

Volume V December 2000



Dedicated to the preservation and performance of the 1989 – 95 Thunderbird Super Coupe & 1989/90 Cougar XR7

"What lies behind us is nothing compared to what lies within us and ahead of us." Anonymous

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Super Coupe Club of America

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Changes of Address

Address changes MUST be submitted in writing by the 25th of the month prior to a Chargin' Thunder (CT) printing. The CT is mailed each March, June, September, and December. This will give us time to change it in the computer prior to the next mailing. Address changes are not taken over the phone. They must be in writing via letter, or email (sccoa@usa.net) stating old address and new address. We cannot be responsible for "lost" issues due to late notice of address change. Replacement cost of any lost issue is \$5.00.

Mailing of Newsletters

The CT newsletter is mailed out quarterly in the third, sixth, ninth, and twelfth month of the year. All issues are mailed at the same time via Bulk Mail Postage.

Problems & Complaints

Our highest priority is getting the CT newsletter mailed to you on a timely basis. Please let us know if you have ANY problem at all. Call or email us with your questions or concerns.

New Membership & Renewal

Membership and subscription to the CT newsletter is \$40 US per year. Dues for those outside the USA and Canada are \$50 per year. Each club year begins with the March issue and concludes with the December issue. Renewal slips are placed in each December issue for the upcoming club year. Each January brings a new club year. New members and late renewals receive issues of the CT back to the previous March (which is the month the first CT of the year is mailed) to keep them totally up to date and keep their yearly volume of issues complete.

Classifieds

Any member may place "car" or "used parts" ads for free in the CT. Send your ad to us via email or post card/letter and it will appear in the next issue. Include your member number with your request. Ads must be typed or printed legibly, please.

Businesses wishing to place an advertisement in a CT newsletter should contact Patty or Bill. 513-697-6501

Daily Schedule

Patty is available 9:00 a.m. – 4 p.m. M-F most days for general information. Bill is available from 6 – 9 p.m. EST M-F for technical info. Please be considerate of the time zone differences! Phone # 513-697-6501.



From The Birds Nest

By Bill Evanoff

The SCCoA web site has continued to grow in popularity as more and more people search the Internet for information on their cars. I get emails from first time visitors to our site weekly and they are always extremely excited to have a place to go to get information about their SC or XR7.

The web hosting company that hosts the SCCoA site offers an interesting statistics package to track the usage of the site. This package gives many statistics on when and where people like to look within the site, where they came from prior to surfing into our site, and where they are located geographically. I'd like to share some of these statistics with you this month, as I'm sure you will find them interesting.

The first bit of information I'd like to share relates to the site usage, or how many people are looking at it. Here are some "Key Terms" and their definitions that must first be explained.

Hits: The total number of files requested from the server.

Bytes: The amount of information transferred in filling those requests.

Visits: The (approximate) number of actual individual visitors.

PViews: The number of Web pages viewed by those visitors.

The chart below shows the results of these Key Terms for the previous nine months. I find it amazing that the site has been averaging between 40,000 to 60,000 individual visitors each month!

Daily reports of this same data are provided for each day of the month. History has shown that the weekends are a much slower period on the site. Weekdays are usually much busier as I'm guessing that people may view the site while at work. Monday, Tuesday and Wednesday are the most active days with Thursday and Friday falling off slightly in usage.

Hourly reports of this data are provided also. Usage is at its lowest at 3 a.m. The number of visitors increases all morning until noon, when it dips slightly for one hour. At 1 p.m., usage steadily increases again until 8 p.m. At this time, usage dips slightly, then drops dramatically at 11 p.m. Usage continues to fall until a low point again at 3 a.m. I'm glad that people are at least signing off long enough to eat lunch!

Monthly Statistics for SCCoA Web Site

Hits	Bytes	Visits	PViews	Month
1,335,630	10,102,954,008	39,927	323,076	Mar 2000
2,176,584	22,263,470,159	62,241	617,544	Apr 2000
2,242,837	22,383,005,610	64,776	635,118	May 2000
2,025,379	19,763,183,729	59,650	577,994	Jun 2000
2,016,627	19,666,518,091	63,331	578,097	Jul 2000
1,905,681	19,638,598,275	56,018	382,474	Aug 2000
1,715,307	16,846,084,219	47,160	237,872	Sep 2000
1,940,926	19,114,003,534	52,111	281,031	Oct 2000
1,668,830	16,612,967,932	44,760	231,228	Nov 2000 (up to 11/25)

Here are some of the search engines that we are getting most of our referrals from:

Yahoo.com
Altavista.com
Excite.com
Hotbot.com
Infoseek.com
Lycos.com
MSN.com
Snap.com
WebCrawler.com

What browsers are our visitors using? Approximately 47% of our users are using MS Internet Explorer Version 5. 23% are using Netscape Navigator Version 4, 11% are using AOL's browser Version 5, 10% are using MS Internet Explorer Version 3, and 4% are using AOL's browser Version 4. Apparently many people have not upgraded their browsers to the newest versions available.

What platform are our visitors using? Approximately 56% are using Windows 98, 54% are using Windows 95, 13% are using Windows NT, and 2% are using Macintosh Power PC.

The "Main" page of the site is obviously the most visited, but here are the next most frequently visited sections: Members Cars, SC of the Month, Frequently Asked Questions (FAQ), Links & Multimedia Our new BBS boards are not actually hosted by our hosting company, but I believe they are the most popular items on the site by far.

Our site surfers obviously love looking at member's cars, so I'll continue to persuade everyone to take a few moments and fill out the Members Car submission form found under this section of the web site. Take a few pictures of your car, scan them and send them to our Webmaster, Ron DiPaola at "scguys@usa.net".

The Multimedia section is very popular also. Watching a SC in-action, such as in one of Wayne Ing's videos, continue to get many hits each month. The fact that he is racing cars such as a Viper or a late model V8 Camaro make the videos all that much more exciting.

Finally, one of the most interesting statistics offered to us each month is "Where do our visitors come from?" Here is a sampling of the diverse locations that we have drawn hits to the SCCoA web site from within the past month.

# Hit	S	Loc	cati	on of E	Doma	ain
633,00	+ 00	USA Commercial				
544,00	+ 00	USA	A Ne	etwork	(Peop	le at work?)
97,000)+	Edι	ıcati	onal (P	eople	at school?)
41,000)+	Car	nada	1		
23,000)+	Mili	tary			
8,300	+	юИ	า-Pr	ofit Org	janiza	itions
5,500	+	Me	xico			
5,300	+	US	Gov	ernmer	nt	
3,100	+	Fin	land			
2,100	+	Net	herl	ands		
2,000	+	Ital	y			
1,600	+	Uni	ted	Kingdo	m	
1,100	+	Cay	/mai	n Island	ds	
944		Aus	strali	ia		
902		Bra	zil			
875		Cod	cos ((Keeling	g) Isla	ands
761		Jap	an			
679			way			
624		Neι	ν Ze	ealand ((Aote	aroa)
573			mar	าy		
480			nce			
Well,	there	is	no	place	too	far-fetched,

Well, there is no place too far-fetched, except for the two islands mentioned, but check out some of the other places that we got numerous hits from:

Chile, Saudi Arabia, Switzerland, Singapore, Czeck Republic, Israel, Iceland, Poland, Denmark, Malaysia, Ireland, Hungary, Faroe Islands, Spain, Argentina, South Korea, Uruguay, Slovak Republic, India, Thailand, Venezuela, Austria, Panama, Taiwan, Belgium, Austria, and Indonesia. I'm quite flattered that the SCCoA is truly an

international club and that we have interest in these far-away places. Where the heck are the Faroe Islands anyway??

Renewal Time

This December issue of Chargin' Thunder fulfills another great year of newsletters. I would like to take this opportunity to brag on all the contributors over the past year. I personally only write a very small percentage of each newsletter. It is all the terrific contributors to the CT newsletters who should be getting the praise! Without the continued input from our membership, the CT wouldn't be worth the paper it is printed on.

I've included a "Renewal" form along with this newsletter and I invite everyone to come back in 2001 for more fun and learning about our favorite vehicles. On the form, the bottom portion is your opportunity to speak out regarding what topics you would like to see articles on for the upcoming year. I'd also like to invite everyone to write an article about his or her car, or a subject they feel qualified to talk about. I welcome any and all contributions as long as the information has not already been covered in detail previously.

Since Patty and I have become the SCCoA coordinators in September of 1998, SCCoA membership has thankfully grown nearly We feel blessed to have the 46%. opportunity to serve the interests of our members. As your coordinators, we are kept busy gathering interesting articles, publishing and sending newsletters, keeping track of addresses. recruiting new members. monitoring the web site and updating it as necessary. We connect members together that are looking for parts or information, plan club events and meets, and answer hundreds of questions via email and over the phone. It definitely keeps us hopping! We thank you for your continued interest and suport of the club and we are looking forward to another great year in 2001.

Our Webmaster

Ron DiPaola, the SCCoA webmaster, has been an unbelievable help to this club and I want to thank him for his unending service and enthusiasm. Without Ron, the SCCoA web site wouldn't be what it is today. Ron has probably put more miles on his SC going to car shows than anyone else I know. To my knowledge, every SCCoA show I've been at within the past three years, Ron has been there too. This guy LOVES these cars and we all owe him a huge THANK YOU for his work on the web site!

Free 2001 Membership!

As an incentive for renewing early next year, we will be entering all renewals received before February 1st 2001 into a drawing for a free year's membership. Two winners will be announced in the March 2001 CT.

Renewing is easier than ever this year as we now offer renewal with your VISA or MasterCard. One can fax us his or her renewal form at 513-697-0580 with their card number and expiration date written in the appropriate spot on the form or one may call us at 513-697-6501. For those who are familiar with PayPal (www.paypal.com), we can also accept your credit cards through this free Internet service. As always, one may snail mail the form to our home using a check or money order. We have unofficially offered a guarantee for quite some time, but SCCoA membership is now offered with a noquestions-asked quarantee. If you don't like it...you get your money back!

