



Part # 11340298⁽⁶³⁻⁷⁰⁾/**113520298**⁽⁷¹⁻⁷²⁾ - C10 Air Suspension System

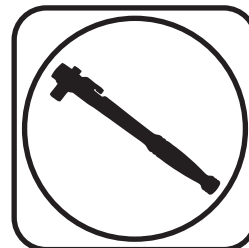
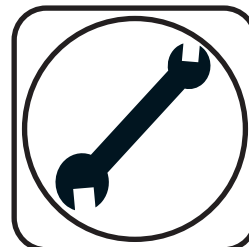
Front Components:

11343699/11353699	Front Upper StrongArm
11341499/11351499	Front Lower StrongArm
11349300/11359300	Front Spindles and Caliper Brackets
11330910	Front CoolRide & Shock Kit
11369120	Front Sway Bar

Rear Components:

11337199	Rear StrongArm System
21150801	Rear Shockwaves

Recommended Tools



C-10 Air Suspension Installation Instructions

Table of contents

Pages 2-4.....	Front Lower StrongArms
Pages 5-7.....	Front Upper StrongArms
Pages 8-11.....	Front CoolRide & Shock Kit
Pages 12-13.....	Spindles
Pages 14-18.....	Front MuscleBar
Pages 19-28.....	Rear StrongArm System
Pages 29-30.....	Rear Shockwaves
Pages 31-32.....	Shockwave Care and Adjustment

IF YOUR TRUCK HAS A WOODEN BED FLOOR, KIT #11337299 WILL BE REQUIRED FOR SHOCK CROSSMEMBER CLEARANCE.

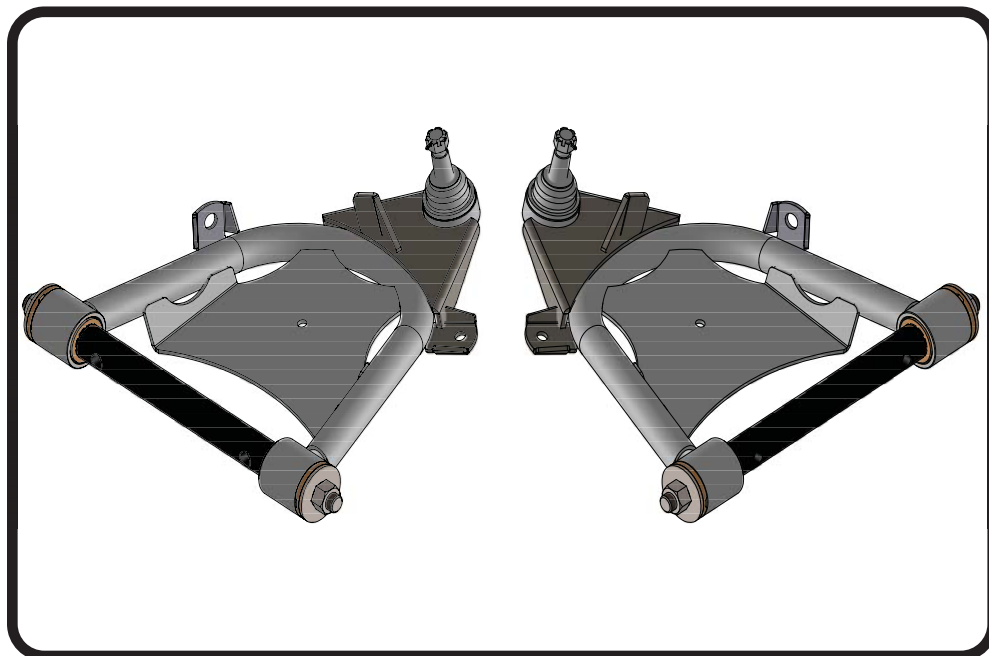
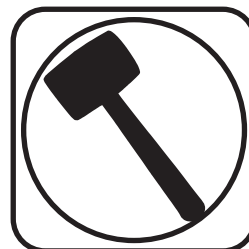
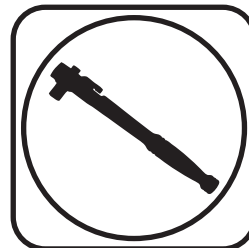
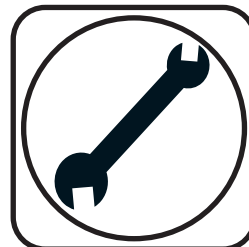




C10 CoolRide StrongArms

Part # 11341499(63-70)/**11351499**(71-87)

Recommended Tools



C-10 CoolRide Lower StrongArms Installation Instructions

Table of contents

Page 3..... Included components

Page 4..... Installation

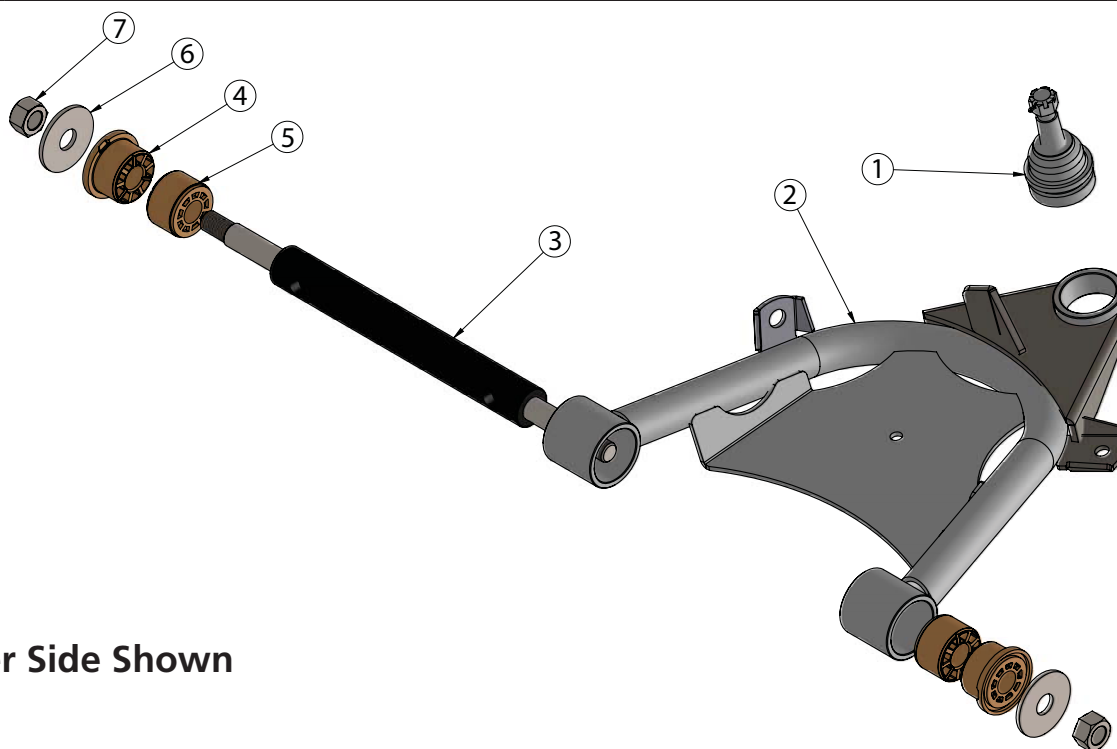
Note: These control arms were designed for use with the RideTech bolt-on shock kit & MuscleBar swaybar. The factory shocks and sway bar will not work.





Lower Control Arm ComponentsIn the box

Item #	Part Number	Description	QTY
1	90000912/90000909	(63-70/73-87) - Lower Balljoint Assembly	2
2	90003152	Driver Lower Control Arm (Shown)	1
2	90003153	Passenger Lower Control Arm	1
3	90002430	Lower Control Arm Shaft	2
4	70010755	Control Arm Bushing - 2.5" OD Ledge	4
5	70011465	Control Arm Bushing - No Ledge	4
6	99753001	3/4" USS Flat Washer	4
7	99752005	3/4"-16 Top Lock Nut	4



Driver Side Shown

Getting Started.....

Note: The 63-87 C-10's have similar control arms through the years, but the balljoints used were different. The year breaks are as follows: 63-70, 71-72, 73-87. Be sure to use the correct balljoint for the year of spindle you are using.

Balljoints:	Ridetech#	Proforged#
63-70:	Upper-90000911	101-10037
71-72:	Upper-90000902	101-10044
73-87:	Upper-90000910	101-10046

Ridetech#	Proforged#
Lower-90000912	101-10036
Lower-90000909	101-10040
Lower-90000909	101-10040

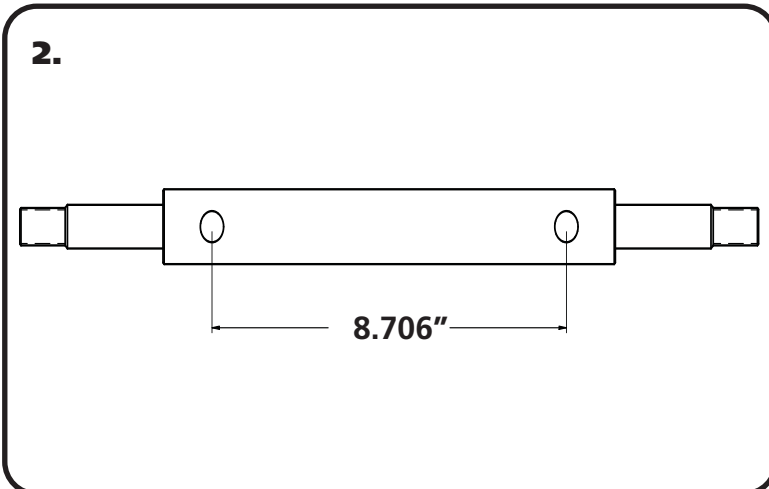


Installing Lower Control Arm



1. The lower control arm is installed using the factory U-bolts and nuts. The lower control arm is located by a pin that is in the center of the front u-bolt cradle. This pin will go into the hole in the control arm shaft to help locate the control arm. Torque the u-bolt nuts to 45 ft-lbs.

