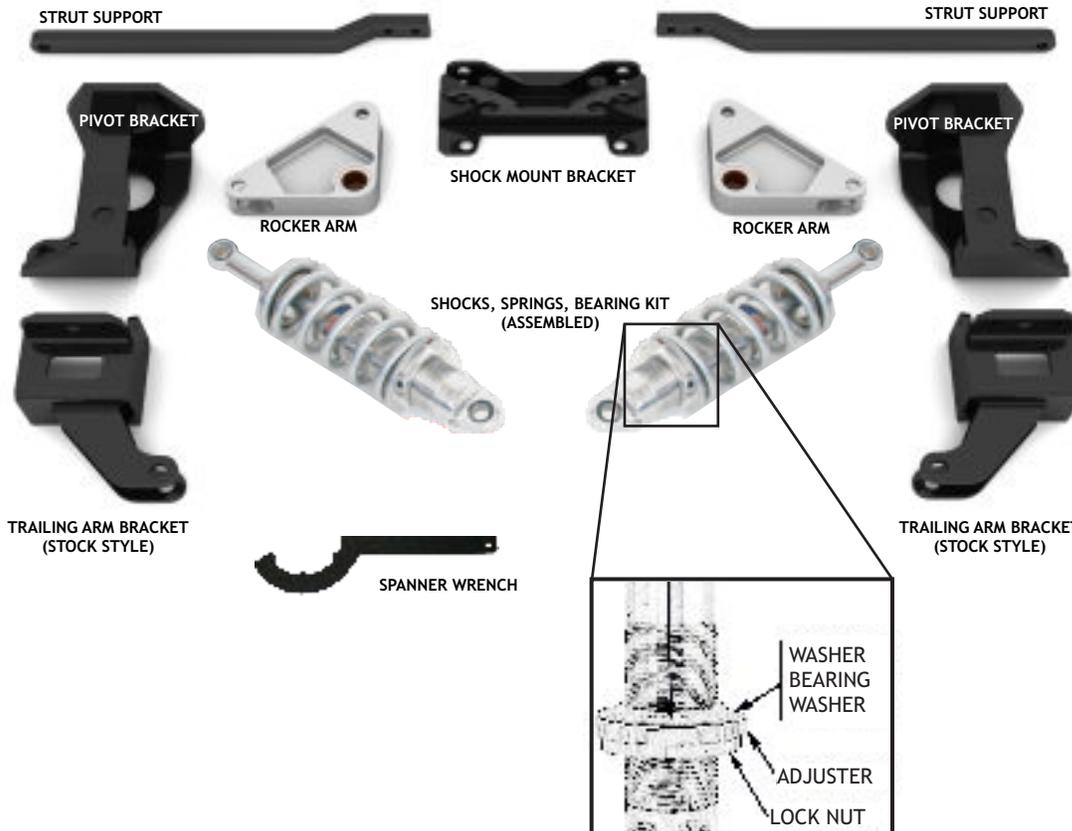


Shark Bite™ Rear Coil Over Installation Instructions

Part Number(s): - 780-86320 through 780-86570
 1963 - 1979 Corvette

Parts and finishes may vary from those shown.



Verify Kit Contents:

- 1 SHOCK MOUNT BRACKET
 MAY BE OMITTED WITH DIFFERENTIAL KIT
- 2 STRUT SUPPORTS
- 2 PIVOT BRACKETS (LH, RH)
- 2 ROCKER ARMS
- 2 TRAILING ARM BRACKETS (LH, RH)
 OR WELD-IN BRACKETS FOR USE WITH
 SINGLE OFFSET TRAILING ARMS
- 2 SHOCKS
- 2 SPRINGS
- 1 SPANNER WRENCH
- 1 BEARING KIT

Not Pictured Here:

- 2 SWAY BAR FITTINGS
- 2 SHOCK EXTENSIONS
- 2 PIVOT SHAFTS
- 3 FASTENER KITS (SEE PAGE 2)
- 2 SHOCK MOUNT WEDGE SHIMS
 (78-79 ONLY)

PLEASE NOTE: This kit is expressly designed for the vehicle applications specified. We gladly offer free technical phone and email support to assist with installation should you encounter any questions or problems.

If you or the installer believes it is necessary to “modify” any components to make them fit PLEASE CONTACT US FIRST. Our technicians can help you. Call our business line during regular hours or email to cservice@speeddirect.com. Modifications may include any revision, deletion or addition to the product as delivered. Any such modifications will void the warranty. Our knowledgeable staff will gladly assist you with any questions you may have during installation. In addition, Class M Corporation, DBA SpeedDirect, is not responsible or liable for any damages or injury resulting from any modification to the components as delivered.

