CHARGIN' THUNDER

VOLUME I

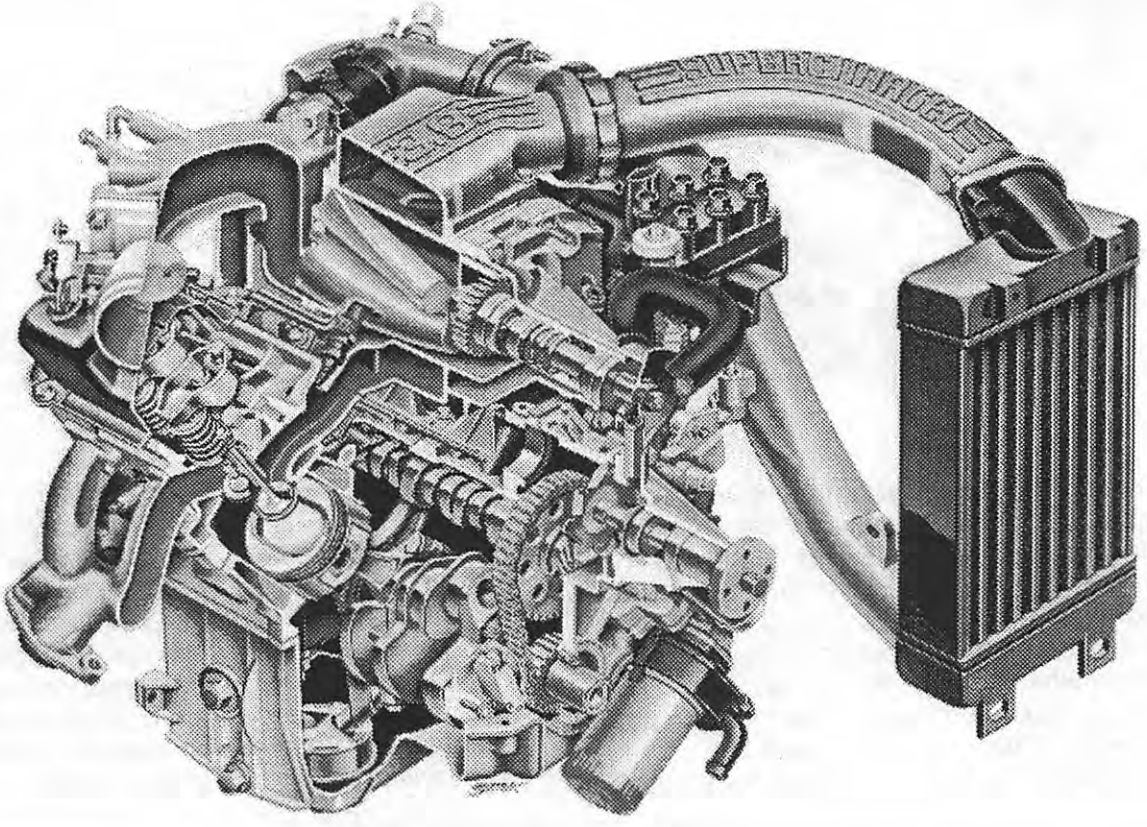
Bill Hull, *President & Editor*

SEPTEMBER 1996

THE OFFICIAL NEWSLETTER
OF
THE SUPER COUPE CLUB OF AMERICA

Dedicated to the Preservation and Performance
of the Thunderbird Super Coupe
1989 - 1995

