



## Part # 11534799

### **1963-1982 Corvette Composite Leaf Springs**









# 1963-1982 Corvette Composite Leaf Springs Installation Instructions

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IT IS VERY IMPORTANT THAT NOTHING COMES IN CONTACT WITH THE COMPOSITE LEAF SPRINGS.

THIS KIT WILL FIT CORVETTES WITH 2 1/4" OR 2 1/2" LEAF SPRINGS. MEASURE THE WIDTH OF YOUR LEAF SPRING AND FOLLOW THE CORRECT STEPS FOR MOUNTING YOUR LEAF SPRING. 63-77 CORVETTES HAVE 2 1/4" SPRINGS FROM FACTORY, 78 CORVETTE CAN HAVE 2 1/4" OR 2 1/2", 79-82 CORVETTES HAVE 2 1/2" LEAF SPRINGS.



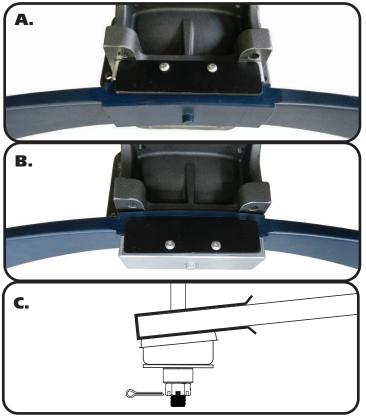




# Major Components .....In the box

	Part # Description				QTY
	90001397	Leaf Spring Blade			1
	90001400	1" Leaf Spring Clamping Block			1
ſ	90001401	Spacer Block Side Plates - 2 1/2" wide leaf spring cars			2
ſ	90001393	Leaf Spring Bolt (9.5")2Leaf Spring Bushing Kit1			
Γ	90001394 Leaf Spring Bushing Kit				1
Γ	90001391 Leaf Spring Bolt Spacers				4
Hardware Kit #99010146					
QTY Description			QTY	Description	
LEAF SPRING TO TRAILING ARM			LEAF	SPRING MOUNTING	
2	1/2"-20 Slc	1/2"-20 Slotted Nut		7/16" Split Lock Washer	
2	1/8" Cotter Pin		1	7/16"-14 x 1 1/4" Hex Bolt GR8	
4	1/2" ID x 2" OD Washer		4	7/16"-14 x 3 1/4" Hex Bolt GR8	
LEAF SPRING SPACER BLOCK			4	9/16" Split Lock Washer	
4	1/4″-20 X 1	1/2" Button Head Cap Screw	4	9/16"-12 x 3 1/4" Hex Bolt GR8	

## **Height Options**



#### **!HEIGHT OPTIONS!**

This kit has some height options and adjustment ability, depending on the stance you are after. The 1" Clamping Block can be mounted above **(A)** or below **(B)** the leaf spring. The kit also includes [4] 1/2" spacers that can be installed on the leaf spring bolt **(C)** to raise the rear of the car.

If you are looking for a level car, start with the block on the bottom side of the leaf spring. If you like the rear of the car higher, put the block on the top side of the leaf spring. The leaf spring bolt spacers are 1/2" tall and will change the ride height approximately 3/8" per set of spacers.

We also offer a coil spring spacer #90001395 to raise the front, if needed.

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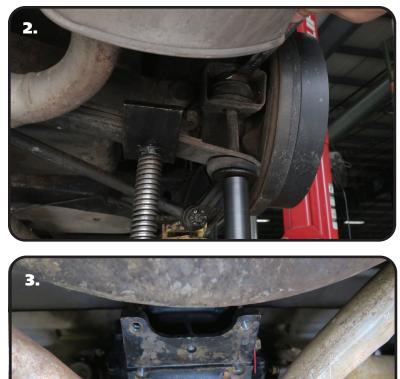
### Getting Started......

#### IT IS VERY IMPORTANT THAT NOTHING COMES IN CONTACT WITH THE COMPOSITE LEAF SPRING.

# DEPENDING ON HOW YOUR EXHAUST SYSTEM IS ON YOUR CORVETTE, YOU MAY HAVE TO REMOVE IT TO INSTALL THE REAR LEAF SPRING.

**1.** Jack the car up and support it by the frame rails. You may need to raise and lower the trailing arms with a jack to ease installation. With the car supported by the frame, put the jack underneath the rear of the trailing arm. Raise the jack enough to take pressure off the shock. Disconnect the bottom of the shock, retaining the OEM hardware. Repeat on the other side.

### Disassembly



**2.** Use the jack to raise one end of the leaf spring enough to take tension off the leaf spring linkage bolt. Remove the linkage. Slowly release the jack. Repeat on the other side.

**3.** With both ends of the leaf spring disconnected from the trailing arms, remove the center clamping plate. Retain the clamping plate for installation of the new leaf spring. On 80-82 Corvettes, you will need to remove the shield that is below the leaf spring clamp.