COMPLETE FASTENER INVENTORY

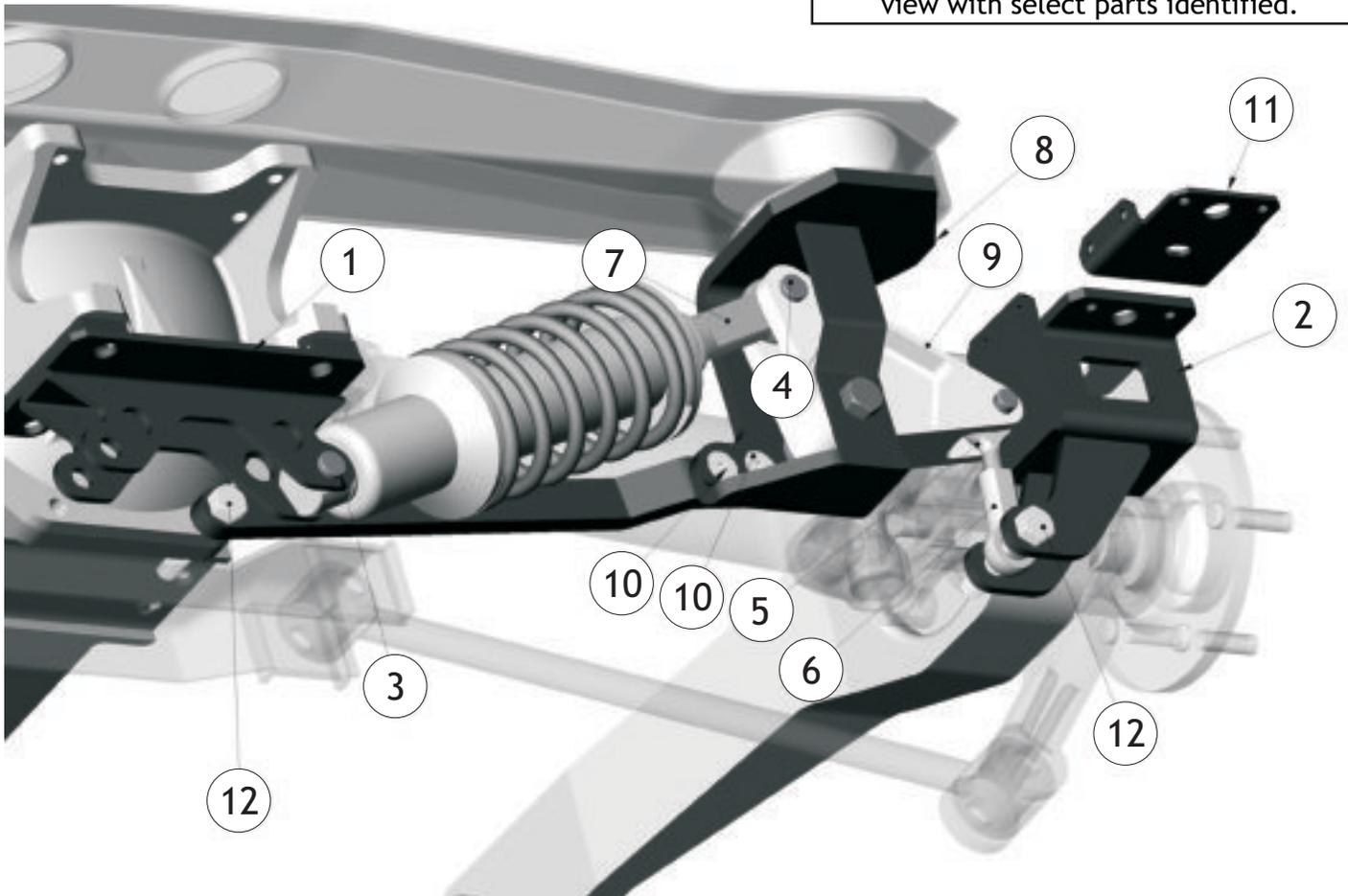
<u>FASTENER KIT 690-61509:</u>	
	4 - 1/2"-20 X 2.25" GRADE 8 BOLT - ROCKER/ROD END BOLTS AND LOWER SHOCK MOUNTS
	2 - 1/2"-20 X 2.5" GRADE 8 BOLT - ROD END TO TRAILING ARM FITTING
	2 - 1/2"-20 X 1.5" GRADE 8 BOLT - TRAILING ARM TO FITTING
	8 - 1/2"-20 NYLOCK NUT
	2 - 7/16"-14 X 2.5" GRADE 8 BOLT - PIVOT BRACKET MOUNTING BOLTS
	2 - 9/16"-18 X 3.5" GRADE 8 BOLT - ROCKER PIVOT BOLTS
	2 - 9/16"-18 THIN NYLOCK NUT
	8 - 1/4"-28 X 3/8" GRADE 8 BUTTON HEAD CAP SCREW, BOLT TOP PLATE ATTACHMENT
	4 - 1/4"-20 X 3/4" GRADE 8 BOLT - TOP PLATE TO TRAILING ARM BRACKET
	4 - 1/4"-20 NUT - TOP PLATE TO TRAILING ARM
	2 - 5/16"-18 X 1" GRADE 8 BOLT - TOP PLATE TO TRAILING ARM
	2 - 5/16"-18 GRADE 8 NYLOCK NUT
	2 - 7/16"-14 X 1.5" GRADE 8 BOLT - DIFFERENTIAL COVER
	4 - 3/8"-24 X 5/8" 82 DEGREE FLAT HEAD SCREW
	2 - 1/2"-20 RIGHT HAND JAM NUT

