



Installation Instructions

2010 & UP CAMARO SUSPENSION PACKAGE PN40027



Congratulations on your purchase of the AFCO 2010 & Up Camaro Suspension Package. We believe that you will agree that this system is second to none, in quality, performance, and ease of installation. **Please read and understand each of the steps involved with the installation of your new 2010 & UP Camaro Suspension Package prior to getting started.**

The AFCO team takes pride in providing the utmost in quality and performance.

Special Notes Before You Get Started

NOTE: This product is intended for racing and off-road applications. This kit was designed to work as a kit with all AFCO components.

AFCO highly recommends hiring a professional installer, one that is familiar with the installation of aftermarket performance products.

AFCO highly recommends hiring a professional to align the vehicle after installing this kit.

AFCO products are not covered under any warranty either expressed or implied.

AFCO is not responsible for any product that has been improperly installed, crashed, welded to, or modified in any way. AFCO does not cover damage to any related components. Neither the seller nor AFCO will be responsible or liable for any loss, damage, or injury resulting from the direct or indirect use of this product or inability by the purchaser to determine the proper use or application of this product.



Parts List

40027F

1. **40029 LH Strut** (Qty. 1)
2. **40030 RH Strut** (Qty. 1)
3. **29024 Coil-Over Kit** (Qty. 2)
 - Top washer cap (Qty. 1)
 - Strut shaft spacer (Qty. 1)
 - Delrin washer (Qty. 1)
 - Top cap (Qty. 1)
 - Rubber isolator (Qty. 1)
 - Nylon collar (Qty. 1)
 - Coil-Over nut (Qty. 1)
 - Key (Qty. 1)
 - 10-24 x 3/8" socket head screw (Qty. 1)
 - Coil-Over sleeve (Qty. 1)
4. **40026 Caster/Camber Kit** (Qty. 1)
 - M14 x 1.5 Lock nut (Qty. 2)
 - 5/8" Washer (Qty. 2)
 - Tall spacer (Qty. 2)
 - Top plate (Qty. 2)
 - Bottom plate (Qty. 2)
 - Tightening block (Qty. 2)
 - 5/16" Washers (Qty. 6)
 - 5/16"-18 x 1.25" Socket head screw (Qty. 6)
 - Grease needle (Qty. 1)
5. **Front Sway Bar Kit**
 - Front sway bar (Qty. 1)
 - Shaft collar (Qty. 2)
 - Rubber bushings (Qty. 2)
 - Steel bushing mounts (Qty. 2)
 - Bolts (Qty. 4)
 - Grease packet (Qty. 1)
6. **Coil Springs 275#** (Qty. 2)



40027R

1. **40028 Rear Shocks** (Qty. 2)
 - Coil-Over nut (Qty. 1)
 - Nylon collar (Qty. 1)
 - Bearing spacers (Qty. 2)
 - M12 x 1.75 nylock nut (Qty. 1)
 - Bumper (Qty. 1)
2. **Rear Sway Bar Kit**
 - Rear sway bar (Qty. 1)
 - Shaft collar (Qty. 2)
 - Rubber bushings (Qty. 2)
 - Steel bushing mounts (Qty. 2)
 - Bolts (Qty. 4)
 - Grease packet (Qty. 1)
3. **Coil Springs 270#** (Qty. 2)



Tool List

Wrenches

- 7mm
- 10mm
- 13mm
- 15mm
- 18mm
- 21mm
- 24mm

Sockets

- 13mm deep well
- 15mm
- 18mm
- 21mm
- 22mm deep well
- 24mm deep well
- 3/4 for lug nuts

Miscellaneous

- 1/4" Allen wrench
- 5/32" Allen wrench
- Impact or ratchet
- Jack
- Jack stands
- Spring compressor
- Tape measure
- Grease gun
- Wire or string to secure spindle
- 2010 & Up Camaro Service Manual
- AFCO Spanner Wrench PN 20110 (Any spanner wrench will work or a punch can be used to adjust coil-over nut)

Front Suspension Removal and Installation

1. Measure and record the front and rear ride heights of both the driver and passenger sides by measuring from the ground to the top of the fender opening (Fig. 1).

