



Part # 11290298 - 1965-1966 GM "B" Body Air Suspension System

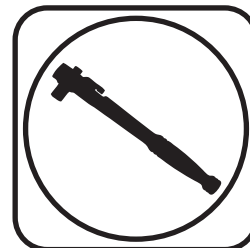
Front Components:

11283001	Front HQ Series ShockWaves
11282899	Front Lower StrongArms
11283699	Front Upper StrongArms
11289100	Front Sway Bar Instructions

Rear Components:

11284610	Rear CoolRide with HQ Series Shocks
11284499	Rear Lower StrongArms
11296698	Rear Upper StrongArms
11289000	Adjustable Panhard Bar
11289102	Rear Sway Bar Instructions

Recommended Tools



1965-1966 GM "B" Body Air Suspension Installation Instructions

Table of contents

Pages	2-6.....	Front CoolRide
Pages	7-15.....	Front StrongArms
Pages	16-19.....	Front SwayBar
Pages	20-29.....	Rear StrongArms
Pages	30-35.....	Rear CoolRide
Pages	36-40.....	Rear SwayBar

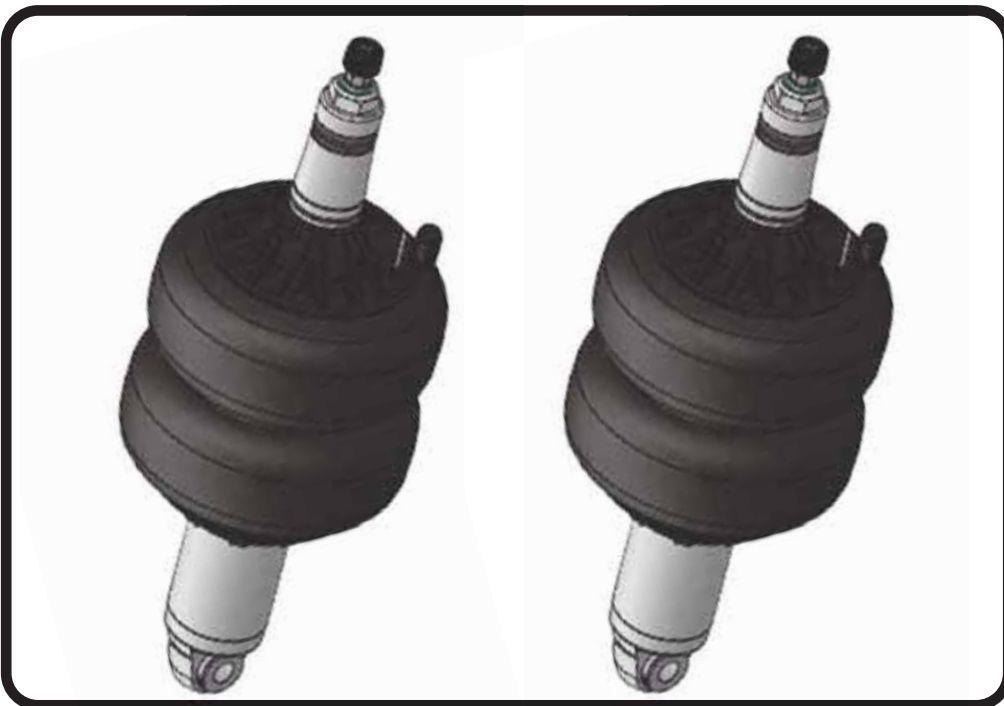
THE FRONT CONTROL ARMS ARE DESIGNED TO BE USED WITH THE OEM SPINDLES.

Some vehicles have two factory upper arms and need a second tubular arm, Kit # 11296698.

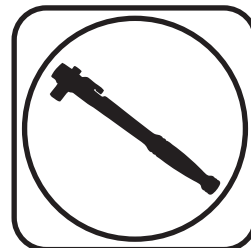




Part # 11283001 - 65-70 GM B-Body Front HQ Series Shockwave



Recommended Tools



1000 Series Bellow, 2.75" Stud/Eye 3.6" Shock Installation Instructions

Table of contents

Page 3..... Included components

Page 4-5..... Shockwave Installation

Page 6..... Notes and Care of Your Shockwave

ShockWave Dimensions:

Center of bearing to Center of bearing:

Compressed: 11.175"

Ride Height: 12.975"

Extended: 14.050"

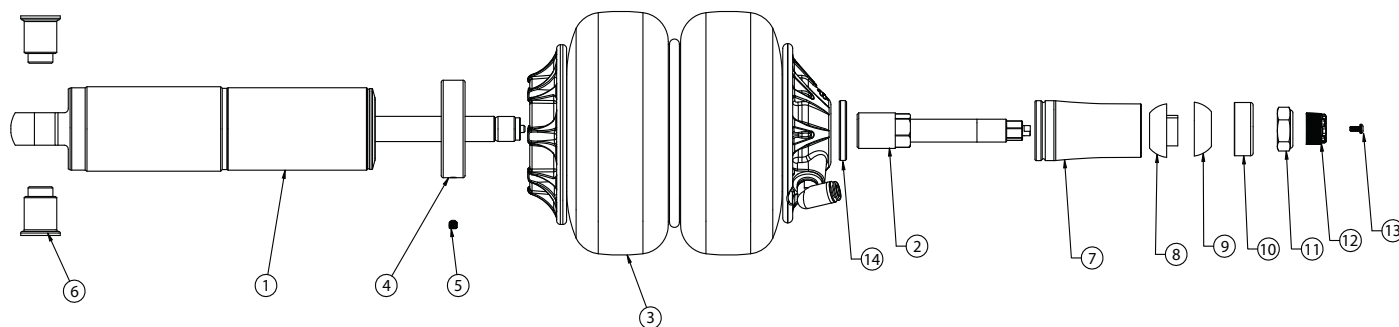
THE DELRIN BALL REQUIRES A 3/4" HOLE FOR THE FLANGE TO GO THROUGH. THIS CAN BE DRILLED WITH A UNIBIT.





Major ComponentsIn the box

Item #	Part #	Description	QTY
1	982-10-803	3.6" Stroke HQ Series Shock	2
2	90009989	2.75" Stud Top (Installed on Shock) - Includes Adjuster Knob & Screw	2
3	24090199	1000 Series 6.5" Double Convolute AirSpring	2
4	234-00-153	AirSpring Locking Ring (Installed on shock)	2
5	99055000	Locking Ring Set Screw (Installed on shock)	2
6	90002062	Spacers - INCLUDED WITH STRONGARMS	4
7	90002313	2.75" Aluminum Stud Top Base	2
8	90001904	Bottom Delrin Ball	2
9	90001903	Top Delrin Ball	2
10	90001902	Delrin Ball Aluminum Top Cap	2
11	99562003	9/16"-18 Thin Nylok Nut	2
12	210-35-120-0	Adjuster Knob - (90009989 assembly)	2
13	90009969	#4-40 X 1/4" SS, 18-8 Pan Head Torx Cap - (90009989 assembly)	2
14	90006782	Stud Top Spacer	2
	70012161	2.75" Stud Top Metering Rod (installed in stud top)	2
	90001994	5/8" ID Bearing (installed in shock and eyelet)	4
	90001995	Bearing Snap Ring (installed in shock and eyelet)	8



THE DELRIN BALL REQUIRES A 3/4" HOLE FOR THE FLANGE TO GO THROUGH. THIS CAN BE DRILLED WITH A UNIBIT.

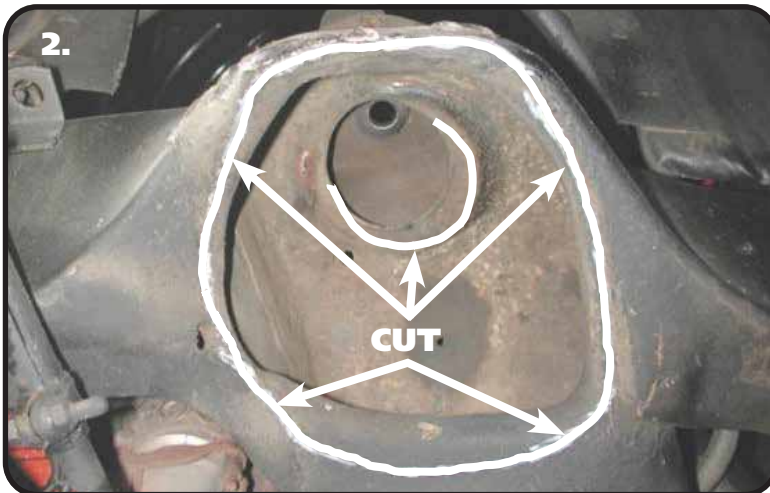
WARNING: ATTEMPTING TO REMOVE THE AIR FITTING WILL DAMAGE IT AND VOID THE WARRANTY.



ShockWave Installation



1. The Shockwave bellow will rub the frame, so some trimming must be done. Using a die grinder, remove the bump stop bracket from the coil spring pocket.



2. The inside lip of the pocket must also be removed to allow for Shockwave bellow clearance. Also, the coil spring retainer needs to be trimmed for the swivel stud top clearance.

