

# Spohn Performance, Inc.

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## **Part# 782-F | Tubular Front Lower A-Arms 1982-1992 GM F-Body Camaro & Firebird**

### **USE OF THIS PRODUCT IS ACCEPTANCE OF SELLER'S DISCLAIMER OF WARRANTY!**

By their very nature, competition components are constantly pushed to their limits. While our components are designed to withstand intense race conditions, it is impossible to control the quality of installation or the varying conditions in which they are used. It is for this reason that absolutely no warranty or guarantee is either written or implied. Neither the seller or the manufacturer will be liable for any loss, damage, or injury – direct or indirect – arising from the use of or inability to determine the use of any product. Before using, the user should determine the suitability of the product for its intended use, and the user shall assume all responsibility in connection therewith. Spohn Performance, Inc. makes no guarantee as to the legality for any specific class. Spohn Performance, Inc. makes no claims, nor does it intend its products to be used in street driven vehicles. Spohn Performance, Inc. reserves the right to make changes in design or add to or improve on their product without incurring any obligation to install the same on product previously manufactured. The Buyer agrees to indemnify and hold Spohn Performance, Inc. harmless from any claim, action or demand arising out of or incident to the Buyer's installation or use of products purchased from Spohn Performance, Inc.

### **INSTALLATION INSTRUCTIONS**

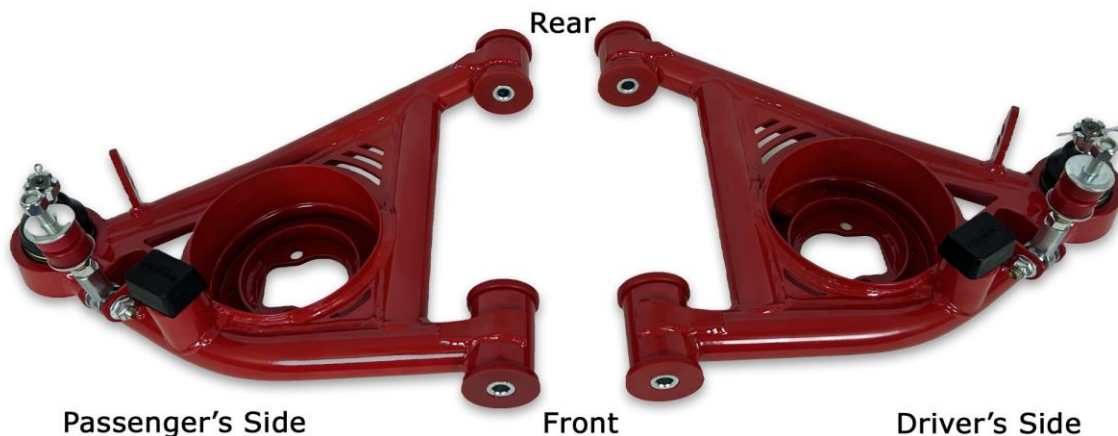
1. This installation should only be performed by an experienced mechanic. Improper coil spring removal and installation can result in serious injury. If you are not experienced in this type of installation we recommend you have the installation performed by a professional mechanic at a commercial garage and/or alignment shop.
2. Begin by jacking up the front of the vehicle and then place jack stands under the frame to safely support the vehicle. The front wheels need to be off of the ground.
3. Remove both front wheels.
4. **On The Driver's Side Only:** Remove the front sway bar end link from the a-arm and the sway bar and discard.
5. Turn the spindle all the way in one direction for easier access to the lower ball joint. Remove the cotter pin from the castle nut on the lower ball joint. Then loosen the castle nut, but do NOT completely remove it. Using a hammer, hit the spindle around the ball joint mounting hole until the ball joint pops loose. You may need to use a pickle fork.
6. Position a jack under the a-arm in the area of the ball joint. Jack up on the a-arm until there is no tension on the ball joint.
7. Insert an internal spring compressor through the bottom of the a-arm and up through the inside of the coil spring. Fully compress the spring using the internal spring compressor (we recommend using our **Part# FCSC1** internal coil spring compressor that is designed specifically for this F-Body application. It makes the job VERY easy!).
8. Remove the castle nut from the lower ball joint.
9. Support and hold the spindle, brakes, etc. up in the car. You must tie this assembly up using wire or rope.
10. Carefully lower the jack you placed underneath the lower a-arm and lower the a-arm as far as it will come down. Hold onto the spring and remove it when it is free as you lower the a-arm.
11. While holding onto the a-arm, remove both of the mounting bolts that go through the a-arm bushings at the frame mounts and then remove the a-arm from the vehicle.
12. Lightly sand and/or wire wheel the insides of the k-member mounts where the a-arm bushings ride. When you have removed all dirt, rust and scale from these mounting areas apply a liberal amount of grease to these areas of the mounts. See the end of these instructions for information on what type of grease must be used.
13. Properly identify the left side Spohn Performance front lower a-arm. The sway bar end link and polyurethane bump stop face the FRONT of the vehicle when installed.
14. Apply a liberal amount of grease to the outside faces of all four bushing ends. See the end of these instructions for information on what type of grease must be used.
15. Mount the a-arm into the k-member mounts and loosely install both mounting bolts. Do NOT completely tighten them, just lightly snug the nuts.

