

1109 Tubular Lower A-Arms 67-69 Camaro/Firebird



Thank you for your purchase from our new line of F-Body parts.
Please call us at (877) 4NO - ROLL if you have any questions
regarding the service or installation of your Hotchkis products.
Visit us online @ www.hotchkis.net

Tubular Lower A-Arms:

Your new Hotchkis tubular lower A-Arms are stronger and more aesthetically pleasing than the original OEM control arms. They are equipped with durable Delrin bushings that are designed to rotate independently of the arm and inner sleeve, which dramatically increases the bearing surface and ensures longer bearing life. Since your getting rid of the stock rubber bushings in place of the stiff Delrin bushings, handling and steering response is dramatically enhanced. Your Hotchkis A-Arms also have polyurethane spring pockets, which can be shimmed up or down allowing for 1" of ride height adjustment. These A-Arms are compatible with stock or aftermarket coils (such as our 2" lowering springs kit # **1906F** *Big Block* or **1907F** *Small Block*).

Your Hotchkis A-Arms are 100% bolt-on. If you have not done so already, we suggest using our Tubular Upper A-Arms (Kit #**1107**) in conjunction with the lowers to maximize your vehicle's handling and response.

Notes:

Although your Hotchkis A-Arm was designed for stock or aftermarket coils, the installation with aftermarket coils is dramatically easier than the OEM coils. This is due to the much longer free length of the OEM coils compared to most aftermarket coils.

Before You Start:

Please read the entire manual before starting. Most pictures shown are of the driver side a-arm. Please perform the same procedure for the passenger side.

1. Raise Vehicle

Raise the vehicle and put it up on jack stands. You may also use a 2-post or 4-post lift.



2. Remove the Front Sway Bar End links

Disconnect the sway bar from each lower A-Arm by removing the sway bar end links.



3. Remove the wheels

Remove both front wheels



4. Undo the Top Shock Mount

Using a combination of wrenches and/or allen keys and remove the top shock mounting nut. Save all shock bushings and hardware for reinstallation.



5. Undo the Bottom Shock Mount

Remove the 2 bolts that secure the bottom shock mount and remove the shock from the vehicle. Keep all bushings and hardware for reinstallation.



6. Disconnect the Outer Tie Rod Ends

Locate the outer tie rod end and remove the cotter pin using a pair of dikes. Use a 11/16" wrench to unfasten the tie rod end castle nut. Hit the steering arm with a hammer to knock the tapered stud out. Allow the tie rod to hang down.



7. Loosen Lower Ball Joint Nut

Locate the lower ball joint nut near the outboard end of the a-arm and remove the cotter pin using a pair of dikes. Use a 7/8" wrench to loosen the castle nut. Do not completely remove this nut! Leave 3 or 4 threads left on the nut.



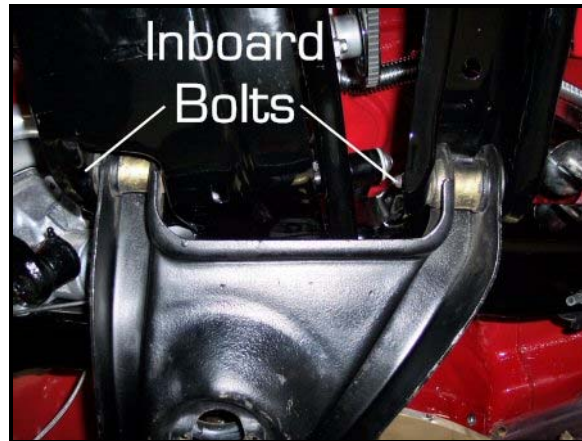
8. Break Loose the Lower Ball Joint Stud

Using your trusty hammer, hit the spindle until the stud pops loose. The castle nut is there to keep the spring from launching the lower a-arm down.