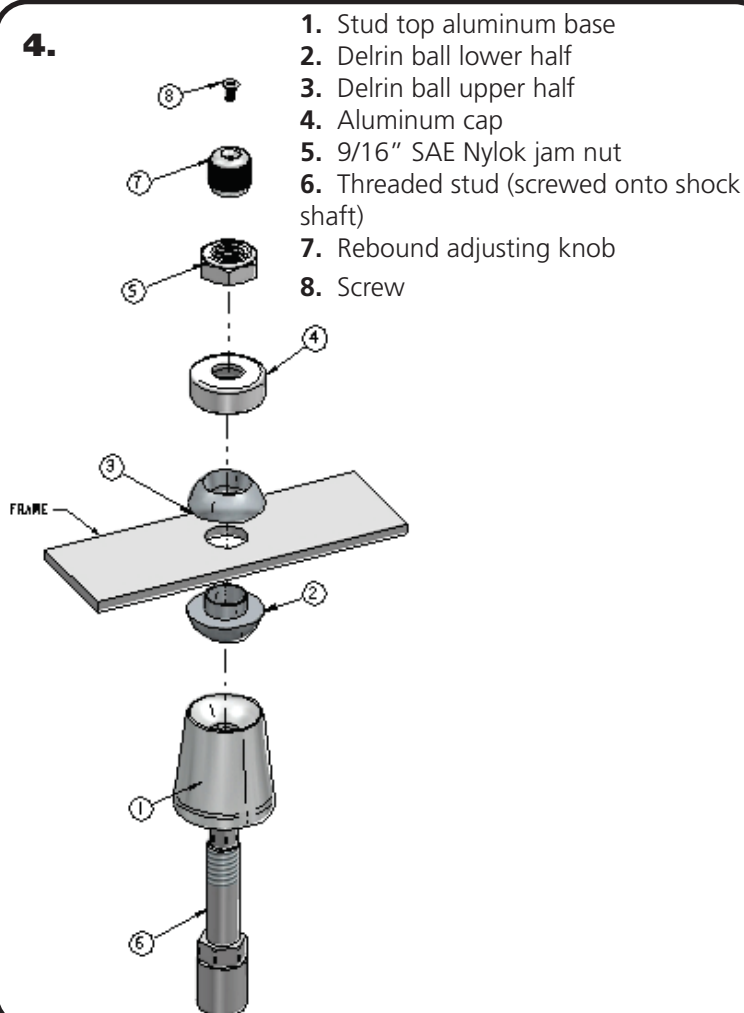


3. Surrounding the hole that the factory shock stem went through is a bushing cup. This must be removed using a chisel or air hammer. After removing, drill the frame out to 3/4". A Unibit works well for this.



ShockWave Installation

4.



Note: The airline must also be routed at this time. It can be ran through the subframe toward the rear of the vehicle.

4. The air fitting location can be rotated by twisting the bellow assembly separate of the shock. Place the Shockwave into the coil spring pocket with the stud sticking through the OEM shock hole. See assembly **Diagram 4**. OEM Shock hole **must** be drilled out to $\frac{3}{4}$ "

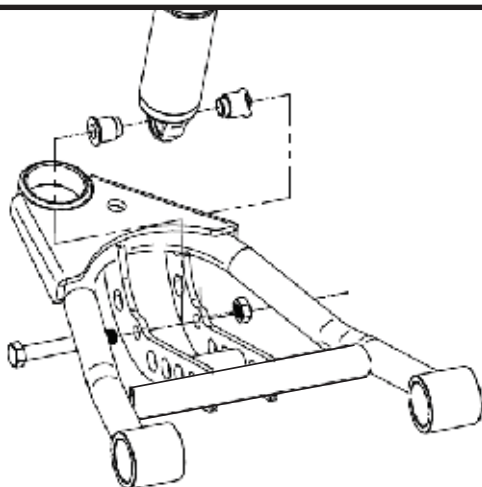
1. Stud top aluminum base
2. Delrin ball lower half
3. Delrin ball upper half
4. Aluminum cap
5. 9/16" SAE Nylok jam nut
6. Threaded stud (screwed onto shock shaft)
7. Rebound adjusting knob
8. Screw

5. Raise the lower arm up to the Shockwave and bolt them together using the $\frac{1}{2}$ " x $3\frac{1}{4}$ " bolt and Nylok supplied w/ the lower arms. An aluminum spacer will be on each side of the bearing. Torque to 75 ftbs.

6. Raise the lower control arm to full compression and double-check to make sure the Shockwave does not rub on anything at anytime. Allowing the Shockwave to rub on anything will cause failure and is not a warrantable situation.

7. The best ride quality will occur around 50-60% suspension travel; depending on vehicle weight this typically occurs around 100 psi.

5.





Notes and Care of your Shockwaves

NOTES:

WARNING: ATTEMPTING TO REMOVE THE AIR FITTING WILL DAMAGE IT AND VOID THE WARRANTY.

TIGHTENING THE TOP 9/16"-18 NUT: SNUG THE NUT DOWN AGAINST THE TOP CAP. YOU NEED TO BE ABLE TO ARTICULATE THE SHOCK BY HAND.

You can clock the airfitting location on the ShockWave by turning the AirSpring assembly of the shock. Make sure the fitting doesn't contact the frame.

When cutting the airline, use a razor blade. The cut needs to be a clean cut and square for the airline to seal properly.

The Locking ring on the shock is NOT adjustable. These rings are set at the factory to optimize the AirSpring stroke with the shock stroke.

The care and feeding of your new ShockWaves

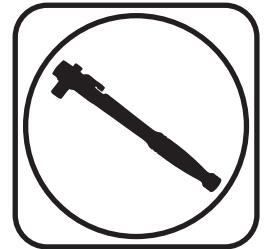
1. Although the ShockWave has an internal bumpstop, **DO NOT DRIVE THE VEHICLE DEFLATED RESTING ON THIS BUMPSTOP. DAMAGE WILL RESULT.** The internal bumpstop will be damaged, the shock bushings will be damaged, and the vehicle shock mounting points may be damaged to the point of failure. This is a non warrantable situation.
2. Do not drive the vehicle overinflated or "topped out". Over a period of time the shock valving will be damaged, possibly to the point of failure. This is a non warrantable situation! If you need to raise your vehicle higher than the ShockWave allows, you will need a longer unit.
3. The ShockWave is designed to give a great ride quality and to raise and lower the vehicle. **IT IS NOT MADE TO HOP OR JUMP!** If you want to hop or jump, hydraulics are a better choice. This abuse will result in bent piston rods, broken shock mounts, and destroyed bushings. This is a non warrantable situation.
4. Do not let the ShockWave bellows rub on anything. Failure will result. This is a non warrantable situation.
5. The ShockWave product has been field tested on numerous vehicles as well as subjected to many different stress tests to ensure that there are no leakage or durability problems. Failures have been nearly nonexistent unless abused as described above. If the Shockwave units are installed properly and are not abused, they will last many, many years. ShockWave units that are returned with broken mounts, bent piston rods, destroyed bumpstops or bushings, or abrasions on the bellows will not be warrantied.



Part # 11289100 - 1965-1970 B-Body Front Sway Bar



Recommended Tools



1965-1970 GM B-Body Front Sway Bar Installation Instructions

Table of contents

Page 8..... Included Components and Hardware List
Page 9-10..... Sway Bar Installation

Install this Sway bar **BEFORE** installing the lower control arms.





Major ComponentsIn the box

Part #	Description	QTY
90000104	Front Sway Bar	1
90001100	Bushing & Strap Kit	1
90000929	12mm End Link	2
90001092	Tube of Lithium Grease	1

Hardware Kit99010042

Part #	Description	Usage	QTY
99371004	3/8" -16 x 1 1/4" Hex Bolt	Bushing Mount to Frame	4
99373003	3/8" Flat washer	Bushing Mount to Frame	8
99372002	3/8" -16 Nylok Nut	Bushing Mount to Frame	4
99123001	M12 Lock Washer	PosiLink to Sway Bar	2
99122001	M12-1.75 Nylok Nut	PosiLink to Control Arm	2
99433002	7/16" Flat Washer	PosiLink to Control Arm	4

Getting Started.....

Install this Sway bar **BEFORE** installing the lower control arms. It is very difficult to install with the Ridetech lower control arms installed.

This sway bar is designed to be used with Ridetech StrongArms and will NOT fit the OEM control arms.

The sway bar will need to be put in position before installing the bushings and straps



1. Slide the sway bar through the same holes in the frame that the factory bar went through. The sway bar needs to be installed with the center dropping down toward the ground to clear the engine.



Sway Bar Installation



2. Lubricate the sway bar busing with the lithium grease supplied. Install the new polyurethane bushing and strap over the sway bar.



3. Clamp the sway bar up to the frame using a couple "C" clamps. The sway bar should be centered in the hole through the frame.



4. The factory bolt holes may not line up with the new strap. If not, two new holes must be drilled with a 3/8" bit. Secure the assembly with two 3/8" x 1 1/4" bolts, flat washers and Nylok nuts.



Sway Bar Installation

Install the lower StrongArms.



5. Screw one end of the PosiLink into the end of the sway bar. A 12mm lock washer will be used between the stud and the sway bar.



6. The other end of the PosiLink will attach to the tab on the StrongArm using a flat washer on each side of the tab and M12-1.75 nylok nut.

8. Tighten all hardware. 3/8" hardware gets torqued to 30 ft-lbs. M12 gets hardware gets torqued to 65 ft-lbs.

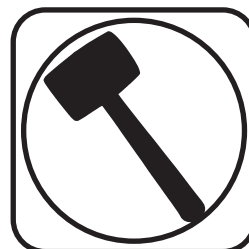
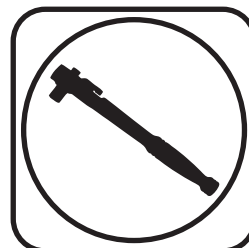
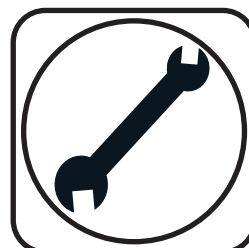
8. Check sway bar clearance through full suspension travel.