NOTE: We have ran across some trucks where the rear pin is the locator pin. It will locate the control arm correctly too.



2. The Lower Cross Shaft has 2 different locating Hole patterns. These StrongArms use the 8.706" center to center locating holes. The Pin in the Cross Shaft Saddle that was pointed out in **Image 2**, will locate into these Holes. Use the OEM Hardware to attach the Lower making sure the Locating Pin is in the 8.706" center to center Holes.



3. **Image 3** is an example of the lower bolted to the crossmember. Install 3/4" ID Washer on to each end of the cross shaft against the bushing. Then install the 3/4"-16 lock nut. Snug the nut up against the washer. You want the suspension move freely through its travel.

4. The final step is to reinstall the spindle onto the truck. Slide the ball joint pins into the spindle and install the castle nut on each one. Torque the ball joint nuts and install cotter pins in each one.

Ball Joint nut Torque Specs:

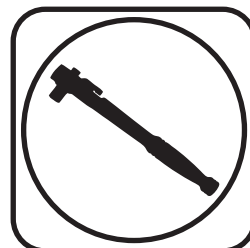
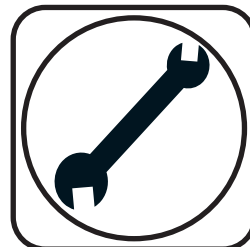
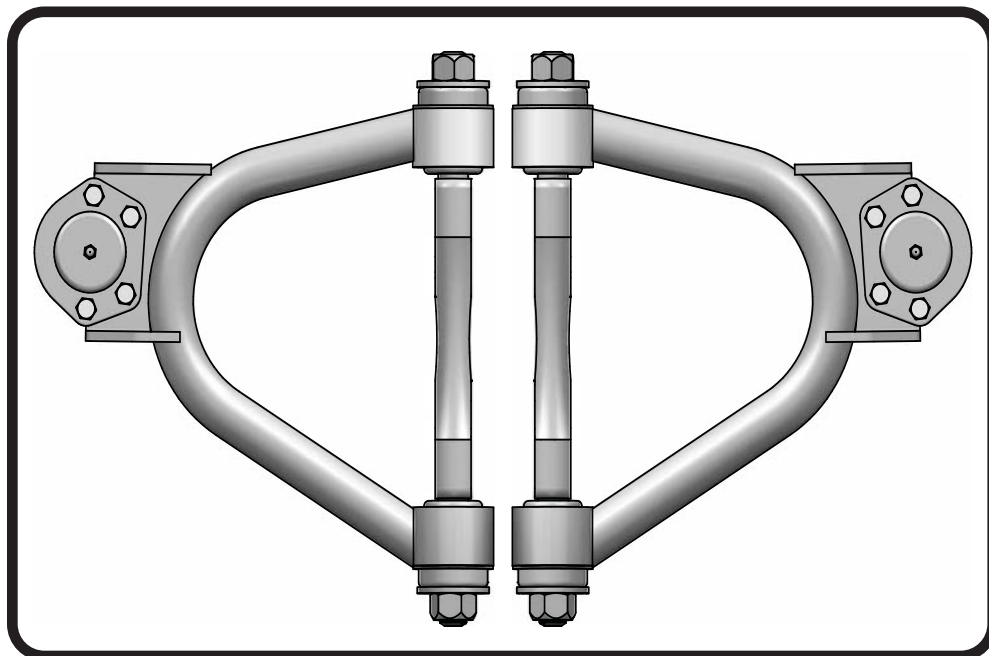
Lower: Torque to 90 ftlbs and then tighten nut to align cotter pin hole not to exceeding 130 ftlbs.



C10 CoolRide StrongArms

Part # 11343699(63-70)/**11353699**(71-72)/**11363699**(73-87)

Recommended Tools



C-10 CoolRide Upper StrongArms Installation Instructions

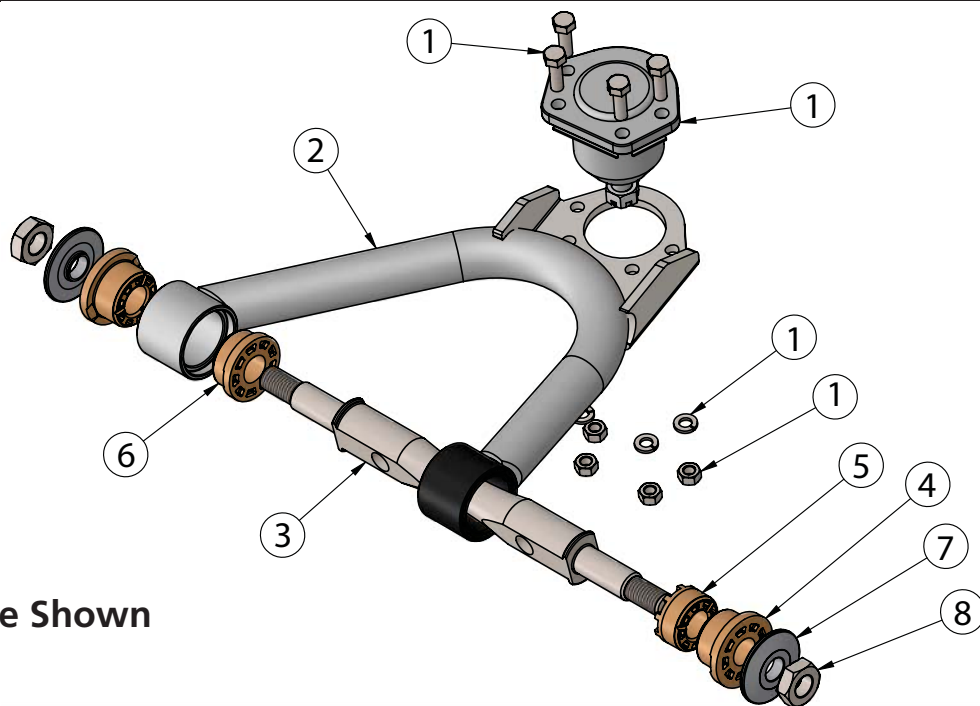
Table of contents

Page Included Components
Page 7..... Installation



Upper Control Arm ComponentsIn the box

Item #	Part Number	Description	QTY
1	90000911/90000902/90000910	(63-70/71-72/73-87) - Upper Balljoint Assembly	2
2	90003150	Driver Upper Control Arm (Shown)	1
2	90003151	Passenger Upper Control Arm	1
3	90003154	Upper Control Arm Shaft	2
4	70010759	Control Arm Bushing - 2.0" OD Ledge	4
5	70010827	Control Arm Bushing - 1.75" OD Ledge	2
6	70010826	Control Arm Bushing - No Ledge	2
7	90002737	Aluminum Control Arm Bushing Washer	4
8	99622005	5/8"-18 Top Lock Nut	4



Driver Side Shown

Getting Started.....

Note: The 63-87 C-10's have similar control arms through the years, but the balljoints used were different. The year breaks are as follows: 63-70, 71-72, 73-87. Be sure to use the correct balljoint for the year of spindle you are using.

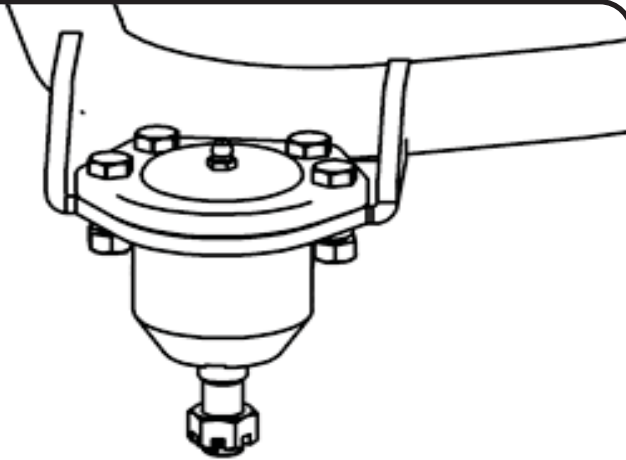
Balljoints:	Ridetech#	Proforged#
63-70:	Upper-90000911	101-10037
71-72:	Upper-90000902	101-10044
73-87:	Upper-90000910	101-10046

Ridetech#	Proforged#
Lower-90000912	101-10036
Lower-90000909	101-10040
Lower-90000909	101-10040



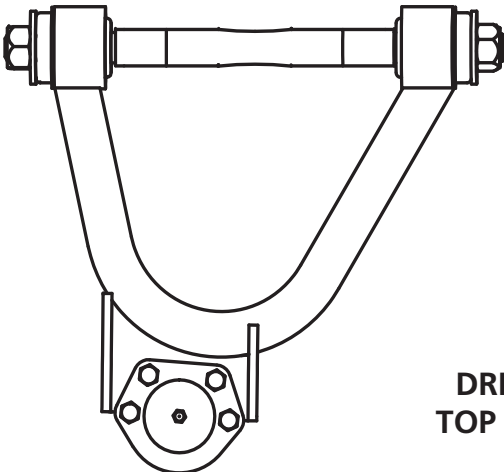
Installation

1.



1. Install the ball joints into the upper control arm with the hardware supplied with the ball joint. The upper ball joint goes in from the top side of the control arm. The gussets on the balljoint plate point up. Torque the hardware to 29 ftlbs.

2.



2. **Diagram "2"** shows the Driver Upper Control Arm. This is looking at the control arm from the top.

3.



3. Remove the OEM upper control arms from the truck. Fasten the control arms to frame using the stock hardware. Reuse the alignment shims; however the truck must be realigned after installation. Torque the nuts to 70 ft-lbs. **When assembling the Control Arms tighten the cross shaft nuts enough to create drag on the delrin bushings, the arm should still move through its travel by hand.**

Ball Joint nut Torque Specs:

Upper: Torque to 50 ftlbs and then tighten nut to align cotter pin hole not exceeding 90 ftlbs.

