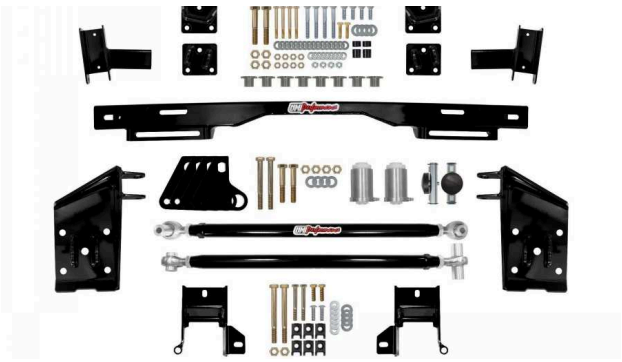
# INSTALLATION INSTRUCTIONS



**1967-1969 Camaro**

# Inboard Shock Relocation w/ Traction Bars

**PART NUMBERS (PN): 273124**

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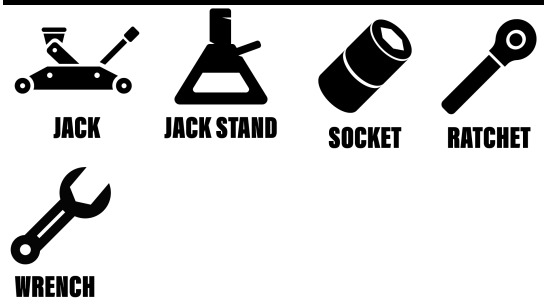
## Included Parts

| Part Description | Quantity | PN |
|---|---|---|
| Upper Shock Mount | 1 | 2731DMA |
| Stud Mount Shock Mount (Driver) | 1 | 2731JDR |
| Stud Mount Shock Mount (Passanger) | 1 | 2731JPA |
| Double Sheer Shock Mount (Driver) | 1 | 2731FDR |
| Double Sheer Shock Mount (Passanger) | 1 | 2731FPR |
| Frame to Shock Mount Bracket (Driver) | 1 | 2731ADRMA |
| Frame to Shock Mount Bracket (Passanger) | 1 | 2731APAMA |
| Leaf Spring Plates | 2 | 2630 |
| Hardware Kit (Inboard Shock Relocation | 1 | 273130-BK |

## Tools Needed



## INSTALLATION INSTRUCTION

**DISCLAIMER**
UMI Performance shall not be held liable for any injuries or damages resulting from the improper installation of this product. It is the sole responsibility of the user to ensure that the product is installed correctly and in accordance with all applicable laws, codes, and regulations. The user assumes all risk and liability for any injuries or damages that may arise from the improper installation of this product. It is important to follow these steps carefully and use the proper tools to avoid damaging the vehicle or causing injury to yourself. If you are uncertain about any part of the installation process, it is recommended that you seek the assistance of a professional mechanic.

1) Lift the rear of the vehicle using your preferred method. Use a vehicle lift or jack and jack stands. Support the weight of the vehicle under the Chassis, allowing the rear suspension to fully "droop".

2) Remove wheels from the vehicle to gain working access.

3) Support the rear end with a jack to remove rear shocks. Remove the upper nut off of the shock located inside the trunk.**Fig 1.** Then remove the lower bolt that attaches the shock to the lower leaf spring plate.. **Fig 2** After shocks are removed, lower the jack

4) Remove U bolts from the Rear Axle.
*Cutting may be necessary if U bolts are rusted. After removing use the jack to support the rear end in the car while removing leaf spring bolts.

5) Remove the front leaf spring plate from the chassis. There are (3) bolts per side to be removed. **Fig 3.**

6)Remove the rear leaf spring bolt, and leaf spring from the car.

7) Remove the front leaf spring bushing from the leaf spring. A Shop press is the simplest way to perform this.

8) Install the supplied aluminum sleeve into the leaf spring using a shop press. Align the grease fitting parallel to the leaf spring. This is important to allow access with a grease gun for future maintenance. **Press the sleeve from the outside in.** You will make driver/passenger side springs. When complete you should have a mirror image pair **Fig 4**

9) Lightly grease the outside of the Delrin bushing and steel sleeve before inserting into the aluminum bushing. Insert from the opposite side of the aluminum bushing. **Fig 5**

10) Remove the snap rings from the bump stop cross shaft. Insert the D shaped cross shaft into one side of the traction bar rocker. Install snap ring.

11)Slide plate onto Delrin bushing as shown in **Fig 6.**. Install 2nd plate on opposite side of bushing. Line up D shaped cross shaft and Delrin bushing at same time. Install snap ring onto cross shaft.