1992 3.8L SEFI SUPERCHARGED ENGINE



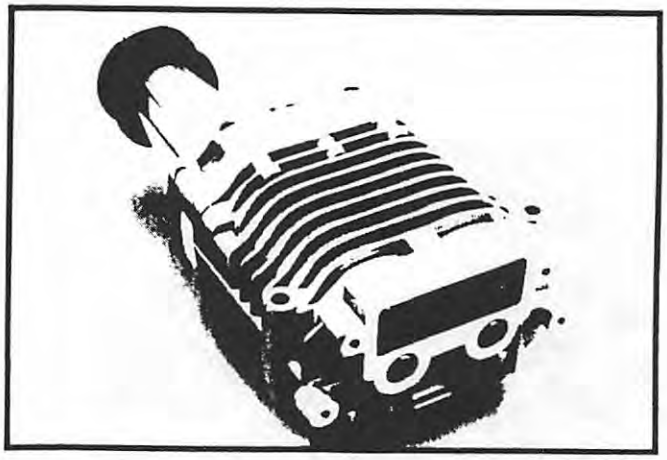
"S" MODEL SUPERCHARGERS

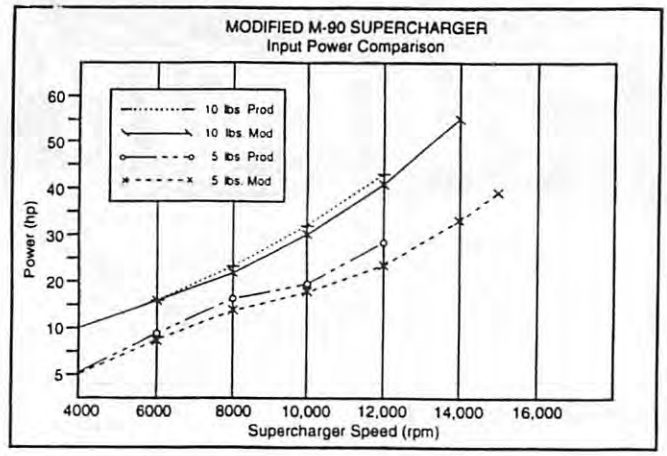
FOR THE PERFORMANCE MINDED ENTHUSIAST

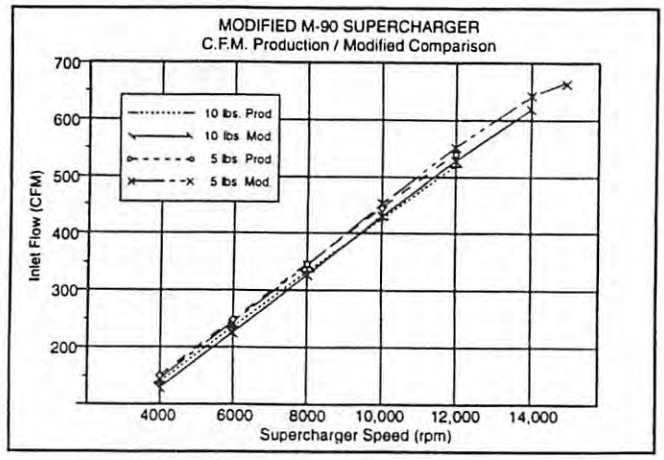
Try our high flow case with super modifications that gives better flow and higher output. For Ford product we take a '94-'95 high flow housing, massage all the flow areas of the inlet and outlet, and get more C.F.M. and blower speed than stock while the temperature and input horsepower come down. This all leads to better overall efficiency.

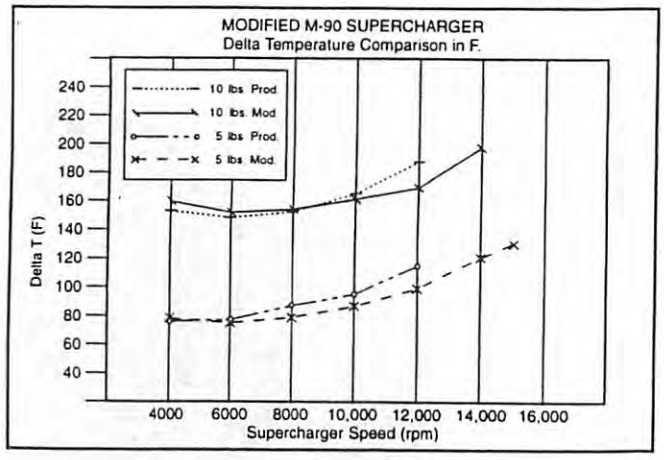
Ford and Mercury owners, with '89-'93 models wanting more power, may take advantage of upgrading their units by bolting on a '94-'95 high flow case and intake manifold. This gives about 18 h.p. Combine this with an "S" modification and you are looking at 25 to 30 h.p.

