



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).

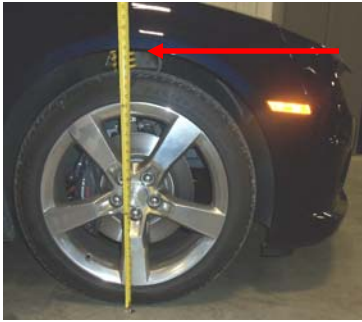


Fig. 1



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

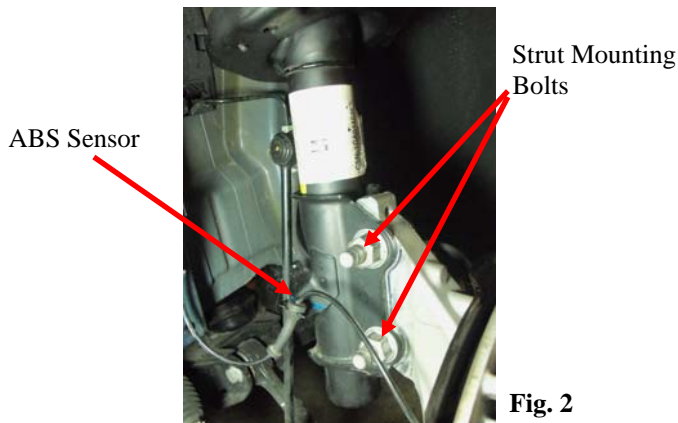


Fig. 2

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

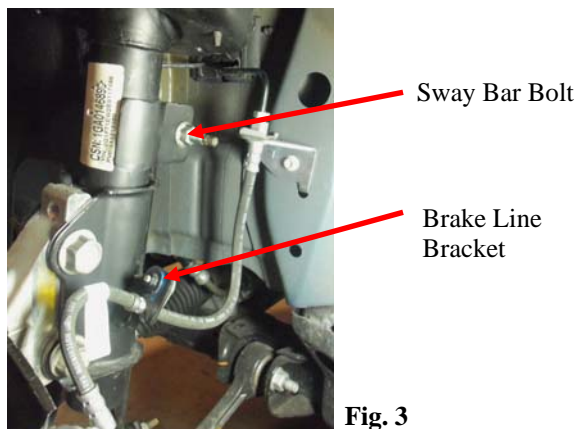


Fig. 3

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).

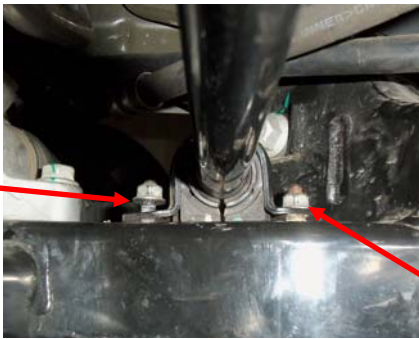


Fig. 7

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.

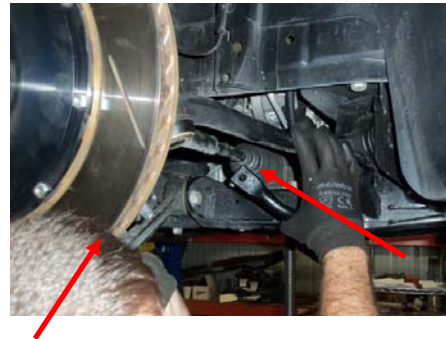


Fig. 10

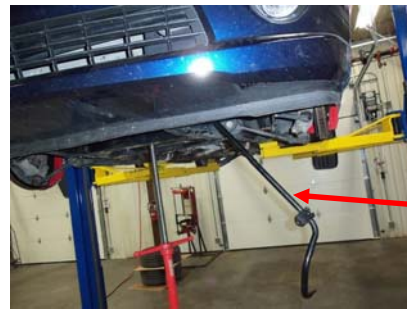


Fig. 11

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).

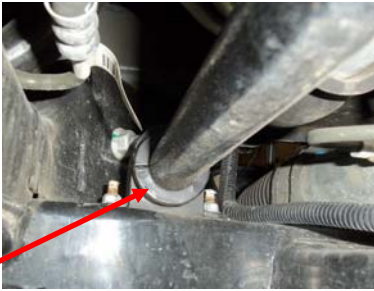


Fig. 14

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.

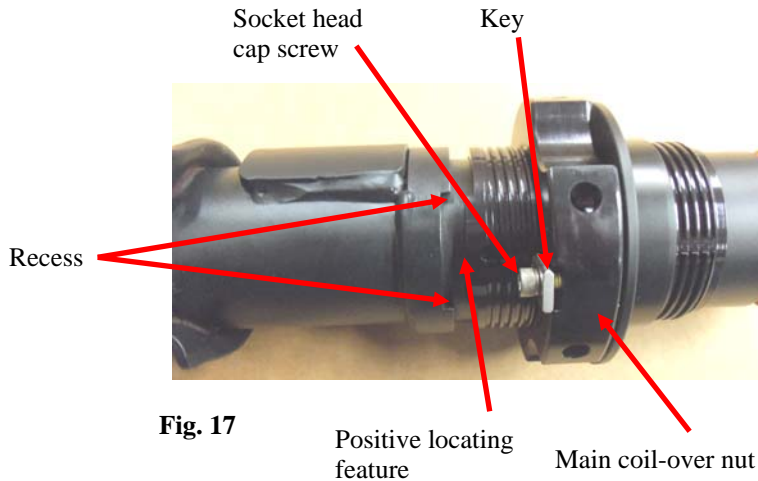
18. Install the tall spacer into the top of the bearing (Fig. 16).



Fig. 16

Front Suspension Removal and Installation

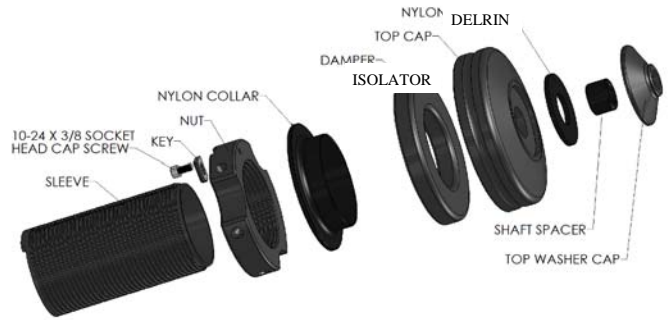
19. Loosen the socket head cap screw from the coil-over nut one turn and disengage the key from the sleeve. Next, screw the main coil-over nut to the very bottom of the sleeve to aid in assembly. From the bottom of the threads to the bottom of the nut should be approximately 1" to set the car at 1" lower 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).



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



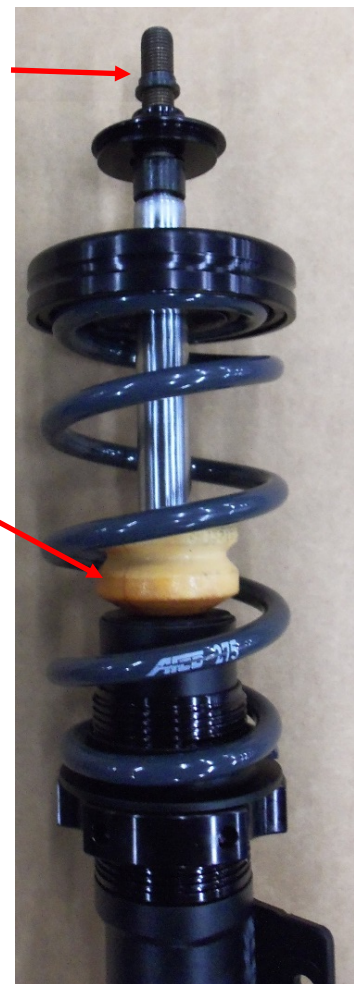
AFCO



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



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).

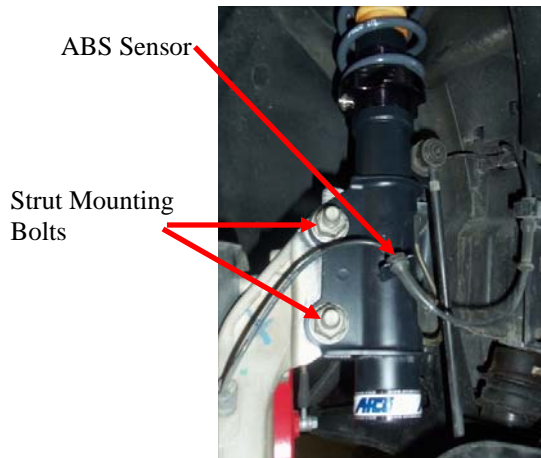


Fig. 22

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).*

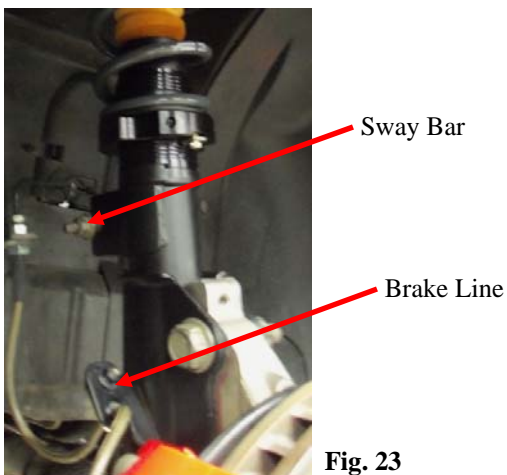


Fig. 23

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).

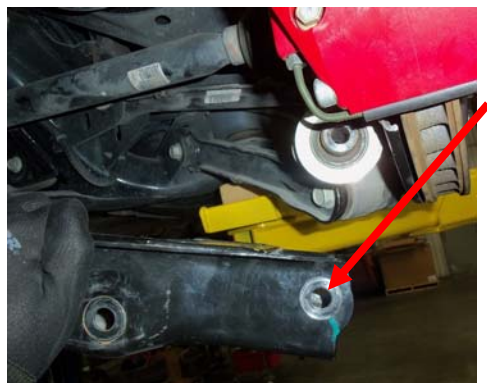


Fig. 27

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).



Jounce bumper

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

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

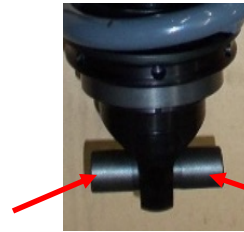


Fig. 35

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!



