



350 S. St. Charles St. Jasper, In. 47546  
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[www.ridetech.com](http://www.ridetech.com)

**Part # 11240210**  
**68-72 GM "A" Body CoilOver System**

**Front Components:**

1	11243510	Front Single-adjustable CoilOvers
1	11222899	Front Lower StrongArms
1	11223699	Front Upper StrongArms
1	11009300	RideTech Tall Spindles
1	11249100	Front MuscleBar

**Rear Components:**

1	11246699	Rear Upper Strong Arms
1	11224499	Rear Lower Strong Arms
1	11226110	Rear Single-Adjustable CoilOvers
1	11229102	Rear MuscleBar

**Components:**

1	85000000	Spanner Wrench
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**Part # 11243510**

**68-72 GM "A" Body HQ Series Front CoilOvers**

For Use w/ StrongArms & RideTech Spindles

**Shock Assembly:**

2	24139999	3.6" stroke HQ Series shock
2	90009988	2" adjustable threaded stud top
2	90001994	.625" I.D. bearing
4	90001995	Bearing snap ring

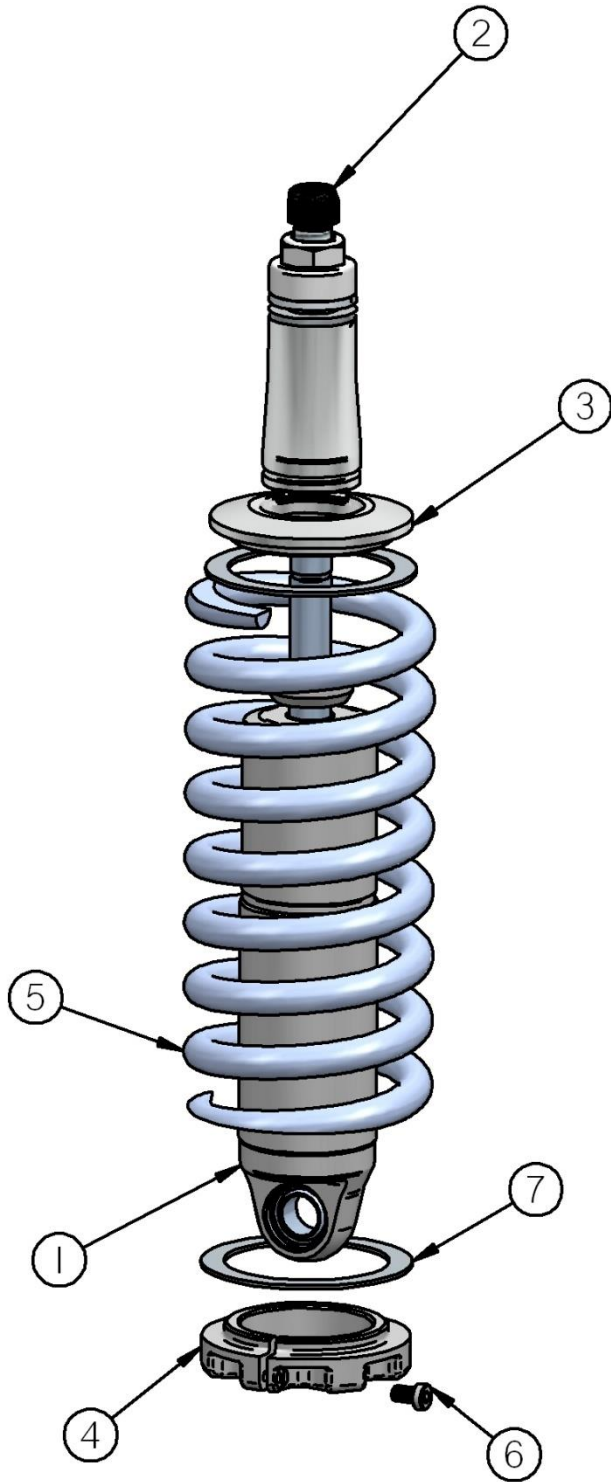
**Components:**

2	59080650	Coil spring – 8" long / 650 # rate
2	90002312	2" stud top base
2	90002222	Spring retainer kit
2	90001902	Aluminum cap for Delrin ball
2	90001903	Delrin ball upper half
2	90001904	Delrin ball lower half
4	70010828	Delrin Spring Washer

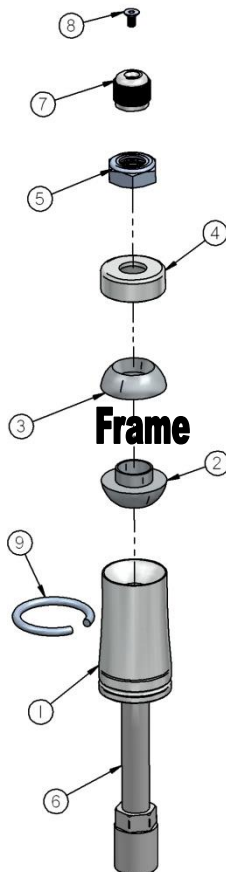
**Hardware:**

2	99562003	9/16" SAE Nylok jam nut	Stud top hardware
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# COILOver

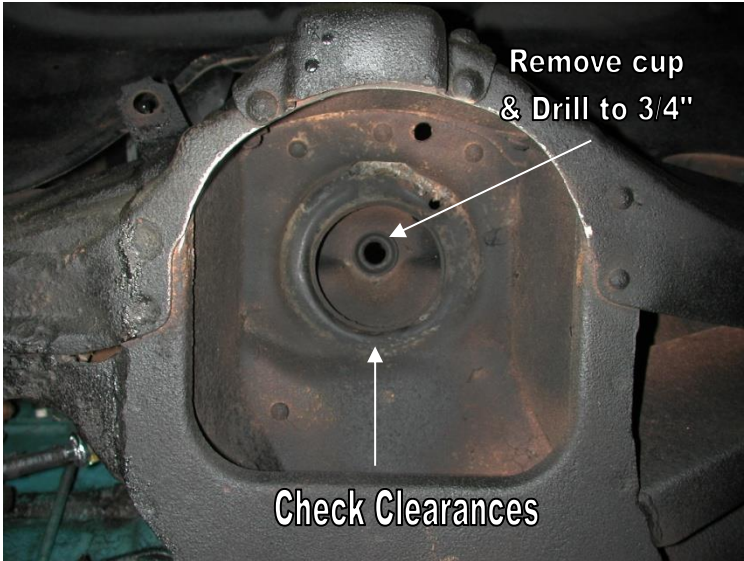


1. Impact Forged, Monotube shock
2. Rebound adjustment knob (SA Only)
3. Upper coil spring retainer
4. Lower coil spring retainer
5. High tensile coil spring
6. Set screw
7. Delrin Spring Washer



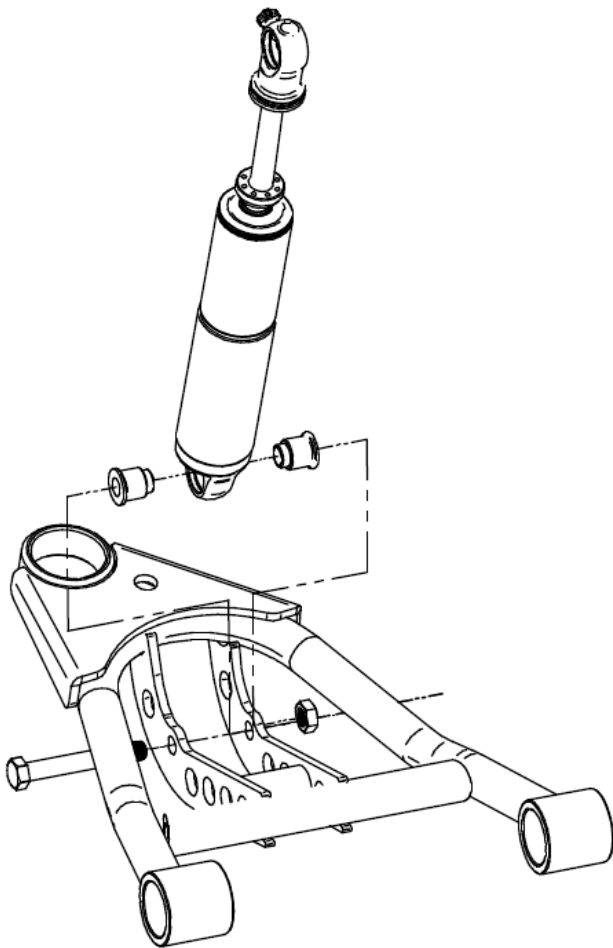
1. Stud top base
2. Lower Delrin ball half
3. Upper Delrin ball half
4. Aluminum cap
5. 9/16" Nylok jam nut
6. Threaded stud
7. Adjustment knob (SA Only)
8. Screw
9. Snap ring

# COILOver



1. To allow the step in the lower Delrin ball half to slide into the factory shock hole, the bushing cup will need to be removed (if your car has one) and the hole may need to be drilled out to  $\frac{3}{4}$ ".