"S" modifications may be made to all Eaton Superchargers on the outlet side. Intake modifications are selected as to "type" on all others. Call for pricing on this super improvement.









WARRANTY

Magnuson Products warrants and will repair or replace, at our option and after inspection in our facility, any new Eaton manufactured product found defective by means of material and/or workmanship for a period of one year from invoice date. This warranty does not cover products which fail because of accident, alteration, misuse, neglect, racing, improper installation, abuse, or when used in applications for which they were not designed or approved. Removal, installation, transportation, labor, inconvenience, damage of other components, personal damage or injury and/or any injury or liability to other persons or property are not covered under this warranty. Magnuson Products shall not be liable for any and all consequential damages occasioned by the breach of any written or implied warranty pertaining to this sale in excess of the purchase price of the product sold.

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FROM THE BIRD'S NEST.... by Bill Hull

Hello to everyone in Supercoupe land! As this issue goes to print our Club membership has grown to 288 in just six short months. New members come aboard at the rate of one a day, as the word is really getting around about a Club dedicated only to the Thunderbird Supercoupe. I want to thank all of you who have helped this Club grow the way it has - there is no way it could happen without your help! Many of you have related to me how you have followed other SC drivers thru traffic etc., to hand them a Club card. Numerous other members have called requesting additional Club cards, having left cards under wiper blades and otherwise distributing all the cards included in the membership package. I have never met a more zealous and dedicated group of car owners in my life! The greatness of the Thunderbird Supercoupe is confirmed by the love of their owners! I have been reminded of my first experience with the Supercoupe by so many of you that relate the same feelings I had - once you drive one, you are hooked!

Tom Johnson, engineer at Ford Motor Company, has joined fellow Ford engineers Bill Evanoff, Clifford Jolley, and Ralph Boyer as one of the newest members of the Club. Tom was involved in the development program for the Supercoupe back in the mid-80's, and stayed in the program until production ceased after the 95 model year (he now works in the Mustang program, see enclosed letter in "Bird's of a Feather" section). We look forward to Tom sharing his unique experiences with us in future newsletters.

Rick Thomson, of Fairfax, Va., has been generous enough to loan to me a personal computer, complete with fax capability and Internet access. We will have a Web page of our own as part of the "Thunderbird Nest" and soon will be able to chat via E-mail. My wife welcomes this new toy more than I do - with a label printing program in place she will no longer have to address close to 300 envelopes by hand!

Chuck Coryell has started a 35th Anniversary Thunderbird Registry (see enclosed letter). I think this a great idea! This particular edition will go down as one the greatest Ford products ever produced and deserves special attention! I know many of you Club members own 35th Anniversary Editions - give Chuck a call at 804-493-9367, he would love to hear from you.

From the begining, I envisioned this Club to be both active and inter-active. The more individual members become involved in Club activities and sharing information about their own SC's, the faster the Club will grow. I welcome all of you Club members to write (preferably type) contributing articles about your special areas of interest or unique experiences with the Supercoupe. Bill Evanoff took the time to research and write the great article on computer chips included in this issue (also the "You

might be a Supercoupe fanatic (or racer) if..) article.

