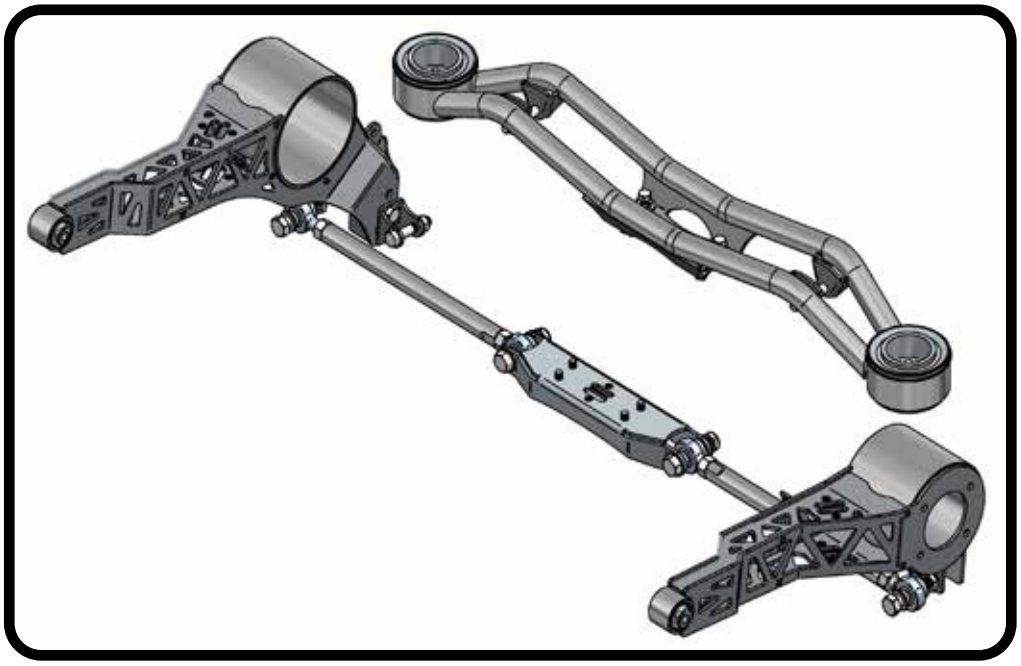
ridetech

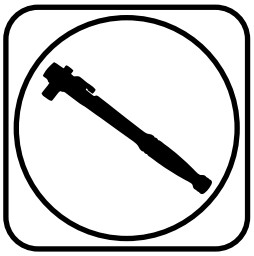
Installation Instructions

Part # 11537194

1963-1979 C2/C3 Rear StrongArms with C7 Bearing Hubs



Recommended Tools



1963-1979 C2/C3 Rear StrongArms

Installation Instructions

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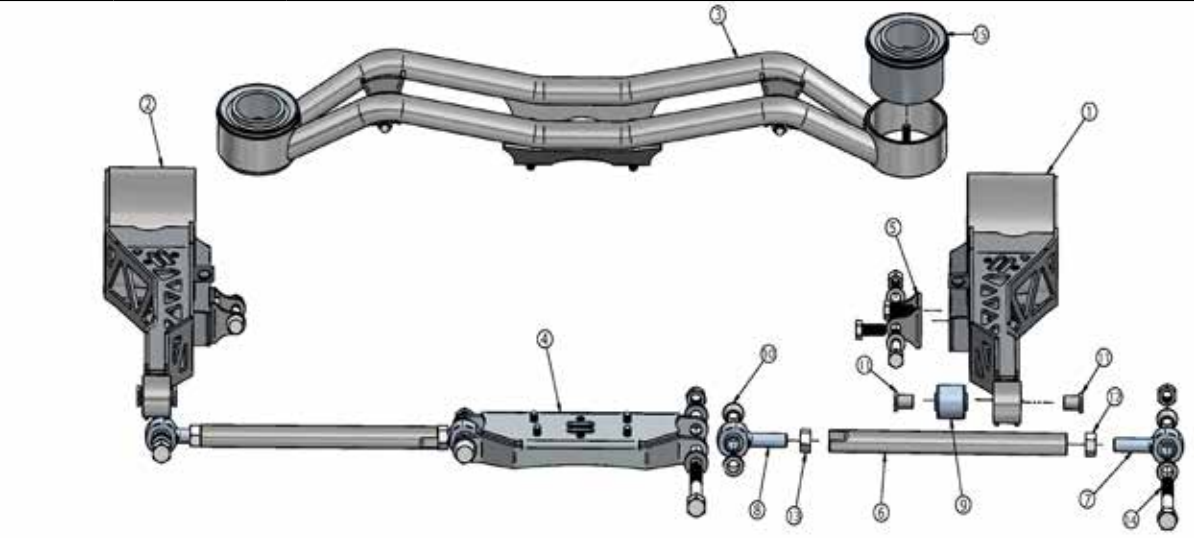
Note: The Trailing Arms in this kit uses a C7 Hub Bearing. The Trailing Arm/Hub is designed to run C5/C6 Corvette Brakes.