2. Assemble the CoilOver then place into the coil spring pocket w/ the stud and lower Delrin ball sticking through the factory shock hole.



3. Check clearance between the upper factory spring retaining lip and stud top base. Allowing this to hit could cause the shock to break, this area may need to be trimmed to allow for full shock movement.

4. Place the upper Delrin ball over stud, then the aluminum cap. Secure the assembly w/ the 9/16" Nylok jam nut.

5. Attach the bottom of the shock to the lower StrongArms using the spacers and hardware supplied w/ the arm.



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**Part # 11222899**  
**64-72 GM "A" Body Front Lower StrongArms**  
**For Use w/ Shockwaves or CoilOvers**

**Components:**

1	90000636	Driver side lower arm
1	90000637	Passenger side lower arm
2	90000898	Ball joint (includes boot, grease fitting, castle nut & cotter pin)
4	90000516	Inner bushing sleeve - .5" I.D. x .75" O.D. x 2.375" long
8	70010759	Delrin bushing half – 1.5" O.D.
4	90002062	Aluminum spacers – shock to lower arm

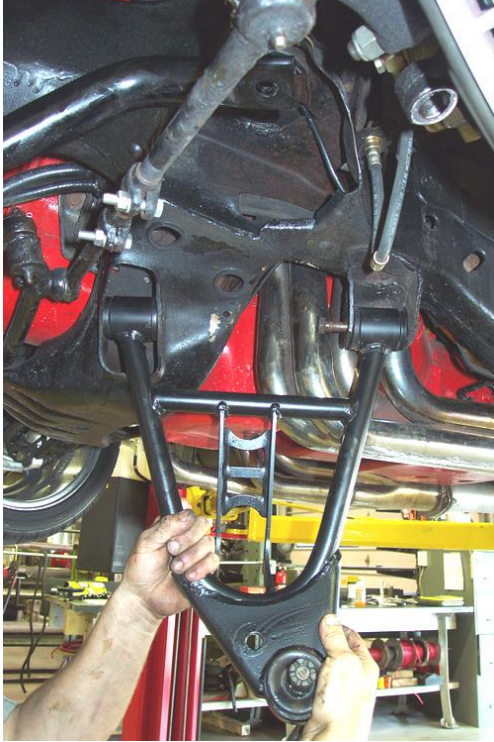
**Hardware:**

2	99501024	½-13 x 3 ¼" Gr.5 bolt	Shockwave to lower arm
4	99501005	½"-13 x 3 ½" Gr. 5 bolt	Lower arm to frame
6	99502001	½"-13 Nylok nut	Shockwave to lower arm / Lower arm to frame

# STRONG ARMS™

by Air Ride Technologies

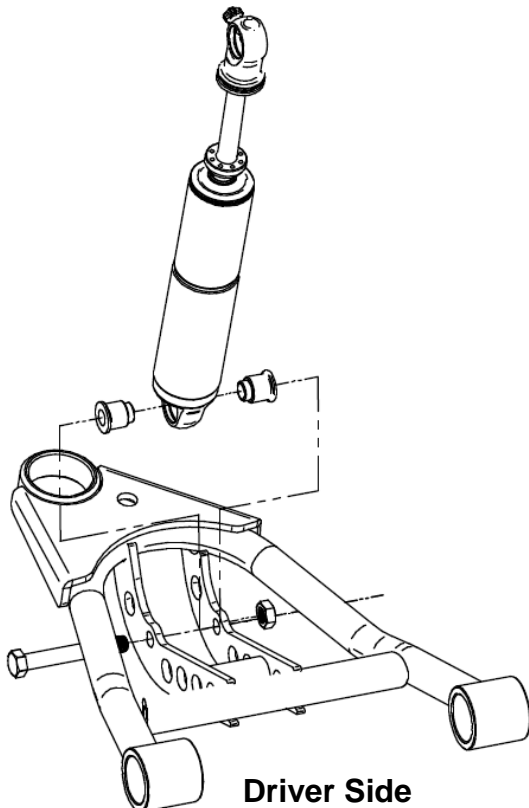
## Installation Instructions



1. After removing the factory lower control arm, clean the bushing mounting surfaces on the frame and lubricate with lithium grease.

2. Fasten the lower arm to the frame with the  $\frac{1}{2}$ " x  $3 \frac{1}{2}$ " bolts and Nylok nuts supplied.

**Note:** On some cars the frame brackets may be pinched and will need to be spread back apart to allow bushing to slide in.



3. Swing the lower StrongArm up to the Shockwave and secure with the  $\frac{1}{2}$ " x  $3 \frac{1}{4}$ " bolt and Nylok nut, an aluminum spacer must be installed on each side of the bearing.

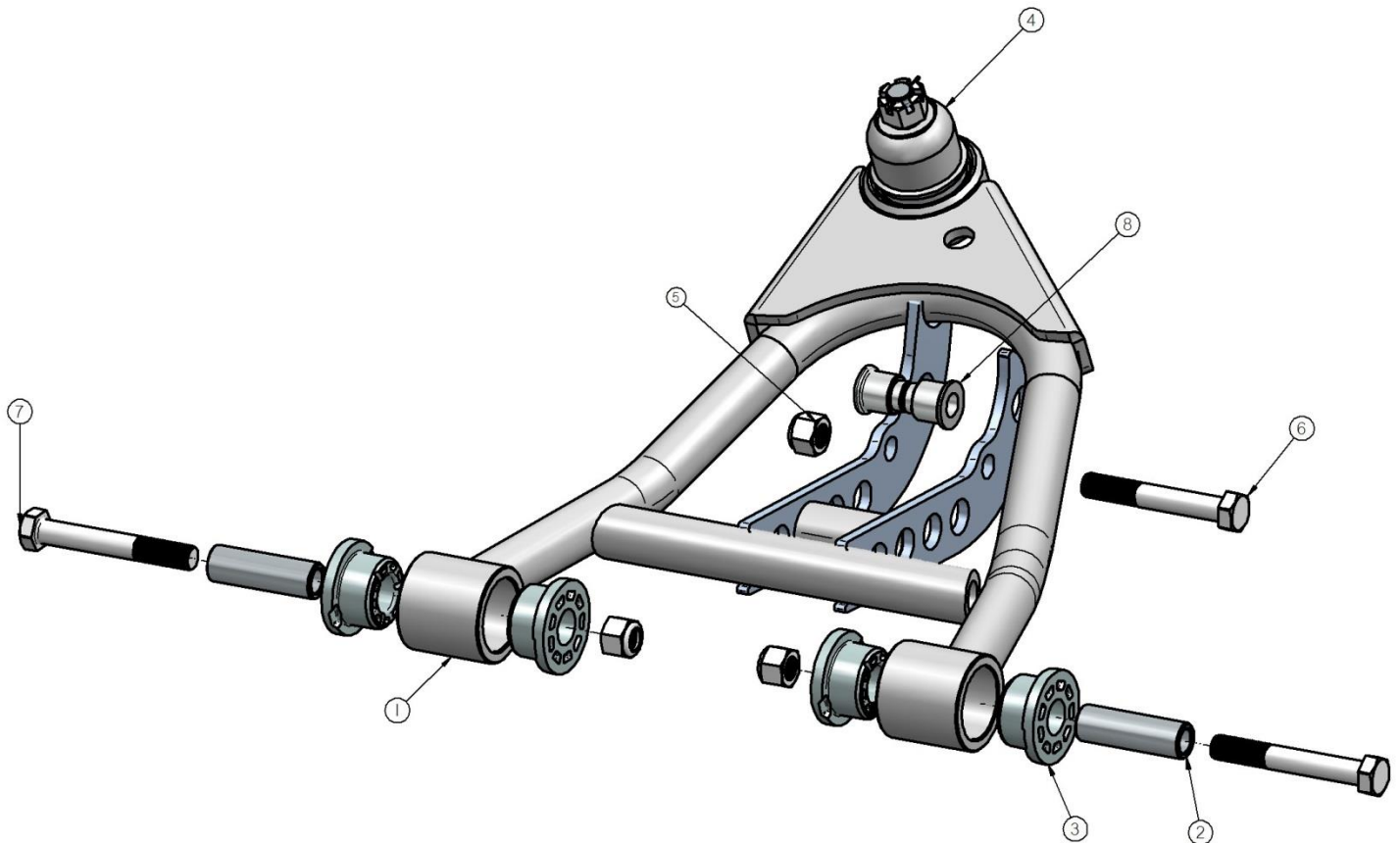
4. Slide the ball joint boot over the stud, then push the stud up through the spindle. Secure w/ the new castle nut and cotter pin supplied.

