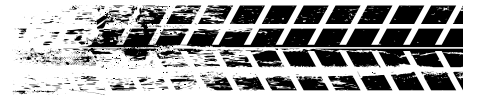




## INSTALLATION INSTRUCTIONS



**Part # 11163699**

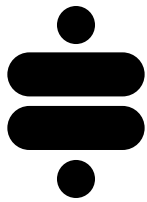


## Front Upper StrongArms 1967-1969 GM F-Body

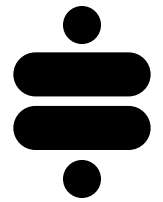


[www.ridetech.com](http://www.ridetech.com)  
812.482.2932





**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**

<b>Safety and Pre-Installation Notes</b>	<b>3</b>
<b>Exploded Views/Parts Listing</b>	<b>4</b>
<b>Caster Tutorial</b>	<b>5</b>
<b>Cross Shaft Positioning</b>	<b>6</b>
<b>Installation</b>	<b>7-9</b>



# 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.**

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

## NOTES

- If you are going to be replacing your lower control arms or spindles, now is an ideal time to tackle those as well.

### Suggested Alignment Specs For Street Driving

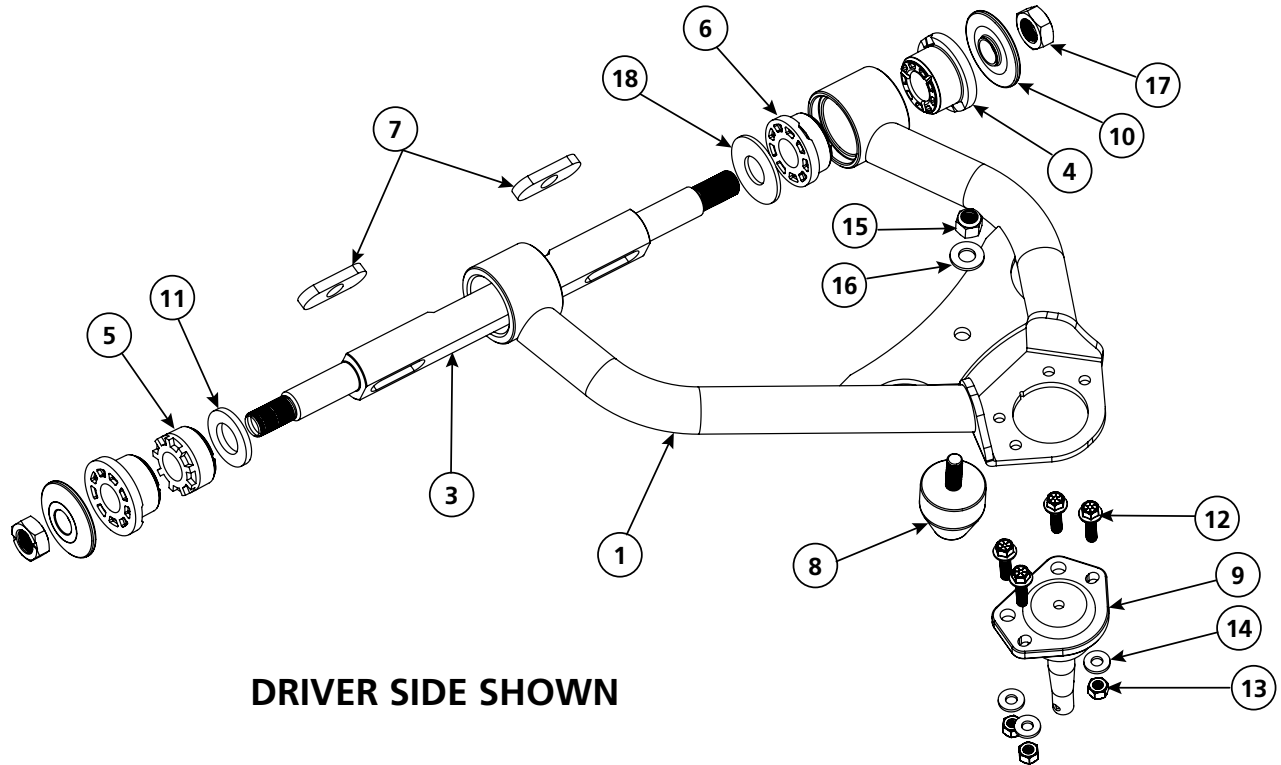
**Camber: -.5 Degrees**

**Caster: +3.0 to +5.0 Degrees**

**Toe: 1/16" - 1/8" Toe In**

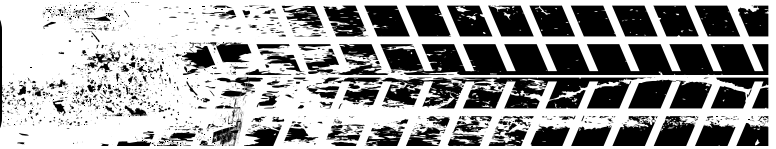
Ridetech recommends this system be installed by a professional technician or experienced, reputable mechanic. Modification or improper installation of this product may result in loss of warranty. Proper installation and setup of your suspension is