Major Components .....In the box

Item #	Part #	Description	QTY
1	90001312	Driver Trailing Arm w/90002644 Bearing Hubs installed	1
2	90001313	Passenger Trailing Arm w/90002644 Bearing Hubs installed	1
3	90002165	Upper Crossmember	1
4	90002166	Strut Rod Mount	1
5	90002158	CoilOver Lower Mounting Bracket	2
6	90002847	Threaded Strut Rod **(Set at 16 5/16" Center to Center)**	2
7	70013364	Strut Rod R-Joint Housing End 3/4"-16 RH Thread (Pre installed in Strut Rod)	2
8	70013564	Strut Rod R-Joint Housing End 3/4"-16 LH Thread (Pre installed in Strut Rod)	2
9	70011856	Trailing Arm Bearing (Pre installed in Trailing Arms with (4) 72000259)	2
10	70013545	Strut Rod R-Joint Spacers - 5/8" ID x .563" Thick	8
11	90002169	Trailing Arm Bearing T-bushings - 7/16" ID	4
12	99752004	3/4"-16 SAE RH Thread Jam Nut	2
13	99752006	3/4"-16 SAE LH Thread Jam Nut	2
14	90002175	5/8"-18 Flat Machine Bolt	2
15	70011824	Upper Crossmember Bushing (Pre installed in Crossmember)	2
	70013977	Crossmember Bushing Retainer Isolator Ring	2
	90003087	Aluminum Crossmember Bushing Retainer	2
	90002191	Trailing Arm Bushing Shim Kit (Not Shown)	1
	90001314	Outer Stub Axles w/ 90001338 U-bolt Clamps	2
R-Joint Components - (Installed in Strut Rod Ends)			
	70013279	Retaining Ring	4
	70013280	Wavo Wave Spring	4
	70013275	Center Pivot Ball	4
	70013276	Composite Cage	4



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Hardware List .....In the box (Kit# 99010053)

QTY	Part Number	Description
TRAILING ARM HARDWARE		
2	99431014	7/16" x 4 1/2" SAE Bolt
2	99432002	7/16" SAE Nylok Nut
STRUT ROD MOUNT TO CENTER SECTION		
4	99371003	3/8" x 1" USS Bolt
4	99373005	3/8" Split Lock washer
4	99373003	3/8" SAE Flat washer
SHOCK MOUNTING HARDWARE		
4	99501003	1/2" x 2 1/2" USS Bolt
4	99501019	1/2" x 1 1/4" USS Bolt
4	99503001	1/2" SAE Flat washer
8	99502001	1/2" USS Nylok Nut

QTY	Part Number	Description
STRUT RODS TO MOUNTS		
4	99621003	5/8"x 2 3/4" Gr. 8 Bolt
4	99622006	5/8" SAE Nylok Jam Nut
4	99623001	5/8" SAE Flatwasher
CROSSMEMBER HARDWARE		
6	99431002	7/16" x 1 1/4" USS Bolt
10	99433002	7/16" SAE Flatwasher
8	99433003	7/16" Split Lock washer
2	99432011	7/16"-14 GR 8 Nut
2	99432010	7/16"-14 GR8 Nylok Nut
4	99433005	7/16" SAE GR8 Flat Washer
2	99435008	7/16"-14 x 3" Stud

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 Corvette excellent handling along with a lifetime of enjoyment. Some of the key features of this system: Trailing arms are designed to give more tire clearance, adjustability of ride height and ride quality, excellent handling.

Note: These system is designed for use with the Ridetech CoilOvers and the MuscleBar swaybar. **The factory shocks and springs will not fit this system.**

1. Raise the vehicle to a safe and comfortable working height.

2. Disassemble the rear suspension using the factory service manual as a reference. You will need to remove the Traverse Leaf Spring, Shocks, Bump Stops, Half Shafts, Trailing arms, Center Section, Upper Crossmember, and Strut Rod Bracket from the Center Section.