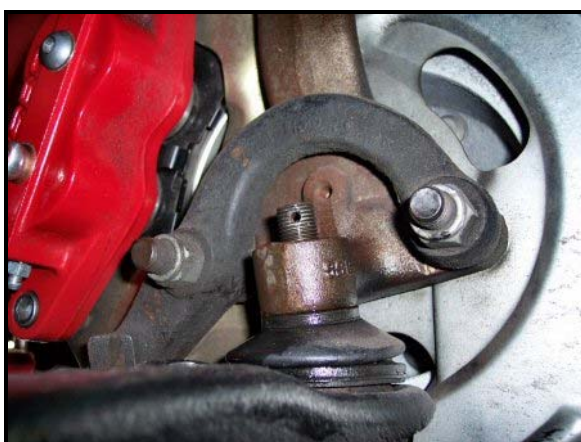
9. Loosen Inboard A-Arm Bolts

Loosen but **do not** remove the 2 inboard a-arm bolts.



10. Disconnecting the Lower Ball Joint Completely

Place a jack underneath the lower a-arm you are working on and jack the arm up until you start to see the ball joint castle nut start to move up. Remove the ball joint castle nut.



11. Relieving Tension on the Spring

Slowly lower the jack to relieve the tension in the spring. If you are removing OEM springs, you must be extra careful since this type of longer spring has more pre-load.



12. Remove the spring

Once you have lowered the a-arm as far as possible, carefully remove the spring.



13. Remove Stock Lower A-Arm

Fully remove the 2 inboard bolts and remove the stock a-arms.



14. Install Pad Spacer and Lower Spring Isolator

Install the $\frac{1}{4}$ " spacer and the lower spring Isolator onto the Hotchkis a-arm. At this time, do not worry about the index clocking of the isolator. With the $\frac{1}{4}$ " spacer, there is no ride height changes from stock. In some cases, it is necessary to raise or lower the driver or passenger side to getting uniform ride height. If you need to lower or raise the vehicle you can order $\frac{1}{8}$ " spacers (P/N#11990014) or more $\frac{1}{4}$ " spacers (P/N#11980014) from Hotchkis directly.

**Possible Combinations:**

No Spacer = $\frac{1}{2}$ " Lower than Stock Arm

$\frac{1}{8}$ " Spacer = $\frac{1}{4}$ " Lower than Stock Arm

$\frac{1}{4}$ " Spacer = Same as Stock Arm (Default Setting)

$\frac{1}{4}$ " + $\frac{1}{8}$ " Spacer = $\frac{1}{4}$ " Higher than Stock Arm

$\frac{1}{4}$ " + $\frac{1}{4}$ " Spacer = $\frac{1}{2}$ " Higher than Stock Arm

15. Reinstall the Hotchkis A-Arm

Install the a-arm in the same manner as removal. Start with the inboard bolts to the subframe. Fully tighten the inboard bolts at this time.



16. Indexing the Spring (Mock Up)

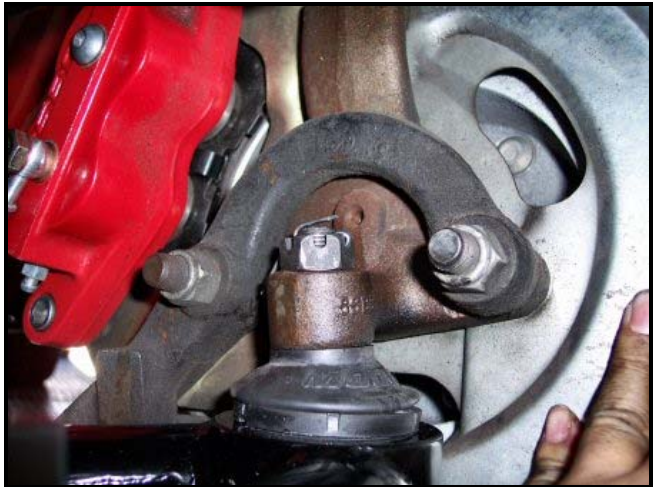
With the a-arm hanging down, grab the coil spring and place the up into the upper pocket. It will need to be clocked at a certain angle to match up with the index. Use some "white out" and mark the frame and the coil to give you a guide when you are ready to install it for real.