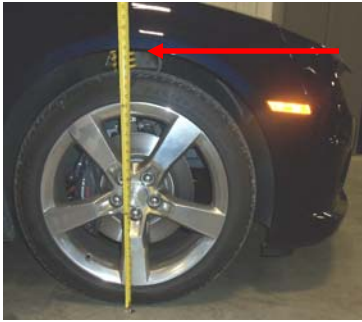


Fig. 1



Fig. 4

2. Secure the front of the vehicle on jack stands.*

3. Remove the front wheels and disconnect the following from the strut: ABS line, brake line, and sway bar link. Secure the spindle and brake caliper to the frame (with wire or other fastener) after removal of the two main strut mounting bolts that attach the spindle to the strut. This will prevent damage to the brake line (Fig. 2-4).*

4. Remove the top strut nut from the strut shaft in the engine bay (Fig. 5).



Fig. 5

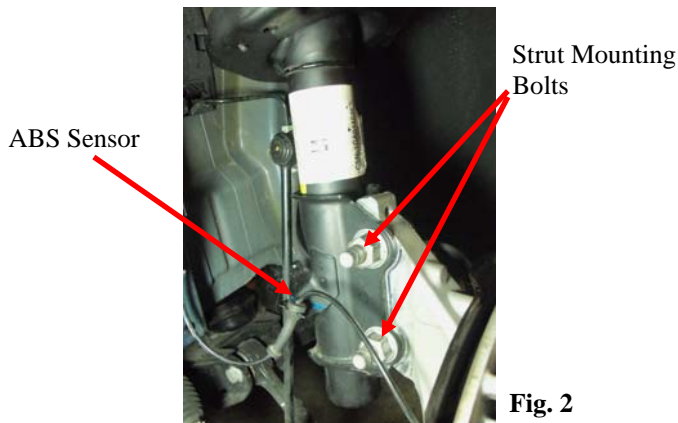


Fig. 2

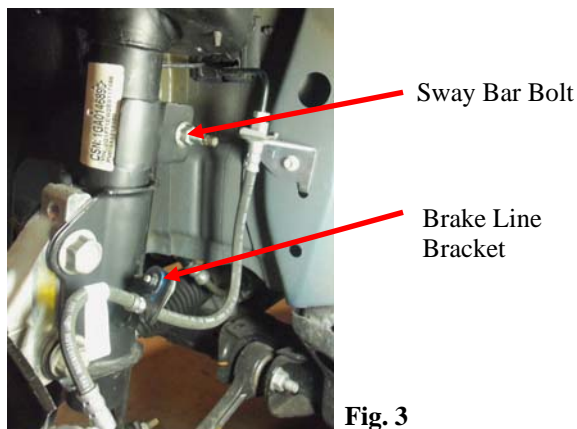


Fig. 3

5. The strut and mount can now be removed from the vehicle.

* Reference service manual

Front Suspension Removal and Installation

6. Remove the 15mm nuts from the end links on the sway bar. Remove the end links (Fig. 6).



Fig. 6

7. Next remove the four 13mm nuts holding the sway bar mounts to the frame. An air ratchet will make this job much easier (Fig. 7).

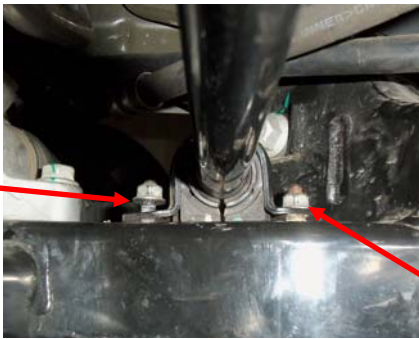


Fig. 7

8. In order to remove the sway bar from the vehicle, the engine will have to be lifted a few inches. Loosen the bottom two 18mm engine mount nuts until they are flush with the bottom of the stud (Fig. 8). Place a piece of wood under the oil pan and raise the engine until the nuts bottom out on the k-member (Fig. 9).



Fig. 8



Fig. 9

9. The sway bar can be removed at this time. You will have to turn the wheels to the driver side and then lift up on the spindle/hub assembly on the passenger side in order to clear the tie rod with the sway bar to get the sway bar out through the driver side (Fig. 10 & 11). Remember how you remove the stock sway bar because the AFCO sway bar goes back in the same way.