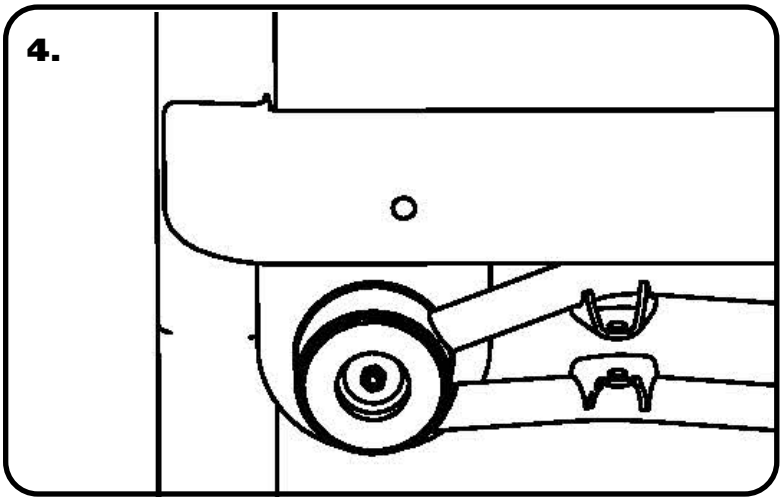
NOTE: Keep the shims for the Trailing Arm in order and marked from where the were removed.

NOTE: You will need to disconnect the brake lines and parking brake cables(if equipped) on the OEM Brake Setup

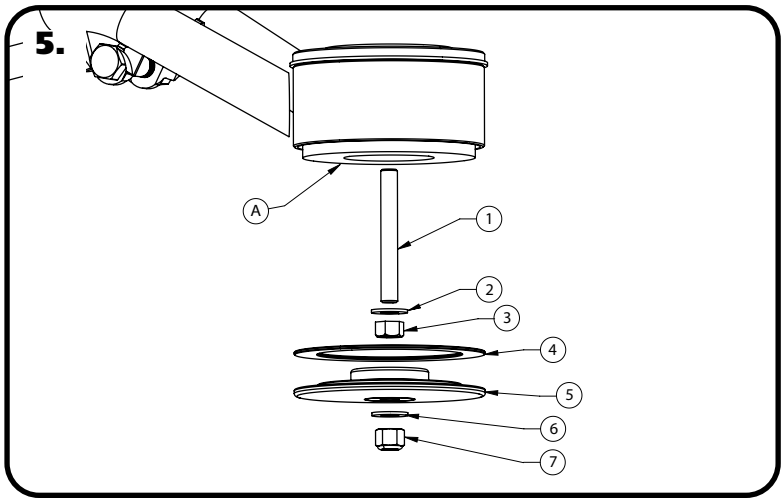
Note: The Trailing Arms in this kit uses a C7 Hub Bearing. The Trailing Arm/Hub is designed to run C5/C6 Corvette Brakes.

Upper Crossmember Installation

4. Attach the Upper Crossmember to the OEM Center Section using (4) 7/16"-14 x 1 1/4" Hex Bolts, (4) 7/16" Lock washers, and (4) 7/16" SAE Flat washers. The Upper Crossmember bolts in place of the OEM upper crossmember. The upper crossmember is symmetrical and will fit either direction.

