

Installing Painted Rear Spoiler and 3rd Brake Light Pulser Item LED

Selection of Spoiler:



There are several types of painted spoilers available. The one available from GM is the same as the original but in Corvette colors instead of the “wart” black! There are two that were available with much longer area of LED’s; one with 44 LED’s and a newer one with 39 LED’s from Philips which

some Internet Forums reported were brighter. Both have the LED’s across the full length of the spoiler versus the short length in the original. There are also a number of full length spoilers available. One from GM and a number in the aftermarket. A full length spoiler was considered but it changed the look of the car and not necessarily for the better! It was not adding anything functionally and most had a small number of LED’s.

It was decided the 39 LED product sold by Southern Car Parts (www.southernCarparrts.com) looked good and provided a more visible 3rd brake light. Although Southern Car Parts offered a pulse option, at the time it did not appear it had the advanced features of one sold by several others. The one purchased was sold by High Horsepower Performance, in California. It has features that do not annoy the drivers behind you, especially when in bumper to bumper traffic! With their Pulser, the 3rd brake light pulses rapidly 3 times making it much more visible. Then it stays on as a normal brake light. In addition if the bakes are released and reapplied within 15 seconds the LED’s don’t pulse! Great idea.

Installation:

Tools:

You’ll need a:

1. 10mm deep socket and a 3/8 ratchet.
2. # 15 Torx screw drive to remove the taillight lenses. (No not try to use any other tool and be sure it is a good quality.)
3. Small round tail file.

Picture Sequence of Assembly

First remove the two inner taillights. Just let them hang by their wires. There are sheet metal screws that retain the taillights. Be sure the screwdriver is inserted properly and perpendicular so you do not round the Torx slot.



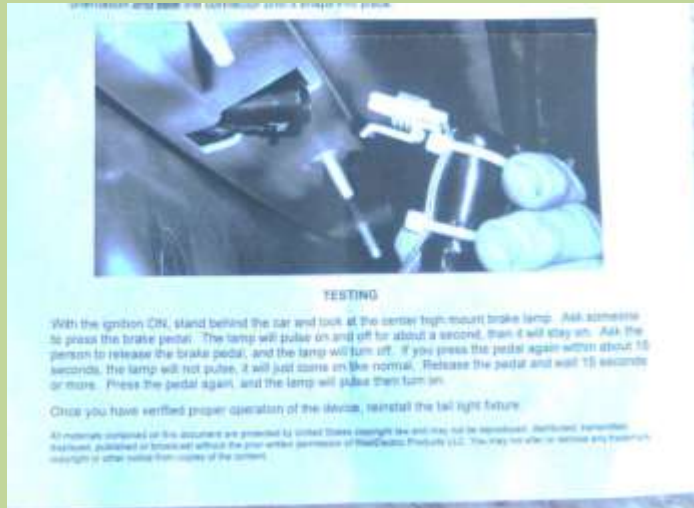
Reach in through the taillight opening with the deep socket and loosen the 4 nuts on the spoiler studs. After they are loosened you can unscrew them by hand. Don't drop them as they are needed and you'll have a hard time fishing them out!



You can unplug the connector to the original spoiler through the opening in the center. Look at how it connects carefully since you have to plug the bottom of the Pulser into the plug in the car without being able to see it! The Pulser simply plugs between the original plug on the wire harness and the new spoiler.



You can plug one side of the Pulser into the new spoiler plug through the hole but you'll have to use one hand! Good practice because now the tricky part! You must reach into the taillight opening and with one hand plug the connector at the bottom of the Pulser into the plug in the car harness (the one you removed initially.) Just be sure they are properly aligned than use your thumb to pull together until the connection snaps!



Optional:
Since the Pulser will be hanging in the rear bumper cavity; to help protect it and to prevent it from making noise, two sided tape and some packing foam was wrapped around the body before it was installed. Duct tape was then wrapped around the assembly.