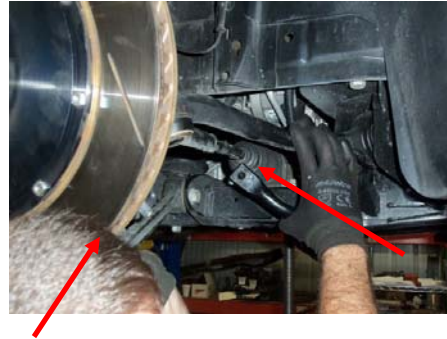


Fig. 10



Fig. 11

10. Next install the AFCO sway bar from the driver side and move it through the chassis to the mounting location.

11. Using the packet of grease, grease both rubber bushings and place onto the sway bar where it will mount (Fig. 12).



Fig. 12

12. The metal mounts should be placed over the rubber bushings and then the 13mm nuts should be tightened (Fig. 13).



Fig. 13

Front Suspension Removal and Installation

13 Center the sway bar in the vehicle and place the shaft collars on the inside of the rubber bushings to prevent the sway bar from moving side to side (Fig. 14).

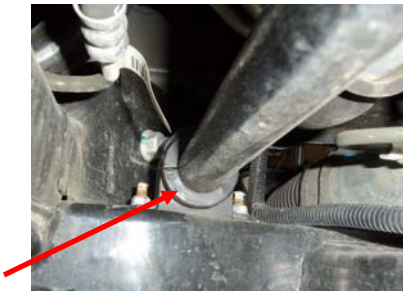


Fig. 14

14. The strut tower should now be ready for installation of the caster/camber plates (Fig. 15).*



Fig. 15

15. Place the top plate and the 3 Allen bolts with washers onto the top of the strut tower (Fig. 16).

16. Install the bottom plate and the tightening block from the bottom side of the strut tower. Thread the Allen bolts into the tightening block until finger tight (Fig. 16).

17. Position the caster camber plate as desired within the strut tower hole (Fig. 16). The stock location will be in the center of the hole. Once the plate is in position torque the 3 Allen bolts to 18 ft-lbs.

18. Install the tall spacer into the top of the bearing (Fig. 16).



Fig. 16

* Reference service manual

Front Suspension Removal and Installation

19. Loosen the socket head cap screw from the coil-over nut one turn and disengage the key from the sleeve. Next, screw the main coil-over nut to the very bottom of the sleeve to aid in assembly. From the bottom of the threads to the bottom of the nut should be approximately 1" to set the car at 1" lower than factory. Install the threaded sleeve over the strut. **Be sure that the positive locating feature on the coil-over sleeve fits into the recess in the strut** (Fig. 17).