Part # 11282899

1965-1970 GM B-Body Front Lower StrongArms

Recommended Tools



1965-1970 GM B-Body Lower StrongArms Installation Instructions

Table of contents

Page 12..... Lower Control Arm Components
Page 13..... Getting Started & Installation
Page 14-15..... Control Arm Installation

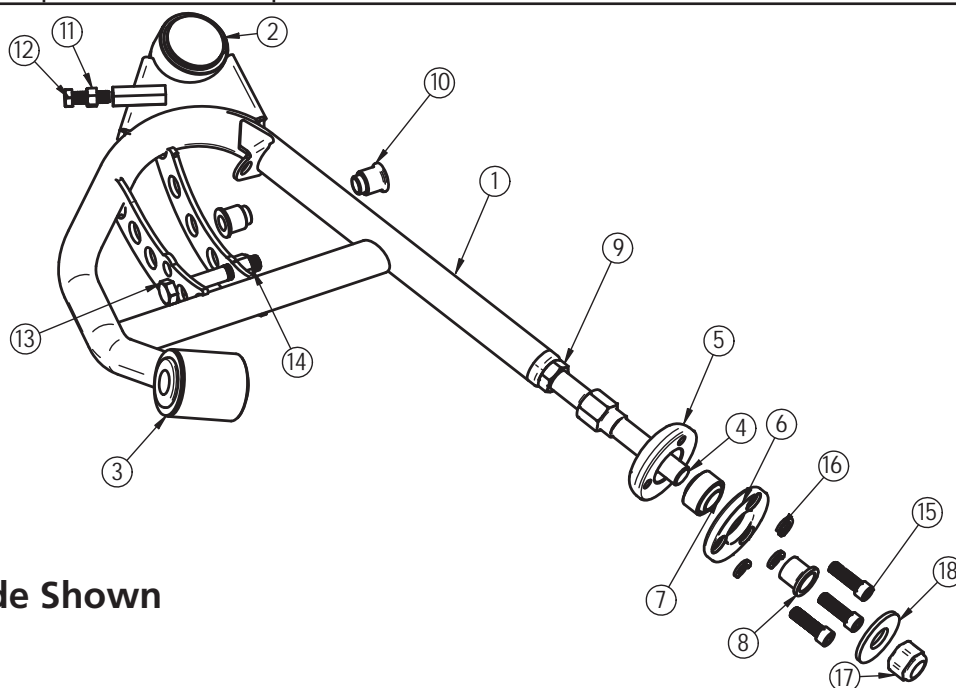
Note: This kit is designed for use with our MuscleBar sway bar. It is easier to install it **before** the lower arms. The factory sway bar will not fit.





Lower Control Arm ComponentsIn the box

Item #	Part Number	Description	QTY
1	90000093	Driver Lower Control Arm (Shown)	1
1	90000094	Passenger Lower Control Arm	1
2	90002586	Lower Ball Joint Assembly - only available through Ridetech	2
3	90000928	Control Arm Bushing	2
4	90000732	Bearing Stud	2
5	90000734	Bearing Housing	2
6	90000735	Bearing Retaining Plate	2
7	90001045	Control Arm Pivot Bearing	2
8	90000733	Pivot Bearing Spacer	2
9	99752006	3/4"-16 Jam Nut	2
10	90002062	ShockWave/CoilOver Bearing Spacers	4
11	99372004	3/8"-16 Hex Nut	2
12	99371004	3/8"-16 x 1 1/4" Hex Bolt	2
13	99501005	1/2"-13 x 3 1/2" Hex Bolt	2
14	99502009	1/2"-13 Nylok Nut	2
	99503014	1/2" SAE Flat Washer	4
15	99371018	3/8"-16 x 1 1/4" SHCS	6
16	99373006	3/8" Split Lock Washer	6
17	99752001	3/4"-16 Lock Nut	2
18	99753002	3/4" Flat Washer	2



Driver Side Shown



Getting Started.....

Congratulations on your purchase of the Ridetech B-Body StrongArms. These StrongArms have been designed to give your B-Body excellent handling along with a lifetime of enjoyment. Some of the key features of the StrongArms: Ball Joint angles have been optimized for the lowered ride height. The Geometry has been optimized for excellent handling, and drive ability. The control arm is a 1-piece control arm to eliminate the strut rod and bushing.

Note: These control arms are designed for use with the Ridetech ShockWaves or CoilOvers and the MuscleBar swaybar. **The factory shocks and springs or the factory sway bar will not fit these arms.**

Installation

1. Raise and support vehicle at a safe, comfortable working height. Let the front suspension hang freely.
2. Remove the coil spring, shock absorber, upper and lower control arms, sway bar and the strut rods. **The factory lower control arm bolt will be reused.**

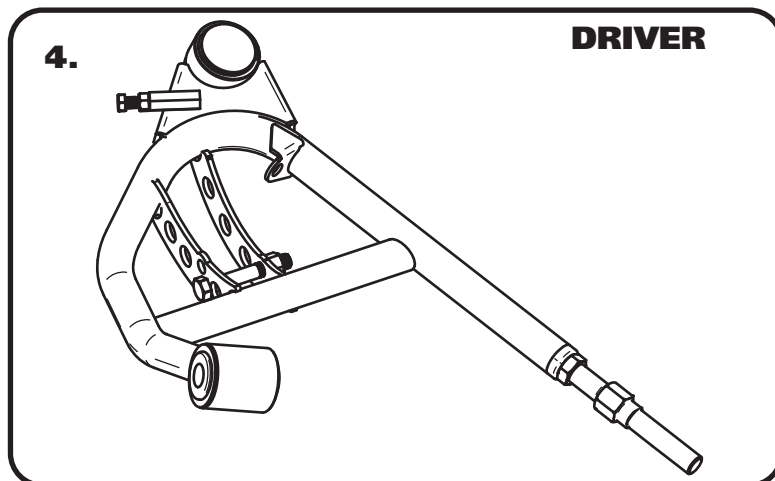
Note: This kit is designed for use with our MuscleBar sway bar. It is easier to install it **before** the lower arms. The factory sway bar will not fit.

3. Drill the factory upper shock mounting hole to 3/4". This can be done easily with a Unibit.

Attach the CoilOver/ShockWave to the frame before installing the lower control arm.

Suggested Alignment Specs:

Camber:	Street: -.5 degrees
Caster:	Street: +3.0 to + 5.0 degrees
Toe:	Street: 1/16" to 1/8" toe in



4. The control arms are marked "D" for Driver and "P" for Passenger. The ball joint pin points down and the sway bar mount is on the front side of the arm.



Control Arm Installation

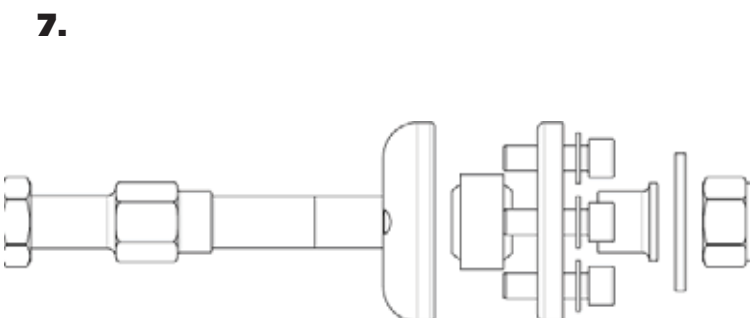


5. Using the bearing retainer as a template; drill three 3/8" holes in the frame to secure the assembly. Use three 3/8" x 1 1/4" SHCS and lock washers to secure the assembly. Torque to 30 ft-lbs.

Note: The hole in the frame may need to be buffed to allow bearing assembly to slide in.



6. Insert the front leg of the control arm into the frame swivel bearing. Bolt the lower StrongArm to the frame using the factory bolt. **The lower control arm pivot bolt gets torqued to 100-125 ft-lbs when the car is sitting on the ground.**

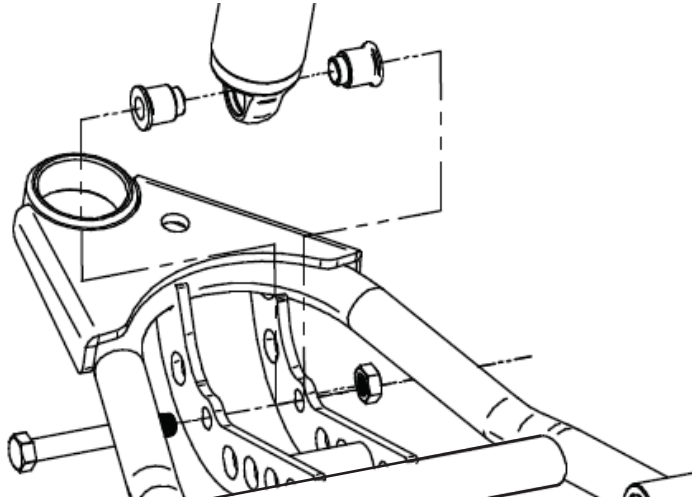


7. The front leg of the lower arm will attach to the frame in place of the strut rod. Refer to **Diagram 7** for assembly order. Torque the 3/4"-16 nut to 75 ft-lbs.



Control Arm Installation

8.



8. Insert the bearing spacers into the lower shock bearing. The SMALL end goes into the bearing. Swing the control arm up, line up the 1/2" holes with the bearing spacers, insert 1/2"-13 x 3 1/2" bolt. Install a 1/2" flat washer and nylok nut. Torque to 75 ft-lbs.

9.



9. Attach the spindle to the control arms.

Torque Specs:

Lower Ball joint - 70 ft-lbs and tighten to line up cotter pin.

Install the cotter pin after tightening the ball joint nut.

10.



10. Thread the 3/8"-16 nut onto the 3/8"-16 x 1 1/4" bolt. Thread it into the front hole of the ball joint plate. You will need to adjust the steering stop to suite your needs. This setting will vary depending on wheel and tire size and other suspension components. Torque to 16 ft-lbs.



