

**June 2016**



By now you've probably started your Chevelle, maybe even driven it some. Did you think about giving everything a once-over or just start it and go? Most people check their fuel level, maybe do an oil change, look for puddles, and air up the tires. When was the last time you put a wrench on your control arm bolts and nuts? Yes, they should be tight, but have you checked? One simple mistake can ruin your day, wallet, car, or even life. Sermon over.

Have you pre-registered for the Street Machine Nationals show yet? Have you thought about where you're going to park? Traditionally, a couple club members volunteer to secure our spot at the fairgrounds, and a couple more arrive quite early each day to make sure nobody encroaches on that space. Please contact a club officer or make it known on the club forums that you would like to volunteer on Thursday to help reserve club space. It's a very simple job; basically requiring time to babysit the area until the fairgrounds closes. Bring your car and detail it there instead of at home, read a book, have a picnic and watch all the other car people do the same thing. This is something that we need to have happen to keep the club's presence strong at such a large show. If you are at all able, even for a little while, please help.



Speaking of the Street Machine Nationals show, did you know that our club has business cards that you can hand out to people at shows? This is a great way to help recruit new members and they don't have to own a Chevelle to be part of our great group. I keep a couple in my car because I often get people asking about Chevelles, and where to go for info.

A few years back I put a Northstar Chevelle Club business card in every Chevelle and ElCamino that was at the Car Craft show, so long as they listed being from MN or western WI, and I took a picture of their car. The business cards said "you've been spotted" and gave our club info and web address. I then posted every one of those pictures on our forum and John D created a link on our homepage for them too. It was a great way to draw traffic to our site and we gained a couple new members from it. Wear your club shirts at shows too. Thanks!



**Taken back in 2008, the first year I parked with the club.**



If you weren't at the May meeting, boy did you miss something special. Don of Minnesota MetalCrafts hosted us at his shop in Eagan. I think everyone who attended was impressed.

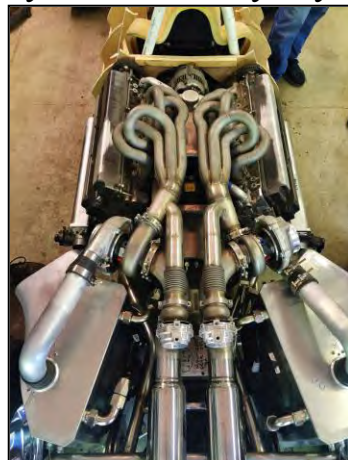
Don retired from a career in machinery design where he created and built the machines that make industrial batteries, his last stint being for submarines. His shop is actually in the garage and basement space of his home, but don't be fooled by that description, it is a well equipped and well thought out workspace. When it was teased that we could see the car Don was building, I don't think anyone was expecting to see that he was literally building a complete car from the ground up. The pictures don't do his work any justice, you really do

have to see it to appreciate what he's accomplished, and yes, it was built in his home shop.

What kind of car is it? It's not like anything else. Don fabricated the frame. What's the body? It will be sheetmetal laid over a structure designed for him. Don will create the panels himself, and they will be unpainted when fully finished. Engine?

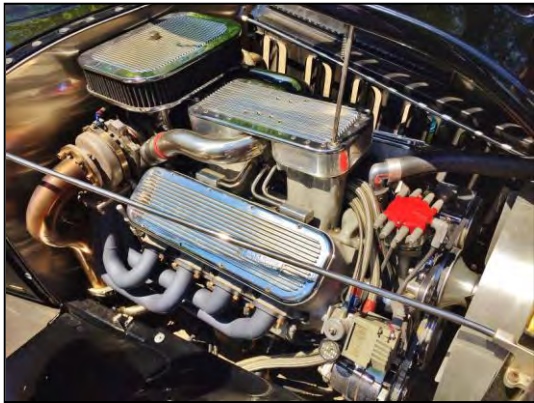
Don took two Toyota 1JZ inline 6 engines, cut the lower part of the crankcases, mated them to a specially machined block, and pivoted the heads to face inward (among many modifications). They feature twin turbochargers and it is a mid engine design. The intercoolers and radiators are actually behind the engine and are designed with elegant compactness in mind.

