509 Hemlock St
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Ph- 814.343.6315 Fax- 814.343.6318

UMI Performance
Race Proven Suspension Systems

Installation Instructions

support@umiperformance.com
www.umiperformance.com

Lower A-Arms

Item #4031

Box Contents:

- (1) Installation Instruction Sheet
- (4) Polyurethane Bushings (Mounted)
- (4) Sleeves (Mounted)
- (1) Lower A-Arm w/ Ball Joint; Driver Side
- (1) Lower A-Arm w/ Ball Joint, Passenger Side
- (2) Bump Stops (#6000G) (Mounted)
  - (1) Castle Nut
  - (1) Cotter Pin
  - (1) Grease Fitting
- (1) Packet Formula 5 Prelube (#9.11108)

2649 Sway Bar Endlink Kit

- (4) 15.03.01.39 – Sway bar endlink washers
- (4) 4806G – Sway bar endlink bushings
- (2) PCYFR6T – High Misalignment rod end
- (4) 1000006 – 3/8 Flat washer
- (2) 1000092 – 3/8-24 x 4” All-thread bolt
- (6) 1000099 – 3/8-24 Nut
- (2) 1000102 – 3/8-16 x 2” Bolt\
- (2) 1000101 – 3/8-16 Locknut

Application:

* 1964 – 1972 GM A-Body

Thank you for Putting Your Trust in A UMI Performance Product!
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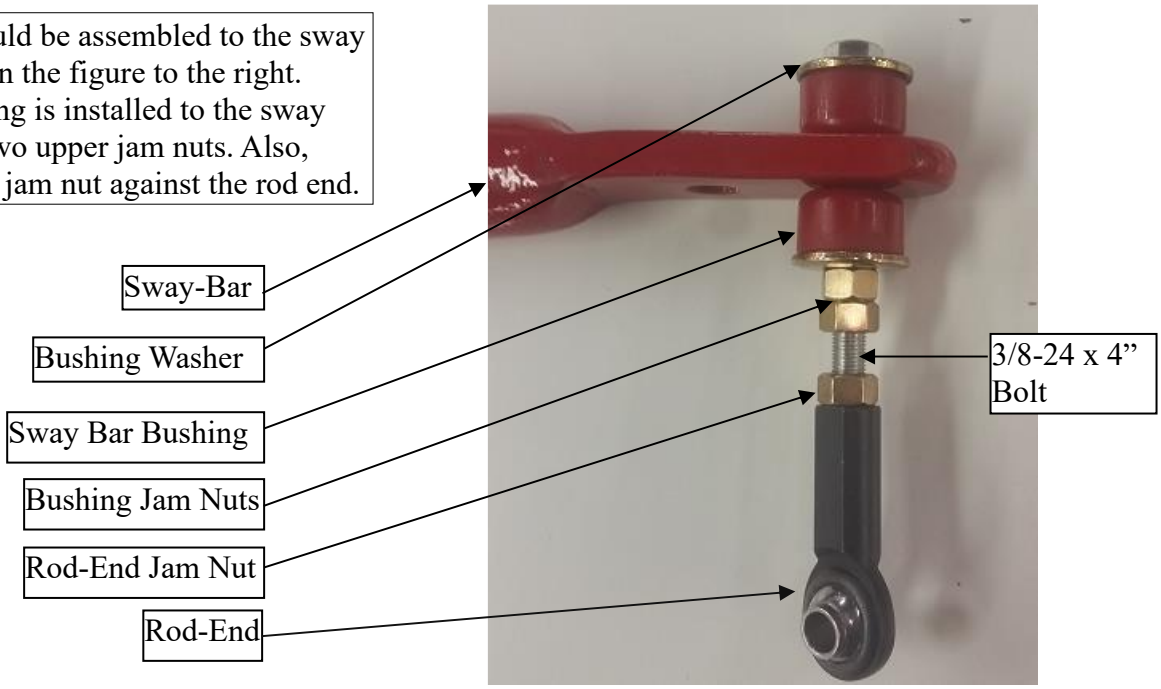
NOTE: Steps below are listed for install of Upper (#4033) & Lower (#4031) A-Arms at the same time. Use this installation instruction sheet only if installing both #4031 and #4033 A-Arms at the same time