As mentioned in the instructions, most holes in the bumper are slotted so the new spoiler will fit easily; all except the round hole shown in the photo. Note the small round tail file on the pad.



You don't need much filing to have the spoiler fit into the recess. 1/8 inch down toward the back of the car was all that was needed. The "plastic" bumper files easily.



Simply put the spoiler in place and run the nuts (those you removed) up by hand. Use the 13mm deep socket to tighten. When reinstalling the taillights you may need to reposition the metal clip so it aligns with the screw.



**Have a MIG (Wire) Welder?
A Friend with a MIG Welder?
Know Someone with a
Fabrication Shop?**

**Do Them a Big Favor and Have Them
Review the Shielding Gas Saving
Information on Our Web Site:**

www.NetWelding.com

***If You Have a Home Shop -
Have You Run Out of Shielding
Gas on a Saturday or Sunday?
We Have a Solution:***

How Much Gas Can Be Saved??

The best way to show the savings is with an example from one of our industrial customers who tested the system then bought them for all 35 of his MIG welders.



A Texas Truck Box manufacturer evaluated the system on a repetitive job, welding doors. With their

standard gas delivery hose they welded **236 doors** with a full cylinder of shielding gas. Just substituting their gas hose with our patented **GSS** maintaining the same flow settings they welded **632 doors!** That's a 63% reduction in shielding gas use.

Weld Performance Improvement

A small shop owner provided this feedback after he purchased a 3 foot **GSS** for his small MIG welder. Al Hackethal reported these findings:



"Well, I can't believe it. I never thought a hose could make that

much of a difference. I had a small job that's been waiting for a while. The weld quality, and even penetration is considerable better. Almost no spatter! The weld seemed to be hotter and I turned my MIG down a notch.

Initially thought that my imagination had kicked in, but then realized that the gas I'm buying is actually working the way it's supposed to. Glad I found your website. This is one of the few things that really works better than any info could suggest. I understood the theory, though in practice I understood much better after the first couple of welds. Now I have better looking welds and almost no spatter, which means less grinding and finish work! In addition, the tip was cleaner after the job I just did.

This will provide savings in time, labor and maybe even consumables too. As a one man shop there's never enough time for anything.

Al also has a TIG welder with 300 amp water cooled torch and bought one of our Leather Cable Covers. His email said this about it!

Oh, the leather wrap for my TIG hoses worked very well and fits perfectly. I'd just replaced the hoses and was looking for something to protect them that was better than the nylon wrap that's available around here. Now I'm "TIGing" again too, and much safer. It's good to know the coolant hoses are well protected. Much better than using a 300 amp TIG and then realizing that I was standing in a puddle of coolant, which is what recently happened. Can't pay the bills if I electrocute myself!

Thanks for making products affordable".

Another Home Shop Writes About GSS System

Perry Thomasson has a very well equipped home shop. He uses a 175 amp MIG welder. However the small welder cart only held a medium size shielding gas cylinder and Perry



wanted to reduce the number of times he had to have it filled.

He purchased the largest cylinder his distributor offered for sale and chained it to a wall in his shop. He needed a much longer gas delivery hose so he added a 50 foot conventional 1/4 inch ID hose. He found he was using a lot of gas.

He purchased a 50 foot long **GSS** and saved a significant amount of shielding gas while improving his weld starts by reducing the starting gas surge. Since his regulator/flowgauge had a hose barb on the output, we supplied Perry with a splice connection on the supply end of the **GSS**. He simply cut the existing gas delivery hose close to the regulator and spliced in the **GSS** hose. The welder end uses a standard CGA fitting that is supplied with the system.

Perry emailed a picture and said;

" The system works great. Thanks for the professional service and a great product."

A Professional Street Rod Builder Had This to Say About the GSS:

They use a 250 amp MIG welder with built in feeder and a 6 foot gas delivery hose. With their standard

gas delivery hose the peak shielding flow at weld start was measured at 150 CFH, far more than needed and enough to pull air into the shielding stream. Air is then sucked into the gas stream causing poor weld starts and possibly weld porosity.