4. Grease the upper ball joints.



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Part # 11330910
63-72 C10 Front CoolRide Kit
For Use w/ Lower StrongArms

COOLRIDE KIT

Components:

2	90006873	Front air springs – 224c
2	90000060	Upper air spring plate
2	90001083	Medium bump stop – 1.5" tall
2	90000472	Aluminum bump stop extension
1	90000726	Driver side bump stop plate
1	90000727	Passenger side bump stop plate

Hardware:

8	99371004	3/8" x 1 1/4" USS bolt	Upper air spring plate to frame
4	99371001	3/8" x 3/4" USS bolt	Air spring to lower control arm/ bump stop
4	99373005	3/8" lock washer	Air spring to lower control arm/ bump stop
12	99372002	3/8" nyloc nuts	
24	99373003	3/8" flat washers	

SHOCK KIT

Shock:

2	986-10-042	4.75" Stroke Stud Top Shock Cartridge
2	70011138	3/4" ID Shock Bushing
2	90002102	1/2" ID Inner Sleeve

Components:

4	70011140	Stem Bushings
4	70011141	Stem Washers
1	90001359	Driver side upper shock bracket – bolt-on
1	90001360	Passenger side upper shock bracket – bolt-on
2	90000471	Aluminum shock spacer
2	90001619	Cantilever Pin Bolt Kit

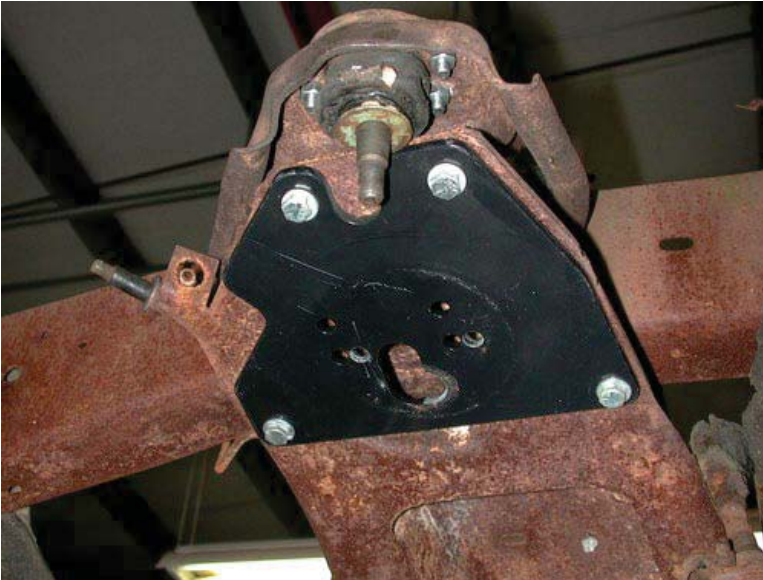
Hardware:

8	99371004	3/8" x 1 1/4" USS bolt	Upper shock bracket to frame
8	99372002	3/8" USS Nylok nut	Upper shock bracket to frame
16	99373003	3/8" SAE flat washer	Upper shock bracket to frame
4	99372006	3/8"- 24 Thin Jam Nut	Upper Shock Stud

COOLRiDE®

CoolRide Installation Instructions

*****Must be used w/ RideTech shock kit*****



1. Hold the upper plate to the cross member as shown in the picture to the left and clamp to frame. Using the plate as a template drill four 3/8" holes in the cross member.



2. Apply thread sealant to the air fitting and thread into the air spring.

3. Remove the upper plate from the frame and place onto the studs on the top of the air spring. The holes are lettered; **slide the plate to position C** moving the air spring to the front of the vehicle. Secure with 3/8" flat washers and Nylok nuts. Torque the nuts 15-20 ft-lbs.

Note: Airline must be routed at this time.



Note: It is acceptable to let the suspension bottom on the air spring. However, if your tire hits the inner fender well before the air spring bottoms out, this bump stop must be installed.

4. The bump stop plate will bolt to the outer two holes of the upper air spring plate. It will hang over the front side of the cross member. It is acceptable to trim the bump stop to achieve maximum drop without the tire rubbing the inner fender well. Torque the 3/8" hardware to 30 ft-lbs.

5. The brake line bracket may need to be tweaked to clear the hose.



6. Fasten the air spring to the lower control arm using a 3/8" x 3/4" bolt, lock washer and flat washer. Torque the bolts to 30 ft-lbs.

7. Check air spring clearance through full suspension travel. **Allowing the air spring to rub will result in failure and is not a warrantable situation.**

8. Ride height on this air spring is approximately 5" tall. The shock absorber should be at about 50-60% travel at this point. Depending on vehicle weight this will usually occur around 80-100 psi.

Shock Installation Instructions



1. Place the new upper shock mount against the frame, the tab in the front of the bracket will slide into the factory shock stud hole. Position the bracket so that the bottom of the bracket is parallel to the bottom of the frame. Using the bracket as a template, mark an drill four 3/8" holes in the frame rail. Secure the bracket to the frame using four 3/8" x 1 1/4" bolts, Nylok nuts and flat washers. Torque the hardware to 30 ft-lbs.



2. Attach the shock to the upper mount using the new rubber bushings and hardware supplied.

Note: A notch must be made in the inner fender well just above the mount to allow clearance for the shock stud.

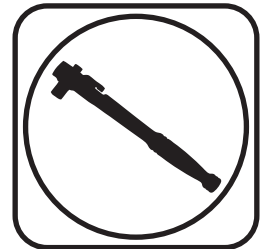


3. Slide the $\frac{1}{2}$ "-20 x 3" flange head bolt through shock, then install the aluminum spacer. The step on the spacer will face the lower arm. Secure the stud to the lower arm w/ the $\frac{1}{2}$ " flat washer and nylok nut Torque to 75 ft-lbs.



Part # **11349300**⁽⁶³⁻⁷⁰⁾/**11359300**⁽⁷¹⁻⁷²⁾ - C10 Drop Spindles

Recommended Tools



Major ComponentsIn the box

1	11349301/11359301	Pair of drop spindles
1	90001926	Pair of caliper brackets

Installation

Balljoint nut Torque Specs:

Upper: Torque to 50 ft lbs and then tighten nut to align cotter pin hole not exceeding 90ft lbs.

Lower: Torque to 90 ft lbs and then tighten nut to align cotter pin hole not to exceeding 130 ft lbs.

Note: These spindles are setup for 1973-1987 HD Rotor and Caliper. The HD Rotor is 1 1/4" wide.



Spindle Installation

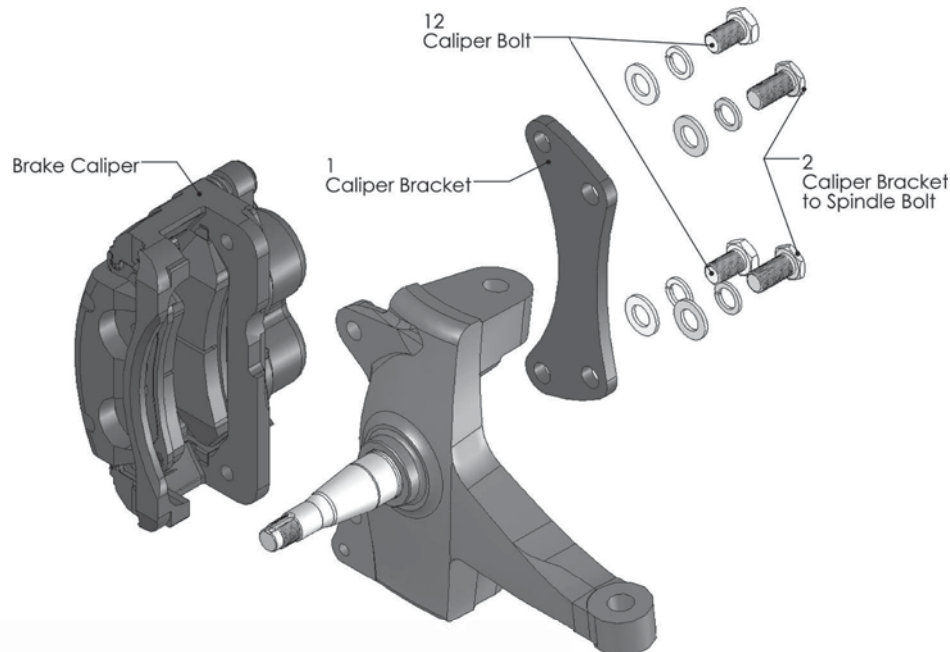
Notes:

This spindle will not work with drum brakes.

A 7/16-14 bolt can be threaded into the spindle and used as an adjustable steering stop.

Instructions:

1. Remove the outer tie rods from the original spindles.
2. Trucks that are reusing existing 1973-1987 heavy half ton 1-1/4" thick rotors and calipers will need to remove the disc brake assemblies from the spindles. Trucks that are not reusing the existing brakes need to disconnect the brake hose from the brake line.
3. Remove the upper and lower ball joints from the spindle.
4. Remove the old spindles.