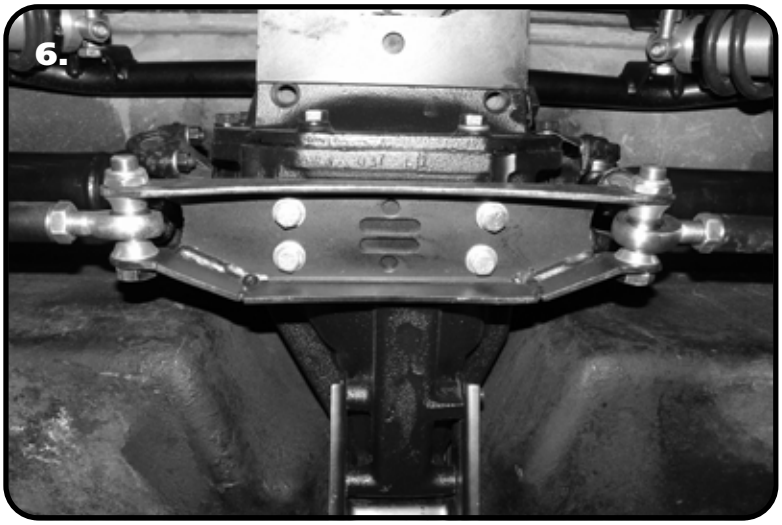


5. Refer to **Images 5 & 6** for installation of the Crossmember. Apply Loctite to the 7/16"-14 x 3" Stud(1), thread it into the frame approximately 3/4". Slide the Crossmember(A) onto the Studs, holding it in place. Install a 7/16" Grade 8 Flat Washer(2) followed by a 7/16"-14 Grade 8 Regular Nut(3). Do this for both studs. Torque the Nuts to 50ftlbs.

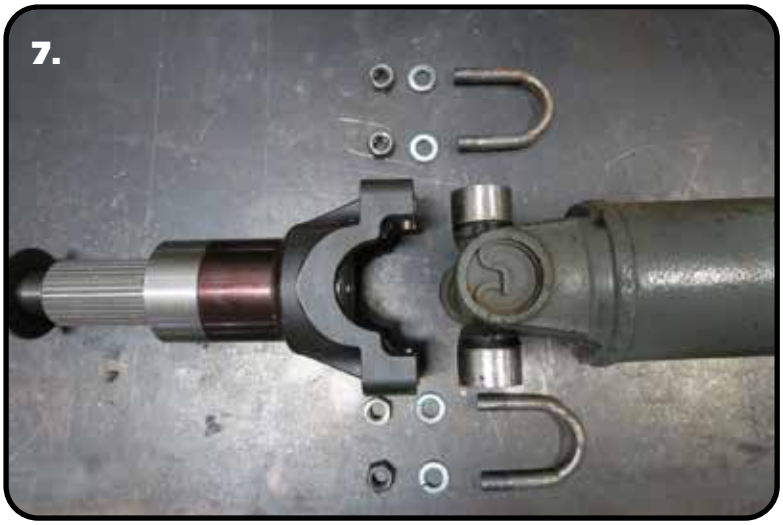


6. Install the Isolator Ring onto the Bushing Retainer. There is an area on the retainer that the isolator sits. With the Crossmember in place and the Nuts torqued, slide the Aluminum Bushing Retainer/Isolator on the Stud. Next, install a 7/16" Grade 8 Flat Washer(6) followed by a 7/16"-14 Grade 8 Nylok Nut(7). Do this for both sides. Torque the Nuts to 50ftlbs.

Strut Rod Bracket and Half Shaft Assembly



6. Install the Strut Rod Bracket onto the bottom of the OEM Center Section with the FLAT side to the rear of the car. Attach the bracket with (4) 3/8" x 1" Hex Bolts, (4) 3/8" SAE Flat washers, and (4) 3/8" Split Lock washers.

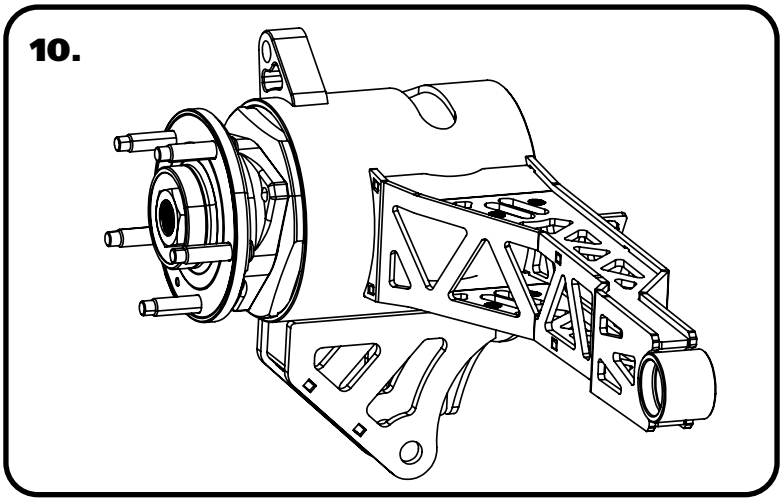


7. Start be attaching one end of the 1/2 shaft to the outer stub axle. The kit includes (2) sets of u-bolts for attaching them. If your half shafts have a flange on them, it will need to be removed. The outer stub axle is designed to accept the stock 1350 u-joint.