1965-1970 GM B-Body Front Upper StrongArms



Recommended Tools



1965-1970 GM B-Body Upper StrongArms Installation Instructions

Table of contents

Page 17.....	Upper Control Arm Components
Page 18.....	Getting Started & Installation
Page 19.....	Installing Spindle and Alignment

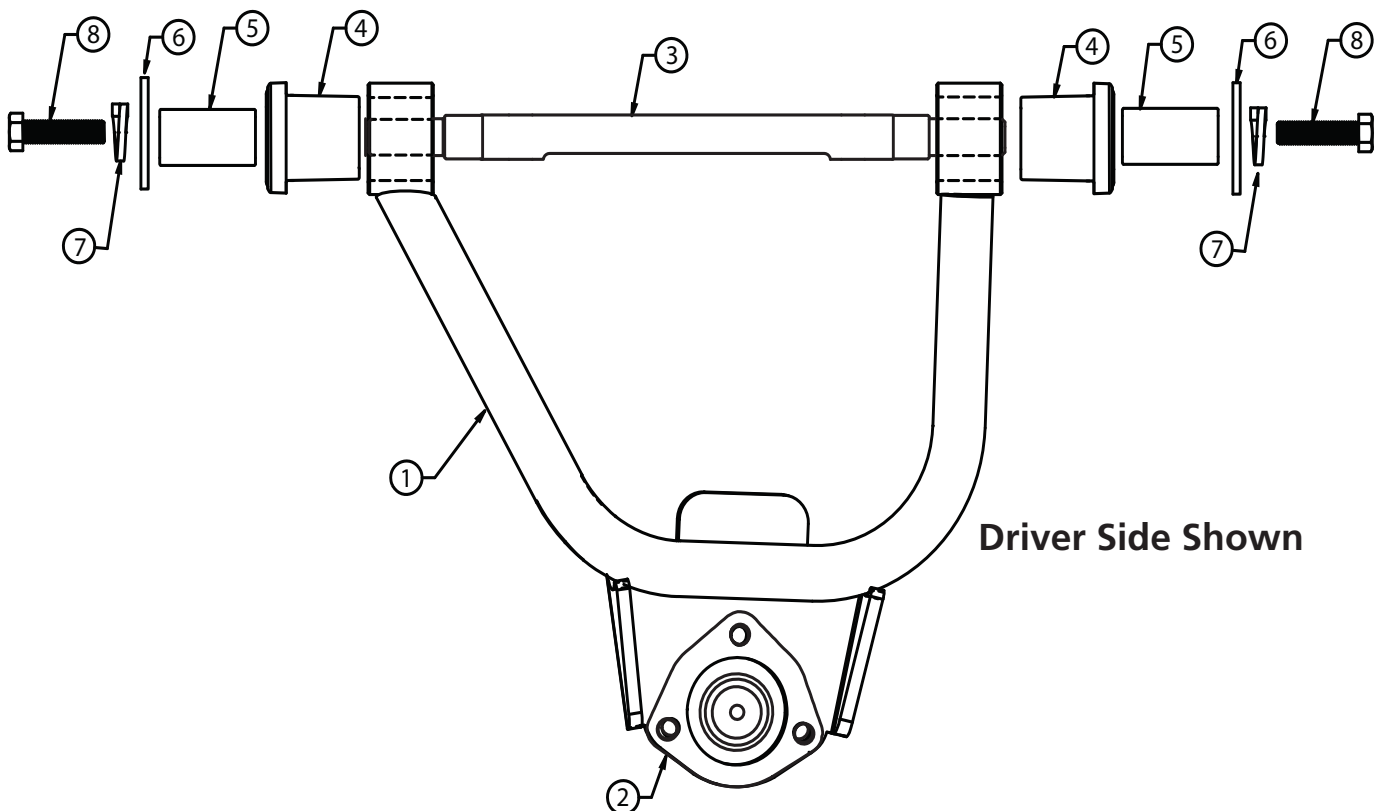
THESE CONTROL ARMS ARE DESIGNED TO BE USED WITH THE OEM SPINDLES.





Upper Control Arm ComponentsIn the box

Item #	Part Number	Description	QTY
1	90001296	Driver Upper Control Arm (Shown)	1
1	90001297	Passenger Upper Control Arm	1
2	90000905 kit	Upper Ball Joint Kit - Proforged # 101-10038	2
3	90000102	Cross Shaft	2
4	90001442	Delrin Bushing	4
5	90001290	Delrin Bushing Inner Sleeve	4
6	99373001	Outer Washer - Cross Shaft	4
7	99373005	3/8" Split Lock Washer -Cross Shaft	4
8	99371013	3/8"-24 x 1" Hex Bolt - Cross Shaft	4



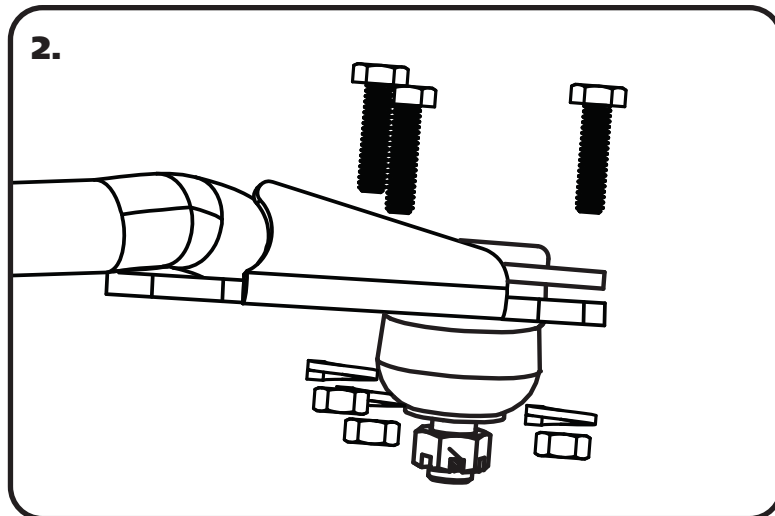


Congratulations on your purchase of the Ridetech StrongArms. These StrongArms have been designed to give your car excellent handling along with a lifetime of enjoyment. Some of the key features of the StrongArms: Ball joint angles have been optimized for the lowered ride height, Delrin bushings are used to eliminate bushing deflection along with providing free suspension movement through the entire travel. The Delrin bushings are made from a material that is self lubricating so no grease zerks are needed.

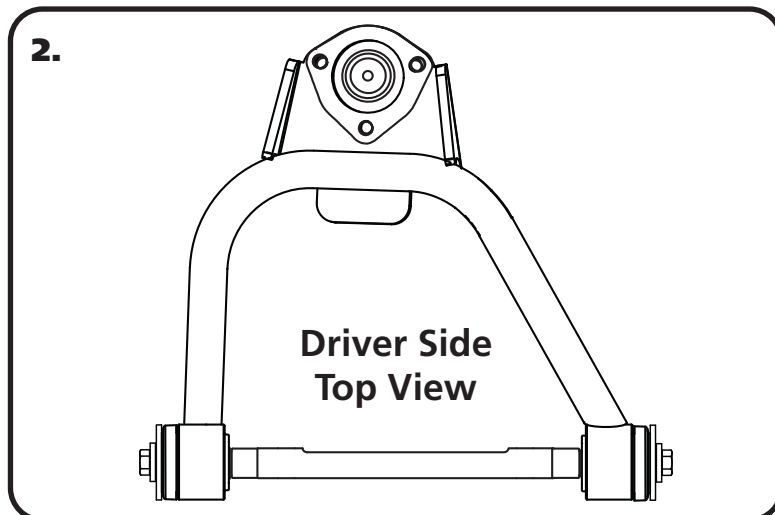
When assembling the Control Arms tighten the cross shaft bolts enough to create drag on the delrin bushings, the arm should still move through its travel by hand.

Installation

1. Remove the upper control arms from the car. Keep the shims separate so that you can put them back in the location they were removed from. If you are replacing the lower control arms and spindle, remove them too. Refer to a Factory Service Manual for the proper method.



2. Insert the Ball Joint into the Control Arm from the TOP side with the Stud pointing downward. Insert the supplied Bolts from the top side. Install a Lock Washer and Hex Nut on the threads of each bolt. Torque the hardware to 18 ftlbs.



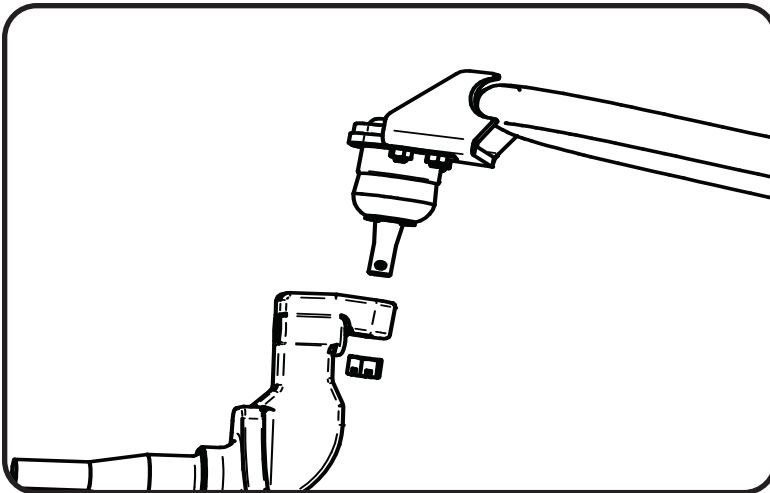
3. The Upper Control Arm is attached to the factory frame using factory hardware. The driver side arm is shown in **Figure "3"**. The Ball joint is located on the arm to the REAR of the car.



Installing Spindle and Alignment



4. The Upper Control Arm is attaching the factory mount using factory hardware. Reinstall the shims in the location they were removed from. The passenger side arm is shown in **Figure "4"**.



5. Attach the Spindle to the control arms. These control arms use a tall ball joint, the boot will NOT touch the spindle. This is normal.

Torque Specs:

Ball joint - 45 ftlbs and tighten to line up cotter pin.

Install the Cotter Pin after tightening the ball joint nut.

6. Tighten all fasteners.

When assembling the Control Arms tighten the cross shaft bolts enough to create drag on the delrin bushings, the arm should still move through its travel by hand.

