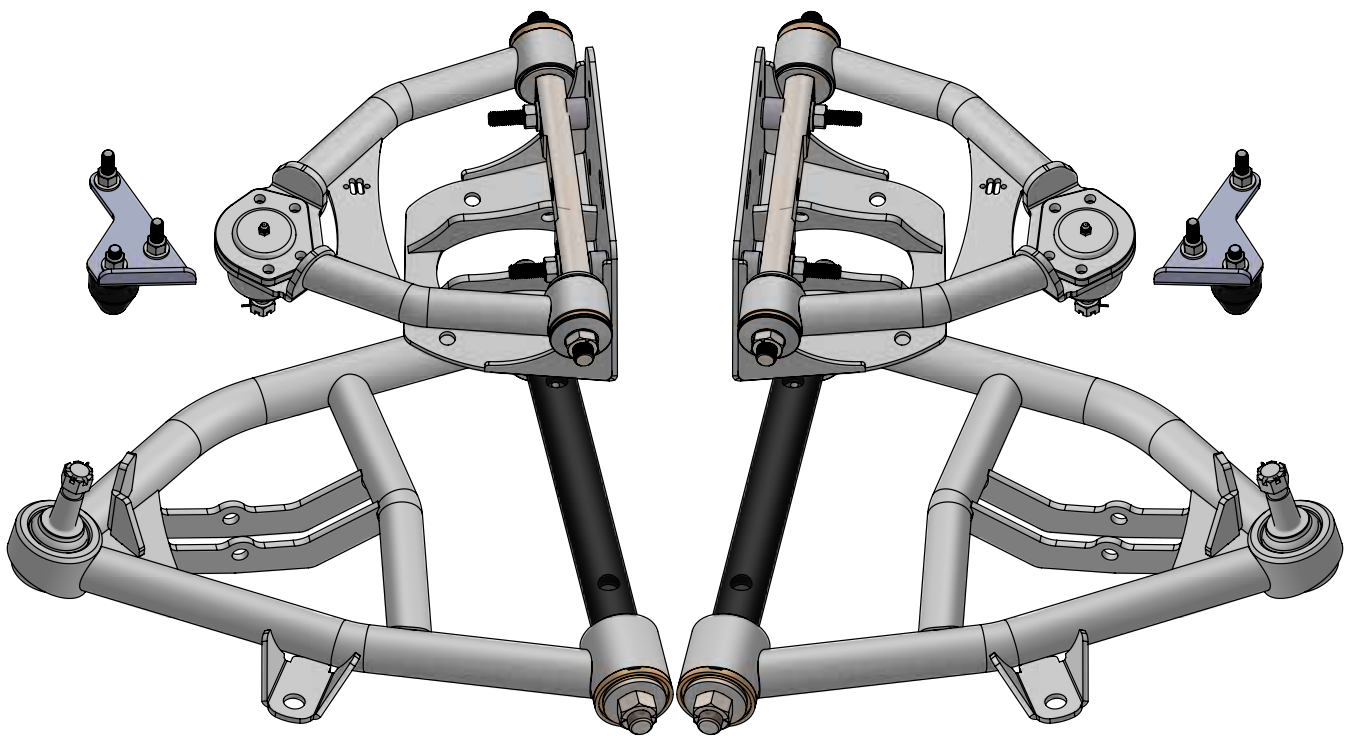




**INSTALLATION
INSTRUCTIONS**

Part # 11342699 / 11352699 / 11362699



**Front Coilover StrongArm System
1963-1987 C10**

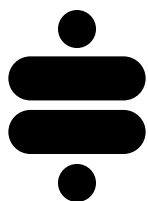
NOTE: These control arms are designed to be used with ridetech coilovers and Musclebar sway bar.

The factory shocks, springs and sway bar are not compatible.