critical to the safe and enjoyable operation of your vehicle. Failure to follow the guidelines and specifications provided in these instructions may result in damage to your vehicle and/or death or serious injury to you, your passengers, or other motorists. Ridetech will not be held liable for any damage, loss or injury occurring from the use of this product outside of its intended application and design parameters.

# EXPLODED VIEWS AND PARTS LISTING



Item #	Part #	Description	QTY
1	90003628	67-69 F-BODY FRONT DRIVER UCA (SHOWN)	1
2	90003629	67-69 F-BODY FRONT PASSENGER UCA	1
3	90003375	Caster Adjustable Cross Shaft	2
4	70010759	Delrin Bushing, 2.0" Large OD	4
5	70010826	Delrin Bushing, 1.5" Large OD,	2
6	70010827	Delrin Bushing, 1.750" Large	2
7	70010883	Caster Slug	4
8	70013323	DAY2061 Medium Bumpstop	2
9	90000908	101-10015 BAL1015 Ball Joint	2
10	90002737	Aluminum T-Washer	4
11	90003933	Machined Washer, 1.45" OD	2
12	99251022	1/4-20 X 1 HCS GR8 BLACK	8
13	99252006	1/4-20 NYLON INSERT L/N BLACK	8
14	99253012	1/4 SAE FLAT WASHER BLACK	8
15	99372002	3/8-16 GR 5 NYLON INSERT L/N G	2
16	99373003	3/8 SAE FLAT WASHER GR 5 ZINC	2
17	99622005	5/8-18 THIN TOP LCKNUT	4
18	90003934	Machined Washer, 1.70" OD	2
	99433004	7/16-14 X USS FLATWASHER (Not Shown)	4