5. Grease the ball joints.

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Item #	Description	Qty.
1.	Passenger side arm	1
1.	Driver side arm	1
2.	Inner bushing sleeve	4
3.	Delrin bushing half	8
4.	Ball joint	8
5.	1/2"-13 Nylok Nut	6
6.	1/2"-13 x 3 1/4" bolt	2
7.	1/2"-13 x 3 1/2" bolt	4
8.	Aluminum bearing spacer	4





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**Part # 11223699**  
**64-72 GM "A" Body Upper StrongArms**

**Components:**

1	90002388	Drivers side arm
1	90002389	Passenger side arm
2	90000908	Ball joint (includes boot, grease fitting, castle nut & cotter pin)
2	90000914	Caster Adjustable Cross shaft w/Hardware
2	70010826	Delrin Bushing – no ledge
2	70010827	Delrin Bushing – small ledge
4	70010759	Delrin Bushing – outer
4	90002737	Cross shaft T-washer
4	70010883	Zero Offset Caster Slugs



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1. On some cars, to remove the upper control arm you must remove the bolts, which are pressed into the frame. We made this slide hammer adapter (a nut with a piece of angle iron welded to it) to aid in removing the bolts.

2. Fasten the upper arm to the frame using the factory hardware. Reinstall the current alignment shims, but **vehicle must be realigned**. This arm was designed with an extra 2 degrees of positive caster with the centered caster slugs. Additional caster slugs are available if more or less caster is desired. By changing the caster slugs you can achieve the caster setting you are wanting without having to run a lot of shims. Caster is explained of the next page.



3. Drop ball joint down through upper arm. Slide ball joint boot over stud, then place boot retainer over the boot. Clamp assembly tight w/ the hardware supplied.

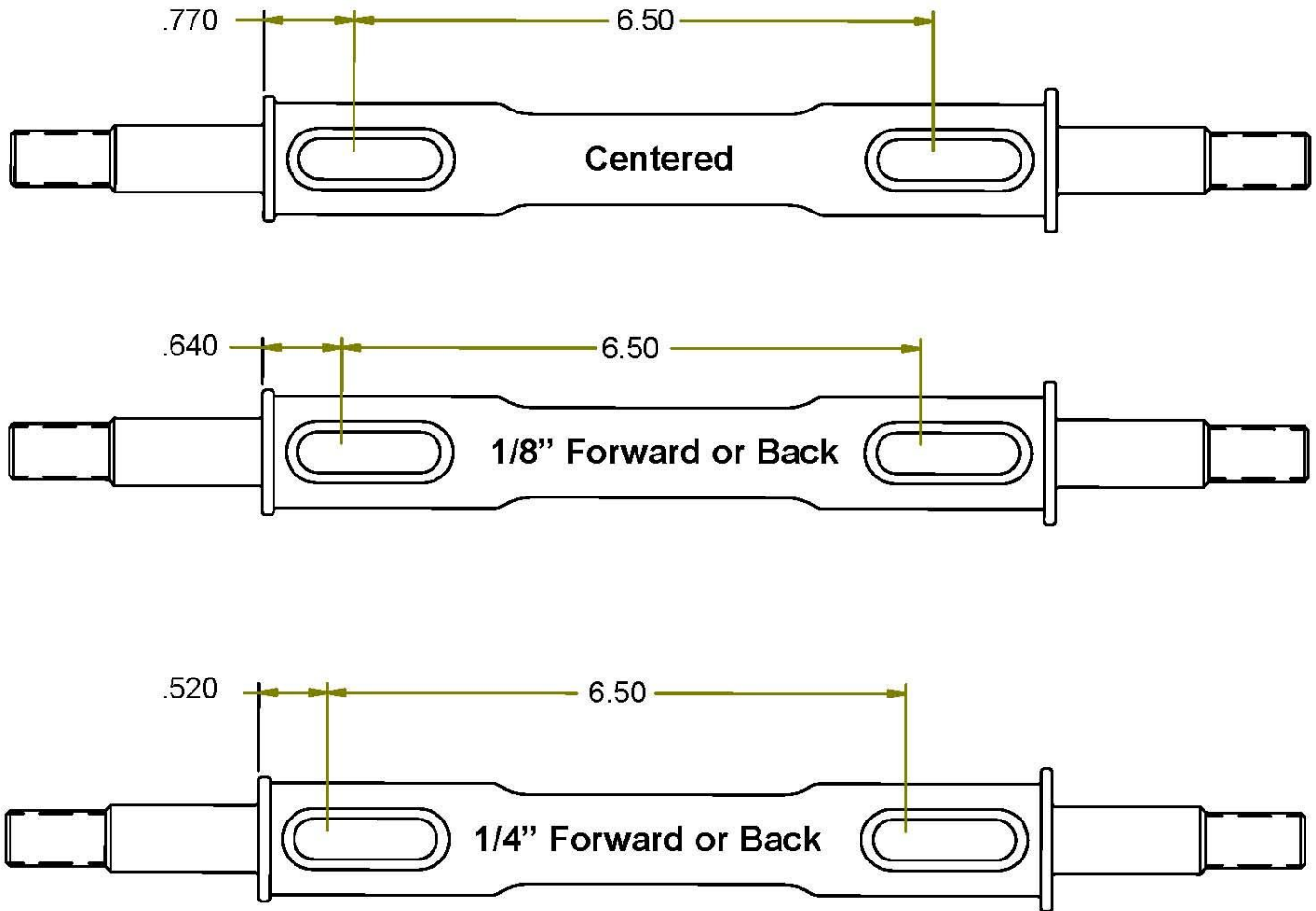
4. Fasten the ball joint to the spindle w/ the new castle nut and cotter pin supplied.

