

## ***1104 - Tubular Lower A-Arms 64-72 GM A-Body*** ***1108 - Tubular Lower A-Arms 70-81 GM F-Body***



### **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 you're 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 # **1900** 64-66 *Small Block*, **1901** 67-72 *Small Block*, **1916** 64-66 *Big Block*, **1917** 67-72 *Big Block* ).

Your Hotchkis A-Arms are 100% bolt-on. If you have not done so already, we suggest using our Tubular Upper A-Arm Package (Kit #**1103 A-Body** or #**1106 F-Body**) 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 Steering 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.



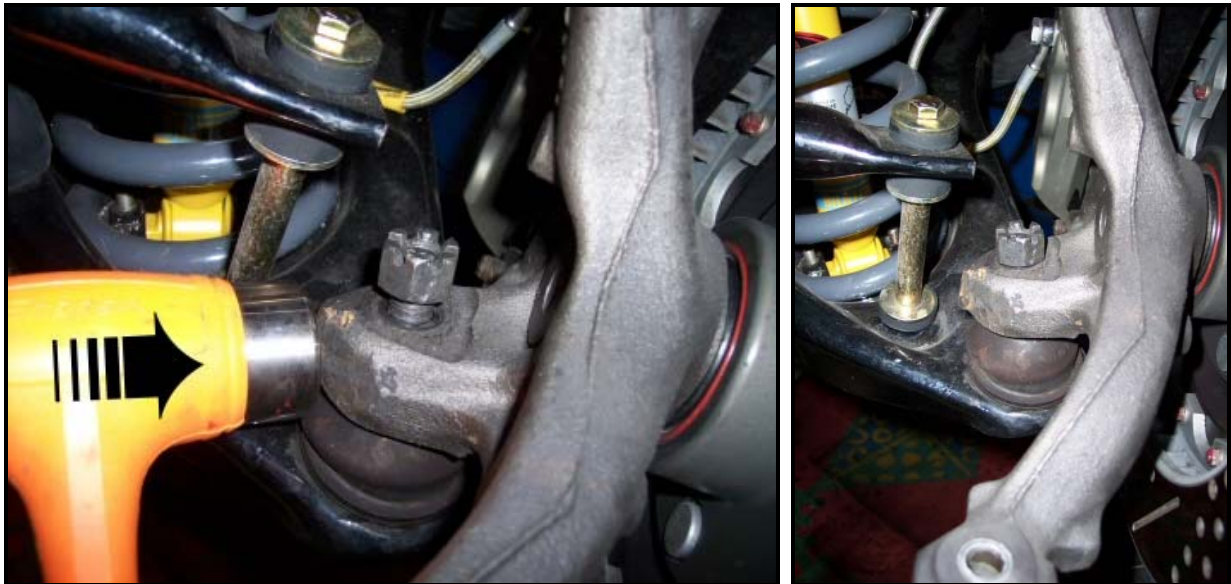
### 7. Loosen Lower Ball Joint Nut

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

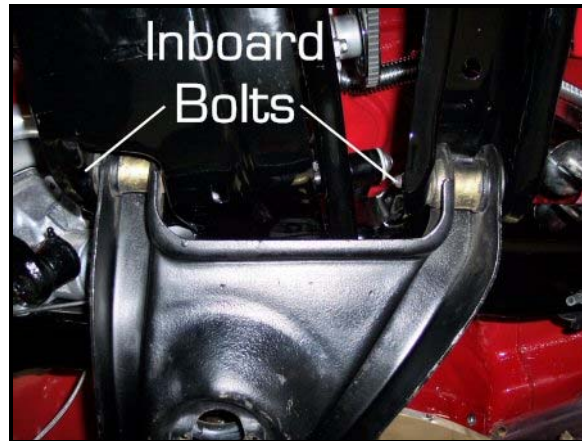
Using your trusty hammer, hit the spindle until the stud pops loose. The castle nut is there to keep the spring from launching the lower a-arm down.





### 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.



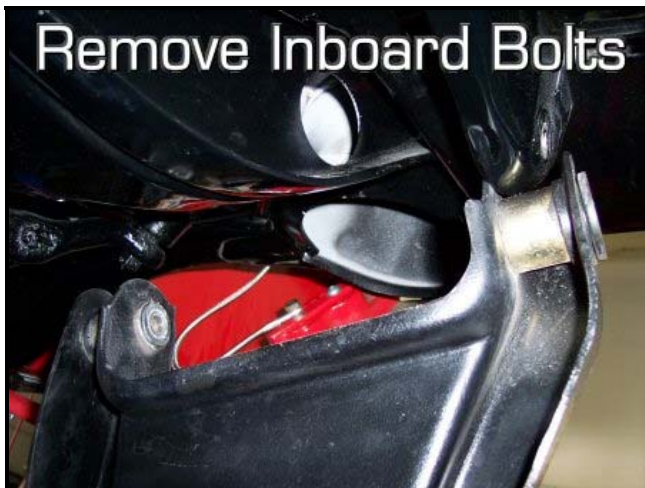
## 12. Remove the spring

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**

- **64-72 GM A-BODIES (1104)**
- **74-81 PONTIAC FIREBIRD (1108)**

Install the 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 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 1/8" spacers (P/N#11990014) or more 1/4" spacers (P/N#11980014) from Hotchkis directly.