1. Before installation, verify box contents are correct and read through instructions completely.
2. On a solid, level surface, jack up the front of the vehicle to a good working height, making sure both wheels are off of the ground, and secure with (2) jack stands under the frame, one on each side. Also, be sure to leave enough room to fully unload the coil spring.
3. Remove wheel(s) then loosen and remove front sway bar end links (top and bottom) from both driver and passenger side. This will allow you to rotate the sway bar out of the working area.
4. Loosen and remove outer tie rod from spindle. (See PHOTO 1)
5. At upper ball joint, remove cotter pin and loosen the castle nut, but **DO NOT remove completely at this time.**
6. Break upper ball joint free from spindle. At this point the castle nut can be removed completely.
7. Position a floor jack under the lower A-Arm and lift the A-Arm to prevent the coil spring from unloading completely. (See PHOTO #4)
8. At lower ball joint, remove cotter pin and loosen castle nut, but **DO NOT remove completely at this time.**
9. Using a ball joint separator (pickle fork), break lower ball joint loose from spindle. Remove the castle nut then move and secure spindle out of the working area as best you can.
10. Remove the upper A-Arm from the frame. There are (2) bolts holding it in place.
11. Loosen and remove the shock from the lower A-Arm. Retain the (2) bolts for future use. Align the shock mounts with the stock A-Arm window to prepare for coil spring removal.
12. ****NOTE: USE EXTREME CAUTION WHEN REMOVING / REPLACING SPRINGS**** To remove the coil spring, slowly drop the lower A-Arm by releasing the jack placed under the A-Arm in step #7.
13. Set the coil spring aside and remove the (2) bolts holding the lower A-Arm to the frame (retain bolts for install). Now the stock A-Arm can be removed. Carefully remove the (2) shock mounting clips from the stock A-Arm and fit them onto the UMI A-Arm. 5/16 x 1 ¼ bolts with locknuts can be used in place of factory bolt/clip.
14. Position the lower A-Arm in place at the frame and secure with the (2) bolts retained in step #13.
15. Orient the bottom of the coil spring with the tab in the spring housing of the UMI lower A-Arm.
16. Support the UMI lower A-Arm with a floor jack. Be sure the spring is in the correct position before you begin to compress the coil spring. (See PHOTO #3)
17. Once coil spring position is verified, begin to compress the spring. While compressing the spring, guide the lower shock mounts through the window of the lower A-Arm's spring housing.
18. Rotate the shock so that the lower mounts are aligned with the mounting clips at the base of the lower A-Arm spring housing. Using the (2) bolts retained from step #11, secure the shock to the lower A-Arm and torque the bolts to factory specification. (See PHOTO #2)
19. Install the spindle unit to the lower A-Arm and **HAND TIGHTEN ONLY** at this time.
20. Locate the UMI upper A-Arm and secure it to the frame first. **DO NOT tighten at this time.**

21. Next, align the upper ball joint with the spindle. This castle nut can be tightened to factory specification at this time. Once tightened correctly, install the cotter pin to secure.
22. At this time the lower ball joint castle nut can be tightened to factory specification and the cotter pin can be inserted to secure the nut.
23. Re-install the tie rod to the spindle, being sure to tighten the bolt to factory specification.
24. Tighten all remaining bolts to factory specification. DO NOT re-install the sway bar end links until the opposite side is complete.
25. Upon completion of both driver and passenger side A-Arms, install the sway bar end links included with the lower a-arms and see figure below for installation. It is best to install sway bar link with the car setting at or near ride height. A high misalignment rod end is used in place of the poly endlinks to reduced bind through suspension travel.

End-links should be assembled to the sway bar as shown in the figure to the right. Once everything is installed to the sway bar, lock the two upper jam nuts. Also, lock the lower jam nut against the rod end.



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NOTE: UMI A-Arms feature alignment settings that cannot be achieved using the factory A-Arms. Below are new alignment specs recommended by UMI. Depending on vehicle ride height or other modifications some competition specs may not be able to be achieved.