5. Tighten the cross shaft nuts enough to create drag on the delrin bushings, the arm should still move.

6. Lubricate the ball joint w/ standard grease.

# STRONG ARMS™

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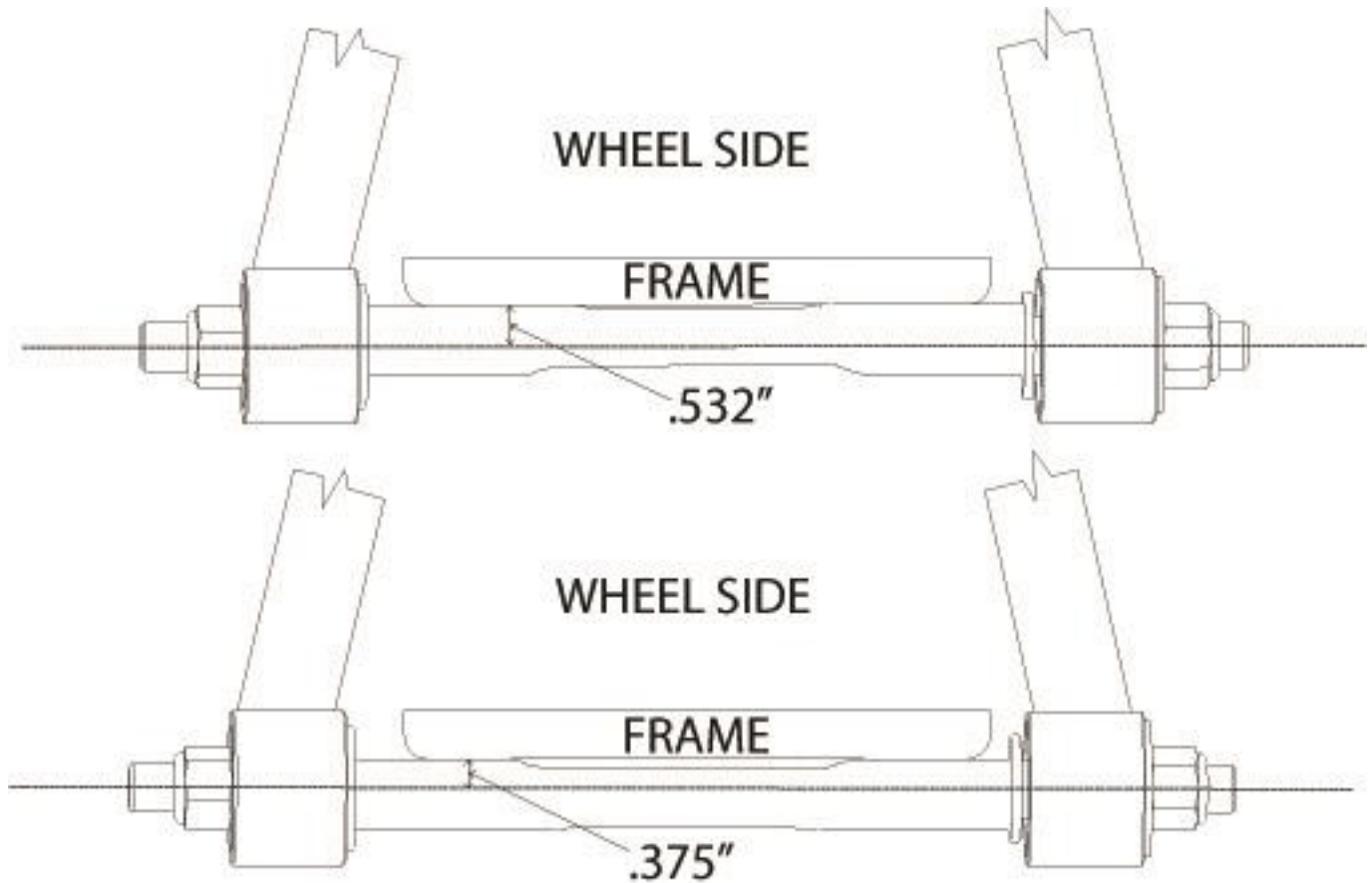
These Strong Arms come equipped with a changeable caster slug setup. This allows you to add or remove caster from the front suspension, if desired. The caster slugs that come in the kit are setup to put the control arm in the centered position, which is approximately 3 degrees of caster. The caster slugs allow you to add or remove caster without having to use a stack of shims. If more or less caster is desired, optional caster slugs can be purchased from your Ridetech dealer or Ridetech.

## Caster Explained:

To understand caster you need to picture an imaginary line that runs through the upper ball joint and extends through the lower ball joint. From the side view the imaginary line will tilt forward or backward. The tilting of this imaginary line is defined as caster.

Caster is measured in degrees by using a caster camber gauge. If the imaginary line described above tilts towards the back of the car, at the top, then you will have positive caster. If the imaginary line tilts forward then you would have negative caster.

Positive caster provides the directional stability in your car. Too much positive caster will make the steering effort difficult. Power steering will allow you to run more positive caster. Negative caster requires less steering effort but can cause the car to wander down the highway.



## Offset Upper Cross Shaft

The cross shaft that is used in the upper control arm is offset. The offset combined with the caster slug option allows you to achieve the alignment setting you desire with minimal shims. To change the direction that the Icon faces, simply spin the cross shaft in the control arm.

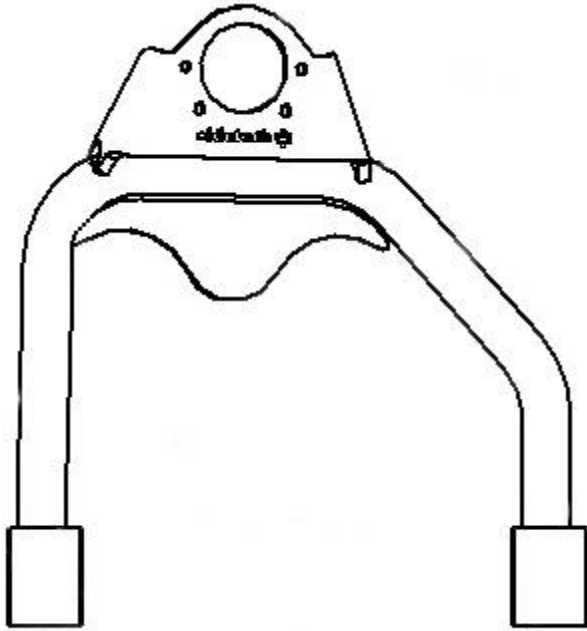
If you are after an aggressive **Track or Autocross Alignment**, bolt the control arm to the frame bracket with the arm offset to the inside of the car (like the top illustration). The Ridetech Icon will be facing the engine.

If a **Street Alignment** is desired, bolt the control to the frame bracket with the arm offset to the outside of the car (like the bottom illustration). The Ridetech Icon will be facing the wheel.

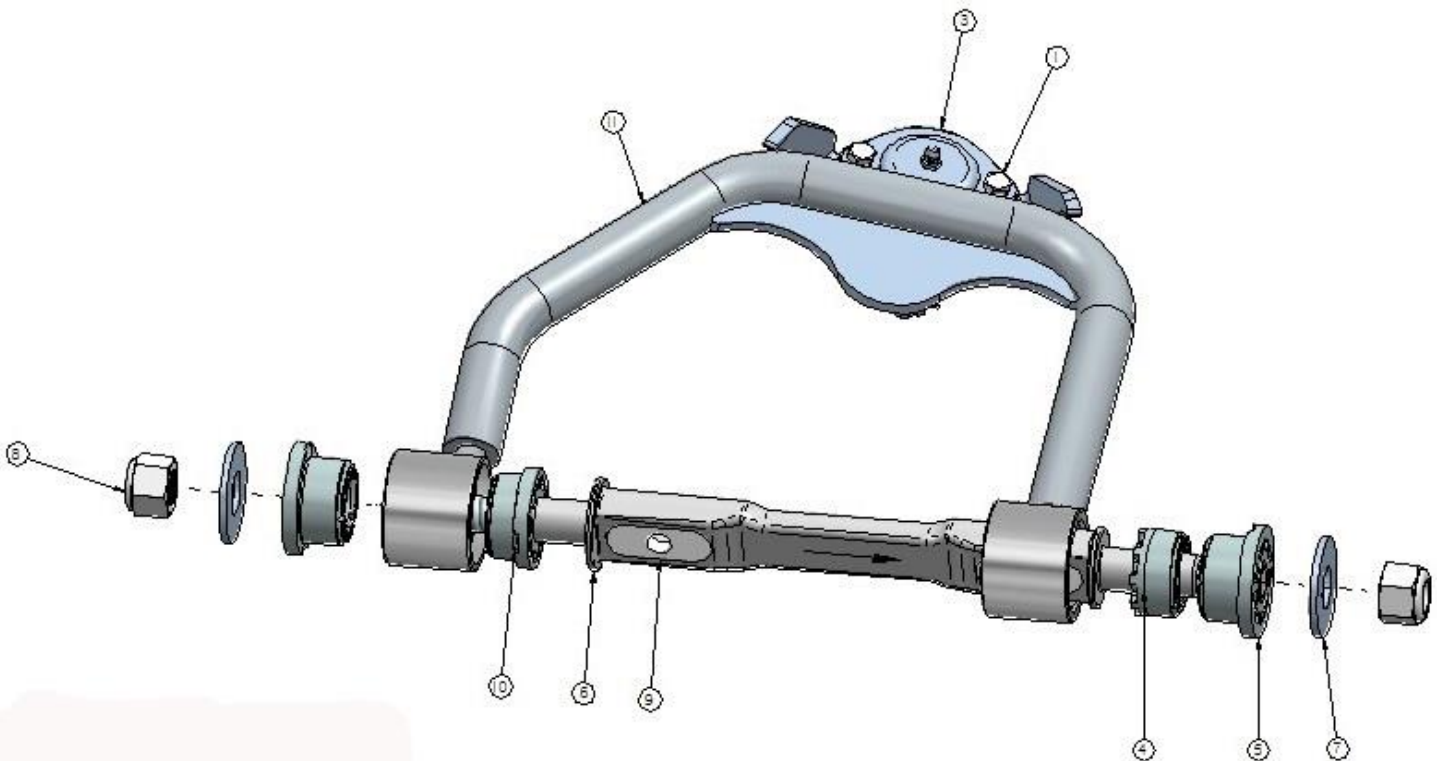
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## Driver Side – Bottom View



