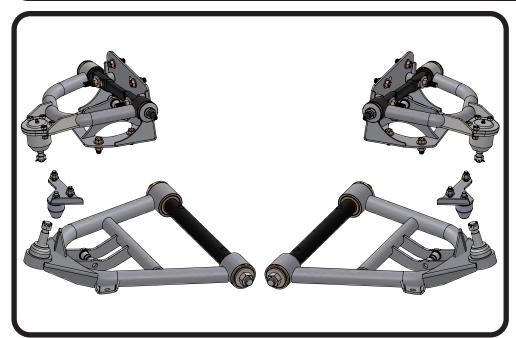




C10 StrongArms

Part # 11342699(63-70)/11352699(71-72) /11362699(73-87)



Recommended Tools





1963-1987 C-10 StrongArms Installation Instructions



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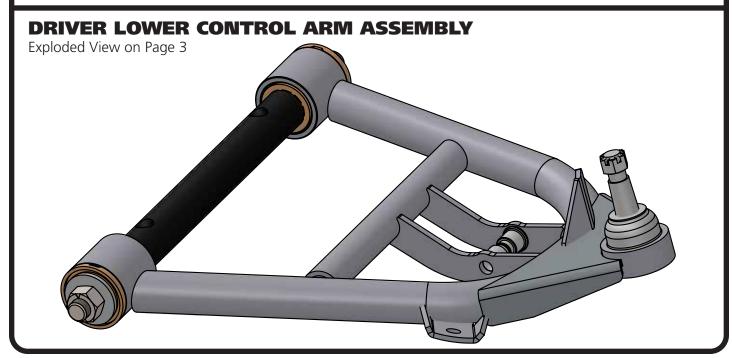






Major Components AssembledIn the box

DRIVER UPPER CONTROL ARM ASSEMBLY Exploded View on Page 4

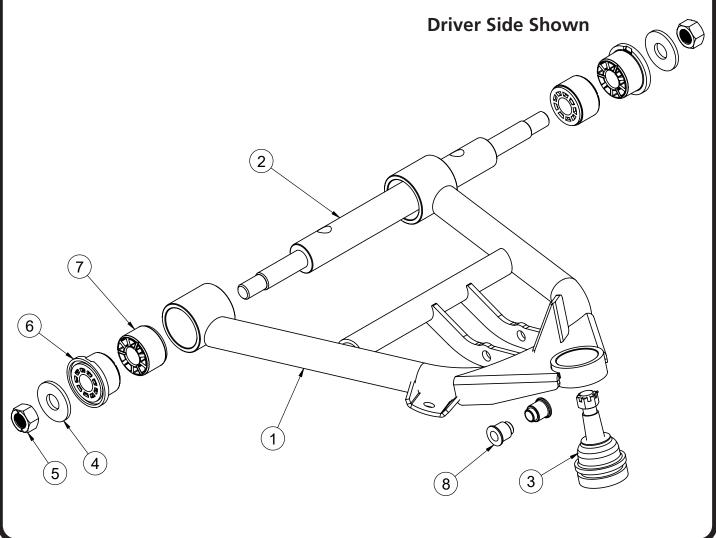






Lower Control Arm ComponentsIn the box

Item #	Part Number	Description	QTY
1	90002384	Driver Lower Control Arm (Shown)	1
1	90002385	Passenger Lower Control Arm	1
2	90002430	Lower Control Arm Cross Shaft	2
3	90000912/90000909	(63-70/71-87) - Lower Ball Joint Assembly	2
4	99753001	Flat Washer - included in hardware kit	4
5	99752005	3/4"-16 Hex Nut - included in hardware kit	4
6	70010755	Outer Delrin Bushing - with Ledge	4
7	70011465	Inner Delrin Bushing - no Ledge	4
8	90002062	Shock Bearing Spacers	4