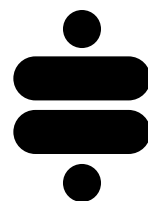


www.ridetech.com
812.482.2932





**Please Read And Understand All Instructions
And Warnings Prior To The Installation Of
This Product.**



THANK YOU

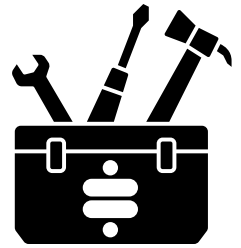
Congratulations on your new ridetech product! It's an honor that you've selected the ridetech brand to upgrade your ride. Our products are developed around quality and performance without compromise. We're confident you'll have many years (and miles) of pure driving enjoyment.
Thank you for choosing ridetech!

Road Map

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RECOMMENDED TOOLS



Jack Stands or Lift

Drill

Hammer

Tape Measure

Torque Wrench

Cut-Off Wheel/Tool

SAE Socket/Wrench Set



SAFETY FIRST



Always use jack stands (if not using a lift). Never rely solely on a hydraulic jack to support the vehicle.

Always raise the vehicle on a clean and level surface. Use wheel chocks when necessary.

Be sure to wear proper Personal Protective Equipment (PPE) when welding.

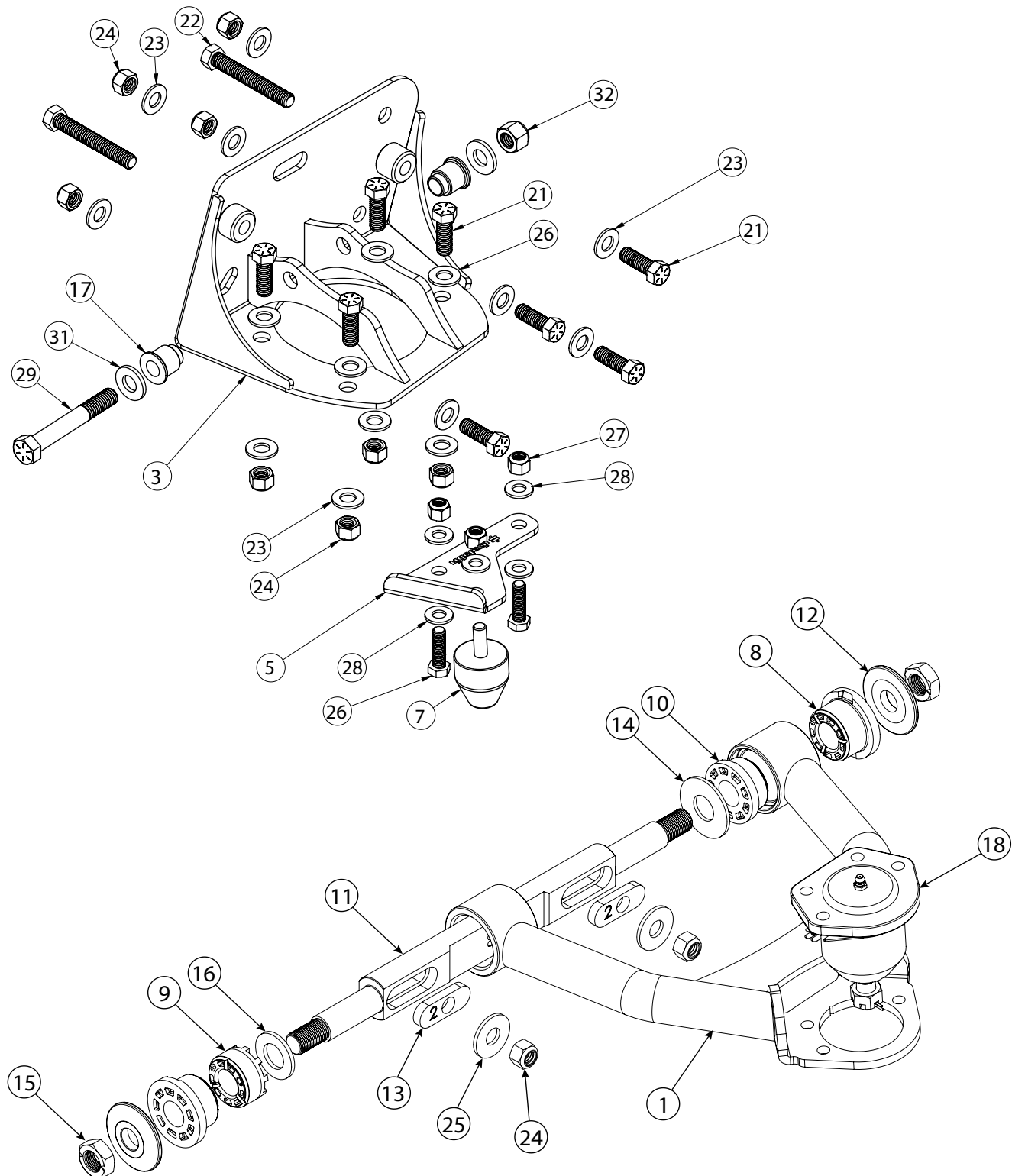
Always wear eye protection (Z87.1) when operating power tools.