Item #	Description	Qty.
1.	1/4"-28 x 7/8" hex bolt	8
2.	1/4"-28 nut	8
3.	Ball joint	2
4.	Inner Delrin bushing no ledge	2
5.	Outer Delrin bushing	4
6.	Caster Adjustable Cross shaft	2
7.	T-Washer	4
8.	5/8"-18 lock nut	4
9.	Caster Slug	4
10.	Inner Delrin bushing w/ledge	2
11.	Passenger side arm	1
11.	Driver side arm	1



**Drivers StrongArm**



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## **11009300 GM "A" & "F" Body Tall Spindles**

2 Tall Spindles

Hardware:

Lower steering arm bolts

(4) 1/2NFX 2 1/2" flathead socket head bolts with Nyloc nuts

Lower caliper bracket bolts

(2) 1/2NFX 2" flathead socket head bolts with Nyloc nuts (Wilwood and Baer Brake kits)

(2) 1/2NFX 2" Grade 8 hex head bolts (use with stock stamped 1/2" thick caliper brackets)

## **INSTRUCTIONS FOR Ridetech Tall SPINDLES**

These spindles will fit '67-69 Camaro, '64-'72 Chevelle, and '68-'74 Nova. They will provide a 2" drop, and are taller than stock to improve the car's cornering ability. The raised upper ball joint will cause the tires to lean into the corner, like a motorcycle, rather than outboard as the shorter stock spindles do. This camber action change also raises the roll center for less body roll, and transfer the car's center of gravity inboard in the turn as well. You will see an appreciable improvement in handling. Standard size anti sway bars will work well with those improvements, without the need for monster sway bars that can cause a harsh ride.

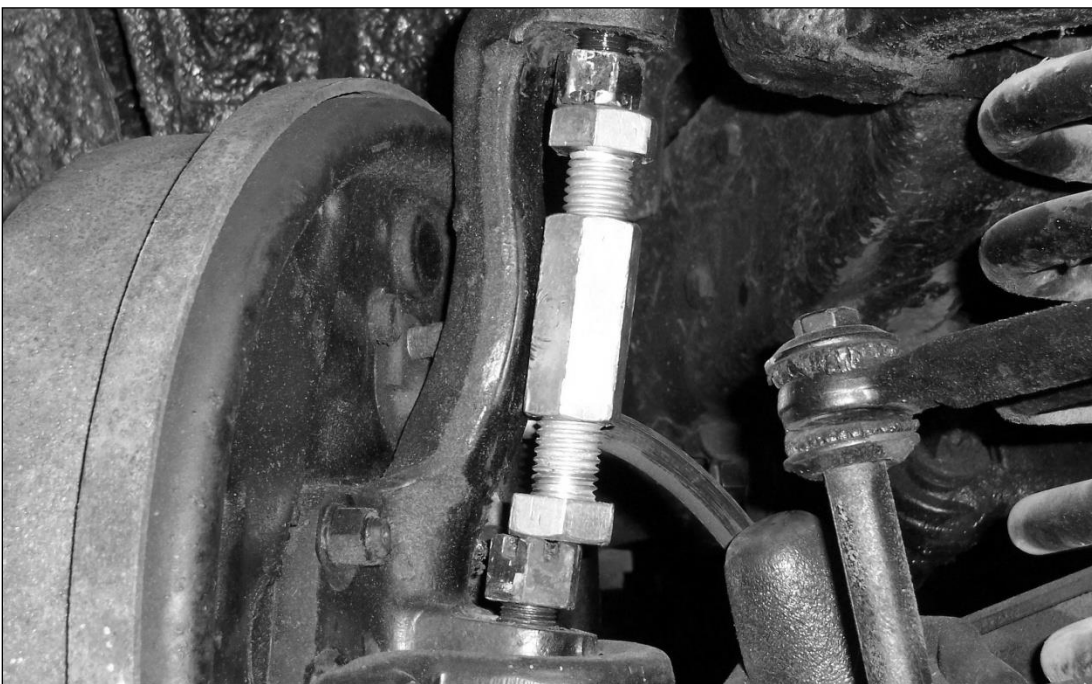
The spindles are modeled after stock disc brake spindles and will accept any disc brake set up designed for those. If your car came with drum brakes, be sure to swap to the appropriate disc brake master cylinder and valving. We have test fitted ECI, Wilwood, Baer, Aerospace, and stock GM kits. The only modification we discovered to be necessary was a small trim on the bottom of the stamped ¼" steel caliper bracket that holds the caliper. It is an area that is not stressed and will not cause any loss of strength. There are variations among the various reproduction the shaft to be flipped in it's bushings for brackets, so the trim will be seen only on some of those.

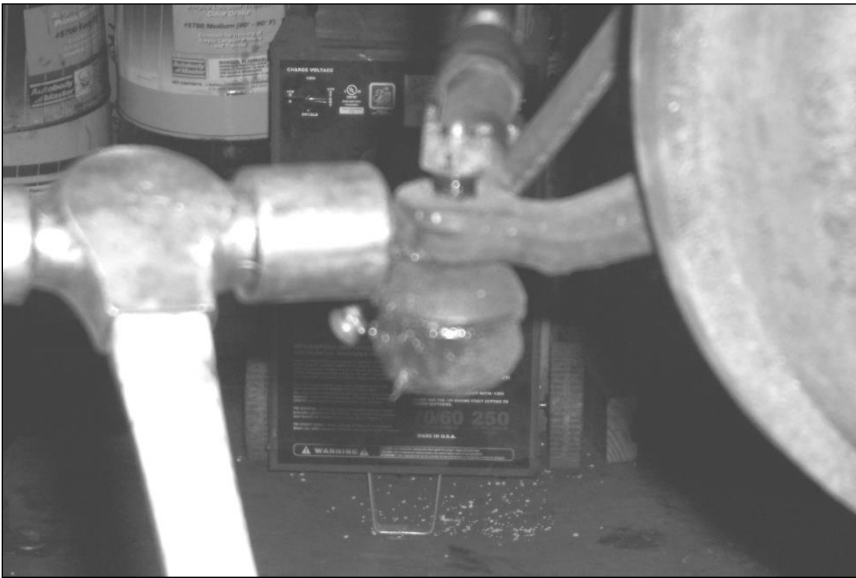
Stock stamped control arms will accept these spindles, as will any aftermarket arms we have seen. Our own tubular control arms have the upper ball joint plates rotated slightly for better ball joint angles on lowered cars. We also set the ball joint ¾" to the rear of the car to allow more aggressive positive caster settings, as well as to compensate for the normal forward rake seen on hot rods. The upper control arms shaft has a 3/16" offset, allowing the shaft to be rotated in it's bushings for a 3/8" net change in the upper arm's effective length. That design was pioneered by the MOOG company, as many stock autos suffer from a sagged cross member, making it difficult to obtain good alignment numbers. We suggest the alignment be done with 1/8" toe in, ½ degree negative camber, and at least 3 degrees positive caster with power steering, 2 degrees manual.

It is important to be sure you have the proper steering arms. Many cars were updated to disc brakes in the past by using disc brake and spindle assemblies from a donor car. However, the Chevelle steering arms are front steer, and the tie rod is roughly the same height as the lower ball joint. The Camaro and Nova arms are rear steer, with the outer tie rod end much lower than the ball joint. If the incorrect arms are used, the incorrect height tie rod end will cause major bump steer problems. Our testing of prototype versions of these spindles revealed that a small additional lowering of the mounting holes for the steering arms was necessary to remove the small amount of factory bumpsteer, and to account for the changes made by the taller spindle. We included that enhancement in the production version of your new dropped spindles.