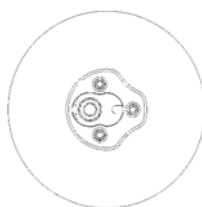
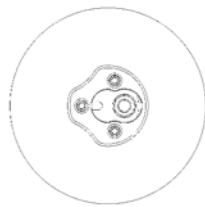
Caster Camber Plate Adjustment Guide

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).

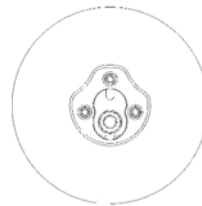
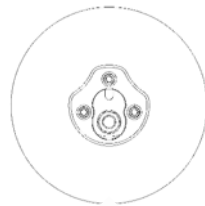
Front of car

Drivers Side

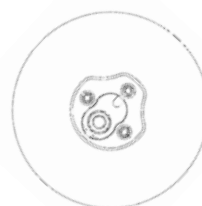
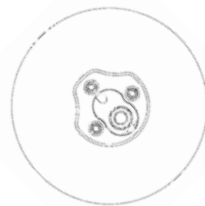
Passengers Side



Maximum camber



Maximum caster



**Combination of
caster and camber**

Fig. 41



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.



Installation Instructions

79-93 Fox Body Control Arm Rod End Style
PN 200008



Congratulations on your purchase of AFCO Mustang Control Arms . 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 control arms 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.

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

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

1. Assembled Control Arms (Qty. 2)
2. 1/16" Washers (Qty. 14)
3. 1/8" Washers (Qty. 10)
4. Spacers (Qty. 28)
5. Installation Instructions (Qty. 1)

Required Accessories

1. Hardware kit..... AFCO PN 200017 (Qty. 1)
2. Coil over kit (79-04 Mustang)AFCO PN 29022 (Qty. 2)
3. Struts (79-04 Mustang).....AFCO PN 30022 (Qty. 2)
4. Caster Camber plate AFCO (79-89 PN 40022, 90-93 PN 40023) (Qty. 1)

Tool List

22mm wrench	Needle nose pliers
24 mm wrench	Pickle fork
11/16" deep well socket	Small standard screwdriver
3/4" deep well socket	Jack stands
15/16" deep well socket	Service manual
24 mm deep well socket	Spring compressor
	Grease gun

1. Secure the front of vehicle on jack stands. Reference the factory service manual for proper jack stand support locations.
2. Remove the wheel and tire, then disconnect the sway bar link from the control arm. Next, disconnect the tie rod end from the spindle.
3. Removal of factory springs should only be performed by an experienced professional! (Reference service manual)* After the spring is removed, remove the factory control arm and spindle assembly by unbolting the main two strut bolts attaching the strut to the spindle (Fig. 1).
4. Remove the spindle from the factory control arm using a pickle fork. NOTE: In some cases it may be necessary to remove the brake rotor and caliper in order to remove the spindle from the control arm.

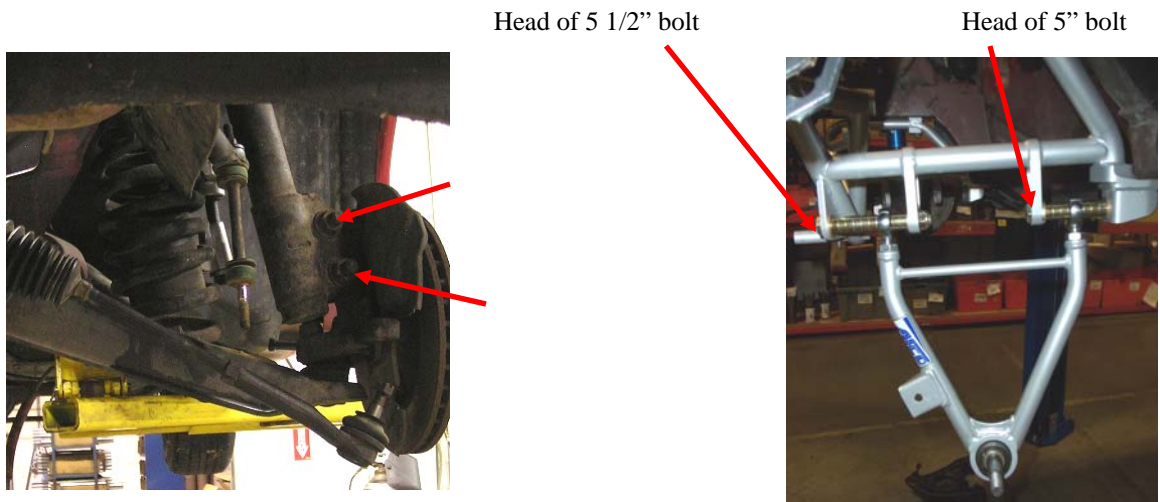


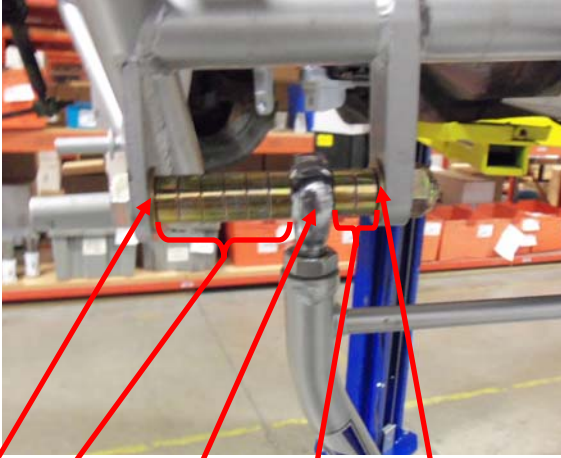
Fig. 1

Fig. 2

5. If installing the AFCO control arm onto the AFCO Tubular K-member, use a 5/8-11 x 5" bolt in the rear mounting position and the longer 5/8-11 x 5 1/2" bolt in the front mounting position (bolts from the 200017 bolt kit) (Fig. 2). The front and rear bolts should be installed with the nut at the rear of the car and the bolt head at the front of the car. This will prevent interference with the steering rack (Fig. 2). If installing the AFCO control arms onto a factory k-member, four grade 8 5/8-11 x 5" bolts and nylock nuts will need to be purchased in order to install the control arms. **DO NOT USE THE FACTORY BOLTS WHEN INSTALLING the CONTROL ARMS!**
6. For spacer installation of the AFCO control arms onto the AFCO Tubular K-Member, see Figs. 3 and 4. If installing onto the stock K-Member, see Figs. 5 and 6. Due to varying tolerances, the use of or removal of a 1/16" washer may be necessary in order to fit the arm. Torque the bolts to 159 ft-lbs.

Fig. 3 Front Control Arm Mount on AFKO Tubular K-Member

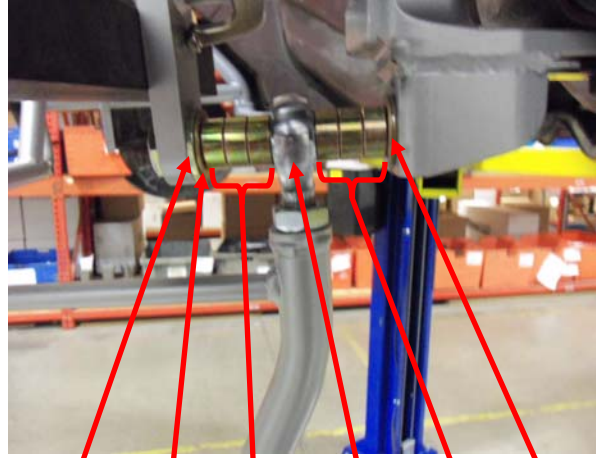
Front of Vehicle



- 1 ea 1/16" Washer
- 6 ea Rod End Spacer
- 1 ea Rod End
- 2 ea Rod End Spacer
- 1 ea 1/16" Washer

Fig. 4 Rear Control Arm Mount on AFKO Tubular K-Member

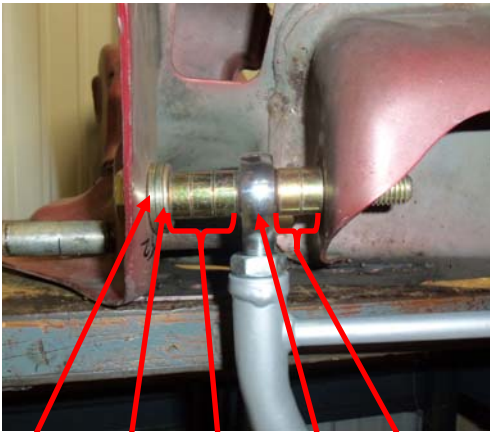
Rear of Vehicle



- 1 ea 1/8" Washer
- 1 ea 1/16" Washer
- 3 ea Rod End Spacer
- 1 ea Rod End
- 3 ea Rod End Spacer
- 2 ea 1/16" Washer

Fig. 5 Front Control Arm Mount on Stock K-Member

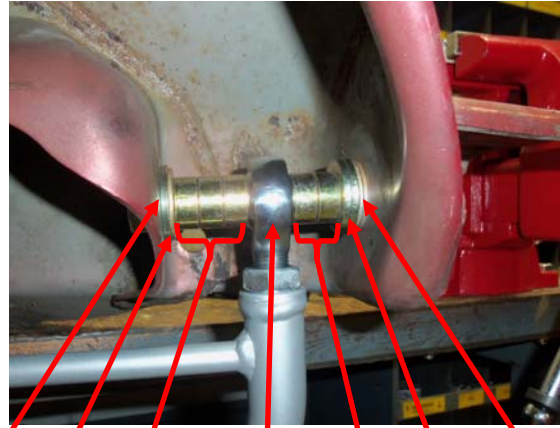
Front of Vehicle



- 2 ea 1/8" Washer
- 1 ea 1/16" Washer
- 3 ea Rod End Spacer
- 1 ea Rod End
- 2 ea Rod End Spacer

Fig. 6 Rear Control Arm Mount on Stock K-Member

Rear of Vehicle



- 1 ea 1/8" Washer
- 1 ea 1/16" Washer
- 3 ea Rod End Spacer
- 1 ea Rod End
- 2 ea Rod End Spacer
- 2 ea 1/8" Washer
- 2 ea 1/16" Washer

7. Install the spindle onto the ball joint, and torque the nut. Next, install the cotter pin (Fig. 7).*
8. Install the two main strut bolts and torque to the manufacturer's specs. (Fig. 8).*



Fig. 7



Fig. 8

9. Re-install the tie rod end into the spindle and torque the nut to manufacturer's spec. (Fig. 9).* Install the cotter pin after the nut is properly torqued.