Upcoming Events

The Boardwalk Casino/Holiday Inn in Las Vegas, NV will be hosting the next Super Coupe Club of the Southwest outing. The event will be January 12, 13 & 14. The hotel is located at 3750 Las Vegas Boulevard. Rooms are \$80 per night plus 8% room tax. There is a block of rooms for the SCCOA/SW and you MUST tell them that you are with this group when making your reservations or

you will pay BIG BUCKS, being a holiday weekend {ML King}. The reservation # is 1-800-635-4581. Please let Kelly Simons (fsracing@lvcm.com) know when you make your reservations. Reservations need to be in by Dec 13. The local drag strip will be open for racing. There will also be a special deal available at the Richard Petty driving school that weekend for those who feel the need for some HI SPEED driving. Contact Kelly Simons with any questions.

National SC Meet

I briefly hit upon this topic in the last CT and it is taking shape thanks to Kurt Sunday and a few other hard working individuals. The date for this event will be April 27 – 29th 2001 and the tentative location is Oklahoma City OK. I hope to have many more details of this event in the March 2001 CT.

SPECIAL on Club Logo Tshirts!

SCCoA Club Logo shirts are now on special until the end of January 2001 to SCCoA members only. They make great birthday or Christmas presents, so order soon to get the sizes you want. To order, simply write me a

letter or email stating which size(s) you are requesting and the quantity.

Sizes M, L, & XL are \$10 (was \$15). Size XXL is \$14 (was \$18) and size XXXL is \$16 (was \$20). Shipping cost for one shirt is \$3. Shipping for two or more shirts is \$4.

The Cartoon shirts are virtually sold out now but there is a small quantity of the shirts with the "Surgeon General" logo written on the front. These are now on sale for \$9 + shipping, but sizes are limited. M, L, and XL. First come first served!



Rear of the "Club Logo" shirt

SCCoNW Meet Review

By Brad Fedoruk t-birdsc@mybc.com

First thing that I would like to say is <u>THANK YOU</u> to all who came out to the Super Coupe Club of the Northwest (SCCoNW) Fall meet in Cloverdale, B.C. on October the 8th. I hope everyone had as

good a time as I did! Although the weather wasn't the greatest to start the day, by the time the meet got going, the rain had stopped and allowed us all the time we wanted to check out each other's cars without getting wet! Lunch at Rafters Bar and Grill was great, and we all had a chance to talk to each other, and compare modifications and discuss future plans.





After we were all finished inside we departed from the restaurant (with a great deal of noise and tire smoke) we headed for the Millenium Amphiteater Park on the Cloverdale Fairgrounds to take some pictures. Not long after we all lined our cars up on the grass of the park, we took our turns taking pictures, and then were promptly asked to remove ourselves from the property (who knew that we weren't supposed to park on the



grass???) So..... those who didn't have prior Thanksgiving arrangements headed back to Rafters for some more fun in the parking lot. After some spectacular displays of the Super Coupe's abilities, and leaving our mark on the blacktop, everyone headed for home.

All in all, we had 12 Thunderbird Super Coupes, 2 Thunderbird LXs, and one Cougar 5.0 XR-7 and almost 25 people came out and showed their support for the Northwest chapter!!! This far exceeded my expectations when I planned the meet, and was very happy to see the attendance. This can only mean one thing...the next one will be bigger and better!



Those in attendance were: Brad Zillmer and Josh Hansen who made the longest drive from Washington state, Mike Harkoff, Dean Stuart, Houman Lessani, Dan Narayan, Shawn Muskovic, Jason Dahl, Ryan Hickmore, Miles Nerona, Kevin Relkoff, John Evoy, Pat Connely, Linda Fedoruk and myself, all from British Columbia. If you were there and I missed putting your name down, I sincerely apologize.

For all who attended this past meet, and for those who didn't get a chance to come, you can check out the following website: www.drive.to/scmeet/ and check out all the action, TONS of great pictures, and two phenomenal Quicktime videos showcasing some of the fun we had on the 8th... check it out!! Very Special thanks to Rob Harrison for putting this

website together within a day of the meet! Even though Rob doesn't own a Super Coupe, he devoted a lot of time and effort into recording the day's events for the rest of us to enjoy. Thanks again, Rob!

The Super Coupe Club of the Northwest is now online! Check out www.scconw.com for info on chapter meets, members' cars, a bulletin board and much more! Special thanks to Dan DaSilva for spending a great deal of time and effort putting together this website.

Check out www.geocities.com/scconw.com for information on Tim Mendoza's 3/4" SC tops (a very worthy investment)

Photos compliments of Rob Harrison!



Anyone hungry for doughnuts?

Even though we may not fall victim to *physical* cancer in our lives, many of us suffer from the four greatest *mental* cancers in Life: Criticizing, Complaining, Comparing, and Competing

Lance Armstrong – 1999 and 2000 Tour de France Winner

Custom Embroidered Auto Apparel

- Your source for custom Thunderbird SC and Cougar XR7 embroidered apparel. http://www.sccoa.com/apparel/

Heavyweight T-Shirts: Gildan Super Heavyweight Tee 100% cotton 6.1 oz preshrunk jersey knit Double needle topstitched neckline Double stitched sleeve and waist hems Seamless collar with taped neck and shoulders Quarter turned to eliminate center crease European straight cut comfortable fit	Available Colors: White*, Natural*, Ash*, Black*, Sports Grey*, Maroon, Orange, Forest*, Royal Blue*, Red*, Navy Blue*, Purple, Light Blue, Light Pink, Yellow Haze, Mountain Rose, Stone Blue, Serene Green, Eggplant, Charcoal, Leaf, Cedar, Indigo Blue, Prairie Dust, Tan, Chestnut, Blue Dusk, Olive, Brick, Sand, Mango, Key Lime, Daisy, Bermuda, Azure, and Coral.	Sizes: All colors available in: M - L - XL - XXL * indicates size available in XXXL Embroidery available in: White, Khaki, Black or Stainless Steel Price: \$ 20.00	
Classic Denim Shirts: Three Rivers Classic Denim Shirt 100% cotton long sleeve denim shirt Button down collar with wood toned buttons. Left chest pocket. Single- button cuff and sleeve placket. Double-needle stitched. Generous cut.	Available Colors: White, Natural, Khaki, Black, or Light Blue Embroidery available in:	Size: S - M - L - XL XXL - XXXL XXXXL - XXXXXL Large-Tall XL-Tall	Price: \$45.00 \$50.00 \$55.00 \$53.00
Golf Polo Shirts: Harvard Square 100% Heavy Pique Sportshirt 7.25 oz ring-spun Egyptian cotton 3 wood-tone button placket. Fashion knit collar. Welt cuffs. Side vents with 2.5 inch extended tail.	White, Khaki, Black or Stainless Steel Available Colors: Denim, Yellow, Sports Grey, Sage, Wine, Ash, Fushia, White, Red, Putty, Royal Blue, Natural, Forest, Green, Navy Blue and Black Sizes: S - M - L - XL - XXL - XXXL	XXL-Tall Embroidery available in: White, Khaki, Black Price: \$ 40.00	k or Stainless Steel
Heavyweight Sweatshirts: Fruit of the Loom 12 ounce, 90% cotton/10% polyester blend fleece fabric Shrinkage-controlled fabric Set-in sleeves Cover-stitched armholes, collar and band bottom	Available Colors: Black, White, Ash, Dark Gray, Natural Beige, Maroon, Forest Green, Navy, Red, Royal Blue Sizes: S-M-L-XL-XXL	Embroidery available in: White, Khaki, Black Price: \$ 40.00	k or Stainless Steel

All items come with your choice of two logos, Cougar XR7 or Thunderbird Super Coupe:





All items are guaranteed satisfaction, just mail the item back and I will refund your money or exchange the item.

All shipping and handling is a flat U.S. \$5.00, regardless of how many items you order or where in the world the apparel is shipped to. This covers insurance and USPS's Delivery Confirmation Receipt service.

To order, mail your order with check or money order made out to: Ron DiPaola to the following address: Ron DiPaola: 206 South Duane Ave. Endicott, New York 13760	For more information, check out the Custom Embroidered Auto Apparel website at: http://www.sccoa.com/apparel or give Ron DiPaola a call at (607) 748-0581.
Name:Shipping Address:	Your order: (be sure to specify the shirt type, shirt color, embroidery color and the size) Write in here or enter on another sheet of paper:
Phone:Email address:	
Your phone number or email address are very important, as occasionally, I need to get in touch with you to clarify your order.	

How to Increase Your Stereo Horsepower

By: Kenn Bueckman

When I became a SCCoA member in 1997, my 1994 SC was basically stock with the exception of the stereo. Upon reading my first "Chargin' Thunder", I was delighted to learn about how people increased the performance of their super coupes. I believe the members of the SCCoA gave me the desire and assurance to accomplish performance upgrades by myself with a few Band-Aids (Bill was right about the header installation). I no longer had to wonder if the upgrades I wanted to complete would ruin my SC.

For many years now, I have been completing stereo upgrades and would like to let the SCCoA members know that stereo upgrades in a SC can be done with relative ease. When you begin to install stereo upgrades, it is necessary to understand how to disassemble and reassemble the door pieces properly. recommend purchasing a Haynes Repair Manual (I call it the T-Bird Bible), because it tells you step by step the proper way to disassemble the panels. The Haynes Manual also informs you how remove/install the receiver and speakers and the tools that are necessary to complete the job. From personal experience, it is best to have a soldering iron and electrical tape or an electrical crimper and crimp on splices prior to installation.

Basic upgrades include a receiver and speakers, which start at approximately \$400.00. The amount for the upgrades can range depending on the selected options and manufacturer. I recommend thumbing through a Crutchfield magazine,

or you can visit them on their website, <www.crutchfield.com>. The Crutchfield magazine, Circuit City, or even Best Buy all carry various stereo equipment so that you can easily familiarize yourself with the different options and brands before you purchase.

Once you have selected the receiver and speakers, it is also helpful to purchase a wiring harness that is specifically made to plug into the factory harness. Using a wiring harness is the easiest and safest way to install your new receiver and speakers without splicing into the original car wires. Harnesses can be purchased from a majority of stereo retail stores or through Crutchfield, who can supply a custom kit, wiring harness, and vehiclespecific installation instructions. I have found that soldering the wires together and then applying 3M super 33 electrical tape around the splices, or crimping the wires together with crimp on splices reduces the chance of the wires separating in the dash after installation.