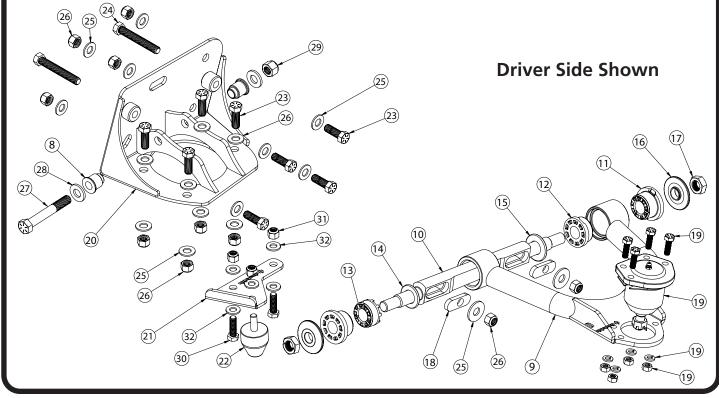






Upper Control Arm ComponentsIn the box

Item #	Part Number	Description	QTY
8	90002062	Shock Bearing Spacers	4
9	90002437	Driver Upper Control Arm (Shown)	1
9	90002438	Passenger Upper Control Arm	1
10	90003375	Caster Adjustable Upper Control Arm Shaft	2
11	70010759	Outer Delrin Bushing	4
12	70010827	Inner Delrin Bushing - with Ledge	2
13	70010826	Inner Delrin Bushing - No Ledge	2
14	99183002	M18 Flat Washer	2
15	99753007	3/4" x 1 3/4" Flat Washer	2
16	90002737	Delrin Bushing T-Washer	4
17	99622005	5/8 - 18 Locknut (included with 90000914)	4
18	70010882	Caster Slug	4
19	90000911 Kit/90000902 Kit/90000910 Kit	(63-70/71-72/73-87) - Upper Ball Joint Assembly	2
20	90002386	Driver Upper Control Arm Mount	1
20	90002387	Passenger Upper Control Arm Mount (Not Shown)	1
21	90000726	Driver Bumpstop Plate	1
21	90000727	Passenger Bumpstop Plate (Not Shown)	1
22	70013323	Bumpstop	2







Hardware ListIn the box Kit #99010079

Item #	Part Number	Description	Usage	QTY
23	99431002	7/16"-14x1 1/4" Hex Bolt Upper Control Arm Mount		16
24	99431003	7/16"-14x3" Hex Bolt	Upper Control Arm to Mount	4
25	99433002	7/16" Flat Washer	Upper Mount to Frame/Control Arm to Mount	20
26	99432001	7/16"-14 Nylok Nut	Upper Mount to Frame/Control Arm to Mount	20
27	99501024	1/2"-13x3 1/2" Hex Bolt	Coilover to Arm and Upper Mount	4
28	99503014	1/2" SAE Flat Washer	Coilover to Arm and Upper Mount	8
29	99502001	1/2"-13 Nylok Nut	Coilover to Arm and Upper Mount	4
30	99371006	3/8"-16x1 1/2" Hex Bolt	Bumpstop Mount to Frame	4
31	99372002	3/8"-16 Nylok Nut	Bumpstop & Bumpstop Mount to Frame	6
32	99373003	3/8" SAE Flat Washer	Bumpstop & Bumpstop Mount to Frame	10

Getting Started.....

Congratulations on your purchase of the Ridetech StrongArm System. These arms have been designed to give your truck excellent handling along with a lifetime of enjoyment. Some of the key features of these StrongArms: Ball joint angles have been optimized for the lowered ride height, Delrin bushings are used for no 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. Upper caster adjustable cross shaft is designed to allow you to run maximum caster angles with minimal shims.

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

Note: The arms in this kit are designed to be used with 63-87 C-10 Spindles. The 63-87 C-10's have similar control arms through the years, but the ball joints used were different. The year breaks are as follows: 63-70, 71-72, & 73-87. Be sure to use the correct ball joint for the year of spindle you are using.

Balljoints:	Ridetech#	Proforged#	Ridetech#	Proforged#
63-70:	Upper-90000911	101-10037	Lower-90000912	101-10036
71-72:	Upper-90000902	101-10044	Lower-90000909	101-10040
73-87:	Upper-90000910	101-10046	Lower-90000909	101-10040

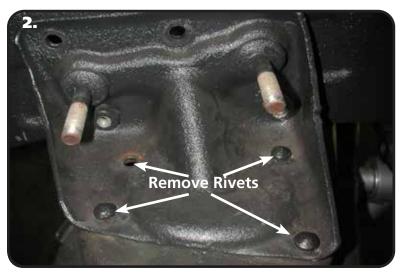
Installation

1. Remove the entire front suspension from the truck leaving the tie rods connected to the center draglink. Refer to the factory service manual for disassembly procedure. Your original spindle will be reused with this setup, set them to the side for the time being. The original U-bolts for the lower control arms will be reused to fasten your new StrongArms to the frame.





Installing Upper Control Arm Mount



2. The factory upper control arm mount will need to be removed from the frame. There are 4 bolts attaching it to the frame rail with 4 rivets attaching it to the crossmember. There are several methods that can be used to remove the rivets from the crossmember. One way is to cut a "+" in the head of the rivet and chisel the 4 pieces of the head off the rivet, then knock the rivet out of the frame with a hammer and punch.