**Possible Combinations:**

No Spacer	= 1/2" Lower than Stock Arm
1/8" Spacer	= 1/4" Lower than Stock Arm
1/4" Spacer	= Same as Stock Arm (Default Setting)
1/4" + 1/8" Spacer	= 1/4" Higher than Stock Arm
1/4" + 1/4" Spacer	= 1/2" Higher than Stock Arm



- **70-81 CHEVY CAMARO (1108)**

Do not install the 1/4" spacer. Just install the lower spring Isolator onto the Hotchkis a-arm. At this time, do not worry about the index clocking of the isolator. In some cases, it is necessary to raise the driver or passenger side to getting uniform ride height. If you need to raise the vehicle you can order 1/8" spacers (P/N#11990014) or the 1/4" spacers (P/N#11980014) from Hotchkis directly. Your kit comes with two 1/4" spacers.

**Possible Combinations:**

No Spacer	= Same as Stock Arm (Default Setting)
1/8" Spacer	= 1/4" Higher than Stock Arm
1/4" Spacer	= 1/2" Higher than Stock Arm
1/4" + 1/8" Spacer	= 3/4" Higher than Stock Arm
1/4" + 1/4" Spacer	= 1" 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. Some car models 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. If your car does not have the upper indexing, then you can skip this step.



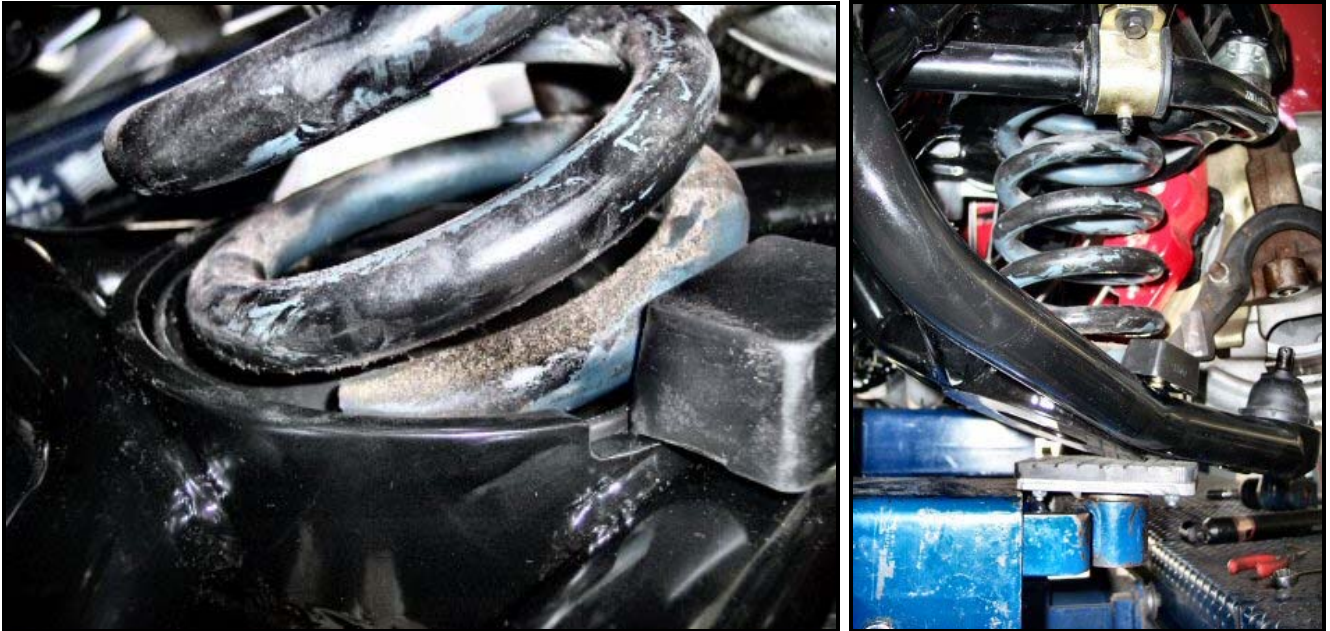
### 17. Install the Spring

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. Install the Sway Bar End links**

Attach sway bar to the control arm with the included end links.



*Note: 1104 shown*

**22. Reinstall the Wheels**

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