# Caster Tutorial



## Caster Defined:

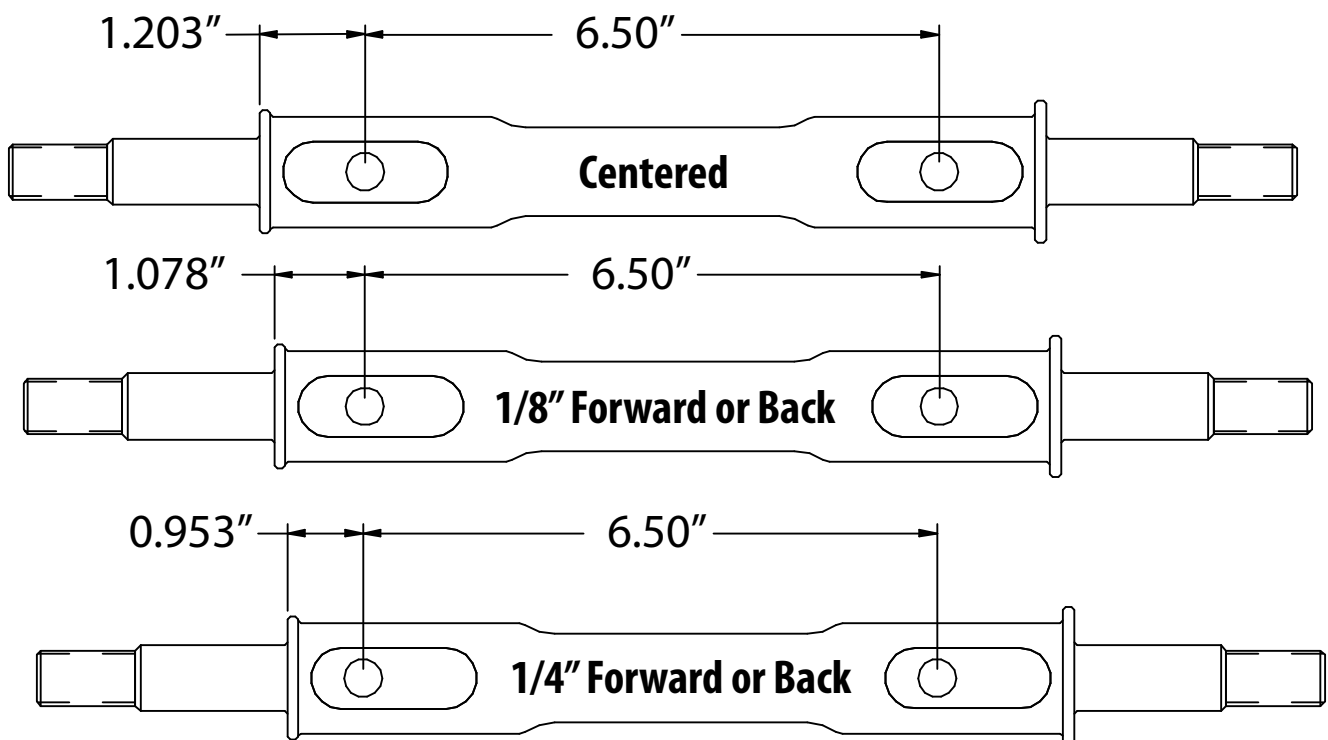
To understand caster, you need to picture an imaginary line that runs through the upper ball joint and extends through the lower ball joint. From the side view, the imaginary line will tilt forward or backward. The tilting of this imaginary line is defined as caster.

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.

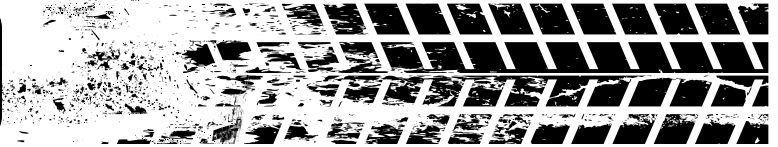
Positive caster provides directional stability in your vehicle. Too much positive caster will make the steering effort difficult. Power steering will allow you to run more positive caster. Negative caster requires less steering effort but will cause the vehicle to wander down the highway.