10. Install the sway bar link into the control arm and torque to manufacturer's spec. (Fig. 9).*

11. If it was necessary to remove the brake rotor and caliper earlier, they should be reinstalled at this time.*

12. Install the grease zerk into the ball joint. Grease the ball joint before installing the tire and wheel (Fig. 10).



Fig. 9



Fig. 10

13. Reinstall the tire and wheel.
14. Repeat steps 2-14 on the opposite side of the car.
15. After both arms have been installed, you should check for proper clearance with the tire, control arm, suspension components, and steering components before driving the vehicle. This should be done while the car is on jack stands and also on the ground in order to check all components during full suspension travel.
16. It is recommended to have a front end alignment performed after installing the control arms.

Service Information

Ball joint.....AFCO PN 20040
5/8" Rod End.....AFCO PN 10434
5/8" Jam Nut.....AFCO PN 10142



The rod end should be set at 1.15" from the nut to the center of the rod end if replaced.



Installation Instructions

79-93 Fox Body Control Arm Bushing Style
PN 200009



Congratulations on your purchase of AFCO Mustang Control Arms . 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 control arms 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.

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

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

1. Assembled Control Arms (Qty. 2)
2. 1/16" Washers (Qty. 8)
3. 1/8" Washers (Qty. 14)
4. Spacers (Qty. 4)
5. Installation Instructions (Qty. 1)

Required Accessories

1. Hardware kit..... AFCO PN 200017 (Qty. 1)
2. Coil over kit (79-04 Mustang)AFCO PN 29022 (Qty. 2)
3. Struts (79-04 Mustang).....AFCO PN 30022 (Qty. 2)
4. Caster Camber plate AFCO (79-89 PN 40022, 90-93 PN 40023) (Qty. 1)

Tool List

- | | |
|-------------------------|----------------------------|
| 22mm wrench | Needle nose pliers |
| 24 mm wrench | Pickle fork |
| 11/16" deep well socket | Small standard screwdriver |
| 3/4" deep well socket | Jack stands |
| 15/16" deep well socket | Service manual |
| 24 mm deep well socket | Spring compressor |
| | Grease gun |

1. Secure the front of vehicle on jack stands. Reference the factory service manual for proper jack stand support locations.
2. Remove the wheel and tire, then disconnect the sway bar link from the control arm. Next, disconnect the tie rod end from the spindle.
3. Removal of factory springs should only be performed by an experienced professional! (Reference service manual)* After the spring is removed, remove the factory control arm and spindle assembly by unbolting the main two strut bolts attaching the strut to the spindle (Fig. 1).
4. Remove the spindle from the factory control arm using a pickle fork. NOTE: In some cases it may be necessary to remove the brake rotor and caliper in order to remove the spindle from the control arm.

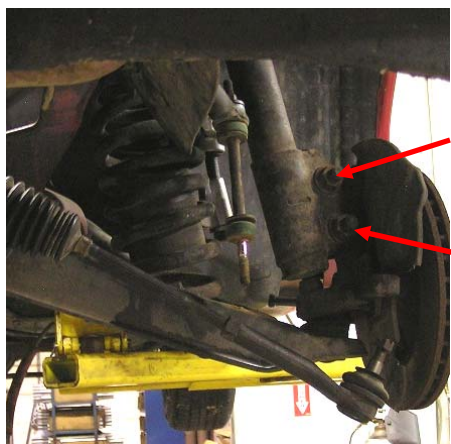


Fig. 1

Head of 5 1/2" bolt

Head of 5" bolt



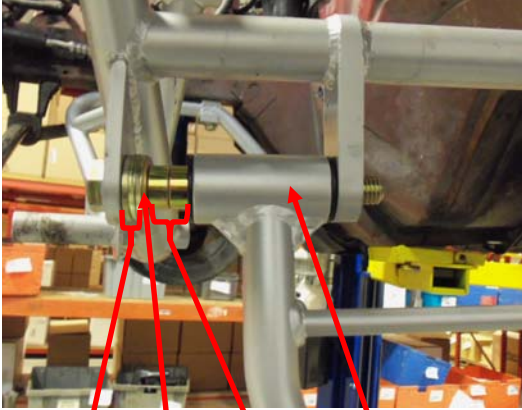
Fig. 2

5. If installing the AFCO control arm onto the AFCO Tubular K-member, use a 5/8-11 x 5" bolt in the rear mounting position and the longer 5/8-11 x 5 1/2" bolt in the front mounting position (bolts from the 200017 bolt kit) (Fig. 2). The front and rear bolts should be installed with the nut at the rear of the car and the bolt head at the front of the car. This will prevent interference with the steering rack (Fig. 2). If installing the AFCO control arms onto a factory k-member, re-use the factory control arm bolts and nuts with the supplied washers.

6. For spacer installation of the AFCO control arms onto the AFCO Tubular K-Member, see Figs. 3 and 4. If installing onto the stock K-Member, see Figs. 5 and 6. Due to varying tolerances, the use of or removal of a 1/16" washer may be necessary in order to fit the arm. Torque the bolts to 159 ft-lbs.

Fig. 3 Front Control Arm Mount on AFCO Tubular K-Member

Front of Vehicle



3 ea 1/8" Washer

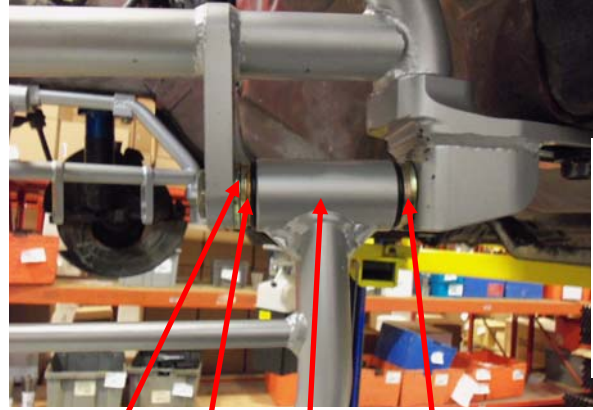
1 ea 1/16" Washer

2 ea Rod End Spacer

1 ea Control Arm Bushing

Fig. 4 Rear Control Arm Mount on AFCO Tubular K-Member

Rear of Vehicle



2 ea 1/8" Washer

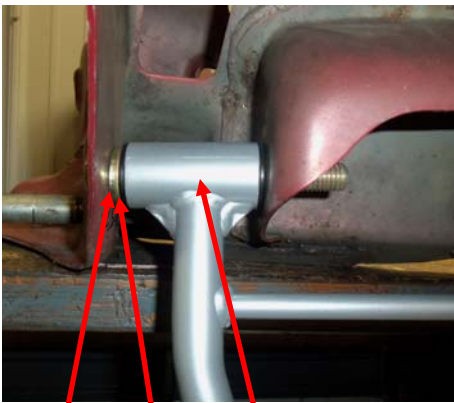
1 ea 1/16" Washer

1 ea Control Arm Bushing

2 ea 1/8" Washer

Fig. 5 Front Control Arm Mount on Stock K-Member

Front of Vehicle



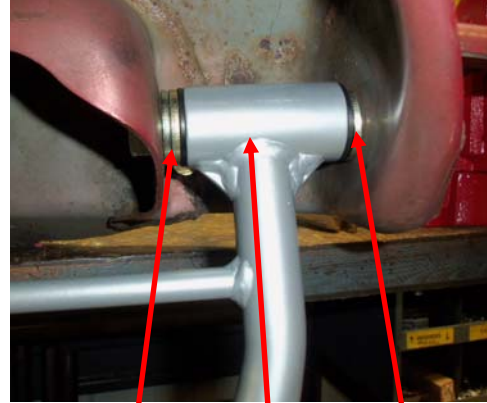
1 ea 1/8" Washer

1 ea 1/16" Washer

1 ea Control Arm Bushing

Fig. 6 Rear Control Arm Mount on Stock K-Member

Rear of Vehicle



1 ea 1/8" Washer

1 ea Control Arm Bushing

1 ea 1/8" Washer

7. Install the spindle onto the ball joint, and torque the nut. Next, install the cotter pin (Fig. 7).*
8. Install the two main strut bolts and torque to the manufacturer's specs. (Fig. 8).*



Fig. 7



Fig. 8

9. Re-install the tie rod end into the spindle and torque the nut to manufacturer's spec. (Fig. 9).* Install the cotter pin after the nut is properly torqued.

10. Install the sway bar link into the control arm and torque to manufacturer's spec. (Fig. 9).*

11. If it was necessary to remove the brake rotor and caliper earlier, they should be reinstalled at this time.*

12. Install the grease zerk into the ball joint. Grease the ball joint before installing the tire and wheel (Fig. 10).



Fig. 9



Fig. 10

13. Reinstall the tire and wheel.

14. Repeat steps 2-14 on the opposite side of the car.

15. After both arms have been installed, you should check for proper clearance with the tire, control arm, suspension components, and steering components before driving the vehicle. This should be done while the car is on jack stands and also on the ground in order to check all components during full suspension travel.

16. It is recommended to have a front end alignment performed after installing the control arms.

Service Information

Ball joint.....AFCO PN 20040

Nylon Bushing....AFCO PN A200020057x

Inner Sleeve.....AFCO PN 0000056



Installation Instructions

94-04 SN95 Control Arm Rod End Style PN
200010



Congratulations on your purchase of AFCO Mustang Control Arms . 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 control arms 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.

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

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

1. Assembled Control Arms (Qty. 2)
2. 1/16" Washers (Qty. 8)
3. 1/8" Washers (Qty. 12)
4. Spacers (Qty. 26)
5. Installation Instructions (Qty. 1)

Required Accessories

1. Hardware kit..... AFCO PN 200017 (Qty. 1)
2. Coil over kit (79-04 Mustang)AFCO PN 29022 (Qty. 2)
3. Struts (79-04 Mustang).....AFCO PN 30022 (Qty. 2)
4. Caster Camber plate AFCO (94-04 PN 40024) (Qty. 1)

Tool List

22mm wrench	Needle nose pliers
24 mm wrench	Pickle fork
11/16" deep well socket	Small standard screwdriver
3/4" deep well socket	Jack stands
15/16" deep well socket	Service manual
24 mm deep well socket	Spring compressor
	Grease gun

1. Secure the front of vehicle on jack stands. Reference the factory service manual for proper jack stand support locations.
2. Remove the wheel and tire, then disconnect the sway bar link from the control arm. Next, disconnect the tie rod end from the spindle.
3. Removal of factory springs should only be performed by an experienced professional! (Reference service manual)* After the spring is removed, remove the factory control arm and spindle assembly by unbolting the main two strut bolts attaching the strut to the spindle (Fig. 1).
4. Remove the spindle from the factory control arm using a pickle fork. NOTE: In some cases it may be necessary to remove the brake rotor and caliper in order to remove the spindle from the control arm.