The Club had a very successful mini-meet as part of Ford Expo '96 in Columbus, Ohio over the Labor-Day week-end. Sponsored by the Performance Ford Club of America and Ricart Ford Motorsports, this 18th annual extravaganza was held at National Trail Raceway just outside of Columbus. Fourteen Supercoupe Club members attended the three-day event : Tom Wilhelm (Ohio), Bill Schlabach (Mich), Rick Thomson (Va), Chuck Coryell (Va), Bill Evanoff (Ohio), Bill McKinley (Ohio), Dick Adams (NC), Steve Prichard (Ind), Al Ohlson (Ill), Steve McCollom (VA), Keith King (Ohio), Neal Frisbee (Ohio), Kerry Dodd (Ind), and last but not least, your humble editor and his long-suffering better-half. Featured during the three day event were many show cars and nostalgia Ford drag cars from the '60's. Several Club members drag raced their SC's, some for the first time. Most notable was new member Neal Frisbee from Elyria, OH, (definitely not a first-timer) who now owns the title "quickest SC in America". Neal's nitrous assisted SC blistered the quarter-mile in 13.08 @ 106 mph on a hot day (see Neal's letter in this issue). Congratulations to Neal on a job well done! The best looking SC present belonged to Keith King. He owns an awesome 95 black on black SC with blacked out head and taillite lenses. It is also lowered 2 inches and sits on 255-50-16 tires with custom wheels. Everyone there agrees- these cars look super sharp with a 1 to 2 inch drop.

Tom Wilhelm, from nearby Gahanna, OH, won a first place trophy in his show class with his beautiful red SC with a killer stereo. If any of you want to know about car stereos check with Tom. He is a true expert in this area and even had one of his project cars featured in an automobile stereo magazine. (tel-614-478-8482). Tom is also the proud owner of an awesome modified Lightning pick-up! His Lightning has run 14-teens at 98 mph in the quarter-mile with 60 foot times of 1.90 sec! I personally drove this truck and can comfirm that it is quick on quick and handles like a sports car. There were reports of a fat guy with a beard doing a burn-out in this truck in the motel parking lot (unconfirmed at this time) which would be a clear violation of Club rules. We ask that any witnesses to this event step forward to either confirm or deny this report, so the guilty party can be apprehended and brought before the rules and infractions committee, headed by newly elected Rules and By-Laws Chairman Dick Adams, from Roanoke Rapids, NC. Dick was elected to this high office by unanimous vote of the SC Club members present, and promises to rule with an iron fist (wrapped around a Coor's lite). He may be the "Hanging Judge" Roy Bean reincarnated so caution is urged for any of you Club members who may be tempted to return to your teen-age years and squirrel around in your SC's while attending a Club meet.

There were also uncomfirmed reports from the Ohio Highway Patrol of low flying Thunderbird SC's on interstate 70 between the

Lennox Inn and National Trails Raceway over Labor Day. Also, it is reported that three Supercoupes took off from a stop light near the motel one after the other after the other, squealing their tires and otherwise causing mayhem on a public highway. Reportedly, an elderly couple in the other lane were forced to stop at the nearest gas station to change their "Depends" after this unfortunate incident! If these wanton acts of terror on the highway continue the Supercoupe Club of America could develop a Badd reputation! We all know that us Club members are a suave and gentile group of peace loving folks, but we need to be careful of the image we project to the unsuspecting public! Anyway, Dick Adams and his loyal band of card-carrying ACLU sleuths and lawyers who comprise the Rules and By-Laws Committee have vowed to get to the bottom of all these unconfirmed reports (Bill Clinton has even offered to provide Dick with any needed FBI files).

As most of you know by now, we met John Vermeersch at the Lennox Inn at the Columbus show. I had inquired previously to Ford Motorsports as to becoming a SVO parts dealer. Their requirements of a $15,000 buy-in and $30,000 annual sales were way beyond my means. When I asked John about our need for certain SVO parts for the Supercoupe Club, he personally waived the requirements and authorized me to become a Ford Motorsports dealer. Hubba! Hubba!