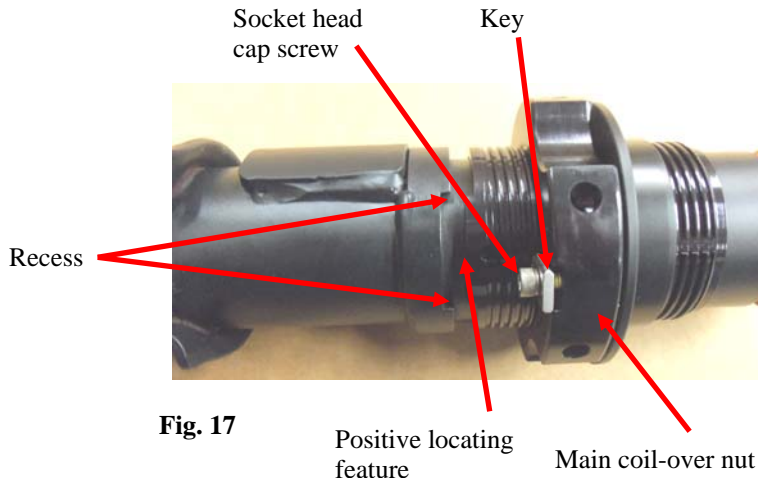


Fig. 17

20. Be sure to lubricate both sides of the Delrin washer with an automotive grease on both sides (Fig. 18).



Fig. 18

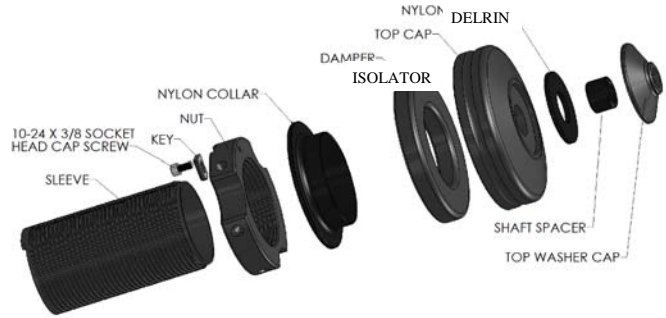


Fig. 19

21. Install the following over the shaft end of the strut : nylon collar, jounce bumper, coil-over spring 275, isolator, top cap, Delrin washer, shaft spacer, top washer cap, and the short caster camber plate spacer (from the 40026 caster/camber plate kit) onto the new AFCO strut (Fig. 19 & 20).

Short spacer from AFCO caster camber plate kit 40026

Jounce bumper

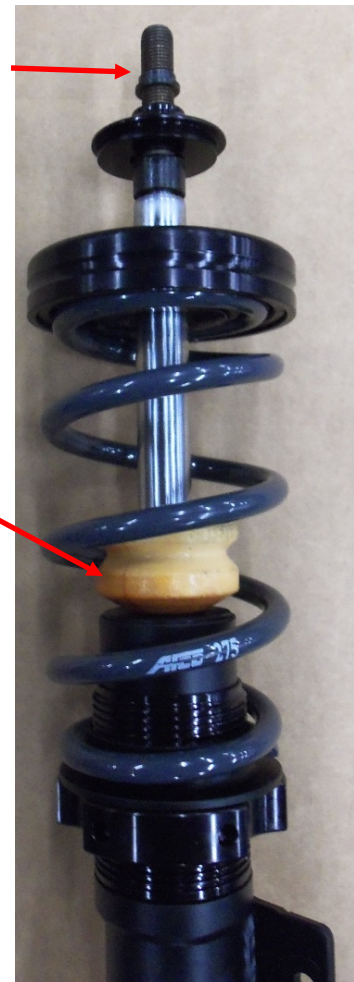


Fig. 20

* Reference service manual

Front Suspension Removal and Installation

22. Install the strut assembly into the already installed caster camber plate. From the top side, place the long strut spacer, washer, and nut onto strut shaft (Fig. 21). Torque the nut to the factory recommended torque spec.*



Fig. 21

23. Reinstall the two main strut mounting bolts & torque to the factory recommended torque spec. (Fig. 22).* Reinstall the ABS line (Fig. 22).

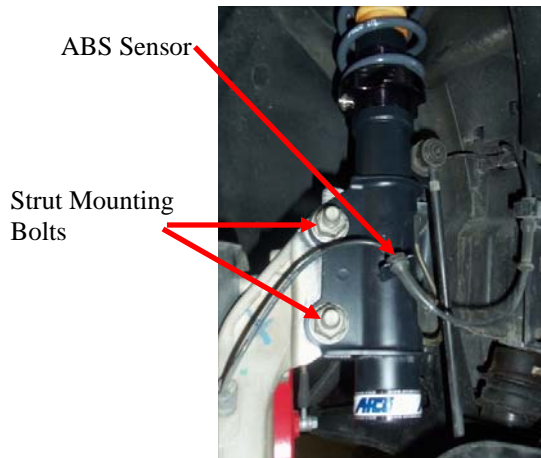


Fig. 22

24. Reinstall the sway bar link to the strut, and tighten it to the factory recommended torque spec. Next, install the brake line bracket (Fig. 23).*

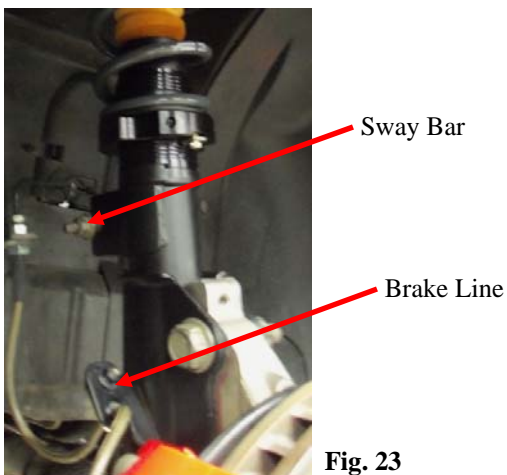


Fig. 23

* Reference service manual

25. Connect the other end of the sway bar end link to the sway bar and tighten the nut (Fig. 24).



Fig. 24

26. Repeat installation on the opposite side of car.

27. With the car on jack stands, rotate the steering wheel all the way to the right and all the way to the left. Check for interference with other components.