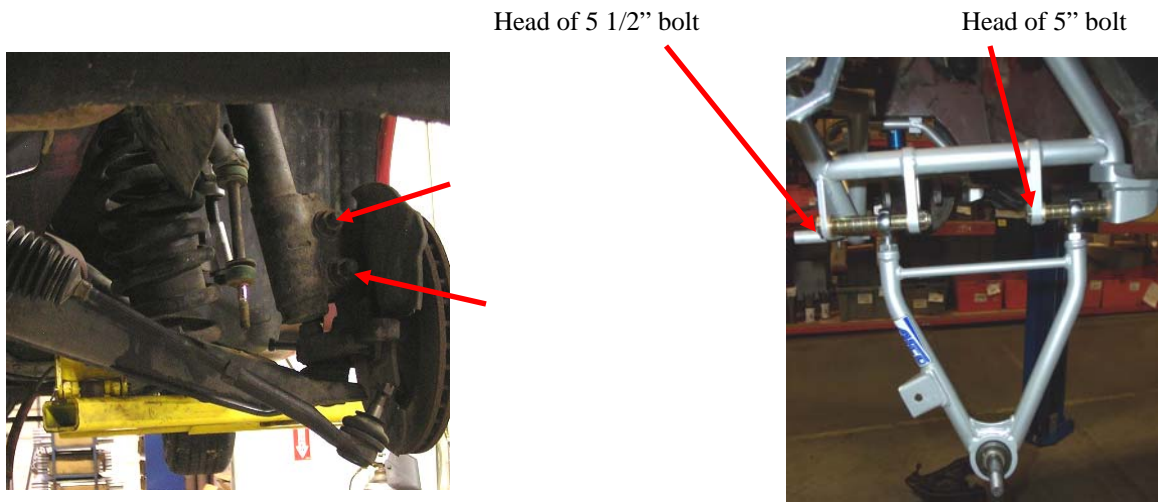
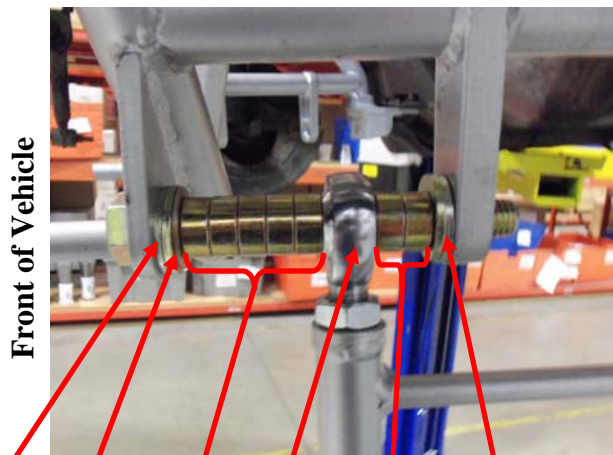


Fig. 1

Fig. 2

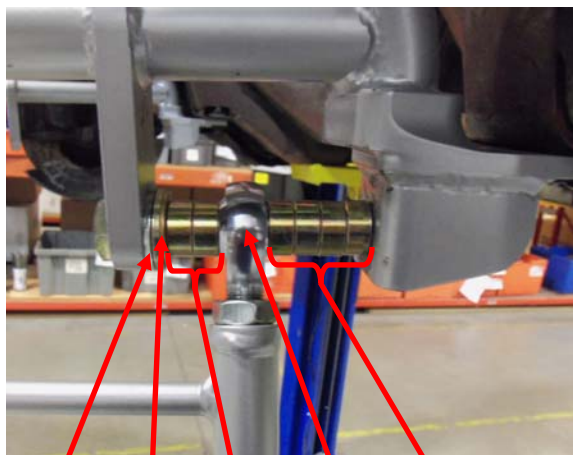
5. If installing the AFCO control arm onto the AFCO Tubular K-member, use a 5/8-11 x 5" bolt in the rear mounting position and the longer 5/8-11 x 5 1/2" bolt in the front mounting position (bolts from the 200017 bolt kit) (Fig. 2). The front and rear bolts should be installed with the nut at the rear of the car and the bolt head at the front of the car. This will prevent interference with the steering rack (Fig. 2). If installing the AFCO control arms onto a factory k-member, four grade 8 5/8-11 x 5" bolts and nylock nuts will need to be purchased in order to install the control arms. **DO NOT USE THE FACTORY BOLTS WHEN INSTALLING the CONTROL ARMS!**
6. For spacer installation of the AFCO control arms onto the AFCO Tubular K-Member, see Figs. 3 and 4. If installing onto the stock K-Member, see Figs. 5 and 6. Due to varying tolerances, the use of or removal of a 1/16" washer may be necessary in order to fit the arm. Torque the bolts to 159 ft-lbs.

Fig. 3 Front Control Arm Mount on AFCO Tubular K-Member



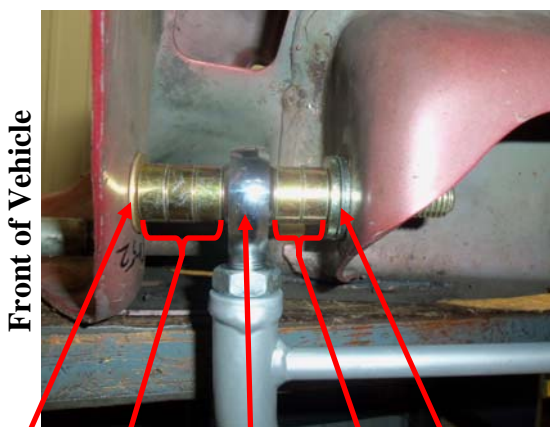
- 2 ea 1/8" Washer
- 1 ea 1/16" Washer
- 5 ea Rod End Spacer
- 1 ea Rod End
- 2 ea Rod End Spacer
- 2 ea 1/8" Washer

Fig. 4 Rear Control Arm Mount on AFCO Tubular K-Member



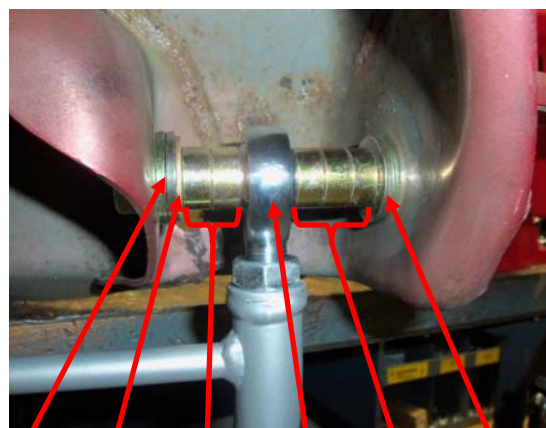
- 2 ea 1/8" Washer
- 1 ea 1/16" Washer
- 2 ea Rod End Spacer
- 1 ea Rod End
- 4 ea Rod End Spacer

Fig. 5 Front Control Arm Mount on Stock K-Member



- 1 ea 1/16" Washer
- 3 ea Rod End Spacer
- 1 ea Rod End
- 2 ea Rod End Spacer
- 2 ea 1/8" Washer

Fig. 6 Rear Control Arm Mount on Stock K-Member



- 2 ea 1/8" Washer
- 1 ea 1/16" Washer
- 2 ea Rod End Spacer
- 1 ea Rod End
- 3 ea Rod End Spacer
- 2 ea 1/8" Washer

7. Install the spindle onto the ball joint, and torque the nut. Next, install the cotter pin (Fig. 7).*

8. Install the two main strut bolts and torque to the manufacturer's specs. (Fig. 8).*



Fig. 7



Fig. 8

9. Re-install the tie rod end into the spindle and torque the nut to manufacturer's spec. (Fig. 9).* Install the cotter pin after the nut is properly torqued.

10. Install the sway bar link into the control arm and torque to manufacturer's spec. (Fig. 9).*

11. If it was necessary to remove the brake rotor and caliper earlier, they should be reinstalled at this time.*

12. Install the grease zerk into the ball joint. Grease the ball joint before installing the tire and wheel (Fig. 10).



Fig. 9



Fig. 10

13. Reinstall the tire and wheel.
14. Repeat steps 2-14 on the opposite side of the car.
15. After both arms have been installed, you should check for proper clearance with the tire, control arm, suspension components, and steering components before driving the vehicle. This should be done while the car is on jack stands and also on the ground in order to check all components during full suspension travel.
16. It is recommended to have a front end alignment performed after installing the control arms.

Service Information

Ball joint.....AFCO PN 20040
5/8" Rod End.....AFCO PN 10434
5/8" Jam Nut.....AFCO PN 10142



The rod end should be set at 1.15" from the nut to the center of the rod end if replaced.



Installation Instructions

94-04 SN95 Control Arm Bushing Style PN 200011



Congratulations on your purchase of AFCO Mustang Control Arms . 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 control arms 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.

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

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

1. Assembled Control Arms (Qty. 2)
2. 1/16" Washers (Qty. 8)
3. 1/8" Washers (Qty. 8)
4. Spacers (Qty. 6)
5. Installation Instructions (Qty. 1)

Required Accessories

1. Hardware kit..... AFCO PN 200017 (Qty. 1)
2. Coil over kit (79-04 Mustang)AFCO PN 29022 (Qty. 2)
3. Struts (79-04 Mustang).....AFCO PN 30022 (Qty. 2)
4. Caster Camber plate AFCO (94-04 PN 40024) (Qty. 1)

Tool List

- | | |
|-------------------------|----------------------------|
| 22mm wrench | Needle nose pliers |
| 24 mm wrench | Pickle fork |
| 11/16" deep well socket | Small standard screwdriver |
| 3/4" deep well socket | Jack stands |
| 15/16" deep well socket | Service manual |
| 24 mm deep well socket | Spring compressor |
| | Grease gun |

1. Secure the front of vehicle on jack stands. Reference the factory service manual for proper jack stand support locations.
2. Remove the wheel and tire, then disconnect the sway bar link from the control arm. Next, disconnect the tie rod end from the spindle.
3. Removal of factory springs should only be performed by an experienced professional! (Reference service manual)* After the spring is removed, remove the factory control arm and spindle assembly by unbolting the main two strut bolts attaching the strut to the spindle (Fig. 1).
4. Remove the spindle from the factory control arm using a pickle fork. NOTE: In some cases it may be necessary to remove the brake rotor and caliper in order to remove the spindle from the control arm.