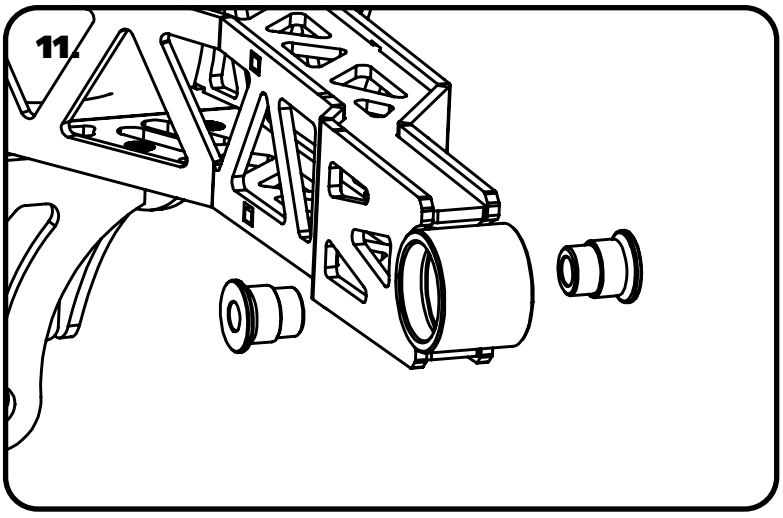
8. Slip the u-joint into the yoke of the stub axle. It should fit down in the yoke with the caps of the u-joint inside the locating tabs. Install the u-bolts over the caps of the u-joints with the threads sticking through the yoke. Install the supplied lock washers and 3/8"-24 nuts on the threads of the u-bolts that is sticking through the yoke.

Half Shaft Assembly &Trailing Arm Installation

9. Torque all 4 nuts evenly to 20 ftlbs.



10. The Trailing Arm Assemblies are Driver and Passenger specific. The Passenger is shown in **Diagram 10**.



11. Install the T-bushings into the front Trailing Arm Bearings. Do this for both Trailing Arms.

Trailing Arm & Half Shaft Installation

12. Install the Driver Trailing Arm Assembly into the stock location using (1) 7/16" x 4 1/2" Bolt, (1) 7/16" Flat washer. Install New Shims that are supplied with the kit. The shim stacks should be the same thickness as the shim stacks that were removed from the OEM setup. Repeat for Passenger side.

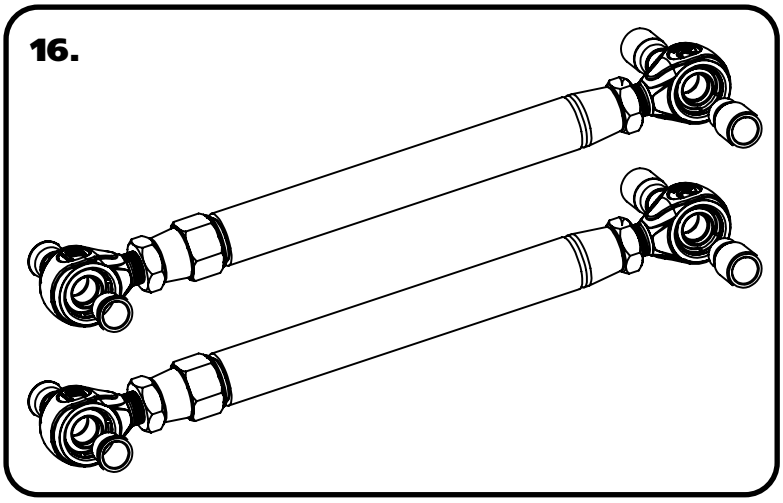
DUE TO VARIATIONS OF THE OPENINGS, CHECK CLEARANCE BETWEEN TRAILING ARMS AND FRAME. THE AREA POINTED OUT IN DIAGRAM "12" MAY NEED TO BE CLEARANCED.