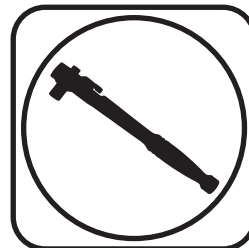
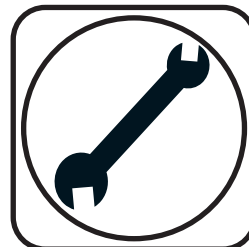
5. Install the new drop spindles onto the upper and lower ball joints.
6. Install the outer tie rods into the new spindles.
7. Install the caliper brackets. The supplied caliper brackets are designed to utilize 1973-87 heavy half ton 1-1/4" thick rotors and calipers. The brackets will mount to the inboard side of the spindle.
8. Pack the wheel bearings with grease. Install the inner bearings and the grease seal. Install the rotor/hub assembly. Install the outer wheel bearing, washer and spindle nut. Adjust the wheel bearings as follows:
 - a. Tighten the nut only slightly (no more than 12lb/ft.) spin the rotor in a forward direction to ensure the bearings are fully seated.
 - b. Check that the spindle nut is still tight. If not repeat step a.
 - c. Loosen the spindle nut until it is just loose.
 - d. Hand tighten the spindle nut and install the cotter pin. Do not use a wrench! If necessary loosen the nut too the first position the cotter pin can be installed into.
9. Install the caliper assemblies. The bleed screws will be towards the top.
10. If using new calipers connect the brake hose to the calipers and the frame. Bleed the brakes. Check for leaks.
11. Check that the rotor can turn freely and that the brakes do not drag.
12. Have the truck professionally aligned.



Part # 11369120 - 1963-1987 C10 Front Sway Bar



Recommended Tools



1963-1987 C-10 Front Sway Bar Installation Instructions

Table of contents

Page 15.....	Included Components and Hardware List
Page 16.....	Sway Bar Installation
Page 17.....	Sway Bar Installation
Page 18.....	Sway Bar Installation

Hardware Torque Specifications

3/8"-16..... 30 ftlbs

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REV2 12/1/21

Major ComponentsIn the box

Part #	Description	QTY
90001246	Front Sway Bar	1
90002926	End Link Kit - SHORT - <i>Stock Control Arms</i>	1
90002513	Bushing Strap	2
70015016	Lined Sway Bar Bushing	2
90002591	Frame Mount	2
90002593	Control Arm Mounts	2
90002932	End Link Kit - LONG - <i>Ridetech Tubular Control Arms</i>	2

HARDWARE KIT99010089

QTY	Part #	Description	QTY	Part #	Description
FRAME MOUNT			BUSHING STRAP continued		
4	99371005	3/8"-16 x 1 1/4" Hex Bolt	4	99372001	3/8"-16 Nylok Nut
8	99373002	3/8" Flat Washer	CONTROL ARM MOUNT		
4	99372001	3/8"-16 Nylok Nut	4	99371005	3/8"-16 x 1 1/4" Hex Bolt
BUSHING STRAP			8	99373002	3/8" Flat Washer
4	99371005	3/8"-16 x 1 1/4" Hex Bolt	4	99372001	3/8"-16 Nylok Nut
8	99373002	3/8" Flat Washer			

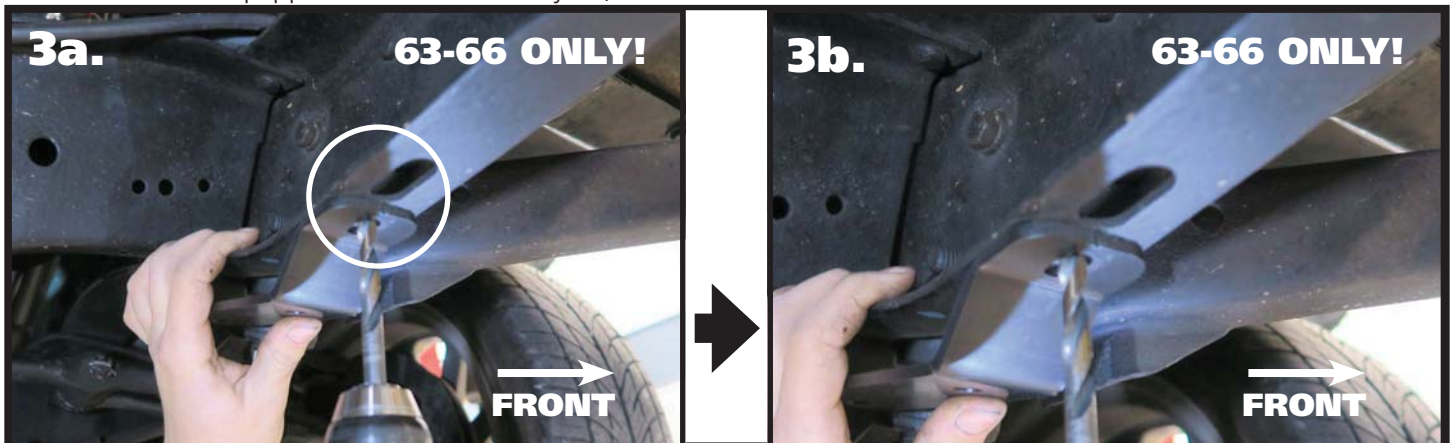
Getting Started.....

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.

This sway bar will fit 63-66, 67-72 & 73-87, but the installation varies between the 3 eras. Be sure that you are reading the instructions for the correct era of truck.

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 truck.

2. If the truck is equipped with a stock swaybar, remove it.



63-66 ONLY! 3a & 3b. The mounting holes for the frame mount will need to be drilled. The frame mount will attach to the frame with the ANGLED END FORWARD. The front edge of the frame mount will be aligned with the rear edge of the slot in the frame that is forward of the cross member. Hold the frame mount on the center on the frame with the front edge lined up with the rear edge of the slot. Use the frame mount as a template to mark the holes to be drilled. Drill the holes using a 3/8" drill bit. Attach the bracket using a 3/8"-16 x 1 1/4" bolt, 3/8"-16 nylok nut and a 3/8" flat washer on top and bottom. The same hardware setup is used in each hole. Repeat on the other side and torque hardware. **SKIP TO STEP 9.**



4. Remove the rivet from the bottom of the frame rail. This can be done by cutting the rivet head off and driving it out or by drilling it out. This cross member is located in front of the suspension cross member.



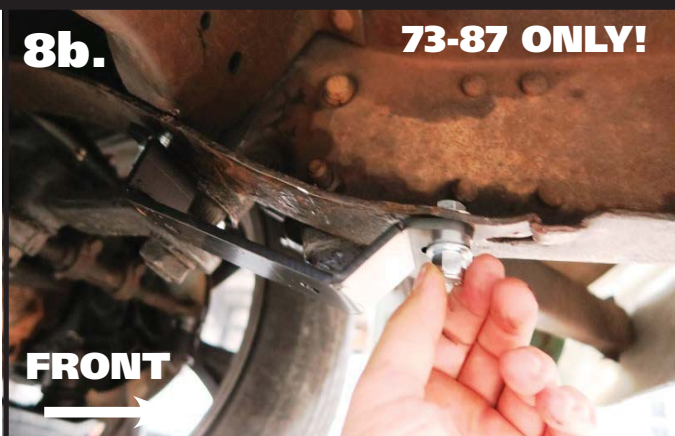
5. Attach the rear hole of the frame mounting bracket to the frame using the rivet hole. The end of the frame bracket with the angled bends goes forward. Attach the bracket using a 3/8"-16 x 1 1/4" bolt, 3/8"-16 Nylok nut and a 3/8" Flat Washer on top and bottom.



6. With the rear hardware installed, line up the bracket parallel with the frame rail. Use the front hole as a guide to drill a 3/8" hole in the frame.



7. Attach the front of the bracket using a 3/8"-16 x 1 1/4" bolt, 3/8"-16 Nylok nut and a 3/8" Flat Washer on top and bottom. Repeat on the other side and tighten hardware. **SKIP TO STEP 9.**



73-87 ONLY! 8a & 8b. If your truck is equipped with an OEM sway bar, the OEM mount will need to be removed to install the Ridetech sway bar. This is done by removing the rivets. The rivets can be removed by chiseling the heads off and driving them out or by drilling the rivets out. The new frame mount bolts directly in place of the old mount. If your truck doesn't have a sway bar, the mounting holes will still be in the frame. The sway bar mount attaches to the frame using the holes from the OEM mount. The end of the frame bracket with the angled bends goes forward. Attach the bracket using a 3/8"-16 x 1 1/4" bolt, 3/8"-16 nylok nut and a 3/8" flat washer on top and bottom. The same hardware setup is used in each hole. Repeat on the other side and torque hardware.



9. Open the sway bar bushing at the split and slide it **OVER** the swasy bar. Do this for both bushings.



10. Next, slip the bushing straps over the sway bar bushings.



11a.



11b.

11a & 11b. This kit requires a bracket to be installed on the control arm for the sway bar linkage. The bracket needs to be positioned with the inside edge 8 1/4" from the CONTROL ARM BUSHING and the ears pointing DOWN. Hold the end of the tape measure against the outer edge of the control arm bushing and make a mark on the control arm at 8 1/4". Hold the bracket on the control arm with the ears pointing DOWN and against the lip of the control arm. Use the bracket to mark and drill the mounting holes to 3/8". Install a 3/8" flat washer on (2) 3/8"-16 x 1 1/4" hex bolts and insert them into the holes. Install a 3/8" flat washer and 3/8"-16 nylok nut on each Bolt. Repeat on the other side and torque hardware.



12a.



12b.

12a & 12b. Hold the sway bar into position on the truck with the sway bar arms below the tie rods. Align the holes in the bushing straps with the holes in the frame brackets. Install a 3/8" flat washer on (4) 3/8"-16 x 1 1/4" hex bolts and insert them into the holes. Install a 3/8" flat washer and 3/8"-16 Nylok Nut on each bolt. Center the bar in the bushings before snugging up the hardware. Do **NOT** completely tighten the hardware. It will be left partially loose until the end links are installed.

13a & 13b. This kit includes 2 different lengths of end links. The SHORT end links are used for STOCK control arms. The LONG end links are used on STRONGARM installations.