There is a special harness available for the JBL systems for SCs, which adapts the new receiver to the factory-amplified system. If you want to use the factory-installed CD changer, be sure to check for compatibility



between the factory CD changer and the receiver and harness. Installing basic stereo upgrades can be completed at

home within a few hours, BUT similar to all SC upgrades, you will need patience!

Super Couped!

By Rich Cunningham SCCoA Member #20

Finally, the dream comes true! After months of gathering parts, getting all the modifications complete, lots of labor and love, my (NEW) rebuilt '95 engine is in my '90 AOD and Running Great! After finding this motor from a '95 AOD with only 51,000 miles on it, I set out to rebuild and upgrade to street/strip use. In previous articles, I have upgraded with 373 gears, low gear set in my AOD with TransGo Shift Kit. Then I lowered it with Eibach Springs and Tokico shocks. I ran 15.15 with the old motor with 3.27 gears and Flowmaster exhaust. After 150,000 miles on my old motor, it was leaking and burning oil and the idle was rough. It had served its purpose well. With the '95 block cleaned and magnafluxed for cracks, we checked the cylinder walls for wear. It was in

excellent shape as was the stock pistons and rods that I reused along with moly piston rings. I also used ARP fasteners throughout the entire motor and Federal Mogul bearings. Comp Cams reground my camshaft. It came out to 222 lift @ .50 w/500 lift with matching pushrods.

My dad, who has over 45 years experience building and racing Ford engines, ported and polished my heads and did a 5 angle valve job. He worked on unshrouding the valves and bowl work under the valves, which helps these heads breathe easier. He also port matched the intake to the intake side of cylinder heads and checked the valve springs discovering that the stock springs could easily take up to 525 lift! Not bad for stock springs! I also added Roller Rockers secured with ARP bolts. My other mods include C&L 73mm mass air meter, 36 lb. injectors, and a BBK 70mm throttle body.



Then I bolted the new Magnum Powers custom inlet plenum from Super Coupe Performance (SCP) to a new S-ported blower with a SCP raised blower top. I have ported my intercooler tubes and installed dual five-inch fans on each side of the intercooler. I also added a detachable ice tray for the intercooler for drag racing purposes. Currently, I'm building a double intercooler soon to be ready to go. I also installed a 190 LPH fuel pump. radiator has been rodded and cleaned and I have installed a 180-degree thermostat and automatic high-speed fan control. Finally, I added SCP jet hot coated headers and high flo cats bolted to my Flowmaster exhaust system.



Rick's Black '90 SC

After my dad helped me build this motor, I had to install this bad boy. Now, that's another job in itself. Since I work at Ford Performance Specialists of Georgia, I had access to a lift. Starting on a Saturday and going hard for three days (all day), I finally got to fire it up on Monday night. Wow! Very Nice Rumble! It sounded great! What a feeling after all the work, it was well worth it. After 1,500 miles, I took it to the strip for a test run. All I could get of it was 14.48 at 96 miles per hour on a cold, cloudy, damp day. Even with drag radials, it was tough going. My tranny was shifting into overdrive too soon when it should

have remained in third gear. This was killing my E.T.s. So, I called it a day. Then, I was told about a company called LenTech Automatics in Canada. They specialize in AOD trannys and valve bodies. I talked to a guy named Chris who custom builds valve bodies. He built a valve body for my transmission, which includes a low gear set. It works Great! You can manually shift 1, 2, 3 and delete O.D. with an inside-the-cockpit switch or select O.D. position and shift 1, 2, 3 automatically with your choice of switching O.D. on or off.

I made a second trip to the dragstrip, which proved to be much better. It was a cool, dry October day with the temperature around 70 degrees. I left the starting gear in first gear and shifted to second at 5800 rpms and the same rpms shifting to third. It held third gear and I ran 13.84@ 100 Finally, the thirteen's at last! mph! Although, I still have some tuning to do with the air/fuel mixture, it really moves and sounds great. There are some friends of mine who have heard my car idling and think it's a 5.0! I just smile and say "sure", I have been seeing more Chevys in my rearview lately than I did before. So, if you have a dream to make your SC go faster, just do it!

Special thanks L.G. Cunningham Performance 770-942-0315

Ford Performance Specialists of Georgia (My employer -- We specialize in working on SCs) 770-949-7191

COMPARISON OF THE STANDARD 3.8L WATER JACKET AND THE 3.8L S.C. WATER JACKET

By "Just Passing through Dearborn"

Being retired now for a while, one of the most exciting projects I worked on at Ford just before I left was Super Charging the 3.8L Cylinder Engine into a performance V-6 Engine for the Super Coupe T-Bird. It has been pretty well documented on the changes for the steel crank and the block changes, but I just stumbled on this old picture of the water jacket cores. Here is how the cylinder head was updated for the additional loads.

To stiffen the Cylinder Head for the increased compression loads from the Super Charger, the water jacket core had to have sand removed or aluminum added to strengthen the head. Attached are water jacket sand core pictures of the production 3.8L water jacket and the 3.8L S.C. water jacket core. It is a photo of the water jacket core looking at the contact face to block.

The numbering system on the picture is of the 3.8L S. C. water jacket version showing the different areas where sand was removed. The water jacket was thinned down to the smallest cross section possible and still make the cylinder head castable without a lot of water jacket core breakage in the casting center. This water jacket (with a lot of the openings to the head deck removed and made extensively thinner) just allowed enough openings to get the water jacket sand out of the head.

Now lets look at the picture with the numbers #1 through #10.

#1 & 2 - These two areas are the head bolt bosses through the water jacket on the intake side of the head which are enlarged to maximum thickness and still get the

water around the head bolt bosses to the water outlet on the intake manifold flange surface. On #1 at the 1 o'clock position notice the groove to the exhaust port wall added for additional support for the head deck for the combustion chamber (opposite clock position for #2)

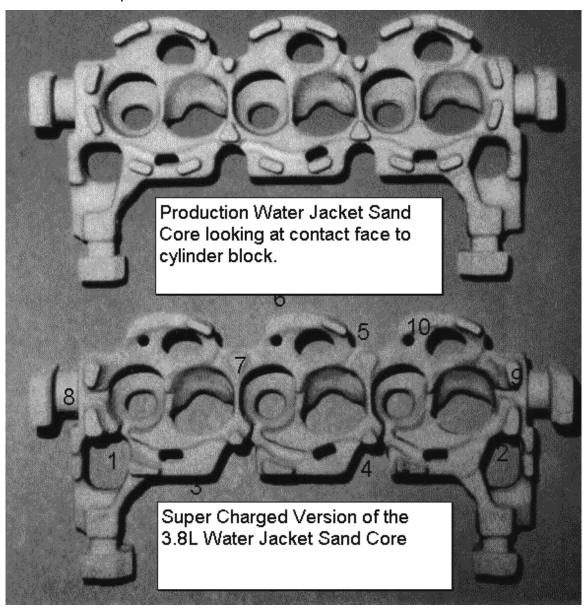
- **#3.** A water jacket opening to the head deck has been removed to stiffen the head deck and still get some needed water under the intake port.
- **#4.** The two internal intake head bolt bosses are again enlarged for stiffness. They also have a stiffness rib added at the 1 o'clock position to the exhaust port wall.
- **#5.** The four exhaust side head bolts bosses also have been enlarged for head bolt strength and combustion chamber stiffness. Notice that the two water jacket openings to the head deck also have been removed at the 6 o'clock position.
- **#6.** Again one water jacket leg has been removed at the 12 o'clock position (3 places).
- **#7.** Item #7 is right on top of one removed water openings to the head deck (2 places).
- **#8.** A metal rib has been added for stiffness between the water openings to the head deck for combustion chamber stiffness.
- **#9.** These two legs to the head deck have been also made smaller and moved to the outside of the head for combustion stiffness.

Super Coupe Club of America

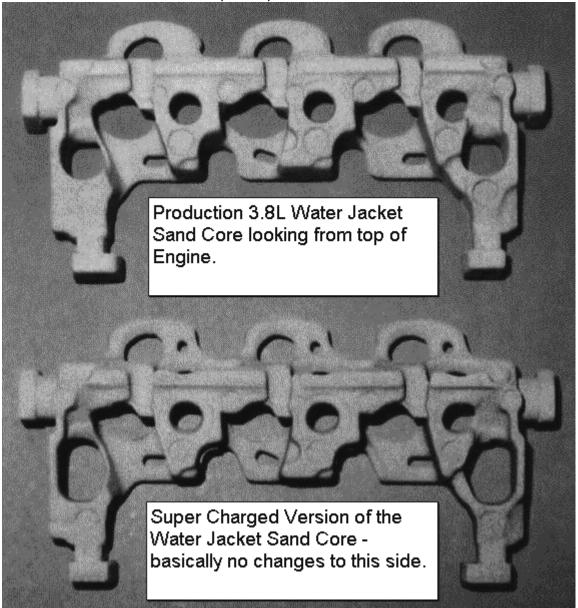
#10. - To get additional stiffness to the combustion chamber under the exhaust port a metal post was added (a hole in the sand core).

The above changes to the water jacket core was maximum take away of sand and still get the sand out of the production 3.8L S.C.

cylinder head and keep the casting center without having extreme amount of water core breaking. Also this aluminum head was heat treated to increase properties of the aluminum. I hope everyone has enjoyed this little tour inside of the 3.8L S.C. Cylinder Head.



Super Coupe Club of America



Change The World

"When I was young and free and my imagination had no limits, I dreamed of changing the world.

As I grew older and wiser, I realized that world would not change. I decided to shorten my sights somewhat and change only my country. But it too seemed immovable.

As I entered my twilight years, in one last desperate attempt, I sought to change only my family, those closest to me, but alas, they would have none of it.

And now, here I lie on my deathbed and realize (perhaps for the first time) that if only I'd changed myself first, then by example I may have influenced my family. With their encouragement and support I may have bettered my country, and who knows, I may have changed the world."

Attributed to an Anglican Bishop who died around 1100 AD

MN12 Performance Inc.