3. The top side of the crossmember will also need trimmed for CoilOver clearance. **A TEMPLATE IS PROVIDED ON PAGE 13**. Cut out the holes in the template and place on top of the crossmember. Trace the template onto the crossmember and cut out the center portion. The Template is a guide to the minimum amount that needs to be cut out. Due to variations in the crossmembers, you may need to trim more to get the upper mount to sit flat on top of the crossmember.

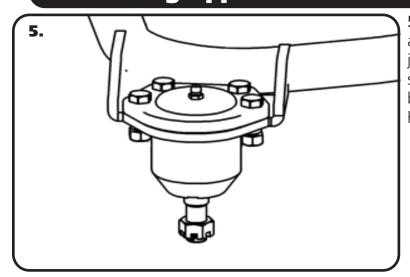


4. Before installing the mount, install the 7/16" x 3" bolts into the upper mount from the back side with the threads pointing towards the wheel side of the bracket. Set the upper control arm mount into position on the frame. The upper brackets are marked D & P for driver & passenger. The brackets get bolted to the frame with 7/16" x 1 1/4" hex bolts and Nylok nuts. The bracket also gets a 7/16" washer under the bolt and under the nut. Due to variances in the frames it may be necessary to drill out the front lower hole. Torque the 7/16" hardware to 50 ftlbs.

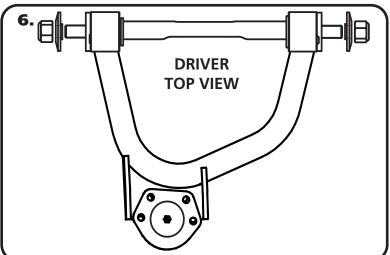




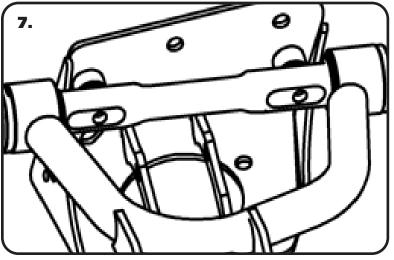
Installing Upper Control Arm Mount and Control Arm



5. 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 ball joint plate point up. Torque the mounting hardware to 20 ftlbs.



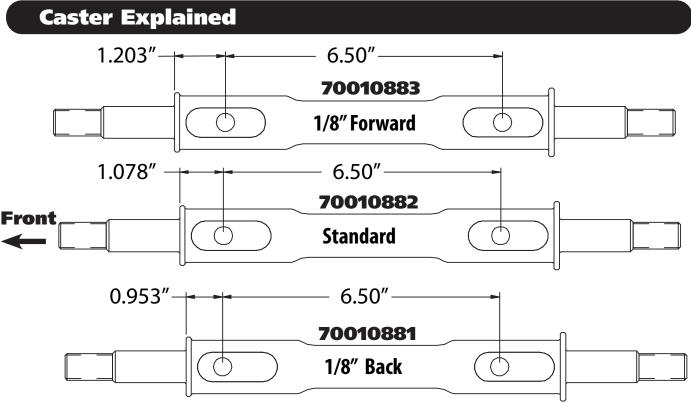
6. The driver side arm is shown in **Figure "6"**. The Ball Joint located on the arm to the front of the truck. Install the T-Washers and 5/8"-18 Lock Nuts using **Figure "6"** as a reference. These can be tightened after installing the control arms on the truck.



7. Install the caster slugs into the cross shaft. The long side of the caster slug goes to the **rear** of the truck. Use the diagram on the next page as a reference for installing the caster slugs. The cross shaft is attached to the truck using a 7/16" USS Flat Washer & 7/16" Nylok Nut. The drivers side is shown in **Figure "8"**. Now tighten the 5/18"-18 locknuts on the cross shaft. This nut gets snugged up. You want the suspension to be able to move freely.







These StrongArms 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 supplied in the kit are standard (70010882). 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 slugs can be purchased from Ridetech or your Ridetech dealer.

1/8" Forward = 70010883 1/8" Back = 70010881

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.