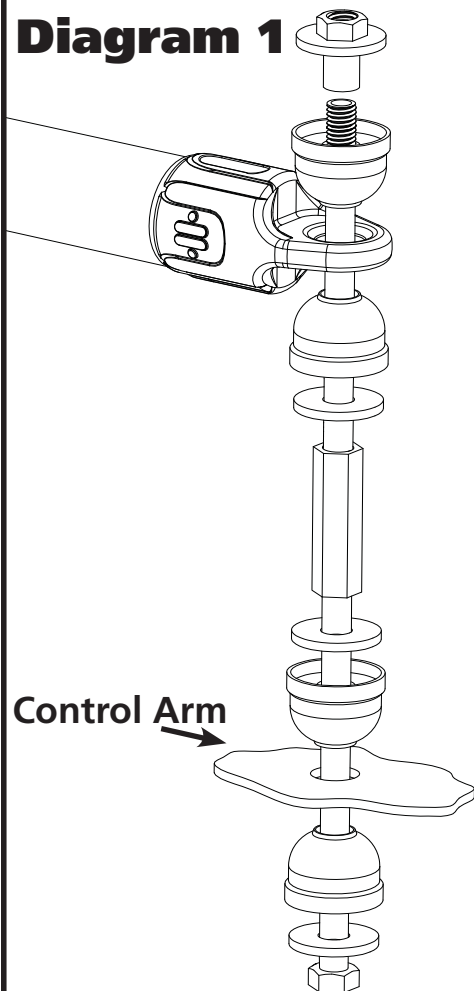


13a. STOCK CONTROL ARMS Install the SHORT end links using **Diagram 1** as a reference. Install both end links before tightening the end link hardware. Tighten the end link barrel nut until it is flush with the end of the bolt, and then tighten it 2-3 more complete rounds.



13a. RIDETECH TUBULAR CONTROL ARMS Install the LONG end links using **Diagram 1** as a reference. Install both end links before tightening the end link hardware. Tighten the end link barrel nut until it is flush with the end of the bolt, and then tighten it 2-3 more complete rounds.

Diagram 1



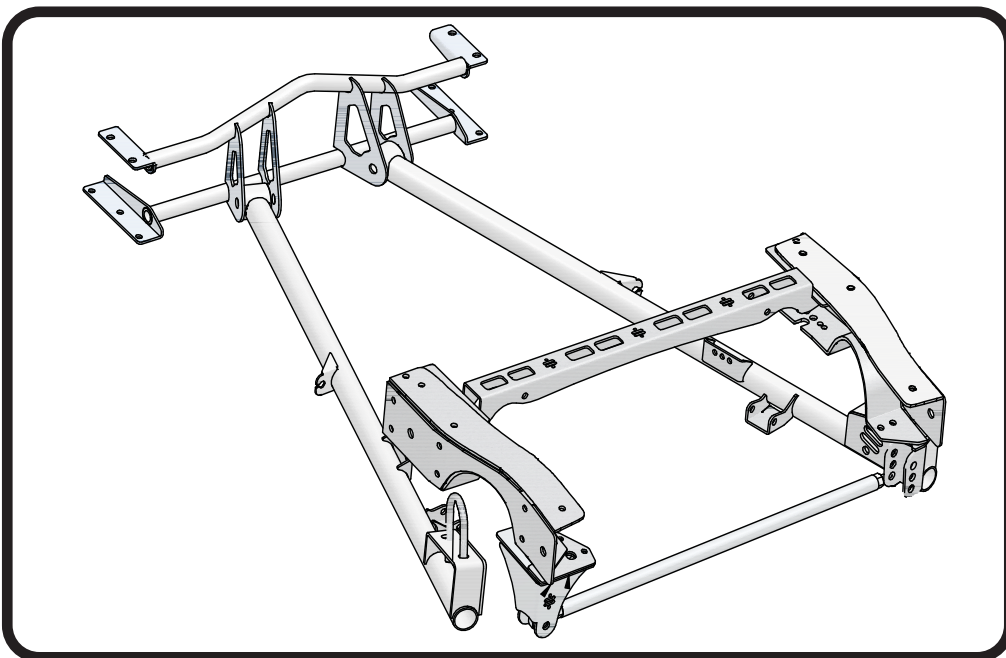
Tighten the end link barrel nut until it is flush with the end of the bolt, and then tighten it 2-3 more complete rounds.



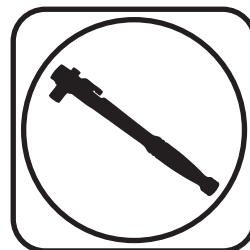
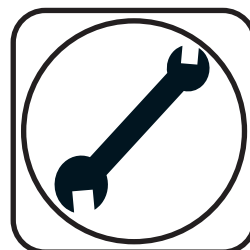
9. Torque the sway bar mounting hardware to 30 ftlbs.



Part # 11337199 - 1963-1972 C10 Rear StrongArms



Recommended Tools



1963-1972 C-10 Rear StrongArms Installation Instructions

Table of contents

Page 20.....	Included Components
Page 21.....	Hardware List and Getting Started
Page 22.....	Disassembly and Front Crossmember Installation
Page 23.....	"C" Notch Installation
Page 24.....	"C" Notch Installation
Page 25.....	Installing "C" Notches and Shock Bridge
Page 26.....	Installing StrongArms and Panhard bar
Page 27.....	Installing Panhard bar and Shockwave/CoilOvers
Page 28.....	Finishing

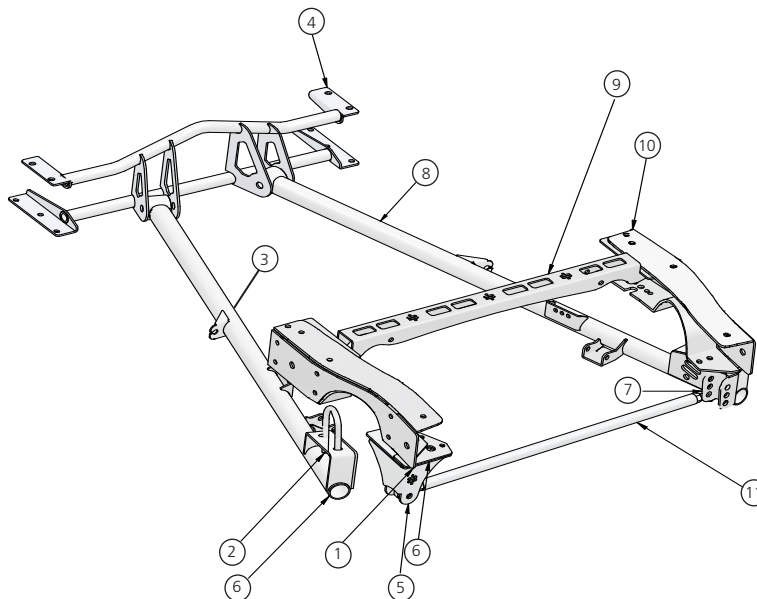
IF YOUR TRUCK HAS A WOODEN BED FLOOR, KIT #11337299 WILL BE REQUIRED FOR SHOCK CROSSMEMBER CLEARANCE.





Major ComponentsIn the box

Item #	Part #	Description	QTY
1	90002435	Panhard Mount Top Spacer	1
2	99756002	Trailing Arm U-bolt	2
3	90000626	Driver Side StrongArm	1
4	90000631	Front StrongArm Crossmember	1
5	90002436	Panhard Bar Frame Mount	1
6	90002434	Panhard Mount Bottom Spacer	1
7	70013364	Panhard Bar R-Joint End	1
8	90000627	Passenger Side StrongArm	1
9	90002432	Upper Shock Bridge	1
10	90000614	Passenger "C" Notch	1
10	90000613	Driver "C" Notch	1
11	90002867	Panhard Bar (34 5/8" center to center)	1
	90002062	Shockwave/Coilover Spacers (Not Shown)	8
	90001083	Medium Bumpstop - 1.5" tall (Not Shown)	2
	70013334	Panhard Bar R-Joint Spacers .625 ID x .620" Long (Not Shown)	4
	70016244	C10 R Joint End Spacer .625 ID x .870" Long	4
	70013279	Spirolox Retaining Ring (Trailing Arm & Panhard R Joint)	1
	70013280	Wavo Wave Spring (Trailing Arm & Panhard R Joint)	1
	70013276	Delrin Snap Over Bushing (Trailing Arm & Panhard R Joint)	1
	70013275	R Joint Center (Trailing Arm & Panhard R Joint)	1
	90001318	R-Joint Rod End - threaded in panhard bar	1





Hardware ListIn the box (Kit# 99010052)

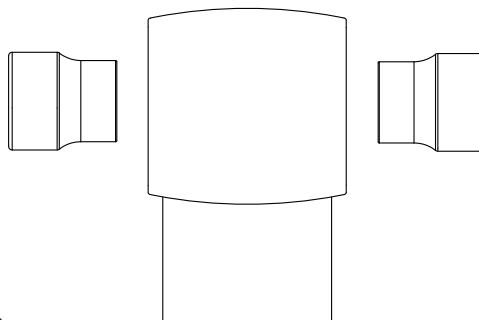
The Hardware Kit contains bags to help aid in selecting the correct hardware for the component being installed. The hardware list shows how the hardware is bagged.