1989-1997 Thunderbird Parts & Information www.mn12performance.com



After a hard day at this years Columbus OH Ford Expo show about twenty Super Coupes, XR7s, and even a few F150s picnicked at Tom and Julie Wilheim's house. We filled up their front yard with cars and even pulled out the John Deere to give the little kids (and one big kid, April Dantes-Williams) tractor rides. Your editor is driving the JD and the cart full of kids comes from the Williams, Wodzisz, and Evanoff families

Congratulations to Doug Williams & April Dantes on their recent marriage! This is the first time two club members have wed. Doug has a blue '89 SC and April has a white '89 SC.

MN-12 to SN-95 Bolt Circle Change and Brake Upgrades

By Douglas L. Fraleigh

This article is to be considered as an addendum to the excellent article written by George Davenport, entitled "Mustang Bolt Pattern Changeover – 13" Cobra Brake Installation", which appeared in the March 2000 issue of Chargin' Thunder.

This information pertains to my 1995 Ford Thunderbird Super Coupe, equipped with 4 wheel disc brakes and ABS. If you have a MN-12 model prior to 1993, you will need to upgrade to 93+ front spindles and sway bar end links.

MN-12's have a bolt pattern which consists of 5 bolts on a 4 1/4" circle. SN-95's (Mustangs 94+) have a bolt pattern of 5 bolts on a 4 ½" circle. As many more options are available, both for wheels and brakes, with the SN-95 bolt pattern, many MN-12 owners have changed, or desire to change, to the SN-95 pattern. I, myself, also owning a 1998 Mustang Cobra, had the stock 17x8 SVT wheels available after adding 18" wheels to Cobra. my Additionally, as I had previously owned a 1990 SC, I was all too aware of the limitations of the undersized stock brake setup.

Previously, it had been possible to change the front bolt pattern using SN-95 parts, but the only solution to change the rear pattern was redrilling the stock hubs. I'm happy to report that with the release of the 1999 SVT Mustang Cobra, rear hubs that interchange with the MN-12, are now available.

Front Hubs and Brakes

With the 93+ spindles, the front wheel bolt pattern change and brake upgrade is a true

"bolt-on". You need to be aware of wheel diameter, width, brake caliper clearance, and tire size. With the 17x8 wheels I used, which have 5.72" backspacing, a 255/45-17 tire is the maximum size possible. Other wheels with different offsets may have different maximums, and most run a front tire size of 245/45-17. See the parts list for the SN-95 items that are required. Ford recommends changing the hub retaining nut each time it is removed, and for the cost of the part, it's cheap insurance.

- 1.) Raise and support the front of the vehicle with both wheels off of the ground.
- Disconnect the stock brake hose, remembering that brake fluid is corrosive.
- 3.) Remove the stock caliper by removing the two 12mm bolts from the rear (15mm socket).
- 4.) Remove the stock rotor. You may have one or two retaining clips on the wheel stud, which may be removed with pliers. If the rotor is rusted to the hub, liberal application of penetrating oil and the judicious use of a mallet is often required.
- 5.) Remove and discard the retaining nut dust cover.
- 6.) Remove and discard the hub retaining nut.
- 7.) Remove the hub.
- 8.) Clean the spindle and slide on the SN-95 hub.
- 9.) Install the hub retaining nut, and torque to 250 lb-ft.
- 10.) Install the retaining nut dust cover.
- 11.) Repeat steps 2 through 10 on the other side of the vehicle.

At this point the bolt pattern change for the front has been completed. Any SN-95 brake kit may now be installed following the instructions supplied with the kit. I have used a 13" PBR Track kit from Baer, stock PBR calipers and 13" rotors from my 1998 Cobra, and now the Brembo 4-piston 13" brake kit from the 2000 Cobra R. The only issues you will need to be aware of are brake caliper clearance (17x8 1998 Cobra wheels clear all these systems, other year Mustang, or aftermarket, wheels may not) and brake lines. The brake calipers I've mentioned all utilize a different brake line bolt than the stock calipers, and the mounting point for the bolt requires modification to the stock brake lines, if you choose to reuse them. I had a custom set of lines made up by Paragon Performance at http://www.paragonperformance.com/.

Rear Hubs and Brakes

Thanks to the introduction of the IRS equipped 1999 SVT Mustang Cobra, rear hubs are now available which allow for a "bolt-on", actually "press-in", conversion of the rear bolt pattern. The 1999 Cobra rear hubs are 28 splines, just like the MN-12, and use the identical wheel bearings. The rear brakes, however, continue to be an area where ingenuity is required. You can choose to redrill the stock rotor for the new bolt pattern, and have the center bore machined to fit the new hubs. instead to adapt the 11.65" rear rotors from a SN-95 Cobra. Please understand that this adaptation will require several modifications to the stock caliper, the rear knuckle, and the fabrication of a bracket to mount the caliper in the correct position relative to the larger rotors.

1.) Raise ONE rear wheel off of the ground. This is necessary to allow removal of the hub retaining nut.

- 2.) Loosen (do not remove) the hub retaining nut.
- 3.) Lower the wheel.
- 4.) Raise the other wheel off of the ground, and repeat step 2.
- 5.) Raise the rear of the vehicle with both wheels off of the ground.
- 6.) Disconnect the brake hose.
- 7.) Detach and remove the parking brake cable.
- 8.) Remove the caliper by removing the two 12mm bolts from the rear (15mm socket).
- 9.) Remove the rotor.
- 10.) Remove the hub retaining nut.
- 11.) Remove the knuckle. Once the three bolts (one upper, two lower) are removed, you can use a 2 or 3 jaw wheel puller to remove the hub/knuckle assembly from the half-shaft.
- 12.) Press out the old hub, and press in the new Cobra hub. Unless you own a hydraulic press, you'll need to take the hub/knuckle assembly to a shop that is properly equipped. This is also an excellent time to inspect, and replace if necessary, the wheel bearings. I choose to replace them, and the bearing retaining clips. Again, I would view this preventative maintenance as cheap insurance.

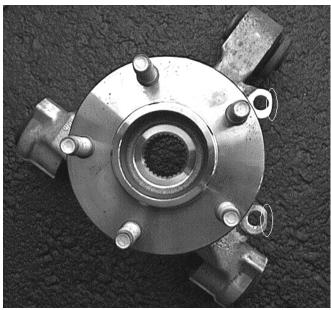
Note: If you intend to upgrade to the 11.65" Cobra rear rotors, skip to the next section.

- 13.) Loosely reinstall the knuckle.
- 14.) Jack up the lower control arm until the weight of the vehicle is supported by the suspension, and torque the three bolts (140 lb-ft upper, 110 lb-ft lower).
- 15.) Repeat steps 6 through 14 on the other side of the vehicle.

- 16.) Lower one side of the vehicle and torque the hub retaining nut to 250 lb-ft.
- 17.) Repeat step 16 on the other side of the vehicle.
- 18.) You may now reinstall your modified stock brakes.
- 19.) Bleed the brake system in accordance with the factory service manual.

Cobra Rear Rotors

The stock rear rotors are 10.125" in diameter, while the Cobra rear rotors are 11.65". The stock rear rotors have an offset

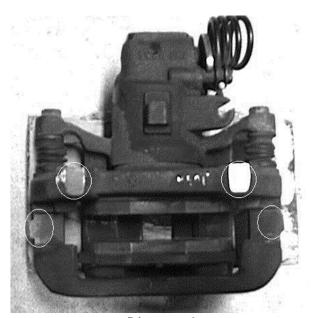


Picture 1

of 40mm, while the Cobra rear rotors have an offset of 45mm. Therefore, a bracket is required that relocates the stock caliper outward 19mm and towards the center of the vehicle 5mm. As the centerlines between the existing caliper mounting holes, and the required mounting holes, is only 19mm, some modifications to the knuckle (see picture 1) and caliper (see picture 2) are required. Also, as the arc of the Cobra rear rotors is greater than the arc of the stock rear rotors, the caliper must be

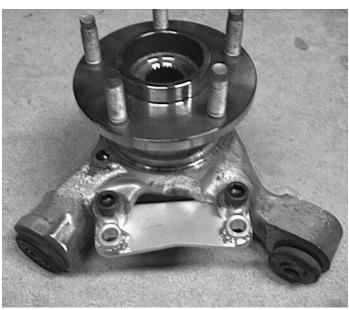
modified to maintain 2-3mm clearance between the outer edge of the rotor and the inside of the caliper (see picture 2). All of these modifications can be performed with simple hand tools, and in fact, I used a variety of flat files. In addition, the stock caliper retaining bolts cannot be reused, and 12mm Allen head cap screws must be used instead.

I fabricated each bracket using 3/16 plate steel and 4 12mm x 1.75 nuts. After cutting the bracket to shape with a saber saw, I used a drum sander for the final shaping. I used the holes in the knuckle to locate two of the mounting holes and marked the location of the other two 19mm adjacent. After drilling the four holes on my drill press with a 15/32" bit, I chamfered the holes and used a flat file to ensure that the plate was flat. I then welded one pair of nuts to the rear of the plate, with the flats parallel to the centerline of the mounting holes. These nuts will be used to mount the bracket to the knuckle. I welded the other pair of nuts to the front of the bracket, again with the flats parallel to the centerline of the mounting holes, and drilled them out with the same 15/32" bit as they are used only



Picture 2

as spacers. I was fortunate in that the height of the nuts I used corresponded to the required spacer height. Your mileage may vary, and you may need to search for nuts of the correct height (10mm). The design of the bracket (see pictures 3 and 4) is such that none of the welds are structural. Others, George Davenport for one, are having aluminum billet brackets machined.



Picture 3

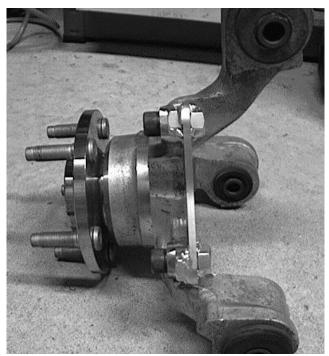
I strongly suggest test fitting the knuckle/rotor/caliper combination on your workbench to ensure that all clearances are correct, prior to attempting to mount the combination on your car.

Once you are completely satisfied that all the clearances are correct, reinstall the knuckles and brakes.