28. Reinstall the wheels and torque the lug nuts to the factory specification.*

Rear Suspension Removal and Installation

29. Place the rear of the car on jack stands and remove the rear wheels.

30. Unbolt the 15mm nuts holding the sway bar to the lower control arms (Fig. 25). Remove the end links from the sway bar.



Fig. 25

31. Unbolt the bottom bolt of the shock using a 21mm wrench (Fig. 25).

32. Loosen and remove the 18mm bolt attaching the spindle to the lower control arm (Fig. 25).

33. Using a 15mm wrench, remove the four bolts attaching the upper shock mount to the car (Fig. 26).



Fig. 26

34. The shock can be removed from the car at this time by pushing down on the lower control arm to gain more room (Fig. 27).

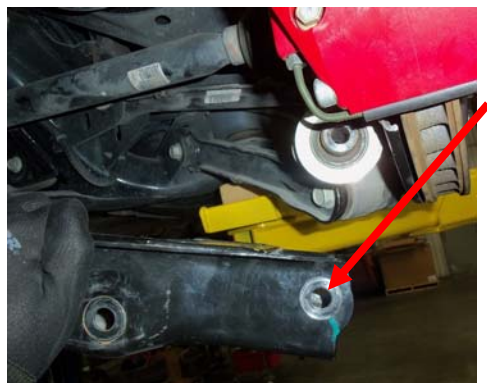


Fig. 27

* Reference service manual

35. The shock and spring assembly will have to be placed into a spring compressor in order to remove the shock and spring from the mount (Fig. 28). Compress the spring and use a 18mm socket to remove the nut on the shock shaft. The shock and spring can be removed from the mount at this time. The mount, rubber isolator, and metal washers will be re-used for the AFCO kit.



Fig. 28

36. Repeat shock removal for the other side of the vehicle.

37. Remove the four 13mm bolts holding the sway bar in place. The sway bar can be removed without dropping the exhaust (Fig. 29 & 30).



Fig. 29

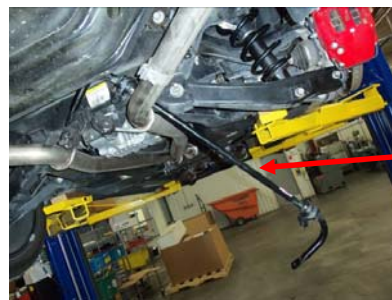


Fig. 30

38. The new sway bar can be installed at this time. First place the sway bar only into the car and let it hang on the exhaust.

Rear Suspension Removal and Installation

39. Next grease the rubber bushings with the supplied grease and place the bushings onto the sway bar close to where they will mount (Fig. 31).



Fig. 31

40. Place the metal mounts over the rubber bushings and bolt into place (Fig. 32).

41. Center the sway bar in the vehicle and install the shaft collars on the inside of each rubber bushing to prevent the sway bar from moving side to side in the vehicle (Fig. 32).



Fig. 32

42. Now the AFCO shock can be installed.

43. Place the coil-over nut with the nylon sleeve on the shock and thread it from the bottom leaving the nut as low as you can. Place the shock bumper on the shaft with the large end towards the bottom (Fig. 33).



Fig. 33

Coil-over nut

44. Place the spring onto the shock and place the top mount with the rubber spring isolator onto the shaft as it was removed, ensuring the plates are on both sides of the rubber bushing. Tighten the upper nut to factory torque specifications (Fig. 34).



Fig. 34

* Reference service manual

45. Insert the bearing spacers into each side of the bearing making sure they are fully seated into the bearing (Fig. 35).

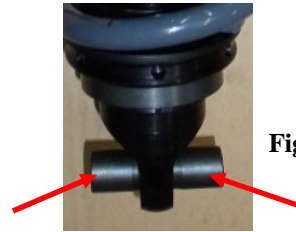


Fig. 35

46. Place the shock into the lower control arm first, but do not install the bolt.

47. Move the shock to get the top mount oriented into position. You may have to twist the top mount to get it oriented into position. Install the four upper bolts but do not tighten (Fig. 36).