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



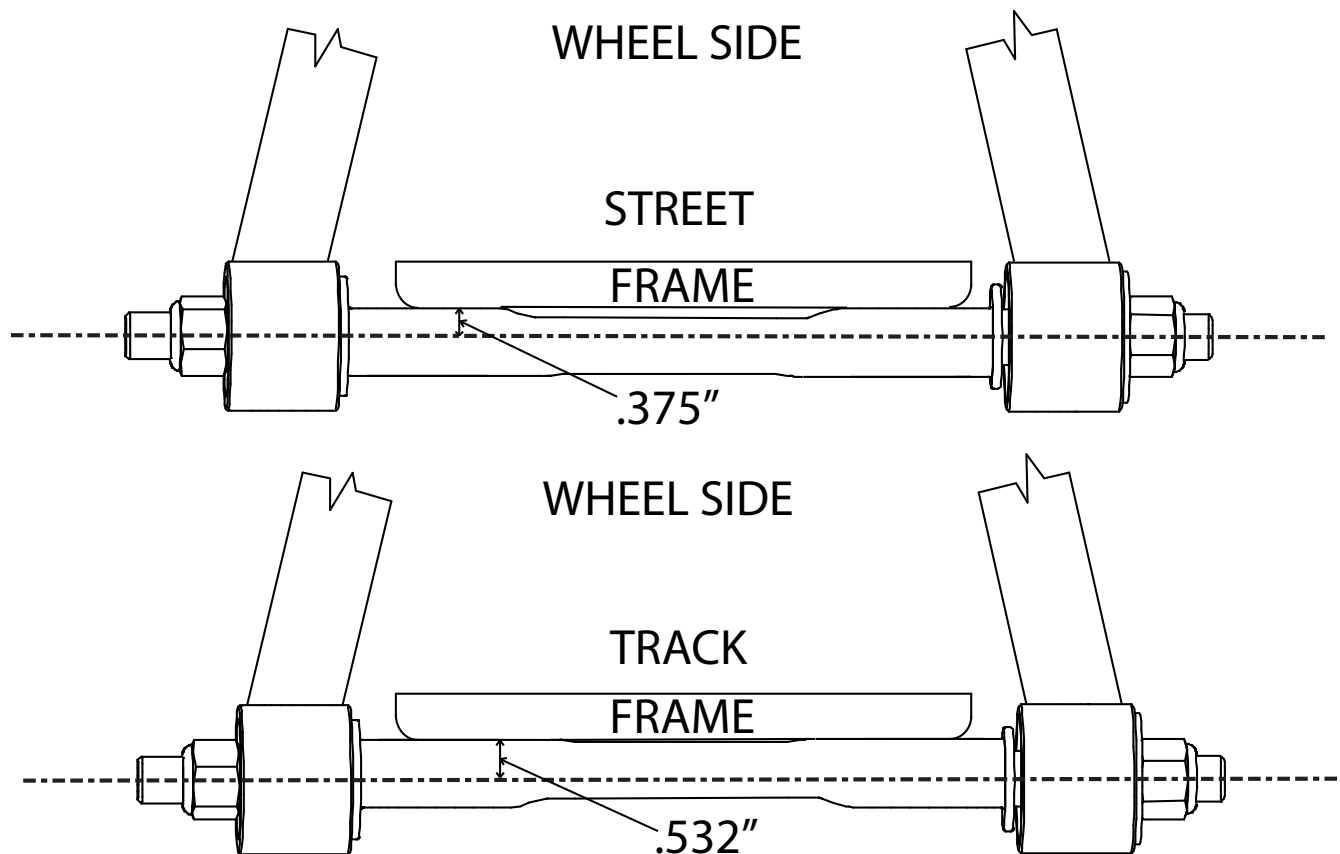
## Cross Shaft Positioning



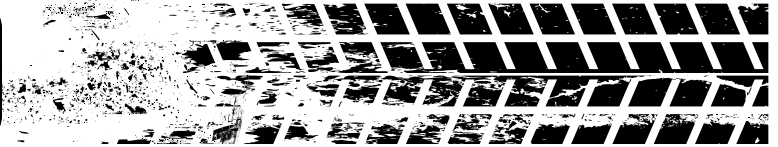
The cross shaft that is used in the upper control arms is offset. The offset combined with the caster slug option allows you to achieve the alignment setting you desire with minimal shims. To change the direction the Icon faces, simply spin the cross shaft in the control arm.

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 car. 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 car. The Ridetech Icon and Caster Slugs will be facing the engine.



# Installation



**1.** Raise the vehicle to a safe and comfortable working height. Remove the existing upper control arms. Refer to the Factory Service Manual for detailed disassembly instructions.

Retain the factory mounting hardware. It will be reused.

**NOTE:** If you will be replacing the lower control arms and spindles, this is a good time to remove them also.

**2.** Install a T-Washer and 5/8"-18 Locknut on each end of the cross shaft (Figure 1).

**Note:** You may leave the 5/8" nuts hand tight for now. They will be easier to tighten once the arm is mounted on the car.

**3.** Rotate the cross shaft to the alignment position that best accommodates your driving style as outlined in "Cross Shaft Positioning" on page 6.