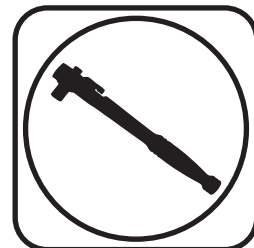
Suggested Alignment Specs:

Camber:	Street: -.5 degrees
Caster:	Street: +3.0 to + 5.0 degrees
Toe:	Street: 1/16" to 1/8" toe in



Part # 11284499 - 1965-1970 Full Size Chevy Rear Lower StrongArm Kit

Recommended Tools



1965-1970 GM "B" Body Rear Lower StrongArms Installation Instructions

Table of contents

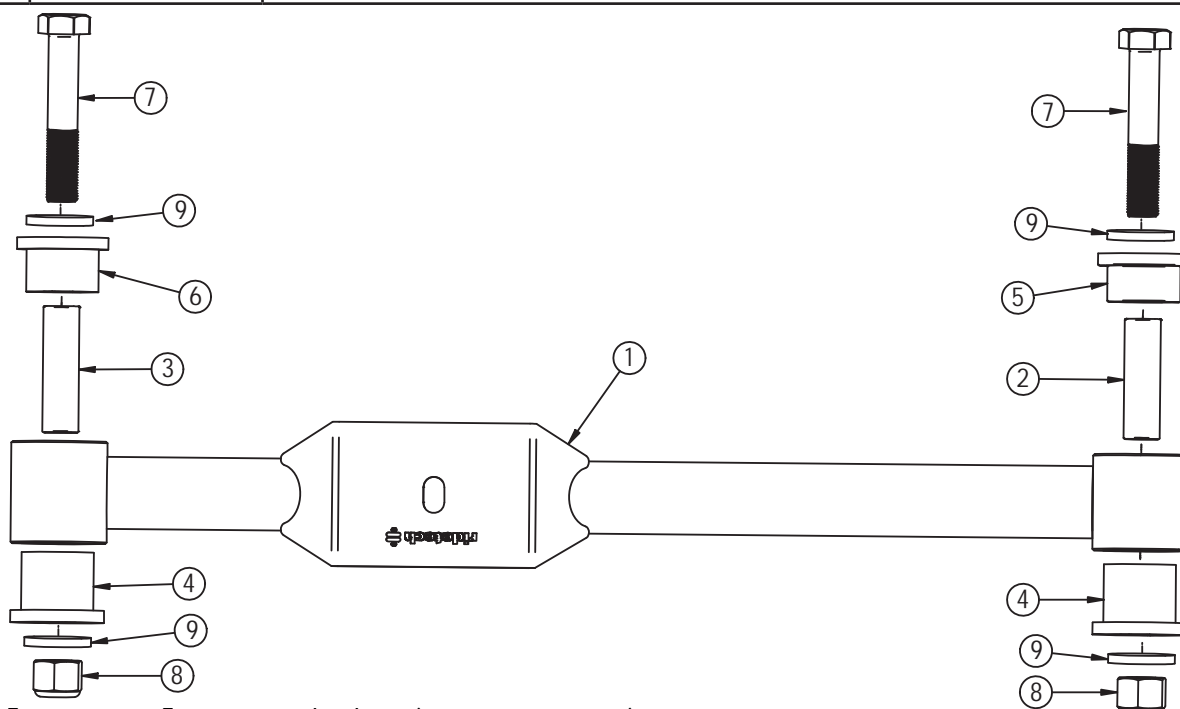
Page 21..... Included Components
Page 22..... Installation





Included ComponentsIn the box

Item #	Part #	Description	QTY
1	90001027	Lower Control Arm	2
2	90000467	Inner Bushing Sleeve - 2.5" Long	2
3	90000722	Inner Bushing Sleeve - 2.625" Long	2
4	90001085	Poly Bushing Half - 1.5" Long	4
5	90001086	Poly Bushing Half - 1" Long	2
6	90001089	Poly Bushing Half - 1.125" Long	2
	90001092	Tube Lithium Grease	1



Hardware ListIn the box (Kit# 99010117)

Item #	QTY	Part Number	Description
7	4	99621010	5/8"-18 x 4" Bolt
8	4	99622006	5/8"-18 Nylok Nut
9	8	99623001	5/8" SAE Flat Washer

Getting Started

1. Raise the vehicle up to a comfortable work height. You will need the support the car by the frame to be able to freely raise and lower the rear axle. Use a jack under the differential to support it.
2. Remove the rear shocks, coil springs, and lower control arms. The lower shock mounts are lightly pressed into the lower control arm mount and will not turn. You will need to drive these out with a hammer. Put something over the end of the threads to keep from damaging them.



Lower Bar Installation



3. Clean the bushing surfaces on the frame and axle brackets. Lubricate with the lithium grease supplied. Fasten the front of the lower StrongArms to the frame using the 5/8" x 4" bolts, flat washers, and nylok nuts supplied. Tighten the bolts/nuts enough to eliminate any gaps.

Note: The StrongArm needs to be installed with the long side to the front of the car and the air spring mount on top.



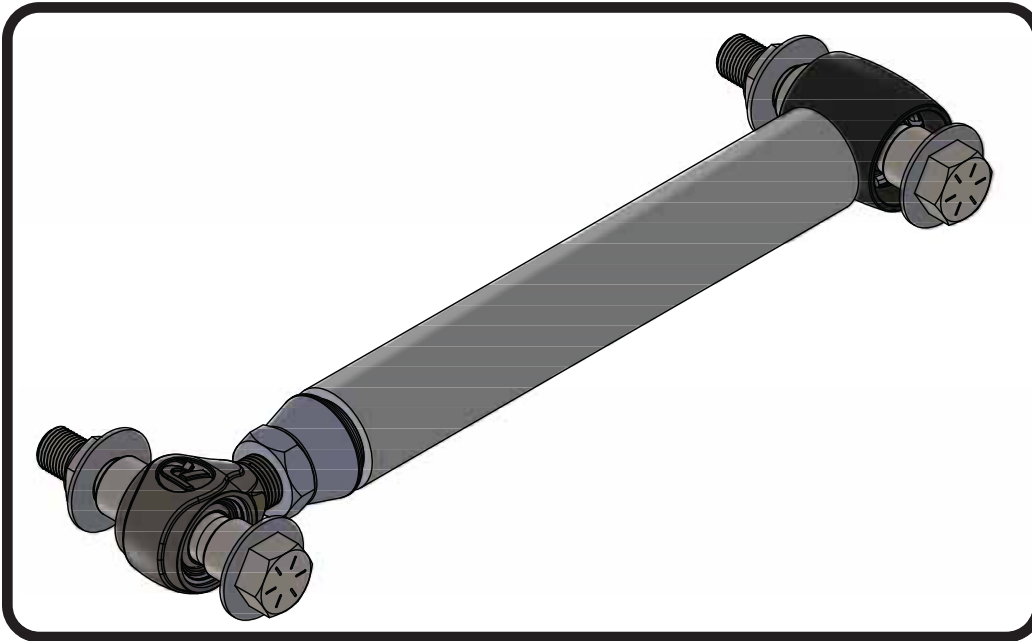
4. Fasten the StrongArm to axle using the 5/8" x 4" bolts, flat washers, and nylok nuts supplied. Tighten the bolts/nuts enough to eliminate any gaps.



5. Thread the 3/8"-16 x 3/4" bolt with washer and lock washer about half way into the air spring. Slide bolt into slot on lower arm and tighten.



1965-1966 Full Size Chevy Rear Upper StrongArm Kit



Recommended Tools



1965-1966 GM "B" Body Rear Upper StrongArms Installation Instructions

Table of contents

Page 24.....	Included Components
Page 25.....	Installation

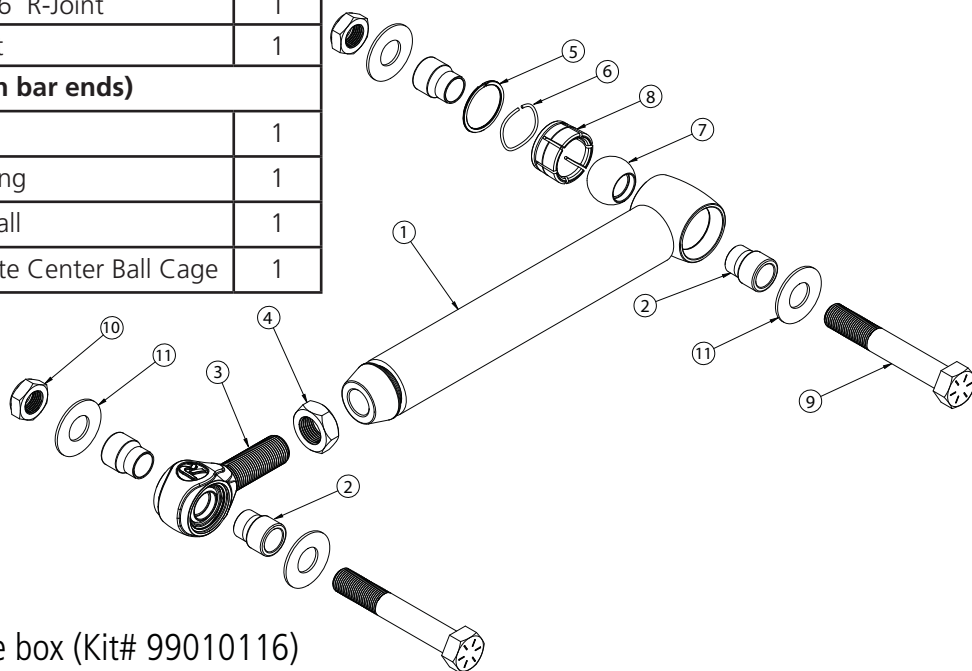
Some vehicles have two factory upper arms and need a second tubular arm, Kit # 11296698.





.....In the box

Item #	Part #	Description	QTY
1	90002850	Upper StrongArm - set to 12.8125"	1
2	70013544	R-Joint Spacers	4
3	90001318	Standard 3/4"-16 R-Joint	1
4	99752004	3/4"-16 Jam Nut	1
R-Joint Components - (Installed in bar ends)			
5	70013279	Retaining Ring	1
6	70013280	Wavo Wave Spring	1
7	70013275	R-Joint Center Ball	1
8	70013276	R-Joint Composite Center Ball Cage	1



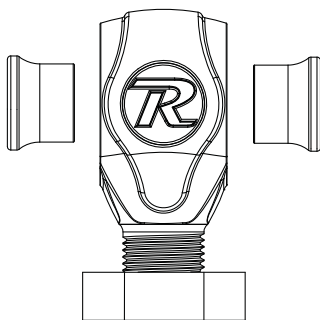
Hardware ListIn the box (Kit# 99010116)

Item #	QTY	Part Number	Description
REAR UPPER CONTROL ARM			
9	2	99621010	5/8"-18 x 4" Bolt
10	2	99622006	5/8"-18 Nylok Nut
11	4	99623001	5/8" SAE Flat Washer

R-JOINT SPACER INSTALLATION

Install the Spacers by inserting the SMALL side of the SPACER into the Center Pivot Ball. Push them in until they bottom out and stop.

UPPER R-JOINTS



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.



Upper Bar Installation



1. Insert the small diameter of the R-Joint Spacers into the center ball of the R-Joint. Insert the R-Joint/Spacers into the OEM mount of the differential.