Fig. 36

48. You will have to hold the bottom of the shock in the control arm and move the coil-over nut up in order to install the bottom bolt. While doing this make sure the rubber isolator stays on the top mount and the springs seats properly (Fig. 37).



Fig. 37

Rear Suspension Removal and Installation

49. Install the lower shock bolt and then the lower control arm bolt (Fig. 38).



Fig. 38

50. Now, all the bolts can be tightened for the shock and control arm.

51. Install the sway bar end link into the control arm and tighten the nut (Fig. 39).



Fig. 39

52. Move the coil-over nut to the desired location; approximately 2" from the bottom of the threads to the bottom of the coil-over nut will be 1" lower than factory.

53. Tighten the socket head cap screw on the locking collar of the coil-over nut to lock the nut (Fig. 40).



Fig. 40

54. Reinstall the tire and torque the lug nuts to factory specifications.

55. Repeat the shock installation for other side of the car.

56. Lower the car onto the ground and settle the car by rocking the car from inside of the trunk and from inside the engine compartment. Do not settle the car by pressing on the fenders because this may cause damage to your fenders.

57. Check the ride height by measuring the distance from the ground to the fender well. If an adjustment needs to be made, the car will have to be placed back on jack stands.

58. Loosen the locking collars and adjust the coil-over nuts with a spanner wrench or a punch. Tighten the locking collars on the coil-over nuts after the adjustments have been made.

59. Lower the car back on the ground and settle the suspension. Check the ride height again.

60. Sometimes it is necessary to drive the car for a few miles to help settle the suspension and seat all of the components in order to get an accurate ride height reading on all four corners of the car.

After the installation, it is strongly recommended to have a front end alignment performed by a Professional!

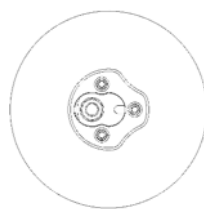
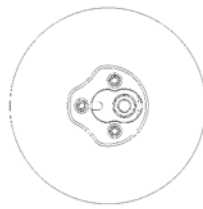
Caster Camber Plate Adjustment Guide

To make adjustments to the caster camber plate, secure the front of the car on jack stands and loosen the three 5/16" Allen bolts. This will allow the strut shaft to be adjusted inside of the fender well. The AFCO caster/camber plate will allow for positioning of the strut shaft to the desired position inside of the fender well. Below is a detailed diagram showing a few possible adjustment positions for the caster camber plate (Fig. 41).

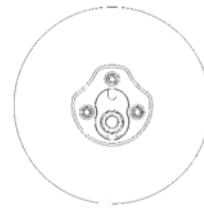
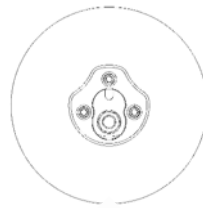
Front of car

Drivers Side

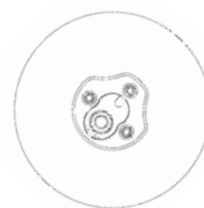
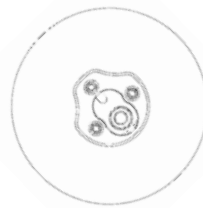
Passengers Side



Maximum camber



Maximum caster



**Combination of
caster and camber**

Fig. 41



* Reference service manual

Caster Camber Plate Service Information



The caster/camber plates are shipped pre-greased. AFCO has provided a needle grease tip that can snap into a standard grease gun for easy maintenance. No components will need to be removed for service on the caster/camber plates. The bearings only require a small amount of grease and should only be serviced as needed or every 15,000 miles. Any multi-purpose grease will work for this application.

1. Snap the grease needle into a standard grease gun (Fig. 42).



Fig. 42

2. From inside the engine compartment, locate the .065" hole on the top of the middle plate of the caster/camber kit (Fig. 43).



Fig. 43

3. Insert the grease needle into the hole in the caster camber plate until it bottoms out (Fig. 44).



Fig. 44

4. Slowly pump grease into the hole, 1/2 - 1 pump should be sufficient or until grease is visible on the ball of the bearing.
5. Wipe off any excess grease with a clean rag.
6. Repeat steps 2-5 for the opposite side.

*** Reference service manual**