- 1.) Perform steps 13 through 17 in the previous section.
- 2.) Attach the bracket to the knuckle from the front using 12mm Allen head cap screws and torque to 85 lb-ft
- 3.) Install the Cobra rotor.

- 4.) Attach the caliper from the rear using 12mm Allen head cap screws and torque to 85 lb-ft.
- 5.) Reattach the parking brake cable.
- 6.) Reinstall the brake hose
- 7.) Repeat Steps 2 through 6 on the other side of the vehicle.
- 8.) Bleed the brake system in accordance with the factory service manual.

Note: The information in this article is presented for informational purposes only. You are solely responsible for your



Picture 4

application of this information and/or any actions you may take and/or any results. You are solely responsible for your safety and should ensure that your vehicle is properly supported while you work on it.

Parts List

Description	Part Number	Qty	Cost	Total
Front Hub	F6ZZ-1104-AA	2	\$60.00	\$120.00
Front Hub Retainer	F3LY-3B447-A	2	\$5.50	\$11.00
Dust Cover	F3DZ-1N135-A	2	\$4.00	\$8.00
Rear Hub	XR3Z-1109-AA	2	\$100.00	\$200.00
Rear Hub Retainer	FOSZ-4B477-A	2	\$7.00	\$14.00
Rear Wheel Bearing	E9DZ-1215-A	2	\$48.00	\$96.00
Bearing Retainer	N803955S	2	\$1.50	\$3.00
Cobra Rear Rotor **	F4ZZ-2C026-B	2	\$75.00	\$150.00
Allen Head Cap Screws	12mm x 1.75 x 30mm	8	\$1.00	\$8.00
Hex Nut	12mm x 1.75	8	\$.75	\$6.00

^{**} As an alternative to the stock Cobra rear rotors, I used anodized and drilled rotors from Autospecialty Powerstop, which I obtained from Summit Racing (see picture 5).

Right Rear Rotor	AR-9146R	1	\$96.06	\$96.06
Left Rear Rotor	AR-9146-L	1	\$96.06	\$96.06



Picture 5

I've had many people ask questions about my SC over the years. I felt it was time to write a feature about it similar to the many others that we have had in the CT newsletters. Here is my story....Editor

Seeing Red!

By Bill Evanoff

I remember the day my father said he was going to buy a good used car from a friend of my older sister. He said it was a red '74 Dodge Dart. I figured, "Oh brother, a Dodge Dart...How boring!" A few days later I heard him drive it into the driveway for the first time and I reluctantly got up and looked out the window to check it out. I was pleasantly surprised and excited with what I saw.

Now, I'm sure everyone is thinking, "Come on Bill, it's only a Dart", but this was one very cool looking Dodge Dart! It was a fire engine red Dart Sport coupe with a white vinyl top (don't you remember when vinyl was cool on your roof??), and a Starsky and Hutch Torino style white stripe that went up and over the roof and way down both sides. It had a sunroof, a fold down back seat that opened into the trunk, and best of all...it had a V8!



'74 Dodge – Got me through high school and the first few years of college

I'm sure many of you are still saying, "It's only a Dart", but for a 16 year old boy that was used to getting driven around at the time in a AMC Hornet and an AMC Matador, this was actually quite a fun car that Dad had just bought. As you can guess, I was easy to please back then and having a sharp red coupe with a V8 to drive while in high school suited me just fine, even if it was a Dart. I received innumerable positive comments on the old Dart's exterior color and knew that I would have future red cars as well.



After the Dodge, I had a '78 Cutlass for many years. It got me through my last year of college and even was my daily driver after buying my SC. In '83 my Dad bought a black Cutlass sedan and it didn't take me long to learn to appreciate how hard it is to keep a black car looking good, especially since I was the family car washer and waxer. I'd clean that black Cutlass up and it would look absolutely stunning. An hour later the dust would settle on it and the shine was gone. I knew then that I'd have to stick with red as my preferred color.



My '78 Olds Cutlass

During my last year in college I began dating my future wife, Patty. She lived in Amherst, Ohio, which is on the far west side of Cleveland. Amherst is also right next to Lorain, Ohio, where they used to make Thunderbirds. Patty's next door neighbor worked at the Lorain Ford plant and he told me about an open house that they were having. I was living in Toledo, Ohio at the time and eagerly drove to Amherst the weekend of the open house. Just for the record, I was eager to see Patty, of course, too...not just the T-bird plant!

This was during the summer of 1987 and the Lorain plant had an area where they were building some prototypes of the MN12 Thunderbird. I was VERY interested to see what they looked like and definitely liked what I saw. They were much sleeker then the Turbo Coupe and also appeared lower and longer. I never did much like the TC model just because of the simple fact that it was a four cylinder. The idea of a supercharged six cylinder really sounded cool to me and with a body like what I saw at the open house I'd definitely be looking at these closely when they would be for sale the coming year. I followed the new Super Coupe in the press and continued to like what I saw and read. It was apparent that the new car would be quite fast and a major technology improvement over the Turbo Coupe.

My attention to the new SC did stray a few times during the late 80's. I went with a friend one time to test drive a '87 Grand National. I had read an article in Car & Driver about this beast and had to check them out. My friend and I went to a dealership and coyly inquired about either a Regal T-Type (which was virtually the same as a G.N., except for the black exterior) or a G.N. and the salesman's eyes immediately lit up. They had two G.N.s in the back and he got the keys to one.

He brought the car around and suprisingly, he stated he wanted to drive it first. We piled in and off we went on our test drive with the salesman doing the driving. I was curious as to what was going on, but we only went a few blocks until he pulled off the street and headed behind another building. He turned his head towards my friend and me and said, "Guys, check this out". He proceeded to power brake the G.N. and quickly there was a cloud of white smoke enveloping the car. He finally let off the brake, yet stayed on the gas and the car careened away from the smoke screen with the tires still screaming for mercy.

We all could not stop laughing and finally I got into the driver's seat for my turn. I have to say, I didn't drive the car too crazy but it was immediately apparent that this was one lightening fast Regal. It was by far the fastest show room car I'd ever been in.

My friend took his turn and after the second stop, he manually pulled the console shifter into low gear. He waited for traffic to clear and nailed it. The car went slightly sideways and shot forward. I expected my buddy to shift the G.N. into second gear quickly but he continued to hold first gear for what seemed like an eternity. The car never hit its rev limiter and just kept pulling hard. Finally he went forward with the

handle and that G.M. 200R4 tranny shifted firm and hard into second with a bang (like I'm sure many AOD owners wished theirs did). Believe me...no shift kit is necessary in these cars.

I was extremely impressed with this bad boy regarding acceleration, but its ride and body motions were all over the place. Its engine and transmission was soooooo good, though, it almost made one forget about the fact that the rest of the car was pure Regal...meaning just adequate. The instrument panel and seats on the G.N. was also a complete joke. They stunk. One other really bad point about the Regal T-Type and G.N. is that they were not available in red!

In the '86 to '87 model year time frame I had also entertained the thought of a 5.0L Mustang GT. Who can argue with its strong performance and the styling. It was about this time that they freshened the bodywork and also gave the rear taillights the "louvered" look. I liked the restyling and even took a few test drives in a 5.0L. This was a few years before I began seeing the reports about the SC. Once I saw what the new Bird was going to look like, I never gave the old Fox body Stang another thought.

The '89 Thunderbirds finally arrived on the dealer's lots late in the summer of 1988. I really liked the cars but the SC model was virtually nonexistent. I did get to see a Titanium colored one on a lot near my work but it was the owner of the dealership's car and I wasn't able to drive it. I read in the car magazines that production problems were stalling production and I was very surprised that Ford had not flooded dealerships with the SC after it won the Motor Trend Car of the Year award. They continued to be hard to find until February or March of 1989.

I remember the first bright red SC I saw going down the road. I was still living in Toledo and I saw a red one coming down 175 near downtown. My neck nearly twisted off as I tried to follow the car as it passed on the other side of the highway. I couldn't believe my eyes and I simply said "WOW", that is beautiful!! For its day, the SC was extremely monochromatic and I loved the nearly solid red color. I also loved the solid red of the Mercury XR7 as it also had a red grill, and red side moldings. I know it is simply a matter of personal preference, but I didn't much care for the more formal roof line despite liking nearly every other aspect of the XR7.

My first test drive in a supercharged model was actually in a XR7. Patty had started her Master's/EdS degrees at Miami University in Oxford Ohio, north west of Cincinnati. She and I headed into Cincinnati one weekend to see the sights and I talked her into going to several car dealerships as I had decided to get a car within the year. This would be my first new car and I wanted it to be something special.

We drove to a Mercury dealership and they had a new Oxford White XR7. I asked for a test drive and they simply asked for my drivers license in exchange for the keys. No salesman went along for the ride and Patty and I headed for some open road. The XR7 was a fully loaded five speed and I did my best at shifting as I had never owned a manual transmission. I had driven several various manual transmission cars previously and I was seriously considering getting a stick if I were to purchase a new car.

This part of Cincinnati was full of hills and twisty roads so the car really felt good as we proceeded along our drive. The car felt so strong but I had yet to really tap into the throttle. I finally pulled off the road into the

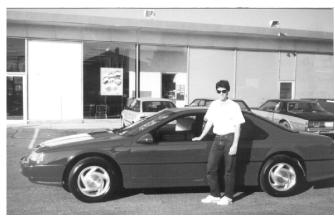
parking lot of an elementary school and proceeded towards the back of the lot. I stopped and told Patty what I was about to do. She tightened up her seat belt as the car began to spin its tires. The school had a freshly black topped parking lot so friction was likely minimized, but the old SC must have spun for thirty feet or more before it hooked up. There was a wisp of wheel hop near the end of the burnout but the supercharged six just felt so full of torque. It was at that moment that I KNEW that this was the setup for me. I couldn't wipe the grin off my face.

Patty did finally quit screaming once we neared the edge of the school parking lot and I nailed the ABS brakes bringing the XR7 to a stop. She told me right then and there that I was never to do that again and that I was definitely not buying a car such as this! It appeared that as much as we were in love at that point in our lives, and we had also recently gotten engaged, we were definitely in a quandary regarding the purchase of a supercharged SC or XR7.