**17. Install the Spring**

Rotate the a-arm up and place a jack underneath. Place the spring up into the upper pocket and index it using your white out guide. Clock the a-arm isolator so the end of the coil matches up with the index of the isolator. Slowly jack the arm up while pushing the bottom half of the spring inboard into the isolator pocket. This step will be easy with aftermarket lowering springs and difficult with OEM stock springs. For OEM stock springs, you may need to use a series of pry bars to pop the bottom end into the pocket.



Once the bottom is popped in, line up the lower ball joint stud with the bottom of the spindle. Continue to jack the a-arm up and insert the ball joint stud into the spindle. Once the stud is in all the way, install the supplied castle nut. Fully tighten this nut and install the new cotter pin. Once the castle nut is fully fastened, you may release the jack and relieve the pressure on the a-arm.



18. Reinstall the Steering Tie Rod

Reinstall the steering tie rod in the same manner as removal. Don't forget to install the cotter pin.



19. Reinstall the Shock

Reinstall the shocks in the same manner as removal.



21. Reinstall the Sway Bar End links

Reinstall the sway bar end links in the same manner as removal.

22. Reinstall the Wheels

Reinstall the wheels and lower the vehicle. You are finished with the Lower a-arm installation!



More Products for Your 1st Gen F-Body!

1107

Tubular Upper Trailing Arms

1404 (Convertibles Only)

Sport Cross Brace

1607

Tie Rod Sleeves

1906F (Big Block)

2" Lowering Sport Coil Springs

1907F (Small Block)

2" Lowering Sport Coil Springs

2207

Front & Rear Sport Sway Bar Set

2407C

1 1/2" Lowering Sport Leaf Springs

4007 (Coupe)

Subframe Connectors

4008 (Convertible)

Subframe Connectors

80014 (Big Block)

Total Vehicle System (TVS) Kit

Includes 1607, 1906F, 2207, 2407C

80015 (Small Block)

Total Vehicle System (TVS) Kit

Includes 1607, 1907F, 2207, 2407C

Please visit our website for more information.

www.hotchkis.net

Hotchkis Performance LLC Return Policy & Limited Warranty

Effective September 1, 2007. This return policy and limited warranty supersedes all previous policy and warranty statements. Policies and warranties are subject to change without notice. Hotchkis Performance is not responsible for printing errors.

Return Policy

We want you to be completely satisfied with your Hotchkis Performance product. In case you're not, you can exchange or return it within 30 days of the purchase date. To obtain a full refund on unused products, excluding freight, please contact our Customer Service Department at (562) 907-7757. You will be assigned a Returned Goods Authorization Number (RGA). The package you return must show the RGA on the outside of the package, include the original invoice and be shipped prepaid to our facility. The product has to be unused and in its original packaging materials and be in sellable condition. For products presenting signs of use or damage, only warranty claims will be accepted. Exchanges or refunds made after 30 days will be subject to a 20% restocking charge. If you purchased your Hotchkis Performance product from an authorized dealer, you are still covered by this return policy. All returns however, should be made to your dealer, not to Hotchkis Performance directly.

Limited Warranty

Hotchkis Performance warrants its products against defects in materials and workmanship for the term of 36 months (3 years) from the date of purchase. This Warranty only applies to the original retail purchaser who retains ownership of the vehicle on which the product was originally installed. If the product is determined to be defective, Hotchkis Performance will repair, replace or refund the purchase price of the defective product at Hotchkis Performance's sole discretion, which shall fully satisfy and discharge any and all warranty claims. Any repaired or replaced product will be returned to the sender freight prepaid.