13. Insert the stub axle into the bearing hub.

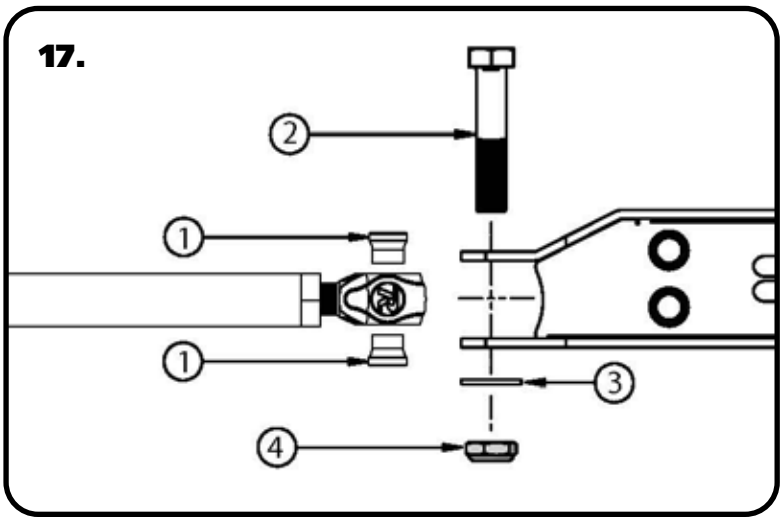
14. Install the 1"-14 flange nut on the threads of the outer stub axle to hold it in place. You will need to remove it later to apply red loctite and torque the nut.

Half Shaft & Camber Rod Installation

15. Install the Half Shafts. The Half Shafts are attached to the Center Section Stub Axles with (4) 7/16"-20 x 1" Hex Bolts with a Nord-Lock Washer on each bolt. Torque to 80 ftlbs.

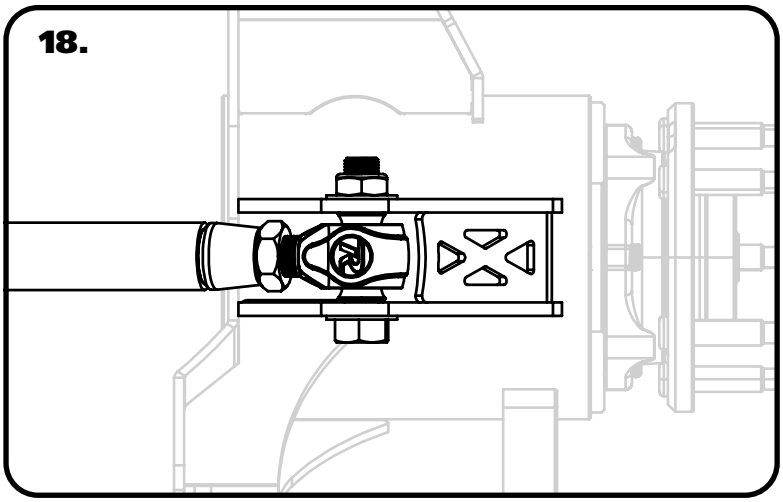


16. If the Camber Rods aren't already assembled, assemble them with a Jam Nut on each Heim End. The Camber Rods use a Left Hand Threaded Heim End on one end with a Right Hand Thread Heim End on the other. Apply Antisieze to the threads of the Heims and thread them into the Camber Rod. Thread the Heims all the way in. With them threaded all the way in, when you adjust them out the heims will be threaded in equally on each end.



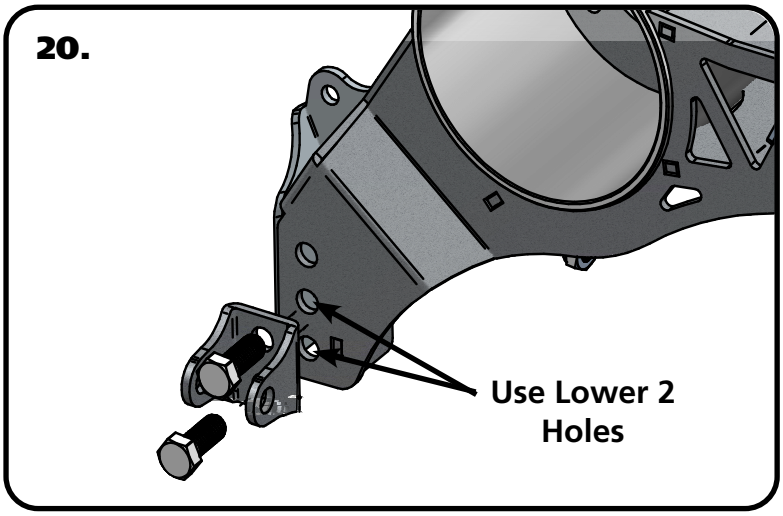
17. Attach the inner end of each Strut Rod using (2) 5/8" I.D. x 9/16" R-Joint spacers, (1) 5/8" x 2 3/4 Hex Bolts, (1) 5/8"Flat washer (under nut), and (1) 5/8" Thin Nylok Nuts. The Strut is installed into the new Strut Rod Bracket located on the center section of the differential. It is installed by inserting a 9/16" thick Spacer in each side of the R-Joint.