It's amazing how a screaming fiancé can put a damper on a guy's fun, but the car scared her and it had actually scared me a bit. I learned quickly what 315 ft-lb of torque can do when the front wheels are not pointed where you want to go and the rear wheels do not maintain traction. The car will go any direction it wants except straight. I nursed the XR7 back to the dealership being sure to drive carefully and not rile Patty any more. I gave the keys back knowing full well that I'd have my own set of keys soon enough...despite Patty's disapproval.

I test drove at least three other SCs and another XR7 over the next few months. All of them were 5-speeds. I started to get serious with regards to options and pricing. I had just started a new job and was able to afford the SC but I was hesitant to go too

crazy with the options list. I had already decided on the most important decision...the color! It was to be the Bright Red. I wasn't too excited about the Titanium (light gray) matching interior color, as I would have preferred a darker gray or black color. But that was really the only color offered in '89 that complimented the Red exterior color.



My salesman took this picture at the dealership after I accepted the keys to my SC!

I had decided to go with the JBL Audio System, but decided against the CD player. CDs were just becoming widely available in the late 80's and I hadn't jumped onto the CD popularity wagon just yet. Besides, I had a ton of cassettes, but had yet to buy my first CD. I also wanted the security alarm and power antenna.

There were two large option groups available. One included many things that I considered very important and the other I felt was a lot of fluff. I decided to go for the 157 package that included dual power seats and a few other goodies, but passed on the more expensive package that included the auto headlamp feature, tilting rear view mirror, cornering lamps, and keyless entry. Many people consider these options as "mandatory", but I thought otherwise and this package was nearly \$1000, which I just couldn't justify to myself.

I had never had a car with leather so I didn't have any strong feelings one way or the other towards that option. learned that the leather option was \$600, one can guess what type of material is covering my seats. As the years have progressed, I am so glad I didn't choose leather because it's well known that the leather Ford chose for the SC was not of the highest quality and most original leather seating surfaces look horrible today. cloth seats still look like new. I was envious of the split folding rear seat that was included with the leather seating option. I have since purchased a salvage yard folding rear leather seat and had it recovered in matching cloth so I now have this feature on my SC.

I made my decision regarding a power moonroof the same way. I forget the exact cost, but I believe it was approx. \$800, so I also passed on the hole in my roof. Today, many owners complain about water or air leaks from their moonroof, so I feel I made the correct long-term decision on this option, also.



On the beach in Charleston SC while on vacation in '92

I took the plunge on August 8th of 1989. I walked into Southwest Ford in Parma Heights, Ohio, and was greeted by Paul Ulan. I was likely his "easy sell" that day, as I knew the details regarding everything I

wanted and was ready to place an order. By this time, the '90s had just come out and Paul did enlighten me on one issue. I was pleasantly surprised to see that a Black interior option had replaced the Titanium from '89.

I was pressed to buy a SC off the dealership's lot, but I wasn't swayed, as I was content to special order one to my specifications. My SC listed for \$22,096 but I walked out the door with a deal of slightly less than \$19K, which included taxes and title. Thankfully, a rebate helped keep the cost down as well. I waited with eager anticipation the six weeks that the dealership said it would take to build my car.

Six weeks came and went with no SC. I finally got a call from the dealership that my car would be ready for pickup on Saturday, October 28th. I remember driving to the dealership and greeting my salesman. He said the car was in the back lot and I could go check it out. I walked out the rear door of the building and there it was! Finally, I laid eyes on it and it was everything I had expected. The red paint gleamed in the sun and I itched to get my hands on the keys. I made a quick walk around the car and looked inside and took a sniff of the new car smell. I was in Heaven.

I settled up with the dealership and headed out for a drive. I didn't exactly have a destination in mind but I wasn't going to let this beautiful sunny fall day go by without a lengthy cruise in my new SC. I drove around town for awhile then decided I would drive the car home to show my parents. Of course, my parents lived in Toledo, which was over 100 miles away. I jumped on the freeway but after thirty miles I decided it was best if I broke the car in properly by varying the engine speed. I headed towards the back roads and enjoyed

the country cruising. It took over two hours to make it back to Toledo, but I pulled in the driveway and honked the horn for the first time.

Both my parents came out of the house Oooohing and Aaaahing. One of the first things my Dad said was that the color looked like the old Dodge's. It didn't take long for several of the neighbors to come over and check out the red SC too. Everyone liked the car and the bright red color drew the most comments. I gave several rides and did my best to smoothly shift the car. Driving the stick was a joy, but I had a lot of learning to do before I would become comfortable with it.

The miles really racked up quickly that first year as I frequently drove the four hours from Cleveland to Oxford, Ohio, to see Patty during her second year at Miami University. I even drove the SC several times that first winter when there was snow on the ground. I soon learned that this was not a wise thing to do and have garaged it every winter since then.



Dragging at Norwalk Raceway with friends

I was completely satisfied with the performance of the car, but I figured that a K&N air filter would be a nice addition. During the first summer I had the car I took it drag racing at the track in Norwalk, Ohio. I ran several times with the quickest being a 15.5 at 89 mph. This was with a good deal of wheel spin and axle hop. I was satisfied with the time slips as that was exactly what

many of the magazines of the day had achieved with their test vehicles.



Staging against my friends Mustang GT



And we're off!....I lost.

The next year I went again to Norwalk with a group of friends from work. One had a '90 GT Mustang fastback and the other a '89 GT Convertible. I had heard them go on and on about how fast their cars were, so I invited them to a little grudge match. The GT Convertible was as loose as a goose on the track during launch and it wheel hopped twice as bad as my SC. No matter what my friend tried, his flexible chassis wouldn't allow the car to hook up and the best time he achieved for the day was a 16.0 at 87 The fastback owner was quite a mph. challenge and when we ran heads-up he actually beat me by a hair. consolation was that the SC had again run a 15.5 time slip, beating the Mustangs best time of 15.6. Remember that this was around '91 or '92 and these Mustang guys had yet to learn about removing the air silencer or bumping the timing on their cars. If they had done these free mods, my K&N

filter equipped SC would have surely been whooped badly.

I was fortunate to always have a daily beater to drive to work so my SC remained my weekend fun car. Sometime around 1994 I decided it would be even more fun with a set of 3.55:1 gears in it. I was lucky to find a Lincoln Mark VIII complete housing at D&D Performance in Detroit. I had called them and apparently this unit was already equipped with a traction-lok unit and the 3.55s I desired. I had done my homework and knew that the Lincoln unit would fit our cars and the story goes that this housing was made up for a Mark VIII owner but he found the gears too aggressive so he had the housing removed after just a few thousand miles. I gleefully took the likenew housing off the shop's hands and installed it myself.

The car was much more responsive and I found I could burn rubber with just a quick stab on the go pedal. I took the car to the track and the new gears were easily worth three tenths in the quarter. I was now really suffering from wheel spin so badly that the car was frustrating me. I knew that it should be faster, but I would need slicks to get better times.

Around 1995 and '96 I began to talk with Bill regarding Hull lot performance improvements. As I've shared in previous articles, I had a local shop make me up a 1/2" welded supercharger top. The car felt stronger but the improvement was subtle. I also decided to get a new exhaust put on the car. Not knowing a thing about SC exhaust systems, I went to a shop and requested that they remove my cats and resonator and install a pair Dynomax Super Turbo mufflers in place of the factory mufflers. Thankfully, the shop talked me into just having a complete new front half system that included new down tubes going

into a Y pipe that connected with my catback exhaust. They said swapping mufflers was no problem.

The shop did a terrific job from the looks of things and I was eager to test my SC with its unrestricted exhaust. I turned the key to drive the car off the rack and it sounded much louder than I expected. said to drive the car a mile or two to see how it sounded and then return to the shop. I drove away from the shop getting used to the loader exhaust. It didn't sound too bad until I put my foot into it and the tach needle went over 3000 rpm. At that point there was a horrible resonance and a BLAAAAATT tremendous noise and immediately started to get a sick-to-mystomach feeling. WHAT HAD I DONE TO MY CAR?

My exhaust sounded like it had a really bad case of gas. I returned to the shop and told them what I had heard. They claimed they could start plugging it back up with converters or another center muffler, but it would cost me dearly. They claimed each converter would cost \$100 and the extra labor would be charged at \$40 per hour. I began thinking that the exhaust they had made for me wasn't THAT bad so I left the shop with my original cat assembly in my trunk. I hoped that my new exhaust would grow on me the more I drove it.

I actually left that exhaust on my car for about a month, but the more I drove it, the more I hated it. It really sounded so bad that I couldn't stand it any longer. I decided to just put my original cat assembly back on the car and after doing so, the car sounded pretty good as the only modification to the exhaust was now the Walker Super Turbo mufflers. I was so thankful that the exhaust shop had suggested not cutting up my original cat assembly.

Shortly after this debacle, the SCCoA got started and we all would gather at shows. We began sharing ideas regarding what kind of exhaust modifications worked on these cars and which didn't. I was fortunate to attend the first SCCoA show along with six other SC owners. That was the '96 Carlisle show. During '96 and '97 I slowly began making more changes to my SC such as a 70mm throttle body with a welded on linkage, a C&L MAFS, and a Spearco intercooler.

During the summer of '97 I also made one of my best SC parts buys ever. I had read in the March 1997 issue of Chargin' Thunder about a SCCoA member who had purchased a set of Cobra R like wheels from the never produced Thunderbird SVT. This guy lived in southeast Michigan and I was travelling there regularly on business at the time. I though it was really cool that this guy had these wheels and I was curious how he had gotten hold of a set. I decided to call him and inquire. As his address was published in his CT letter, one phone call to information netted me his phone number. We had a nice conversation and he shared with me how he was actually the second person to own the wheels and that they had originally come from a Ford Motor recycling facility in the Detroit area where the SVT cars were dismantled and the pieces sold off.

During our conversation, it came up that this person was going to be selling his car soon as they needed a family type car. I immediately asked what plans he had for the SVT wheels. His plans were to sell them to a friend but he would let me know if his friend couldn't get sufficient funds or refused them for any reason. My hopes were dashed as I figured his friend would be an idiot not to buy these limited edition custom wheels if given a chance.