EXPLODED VIEWS AND PARTS LISTING

ITEM #	PART #	DESCRIPTION	QTY
1	90003638	63-87 C10 UCA DRIVER (Shown)	1
2	90003639	63-87 C10 UCA PASSENGER	1
3	90002386	63-87 C-10 Upper CoilOver Mount - Driver (Shown)	1
4	90002387	63-87 C-10 Upper CoilOver Mount - Passenger	1
5	90000726	63-87 C-10 Bump Stop Plate, Driver (Shown)	1
6	90000727	63-87 C-10 Bump Stop Plate, Passenger	1
7	70013323	DAY2061 Medium Bumpstop	2
8	70010759	Delrin Bushing, 2.0" Large OD	4
9	70010826	Delrin Bushing, 1.5" Large OD	2
10	70010827	Delrin Bushing, 1.750" Large OD	2
11	90003375	Caster Adjustable Cross Shaft	2
12	90002737	Alum Washer - Upper Strong Arm	4
13	70010882	Caster Slug, F/A Body	4
14	90003934	WASHER; 1.70 OD	2
15	99622005	5/8-18 THIN TOP LCKNUT	4
16	90003933	WASHER; 1.45 OD	2
17	90002062	Shock Bearing Spacer	4
18	90000911	63-70 Upper Ball Joint Assembly	2
	90000902	71-72 Upper Ball Joint Assembly	
	90000910	73-87 Upper Ball Joint Assembly	

Hardware Kit: 99010079			
Item #	Part #	Description	QTY
LOWER CONTROL ARM CROSS SHAFT			
19	99753001	3/4" Flat Washer	4
20	99752005	3/4 -16 TOP LOCKNUT	4
UPPER CONTROL ARM MOUNT			
21	99431021	7/16"-14 X 1 1/4" BOLT GR8	16
22	99431025	7/16"-14 X 3" BOLT GR8	4
23	99433005	7/16" SAE FLAT WASHER GR8	32
24	99432010	7/16"-14 NYLOK NUT GR8	20
25	99433004	7/16" USS Flat Washer	4
BUMPSTOP TO FRAME			
26	99371004	3/8"-16 X 1 1/4" BOLT	4
27	99372002	3/8"-16 NYLOK NUT	6
28	99373003	3/8" SAE FLAT WASHER	10
COILOVER MOUNTING			
29	99501005	1/2"-13 X 3 1/2" BOLT GR8	2
30	99501064	1/2"-13 X 2 3/4" BOLT GR8	2
31	99503014	1/2" SAE FLAT WASHER	8
32	99502009	1/2"-13 NYLOK NUT GR8	4