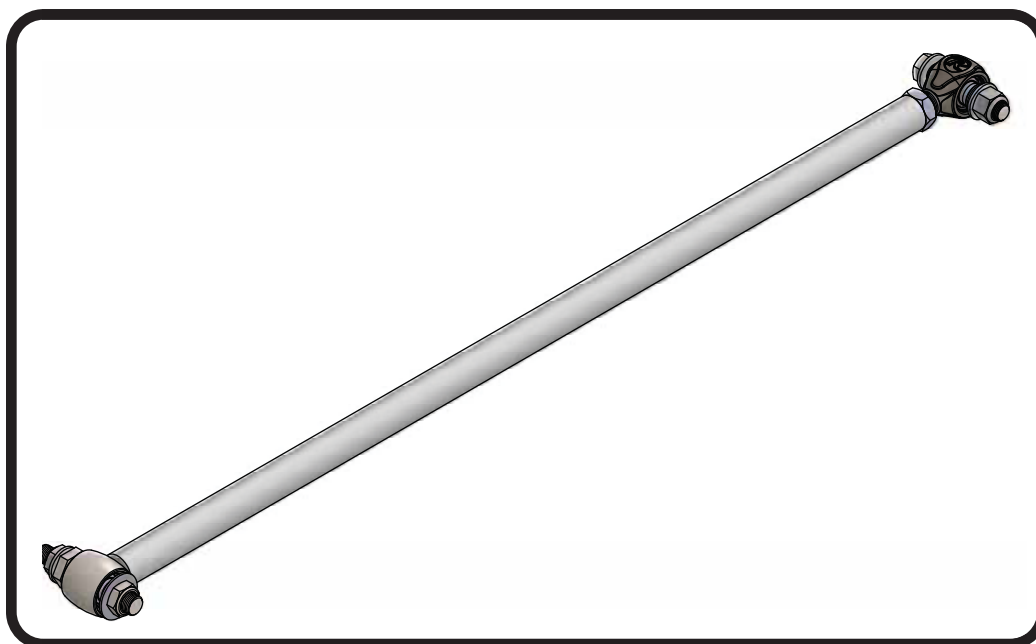


2. Install a 5/8" flat washer on a 5/8"-18 x 4" hex bolt through the mount and control arm R-Joint. Install a 5/8" flat washer, followed by a 5/8"-18 nylok jam nut onto the threads of the bolt. Tighten the hardware enough to eliminate any gaps.

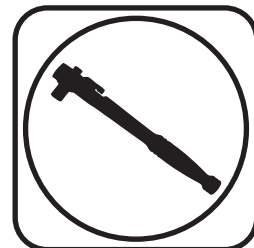
REPEAT THE ABOVE STEPS FOR THE FRAME SIDE OF THE UPPER STRONG ARM.



1965-1970 Full Size Chevy Adjustable Panhard Kit



Recommended Tools



1965-1970 GM "B" Body Adjustable Panhard Kit Installation Instructions

Table of contents

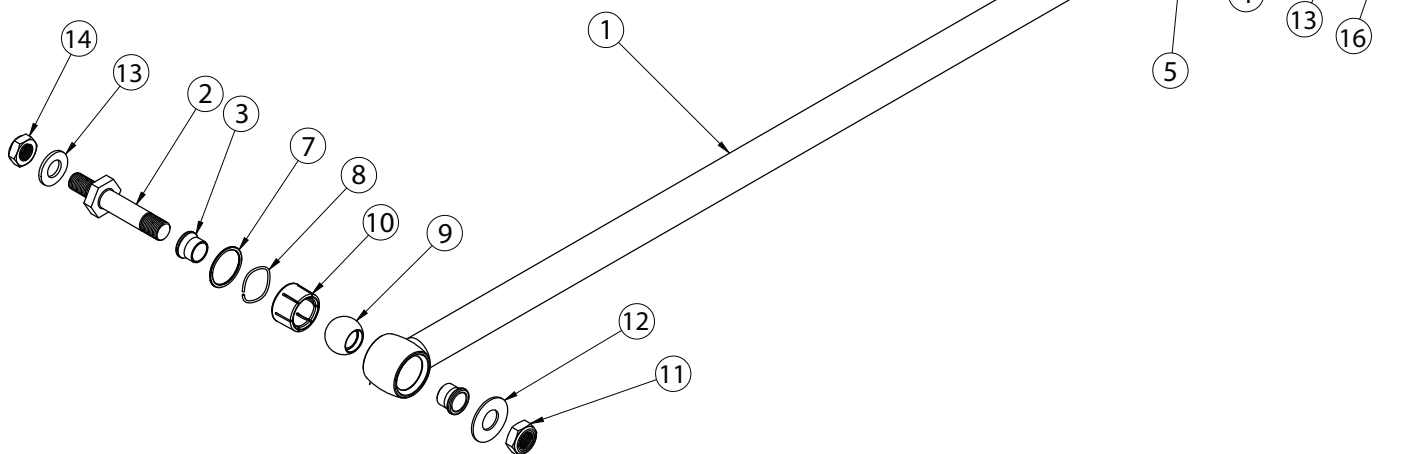
Page 27.....	Included Components & Hardware
Page 28-29.....	Installation





Included ComponentsIn the box

Item #	Part #	Description	QTY
1	90002827	Panhard Bar - set to 35.750"	1
2	90000461	Panhard Stud	1
3	70013334	R-Joint Spacers - Stud	2
4	90001318	Standard 3/4"-16 R-Joint	1
5	99752004	3/4"-16 Jam Nut	1
6	70013764	R-Joint Spacers - Frame	2
R-Joint Components - (Installed in bar ends)			
7	70013279	Retaining Ring	1
8	70013280	Wavo Wave Spring	1
9	70013275	R-Joint Center Ball	1
10	70013276	R-Joint Composite Center Ball Cage	1



.....In the box (Kit# 99010123)

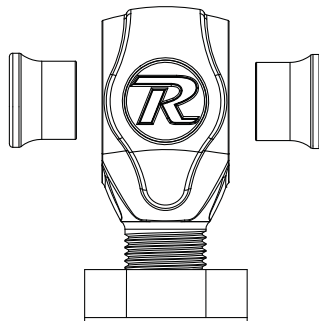
Item #	QTY	Part Number	Description
PANHARD BAR STUD			
11	1	99622006	5/8"-18 Nylok Jam Nut
12	1	99623001	5/8" SAE Flat Washer
13	1	99566003	9/16" SAE Flat Washer
14	1	99562001	9/16"-18 Nylok Nut
PANHARD BAR FRAME MOUNT			
13	2	99566003	9/16" SAE Flat Washer
15	1	99561003	9/16"-18 x 3" Bolt
16	1	99562003	9/16"-18 Nylok Jam Nut



R-Joint Spacer Installation

UPPER R-JOINTS

Install the Spacers by inserting the SMALL side of the SPACER into the Center Pivot Ball. Push them in until they bottom out and stop.



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.

The Panhard bar can be removed from the car with it sitting at any height, but the car will need to be at ride height when checking the sided to side dimensions. It may be necessary to adjust the panhard bar to center the differential in the car at ride height.

1. Remove the OEM panhard bar from the car.
2. Remove the panhard bar stud from the rear differential.

Panhard Bar Installation



1. Bolt the new panhard bar stud into the OEM location of the axle using the 9/16" flat washer and 9/16"-18 Nylok nut supplied in the kit. Torque to 95 ftlbs.



Panhard Bar Installation

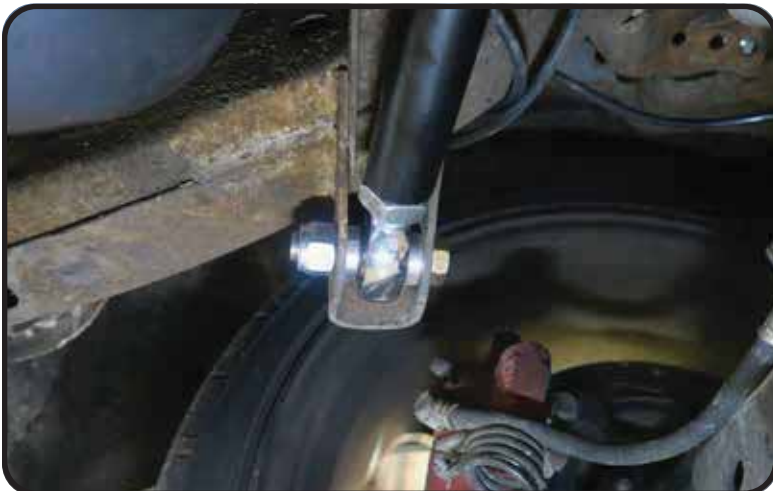
2.



2. Install a Narrow 5/8" ID R-joint Spacers into each side of the R-joint of either end of the Panhard Bar. The Small Diameter goes into the R-joint. Slide the R-joint onto the stud and fasten in place with a 5/8" flat washer and 5/8"-18 thin jam nylok nut. Torque to 95 ftlbs.



3. Install the 3/4" jam nut onto the end of the R-Joint end, then screw R-Joint end into the end of the panhard bar. Set the Panhard Bar to 35.750". You may need to readjust it after getting the car set at ride height, but this is a good starting point. Press the SMALL diameter of the 9/16" I.D. R-Joint spacers into each side of the center ball of the remaining R-Joint. Push the spacers in until they bottom out in the center ball.



4. Insert the R-Joint Housing end of the panhard bar into the OEM frame mount. Align the align hole in the R-Joint end with the holes in the OEM mount. Install a 9/16" flat washer on a 9/16"-18 x 3" hex bolt and insert in into the aligned holes. Install a 2nd 9/16" washer followed by a 9/16"-18 nylok nut on the threads of the bolt sticking through the frame. Torque to 95 ftlbs.

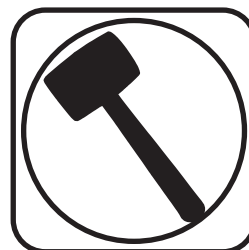
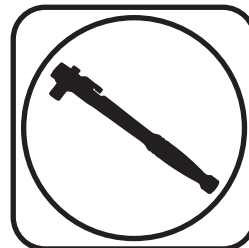
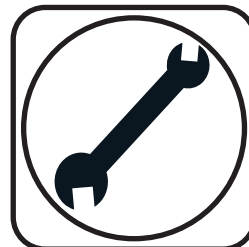
5. Check the side to side dimension between the tire and quarter panel with the car at ride height. You may need to adjust the panhard bar to center the axle at ride height.