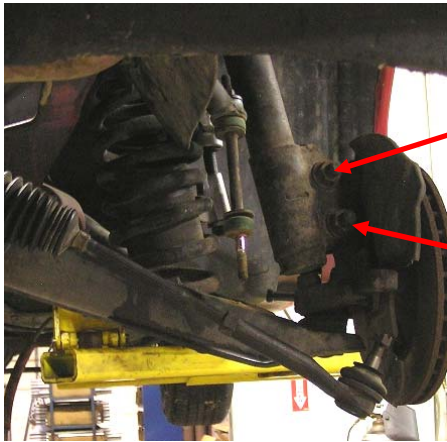


Fig. 1

Head of 5 1/2" bolt

Head of 5" bolt



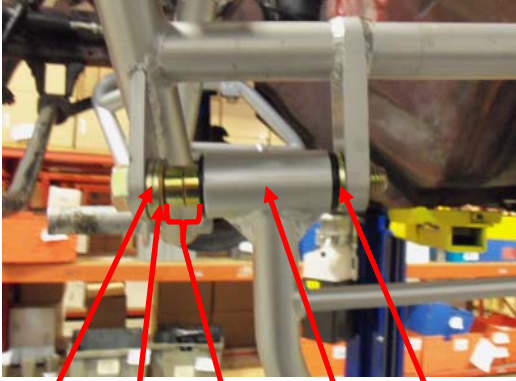
Fig. 2

5. If installing the AFCO control arm onto the AFCO Tubular K-member, use a 5/8-11 x 5" bolt in the rear mounting position and the longer 5/8-11 x 5 1/2" bolt in the front mounting position (bolts from the 200017 bolt kit) (Fig. 2). The front and rear bolts should be installed with the nut at the rear of the car and the bolt head at the front of the car. This will prevent interference with the steering rack (Fig. 2). If installing the AFCO control arms onto a factory k-member, re-use the factory control arm bolts and nuts with the supplied washers.

6. For spacer installation of the AFCO control arms onto the AFCO Tubular K-Member, see Figs. 3 and 4. If installing onto the stock K-Member, see Figs. 5 and 6. Due to varying tolerances, the use of or removal of a 1/16" washer may be necessary in order to fit the arm. Torque the bolts to 159 ft-lbs.

Fig. 3 Front Control Arm Mount on AFCO Tubular K-Member

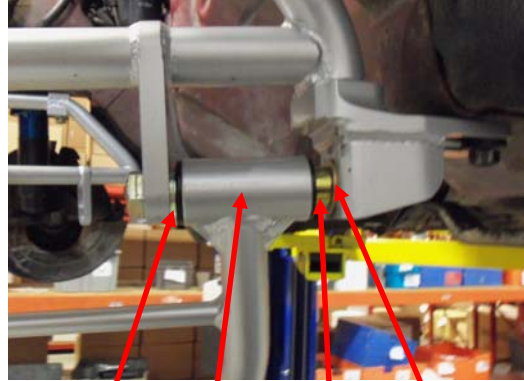
Front of Vehicle



- 2 ea 1/8" Washer
- 1 ea 1/16" Washer
- 2 ea Rod End Spacer
- 1 ea Control Arm Bushing
- 1 ea 1/8" Washer

Fig. 4 Rear Control Arm Mount on AFCO Tubular K-Member

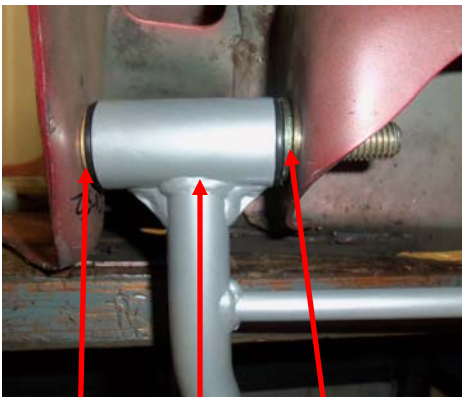
Rear of Vehicle



- 1 ea 1/8" Washer
- 1 ea Control Arm Bushing
- 1 ea Rod End Spacer
- 1 ea 1/16" Washer

Fig. 5 Front Control Arm Mount on Stock K-Member

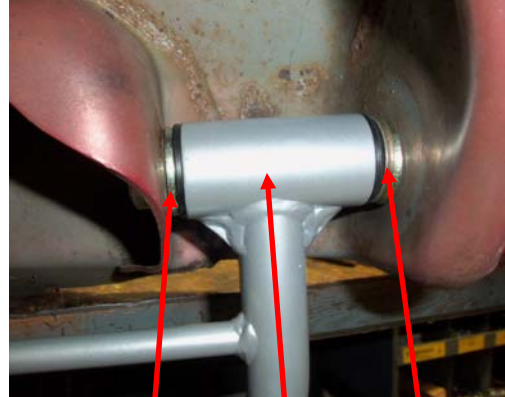
Front of Vehicle



- 1 ea 1/16" Washer
- 1 ea Control Arm Bushing
- 1 ea 1/8" Washer

Fig. 6 Rear Control Arm Mount on Stock K-Member

Rear of Vehicle



- 1 ea 1/8" Washer
- 1 ea Control Arm Bushing
- 2 ea 1/8" Washer

7. Install the spindle onto the ball joint, and torque the nut. Next, install the cotter pin (Fig. 7).*
8. Install the two main strut bolts and torque to the manufacturer's specs. (Fig. 8).*



Fig. 7



Fig. 8

9. Re-install the tie rod end into the spindle and torque the nut to manufacturer's spec. (Fig. 9).* Install the cotter pin after the nut is properly torqued.

10. Install the sway bar link into the control arm and torque to manufacturer's spec. (Fig. 9).*

11. If it was necessary to remove the brake rotor and caliper earlier, they should be reinstalled at this time.*

12. Install the grease zerk into the ball joint. Grease the ball joint before installing the tire and wheel (Fig. 10).

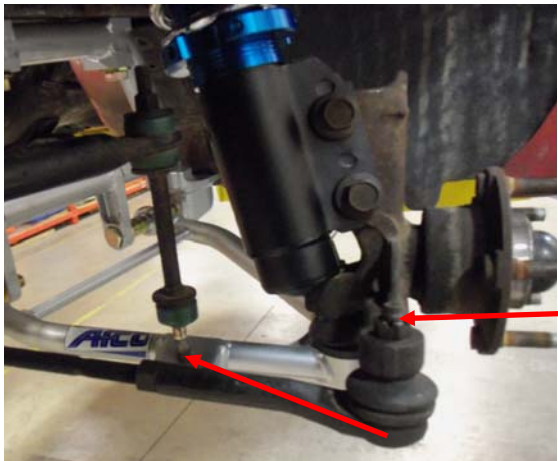


Fig. 9



Fig. 10

13. Reinstall the tire and wheel.

14. Repeat steps 2-14 on the opposite side of the car.

15. After both arms have been installed, you should check for proper clearance with the tire, control arm, suspension components, and steering components before driving the vehicle. This should be done while the car is on jack stands and also on the ground in order to check all components during full suspension travel.

16. It is recommended to have a front end alignment performed after installing the control arms.

Service Information

Ball joint.....AFCO PN 20040

Nylon Bushing....AFCO PN A200020057x

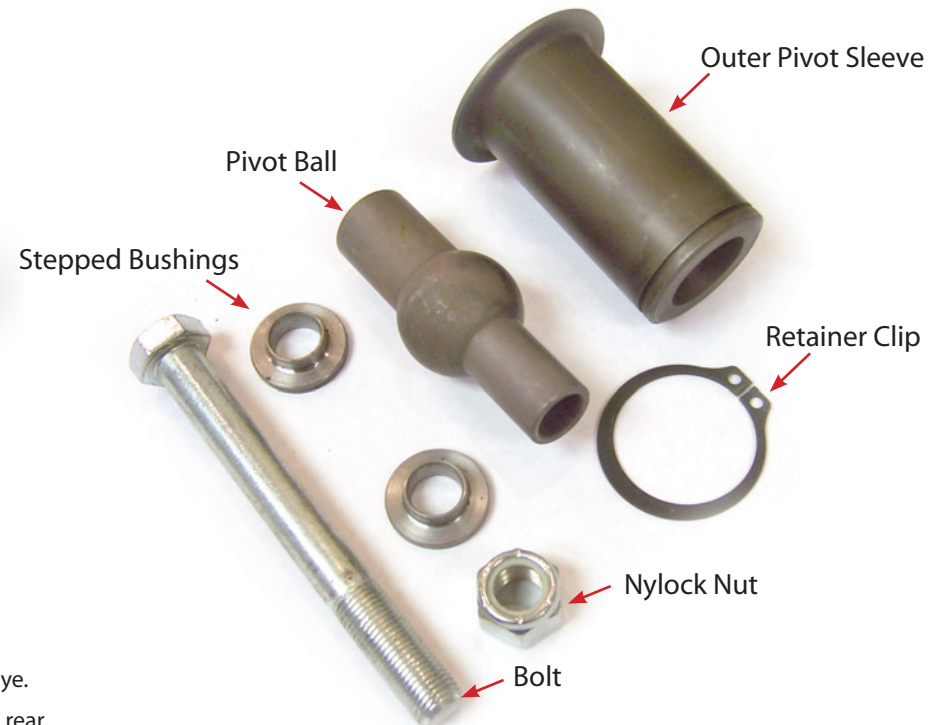
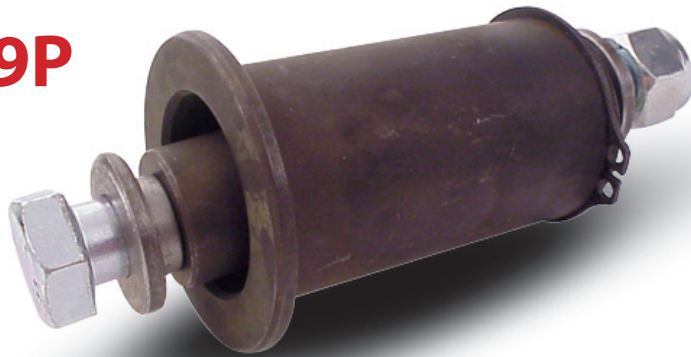
Inner Sleeve.....AFCO PN 0000056

Leaf Spring Pivot Bushing



This unit is designed to replace the bushing in the front spring eye on Chrysler type racing springs (both in mono lead and multileaf). The purpose of the part is to relieve any bind or restriction on the movement of the spring when responding to various loads.