<u>FASTENER KIT 690-01515:</u>	
	4 - THICK ROD END SPACER
	4 - THIN ROD END SPACER
	2 - 0.125" THICK OILITE WASHER
	2 - 0.062" THICK OILITE WASHER
	2 - MALE RIGHT HAND ROD END
	2 - FEMALE RIGHT HAND ROD END
	2 - 1/4" THICK 1/2" ID FLAT WASHER - TRAILING ARM CUP
	2 - 1/2" X 1.75" OVERALL LENGTH CLEVIS PIN (SHOCK/ROCKER)
	2 - CLEVIS PIN CLIP

<u>FOR 63-77 ONLY, FASTENER KIT 690-61507:</u>	
	2 - 9/16"-12 X 1" GRADE 8 BOLT - CENTER MOUNT
	2 - 9/16"-12 X 1.5" GRADE 8 BOLT - CENTER MOUNT
	2 - 9/16" LOCK WASHER

<u>FOR 78-79 ONLY, FASTENER KIT 690-61506:</u>	
	2 - 7/16"-14 X 1" GRADE 8 BOLT - CENTER MOUNT
	2 - 7/16"-14 X 1.5" GRADE 8 BOLT - CENTER MOUNT
	4 - 7/16" LOCK WASHERS

Corvette Shark Bite rear coil over assembly view with select parts identified.



- | | |
|---------------------------------------|---|
| 1. CENTER SHOCK MOUNT BRACKET | 7. SHOCK EXTENSION |
| 2. LOWER TRAILING ARM BRACKET (STOCK) | 8. PIVOT BRACKET |
| 3. 1/2" x 2" BOLT (x2) | 9. ROCKER ARM |
| 4. CLEVIS PIN AT ROCKER | 10. 82 DEG SCREW FOR SUPPORT STRUT |
| 5. MALE ROD END | 11. SWAY BAR FITTING |
| 6. FEMALE ROD END | 12. DIFFERENTIAL COVER BOLT AND SUPPORT STRUT |

1. Begin by performing an inventory on all the parts, including fastener kits.

2. Measure the current ride height if it is desired to attain the same height after installation. If set to the current height there will not be a need to perform wheel alignment once the new system is installed.

REMOVAL OF STOCK COMPONENTS:

EXERCISE EXTREME CAUTION WHEN WORKING AROUND SPRINGS. THEY CAN BE DEADLY IF PROPER SAFETY MEASURES ARE NOT TAKEN.

3. Start by supporting the car securely on jack stands. Never support the car by using only a jack. To relieve stress on the fiberglass, pop the hood, open the doors and release the T-top locks (if applicable).

4. Remove the rear wheels. Place a large C-clamp approximately 10" from the end of the leaf spring. This clamp is to keep a floor jack from slipping up the curve of the spring. Use a floor jack to slightly compress the spring so that tension is taken off the bolt attachment to the trailing arm. Loosen the bolt/nut, and once removed, lower the jack to take the tension off the spring. Repeat procedure on the opposite side.

5. Remove the spring from the car via the four bolts on the bottom of the differential cover. Be sure to support the spring before the bolts are removed as the spring weighs about 45 lbs. Once removed, clean the spring mount so there is no buildup on the surface.