Camber Rod & Shock Mount Installation



18. The Outer end of the Camber Rod is attached to the camber rod mount on the new trailing arms with (2) 70013545 (9/16" Long) Spacer, one in each side of the R-Joint. Use the 5/8"-18 x 3" hex bolt, flat washer, & nylok jam nut that is supplied in your the kit.

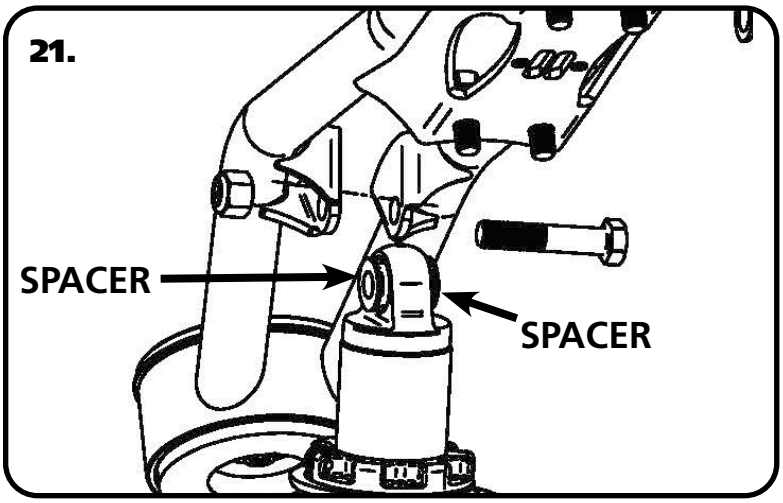
19. Torque the stub axle nut to 118 ftlbs using a 1 1/2"socket and torque wrench.



20. Attach the Shock Mounting Bracket to the lower to holes in the Trailing Arm. The Shock Mount is attached using (2) 1/2"-13 x 1 1/4" Bolts and (2) 1/2"-13 Nylok Nuts.

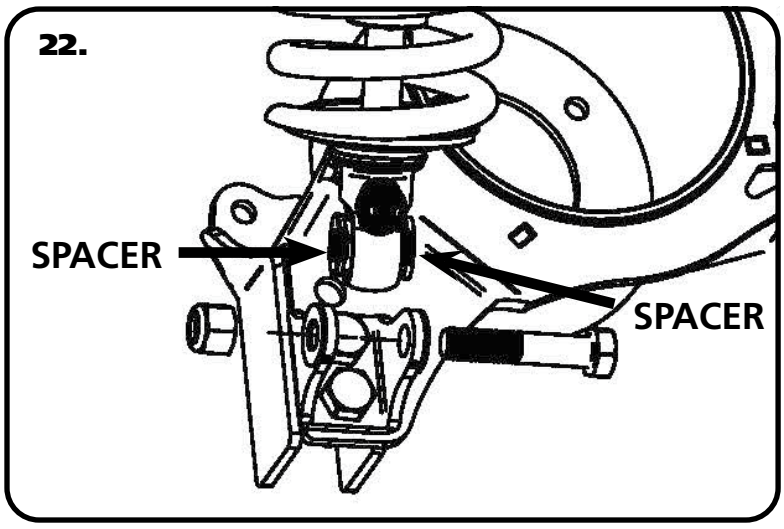
Note: The Upper 2 holes would be used if a 1" higher ride height would be desired.

CoilOver Installation



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

Note: If installing TQ Series CoilOvers, the hose MUST be to the INSIDE of the car.



22. Install a spacer on each side of the lower 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 2 1/2" bolt and 1/2" Nylok nut. Tighten the upper and lower shock bolts.

23. Tighten all fasteners. If you are going to install the Ridetech MuscleBar, now is a good time to do it.

24. Set ride height on the Corvette. The ride height of the Coilover is approximately 13". When 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.

STILL HAVE QUESTIONS?

Tech line hours
Monday - Friday
8AM - 6PM (EST) 812-482-2932