**4.** Insert the caster slugs into the recessed openings in the cross shaft (Figure 2).

**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.

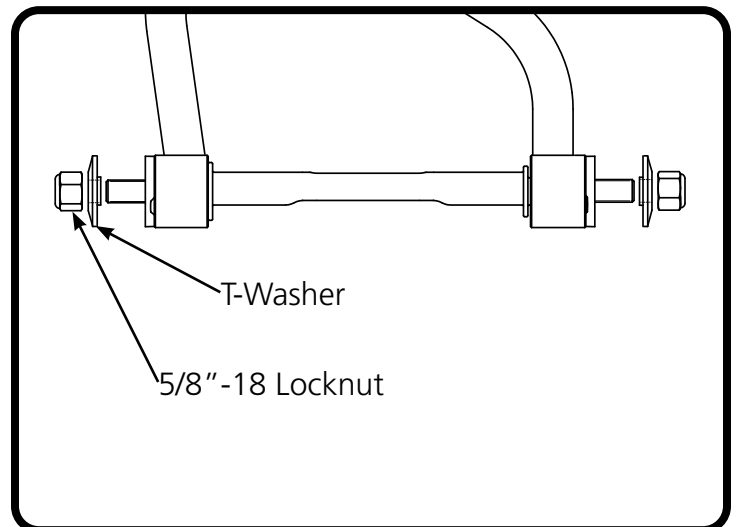


Figure 1

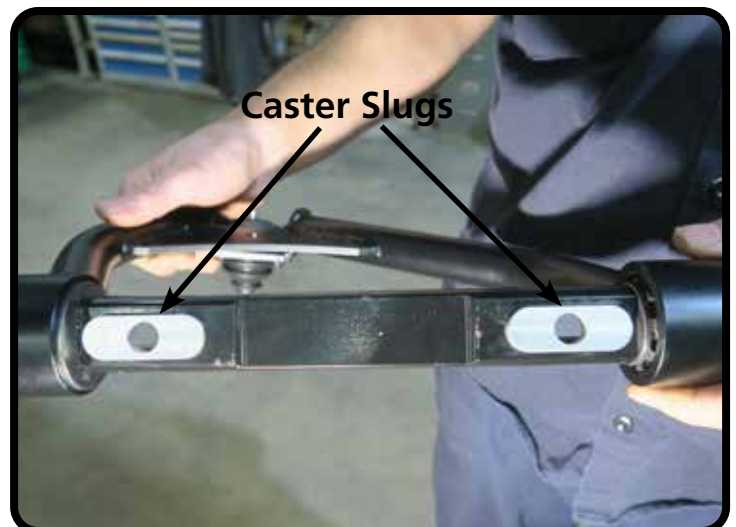


Figure 2

## Installation

5. Install the arm onto the factory frame mount bolts. The offset position of the ball joint should be oriented toward the rear of the car (Figure 3).

6. Install a 7/16" USS Flat Washer on each mounting bolt, followed by the OEM mounting nut (Figure 4).

**Torque the mounting nuts to 50 ft-lbs.**

7. After torquing the arm-mounting nuts, tighten the 5/8" nut on each end of the cross shaft (Figure 5).

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

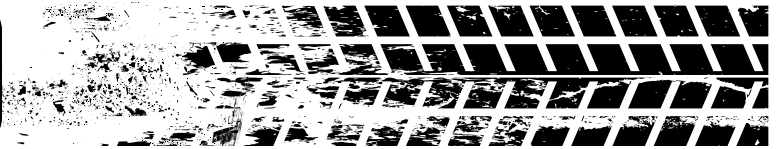


Figure 3

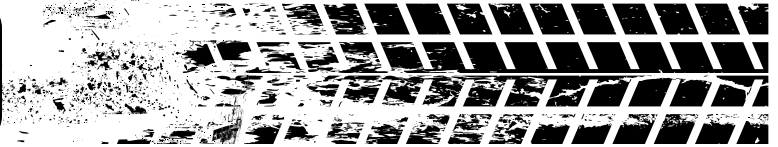


Figure 4



Figure 5

## Installation



**8.** Install the bump stop from the bottom into the hole in the gusset plate (Figure 6).

Install a 3/8" flat washer and 3/8"-16 locknut on the bump stop stud and tighten.



Figure 6

**9.** Attach the spindle to the control arm.

**Torque the castle nut on the upper ball joint to 50 ft-lbs.**

**NOTE:** You may have to tighten slightly over the torque spec to get a hole to line up for the cotter pin.



Figure 7

**10.** Install and bend the cotter pin (Figure 8).

**11.** Check to ensure all fasteners are tight and repeat on the opposite side.

**12.** Have the vehicle aligned.



Figure 8