INSTALLATION:

6. Install the center bracket. Tighten the front bolts until the lock washer crushes, but don't over tighten and bend the bracket. For 1978-79 cars, use the wedge shims to fill in the gap between the bracket and the differential bolt holes. Tighten to 50 ft/lbs.

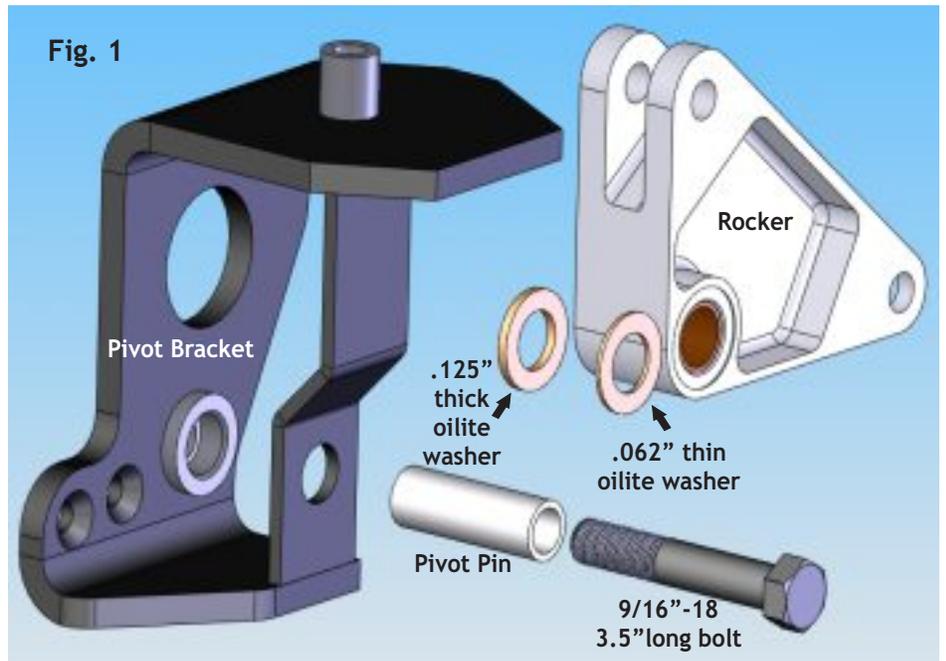
7. Remove the shocks from the trailing arms and the frame. Disconnect the sway bar (if installed) from the trailing arm.

8. Remove one of the rear cross member bolts. Do not remove both bolts at the same time or the entire differential could fall out.

9. Apply thread lock to the supplied 7/16"x2.5" bolt and start the bolt into the cross member. DO NOT use a lock washer on this bolt. Install the support strut on the differential cover using the 7/16"x1.5" bolt, and at the main bracket using the flat head bolts. **Tighten the support strut first and the cross member bolt last.** Torque 7/16" bolts to 50 ft/lbs and flat head bolts to 30 ft/lbs. Do not install strut backwards- see Page 3 diagram.



10. The rocker arm must first be assembled on the pivot bracket as shown in Figure 1 at right. The long side of the rocker installs to the outside of the car. The short side with the narrow opening should be towards the inside of the car to attach the shock. Reversing the rocker will cause the suspension to work poorly and incorrectly. The thickest oilite washer installs toward the heavy part of the bracket and the thin oilite washer on the other (smaller) side. The washers install in the indents of the rocker and the rocker arm slides into the pivot bracket.



11. Once aligned with the holes the pivot pin slides into the bracket and rocker. It will install flush with the bracket. The 9/16"x3.5" bolt slides in and the thin nylock nut secures the bolt. Torque to 30 ft/lbs. Repeat for the other side.

VEHICLES WITH OFFSET TRAILING ARMS ONLY: Please refer to weld-in bracket instructions on the next page before proceeding.



Fig. 2

12. Place a 2" diameter washer inside the trailing arm cup. Slide the trailing arm mount onto the trailing arm and secure it with a 1/2"x1.5" bolt. Torque to 100 ft/lbs.

13. Fit the top plate on top of the trailing arm and install with four 1/4" cap screws into the trailing arm mount, one 5/16" bolt through the plate and into the trailing arm, and two 1/4" bolts. See Figure 2.

14. Assemble the rod ends, male to female, including the jam nut. Thread them fully so they are as short as possible. See Figure 3. The male end attaches to the outer rocker hole using the 1/2"x2.25" bolt, thin spacers and nylock nut. Snug tight, but do not over tighten. The other end attaches to the trailing arm using the 1/2"x2.5" bolt, thick spacers and nylock nut. Place the spacers evenly on each side of the rod end. See Figure 4.