**Note:** We have installed either polyurethane or Delrin® bushings, both of these are much more resistant to flex than the factory rubber bushings, so it may be necessary to tap the a-arm into the k-member mounts using a soft hammer.

16. Install the fully compressed coil spring into the top spring mount in the k-member. Then swing our lower a-arm up and guide the bottom of the coil spring over the short spring centering tube that is welded to the bottom of our lower a-arm's spring pocket. Make sure that the coil spring is properly clocked. The end of the coil spring should butt tightly against the face of the spring ramp that is welded to the bottom of our lower a-arm's spring pocket.
17. Position a jack under the a-arm in the area of the ball joint.
18. Remove the wire or rope you used to tie up and support the spindle, brakes, etc.
19. Jack up on the a-arm until the ball joint is fully seated in the spindle. Install the supplied castle nut and fully tighten, then install the supplied cotter pin and bend it over. Remove the jack.
20. Loosen the internal spring compressor and remove it through the bottom of the a-arm. Make sure the coil spring remains clocked correctly against the face of the lower spring ramp when the spring is fully uncompressed.
21. **Repeat Steps 4-20** on the passenger's side of the vehicle.
22. On both sides of the vehicle loosely connect the top of the sway bar end links to the front sway bar. The bottom of the end link is fully installed and tightened when we assemble the a-arm. Remove the Nylock® nut from the top of the end links and then sandwich the front sway bar between the two bushings (same as the factory end link). Then install the 3/8" Nylock® nut and make it snug, but not fully tightened.
23. Safely lower the vehicle to the ground.
24. With the vehicle on the ground and the suspension loaded, tighten both of the mounting bolts that go through the a-arm bushings at the frame mounts on both sides of the vehicle.
25. With the vehicle on the ground and the suspension loaded, tighten the 3/8" Nylock® nut on the top of both of the front end links. Tighten the nut until you see the bushings starting to deform, then STOP.
26. Grease all four of the bushings (two per side) through the grease fittings. 4-5 pumps from a grease gun in each bushing is plenty, do not grease more than that.

**VERY IMPORTANT:** The bushings come pre-lubed. DO NOT use any petroleum based grease on polyurethane bushings! Polyurethane bushings must be lubricated with synthetic silicone based waterproof grease. These are the bushing manufacturer's recommendations to prevent premature bushing wear, and will keep things "squeak-free". You can order this grease from Spohn Performance using our **Part# 902**.

**Do not over grease the bushings! You only need a couple pumps of grease. Over greasing will cause the bushings to balloon from the hydraulic pressure inside of the bushing sleeves and they will fail!**



### **Recommended Alignment Settings**

| <b>Left Side</b>                                                                      | <b>Right Side</b>                                                                     |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Caster: 4.5° Positive<br>Camber: 0.5° Negative<br>Toe-In: 3/32" Total (.05° per side) | Caster: 4.5° Positive<br>Camber: 0.5° Negative<br>Toe-In: 3/32" Total (.05° per side) |

**Fitment Note:** If you install our Part# MR-8292F Pinto Manual Steering Rack you must use our Part# 781-F-MR or 782-F-MR tubular a-arms. Those a-arms have longer than stock steering stops that limit the turning radius to be compatible with the Pinto rack and pinion steering.

Make sure your tubular a-arms match your steering type. Do NOT use Part# 781-F or 782-F a-arms with a Pinto manual steering rack. Do NOT use Part# 781-F-MR or 782-F-MR with factory type steering. See the chart on the next page for proper a-arm fitment applications.

| <b>A-Arm Part#</b> | <b>Vehicle Application</b>  | <b>Steering Application</b> | <b>Spring Type</b>             |
|--------------------|-----------------------------|-----------------------------|--------------------------------|
| 781-F              | 1982-1992 Camaro & Firebird | Factory Style Steering      | Coil-Over Only                 |
| 781-F-MR           | 1982-1992 Camaro & Firebird | Spohn Pinto Manual Rack Kit | Coil-Over Only                 |
| 782-F              | 1982-1992 Camaro & Firebird | Factory Style Steering      | Std. Coil Springs or Coil-Over |
| 782-F-MR           | 1982-1992 Camaro & Firebird | Spohn Pinto Manual Rack Kit | Std. Coil Springs or Coil-Over |