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April 2010

Welcome to another issue of the Northstar Chevelle Club Newsletter. This month's newsletter comes from my own recent rear axle rebuild project. I readily admit that I am not a mechanic and I'm bad with instructions unless I can write them for myself. I will also admit that on my limited car budget, I can't just go to the best place in town and have it done for me. Luckily, I know a guy. I think we all "know a guy" for various things. It's part of the car culture. I got a call from him saying he had some time, and to bring all of the axle parts up on Saturday so we can get it done. I trust him. He does good work, and since we grew up together we trade labor instead of dollars. While being his second pair of hands and trying to stay out of the way, I got to thinking about how lucky I am to have to know someone who can fix just about anything car related. His real job is at a tech line that helps mechanics out. They have a huge library of books and materials that include service manuals for just about every vehicle and automotive system in the past 40+ years. Too bad it's not available to the general public. In the end "we" got my axle almost done, and he finished it up later that night after I left. I don't know what it will cost me in trade, but it probably involves cleaning out the horse stalls for a couple hours.

NEXT MEETING
APRIL 15TH at 3pm
CA PERFORMANCE
6780 HUDSON BLVD
OAKDALE, MN 55128
(651) 739-2904

Don't forget-our open forum for news, events tech info, and anything else to chat about is [http://northstarcheves.com/activeboard.com/](http://northstarcheves.com/activeboard)
If you aren't signed up, you're missing out on a big part of this club! Stop by and see what's going on, join in, or just introduce yourself

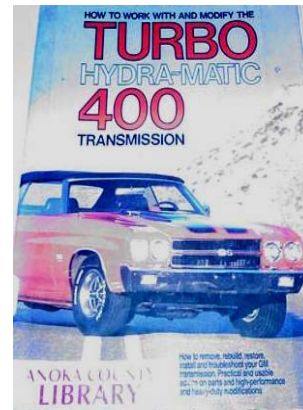
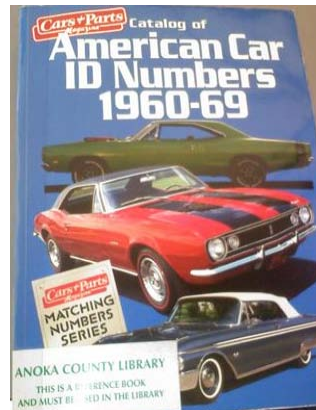
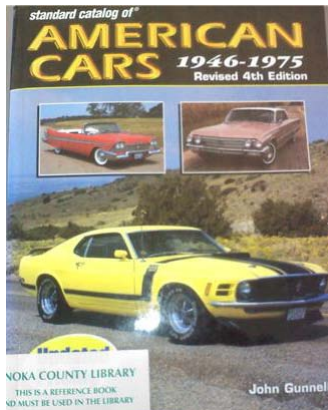
Club officers:

President: Bryan Flattem
Vice President: John Enga
Treasurer: Terry Didion
Webmaster: John Delke

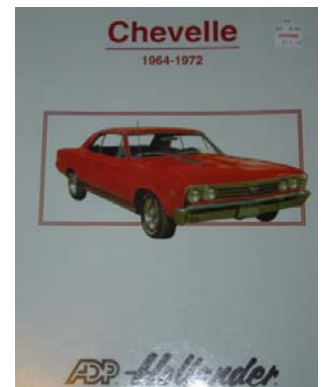
Club Secretary: Lori Macree
Events Coordinator: Ian Macree
Forums Webmaster: Tom Brokaw

Resto Report: Reference Materials

One day while at the little library by my house, I wanted to see what they had available for us car people. I remember from when I was younger, that there was a really nice reference section at the main Eagan library. They had all kinds of Motors brand books, and the series of Motors Interchange manuals, but nothing dating back to the musclecar era at the time. I was pleasantly surprised to see that my little 8 aisle library had many of the books that us Chevelle owners could find useful. There are production number breakdown books, Chevelle and SS history books, even tuning and performance books. Did you know that Anoka County Libraries have free use of the online AllData technical service? Does yours?



At home, I have accumulated a decent set of manuals and catalogs that I have found either at swap meets, used book stores, or even the library's sale bins. There's plenty of this stuff out there if you are willing to look. Half Price Books is a good start. They had Hollander interchange manuals just for Chevilles. I got mine for \$12.48, not the \$24.95 cover price. I picked up a Camaro one too since it was like 2 for 1. These are great places to see what parts are the same as other GM models. Things like door regulators, axle and suspension pieces, etc.



