

# WA Technology

## License Plate Frame Options; *ITEM LPF*



Found a great license plate frame on eBay. The company, Billet Frames; WEB Site: <http://www.billetframes.com>. They offer custom frames in a variety of sizes. They are made from billet aluminum and engraved with a variety of fonts with whatever you want! They are available with an aluminum and black finish. You can see the black frames we picked. As noted it reads 2008 Z51 on top and 436HP on the bottom. The frame style chosen allowed the State Year and Month sticker to be fully visible.

It looked good but when we went “monochrome” will all Yellow eliminating the Black Spoiler, Door Handles and adding Yellow Splash Guards we needed something else. We purchased a painted Yellow From Mid America:



You can decide which frame you like best but the Yellow does look more in keeping with the monochrome Yellow!

Installing the Billet Frame is straight forward. It's a simple frame that screws into the OEM plastic receptacles. Found a clever set of 4 license plate screws that prevent theft. They use an Allen wrench but instead of a simple hex opening they have a small pin in the center with a corresponding hollow in the center of the Allen wrench! Cleaver. Bought them because they had a small head and were made from stainless steel. On the bottom we purchased some black plastic license plate fasters and used them to clamp the license plate, clear plastic flat cover we purchased and the holder. Cut off the excess screw threads with a pair of side cut pliers. The Billet Frame also came with 4 clear plastic washers. Used these even on the painted frame.

The Painted Yellow was more complex to install. It comes with good instructions but follow them carefully. Will provide some additional hints:

This is a photo of the license plate area. You can see two OEM white plastic screw holders. Harder to see are the two small black rubber raised "bumpers" at the bottom center.



This is a photo with the white plastic and black rubber "bumpers" removed. No problem with the black "bumpers" just pull them out with pliers. However the white plastic is not so easy! You will scratch the paint so be sure it is where it won't show! Place a thin screw driver at the bottom of the plastic and pry loose. Be careful it doesn't slip!!



Be sure the area is free of wax and most important silicon you may have used on the finish and that could have run down behind the plate. I use this professional cleaner from 3M for this type cleaning. You can purchase at an automotive paint store. Great stuff for cleaning off adhesives and making the finish wax and silicon free.



This next step is a little tricky. The aluminum backing plate attaches with 3M VHB tape. (Photo is only for info, we use this tape for one of our Shielding Gas Saving products.) Once it touches a surface it sticks, you won't remove it. Follow their advice and test position the aluminum backing plate with the tape cover in place! When removed and you put the brass screw holders into the holes you won't move it again - so be sure its placed correctly!



One suggestion, hook the bottom of the Plate Cover before putting in the plate. Tilt it forward then slip in the licenses plate. There is no room to fit a clear cover over the license plate. Probably just as well since the back of the Corvette accumulates so much road dust it was impossible to keep dirt from getting behind the previous clear cover!

Finished product looks great. Hard to see since color match is so good.



**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](http://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.

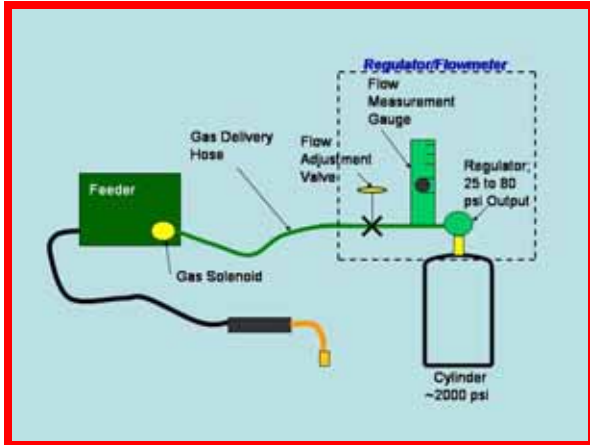


Kyle Bond, President, indicated a big benefit is the reduced time and effort

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](http://www.NetWelding.com).**

There are more testimonials at:

[http://www.netwelding.com/product/on\\_test\\_results.htm](http://www.netwelding.com/product/on_test_results.htm)

Have more questions? See:

[http://www.netwelding.com/Overview\\_GSS.htm](http://www.netwelding.com/Overview_GSS.htm)

Or email us at:

[TechSupport@NetWelding.com](mailto:TechSupport@NetWelding.com)