QTY	Part Number	Description	QTY	Part Number	Description
PANHARD MOUNT & PANHARD BAR			"C" NOTCH MOUNTING CONTINUED		
2	99621003	5/8" x 2 3/4" Gr. 8 Bolt	12	99622001	5/8" SAE Nylok Nut
2	99622006	5/8" SAE Nylok Jam Nut	18	99623001	5/8" SAE Flat Washer
6	99431012	7/16" x 1 3/4" USS Bolt	TRAILING ARM TO CROSSMEMBER		
6	99432001	7/16" USS Nylok Nut	2	99621015	5/8" x 4 1/2" SAE Gr.8 Bolt
12	99433002	7/16" SAE Flat Washer	2	99622001	5/8" SAE Gr. 8 Nylok Nut
FRONT CROSSMEMBER MOUNTING			4	99623001	5/8" SAE Flat Washer
10	99431001	7/16" x 1" USS Bolt	SHOCK BRIDGE & SHOCK MOUNTING		
20	99433002	7/16" SAE Flat Washer	4	99501024	1/2" x 3 1/4" USS Bolt
10	99432002	7/16" USS Nylok Nut	4	99502001	1/2" USS Nylok Nut
"C" NOTCH MOUNTING			6	99431002	7/16" x 1 1/4" USS Bolt
6	99431002	7/16" x 1 1/4" USS Bolt	6	99432001	7/16" USS Nylok Nut
12	99431001	7/16" x 1" USS Bolt	12	99433002	7/16" SAE Flat Washer
18	99432001	7/16" USS Nylok Nut	TRAILING ARM U-BOLTS HARDWARE		
36	99433002	7/16" SAE Flat Washer	4	99753004	3/4" SAE Flat Washer
6	99621014	5/8" x 1 1/2" Gr. 8 Bolt	4	99752002	3/4"-16 Hex Nut

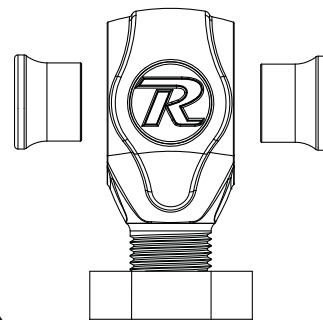
R-JOINT SPACER INSTALLATION

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.

TRAILING ARM R-JOINT



PANHARD 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.



Getting Started.....

Congratulations on your purchase of the Ridetech Rear StrongArm System. This system has been designed to give your truck excellent handling along with a lifetime of enjoyment. Some of the key features of this system: C-notches to give your truck a lowered stance, long panhard bar to reduce the side to side movement of the differential, double tube front trailing arm crossmember allows the exhaust to be ran through it, new trailing arms to replace old deteriorated trailing arms, and the biggest feature of all, it allows the use of Shockwaves or Coilovers.

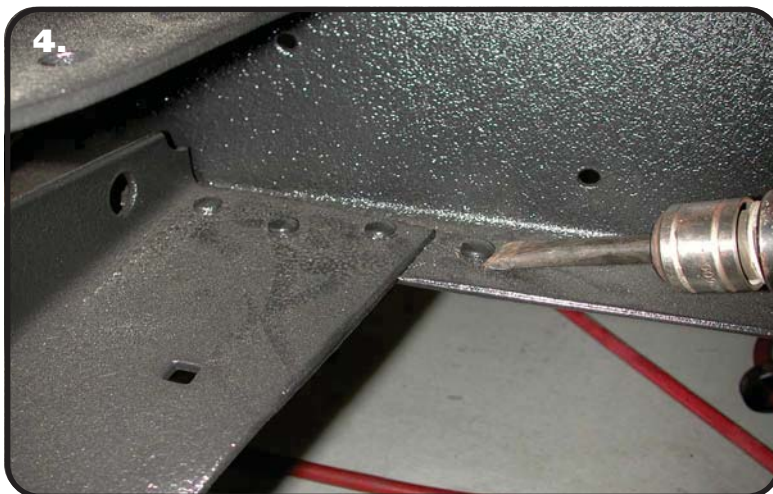
Note: These system is designed for use with the Ridetech Shockwaves or CoilOvers and the MuscleBar swaybar. **The factory shocks and springs or the factory sway bar will not fit these arms.**

Note: This kit is designed for trucks with the factory coilspring setup. It can be used on leaf spring trucks if a Coil spring differential is used or the trailing arm mounts are added to the leaf spring differential.

1. Raise the vehicle to a safe and comfortable working height. Let the rear suspension hang freely.
2. Remove the bed.
3. Raise the axle a couple inches and support it so that it cannot rotate. Remove the trailing arms, coil springs, shock absorbers, and panhard bar. Refer to the factory service manual for proper disassembly procedures.

Note: This kit is designed for use with a 1-piece drive shaft.

Disassembly and Front Crossmember Installation

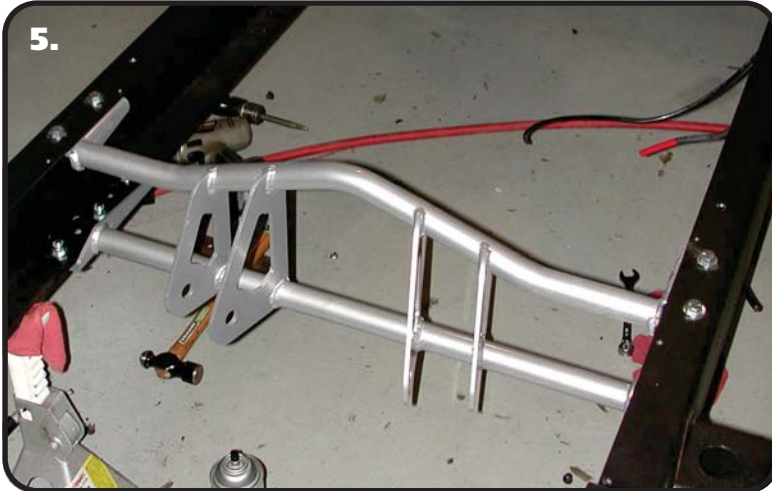


4. The factory trailing arm frame cross member will be replaced with the tubular one supplied. To remove the factory cross member, the rivets must be removed. The easiest method is to chisel them off with an air hammer. Then use a hammer and punch to drive the rivets out.

Note: On each side there is one rivet in front of the cross member and one behind that must also be removed for the new cross member.



"C" Notch Installation



5. Install the new cross member with the trailing arm flanges towards the rear. The cross member is bolted to the bottom side of the frame rails using 10 - 7/16" x 1" bolts, 10 - 7/16" Nylok nuts and 20 - 7/16" flat washers. It may be necessary to enlarge some of the holes with a 7/16" bit.



6. The factory upper shock cross member must also be removed to allow for the new upper shock cross member and "C" Notch.



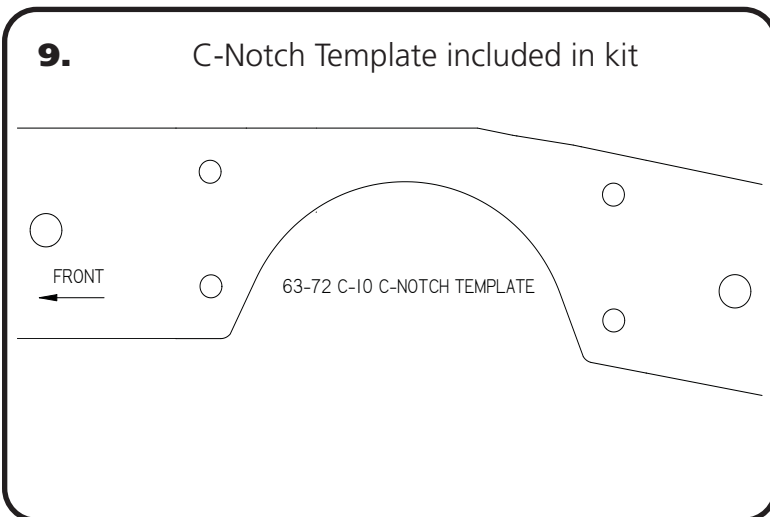
7. On the driver side of the rear frame cross member; these two rivets must be removed before installing the "C" notch. Also, remove the factory panhard mount.



"C" Notch Installation



8. The lower rear rivet on this reinforcement plate must also be removed to mount the notch.



9. Use the supplied "C" Notch template to mark out the frame for cutting. Before cutting out the frame, support the frame in front of and behind the "C" Notch area. We suggest doing one side at a time. The "C" Notch template has an arrow pointing to the front of the truck. Use the 5/8" holes to locate the template of the frame.

Note: We have seen trucks with only (1) 5/8" hole. If your truck only has one hole, line it up and then, line up the other edge of the template with the frame rail.



10. The original shock crossmember holes will line up with the holes in the "C" Notch. You can use these holes to double check your Notch placement.



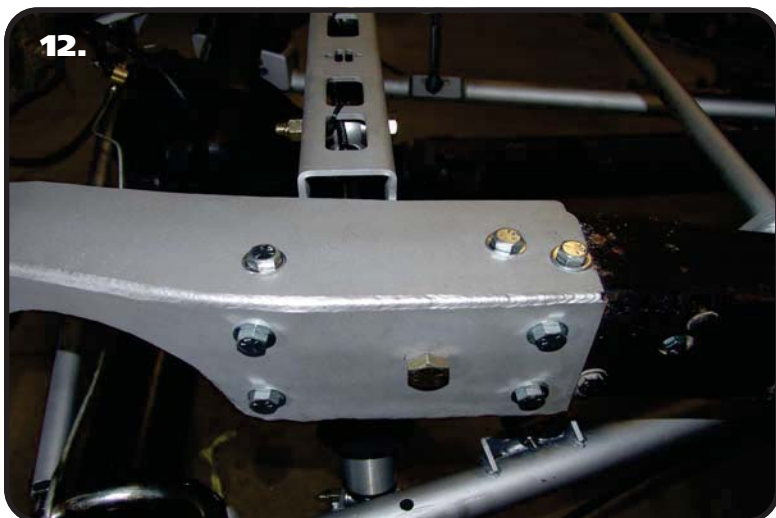
Installing "C" Notches and Shock Bridge

11.



11. Slide the "C" Notch over the frame rail. On some trucks there is just one 5/8" hole, on others there are two holes. Insert 5/8" x 1 1/2" bolt, Nylok nut and flat washer in each hole to secure the notch. The factory rivet holes will need to be drilled out with a 7/16" drill bit. Use the "C" Notch as a template to drill the remaining holes. Attach the c-notch using 7/16" x 1" bolts, Nylok nuts, and flat washers. Leave the front (3) bolts out of the top of both notches and the (2) bottom rear bolts of the drivers side out for the moment.