Several months went by and I decided to call my Michigan friend again to see if he had sold the wheels. Much to my surprise he had not and was now seriously advertising his car for sale. I was extremely excited about this news but I was almost afraid to ask what he wanted for the SVT wheels as I was expecting a very dear price. The topic did finally come up and although his price wasn't as bad as I had first envisioned, it was quite high. I told him I had better consult with my wife first before I said yes to the wheels and I would let him know within a day or two.

Now remember what Patty had previously said about me ever even buying a SC, so I was always considerate of her opinion whenever the topic of "improvements" to the old SC was brought up. I could just see her saying, "How many sets of wheels do you need?", or "What's wrong with your existing wheels...They still look like new!". I must have caught her in a weak moment because she didn't even flinch when I laid the price on her. I bought the wheels and first publicly displayed them at the Columbus Ford Expo show in '97. Everyone there went crazy over them.

I thought for sure that I would always have a unique looking SC as the only way to get Cobra R looking wheels on a Tbird was to change the bolt pattern. At that time, no one had done that to my knowledge. My uniqueness was short lived, as a plethora of look-alike Tbird SVT wheels would be available shortly. I remember going to the Mobil 1 Ford Challenge the next spring and there were at least three other SCs present with virtually the same wheels as mine. I'm still very satisfied with my magnesium original SVT wheels and don't plan to change them anytime soon.

The winter of '98 was when I took the big jump regarding performance with my SC. I

installed Eibach springs, Koni shocks, headers, a Super Coupe Performance exhaust and raised/enlarged cast supercharger top, a "S" model supercharger, underdrive pulleys, an IC fan, 36# injectors, and a 190 lph fuel pump. The car was finally the rocket I was hoping it would be. The only change I have made since is the addition of a Magnum Powers inlet plenum that I wrote about in the September, 2000 CT.



Some of the other minor changes I've made over the years are a 145 mph speedometer from a '94/95 SC and a air bag in the passenger side spring to control wheel hop. I've taken out the air silencer and have a fresh air intake system with a polished stainless steel tube connecting the MAFS and Tbody. The 3.55:1 gears have long since been swapped out for 3.27s because I

felt that the car needed a sixth gear with the 3.55s. The RPMs were a bit too high for my taste. I have also added a dash of color to the black interior with bright red inserts in the door panels.

I have a larger sway bar sitting in my garage that I'll install some day and I have already purchased the parts necessary to change the car over to 13" brakes. I found a deal on a set of new PBR dual piston calipers last year at the Carlisle swap meet and found a set of late model spindles in my local salvage yard. I also have a pair of black cadmium plated 13" Cobra rotors. Finding the time to make the swap is now the issue. The brake upgrade may happen this winter but with the schedule I've been keeping lately, it may not.

Owning a SC for the past ten years has been a real pleasure. I take pride in owning a car that is unique and slightly rare. I could never own a Mustang, as they are literally everywhere. As far as the general population of Mustang and GM owners is concerned, I'm sure they consider the SC an odd, overweight slug. They, also, likely say that I'm crazy for wanting a V6. If that is true, then I'm certifiable!

SUPER COUPE PERFORMANCE

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Contact Bill or Patty at Email: sccoa@usa.net Phone: 513-697-6501 Fax: 513-697-0580

SC Fog Lamps

How to rewire and add aftermarket lamps

By Mark Gluss msq419@aol.com

From the time I started visiting the SCCoA web site, I have seen a recurring problem regarding the OEM headlamp switch and fog lamps. Several members have come up with various solutions for rewiring their fogs and adding larger aftermarket fog lamps. After looking at them, I came up with a way to rewire the fog lamps using the OEM wiring and switch. The following steps outline a way to safely rewire your fog lamps to remove them from the headlamp circuit, allowing you to use them independently of the headlamp system. No longer will you be plagued with the fog lamps going off when you use the high beam lights or worry about burning your headlamp or multifunction switch due to overloading.

The first step is to test the fog lamp fuse to see which side is hot when the headlamps are turned on. Pull the fog lamp fuse and "blow it" by pulling out the center link of the fuse. Insert a piece of insulation stripped from a piece of wire to prevent accidental arching. Directly above the fog lamp fuse is the "ACC" fuse. This is a switched fuse that is on only when the key is in the on position. Run a jumper from the "ACC" fuse to the fog lamp fuse and reinsert the "blown" fog lamp fuse in its holder. Probe the jumper connection to fog lamp fuse to make sure you have power and that the power cuts off when the ignition switch is turned off. In the case of my '92 SC, the left side of each fuse, as you face the fuse block, was the connection needed. You can now use your fog lamps independently of your headlamps.

To provide the most power to your fog lamps you should run a relay that is opened by the OEM switch and provides 12V power to the lamps. Starting with the driver's side fog lamp, pull off its socket. With the key in the on position and the flog lamp switch turned on, use a test light to determine which lead is the power lead and which is the negative lead. Pull the socket off the passenger side fog lamp and probe that socket to determine which wire is the power and which is the negative. Turn off the ignition and disconnect the negative power lead of your battery. Back at the driver's side fog lamp socket, cut the positive lead about 3" up from the socket. Crimp a new wire onto the lead that would be coming from the switch and run this new lead up to a 30 amp relay that you can mount to your radiator support or in any convenient location. This wire goes on the lug of the relay that closes the relay allowing 12V power to light the lamps. Next, run a ground wire from the relay to the bolt on the body and make sure it grounds out by testing your connection with a test light.

Crimp a new wire on the short positive cut wire on the driver's fog lamp socket that will provide power to the lamp. Run this wire back to the relay, but don't connect it to the relay at this time. Now move over to the passenger side fog lamp and cut the positive lead just as you did the driver's lead. Tape off the end of the positive lead that would be providing power from the fog lamp switch. Crimp a new lead on the remaining power lead that goes to the socket and run the new wire back to the relay. Take the two wires that will provide power to the fog lamps and crimp them together and attach them to the correct lead of the relay.

The last connection is the 12V power lead. Run a fused wire from the relay to a 12V power source. I ran mine to the 12V junction block just behind the battery on the drivers side and used a 20 AMP fuse.

Most relays have five leads on them. You will only be using four. The center lead is not used. The wiring diagram for the Hella relay shows the following connections should be made:

- 85 Ground wire lead
- 86 Power lead coming from OEM switch
- 87 Leads running to positive fog lamp terminal
 - 30 Fused 12V lead

At this point if you wish to use the OEM fog lamps, just reattach the sockets to the fog lamps. But if you're like me, you did this to use more powerful lights. I mounted a set of Hella 530 clear fog lamps where the OEM lamps were. These lights fit very nicely and fill the entire bumper cutout for the fog lamps. Changing the OEM fogs to an aftermarket lamp is a bolt up operation.

Remove the OEM fog lamps and brackets by unbolting the two bolts from the bumper reinforcement that hold the brackets in place and slide the whole unit out the rear of the bumper cover.

To fabricate new brackets, I cut two 6" lengths of 1" x 1" galvanized corner brace that has holes predrilled into it. I found these holes line up perfectly with the OEM bracket holes and centered the light in the opening. I drilled out the hole that would accept the larger fog lamp bracket bolt.

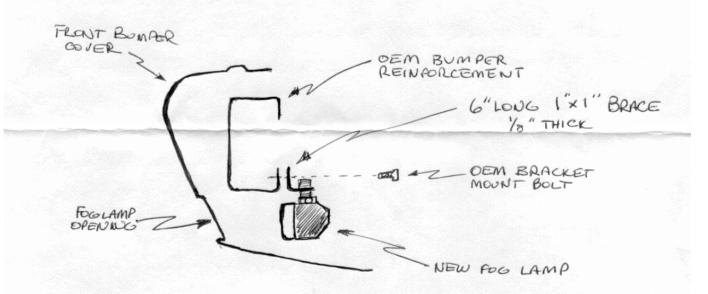
Mount the new brackets to the bumper reinforcement using the OEM mounting holes and bolts. Mount the bracket so the side you will mount the fog lamps to is flush with the lower edge of the reinforcement. Mount the fog lamp using washers as spacers to center the lamp in the bumper opening. Connect the positive and negative leads of the new fog lamp to the existing wiring. You can either cut the OEM socket off and crimp the wires together, or use taps to crimp into the OEM wiring. NOTE: Do not connect the negative leads from the fog lamps to the negative lead on the relay – keep them separate.

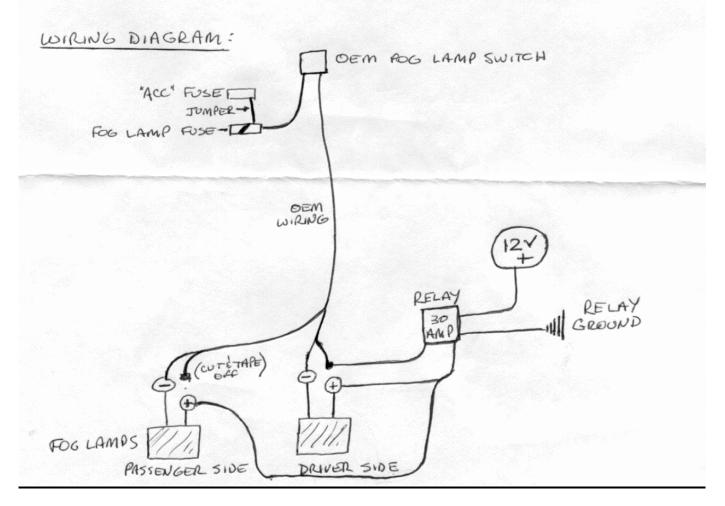
Make sure you tape all connections securely to prevent corrosion and the possibility of arching. Reconnect the negative battery lead and enjoy your new fog lamps. By wiring the fog lamps using a jumper from the "ACC" fuse, you won't have to worry if you accidentally leave the fog lamp switch in the on position. When you turn the key off, the power is cut to the "ACC" fuse and the lights will turn off.

I also recommend using a Competition Limited wiring harness that effectively reduces the load on the headlamp switch by using relays to power the high and low beam lamps. All four lamps, low and high, will light when using this setup. When using the headlamp harness and rewiring the fog lamps you will now be able to have your fog lamps, low beam and high beam headlamps on without overloading your OEM wiring or switches.