ALIGNMENT RECCOMENDATIONS

	Street and Show	Street Performance	Mild Competition (Not recommended for street use)
Camber	0 to -1/4 degrees	-1/2 degrees	-1 to -1.5 degrees
Caster – Driver Side	+5 degrees	+5 degrees	+5 to +6 degrees
Caster – Passenger Side	+5.5 degrees	+5.5 degrees	+5.5 to +6.5 degrees
Toe	IN 1/8" total	IN 1/16" total	OUT 0" to 1/16" total (Autocross)

Tall ball joint info: Tall ball joints have exposed shaft. This is A-OK and does not hurt any aspect of performance or assembly. The extra shaft distance is used to improve camber gain and handling performance. Installation relies on the taper and not on the shaft.

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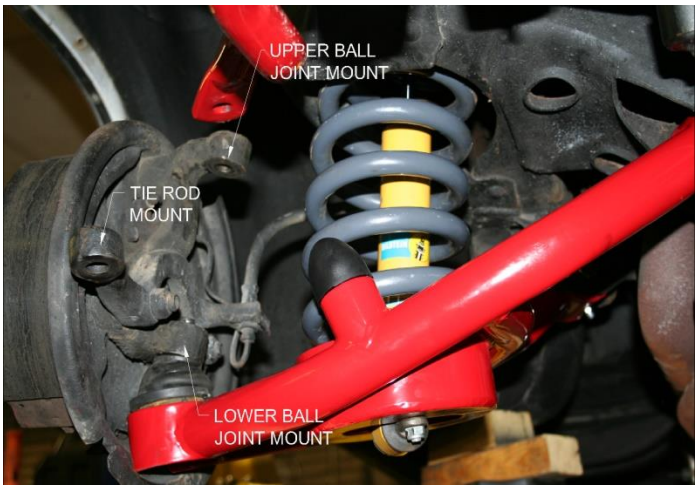

PHOTO #1

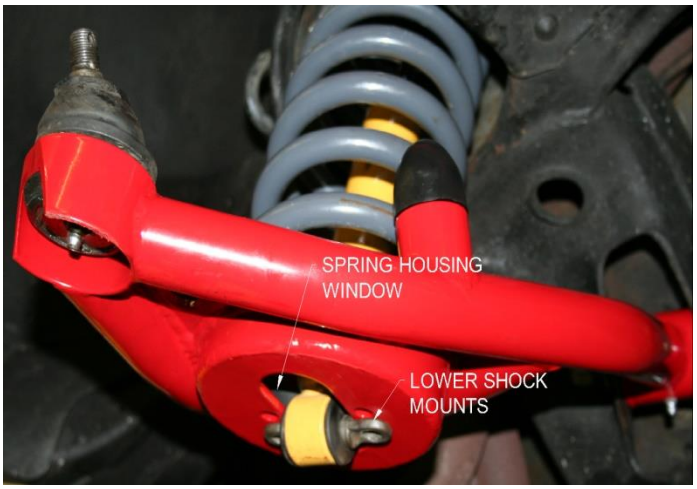

PHOTO #2

PHOTO #3

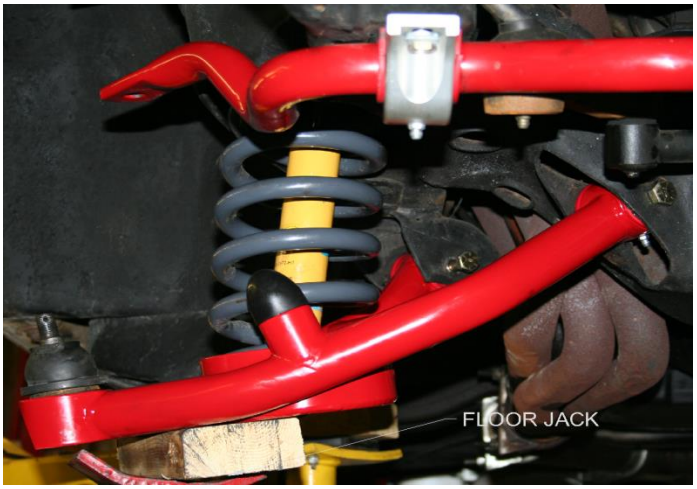

PHOTO #4

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UMI Performance Inc.
Made in Pennsylvania, USA