20229P



Assembly Instructions

- Remove front spring eye bushings and clean out any rust or scale from inside of spring eye.
- Push outer pivot sleeve into front spring eye from left side of spring (when looking from rear of car). Due to spring manufacturing tolerances for front eye dimensions, the outer pivot sleeve may need anything from a rubber mallet to a small press to install.
- Install snap ring on pivot sleeve.
- Coat inside of pivot sleeve with good load bearing grease such as wheel bearing lubricant.
- Grease the pivot ball and install inside pivot sleeve. The small end of the pivot ball will be on the same side of the spring as the snap ring.
- Place the spring in the front mounts. Install the stepped bushings into the bracket bolt holes. Secure the stepped bushings with two 1/2" welds each. (If mount brackets are less than 3/16" thick the stepped bushings will need to be cut down so that the step is the same thickness as the mounting plate.)
- Put the 1/2 x 4-1/2 bolt through the entire assembly and tighten the lock nut.
- Assemble the rest of the suspension.

Recommended Maintenance

Remove the pivot ball, clean and re-pack with grease and re-install every 3 to 4 race nights. (more often in extremely dusty or abrasive conditions)

PLEASE READ TO ENSURE OPTIMUM PERFORMANCE FROM AFCO LOW FRICTION BALL JOINTS

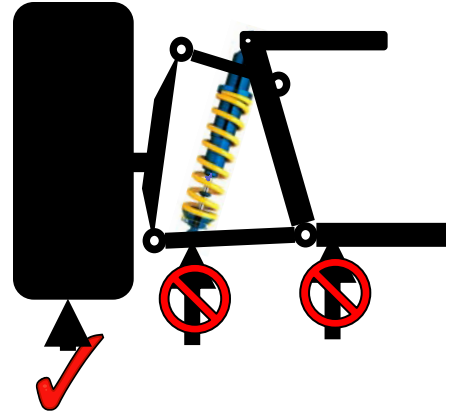
Thank you for purchasing a genuine AFCO low friction ball joint. This ball joint has been engineered to provide the lowest friction possible. The low friction ball joint will provide more repeatable and consistent set ups, better handling and improved traction because of superior suspension response.

When under load the low friction ball joint has little to no deflection or play and little friction. The tolerances between the ball and the housing that make the AFCO Low Friction ball joint superior in this respect are very tight and provide precise suspension motion. When jacking the racecar, however, you should be aware of the Following:

* When lifting the car by the lower control arms or frame, some play may be evident in the ball joints. This is considered normal and should be expected. The tires and suspension are heavy and can cause the unloaded ball joint to come slightly out of its socket when the car is jacked as described above. Again, this is considered normal.

The proper way to check any ball joint for wear is described below.

- 1) Set the tire on a slide plate to allow the wheel to slide freely. Old body panels or plastic sheets stacked together and greased make great slide plates.
- 2) Using a light hammer, tap on the side of the spindle where the stud from the ball joint is bolted. There should be little to no movement of the ball relative to the housing. When the play becomes excessive you may have a worn out ball joint.





Dual Stage Coil-Over Setup Instructions

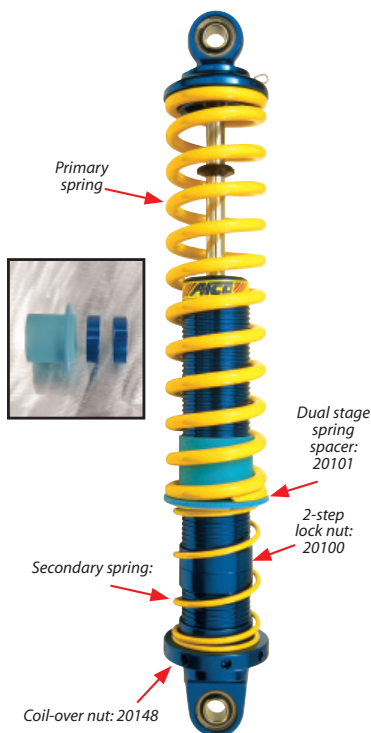
More Traction & More Forward Bite

AFCO's Dual Stage Coil-Over keeps the springs and suspension loaded at all times to improve traction. Additionally, the system's special Dual Lock Nut feature can be adjusted to enhance weight transfer, especially at corner exit.

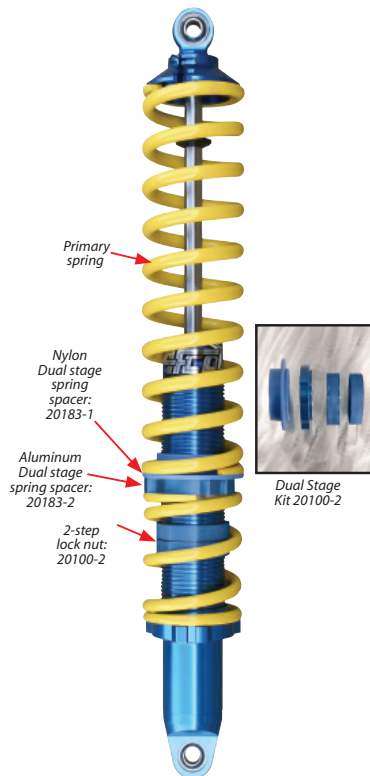
Multiple Options

A variety of spring rates is available to provide you with the ultimate combination for traction improvement.

20121: Fits Afco small body shocks using 1 7/8" ID springs.



20121-2: Fits Afco large body shocks using 2 5/8" ID springs.



SMALL BODY DUAL STAGE COMPONENTS	
DESCRIPTION	PART #
15# SECONDARY SPRING	29015-3
25# SECONDARY SPRING	29025-3
45# SECONDARY SPRING	29045-3
65# SECONDARY SPRING	29065-3
DUAL STAGE HARDWARE KIT (2 X 20100 & 1 X 20101)	20121
DUAL STAGE LOCK NUT	20100
DUAL STAGE SPRING SPACER	20101

BIG BODY DUAL STAGE COMPONENTS	
DESCRIPTION	PART #
SECONDARY SPRING 4 X 300# 2-5/8 I.D.	26300
SECONDARY SPRING 4 X 400# 2-5/8 I.D.	26400
SECONDARY SPRING 4 X 600# 2-5/8 I.D.	26600
SECONDARY SPRING 4 X 800# 2-5/8 I.D.	26800
BIG BODY DUAL STAGE HARDWARE KIT (INCLUDES 2 X 20100-2, 20183-1, 20183-2)	20121-2
DUAL STAGE SPRING SPACER/SLIDER NYLON	20183-1
DUAL STAGE LOCK NUT (REQUIRES 2 PCS.)	20100-2
DUAL STAGE SPRING SPACER ALUMINUM	20183-2

How It Works

When two springs are stacked, the overall spring rate is softer than either spring as long as both springs can flex. If one spring becomes unable to flex, then the spring rate stiffens to the rate of the active spring. The AFco Dual Stage Coil-Over takes advantage of this principle to improve traction by providing dual spring rates.

For example, adding an AFco Dual Stage Coil-Over to the right and/or left front will cause the front of the racecar to lift higher at corner exit. The increase in front end lift is due to the soft spring rate provided by the dual, active springs while the springs are unloading weight. The higher front end lift causes additional weight to transfer to the rear tires and improves forward bite.

The dual lock nuts can be adjusted to keep just one spring active when the suspension goes into compression beyond a certain point. Thus, you can keep your original spring rate and maintain corner entry handling with the AFco Dual Stage Coil-Over.

The AFco Dual Stage Coil-Over can also be used on the left rear of dirt racecars to improve corner exit handling. This system can be set up to provide a stiff compression rate along with a soft rebound rate and has proven to be more effective than a simple stacked spring arrangement, which provides a softened rate in both compression and rebound.

Set-Up

You can start out with your normal spring rate. Then add a second spring. Dirt late models will typically add a 4" x 400#/in. to 600#/in. second spring for left rear applications. Set ride heights with the dual lock nuts not touching the slider / spring spacer. Adjust the dual lock nuts to just contact the slider / spring spacer after the ride heights have been set. You can soften a spring to increase lift and hike-up or stiffen a spring to keep the chassis flatter on the race track. Keep in mind that a change to the primary spring can affect both corner exit and entry handling, especially when a right side spring is changed.

Spring Rate Formula: Dual Active Springs

$$\frac{\text{Primary Spring Rate} \times \text{Secondary Spring Rate}}{\text{Primary Spring Rate} + \text{Secondary Spring Rate}} = \text{Act. Spring Rate}$$

$$\text{Example: } \frac{200\#/in. \times 400\#/in.}{200\#/in. + 400\#/in.} = \frac{80,000}{600} = 133.33\#/in.$$

Note: The combination of a 200#/in. and 400#/in. spring works the same as a single 133#/in. spring, as long as both combination springs are active.

Options

You can apply the Dual stage principle to any spring: suspension, 5th coil, etc. You can also delay the stiffening effect of the Dual stage arrangement by adjusting the Dual stage lock nuts away from the aluminum spring spacer.



79-04 Ford Mustang Perfect Fit K-Member
Part # 20022

Installation Instructions

Congratulations on your purchase of the AFCO Perfect Fit K-member for the 79-04 Ford Mustang. ***Please read and understand each of the steps involved with the installation of your new k-member prior to getting started.***

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

Special Notes Before You Get Started

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

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 proper use or application of this product.

This instruction manual is written for two different scenarios:

1. With the factory k-member and engine still installed.
2. With the factory k-member and engine removed
 1. Take inventory of all the parts you have to install your new k-member. Make sure each piece is accounted for prior to taking your vehicle out of service.
 2. Look at the **Tool and supply list** below to make sure you have all the needed tools and supplies before you get started.

Tool and supply list

Miscellaneous hand tools are required for proper installation of this K-member. We have listed a few of the required and optional tools to help with your installation.

- Assorted metric sockets and wrenches (required)
- Assorted standard sockets and wrenches (required)
- Ratchet and extensions (required)
- 25-200 ft/lb torque wrench (These usually can be borrowed or rented from most local auto part stores)
- 4 plumb bob's
- Tape measure
- Rubber mallet or dead blow hammer
- Floor jack and jack stands or a hydraulic lift
- Engine hoist or engine truss
- Coil spring compressor
- Safety glasses or goggles
- Penetrating fluid (optional)
- Fender pads (optional)
- Work gloves (optional)

3. The factory struts and springs cannot be used with this installation.

Therefore the following parts are required:

- AFCO Struts (Part # 30022)
- 2-5/8" I.D. Coil-Over Springs: 10" or 14" can be used with coil over strut kit.

