



INSTALLATION INSTRUCTIONS

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Part #2628 Leaf Spring Traction Bars 1970-1981 GM F-Body



Applications

1970-1981 GM F Body, Chevrolet Camaro, Pontiac Firebird

Included Parts

| Part # | Quantity | Description |
|---------|----------|--|
| 2628ABC | 2 | Front Leaf Spring Bushing – Aluminum/delrin |
| 2628LW | 2 | Traction Bar Tubes w/ Rod ends / spacers - Assembled |
| 2628GKW | 2 | Lower Leaf Plates |
| 2628DA | 4 | Traction Bar Rocker - Short |
| 2628E | 2 | Traction Bar Bump Stop – Includes Snap Rings |
| 1000009 | 2 | 1/2-13 x 3" gr 8 bolt |
| 1000013 | 4 | 1/2-13 Nylock Nut |
| 1000015 | 4 | 1/2 Flat Washer |
| 1000131 | 2 | 1/2-13 x 4 1/2 gr 8 bolt |

Optional Items

- UMI2620 2" Lowering Leaf Spring – 175lb/in rate
- UMI2624 Front Leaf Spring Mount
- UMI2625 Poly Bushing Shackle Kit
- UMI2626 Delrin Bushing Shackle Kit
- UMI2627 Leaf Spring Installation Kit
- UMI2628DB Front Traction Bar rocker- For use with UMI2624

Installation

1. Lift rear of 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 vehicle to gain working access.
3. Support the axle with a jack or separate jack stands
4. Remove U bolts from Rear Axle.

**Cutting may be necessary if U bolts are rusted.*

5. Remove Front leaf spring plate from chassis. There are (3) bolts per side to be removed.
6. Remove Rear leaf spring bolt, and leaf spring from car.

** Note; If bolts are rusted inside bushings, cutting may be required to remove leaves. If the bolt cannot be removed, factory replacement bushings will be needed to press into the leaf springs.

** The front bushing replacement is included with this kit.

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

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.

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 below. 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.

** The cross shaft will have some side to side play. This is needed.

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

** Traction bar works with Factory front mount or UMI2624 adjustable front mounts

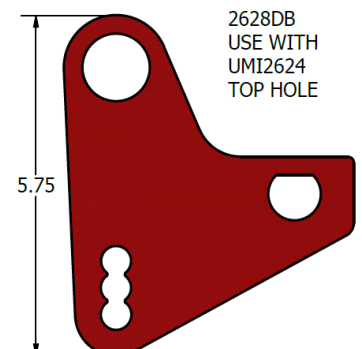
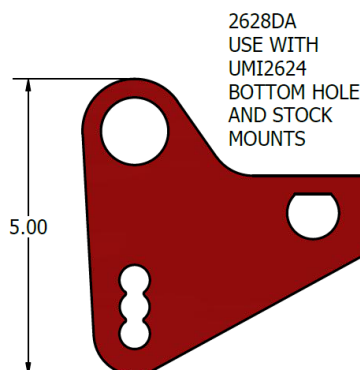
** If using the UMI2624, the rocker supplied with the 2628 kit works with the lower mounting hole. To use with the upper hole on the 2624, part# 2628DB is required.



Hardware Required:

- (2) 1/2-13 x 5" U Bolt
- (4) 1/2 Washer
- (2) 1/2-13 Nylock Nut

Torque: 55 ft lb



Installation Continued

13. Install Rear bushings and shackles onto the leaf spring. Refer to UMI Part#'s 2625 or 2626 instructions.

14. Reinstall Leaf spring into the car. It is easiest to install the front mount first, then swing leaf spring into place in rear and install bolts.

** On most 2nd gens, the top shackle bolt can be installed from the outside/in without removing the fuel tank.

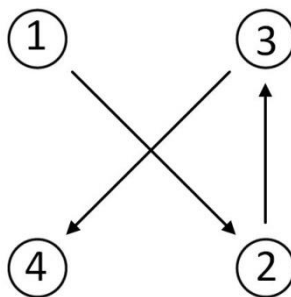
15. Lower the axle onto the leaf spring. Be sure to use an isolation pad between the leaf spring and axle. The alignment pin on the leaf spring must fit into the isolation pad and rear axle. This locates the rear axle in the correct position.

16. Install U bolts on the axle and the lower leaf plate. The UMI lower leaf plate is the same for both sides. The shock mount installs on the outside of the leaf spring in the factory location. On the driver side, the shock is on the rear of the axle. On the passenger side, it is on the front side.

17. Install U bolt nuts and hardened washers. These are included in the UMI2627 kit

**A small amount of Anti-seize is recommended on each u bolt thread.

18. Tighten Nuts evenly in an "X" pattern.



Hardware Required:

(4) 7/16-20 x 6 3/4" U Bolt

(8) 7/16 Hardened Washer

(8) 7/16-20 Tall Hex Nut

Torque: 55 ft lb



19. Install Shock bushings, washers, and nuts onto the leaf plate.

20. 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 in car. The rod end jam nuts should be loose to allow adjustment.

21. Install the wide spacers in between the traction bar rockers. It is recommended to start in the center adjustment hole. Install the supplied bolt from the outside, use a washer under the nylock nut. A washer is not required under the head of the bolt.

Hardware Required:

(2) 1/2-13 x 4 1/2" gr8 bolt

(2) 1/2 flat Washer

(2) 1/2-13 nylock Hex Nut

Torque: 55 ft lb

22. Install the narrow spacers between the lower leaf plate mounts. It is recommended to start in the center adjustment hole. Install the supplied bolt from the outside, use a washer under the nylock nut. A washer is not required under the head of the bolt.