Fog Lamp Electrical Wiring and Mounting Diagrams

MOUNTING DIAGRAM:





The SUPER COUPE CLUB of the SOUTHEAST

By Mike Puckett

During the summer I received an email from Brad Klein of the Super Coupe Club of the South asking if I'd considered starting another chapter here in the Atlanta area. The SCCoS had become so big and widespread that it wasn't practical for a lot of people outside of Florida to attend events.

He would turn over to me his contacts outside the state for inclusion in a new chapter if I were interested. As it turned out, I had indeed, considered a new chapter as I had received a few inquiries from some of the local Super Coupers. I emailed everyone Brad had referred to me, contacted local SCers, and the chapter was begun. Slowly I gathered a list of 21 members across Alabama, Georgia and Tennessee. We've already had three scheduled events to attend and all of us have gained several new friends as we've all become acquainted. We have a website now at www.sccose.tripod.com thanks to member Dan Lineback. We also have the unofficial fastest SC as a member with Steve Griffith (12.23 sec. ET) who has just entered the US Navy. We were also extremely proud to pick up Lieutenant Colonel Glenn Huber from the SCCoSW.

Our congratulations go out to Glenn on his recent promotion to LTC. Jason Parham sort of become has the unofficial videographer and has made outstanding videos of our past outings. Now, If I can only figure out how to make this All-In-Wonder Pro video card do video capture, I'll get some mpeg's on the club's website.

So far our meets have been drag racing events at Atlanta Dragway. We were at 'MOPAR vs. the World' in September and we've had 2 dates at Atlanta Dragway's Saturday bracket series in October and November. This Summitt Racing sponsored bracket series runs from March until October almost every weekend.

Our first two events were sparsely attended with only Dan Lineback, Rick Cunningham and myself racing. On one pass by Rick and myself the mutual screaming of the combined blowers had people in the stands turning to see what was racing as Jason Parham videoed Rick getting me again. At our most recent gathering we had seven SC's present. Jason Parham came in his other car again since his XR7's engine is making an ugly noise. LTC Glenn Huber drove over from Ft. Benning, and Ron Weimer came down from Knoxville as well as Rick, Dan, and myself. A new couple, Randy and Deborah Gilbert, showed up in matching platinum '95's.

We looked like quite a flock of birds as we all pulled through the staging lanes in a group. I took one over Glenn, Rick just bested Ron, and Randy was victorious over his wife Deborah. After a short wait we were able to restage for a 2nd attempt. I was struck by Murphy on my next two runs bogging and nearly stalling first and then missing a 3rd gear shift on the next run losing to Ron both times. I did turn identical 14.33's on my two good runs. Ron was eventually able to make it to the fourth round of eliminations before we finished for the evening. Meanwhile. Deborah was able to get revenge and beat Randy and Rick won one over Glenn.

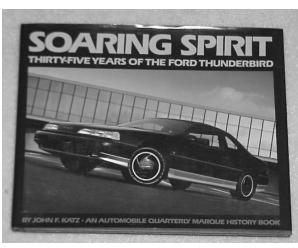
Atlanta Dragway isn't exactly centrally located in the region and it is difficult to

reach for some members, so the search goes on for another 1/4 mile strip that is convenient to more members. We'll be looking into other activities where we can show off our SC's as time goes on. And of course, we're always looking for new members to sign up.



Rick Cunningham and son, Rick Jr., at Atlanta Dragway

35th Anniversary Dealer Package What was included?



Soaring Spirit Book



Accessory Kit



Key Chain - Front and Back



Key Blanks - Black with car logo stamped into head



Pen/Holder - Black with blue stripes and 35th wing logo

Super Coupe Club of America



Suede Cleaning Kit and Instruction Sheet



Silver and Black Car Cover with 35th Logo



Black/Silver Striped Floor Mats with 35th Logo

Super Coupe Club of America

Make your plans now to attend the 2001 Carlisle All Ford Nationals June 1, 2 & 3, 2001. The SCCoA will again be staying at the Super 8 Motel at 100 Alexander Spring Road in Carlisle. There has been a slight change of plans regarding our group reservations. The motel now has a computerized booking system and they claim they cannot book a group of rooms without having all the names of those staying in advance. So this puts the responsibility back in our laps. Make your reservations under your own name as the hotel canceled the "SCCoA/Evanoff" booking.

As of late November, the hotel had many rooms available, so MAKE YOUR RESERVATIONS NOW or risk being shut out later. One can always cancel reservations a few days before the show if you can't make it at the last minute, but I guarantee you, this place will get sold out early next year. Better to be safe (with a reservation) than sorry.

Call the Super 8 Motel <u>TODAY</u> 100 Alexander Spring Rd., Carlisle PA 17013 <u>717-245-9898</u>

Here is a special offer for SCCoA member. If you mail this form (or, I suggest making a copy of it) to the folks at Carlisle before January 31, 2001, you can get into next year's show for only \$20! This offer gets two people and their car in for all three days!

Mail to: Carlisle All-FORD Nationals 1000 Bryn Mawr Rd. Carlisle, PA 17013-1588

-CARLISLE-	Club pre-registration form. \$20 allows two adults into the show all 3 days. Form must be received on or before January 31, 2001.			
All-FORD	Club Name:	Super Cou	pe Club of Ar	merica
	Name:		Phone (1
-Nationals-	Address:			
	City:		State	Zip Code:
June 1, 2 & 3, 2001	Year. Ma	ike:	Medel	
CARLISLE PA FAIRGROUNDS	Enclosed Paymi Pre-registration: TOTAL ENCLOSE	\$20 per vehicle	Ga 1000	mpleted form and payment burlisle All-FORD Nationals, Bryn Mawr Rd., Carliste PA 17013-1588 or to your club official

ATTENTION ALL-FORD - Nationals—

CLUB COORDINATORS

The 2001 Carlisle All-FORD Nationals will take place June 1, 2 & 3, at the Carlisle Pennsylvania Fairgrounds.

We are offering early Fun Field registration discounts to clubs that have participated in the past. It is important you inform your members of this early discount registration fee immediately (by way of a club newsletter or direct mail).

It is also very important you follow the rules for early registration listed below.

- Club Pre-Registration rate = \$20.00 (before Jan. 31, 2001) This will allow two adults and one vehicle into the show all three days. Between February 1 and May 13, the pre-registration rate will increase to \$25. After May 13, registration is \$35 cash, payable only at the event. All pre-registrations must be received on or before the deadlines. Sorry, no extensions.
- This rate is for individuals showing a car on the Carlisle All-FORD Nationals show field. This is not the fee paid for general gate admission.
- We are offering pre-registration for camping and trailer parking. As the event grows larger every year, space becomes very limited, however, our priority is to offer ample room for show cars, swap meet and corral. In order to secure a 10' x 60' camping/trailer parking space for the weekend, we reccommend referring to our website at www.carsatcarlisle.com or calling into our office for a registration form
- Club pre-registration form must be completed and accompanied by a \$20 payment. Registrants may use a check, money order (payable to Carlisle Productions)
 Visa or MasterCard as a form of payment.
- Club officials may submit registrations in a group packet. One check from the club official can be issued as payment for several members. When this method is used, the club member should send the registration form with payment to the club official. The club official will forward the group packet to Carlisle Productions on or before January 31, 2001. Include each member's name, home address, phone number and type of vehicle along with the club name and a club check.

Note: we will not process blank registration forms. You must have a member registered at the time of payment. No late entries accepted.

At this time we can tell you the 2001 Carlisle "Give Away" will be a 1989 Ford Thunderbird SC 35th Anniversary model with only 6,749 miles. The Carlisle All-FORD Nationals will take place June 1, 2 & 3, 2001. In March we will mail an informative event brochure to all pre-registered & past show participants. This piece will highlight the 2001 Carlisle All-FORD Nationals event schedule.

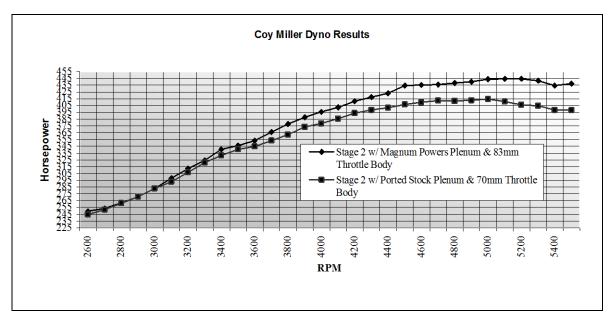
An indoor display of vehicles demonstrating the Ford heritage from the early to late models will be featured as the Carlisle All-FORD Nationals Invitational. If you own or are aware of any vehicles which should be considered for the indoor display please submit a photo of the vehicle along with a brief description about the car's features to The Carlisle All-FORD Nationals Invitational, attention: Lisa Leathery. We like to make selections early, so please submit photos as soon as possible.

Thank you for your past show participation. We will offer the use of a tent to any club that has 20 vehicles preregistered. Watch your mail for the club tent reservation form and we hope you will join us in 2001 for the Carlisle All-FORD Nationals.

Magnum Powers™

Serious Performance Parts for your Thunderbird Super Coupe!

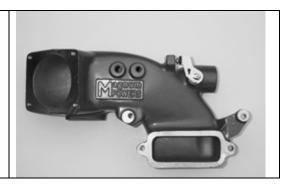
Bolt on an extra **40 horsepower** with Magnum Powers (MP) High Performance Inlet Plenum and Throttle Body! That is right, the Magnum Powers Inlet Plenum starts adding HP at 3100 RPM and keeps right on climbing. See the Dyno Chart below.



Many months of engineering, testing, and thousands of dollars of production tooling were required to bring this plenum to you. The results are awesome and we have the dyno charts to prove it!

Cast from heat-treated 356-T6 aluminum and powder coated for a factory look this plenum is a real eye pleaser, featuring:

- Huge 83mm Throttle Body (TB) Flange accepts stock, 75mm or MP 83mm TB.
- Air passage shaped for maximum airflow.
- EGR valve adapter available.
- Stainless Steel bypass valve, shaft and lever for long life and good looks.
- Powder Coat finish for an OEM factory look
- Hardware included.



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Check out our NEW web site! http://www.magnumpowers.com