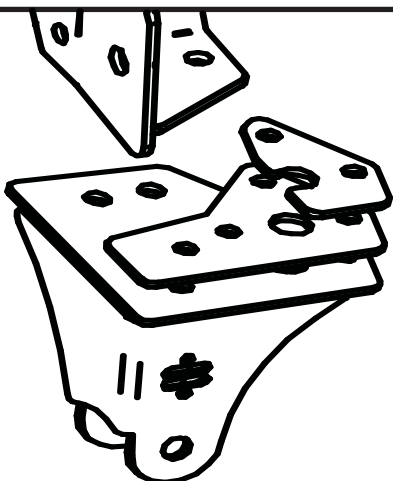
12.



12. Once both "C" Notches are in place bolt in the upper shock bridge. The new upper shock bridge uses the (3) holes in the top of the "C" Notch. The bridge is offset to the rear of the truck, it goes from "C" Notch to "C" notch under neath the top lip of the frame sandwiching the frame between it and the "C" Notch. It is bolted in place using (6) 7/16" x 1 1/4 bolts, Nylok nuts and flat washers.

IF YOU HAVE A WOODEN BED FLOOR, YOU WILL NEED KIT 11337299 TO SPACE THE SHOCK CROSSMEMBER DOWN. THE SPACERS WILL NEED TO BE BOLTED IN BETWEEN THE CROSSMEMBER AND FRAME.

13.



Note: There are four holes on each side of the bridge; only 3 will be used.

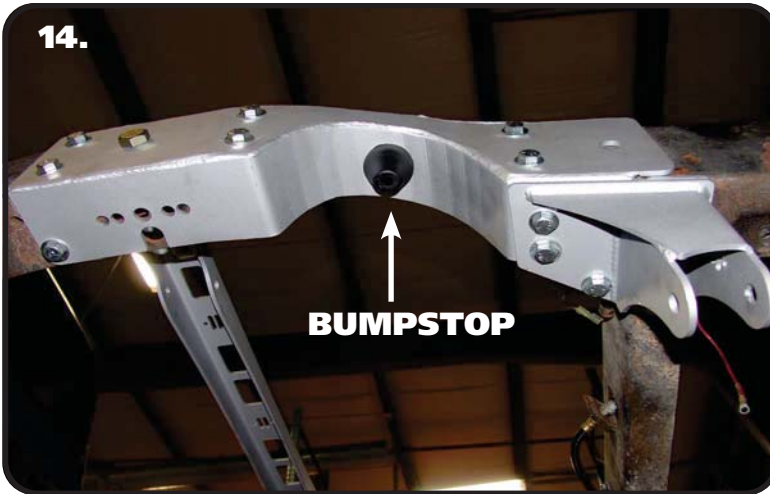
13. Bolt the new panhard mount to the bottom side of the frame on the drivers side. The panhard mount uses (2) spacers to mount it properly (See diagram #13 for reference). The new panhard mount is bolted in place using (6) 7/16" x 1 3/4" bolts, Nylok nuts and flat washers.

Torque the 7/16" hardware to 50 ft-lbs.



Installing StrongArms and Panhard Bar

14.



14. Install the bumpstops into the "C" Notch using a 3/8" nut and flat washer.

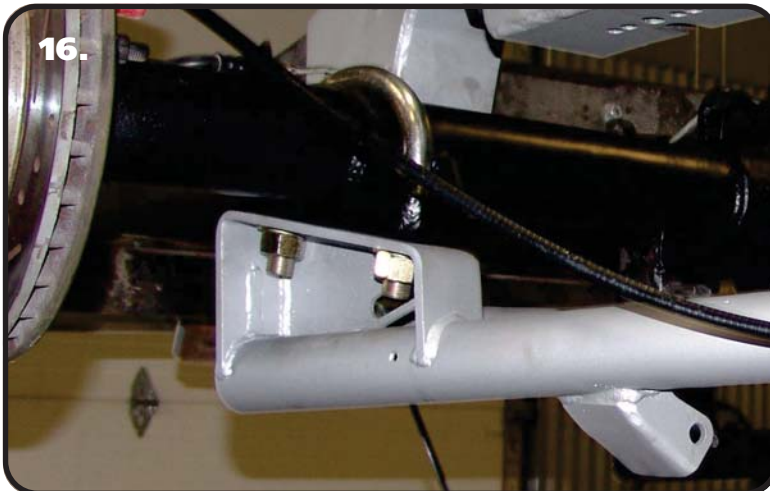
15.



15. The StrongArms are a direct replacement of the factory trailing arms and will bolt to the new tubular cross member using two 5/8" x 4 1/2" Bolts, 4 Flat Washers, & 2 Nylok nuts. Insert the R Joint Spacers into each side of the R Joint. These bushings are Delrin and do NOT need lubricating. Torque to 115 ft-lbs.

Note: There is a driver and passenger side arm. The shock mount will point towards the center of the vehicle. The Panhard mount is on the Passenger StrongArm.

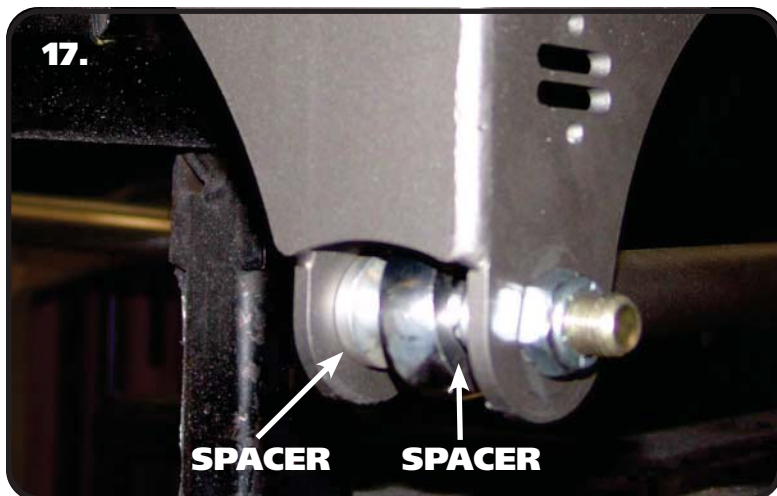
16.



16. Bolt the other end of the StrongArm to the axle using the new U-bolts supplied. Torque the u-bolts hardware 220-320 ft-lbs.

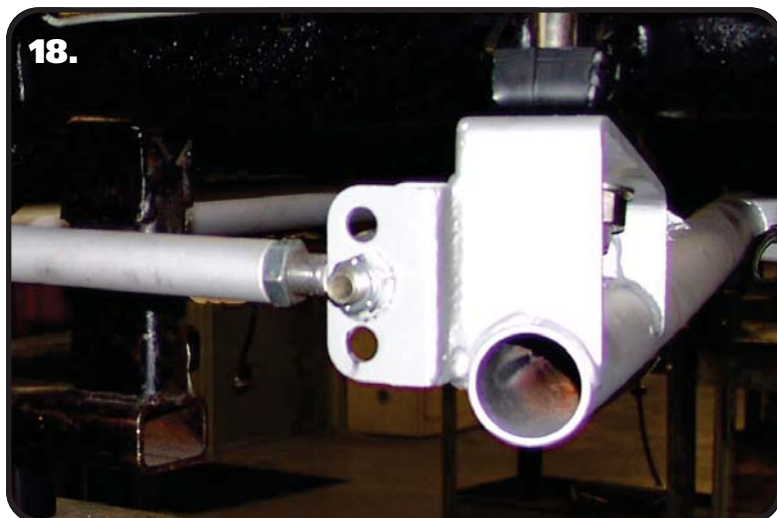


Installing Panhard Bar and Shockwaves/Coilovers

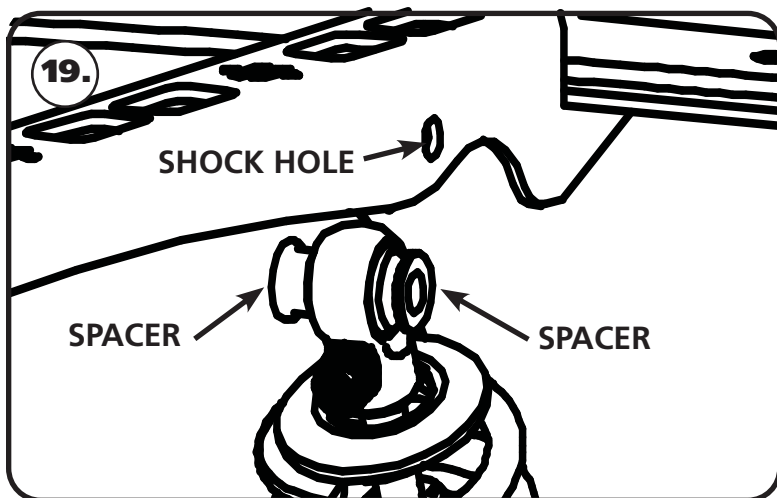


17. Install the Panhard bar into the frame bracket using a 70013334 Spacer in each side of the R-Joint end. The Panhard bar is attached using 5/8" x 2 3/4" bolt and a jam Nylok nut.

Note: The panhard bar is set at 34 5/8" before it is shipped.



18. Install the other end of the Panhard bar into the bracket on the Passenger StrongArm using a 70013334 Spacer in each side of the R-Joint end. The **center** hole is the standard hole. The goal is to keep the panhard bar level as possible at **ride** height. If you decide to run the system higher or lower than the designed ride height the other 2 holes can be used to help keep the panhard bar level at **ride** height. Torque the 5/8" hardware to 45 ft-lbs.