With the **GSS** replacing their existing hose, the peak flow surge at the weld start was about 50 CFH and it quickly reduced to the 25 CFH setting. With the many short welds made and frequent inching of the wire, they used less than half the gas and had better starts.

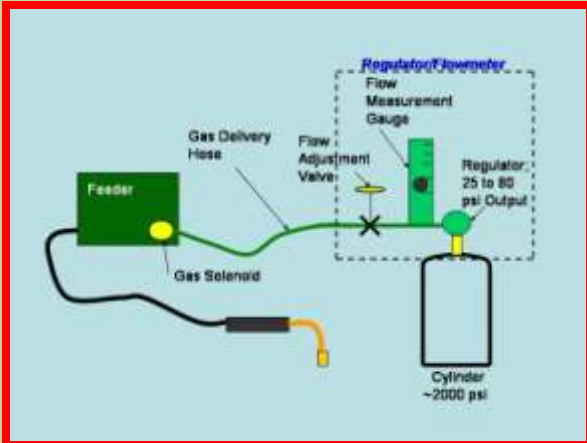


Kyle Bond, President, indicated a big benefit is the reduced time and effort

changing cylinders since it's required less frequently. He quickly saw the improvement achieved in weld start quality as a significant advantage! Kyle, an excellent automotive painter, was well aware of the effects of gas surge caused by pressure buildup in the delivery hose when stopped. He has to deal with the visible effects in the air hose lines on the spray gun in his paint booth! It's too bad we can't see the shielding gas waste as Kyle can the effects of excess pressure when he triggers his spray gun! The paint surge is visible and creates defects unless the gun is triggered off the part being painted! Kyle can manage the surge by triggering the paint gun off the part; unfortunately we can't start our weld with the MIG gun off the part! The **GSS** has a built in surge flow limiting orifice that keeps the peak flow from becoming excessive. So you not only save gas you improve your weld starts!

How Does The GSS Work?

Gas waste occurs every time you pull the MIG torch trigger even if it's only to inch the wire to cut off the end.



To keep flow at the preset level the gas pressure in the cylinder regulator will be between 25 and 80 psi. Flowgauge regulators (those with a flow calibrated pressure gauge) operate in this pressure range as well.) However to flow shielding gas though the welder and torch typically requires 3 to 5 psi depending on restrictions. Therefore every time



welding stops the pressure in the gas hose raises to the regulator pressure of 25 to 80 psi. That stores up to 7 times the hose volume of gas in the hose. This is similar to your shielding gas cylinder which holds about 150 times the volume of gas as the physical volume of the cylinder due to the high pressure!

The patented **GSS** stores over 80% less gas than typical shielding gas hoses. In addition to the wasted gas (which you can hear when you pull the torch trigger) the high flow also

causes air to be pulled into the turbulent shielding gas stream! This is like starting with the gas cylinder shut off! You have probably experienced that before when you forgot to open the valve!

It takes a short time for the shielding gas flow to return to a smooth less turbulent (laminar) flow even when the start gas surge flow reduces. That can take several seconds so when making short welds or tack welds you're not getting all the benefits of the shielding gas you're purchasing!

SUMMARY:

The **GSS** can cut your gas use in half or more. It also has a surge restriction orifice built into the fitting at the welder- wire feeder end. That limits peak flow (*but not your set flow*) to a level that avoids excess turbulence for better starts. It allows a controlled amount of shielding gas to quickly purge the weld start area.

All you need to do is replace the exiting gas hose from cylinder regulator to welder with our patented **GSS**. It is available in various lengths at www.NetWelding.com.

There are more testimonials at:

http://www.netwelding.com/product/on_test_results.htm

Have more questions? See:

http://www.netwelding.com/Overview_GSS.htm

Or email us at:

TechSupport@NetWelding.com