INSTALLATION IS GOING TO DEPEND ON THE WIDTH OF THE LEAF SPRING. IF YOUR CAR HAS A 2 1/4" WIDE LEAF SPRING, CONTINUE WITH STEP 4. IF YOU 78-79 CORVETTE AND IT HAS A 2 1/2" WIDE LEAF SPRING, SKIP TO STEP 7. IF YOU ARE INSTALLING THE LEAF SPRING ON AN 80-82 CORVETTE, SKIP TO STEP 12.



4.



### 63-78 2 1/4" Leaf Spring Mounting



AMPING BLOCK

location with the ends of the leaf spring pointing downward. THE CENTER LOCATING PIN NEEDS TO BE INDEXED INTO THE HOLE OF THE HOUSING.

63-78 CORVETTE WITH 2 1/4" LEAF

SPRING! Position the leaf spring in the OEM

5. 63-78 CORVETTE WITH 2 1/4" LEAF SPRING! The kit contains a 1" thick clamping block that needs to be positioned between the composite leaf spring and OEM clamping plate. The clamping block has a center hole that the leaf spring pin will nest into. The pin of the clamping block will be pointing down.



6. 63-78 CORVETTE WITH 2 1/4" LEAF SPRING! The kit contains new hardware for the center clamping plate. Depending on the year of the car, it can have one of 2 bolts sizes, 9/16"-12 or 7/16"-14. The kit contains (4) 3 1/4" long bolts & (4) Split lock washers of each size. Determine which is the correct size for your Corvette. Hold the center of the leaf spring and 1" clamping block in position. Bolt the OEM clamping plate in place with the correct hardware. Snug the hardware down, but DO NOT COMPLETELY TIGHTEN. The car needs to have its weight on the rear tires before torquing the clamping bolts. SKIP TO STEP 17.

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5.



#### 812-482-2932

78-79 2 1/2" Leaf Spring Mounting





7.





5

78-79 CORVETTE WITH 2 1/2" LEAF 7. **SPRING!** The kit includes a 1" clamping block and 2 side plates for installing the leaf spring in a car that came originally equipped with a 2 1/2" wide leaf spring.

78-79 CORVETTE WITH 2 1/2" LEAF 8. **SPRING!** Attach the side plates to the clamping block using (4) 1/4"-20 x 1/2" button head screws. The mounting holes in the clamping block are centered, the tabs can go either direction, but need to be sticking up on the opposite side of the locating pin. Attach the tabs so they are both sticking above the spacer block the same direction, opposite of the locating pin Align the holes in the side plates with the holes in the clamping block. Thread a 1/4"-20 x 1/2" button head in each hole. Torque to 4 ftlbs (48 inch lbs).

78-79 CORVETTE WITH 2 1/2" LEAF 9. **SPRING!** Slip the clamping block assembly on the bottom side of the leaf spring, aligning the locating pin with the hole in the clamping block assembly. The clamping block assembly needs to be installed on the leaf spring with the side plates going on each side of the leaf spring. The locating pin in the clamping block should be pointing down away from the leaf spring. The leaf spring is mounted in the car with the ends curving to the ground.









### 78-79 2 1/2" Leaf Spring Mounting



**10. 78-79 CORVETTE WITH 2 1/2" LEAF SPRING!** Position the leaf spring/clamping block in the OEM location with the ends of the leaf spring pointing downward. THE CENTER LOCATING PIN NEEDS TO BE INDEXED INTO THE HOLE OF THE HOUSING.



**11. 78-79 CORVETTE WITH 2 1/2" LEAF SPRING!** The kit contains new hardware for the center clamping plate. The kit contains (4) 7/16"-14 x 3 1/4" bolts & (4) 7/16" split lock washers. Hold the center of the leaf spring and clamping block assembly in position. Bolt the leaf spring/clamping plate in place with the supplied hardware. Snug the hardware down, but **DO NOT COMPLETELY TIGHTEN**. The car needs to have its weight on the rear tires before torquing the clamping bolts. **SKIP TO STEP 17.** 

### **80-82 Batwing Leaf Spring Mounting**



**12. 80-82 CORVETTE!** The kit includes a 1" clamping block and 2 side plates. The 80-82 Corvette will only use 1 side plate installed to the rear of the car.

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### **80-82 Batwing Leaf Spring Mounting**



- **13. 80-82 CORVETTE!** Attach the (1) side plate to the clamping block using (2) 1/4"-20 x 1/2" button head screws. The mounting holes in the clamping block are centered, the tab can go either direction, but needs to be sticking up on the opposite side of the locating pin. Attach the tab so it is sticking above the block on the opposite side as the locating pin. Align the holes in the side plate with the holes in the clamping block. Thread a 1/4"-20 x 1/2" button head in each hole. Torque to 4 ftlbs (48 inch lbs).
- **14. 80-82 CORVETTE!** Position the clamping block in the OEM location with the side plate to the REAR of the car and pointing down. THE CENTER LOCATING PIN NEEDS TO BE INDEXED INTO THE HOLE OF THE HOUSING.