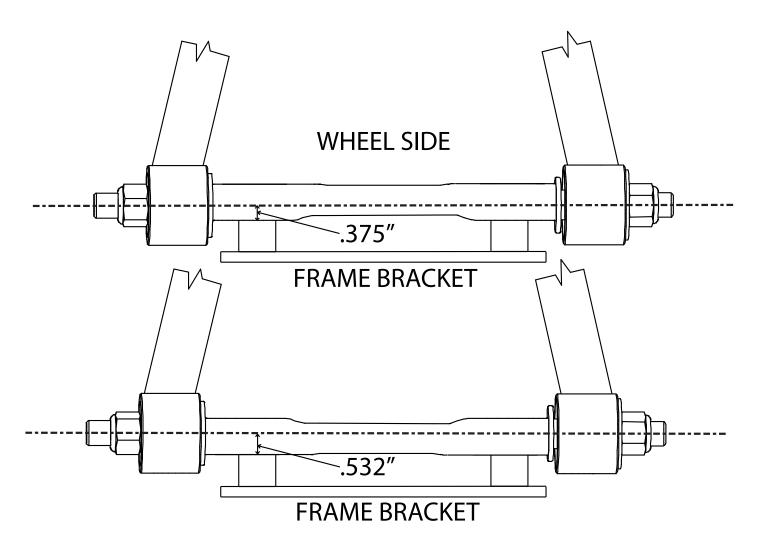
Caster is measured in degrees by using a caster gauge. If the imaginary line described above tilts towards the back of the vehicle at the top, then you have positive caster. If the imaginary line tilts forward then you have negative caster.

Positive caster provides the directional stability in your vehicle. 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 will cause the vehicle to wander down the highway





Offset Upper Control Arm Shaft



The cross shaft that is used in the upper control arms 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 the Icon faces simply spin the cross shaft in the control arm.

If you are after a **Street Alignment** bolt the upper control arm to the frame mount with the arm offset to the outside of the truck. The Ridetech Icon will be facing the wheel.

If a more aggressive **Track or Autocross** alignment is desired, bolt the control arm to the frame bracket with the arm offset to the inside of the truck. The Ridetech Icon will be facing the frame rail.



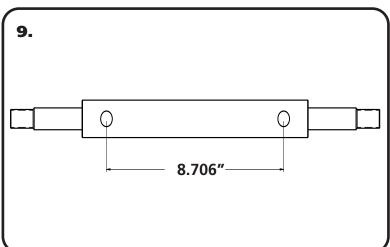


Installing Upper and Lower Control Arm



8. 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. Bolt the control arm to the frame with the sway bar tab to the front of the truck.

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



9. 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 8**, 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.

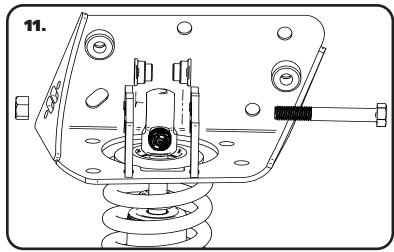


10. Image 10 is an example of the lower control arm bolted to the crossmember. Install 3/4" ID Washer on to each end of the cross shaft against the bushing. Then install the 3/4"-16 lock nut. Snug the nut up against the washer. You want the suspension to move freely through its travel.

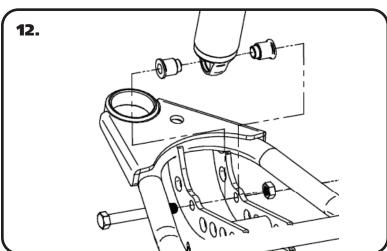




Installing CoilOver Assembly



11. Install a spacer on each side of the upper Coilover. The small outside diamter of the spacer will insert into the shock bearing. Push the spacer in until it bottoms out in the bearing. Slide the assembly into the upper mount from the bottom side. If your shock has an adjuster knob position it to the wheel side of the mount. Line up the hole in the spacers with the hole in the strap and insert 1/2" x 3 1/2" bolt and install 1/2" Nylok nut.



12. Install a spacer on each side of the lower Coilover. The small outside diameter of the spacer will insert into the shock bearing. Push the spacer in until it bottoms out in the bearing. Slide the shock with the spacers installed into the lower control arm. Raise the arm up to line up the holes in the bushing with the 1/2" hole in the control arm straps and hold it in place while you install the 1/2" x 3 1/2" bolt and 1/2" Nylok nut. Tighten the upper and lower shock bolts to 75 ftlbs.



13. Depending on your wheel size, you may need an external bumpstop to keep the tire from hitting the inner fender. The bump stop plate attaches to the wheel side of the crossmember. The bent tab goes against the back side of the crossmember with the holes as far out as you can drill them. Use the mount as a template to drill the holes and attach mount with the remaining 3/8 x 1 1/2" bolts washers and Nylok. After mounting the plate, you can attach the bumpstop. Torque the 3/8" hardware to 30 ftlbs.





Finishing & Alignment

14. 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:

Upper: Torque to 50 ftlbs and then tighten nut to align cotter pin hole not exceeding 90 ftlbs. Lower: Torque to 90 ftlbs and then tighten nut to align cotter pin hole not to exceeding 130 ftlbs.

Suggested Alignment Specs:

Camber: Street: -.5 degrees

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