12) Install Front leaf spring mount onto the leaf spring at this time. Install cross bolts from the outside of the car in. This is required for clearance once installed in the car. Torque bolt to 55 ft lbs

## FIGURES FOR REFERENCE

*Figure 1: Remove Upper Shock Nuts. Located inside the trunk.*

*Figure 2: Remove the lower shock bolts.*

*Figure 3: Leaf Spring Mount Removal*

*Figure 4: Grease Fitting Orientation*

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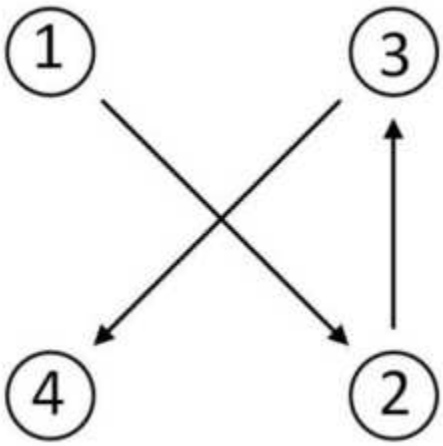
13) Reinstall leaf springs into the car. It is easiest to install the front mount first, then swing leaf springs into place in the rear and install bolts.

14) Lower the axle onto the leaf spring. Be sure to use an isolation pad between the leaf spring and axle. The alignment pin on the leaf spring must fit into the isolation pad and rear axle. This locates the rear axle in the correct position.

15) Install U bolts on the axle and the lower leaf plate. The shock mounts are going to be on the inboard side.

16) Install U bolt nuts and hardened washers. Tighten Nuts evenly in an "X" pattern.

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17) Install the traction bar tube between the axle mount, and front rocker plate. The bars are shipped with the spacers in the correct location. The hex side of the bar uses a LH rod end and will have (2) wider spacers. The RH thread uses (2) narrow spacers. Make sure spacers are correct before installing them in the car. The rod end jam nuts should be loose to allow adjustment. **Fig 7 &**

## FIGURES FOR REFERENCE


*Figure 5: Delrin Bushing install*

*Figure 6:* 2628 DB plates installed.

*Figure 7. Bolt and Spacer Orientation.*

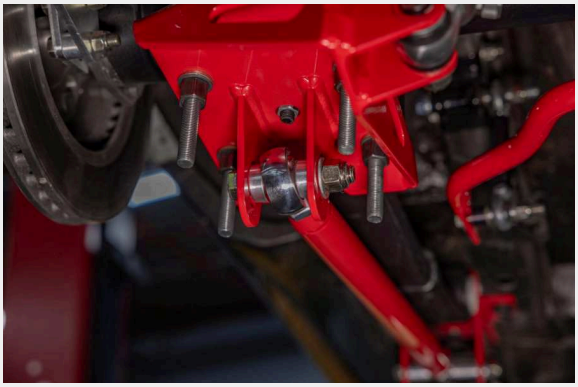

*Figure 8 Rear of traction bar mounting.*

## INSTALLATION INSTRUCTION

### Upper Shock Mount Relocation Bracket

18) Removing the exhaust will allow for more clearance to install the upper mount.

7) The upper shock mount can be laid out to loosely assemble. Choose the upper shock mount that fits your application. **Fig 5.** The upper bolt for the shock mount receives a flat head bolt, followed by the included spacer. This keeps from overtightening the bolt and crushing the square tubing on the mount **Fig 6**. Insert into the elongated hole and install a washer and nut. Leave loose until installed. At this point you can install the two lower bolts thru the shock mount, followed by a washer and nut. Also leave these loose until final adjustment. Slide the two frame mounts into the square tubing as shown in **Fig 7 .** Add a washer to the bolt then slide it through the mount and install a washer and nut. Leave mounts loose until installed.

8) Slide the adjustable shock mount up into place. The C channel mounts slide over the rear frame rails. The bottom of the mounts have two holes drilled on the bottom flat to install a self tapping machine screw to hold the mount in place while you drill and install the mounting bolts through the subframe. We located our mount using the front threaded hole in the frame and set ours at 2 ⅞ from the center of the threaded hole to the front edge of the mounting bracket. **Fig 8.** This can be adjusted forward or rearward for shock to floorpan clearance or to make room for your exhaust. It is held into place using the included 5/16 hardware. Use a washer on both sides of the mount and included lock nuts and torque to **22 ft lbs.**