Disassembly of the ball joints from the spindles can be eased by making the simple tool shown in the photo below. A pair of 1 ½" long bolts are threaded into a matching hex coupler. The ball joint cotter pins are removed, and the hex nuts loosened a couple turns. Place the tool between the ball joint studs, and turn a bolt to expand the tool, gently popping the ball joint studs loose. If your ball joint boots are torn, as often happens when a pickle fork is used to separate the ball joints, NAPA has replacements. The best way to remove the outer tie rod pivot is to loosen the hex nut, and then rap the steering arm boss with a hammer. Tie rod ends pullers are also available if you want to be more gentle on the parts. Do NOT hammer on the tie rod stud itself! Be sure to leave the shock absorber in place to control the spring and prevent it jumping out.





If you remove the calipers but leave the hoses attached, supporting them to avoid stressing the hoses, you won't even need to rebleed the brakes!

Reattach the new spindle, being sure to get the castle nuts tight, and install new cotter pins. Attach the steering arms into the lower holes in the spindles using the 4 supplied 1/2NFx2 1/2" long flathead bolts and Nyloc nuts supplied. The 1/2NFx 2" long flat head bolts and nyloc nuts we supply are for use with Wilwood and Baer brake kit lower bracket bolts. The 1/2NFx2" hex head bolts are used with stock caliper brackets. Reassemble your disc brakes as well. Now would be a good time to clean and grease the bearings.

**BEFORE** you try moving the car, pump the brakes to reset the pads to the rotors. Rebleed if necessary. Have the alignment shop set the car with 1/2 degree positive camber, 2-3 degrees positive caster, and 1/8" toe in. We're sure you'll be amazed at the difference in handling!



**Note:** If using a factory style stamped caliper bracket, the bracket may need to be trimmed. The dust shield may also need to be modified.





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**Part # 11249100**  
**68-72 GM "A" Body Front MuscleBar**

**Components:**

1	90000151	Front sway bar (38.750" Tube length)
1	90000148	Driver side arm
1	90000149	Passenger side arm
1	90000146	Driver side frame plate
1	90000147	Passenger side frame plate
1	90000153	Driver side frame bracket
1	90000154	Passenger side frame bracket
2	90000926	90 degree 10mm PosiLink
2	90000924	Straight 10mm PosiLink
4	90000717	T-bushing (PosiLink to lower arm)
2	90001099	Polyurethane frame bushing – 1.5" I.D.
2	99250001	¼-28 straight grease zerk
1	90001092	Tube of Lithium grease
2	99115001	10mm x 1.5 x 36mm stud (use Loctite) In PosiLink

**Hardware Kit: 99010041**

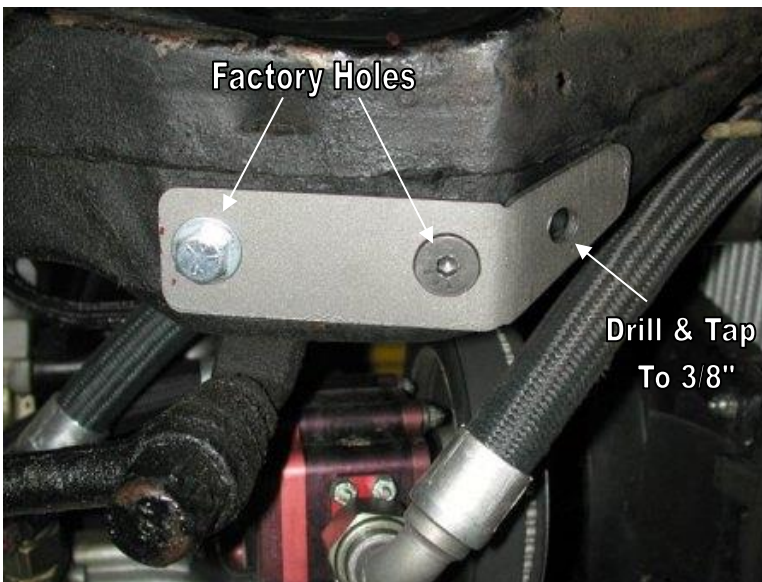
2	99371028	3/8" x 3/4" USS Flat head Allen bolt	Frame plate to frame
4	99371004	3/8" x 1 ¼" USS bolt	Frame bracket
14	99373003	3/8" SAE flat washer	Frame bracket / Sway bar arm to bar
10	99373005	3/8" lock washer	Frame bracket / Sway bar arm to bar
6	99371017	3/8" x 1" Button head Allen bolt	Sway bar arm to bar
4	99112002	10mm Nylok nut	PosiLink
2	99502003	½" SAE Nyloc jam nut	Steering arm

# MUSCLEbar™

by Air Ride Technologies

## 11249100 Installation Instructions

1. This sway bar was designed for use with our lower StrongArms. Installation with other control arms may require modification.
2. Remove the end links from the factory sway bar. Then remove the bolts attaching the sway bar to the frame.



3. Bolt the frame plate to the frame using the factory sway bar holes. The front hole will use a 3/8" x 3/4" flat head Allen screw. The rear hole will use a standard 3/8" x 1 1/4" hex bolt.

4. Using the bracket as a guide, drill the front hole with a 5/16" bit and thread with a 3/8"-16 tap.

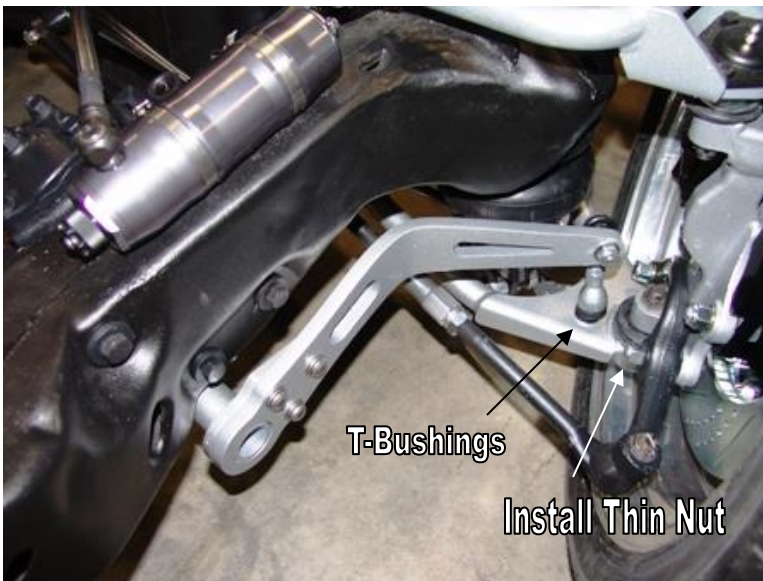
**Note:** On some cars the factory bolt holes may be 5/16" and will need to be drilled and tapped to accept a 3/8" bolt.



5. Slide the poly bushing over the bar and lubricate with the lithium grease supplied.

6. Slide the bracket over the bushing and fasten the bar to the frame using 3/8" x 1 1/4" bolts, flat washers and lock washers.

**Note:** Future lubrication should only be done with non-petroleum based lubricants.



7. Bolt the sway bar arm to the bar using 3/8" x 1" Button head screws with flat washers and lock washers.

8. Fasten the 90 degree end of the PosiLink to the sway bar arm using a 3/8" flat washer on each side of the arm and a 10mm Nylok nut.

9. Two T-bushing will be used on each side to attach the straight end of the PosiLink to the lower control arm. Secure with a 10mm Nylok nut.