Part # 11284610

1965-1970 Full Size Chevy Car REAR CoolRide Air Spring Kit with HQ Series Shocks

Recommended Tools



1965-1970 Full Size Chevy CoolRide Air Spring Kit

Installation Instructions

Table of contents

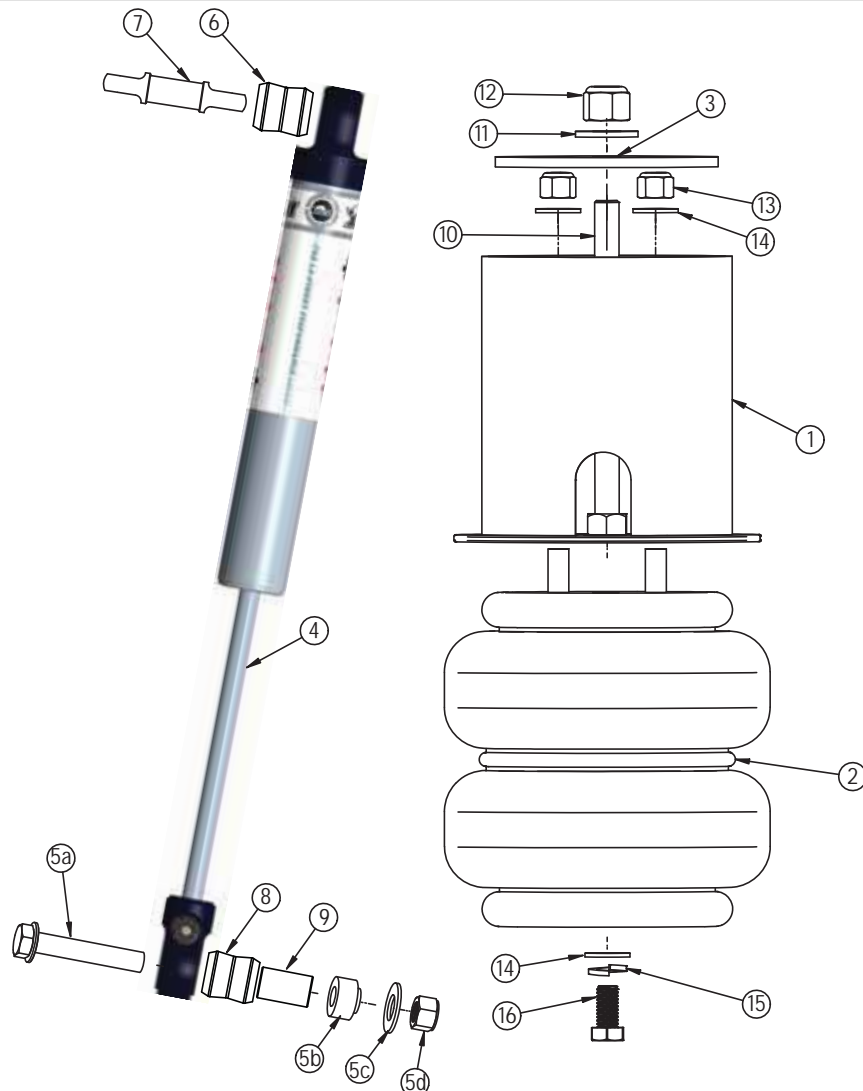
Page 31.....	CoolRide Kit Components
Page 32.....	Hardware List & Getting Started
Page 33-35.....	Installing CoolRide
Page 35.....	Shock Adjustment

THIS COOLRIDE KIT IS DESIGNED TO BE USED WITH RIDETECH STRONGARMS.



CoolRide Kit ComponentsIn the box

Item #	Part Number	Description	QTY
1	90000024	Upper Air Spring Cup Bracket	2
2	90006781	6.5" Diameter AirSpring	2
3	90000224	Large Upper Washer - may not be needed	2
4	986-10-020	7.55" HQ Series Shock Assembly	2
5	90001619	Cantilever PIN Bolt Kit	2
6	70011139	5/8" ID Shock Bushing	2
7	90002068	Extended Trunnion	2
8	70011138	3/4" ID Shock Bushing	2
9	90002102	1/2" ID x 1.312" Shock Sleeve	2





CoolRide Hardware Kits.....In the box

Kit # 99010120

Item #	Part Number	Description	QTY
UPPER AIR SPRING MOUNTING			
10	99435001	7/16"-14 x 6" Stud	2
11	99432001	7/16"-14 Nylok Nut	2
12	99433002	7/16" Flat Washer	2
13	99372002	3/8"-16 Nylok Nut	4
14	99373003	SAE Flat Washer	4
LOWER AIR SPRING MOUNTING			
14	99373003	3/8" SAE Flat Washer	2
15	99373005	3/8" Split Lock Washer	2
16	99371001	3/8"-16 X 3/4" Hex Bolt	2

Kit # 99010119

Item #	Part Number	Description	QTY
SHOCK HARDWARE			
	99311001	5/16"-18 X 1" Hex Bolt	4
	99312003	5/16"-18 Nylok Nut	4
	99313002	5/16" SAE Flat Washer	8

Getting Started.....

THIS COOLRIDE KIT IS DESIGNED TO BE USED WITH OEM CONTROL ARMS.

1. Raise and support vehicle at a safe and comfortable working height.
2. Support axle then remove coil spring, and shock. Refer to service manual for proper disassembly procedure.
3. Apply thread sealant to the air fitting and screw it into the air spring.

Installing CoolRide



4. Apply thread sealant to the air fitting and screw it into the air spring. Assemble the upper cup bracket to the air spring, using 3/8"-16 Nylok nuts and 3/8" flat washers. Torque the 3/8" nuts 15-20 ftlbs.



Installing CoolRide

5.



5. Thread the 6" stud into the nut in the bottom of the cup.

6a.



6a & 6b The large washer needs to be installed on the TOP side of the frame at the coil spring pocket.

6b.



6b. The washer needs to be center on the upper opening.



Installing CoolRide



7. Place the air spring assembly into the coil spring pocket with the tab on the side of the cup aligning with the factory bump stop mount. The stud should poke through the hole in the upper coil spring pocket. Some cars may not have this hole and it must be drilled with a 7/16" drill bit. Fasten with a 7/16" Nylok nut and flat washer. Torque 25-35 ft-lbs.



8. Thread the 3/8"-16 x 3/4" bolt with washer and lock washer about half way into the air spring. Slide bolt into slot on lower arm and tighten.

Install the Ridetech HQ Series Shock kit #11280701.

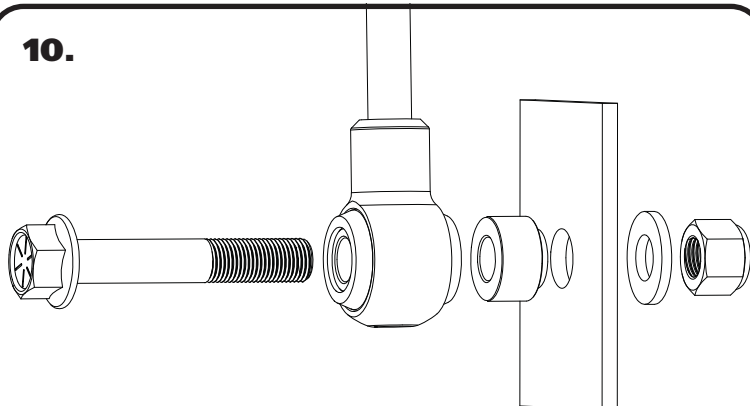


9. Attach shock T-Bar to frame using 5/16" x 1" bolts, Nylok nuts and flat washers. Torque to 17 ft-lbs.



Installing CoolRide

10.



10. Attach the shock to the axle using the new shock bolt kit supplied. Use **Diagram 10** as a reference for assembly. Torque to 75 ft-lbs.

11. This air spring should be approximately 5" tall at ride height.

IT IS THE FINAL RESPONSIBILITY OF THE CUSTOMER TO ENSURE THAT THE AIR SPRING DOES NOT RUB ON ANYTHING AT ANYTIME!!

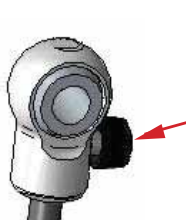
Shock Adjustment

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 or stud top. You must first begin at the ZERO setting, then set the shock to a street setting of 12 or handling setting of 8.



-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 clockwise 12 clicks. This sets the shock at 12 for a street setting. If you are after a handling setting only go 8 clicks.

Take the vehicle for a test drive.



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

-if the vehicle is too soft increase the damping effect by rotating the rebound knob clockwise 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:

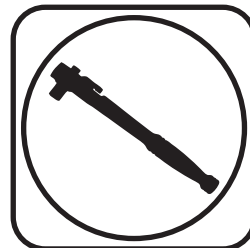
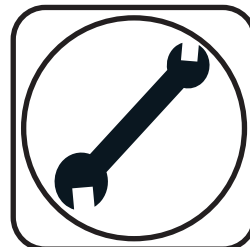
One end of the vehicle will likely reach the desired setting before the other end. If this happens stop adjusting the satisfied end and keep adjusting the unsatisfied end until the overall ride quality is satisfactory.



1965-1970 GM B-Body Rear SwayBar



Recommended Tools



1965-1970 GM B-Body Rear SwayBar Installation Instructions

Table of contents

Page 37.....	Included Components and Hardware List
Page 38-39.....	SwayBar Installation
Page 40.....	SwayBar Installation and Adjustment

Hardware Torque Specifications

3/8"-16.....	30 ftlbs
7/16"-20.....	55 ftlbs
M10-1.5.....	37 ftlbs



Major ComponentsIn the box

Part #	Description	QTY
90002410	Rear SwayBar	1
90000740	Axle Bracket, 3" Axle Tube	2
90001250	Bushing Strap	2
70015012	Lined Sway Bar Bushing	2
90001251	1965-1966 Frame Tab, Driver	1
90001252	1965-1966 Frame Tab, Passenger	1
90002411	1967-1970 Frame Tab, Driver	1
90002412	1967-1970 Frame Tab, Passenger	1
70014301	Clamp Ring	2
70014207	Clamp On SwayBar End	2
90002571	10mm 90 Degree End Links	4
90001253	SwayBar End Link Spacer, 4"	2
90000088	7/16" U-bolt	2

HARDWARE KIT.....99010084

QTY	Part Number	Description
TAB TO FRAME		
4	99371005	3/8"-16 x 1 1/4" Hex Bolt
4	99373002	3/8" Flat Washer
4	99372001	3/8"-16 Nylok Nut

QTY	Part Number	Description
SWAYBAR TO AXLE		
4	99433002	7/16" SAE Flat Washer
4	99432002	7/16"-20 Nylok Nut
SWAYBAR END CLAMP		
4	99371054	3/8"-16 x 7/8" Socket Head Bolt
1	90002276	Antisieze

Getting Started.....