Recommendations:

Drag race applications: 14" tall 125 lb. rate (Part# 24125CR)

Non-drag race applications: 10" tall, 200 lb. rate (Part# 23200CR)

- Coil- Over Kit Part # 29022
- Caster/Camber Plates Part #'s 40022 (79-89), 40023 (90-93) and 40024 (94-04)
- AFCO Lower Control Arm Install Kit (Part# 200017)

On 79-93 Models, some additional steering components are also required.

- ¾ X 36 to ¾" DD low profile steering u-joint. AFCO part# 200003 or Flaming River part# FR1925
- ¾ DD to ¾ DD low profile steering u-joint. AFCO part# 200004 or Flaming River part# FR1920
- ¾ DD steering shaft Material. AFCO part# 200007 or Flaming River part# FR1850SS
- Steering column tongue. 3" FR1504T or 6" FR9950TLG

(On 94-04 Models the steering parts listing above is not required, however will provide extra header clearance.)

Optional Parts Available for your new K-Member

Your new K-member has been designed to be compatible with factory lower control arms and factory rack and pinion. However we also recommend the following optional parts:

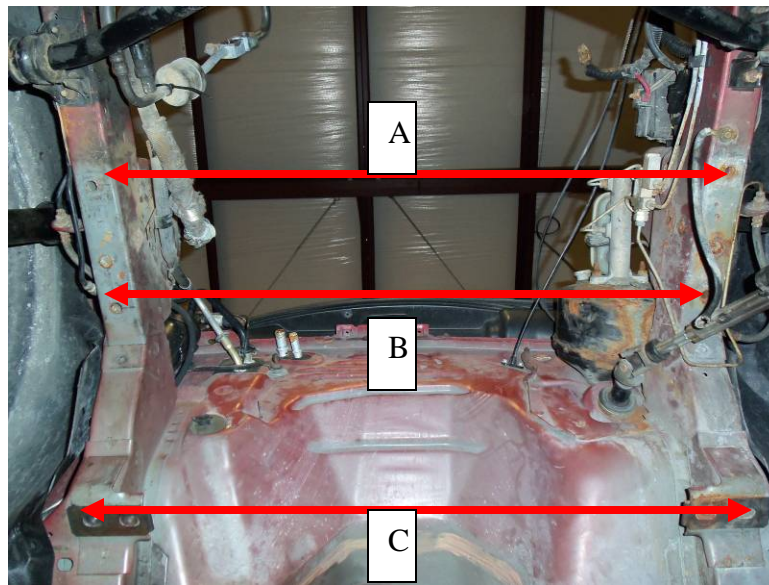
- Lightweight Tubular Lower Control Arm Assemblies Sold in pairs.

Part # 200008 (79-93 rod end style)
Part # 200009 (79-93 bushing end style)
Part # 200010 (94-04 rod end style)
Part # 200011 (94-04 bushing end style)

- Engine Mount Kits Available

Part # 20024 (5.0 Small Block Ford)
Part # 20025 (4.6 Modular Ford)
Part # 20026 (SBC, BBC, & LS Based Engines)
Part # 20027 (Big Block Ford)

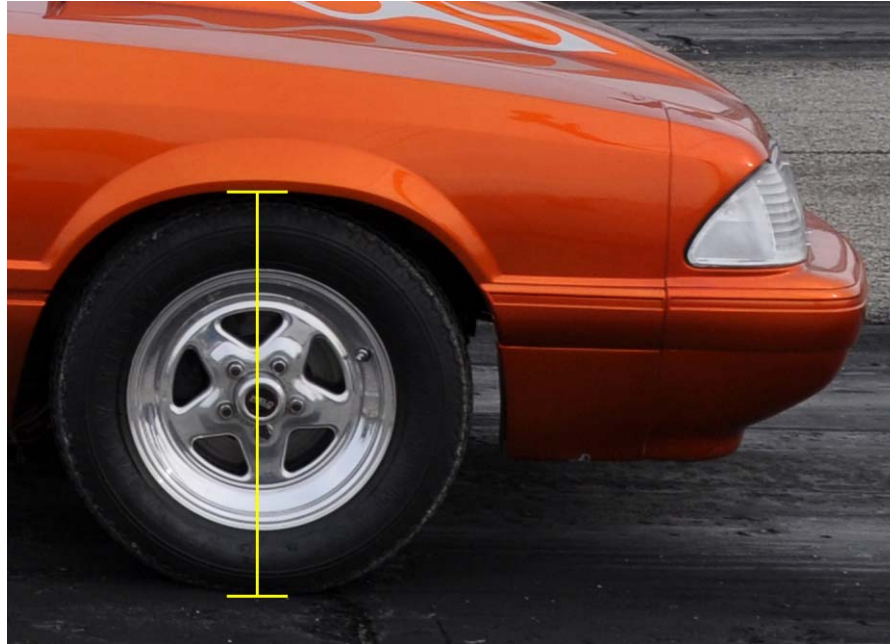




4. Measure the distance across the front mounting holes center-to-center. This number should be about 34" for the 1st set (A) and 33-3/8" for the second set (B). Complete the same measurement on the outside rear mounting holes (C). This number should be about 32 1/4" center to center. These measurements are the same for the SN95 and Fox Body. Check these measurements to determine if the frame is close to factory specs. If your measurements are considerably different you may experience installation and alignment issues.
5. If you are putting in a different engine and transmission combination other than stock it may be necessary to modify the transmission crossmember.



6. **Measure the ride height at the front wheel on both sides of the car** and document the measurement. Note: Measure ride height on a flat level surface from the ground to the bottom edge of the front fender. Stock ride height should measure around 27"s.



Safety Notes:

While this installation can be done on the floor with the use of jack stands, we strongly recommend that this job be completed utilizing a hydraulic lift. The use of safety goggles is strongly recommended, as debris may be dislodged from beneath your vehicle while removing or installing parts.

Stock K-member Removal with Engine Still in Vehicle

1. Disconnect the negative battery cable.
2. Raise the front and the rear of the car up as high as possible next, support on jack stands, on each front frame rail just behind the radiator support and under the rear axles on the rear.
3. Support the engine with an engine hoist or an engine support truss.
4. Remove the front wheels.
5. Unbolt the caliper off of the spindle and hang it out of the way to prevent damage to the brake hose.
6. Place a floor jack under the lower control arm. Leave enough room between the jack and the control arm to tap the ball joint loose from the

spindle but not removing it. Once loose the control arm will rest against jack keeping pressure on the spring until it is compressed in a later step.

7. Remove the sway bar link from the control arm

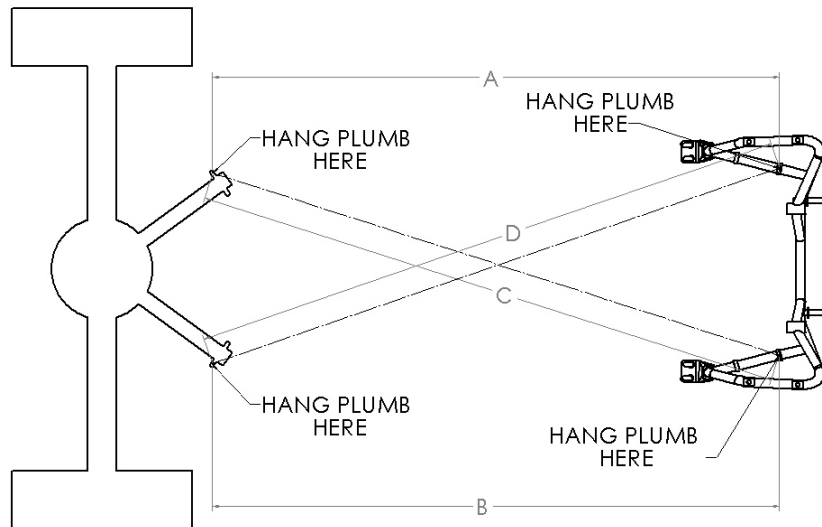


8. Remove the tie rod end from the spindle.
9. Lower the jack just enough to separate the control arm from the spindle.
10. Remove strut bolts at the spindle and remove the spindle.

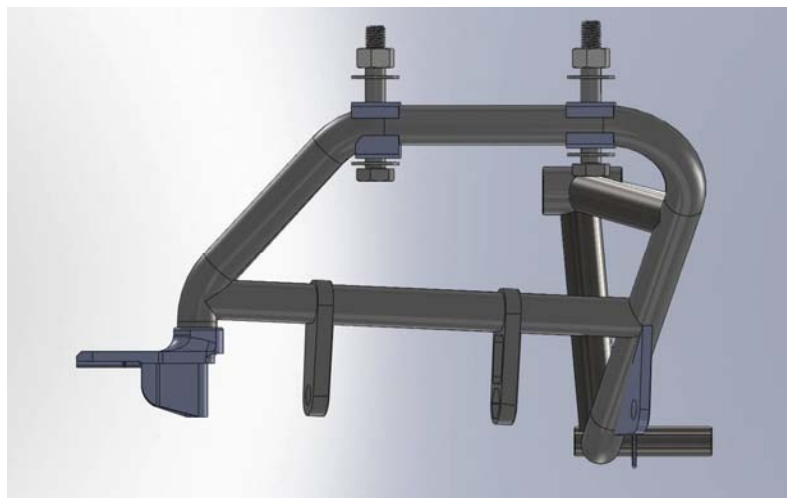


11. Remove the strut.

12. Use an internal spring compressor and compress the spring. **CAUTION: A compressed spring is under an extreme amount of load and if compressed improperly could result in serious injury. Make sure you follow the directions of the spring compressor.**
13. Lower the jack and carefully remove the spring.
14. Repeat steps 5 through 13 for the other side of the car.
15. Remove the bolt holding the steering shaft to the rack and pinion also remove the shaft from rack and pinion.
16. Unhook power steering lines and remove the rack and pinion.
17. With engine supported remove engine mount bolts and raise engine enough to clear the mounts from k-member.
18. Check for any wiring/ground straps etc. attached to k-member and remove if necessary. Place a floor jack under the center of the k-member and loosen 8 bolts fastening it to the vehicle. Lower the jack and remove k-member from vehicle.
19. With the k-member removed, install the new engine mounts to the engine block. Torque the bolts to 50 ft-lbs
20. Install all bolts in the k-member and only snug the bolts enough that the k-member can still be moved from side to side and from front to back. The front frame rail bolt is 9/16 X 5-1/2" long and rear frame rail bolt is 9/16 X 6" long. The four rear mounts maintain the use of the factory bolts.
21. Square the k-member at this time using plumb bob's. **(Refer to the chart on the next page for reference.)** Start by squaring the k-member from front to rear and move the k-member accordingly until measurement "A" and measurement "B" are equal. Without moving the k-member from front to rear square the k-member from side to side until measurement "C" and measurement "D" are equal. Refer to diagram below. Note: ***Be sure that the plum bob's are hanging from the same points on each side of the car so the measurements are accurate, the outside of the rear control arm bolt against the nut on the rear of the car and directly in the center of the front control arm mounting bracket on the front of the k-member.***



22. Torque the four front k-member bolts to 115 ft-lbs and the four rear bolts to 72 ft-lbs. The k-member was designed to use a 9/16 USS washer on the front bolts, 1-1/2" outside diameter, 5/8" inside diameter and 1/8" thick. Once the bolts are all torqued double check the measurements to make sure the k-member is still square. If the k-member has moved during the tightening process, loosen and start the squaring process again.
23. Install the rubber engine mount bushings and inner steel sleeves, provided in the motor mount kit, into the k-member engine mount tubes.