Hardware Required:

(2) 1/2-13 x 3" gr8 bolt

(2) 1/2 flat Washer

(2) 1/2-13 nylock Hex Nut

Torque: 55 ft lb

Installation Continued

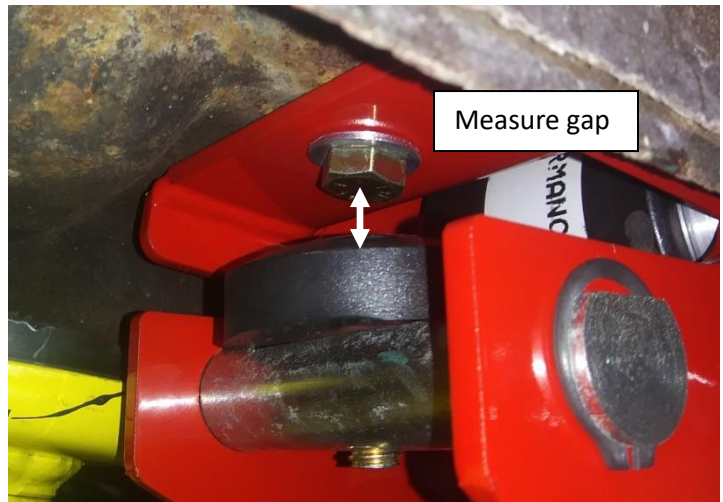


23. Adjusting the length of the traction bar tube must be completed when the vehicle is on the ground and sitting at ride height.

24. Adjust the length of the traction bar tubes and measure the gap between the front bump stop and front leaf mount bolt. This gap will adjust how much spring wrap occurs before the bar begins to apply force.

Refer to the included tuning chart to determine the gap for your application. Once adjusted, tighten both jam nuts on the traction bar tube.

*** It is easiest to use a piece of scrap material as a feeler gauge to set this gap. For example, 1/8" aluminum strap to set an 1/8" gap.*



Tuning

There are 3 adjustment points that can be used to tune the traction bars. Front Bump stop gap, Front rocker height, and Rear axle mount height.

Bump stop gap:

The bump stop gap determines the amount of spring wrap up before the traction bar applies force to the tires. Less gap reacts quicker, more gap provides a softer “street” ride. This adjustment is excellent for street cars that are occasionally raced. If the ride feels “harsh” on a street car, adjust the gap slightly larger.

To make the adjustment, loosen jam nuts on rod ends, turn the tube until the gap between bump stop and chassis is set to desired measurement. It is useful to use a known thickness as a feeler gauge to get this measurement equal on both sides.

Recommended settings

| | |
|--|------------------|
| Drag racing, Road Racing, Auto crossing: | 1/8” gap or less |
| Street driving | 3/8” gap or more |

Front Mounting point:

Adjusting the height of the chassis side rocker arm changes how quickly the rocker rotates and contacts the bump stop. It also changes the angle of the bar, changing the vertical force applied to the tires. This location works in conjunction with the axle mount to determine the angle.

| | |
|---------------------------------------|----------------------------|
| Quicker Reaction, More vertical force | Raise front mounting point |
| Slower Reaction, Less vertical force | Lower front mounting point |

Lowering the mount can be helpful on high grip situations like a prepped drag strip.

Axle Mounting Point:

Adjusting the height of the axle side mount changes how much force is converted from the rear axle torque. By changing the angle of the bar, it changes the amount of vertical force/load applied to the tire. This works in conjunction with the chassis/front mount to determine the angle.

| | |
|---------------------|---------------------------|
| More vertical force | Lower rear mounting point |
| Less vertical force | Raise rear mounting point |

In an autocross situation, if the car does not turn as well on the throttle, raising the axle mount 1 hole can help the car rotate under power.

After changing either the front mounting point or the axle mounting point, the bump stop gap should be checked.

UMI Performance

2628

Leaf Spring Traction Bars

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Warranty Information

UMI Performance warrants all UMI Performance products for a period of two (2) years from the original date of purchase.

This warranty is valid against defects in materials and workmanship for the two (2) year warranty period. ♦ It is not valid against defect resulting from, but not limited to:

Misuse and/or abuse, neglect or accident, Exceeding the item's design limits, Improper installation. Acts of God, including lightning, floods, earthquakes, fire or high winds.

Damage in handling, including damage encountered during shipment.

This warranty is valid for the original purchaser of the UMI Product. ♦ Warranty is not transferable or valid for second ownership.

This warranty shall be considered void if the warranted product is in any way altered, adjusted, tampered with or defaced.

The two (2) year warranty does not apply to normal wear and tear (the gradual deterioration of an asset which results naturally from use and/or age, i.e. bearings, bushings, etc.).

Non UMI manufactured parts are not covered or valid under this UMI Performance warranty.

UMI Performance cannot guarantee compatibility or performance of its products with other components used in conjunction with UMI Performance products.

UMI Performance cannot assume responsibility for any damages to UMI Products nor for claims for personal injury or property damage resulting from the use of UMI Performance's products or the improper operation thereof or consequential damages arising from the products or use of the products.

UMI Performance two (2) year warranty excludes incidental charges incurred by the end user in the event of breakage (towing, labor, installation, etc.). ♦ By their very nature,

competition suspension parts are continuously expected to exceed to their limits (either by race or road use). UMI suspension components are designed to withstand intense race conditions, although it is impossible to control the quality of installation or the varying conditions in which they are used.

This warranty supersedes all other warranties and may only be modified by statement in writing, signed by UMI Performance owners/principals.

All Warranties implied by law, including the warranties of merchantability and fitness for a particular purpose, are hereby limited to the warranty period herein and shall expire at the end of such period.