Exclusions from Warranty

Items offered but not manufactured by Hotchkis Performance are warranted according to the manufacturer's terms and are not covered by this limited warranty. Hotchkis Performance shall not be responsible for any labor, removal, installation, re-installation or maintenance costs. This warranty does not cover the cosmetic finish or plating of any product or any normal wear and tear to any product. In addition, this warranty does not apply to any products that have been:

- **Improperly installed or installed by someone other than a qualified, licensed auto mechanic experienced in the installation and removal of suspension products;**
- **Improperly serviced, misused, or modified, altered or subjected to abuse, negligence, accident or collision;**
- **Installed in any vehicle that has been modified;**
- **Installed on any vehicle that has carried loads in excess of automobile manufacturer suggested weight limits; or**
- **Installed on any vehicle that has been subject to abnormal or excessive use, including rallying, racing or racing-type activities or off-road use.**

Limitation of Warranty

This limited warranty is the entire and only warranty for the products and may not be modified or supplemented by any other person or company in any form. Any description of the products, by anyone, is for the sole purpose of identifying them and is not part of the basis of the bargain, and does not constitute a warranty that the products will conform to that description. The statements of any salesperson do not constitute part of this limited warranty and cannot be relied upon as a warranty.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. ANY IMPLIED WARRANTIES ARE DISCLAIMED TO THE FULLEST EXTENT PERMITTED BY LAW. THIS WARRANTY DOES NOT COVER CONSEQUENTIAL DAMAGES, LOSS OF TIME OR REVENUES, INCONVENIENCE, LOSS OF USE OF THE VEHICLE, DAMAGE TO THE VEHICLE OR COMPONENTS OF THE VEHICLE, ANY OTHER TYPE OF CONSEQUENTIAL DAMAGES, OR OTHER INCIDENTAL OR INDIRECT DAMAGES. HOTCHKIS' MAXIMUM LIABILITY UNDER THIS WARRANTY SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PRODUCT. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages and in such states the above limitations or exclusions may not apply. This limited warranty gives the purchaser specific legal rights and the purchaser may have other rights that may vary from state to state.

Technical Information

Hotchkis Performance makes every effort to ensure that you are provided with the most accurate and up-to-date technical information. However, all technical information is approximate and may vary upon application. Additional suspension components may be needed in some applications, depending upon the make, model, engine and chassis of the vehicle. Hotchkis Performance is not responsible for any consequences resulting from manufacturer's technical mid-year changes. Hotchkis Performance products should only be installed by a qualified, licensed auto mechanic experienced in the installation of such products.

Warranty Claim Procedure:

The answer to ALL the following questions should be YES before making a warranty claim:

- Is the product appropriate to your application?
- Did you carefully and thoroughly read the instructions provided along with the product?
- Do you have the original invoice or sales receipt?
- Is the return date within 36 months from the purchase date?
- Are you the original purchaser?
- Was the product properly installed by a qualified, licensed auto mechanic?
- Has the product been installed on the original vehicle on which it was installed at all times?
- Is the product unmodified and clean?
- Is the reason for return a legitimate product defect?

If the answer to all these questions is YES, please contact our Customer Service Department at (562) 907-7757. You will be given a Returned Goods Authorization Number (RGA) valid for 60 days. You will also be asked to ship the product prepaid to our facility. All shipments MUST be (i) prepaid, (ii) include the original invoice or sales receipt, (iii) show the RGA on the outside of the package and (iv) include your name, address, make and model of the vehicle, and a brief description of the claimed defect, including the circumstances under which the defect occurred. Warranty related inquiries should be sent to the following address:

**HOTCHKIS PERFORMANCE, LLC
C/O CUSTOMER SERVICE
12035 BURKE ST. SUITE 13
SANTA FE SPRINGS, CA 90670**

Hotchkis Performance will not accept product returns without the RGA number, receipt and the information described above. C.O.D. or collect shipments will be refused. Once the returns are received at Hotchkis Performance, we will evaluate the products, verify the sales receipt, and investigate the warranty claim.