15. Assemble the shock by threading the lock nut then spring seat onto the body about half way down. Thread the shock extension onto the end and tighten the jam nut. **NOTE:** If the shocks came with shock extensions already installed on the shock, discard them and use the longer shock extensions provided with the kit. **DO NOT USE THE SHORT EXTENSIONS.** Pull the shock so it is completely extended; this may require setting the adjustments to their softest setting. Place the spring bearing on the spring seat

and then the spring. Place the spring top on the shock, compress the shock about 1" and thread the seat until the spring contacts the spring top.

16. Place the shock extension in the rocker and install the clevis pin. Secure with the clevis pin clip. Put the clevis pins on the back side of the bracket and on the middle setting. Orient the cotter pins so they won't get accidentally pushed out. Double check to ensure that the motion of the rocker does not cause the end of the clevis pin to contact the back of the pivot bracket.



Fig. 3

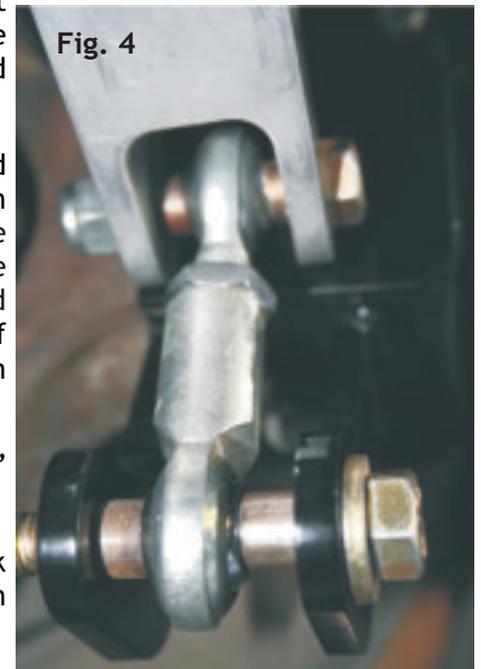


Fig. 4

17. Place the other end of the shock in the center mount and install the 1/2"x2" bolt and nylock. Torque to 30 ft/lbs.

18. Repeat all steps for the other side or perform concurrently. Double check the tightness of all installed fasteners. Be certain that each one has been properly tightened.

19. Re-install sway bar. Re-install wheels and lower the car off the jack stands. Adjust the spring seats to get the approximate ride height. The suspension will settle once driven, so re-check after a few miles.

20. Use the adjuster knobs on the shocks to get the desired valve settings.

21. **After 100 miles of driving re-check all fasteners for tightness.**

VEHICLES WITH OFFSET TRAILING ARMS ONLY

If your vehicle has offset trailing arms, a weld-on trailing arm bracket is required that is different than the standard trailing arm bracket. Make sure you have bracket part numbers 560-61215-01 and 560-61215-02.

1. Remove the powder coating from the trailing arm in the areas where the bracket and trailing arm will be welded. Brackets are bare metal finish. It may be necessary to mock up installation to determine what areas need to be cleaned.
2. Attach the bracket to the trailing arm with the supplied 1/2"x1.5" bolts. Ensure the bracket seats flat on the trailing arm and does not angle or have any gaps between them. Orient the bracket so the mounting tabs for the rocker connection point inwards towards the center of the car, and are at a right angle to the trailing arm.
3. **Weld all edges of the bracket to the trailing arm, including the top near the sway bar connection.** Failure to do so will lead to the bracket breaking off of the trailing arm.



Photos taken after welding and powder coat.

NOTICE

Class M Corporation DBA SpeedDirect takes no responsibility for the quality or completeness of any customer performed fabrication. The end user may be at risk of life and property if the welds are not done by a certified welder - not just any welding shop or garage mechanic. A certified welder is a person who holds a certificate that indicates they have been tested by an agency and found competent to perform critical or life and safety related welding fabrication.

SHARK BITE THREE YEAR WARRANTY TERMS

Our warranty can be found at www.speeddirect.com/threeyearwarranty. It is your responsibility to understand what Class M Corporation DBA: SpeedDirect is warranting on the components you have purchased. Be advised that our warranties change from time to time and it is our exclusive right to change the terms of the warranty at any time and for any reason.

SHARK BITE REPLACEMENT POLICY

Labor charges and/or damage incurred in installation, repair or replacement as well as incidental and consequential damages connected therewith are excluded and will not be paid by seller. Any and all costs for inspection, removal or replacement of the kit or its constituent parts or assemblies under the warranty are the responsibility of the original purchaser.