize steering angle and it is necessary. A normal coilover will contact the upper control arm where the spring
  passes through the arm.
- The OEM steering shaft firewall boot must be removed, and the firewall needs a slight notch in it. The reason is that BMW steering rack is narrower and the steering shaft angle increases towards the centre of the car. The BMW steering rack also requires the factory steering rack guibo, we have machined an adapter to connect to the E46 Guibo. The Guibo comes with a rubber damper installed. This can be run as is, or the rubber damper can be drilled out, and the two halves of the guibo bolted together.
- Tools and equipment required for installation:
  - Floor Jack, Jack Stands, Wrenches, Sockets, Plier, Torque Wrench, Thread Locker

#### **Step 1: Preparation**

- Ensure the car is parked on a level surface and the wheels are chocked to prevent accidental movement during installation.
- Safety First Disconnect the negative terminal of the battery to avoid any electrical accidents while working on the car. In addition to chocking the wheels and disconnecting the battery, it is essential to wear appropriate safety gear and clothing, including closed-toe shoes, long sleeves and safety glasses.
- Lift the car using a jack or Hoist making sure to position it securely under the recommended lifting points. Then,
  place the jack stands for additional support before beginning any work. Double-check that the car is stable and
  won't shift while you work.

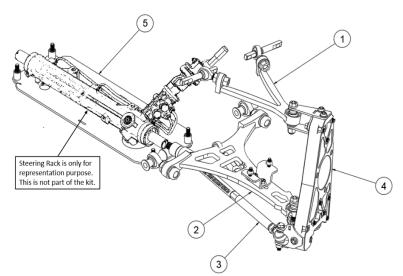
#### **Step 2: Front Suspension removal**

- Remove the wheels, brakes, and any components obstructing access to the front suspension.
- Unbolt the factory suspension components, such as tie rods and control arms. Be cautious not to damage any surrounding parts during this process.
- Once the factory components are removed, the stock steering knuckle should be taken out to make way for the new angle kit.

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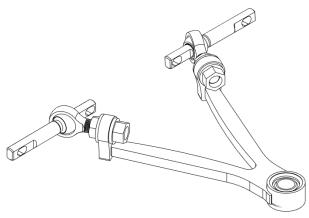
## **Step 3: Angle Kit Installation**



Fully assembled view of FDF Pro Angle Kit for Corvette C6 is shown for the left-hand side of the car.

- 1. Upper Control Arm sub-assy (Common for LH & RH side)
- 2. LH side Lower Control Arm sub-assy
- 3. Tie Rod sub-assy (Common for LH & RH side)
- 4. LH side Knuckle sub-assy
- 5. Steering Rack Relocation kit

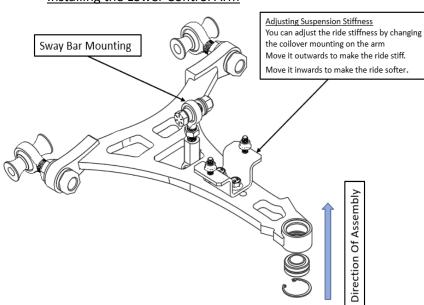
## **Installing the Upper Control Arms**



FDF Pro angle kit Upper Control arms for Corvette C6 are common for Left-hand and Right-hand side of the car.

Make sure all bolts are torqued properly.

## **Installing the Lower Control Arm**



FDF Pro angle kit Lower Control arm for Corvette C6 is different for Left-hand and Right-hand side of the car. The Lower Control arm shown in the image is for Left-hand side of the car.

- The spacers will be zip-tied to the Heim joints before shipping. Make sure to assemble the spacers in the car in the same way they are shipped.
- Make sure all the bolts are torqued properly.
- Double check that the snap ring is assembled from the bottom of the lower control arm.