I have yet to see a GM parts book there, but those are often found at swap meets. You can even find it on disc now on Ebay. These are a great place to start when finding NOS or original parts for your car. The way GM has the parts listed takes some time to learn, but there are indexes and illustration pages that help. With the correct part number you can go to the dealer and ask if it's still available in the warehouses or at a dealer across the country. GM assembly and body manuals are also wonderful places to get the proper assembly instructions. There's all kinds of restoration parts catalogs out there too, and some use the original part numbers from GM. I love these places, but it can be confusing to determine if they're actually OEM or reproductions. I get curious about what other books and manuals people have. I have a 3' shelf full of reference books and catalogs in the garage-right where I need them. I'm always curious as to what other people have too.

Cool Tool: Ratech Pinion gear shim estimator

As anyone who has done a gear swap or rear axle rebuild can attest, it is a process involving some trial and error to get your pinion gear in the right position with shims. If you don't, it will affect where the gears mesh to the ring gear. It was suggested to me that I buy the Ratech pinion tool to speed things up and make it much easier. I figured it was a decent investment at about \$30. The instructions were very simple:



Install used bearing on new aftermarket gear, slide pinion gear into gousing and take up the slack with the pinion nut.

Then measure from the side bearing surface to the top of the tool.

Subtract a number printed on the tool from that measurement and you have a very close pinion shim number to use. Mine was about .002 off from perfect, and it took maybe 2 minutes to do.



Spring is here! As I write this, it hit 80 degrees today. My yard is now turning green instead of white. My garage got a little cleaning and some space was made for work to be done. I've even started to get some things done out there. It is time to roll up those car covers, air up those tires, and get out driving if you can. If you've got plans for a Saturday or Sunday drive, post it on our forums. Hitting the local weeknight cruise spot? Lots of our members have cars ready to go, and are just itching for an excuse to go for a drive. The main cruise nights for this summer have been posted too, but they don't start until Mid May, so it's time to make your own up. SEMA has a good tagline we shouldn't forget: **Enjoy the drive.**

Anoka opens 5/15
Hastings opens 5/29
North St Paul opens 6/4

How to Photograph Your Car

Part 1: Lighting

By: Troy Kruger

www.customshowboards.com



This is the first part of a series of articles, which will help learn to properly use your equipment and environment to create that spectacular photograph that you yearn for. Don't worry, as there is no need to spend a lot of money. In fact, you likely already have most of the tools to create that beautiful shot. The hardest part is getting the right

subject, and your beloved Chevrolet vehicle should fit that bill nicely. So let's get started by talking about lighting.

Good photography is 90% lighting. Since we typically don't have access to a studio large enough for our cars, we have to do with what natural light is available to us. Plan your photo shoot carefully. Avoid mid-day sun, as the light is very harsh and will wash out the top of your vehicle. Late evening/early morning horizontal light is the best. If you are lucky and can



work fast, you can get some very good photos right at sunset. However, you have little time to get the perfect shot. That's why I recommend starting with sunrise instead, so that you won't run out of time after the "perfect" moment. Make sure the light source is behind you (the camera), but don't let your body cast a shadow onto your shot! Another good time to take a photo of your car, especially if it is black, is

during an overcast day. You have more time, and you can rely on your automatic settings with your camera if you are just getting the hang of things. Little can go wrong in this light, except potential rain!

Some photographers have recommended using a fill flash, but I personally don't like it for exterior shots. It looks unnatural to me, and anything reflective on your car (like license plates and reflective decals / striping) will be way overexposed. Instead, always **use a tripod** so that you can shoot without a flash. You can get a tripod at the local electronics store for under \$50 – there is no need to break the bank if you are just getting started. If



you have a step ladder handy, you can even use that in a pinch to balance your body and camera as well. Hold on to that ladder, because you will see how to use it in a future installment regarding composition.

So how about the flash? A flash is usually necessary for interior shots and under-hood

engine shots to fill in the dark shadows. I like to find some bright shade for these shots (less shadows) and use my flash. Avoid shooting in harsh sun with the light penetrating certain areas of the interior/engine compartment and darkening others. Learn how to “force your flash” using the settings on your camera. When in automatic mode, it will rarely fire outdoors on those interior and engine shots where you need it the most.

Next time, we'll take a look at how to compose those “perfect” shots. Until then, start collecting a file of photos that you love, which you find in magazines, calendars, and on the internet. Study them hard, and try and duplicate them the best you can. By the end of this series, you should be able to do it! If you can't wait, you can check out more tips on my website: www.customshowboards.com

We need more newsletter subjects!

Also, anyone who hasn't had their car featured in a newsletter, please let me know so we can include it in an upcoming issue!