*Figure 6: Bolted into car*

## FIGURES FOR REFERENCE

*Figure 5: Shock Mounts and Orientation*

*Figure 6: Bolt and Spacer Orientation*

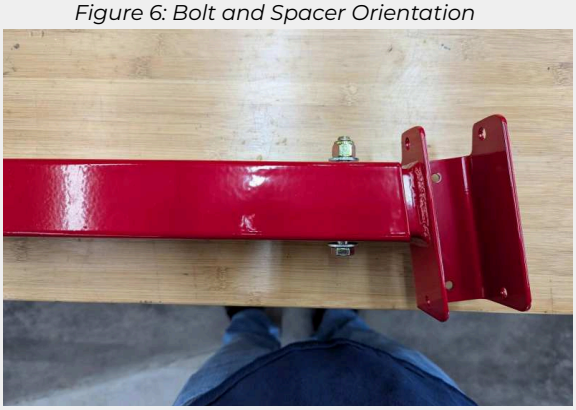

*Figure 7: Frame mount orientation*

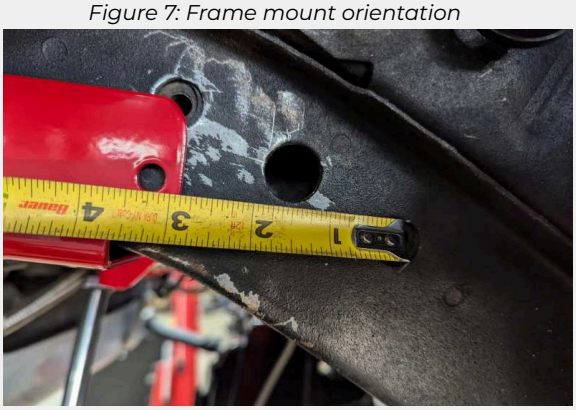

*Figure 8: Rear of traction bar mounting.*

## INSTALLATION INSTRUCTION

9) Once the mounting bolts are drilled and installed to specified torque specs, you can center the mount in the car and torque the ⅜ bolts on each end of the mount to **37 ft lbs. Fig 9**

10) Adjust the shock mounting location on the main frame of the relocation bracket. These are adjusted to help with exhaust clearance issues so reinstall the tailpipes for final fitment of location. **Exhaust might need to be modified to clear the shock relocation bracket.** Keeping the shock as vertical as possible helps with shock effectiveness .Slide the shock into place to confirm clearance before tightening the upper shock mount. Measure to make sure both sides are the same before torquing the nuts to **37 ft lbs.**

11) Once the shock mounts are in place and torqued you can install the shocks. The ½ bolt on the double sheer mount can be installed with bushing and torqued to **50 ft lbs.** If you are using the double sheer mount for the top, it is torqued to the same specs. If you are running the stud mount for the top it is torqued to roughly **14 ft lbs or until the rubber bushing compresses to roughly the size of the washer.** Using a jack, raise the rear end in the car until shocks line up and install the bolts to specified torque spec.

12) Now you can reinstall the wheels and torque to factory specs and lower the vehicle back to the ground.

**NOTE:** If you purchased Viking shocks to accompany this kit, measure the shock eye to eye at ride height to ensure you are within the specified window.

Viking Shock Ride Height Specifications - Eye to Eye at Ride Height

**Stud Top - Eye Poly Lower**

| | |
|---|---|
| B244, B344AP | 14-⅝" to 16" |
| B242, B342AP | 13-⅜" to 14-⅝" |

**Bearing Upper and Lower**

| | |
|---|---|
| D211-W, D311AP-W, D311AJ-W | 15-⅛" to 16-½" |
| D209-W, D309AP-W, D309AJ-W | 13-⅞" to 15-⅛" |

## FIGURES FOR REFERENCE

*Figure 9: Center Mount up and Torque*

*Figure 10: Finished mount*

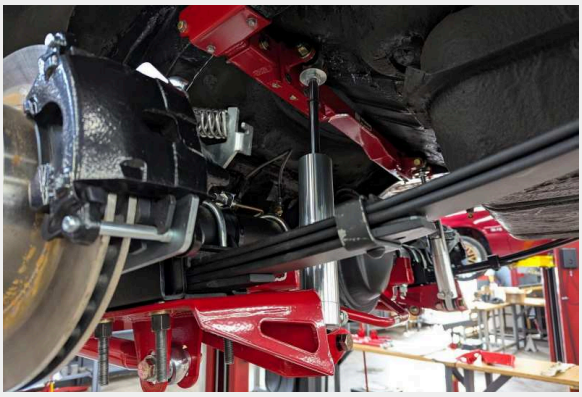

*Figure 11. Finished Mount*