

C3 Corvette Front Spoiler - Getting Spoiled

Adding An Aftermarket Front Spoiler To Our '76 Stingray

By Steve Dulcich

Photography by Steve Dulcich



There are items that add a distinctive performance look to your Corvette, and some of those include a considerable measure of actual performance. Among these is the front spoiler. From the standpoint of function, a front spoiler deflects a portion of the airflow that would otherwise end up under the car, creating undesirable front-end lift at speed, improving stability. A good chunk of this deflected air finds its way through the radiator, which often provides a bonus in terms of improved engine cooling.

With these credible benefits at hand, it was no wonder that GM saw fit to install a spoiler at the front of production Corvettes for the '78 Indy Pace Car version. This factory spoiler became an option in the following year, while later Corvettes had a redesigned front fascia with an even more extensive air dam.

A real front spoiler wasn't a factory offering for our '76 Stingray project car. A factory Corvette in that year features large cooling holes in the lower valance blanking panel, used in tandem with a polyurethane baffle at the trailing edge. The baffle is designed with a lower lip protruding downwards as a sort of mini-spoiler, directing airflow through these holes and into the radiator area. While this imparts a degree of functionality, from the standpoint of style, the baffle just isn't the same as a true spoiler incorporated into the bodywork.



Here's a view under the custom modified fiberglass nose of our '76 Corvette, revealing the stock front lower valance and plastic air baffle. Note the large cooling holes incorporated into the lower valance, and imagine how much air a larger spoiler will force upwards and through the radiator.

All that said, we were eager to add a front spoiler to our '76 Stingray, both to reap the potential performance improvements as well as for the great looks. We ordered a new spoiler (PN 10291) from Eckler's. This one-piece custom spoiler is similar to the factory offering but has rounded corners, which we felt better complemented the swooping lines of our car than the squared-off outer corners of the '78 factory unit. If preferred, Eckler's also offers the factory-styled spoiler (PN 10289), which comes at the same retail price.

These spoilers are one-piece bolt-on units, designed to utilize the mounting provisions for the factory air baffle at the rear of the valance. The factory air baffle does double-duty, with the lower lip serving as an air deflector, while the upper portion blanks the area between the lower valance and the radiator crossmember, forcing airflow through the radiator. The replacement spoiler will take the place of the air deflection function of the stock baffle, but the upper part

of the baffle is still needed to blank the area below the radiator closed. To accomplish this, the lip portion of the factory baffle is cut off, and the top portion blanking the radiator is retained. For our installation, we left off the baffle completely for now and will be fabricating a custom sheet-aluminum blanking panel to serve the same purpose.

We were impressed with the fit of the Eckler's spoiler but even more excited by the purposeful and racy look it added to the front of our project car. As noted, the spoiler bolts on via the stock bolt holes used to mount the production baffle, but two additional fasteners are required at the fenders. Eckler's solution is a bolt-and-washer arrangement that clamps the top edge of the spoiler at the fender, requiring no drilling in the stock bodywork. While drilling no holes may be an important consideration to some Corvette owners, we could see room for improvement in the mounting technique if the stock fender lip is drilled for a series of through-bolts along the inside lip.

Difficulty Index - 2 Wrenches	
Anyone's Project: no tools required	1 Wrench
Beginner: basic tools	2 Wrenches
Experienced: special tools	3 Wrenches
Accomplished: special tools and outside help	4 Wrenches
Professionals Only: send this work out	5 Wrenches



A view from the rear clearly shows how the factory black plastic baffle blanks the area from the valance to the lower radiator support. This directs the airflow picked up through the valance holes up and into the radiator, rather than just letting the air pass below.



These are obviously not the original fasteners retaining our car's baffle. Years of use have cracked and damaged our stock baffle's mounting holes, with large washers used to hold it in place. The spoiler installation begins by unbolting and removing the baffle.



With the baffle removed, a large, open area is created below the radiator. It's easy to see that any air picked up by the spoiler and forced in through the valance will glide right out below the radiator, bypassing it entirely.



Normally, the baffle would be cut at the tape line shown here to remove the lower lip, and the upper portion would be bolted in at the stock location between the bodywork and the new spoiler to blank the area below the radiator.



This is our custom spoiler from Eckler's (PN 10291). The spoiler deflects considerably more air than the lip on the production baffle.



We liked the shape of the 10291 spoiler, with its sweeping and rounded corners. A stock-style spoiler (PN 10289) is also available and has the squared-off corners of a production Pace Car spoiler.



The Eckler's spoiler is predrilled to utilize the factory fastener provisions. We decided not to use the upper baffle to blank the area between the radiator and spoiler as our baffle was in poor condition. To replace it, we'll fabricate a new blanking panel from sheet aluminum later. Start by installing the fasteners just finger-tight so that the spoiler exact position can be adjusted.



The front edge of the spoiler should meet the downturned lip of the valance exactly. We were impressed with the fit of the Eckler's piece.



The outer edge of the spoiler may seem a little wide while it's just hanging loose, while there's enough flex to easily bring it in tight with the flowing fender line.



We used some small C-clamps to gently bring the spoiler lip tight to the fender. Don't use excessive force when clamping hard fiberglass.



To avoid drilling holes in the stock bodywork, the spoiler is secured at the fender edge with a bolt-and-washer arrangement designed to clamp the two pieces together. If drilling holes isn't a concern, a more secure installation can be done using a series of fasteners along the inner edge, shown clamped in the previous photo.



With the spoiler secured to the fender, the edge as visible from the front of the car matched up perfectly, and the shape flowed nicely into the fender line.



The finished product lends an aggressive, high-performance look to a C3 Corvette nose.