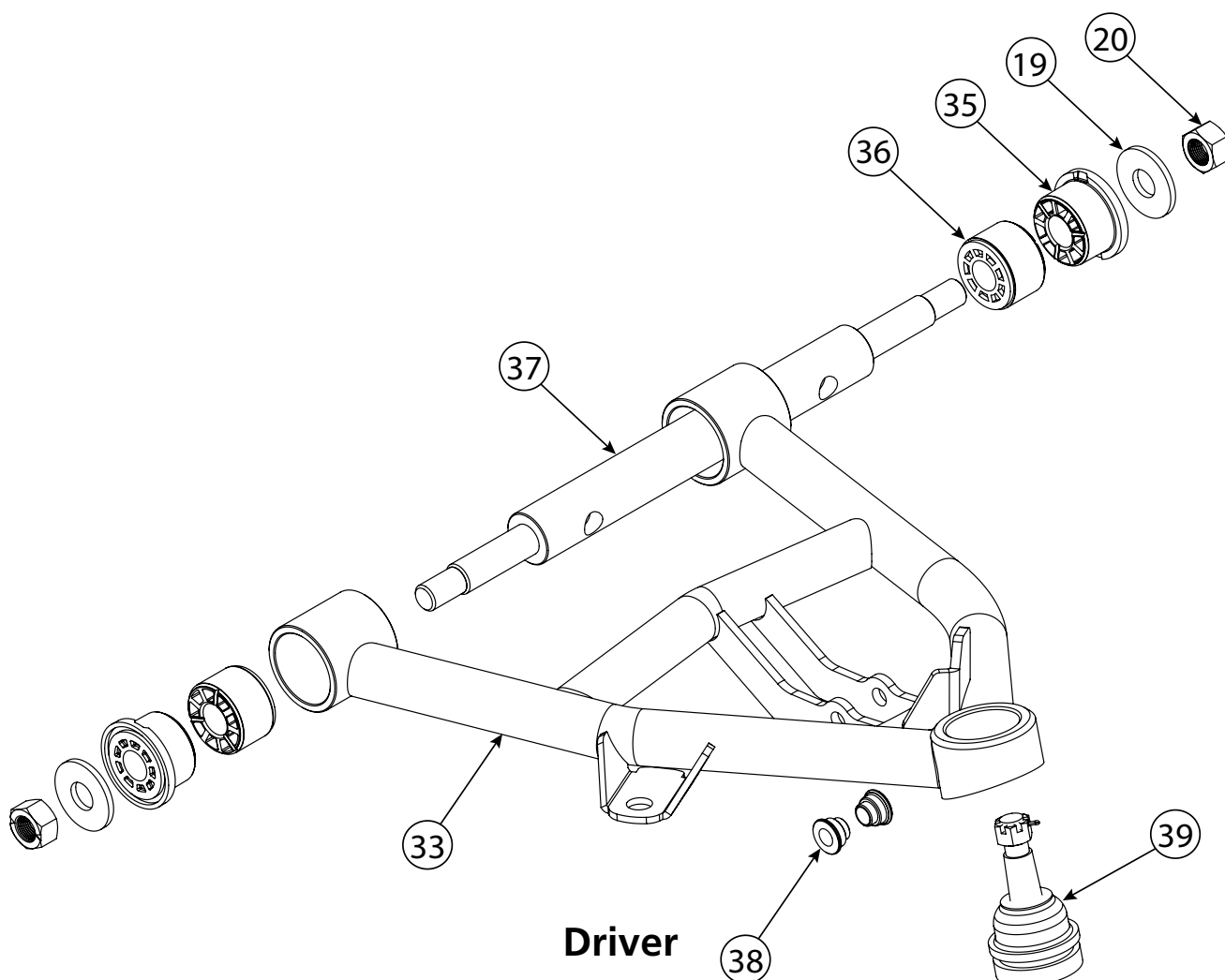
PARTS LISTING AND EXPLODED VIEWS



Driver

EXPLODED VIEWS AND PARTS LISTING

ITEM #	PART #	DESCRIPTION	QTY
33	90003641	63-87 C10 COILOVER LCA DRIVER (SHOWN)	1
34	90003642	63-87 C10 COILOVER LCA PASSENGER	1
35	70010755	Delrin Bushing, 2.5" Large OD	4
36	70011465	Delrin Bushing, 2.050 OD	4
37	90002430	CROSS SHAFT; C-10 LCA	2
38	90002043	Aluminum Spacer, .500" ID	4
39	90000912	63-70 Lower Ball Joint Assembly	2
	90000909	71-72 Lower Ball Joint Assembly	
	90000909	73-87 Lower Ball Joint Assembly	



Disassembly

NOTE: 63-87 C-10's have similar control arms through the year range, but with varying ball joints. See the table below for the ball joint part numbers and their corresponding year ranges. Be sure to use the correct ball joint for the year range of the spindle you are using.

C-10 BALL JOINTS		
Year Range	Upper	Lower
63-70	90000911	90000912
71-72	90000902	90000909
73-87	90000910	90000909

1. Raise the vehicle to a safe and comfortable working height and remove the entire front suspension. Refer to the factory service manual for the correct disassembly procedure. You may keep the tie rods connected to the center draglink.

Keep the following items as they will be reused upon reassembly:

Spindles

U-Bolts (for attaching lower control arms)

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, along with 4 rivets attaching it to the crossmember.

There are several methods that can be used to remove the rivets from the crossmember. We chose 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.



Figure 1

Upper Mount Installation

3. The top side of the crossmember will need to be trimmed for coilover clearance. **A cutout template is provided on page 16.** Cut out the center holes in the template and place on top of the crossmember. Trace the template onto the crossmember and cut out the center portion (Figure 2).

Due to variations in the crossmembers, you may need to trim a bit more to get the upper mount to sit flat on top of the crossmember.