For Racing Use only



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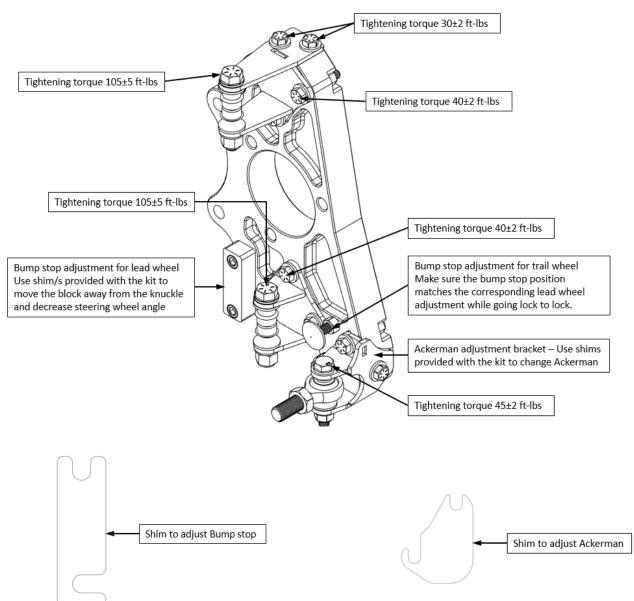


#### **Installing the Tie rod**



FDF Pro angle kit Tie rod for Corvette C6 is common for Left-hand and Right-hand side of the car.

## **Installing the Knuckle**



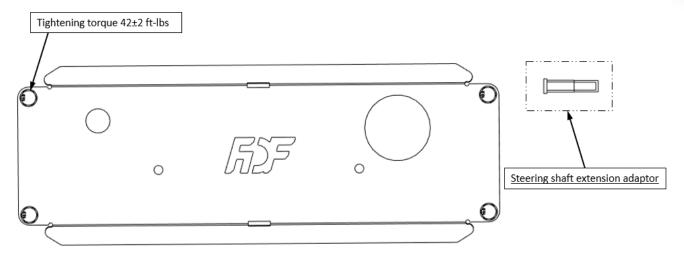
FDF Pro angle kit Knuckle for Corvette C6 is different for Left-hand and Right-hand side of the car. The Knuckle shown in the image is for Left-hand side of the car.



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#### Installing the Steering rack relocation kit



## Step 4: Reassembly

- Double-check all connections and fastenings for any loose or improperly secured components.
- Pay attention to every bolt and nut to prevent any potential issues during drifting.
- Reinstall the wheels and brakes. Ensure brake lines are of sufficient length while turning wheels both sides lock to lock (no tension or potential breaking).
- Lower the car back to the ground.

### **Step 5: Alignment and Adjustment**

Recommended Alignment Specifications: -

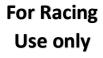
- Caster +6.5° to +7.5°
- Camber -3.5° to -4°
- Toe 0 to 1/8<sup>th</sup> out
- ➤ Wheel size recommendation 18 x 9 +15 offset

These are only the recommended alignment specs. You can set up based upon individual preference.

- Do not exceed the Heim joint adjustments. Each Heim joint should have a minimum of 1 to 1.5 times the diameter of the Heim joint. (For Example: a ¾" Heim joint needs to have approx. ¾" to 1 1/8" thread engagement inside the arm, this is 12-18 threads)
- After installing the angle kit, it is crucial to get a professional alignment at a specialized shop that understands
  drifting setups. They will align the car to optimal angles for drifting and ensure the best possible handling and
  response.
- Additionally, adjustments to the angle kit components might be necessary to fine-tune the car's steering and suspension to your preferred drifting style. Make these adjustments as needed while considering safety and performance.

#### Step 6: Test Drive

- Before fully utilizing the drift car, take it for a test drive in a safe area to assess how it responds to the angle kit installation. Pay attention to any issues, unusual noises, or handling quirks that may require further adjustments.
- Take notes of any issues and adjustments needed during the test drive. Address these concerns before engaging in more aggressive drifting maneuvers.





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## **Conclusion:**

Recap the installation process and emphasize the importance of professional alignment after installing an angle kit. Always remember to prioritize safety during any car modifications and always use certified licensed technician for your installations. Bolt check regularly, recommendation is before each racing event.

Thank you for choosing FDF angle kit to enhance your drifting experience.

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