10. Install the thin 1/2" Nylok nuts on the front bolt of the steering arm, and cut off excess threads.

11. Check PosiLink alignment through full suspension travel to ensure that it does not bind.





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**Part # 11226110**  
**64-72 GM "A" Body Rear HQ Series CoilOver Kit**

**Shock Assembly:**

2	24159999	5" stroke single adjustable shock
2	90002024	1.7" eye w/ rebound adjustment
4	90001994	.625" I.D. bearing
8	90001995	Bearing snap ring

**Components:**

2	59120225	Coil spring – 12" long / 225 # rate
2	90002222	Spring retainer kit
8	90002043	Aluminum spacer - .5" I.D.
4	70010828	Delrin Spring Washer
2	90002327	Upper shock bracket
1	90002224	Driver side lower ShockWave bracket
1	90002223	Passenger side lower ShockWave bracket

**Hardware:**

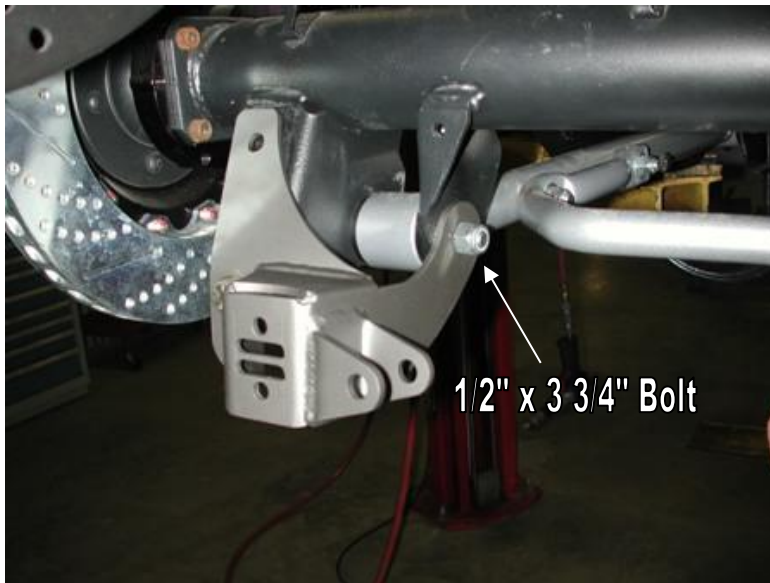
4	99311001	5/16"-18 x 1" Gr. 5 bolt	Upper bracket to frame
4	99312003	5/16"-18 Nylok nut	Upper bracket to frame
8	99313002	5/16" SAE flat washer	Upper bracket to frame
2	99501027	1/2"-13 x 3 3/4" SAE bolt	ShockWave bracket to trailing arm bracket
4	99501002	1/2"-13 x 1 1/2" SAE bolt	ShockWave bracket to factory shock bracket
4	99501003	1/2"-13 x 2 1/2" SAE bolt	ShockWave to upper and lower bracket
10	99502001	1/2"-13 SAE Nylok nut	Lower ShockWave mount and mounting
10	99503001	1/2" SAE flat washer	Lower ShockWave mount

# SHOCKwave<sup>®</sup>

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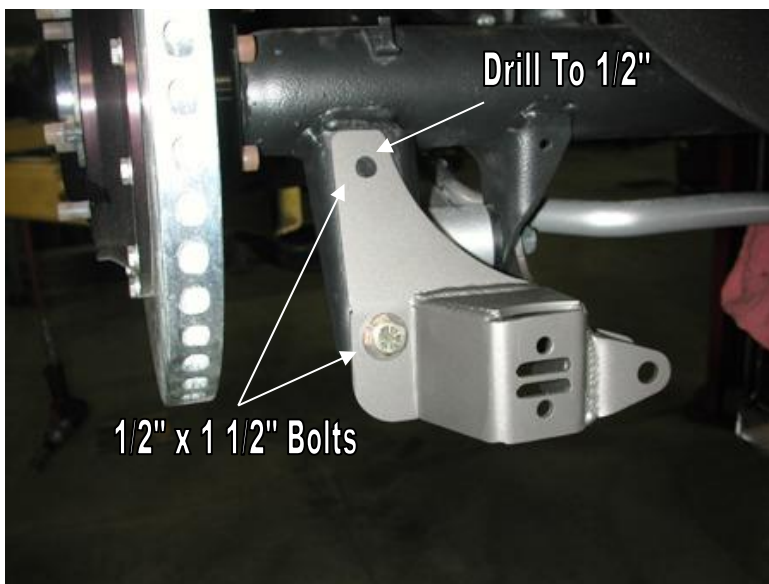
## Installation Instructions

1. Raise and safely support the vehicle by the frame rails.
2. Using a jack, slightly raise the axle approximately 1". Remove the shock absorbers.
3. Lower the axle down enough to remove the coil springs.
4. The exhaust tail pipes may need to be removed and/or modified for ShockWave installation.



4. Remove the lower trailing arm mounting bolt. (Do one side at a time to keep the axle from rotating).

5. Install the longer 1/2" x 3 3/4" bolt through the lower trailing arm from the outside in. Install the lower bracket over the bolt and secure with a 1/2" Nylok nut and flat washer.



6. The lower bolt hole in the back of the bracket will align with the factory shock stud hole. Use a 1/2" x 1 1/2" bolt, Nylok nut and flat washers.

7. The upper hole must be drilled with a 1/2" bit. The edge of the bracket should be parallel to the axle bracket. Use an centering punch and 1/8" bit to drill a pilot hole. A 1/2" x 1 1/2" bolt, Nylok nut and flat washers will be used here as well.



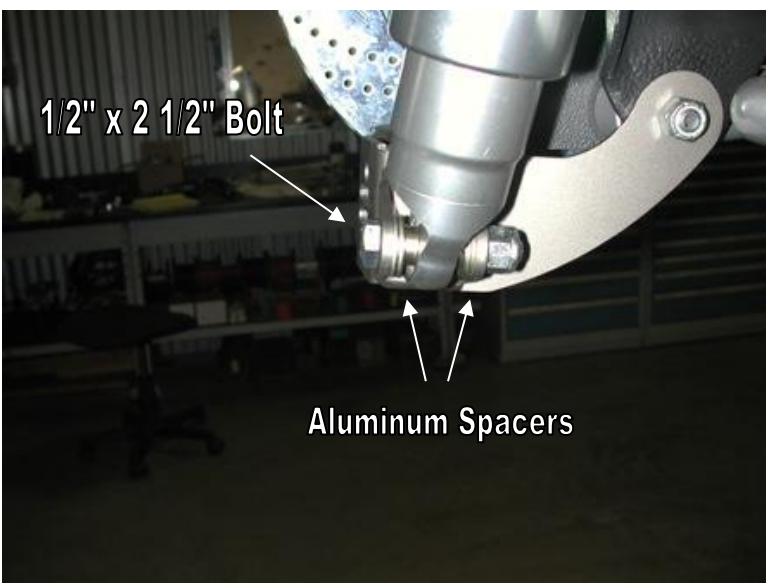
8. Fasten the new upper shock bracket into the factory shock location using the 5/16" x 1" bolts, flat washers and Nylok nuts supplied.

**Note:** Position the bracket to offset the shock toward the center of the car.



9. Assemble the spring onto the Coilover. **Assembly is explained on the last page.**

10. Fasten the CoilOver to the upper bracket using a 1/2" x 2 1/2" bolt and Nylok nut. 1/2" I.D. aluminum spacers must be installed on each side of the bearing.



11. Fasten the CoilOver to the lower bracket using a 1/2" x 2 1/2" bolt and Nylok nut. 1/2" I.D. aluminum spacers must be installed on each side of the bearing.

12. Ride height on this CoilOver is 14.5" from center eye to center eye.



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**Part # 11246699**  
**68-72 GM "A" Body Rear Upper StrongArms**

**Components:**

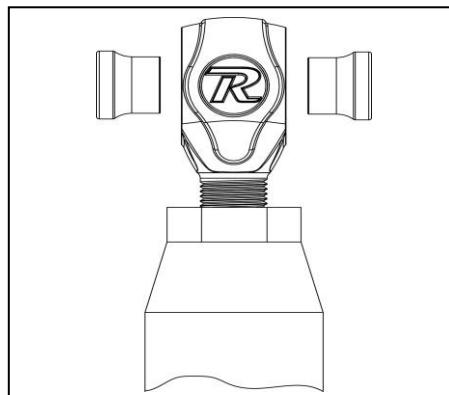
- 2 90001115 Upper StrongArm (Set to 10.26")
- 2 70013364 R-Joint threaded rod end housing
- 4 70013784 R-Joint Spacers

**R-Joint Components**

- 70013279 Retaining Ring
- 70013280 Wavo Wave Spring
- 70013276 R-Joint Composite Center Ball Cage
- 70013275 R-Joint Stainless Center Ball

**Hardware:**

- 2 99752004 3/4" SAE Jam nut R-Joint End
- 4 99501006 1/2" x 3 1/2" USS Gr. 8 bolt StrongArms
- 4 99502009 1/2" USS Gr. 8 Nut StrongArms



Insert the SMALL end of the spacer INTO each side of the center pivot ball. Push the spacer in until it bottoms out in the center pivot.