4. Before installing the mount, install (2) 7/16"-14" x 3" bolts into the back side of the upper mount (Figure 3). The head of the bolt should nest in the hex recess in the mount.

5. Set the upper control arm mount into position on the frame (Figure 4). Ensure the heads of the bolts do not push out of the recess on the back side.



Figure 2



Figure 3



Figure 4

Upper Mount/Control Arm Installation

6. Attach the bracket to the frame with (8) 7/16" x 1 1/4" hex bolts and Nylok nuts. Be sure to include a 7/16" washer under the head of each bolt and under each 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**.

7. Install the ball joints in the upper control arms using the supplied hardware. The ball joint is installed from the top of the arm (stem point down). See Figure 6.

8. Torque the ball joint hardware to **20 ft-lbs** and install the grease zerk (Figure 7).



Figure 5



Figure 6



Figure 7

Upper Control Arm Installation

9. Install a 90002737 Aluminum Washer and 5/8"-18 Thin Locknut on each of the threaded ends of the upper control arm cross shaft (Figure 8). You may leave the nuts hand tight for now. They will be tightened after the arm is installed on the truck.

10. Rotate the cross shaft to the alignment position that best accommodates your driving style as outlined in "Cross Shaft Positioning" on page 17.

11. Install a 70010882 Caster Slug into each of the recessed openings on the cross shaft. For the standard setting, the longer side of the slug, relative to the offset hole, should be oriented to the rear. See Figure 9.

For additional caster settings and slug options, see the "Caster Tutorial" on page 18.

NOTE: If you are using the optional offset caster slugs (purchased separately), they will be stamped with either "2" or "3". When installing in the cross shaft, make sure the stamped numbers are oriented in the same direction. Orientation does not matter with the slugs stamped with a "1" since the holes are centered.

12. Before installing the arm, ensure you have the correct arm on the correct side. The position of the ball joint should be offset to the front of the vehicle. See Figure 10.