**15. 80-82 CORVETTE!** Hold the clamping block in place and put the leaf spring in place. THE CENTER LOCATING PIN NEEDS TO BE INDEXED INTO THE HOLE OF THE CLAMPING BLOCK.



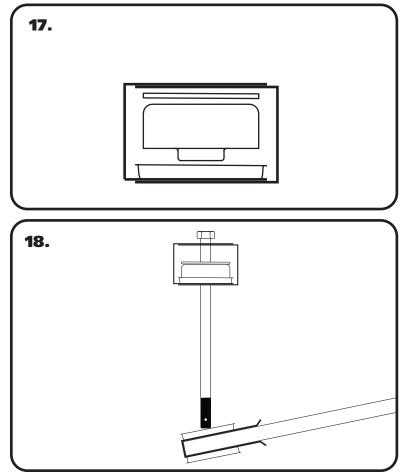


### **80-82 Batwing Leaf Spring Mounting**



**16. 80-82 CORVETTE!** The kit contains new hardware for the center clamping plate. The kit contains (2) 7/16"-14 x 3 1/4" bolts, (1) 7/16"-14 x 1 1/4" bolt & (3) Split lock washers. Hold the center of the leaf spring and clamping block assembly in position. Bolt the clamping plate in place with the supplied hardware. Snug the hardware down, but **DO NOT COMPLETELY TIGHTEN**. The car needs to have its weight on the rear tires before torquing the clamping bolts. Reinstall the shield below the clamping plate.

# Leaf Spring Linkage Installation



**17.** Install a leaf spring bushing into the OEM location of the trailing arm. Install a 1/2" ID x 2" OD flat washer on top of the leaf spring bushing, lining up the center holes.

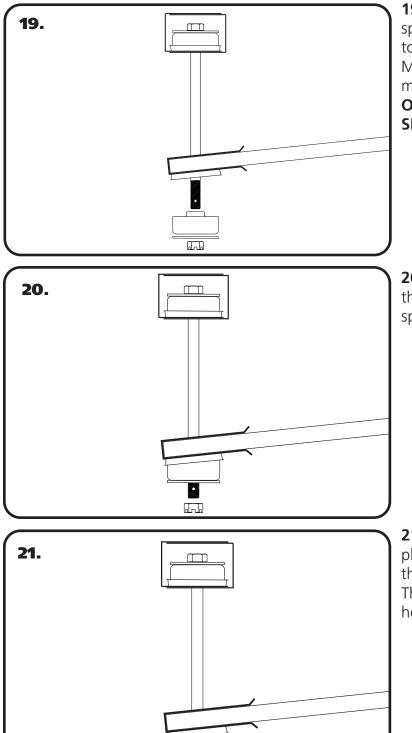
**18.** Insert the 1/2 "-20 x 9 1/2 " bolt in the leaf spring bushing. The bolt will go in through the top of the trailing arm.

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### Leaf Spring Linkage Installation



**19.** You will need to raise the end of the leaf spring up to get the bolt through far enough to get the bottom leaf spring bushing installed. Make sure to jack up the leaf spring by the metal on the end of the spring. **DO NOT JACK ON THE COMPOSITE PART OF THE LEAF SPRING.** 

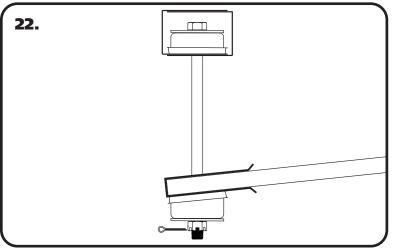
**20.** Slip the lower leaf spring bushing on the threads of the bolt sticking through the leaf springs, followed by the 1/2 " ID x 2 OD washer.

**21.** While holding the bushing and washer in place, thread the 1/2"-20 slotted hex nut on the bolt sticking through the bushing/washer. Thread the nut up the bolt until the cotter pin hole lines up with a slot in the nut.





### Leaf Spring Linkage Installation

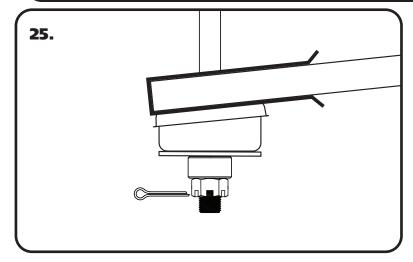


**22.** Install the 1/8" cotter pin and bend the ends to keep it in place.

**23.** Continue with the rear shock installation.

**24.** Set the car on the ground and torque the leaf spring clamping bolts to 65 ftlbs.

### Ride Height Adjustment (OPTIONAL)



**25. OPTIONAL** The kit includes spacers that will raise the back of the car approximately 3/8". The spacer will get installed between the 1/2"-20 Slotted hex nut and the washer of the lower leaf spring bushing. Support the end of the leaf spring by the metal part of the blade. Remove the cotter pin and 1/2" slotted hex nut. Install the spacer, followed by the castle nut and cotter pin. You will need to raise the end of the leaf spring more to get the cotter pin hole aligned with the slots of the slotted hex nut. We include 2 spacers per side for fine tuning your rear ride height.