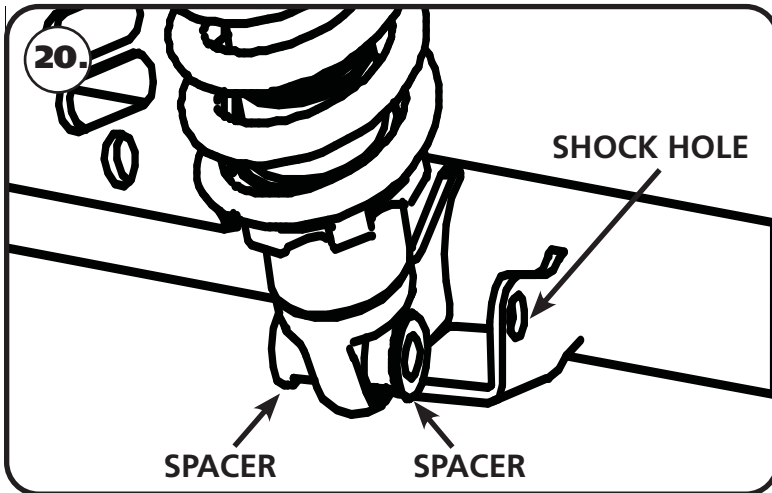


19. Install a spacer on each side of the upper Shockwave/Coilover. Slide the assembly into the upper bridge from the bottom side. If your shock has an adjuster knob position it so that the knob points toward the center of the truck. Line up the hole in the spacers with the hole in the upper shock bridge and insert 1/2" x 3 1/4" bolt and install 1/2" Nylok nut.

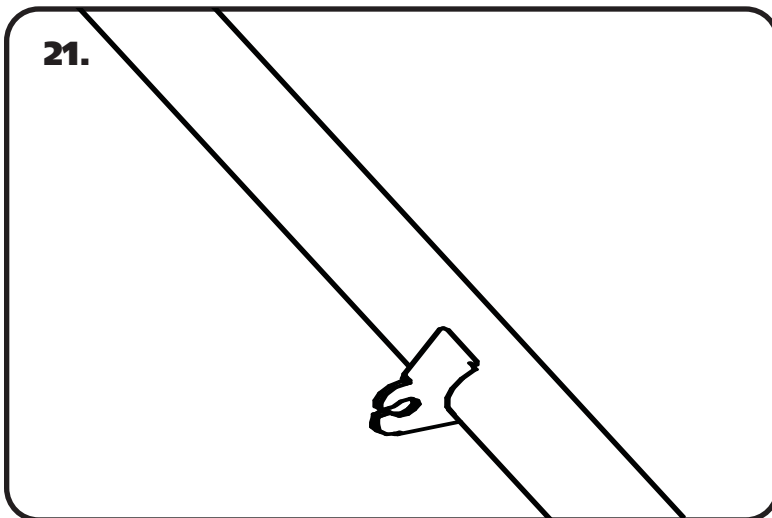
Note: If installing Shockwaves and you want to locate the air fitting in a different location, the air spring assembly can be rotated on the shock by grabbing the shock and air spring assembly by hand and spinning the shock in the air spring assembly.



Finishing



20. Install a spacer on each side of the lower Shockwave/Coilover. Slide the shock with the spacers installed into the mount on the lower StrongArm. You may need to jack the rearend up to line up the holes in the bushing with the 1/2" hole in the shock mounts and hold it in place while you install the 1/2" x 3 1/4" bolt and 1/2" Nylok nut. Tighten the upper and lower shock bolts to 75 ft-lbs.



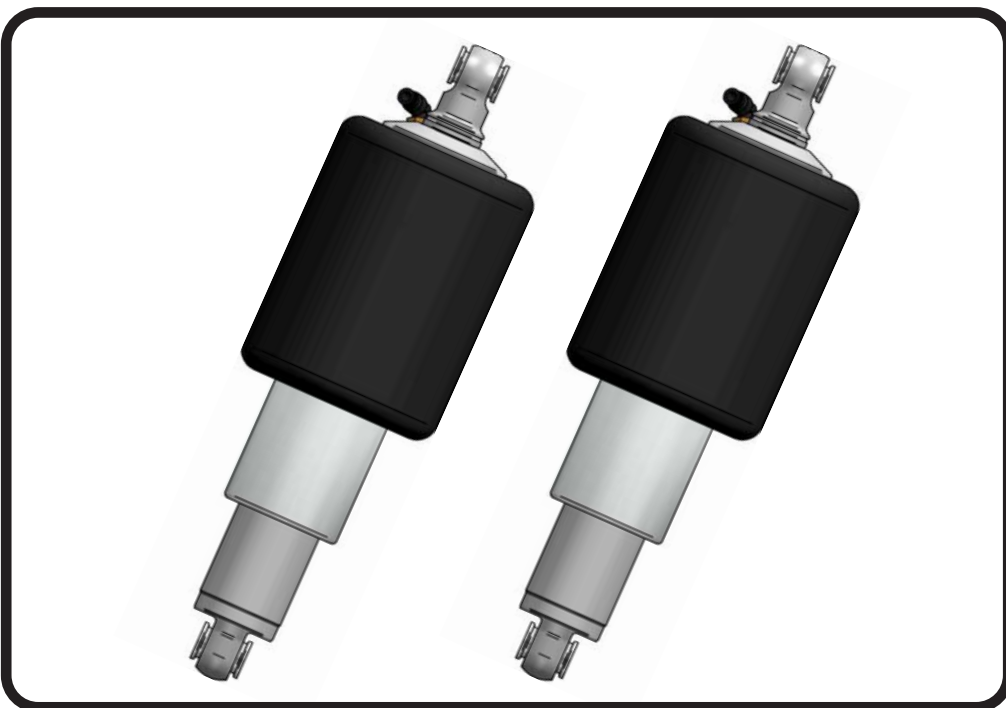
21. The StrongArms have a tab for the emergency brake cable. Install the cable into the tabs and hook the cables back up.

22. Tighten all fasteners. If you are going to install the Ridetech MuscleBar, now is a good time to do it. Reinstall the bed and set the truck back on the ground.

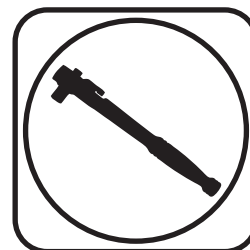
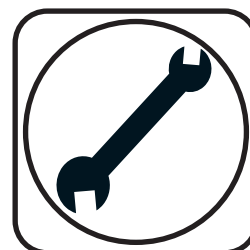
23. Set ride height on the truck. The ride height of the Shockwave/Coilover is approximately 14 1/2". If you are using Shockwaves, this is done by changing the air pressure in the Shockwaves. If you are using Coilovers, the ride height is done by using the adjuster nut for the coil spring. The coil spring on the Coilover will have some preload in the spring to get ride height, this is normal.



Part # 21150801 - 5.2" Stroke HQ Series Shockwave



Recommended Tools



8000 Series Bellow, Eye/Eye 5.2" Shock Installation Instructions

Table of contents

Page 30.....	Included Components
Page 31.....	Notes and Care of Your Shockwave
Page 32.....	Shock Adjustment

ShockWave Dimensions:

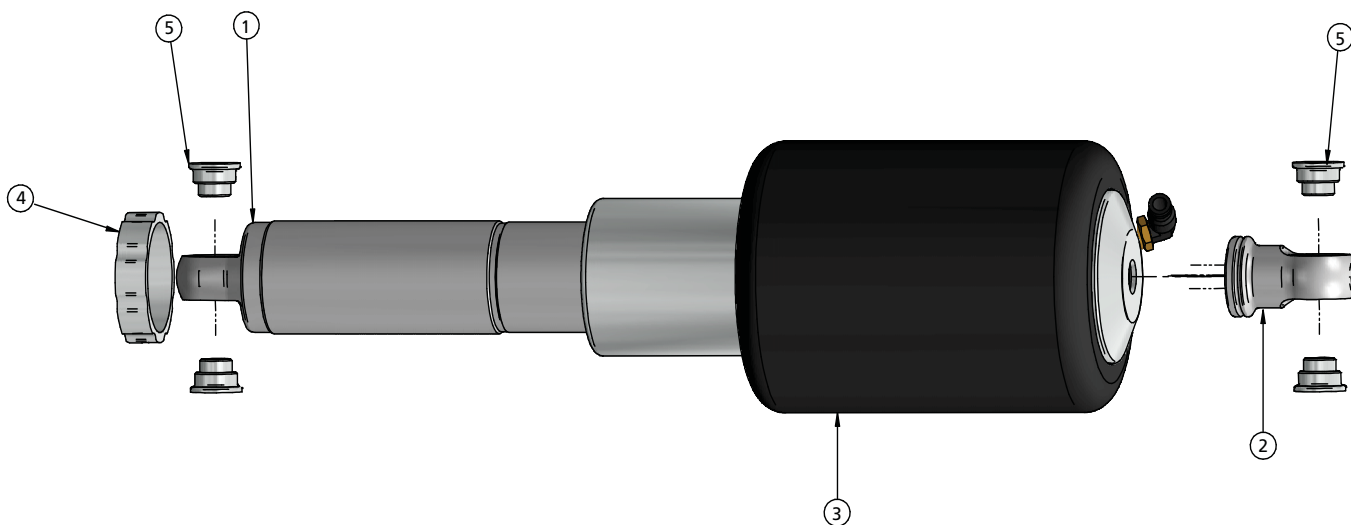
Center of bearing to Center of bearing:

Compressed:	11.85"
Ride Height:	14.60"
Extended:	16.42"



Major ComponentsIn the box

Item #	Part #	Description	QTY
1	982-10-805	5.2" Stroke HQ Series Shock	2
2	815-05-022-KIT	1.7" Shock Eyelet	2
3	24090899	8000 Series, 5" Diameter AirSpring	2
4	234-00-153	AirSpring Locking Ring (Installed on Shock)	2
5	90002062	1/2" ID Shock Bearing Spacers - included with rear StrongArm kit	4
	90001994	5/8" ID Bearing (installed in shock and eyelet)	4
	90001995	Bearing Snap Ring (installed in shock and eyelet)	8



BEARING SPACERS (90002062) ARE INCLUDED WITH THE REAR STRONGARM KIT.

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



Notes and Care of your Shockwaves

NOTES:

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

! WARNING: 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.

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 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.



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.

You must first begin at the ZERO setting, then set the shock to a medium setting of 12.



-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 12 clicks. This sets the shock at 12. (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.