Figure 8

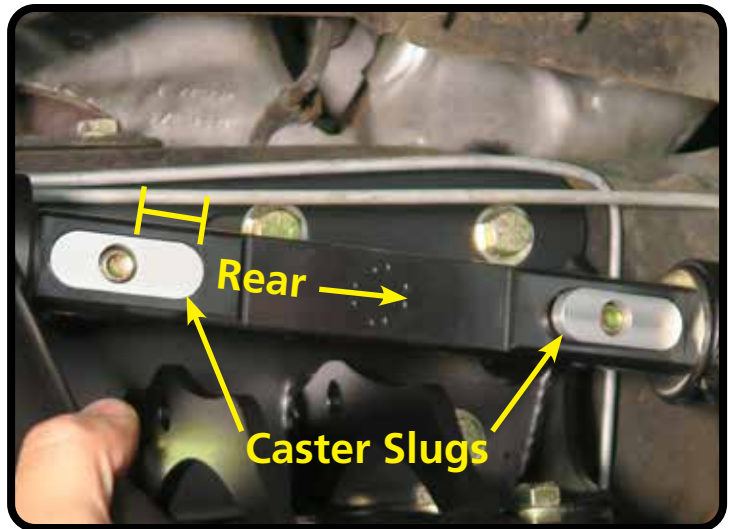


Figure 9

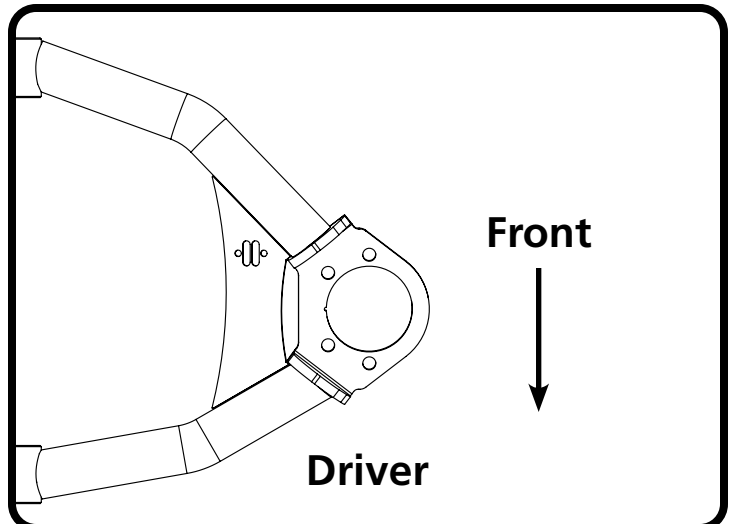


Figure 10

Upper Control Arm Installation

13. Mount the upper control arm onto the 7/16" x 3" bolts on the upper mount.

14. Install a 7/16" USS flat washer and Nylok nut to each bolt and torque to **50 ft-lbs**.

15. Torque the 5/8"-18 nuts on each end of the cross shaft to **55 ft-lbs** (Figure 13).



Figure 11



Figure 12



Figure 13

Bump Stop Installation

16. Use the bump stop plate as a template to mark and drill the mounting holes. The bent tab of the plate should be pointing up and positioned to the front of the vehicle. The flat edge of the plate should be aligned with the outside edge of the crossmember. See Figure 14.

17. Mount the bump stop plate to the crossmember with 3/8"-16 x 1.25" bolts and 3/8" washers and nuts. Use a washer under the head of the bolt and under the nut.

Torque the 3/8" hardware to **30 ft-lbs.**

18. Attach the bump stop to the plate using a 3/8" washer and nut (Figure 16).



Figure 14



Figure 15



Figure 16

Lower Control Arm Installation

19. The lower control arm is installed using the factory u-bolts and nuts. The lower control arm is located with a pin that is in the center of the front u-bolt cradle (Figure 17). This pin will go into the hole in the control arm shaft to help locate the control arm.

NOTE: We have encountered some trucks where the locator pin is in the rear U-bolt cradle. It will still locate the control arm correctly.

20. The lower control arm cross shaft has 2 different locating-hole patterns. The arms in this particular kit use the 8.706" center-to-center locating holes (Figure 18). The pin shown in Figure 17 will locate into these holes.