23. Lower the engine down until you line up the engine mount and the engine mount bushings.
24. Install motor mount bolts and torque to 80 ft-lbs.
25. Install the lower controls arms. If installing the factory control arms and the optional premium hardware kit, torque the bolts to 159 ft-lbs. If installing tubular control arms refer to the recommended torque spec from the manufacturer.

Front



One 1/8" spacer and one .850 spacer

Rear



one 1/8" washer and one 1/16" washer

26. Install the rack & pinion and torque bolts to 80 ft-lbs
27. Install the spindles to the control arms and torque the nuts to 120 ft-lbs
28. Install the caster/camber plates following the installation manual for the caster/camber plates.
29. Install the coil-over struts following the strut installation manual.
30. Tighten strut bolts to spindles then torque to 148 ft-lbs

31. Install tie rod ends and torque to 59 ft-lbs.
Note: The rack and pinion mounts are moved towards the passenger side of the car to allow for additional left side header clearance so it may be necessary to adjust the tie rod ends from the factory location.
32. Reinstall the calipers
33. Reinstall the sway bar. It may be necessary to raise the control arms using a floor jack or lower the car down on it's suspension to reinstall the sway bar end links.
34. Reinstall the front tires. (Refer to owners manual for lug nut torque specifications)
35. Center the rack and pinion travel from side to side. Follow these steps:
 - Step 1** Install the steering shaft onto rack and pinion. It is not necessary to tighten it at this time. Turn the steering wheel all the way to the right.
 - Step 2** While turning the steering wheel; count the revolutions from lock to lock on the rack and pinion. Divide the number of revolutions by 2.
 - Step 3** Starting from one side, turn the wheel from the number calculated in step 2 to center the rack and pinion.
 - Step 4** Remove the steering joint at the rack and pinion. Make sure you don't turn the rack and pinion during removal.
 - Step 5** Straighten the steering wheel from inside the car and re-install the steering shaft and torque the steering shaft bolt to 25 ft-lbs. If using an aftermarket shaft refer to the manufacturer instructions for torque specs.
36. Adjust the caster and camber as close as you can by eye and be sure to have an alignment done on the vehicle. It also may be necessary to adjust the toe as close as you can before the alignment.
37. Remove the jack stands.
38. Settle the suspension by rolling the car forward and back a few times and pushing down on the front and the rear of the car a few times before checking ride height.

39. Measure the ride height in the same manner as instructed earlier in this manual and adjust accordingly. Refer to the installation manual for the coil- over struts for the proper adjusting procedure.
40. Contact your local alignment shop for an appointment to get your alignment specification set.

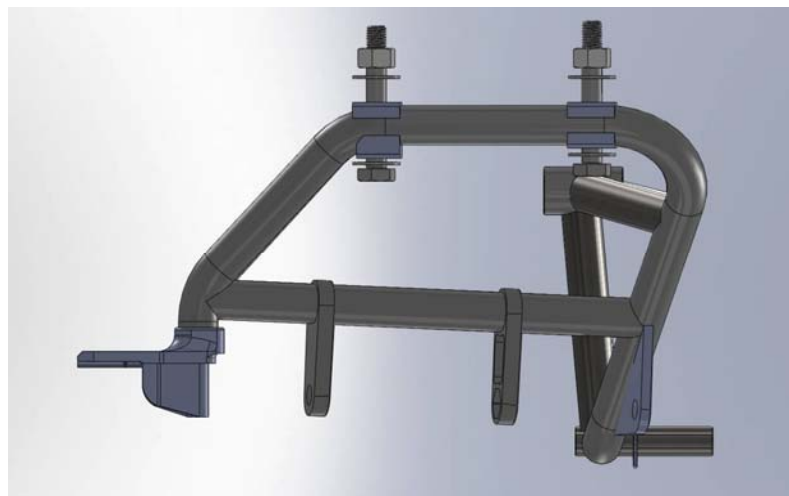
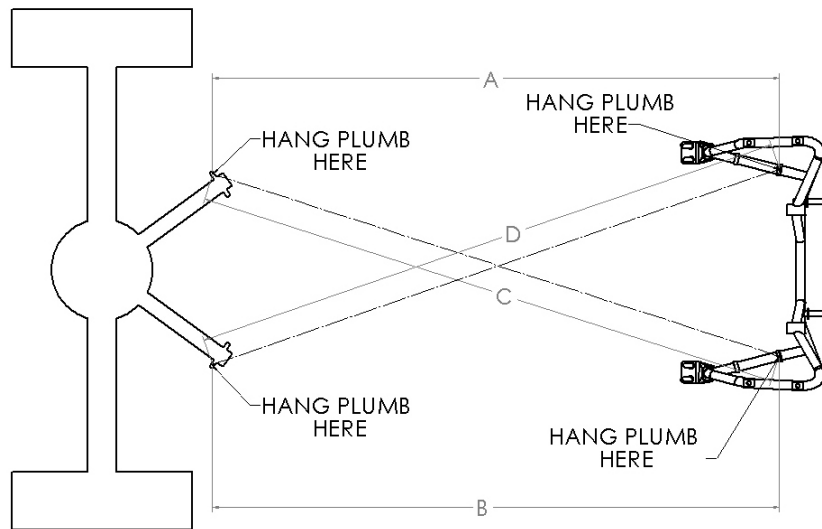
K-member installation with engine and factory k-member removed.



1. Raise the front and the rear of the car up as high as possible next, support on jack stands on each front frame rail just behind the radiator support and under the rear axles on each side.
2. Install all bolts in the k-member and only snug the bolts enough that the k-member can still be moved from side to side and from front to back. The front frame rail bolt is 9/16 X 5-1/2" long and rear frame rail bolt is 9/16 X 6" long. The four rear mounts maintain the use of the factory bolts.



3. Square the k-member at this time using plumb bob's. **(Refer to the chart below for reference.)** Start by squaring the k-member from front to rear and move the k-member accordingly until measurement "A" and measurement "B" are equal. Without moving the k-member from front to rear square the k-member from side to side until measurement "C" and measurement "D" are equal. Refer to diagram below. Note: ***Be sure that the plum bob's are hanging from the same points on each side of the car so the measurements are accurate, the outside of the rear control arm bolt against the nut on the rear of the car and directly in the center of the front control arm mounting bracket on the front of the k-member.***



5. Install lower controls arms. If installing the factory control arms and the premium hardware kit torque the bolts to 159 ft-lbs, refer to the pictures below for control arm spacer location. If you're installing tubular control arms refer to the recommended torque spec from the manufacture.

Front



One 1/8" spacer and one 1.850 spacer

Rear



one 1/8" washer and one 1/16" washer



6. Install the rack & pinion and torque bolts to 80 ft-lbs.
7. Install the spindles and torque the nuts to 120 ft-lbs.

8. Install caster/camber plates following the installation manual for the caster/camber plates.
9. Install the coil-over struts following the installation manual for the struts.
10. Tighten strut bolts to spindles and then torque to 148 ft-lbs.
11. Install tie rod ends and torque to 59 ft-lbs.
Note: The rack and pinion mounts are moved towards the passenger side of the car to allow for additional left side header clearance so it may be necessary to adjust the tie rod ends from the factory location.
12. Reinstall the calipers.
13. Reinstall the sway bar. It may be necessary to raise the control arms up using a floor jack or lower the car down on it's suspension to reinstall the sway bar end links.
14. Install the rubber engine mount bushings and inner steel sleeves, provided in the motor mount kit, into the k-member engine mount tubes.
15. Lower the engine down until you line up the engine mount and the engine mount bushings.
16. Install motor mount bolts and torque to 80ft-lbs.





17. Hook up all remaining wiring, hoses, etc. From the engine removal.
18. Reinstall the front tires. (Refer to owner's manual for lug nut torque specifications)
19. Center the rack and pinion travel from side to side. Follow these steps:
 - Install the steering shaft onto rack and pinion. It is not necessary to tighten it at this time. Turn the steering wheel all the way to the right.
 - While turning the steering wheel, count the revolutions from lock to lock on the rack and pinion. Divide the number of revolutions by 2.
 - Starting from one side, turn the wheel to the divided number to center the rack and pinion.
 - Remove the steering joint at the rack and pinion. Make sure you don't turn the rack and pinion during removal.
 - Straighten the steering wheel from inside the car and re-install the steering shaft and torque the steering shaft bolt to 25 ft-lbs. If using an aftermarket shaft refer to the manufacturer instructions for torque specs.
20. Adjust the caster and camber as close as you can by eye and be sure to have an alignment done on the vehicle. It also may be necessary to adjust the toe as close as you can before the alignment.

21. Remove the jack stands.
22. Settle the suspension by rolling the car forward and back a few times and pushing down on the front and the rear of the car a few times before checking ride height.
23. Measure the ride height in the same manner as instructed earlier in this manual and adjust accordingly. Refer to the installation manual for the coil over struts for the proper adjusting procedure.
24. Contact your local alignment shop for an appointment to get your alignment specifications set.

Congratulations! You have just completed the installation of your Perfect Fit K-Member. You now have the highest quality, best performing k-member available.

