Installation Instructions

AFCO Low-Friction Front Suspension Kit

This kit is designed to:

1. Reduce the resistance of your front suspension to move.
2. Maintain consistent front end settings (caster, camber, & toe) during cornering, acceleration and deceleration.

When properly installed, the AFCO Lo-Friction Front Suspension Kit will improve both the handling consistency of your front suspension and your chassis' ability to transfer weight.

NOTE:

The solid front suspension bushings found in this kit will not isolate road noises as do soft, pliable factory type bushings.

PLEASE READ ALL INSTRUCTIONS PRIOR TO INSTALLATION. SEEK PROFESSIONAL HELP IF YOU LACK THE ABILITY OR CAPABILITY TO SAFELY AND CORRECTLY COMPLETE THIS INSTALLATION.

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Installation Instructions

1. Safely remove the front springs from your suspension.
   TIP *(Drag and street cars using stock type front springs): Measure the free heights of your front springs. Install the tallest spring in the driver's side suspension to preload the right rear tire. This adjustment can improve traction and handling during acceleration.*

2. Disconnect upper & lower control arms from the spindles then the chassis.
   - Keep note of the amounts of alignment shims used between the upper control arm cross shafts and the chassis. These shims will have to be returned to their original positions upon reassembly.

3. Remove ball joints and inner bushings from upper & lower control arms.
   - Be careful not to bend or distort any control arm.
   - It's best to have access to a hydraulic press or large vice to complete this step.
   - Some auto parts stores rent tools specifically designed to remove and install control arm bushings and ball joints.

4. Check:
   A. Ball joint tapers of your spindles for roundness.
      - Out of round tapers can cause a ball joint stud to break. Replace spindle/s if necessary.
   B. Ball joint stud for proper fit in spindle.
      - There should be no slop between stud and spindle.
      - Make sure ball joint stud protrudes through spindle so that attachment nut can be properly installed.
   C. Ball joint fit to control arms.
   D. Bushing fit to control arms.
      - Bushings are designed undersized for an easy to slightly loose but not excessively sloppy fit. Keep in mind bushings will be welded to control arms.
      - Tight bushing fits may be due to out of round, rusty and/or misaligned bushing pockets in the control arms. Clean, grind and/or realign the pockets as needed.
   E. Lower control arm bushing fit to chassis.
      - Use bolts without nuts to trial fit all 4 lower control arm bushings to the chassis.

NOTE: It will be necessary to drill the lower control arm chassis mount bolt holes to 1/2" on chassis that use smaller, metric bolts. Correct 1/2" diameter bolts and nuts are provided in kits designed for use on chassis originally equipped with the smaller mounting hardware.

      - Each bushing's inner sleeve should fit slightly tight to slightly loose inside the chassis mounts. Massage the chassis mounts if necessary to properly fit the inner sleeves. Do not shorten the sleeves beyond minor filing or sanding.
      - Install nuts onto mounting bolts and fully tighten lower control arm bushings to chassis. Bushings should rotate freely around their inner sleeves.

   F. Upper control arm bushing fit to cross shaft.
      - Bushings should rotate smoothly on cross shafts. Fit should be similar to fit between the lower control arm bushings and their inner sleeves.

NOTE: GM did not always use the same bushings throughout some model years. Also, some replacement upper control arm cross shaft kits use bushings and cross shafts different than the original equipment components. If any bushing in this kit does not fit as described above, please provide us with measurements so that we can send you the proper components. AFCO Racing Products (800-632-2320).

5. Install bushings into the upper control arms and onto the cross shafts for final assembly.
   - Position grease fittings for easy access.
   - Make sure cross shafts rotate freely then spot weld both ends of each bushing to the upper control arm in at least 3 places. Cross shaft must remain free to rotate during and after welding.
   - Stitch weld over spot welds. Weld carefully so that cross shafts remain free to rotate.

6. Install bushings into lower control arms for final assembly.
   - Position grease fittings for easy access.
   - For best results, install a steel tube, rod or length of all-thread (most items are usually available at hardware stores) through both lower control arm bushings to maintain bushing alignment during welding. Massage bushing pockets in control arms to align bushings if necessary.
   - Spot weld both ends of each bushing to the lower control arm in at least 3 places. The steel alignment shaft must remain free to rotate during and after welding.
   - Stitch weld over spot welds. Weld carefully so that the alignment shaft remains free to rotate during and after welding.

6. Install ball joints onto control arms.

7. Grease upper and lower control arm assemblies. Use hi-temp grease.

8. Prior to installation of the lower control arms, it's best to check the lower control arm bolt holes in the chassis for proper alignment.
   - Shove the alignment shaft (used in Step 6) through the lower control arm bolt holes in the chassis. Insert from the front of the chassis.
   - If necessary, modify the rear mount in the chassis (it's easier to access than the front mount in most cases) so that all mount holes align.

TIP: Most front and rear mounts will misalign by one half to the full diameter of the alignment shaft. The frame or the rear mount may be bent if mount hole misalignment is beyond this range. You can correct minor misalignments by bending the rear mount and/or drilling or notching the necessary mount holes until the alignment shaft fits through all holes. At this point you can position flat washers over the alignment shaft at the drilled or notched mount holes then weld the washers into place on the outside of the mount bracket/s. Your lower control arm mounts will then be in proper alignment and your lower control arms will be bind free.

9. Reinstall upper and lower control arm assemblies on chassis.
   - Maintain the original upper control arm shims for each upper control arm mount.
   - Fully tighten control arm mounting bolts.
   - Control arms should move freely through their normal range of motion. Correct any problems before proceeding.
   - Reinstall spindles and remaining components.

10. Align front suspension to the correct specifications of caster, camber and toe for your vehicle.

Maintenance

Oval Track Racecars:
- Grease ball joints and control arm bushings prior to every or every other race day.
- Clean surfaces between each lower control arm bushing's inner sleeve and outer housing bore at least once during season or more often when racing on dirt.

Drag and Hi-Performance Vehicles:
- Grease ball joints and control arm bushings monthly during the racing season.
- Clean surfaces between each lower control arm bushing's inner sleeve and outer housing bore prior to the racing season.

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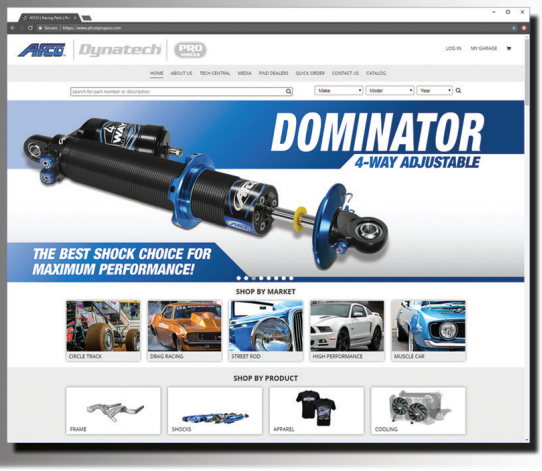
AFCO has been dedicated to building speed, power and performance for over three decades. For more information on our Suspension, Cooling and Brake components, find us online at AFCOracing.com.



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