21. Use the OEM hardware to attach the lower control arm, making sure the locating pin is in the 8.706" center-to-center holes.

The sway bar tab on the control arm should be oriented to the front of the truck.

22. Install a 3/4" flat washer and 3/4"-16 Nylok nut on each of the threaded ends of the cross shaft and tighten (Figure 19).

NOTE: You only need to tighten the cross shaft nuts enough to create drag on the delrin bushings. The arm should still move freely through its travel by hand.



Figure 17

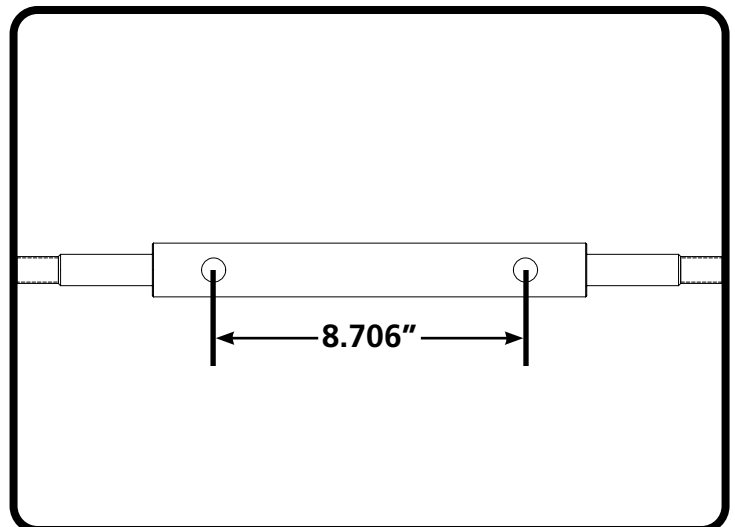


Figure 18



Figure 19

Coilover Installation

23. Install a 90002062 spacer on each side of the upper coilover bearing. 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 assembly into the upper mount from the bottom. If your shock has an adjuster knob, position it to the wheel side of the mount (Figure 20).

Line up the hole in the spacers with the holes in the mounting straps and insert a 1/2"-13 x 3.5" bolt and install a 1/2" Nylok nut. Use a 1/2" washer under the head of the bolt and under the nut.

24. Install a 90002043 spacer on each side of the lower coilover bearing. The small outside diameter of the spacer will insert into the shock bearing. Push the spacer in until it bottoms out in the bearing (Figure 21).

25. Raise the arm up to line up the holes in the spacers with the 1/2" holes in the control arm mounting straps. Install a 1/2"-13 x 3.5" bolt and 1/2" Nylok nut. Use a 1/2" washer under the head of the bolt and under the nut (Figure 22).

Torque the upper and lower shock mounting bolts to **75 ftlbs**.



Figure 20



Figure 21



Figure 22

Ball Joint Torque Alignment Specs

26. Reinstall the spindle. Slide the ball joint pins into the spindle and install the castle nut on each one. Torque the castle nuts as directed below:

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

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



Figure 23

Suggested Alignment Specs For Street Driving

Caster:	-.5 Degrees
Camber:	+3.0 to +5.0 Degrees
Toe:	1/16" to 1/8" Toe In

DRIVER

REMOVE CENTER AND ALIGN
HOLES FOR CUTTING TEMPLATE



REMOVE CENTER AND ALIGN
HOLES FOR CUTTING TEMPLATE



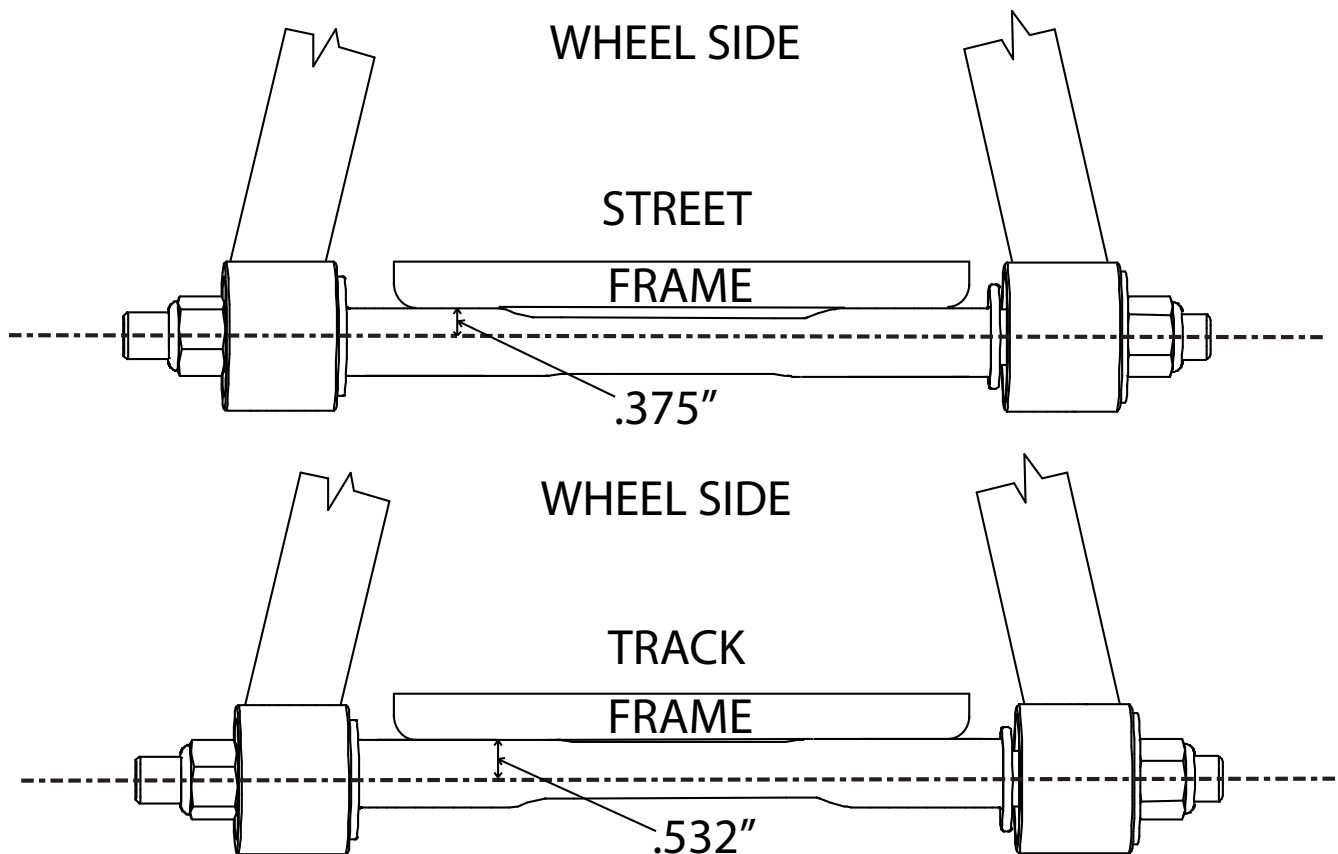
PASSENGER

Cross Shaft Positioning

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 and Caster Slugs 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 and Caster Slugs will be facing the engine.



Caster Tutorial

Caster Defined:

To understand caster, you need to picture an imaginary line that runs through the upper balljoint and extends through the lower balljoint. 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 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.

These StrongArms come equipped with a changeable caster slug setup. This allows you to add or remove caster from the front suspension. The caster slugs supplied in the kit are set up to be centered. 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 listed below can be purchased from Ridetech or your ridetech dealer.

Centered:	70010883 (supplied with control arms)
1/8":	70010882
1/4":	70010881