# STRONG ARMS™

by Air Ride Technologies

## Installation Instructions

*New R-Joints will be quite stiff (75-90 in/lbs breakaway torque) until they "break in" after a few miles of use. After the break in period they will move much more freely. Because the composite bearing race contains self-lubricating ingredients, no additional lubrication is needed or desired. Any additional lubrication will only serve to attract more dirt and debris to the R-Joint and actually shorten its life.*



1. The length of the upper bar should be set from the factory at 10.26" center to center. Ensure that the jam nut is tight.
2. Insert the Spacers into the R-Joints. Refer to Diagram 1 on Page 1.
3. Using the 1/2" x 3 1/2" bolt and Nylok nut supplied, fasten the R-Joint end to the frame bracket. An aluminum spacer must be installed on each side of the Heim end.



4. Fasten the other end of the bar to the axle using a 1/2" x 3 1/2" bolt and Nylok nut.

**Note:** Inspect the rubber bushing in the axle for wear or cracked. Replace with factory replacement bushing if needed.





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**Part # 11224499**  
**64-72 GM "A" Body Rear Lower StrongArms**

**Components:**

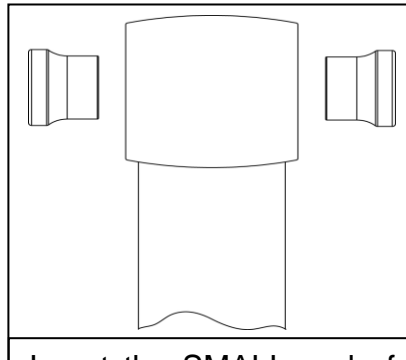
- 2 90002826 Lower StrongArm – WW 22"
- 8 70013784 R-Joint Spacers

**R-Joint Components**

- 70013279 Retaining Ring
- 70013280 Wavo Wave Spring
- 70013276 R-Joint Composite Center Ball Cage
- 70013275 R-Joint Stainless Center Ball

**Hardware:**

- 4 99431003 7/16" x 3" USS bolt Swaybar to lower bars
- 4 99432001 7/16" USS Nylok nut Swaybar to lower bars
- 8 99433002 7/16" SAE flat washer Swaybar to lower bars
- 4 99501006 1/2" x 3 1/2" USS Gr. 8 bolt StrongArms to frame
- 4 99502009 1/2" USS Gr. 8 Nylok nut StrongArms to frame



Insert the SMALL end of the spacer INTO each side of the center pivot ball. Push the spacer in until it bottoms out in the center pivot.

# STRONG ARMS™

by Air Ride Technologies

## Installation Instructions



1. Remove the sway bar (if equipped) and factory lower trailing arm. Do one side at a time to keep the axle from rotating.
2. Insert the Spacers into the R-Joints. Refer to Diagram 1 on Page 1.
3. Attach to front on the lower StrongArm to the frame using the ½" x 3 ½" bolts and Nylok nuts supplied.
4. This arm has holes in the tube for sway bar attachment. Mount the bar so that the holes are closest to the axle. New 7/16" x 3" bolts are supplied to reattach the sway bar.



5. Attach to rear of the lower StrongArm to the frame using the ½" x 3 ½" bolts and Nylok nuts supplied.

**Note:** Tighten the bolts enough to remove any lateral movement.

***New R-Joints will be quite stiff (75-90 in/lbs breakaway torque) until they "break in" after a few miles of use. After the break in period they will move much more freely. Because the composite bearing race contains self-lubricating ingredients, no additional lubrication is needed or desired. Any additional lubrication will only serve to attract more dirt and debris to the R-Joint and actually shorten its life.***



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**Part # 11229102**  
**64-72 GM "A" Body Rear MuscleBar**

**Components:**

1 90009960 Rear sway bar

**Hardware:**

4	99431003	7/16" x 3" bolt	Sway bar to lower arm
4	99432001	7/16" Nylok nut	Sway bar to lower arm
8	99433002	7/16" flat washer	Sway bar to lower arm

**MUSCLEbar™**  
*by Air Ride Technologies*

**Installation Instructions**



1. Attach sway bar to lower trailing arms using 7/16" x 3" bolts, Nylok nuts and flat washers supplied.
2. If using factory trailing arm without sway bar mounting holes, they will need to be drilled. Use the sway bar as a template; it is self-positioning as the lower arms are angled. Spacers are supplied to keep from pinching the arm.

## **Ride Height**

We have designed most cars to have a ride height of about 2" lower than factory. To achieve the best ride quality & handling, the shock absorber needs to be at 40-60% overall travel when the car is at ride height. This will ensure that the shock will not bottom out or top out over even the largest bumps. Measuring the shock can be difficult, especially on some front suspensions. Measuring overall wheel travel is just as effective and can be much easier. Most cars will have 4-6" of overall wheel travel. One easy way to determine where you are at in wheel travel is to take a measurement from the fender lip (center of the wheel) to the ground. Then lift the car by the frame until the wheel is just touching the ground, re-measure. This will indicate how far you are from full extension of the shock. A minimum of 1.5" of extension travel (at the wheel) is needed to ensure that the shock does not top out. If you are more than 3" from full extension of the shock then you are in danger of bottoming out the shock absorber.

## **Adjusting Spring Height**

When assembling the CoilOver, screw the spring retainer tight up to the spring (0 preload). After entire weight of car is on the wheels, jounce the suspension and roll the car forward and backward to alleviate suspension bind.

- If the car is too high w/ 0 preload then a smaller rate spring is required. Although threading the spring retainer down would lower the car, this could allow the spring to fall out of its seat when lifting the car by the frame.
- If the car is too low w/ 0 preload, then preload can then be added by threading the spring retainer up to achieve ride height. On 2.6" - 4" stroke shocks, up to 1.5" of preload is acceptable. On 5-7" stroke shocks, up to 2.5" of preload is acceptable. If more preload is needed to achieve ride height a stiffer spring rate is required. Too much preload may lead to coil bind, causing ride quality to suffer.

# ridetech

## Assembly...



First using the supplied lower adjuster nut(90002222) thread the nut onto the shock from the bottom side as seen in figure 1



Next install delrin washers then coil spring over the top of the shock as seen in figure 2



Before the upper spring mount can be installed screw the adjuster knob on the upper eye mount to the firmest setting (clockwise) as seen in figure 3.



Slide the Delrin washer over the spring, Next slide the upper spring mount (90002222) over eyelet as seen in figure 4.



Install upper spring mount retainer clip (90002057) into the groove on the upper eyelet as seen in figure 5. Then reinstall adjuster to complete assembly.



The included set of bearing spacers (900002044) are used to adapt the coil-overs to just about any application. The supplied spacers allow the coil-overs to accept 5/8" or 1/2" bolts.

## Shock adjustment 101- Single Adjustable

### Rebound Adjustment:

How to adjust your new shocks.

The rebound adjustment knob is located on the top of the shock absorber protruding from the eyelet. You must first begin at the ZERO setting, then set the shock to a soft setting of 20.



-Begin with the shocks adjusted to the ZERO rebound position (full stiff). Do this by rotating the rebound adjuster knob clockwise until it stops.



-Now turn the rebound adjuster knob counter clock wise 20 clicks. This sets the shock at 20. (settings 21-24 are typically too soft for street use).

Take the vehicle for a test drive.



-if you are satisfied with the ride quality, do not do anything, you are set!



-if the ride quality is too soft increase the damping effect by rotating the rebound knob clock wise 3 clicks.

Take the vehicle for another test drive.



-if the vehicle is too soft increase the damping effect by rotating the rebound knob clock wise 3 additional clicks.



-If the vehicle is too stiff rotate the rebound adjustment knob counter clock wise 2 clicks and you are set!

Take the vehicle for another test drive and repeat the above steps until the ride quality is satisfactory.

Note:

One end of the vehicle will likely reach the desired setting before the other end. If this happens stop adjusting the satisfied end and keep adjusting the unsatisfied end until the overall ride quality is satisfactory.