The rear suspension is an older style independent design, which was already adapted for the larger wheels he has now. Yes, Don built it all himself, including creating dummy shocks he built to keep it all in perspective. The front suspension is a lesson in art. Don created the control arms as well as the knuckle itself. The list could go on and on... but I'll stop and just post the pictures. Rest assured, if there's a part he doesn't like or if he thinks it needs re-working, off the car it goes. Don isn't apparently intimidated by anything.





Now that you're salivating and dying to see his shop, I'm going to stall a little bit further. Don has a completed hot rod that he currently drives to shows. It's a Buick that he bought decades ago and "was just a pile of parts, no body". After doing some magic to the engine (it's a turbo'd big block Chev) Don created the body. He stamped those louvers himself. By the way, they're descending sizes which made it



somewhat difficult to do since the tool had to be modified each time. He built the convertible top frame and mechanism too, foregoing power for manual out of simplicity. Like the other car, there are so many small details that I just can't do the car justice. Details like adding to the head casting so the valve covers are just the top panel, and modifying the head so you can't see what has been added on. Amazing.

### **Are you ready for the shop tour yet? Here we go!**

Sitting in the main working shop area is another vehicle, this time it's for someone else. Don did a bunch of metal work to it, and still to be done is grafting on the roof panel of a Dodge Magnum wagon because "the roof panel has the same arch". I expect it to be metal finished to the same degree the rest of this body is in. Beautiful work. In another room, you'll find most of his sheetmetal working equipment as well as materials storage. Now we're into dream shop stuff. Panel breaks, nippers, rollers, stretchers, shrinkers, Don has it all, and it's neatly fit into the area.



We got a tour of the shop and some of what he's able to accomplish with a metal shrinking demo followed by his smoothing the piece out on the English Wheel. Virtually every useable space has been taken up by some sort of tool or supply. We were given virtually free reign of his shop to poke around and check things out. That's when we came across what most don't have.....

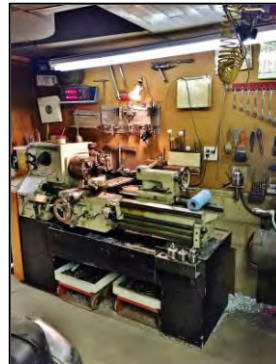




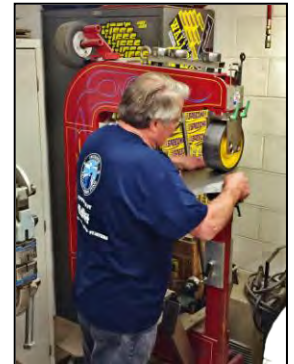
That's right. He's got a toilet in his shop. Remember when I said that the shop was in the garage/basement of his home? Well, he literally converted the whole space into one giant man cave. Storage space is not wasted in this shop.

What I can only assume would have been a bedroom, you will find his machine shop. Snaking around the house's utilities, this room housed the lathe, mill, drill press, tubing bender, and all of their specialized accessories, plus decades of boxed car magazines including HOT RODs going back into the 1940s.

Don truly is a master of his craft. He has done work as simple as welding a sump panel and bung onto my Chevelle's fuel tank, to modifying Chris P's Camaro hood for supercharger clearance, or work as creative as making header heat shields for a TPIS-built Ferrari V-12 owned by a prominent auto dealership group owner. Unfortunately, Don has stated that he no longer is taking in additional work, so you will have to either develop your own skills or find another metal master like him.



Shrinking, then smoothing



At left is an artist's rendering of what Don's project could look like. The rivets would be mostly decorative, and he still hasn't decided if the panels need them for character or not. I'm sure whatever Don decides will look awesome though.

More information about Don's engine build can be found here:

<http://www.engine-labs.com/tag/don-groff/>



Simple enough idea right? Perfect for your mobile tool box. Sockets can be done on a piece of wire or string so they stay together. There are all kinds of ways to house your portable tools if you have a little creativity. Over next winter, I'll be looking into using my trunk space better since I'm one of those who bring half a tool box with me.