This sway bar kit utilizes a anti-friction lining in the sway bar bushing. The lining allows the sway bar to move freely and quietly in the bushing. No lubrication is required.

The kit contains 2 different sets of frame brackets to accommodate the different frame variations. One set of frame brackets fit 1965-1966, the 2nd set of frame brackets fits 1967-1970. **Steps 11a & 11b** illustrate the differences between the brackets.

THIS SWAYBAR ATTACHES TO THE AXLE AND FRAME.

1. Jack the vehicle up to a safe working height and support with jack stands. Make sure the jack stands are stable before working under the car.

2. Remove the stock sway bar if the car is equipped with one.



3. Open the sway bar bushing at the split and slip it OVER the sway bar. Do this for both bushings.

4.



4. Install the Bushing Straps over the SwayBar Bushings.

5.



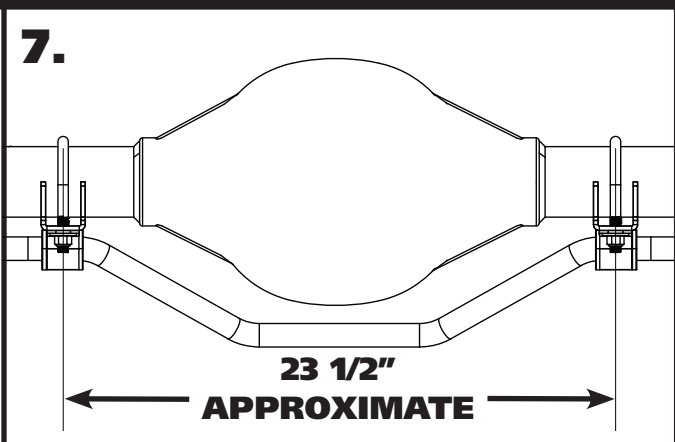
5. Install the U-bolts onto the axle tube with the threads pointing down. You may need to raise the brake lines in the area of the u-bolts. The u-bolts will be approximately 23 1/2" apart and equal distance on each side from the brake backing plates

6.



6. Install an Axle bracket onto each u-bolt with the flat side to toward the ground.

7.



7. **Diagram 7**, illustrates the correct installation of the sway bar. Again, the axle brackets will be approximately 23 1/2" from center to center. The mounts should be spaced equal amounts from the brake backing plates, centering the sway bar on the axle.

8.



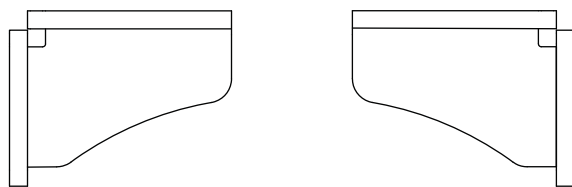
8. Hold the SwayBar in position on the car with the center bend toward the ground. Install a 7/16" Flat Washer & 7/16"-20 Nylok Nut on the threads of the u-bolts. Snug the hardware down and verify the swaybar is centered and the axle mounts are level. Torque the u-bolt hardware.

9.



9. Apply Antisieze to (4) 3/8"-16 x 7/8" Socket Head Cap Screws and thread them into the Clamp-On Ends. Install a clamp-on end on each end of the bar. The End Link mounting hole should be mounted to the outside of the bar and pointing down. Start with the mount flush with the end of the bar.

10a. 1965 - 1966

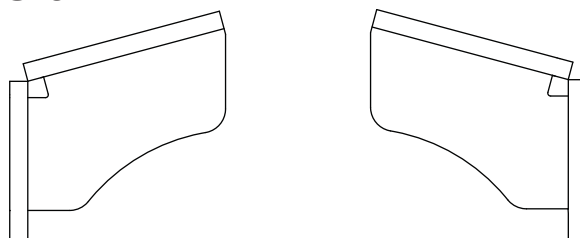


DRIVER

PASSENGER

AS VIEWED FROM THE REAR OF THE CAR

10b. 1967 - 1970



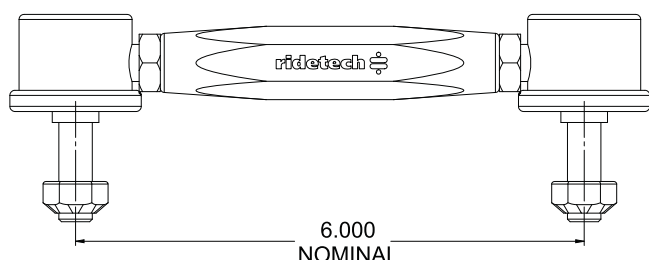
DRIVER

PASSENGER

AS VIEWED FROM THE REAR OF THE CAR

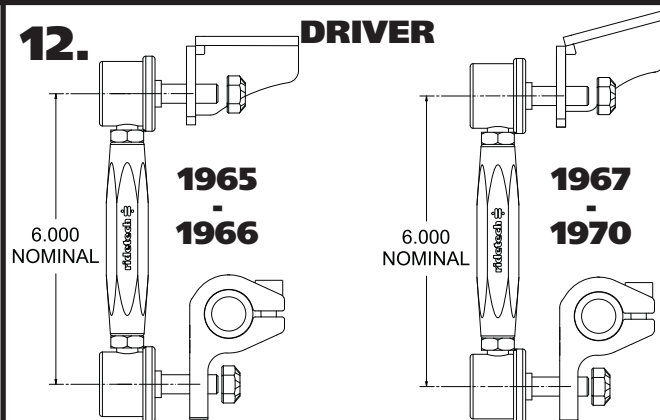
10a & 10b. Diagrams 10a & 10b are to help you determine the correct frame brackets for your car. The brackets in **10a** fit, 1965-1966. The mounting holes are perpendicular to the sway bar linkage tab. The brackets in **10b**, fit 1967-1970. The mounting holes in the 1967-1970 brackets are angled. Both sets of brackets are viewed from the rear as they would be installed on the car. Each bracket has a **RIDETECH** logo stamped in the front side.

11.



11. Assemble the end links. Thread the jam nut up the shank of the 90° end link. Thread and end link end each end of the center adjuster until they reach the jam nuts. Thread the end links out evenly until you have a measurement of 6" from center to center of the 90° ends. The studs of the 90° ends need to be pointing in the same direction. Snug the jam nuts against the center adjuster.

12.



12. Determine the correct frame bracket for your year of car. Attach the SwayBar Linkage to the Clamp-On Mount using the hardware on the linkage. Attach the correct tab to the top of the linkage with the gusset to the front. Use **Diagram 12** as a reference. Attach the linkages and tab to both sides.

13.



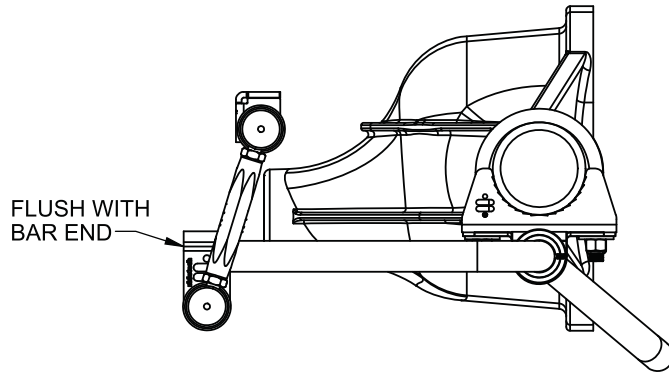
13. Swing the tab up to the frame, keeping the linkage straight from side to side. Use the tab to mark the location of the holes that will need to be drilled. Drill the holes with a 3/8" drill bit. Install a 3/8" flat washer on each of (2) 3/8"-16 x 1 1/4" hex bolts and install them through the bracket and drilled holes. Install a 3/8" flat washer & 3/8"-16 nylok nut on each bolts sticking through the frame. Torque the hardware and repeat on the other side.

14.

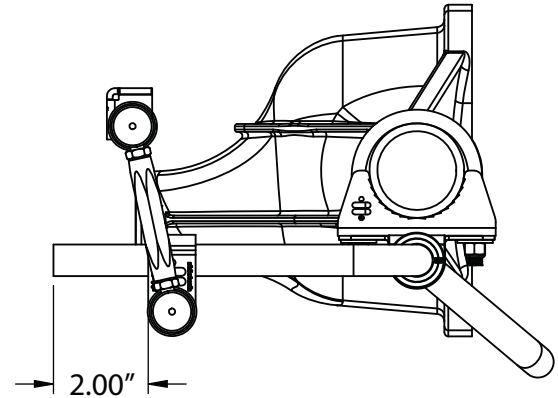


14. Install the locking rings on the inside of each bushing assembly. Use a hex key to take the locking ring apart. Reassemble it on the bar positioned next to the outside of the bushing assembly. Push the locking ring up against the bushing assembly and tighten.

15. MINIMUM RATE 177 LB/INCH



HIGH RATE 255 LB/INCH



15. We recommend getting the swaybar as level as possible at ride height and with no preload. Both of these steps are done by adjusting the end links. These end links can be adjusted from 6" to 6 3/4". Disconnect the end links from the swaybar and adjust one side to get the swaybar level. Reattach the end link to the swaybar and adjust the 2nd end link so that it goes in and out of the clamp-on mount with ease. This will be zero preload.

The rate of this sway bar is also adjustable. This is possible by changing the position of the clamp-on ends on the bar. The standard setting is with the clamp-on mounts even with the end of the bar, stiffest is with the clamp-on end positioned 2" from the end of the swaybar. The Diagram above shows the clamp-on mount in the softest and stiffest settings. The position of the mounts will be determined by several factors; spring rate, front bar size, and even tire size. We recommend running this rear sway bar with Ridetech's front sway bar (11289120) for the best performance.