Modified (raised and enlarged) supercharger adapter air outlets are being produced even as this is written. With the help of Magnuson Products I was able to obtain 20 stock units to have modified. Eaton possesses only 60 additional units in their warehouse, Magnuson can obtain these for the Club for only $60 per unit. Ford Motor Company's price is somewhere between $260-$280 for a stock top! I cannot over-emphasize the importance of the modified supercharger tops for increased performance on the Supercoupe. The stock adapter top has a passage about the size of a one-barrel carburater - all the air these engines need must pass thru this small hole. Consider this adapter neck as an exhaust for the supercharger, if you will. Particularly with the Model S blower and those of you using overdrive pulleys, this is a very critical area. If airflow thru this adapter is hendered, as it is on stock units, the blower is unable to deliver the air-flow it is capable of. Supercharger backpressure and over-heated air results, severely limiting performance on even stock engines. I am ever more convinced that Ford intentionaly restricted these stock tops to limit performance (warranty concerns, etc.) rather than concerns over hood clearance. We are raising the modified units 3/4 inch while still not touching the hood blanket! Included with these modified tops will be a special Loctite product for flange to flange fittings (Gasket Elinimator 518 Sealant), a tube of anti-seize compound for the collar nut and new 3/4 inch longer hold-down bolts (also provided). Be the first person on your block to own one and let it rip!

Watson Engineering is producing 15 sets of 2½ inch headers with

matching downpipes. Ten sets are already spoken for, and after a slow start Club members are placing about one order per week. After receiving my Tracking Products Dual Exhaust system, as nice as it is, I have begun having Ronnies Auto service duplicate this system, and by eliminatig the middle man, can offer this dual system for $395.00 instead of $545.00. It is still the only "True-Dual" system on the market for the SC.

Magnuson Products is still allowing me to sell the Model S blower for $1450.00 exchange for a limited time. It is a real piece of work, capable of flowing 700 cfm , enough to support 500 hp on a properly set up engine. Magnuson also offers special prices to Supercoupe Club members on replacement nose pieces and regular blower rebuilds. Spearco, after promising us for months to restart production of their high-capacity inter-coolers, has not returned my last 6 phone calls. This part, along with the supercharger tops and headers, is such a key part in the SC's over-all performance, I recommend every one of you Club members who wants an improved inter-cooler to call Spearco every week as I have been doing - maybe they will get the message.(818-901-7851)

SVO (made by Crane) bolt-down roller rocker sets are now available thru the SC Club for $299. ARP head-studs are also available for $119 (Neal Frisbee tells me he paid $135 for his one only custom set last winter). I have found a source for custom seat covers for the SC. I have tried every seat cover ever made and nothing fits until now. They come in 13 colors with SC and T-bird wing inserts (4 colors) and even cover the head rests. Made of washable denim material they are available for $125 plus $5 shipping. A&A fiberglass has a real boss-looking front air-dam available for 89-93 SC's, price $229 plus shipping. I have factory crankcase windage trays available for $29 - most windage trays cost $49 on up. Last but not least, I still have plenty of real nice SC Club apparel left. I don't have all colors in all sizes left, but I do have plenty (too much!). I went ahead and put my SC back in hock to pay off the clothes - I seriously doubt I will order any more after these are gone. Speaking of hocking things - I heard from the National Pawn Shop Association that pawn shops all over the country are over-stocked with like-new sets of Family Jewels! THANK YOU ALL FOR YOUR SUPPORT!

I think I've said enough - it's time for you Club members to speak....

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BIRDS OF A FEATHER

(NOTE: Please Abb. Club as SCCOA. Thanks, Ed.)

September 25, 1996

Bill Hull,

I've recently installed the "Goodies" listed below from the SCCOA:

K&N Panel Filter
Magnecor 8.5mm Spark Wires
Tracking Products true-dual stainless steel exhaust with Dynomax Ultra Flo mufflers

The Results!

1. Low rumble at idle, roar at 2,000-2,500 rpm with full throttle. Nice mellow tone at city and cruising speeds overall.
2. 2-3 psi LESS boost at wide open throttle, maybe due to less exhaust back pressure? (Yes, Ed.)

3. Quicker throttle response
4. More midrange punch, 2,000-3,000 rpm

Next Modifications:

Remove air intake resonator
Modifided supercharger adapter air outlet

Enclosed is my payment of $285.00 for the new S/C tops.

Thanks,

Conrad H. Lu
197 S. Rosemead Blvd.
Pasadena, CA.
91107-3955

Hi Bill,

My name is Greg Perri, and I spoke to you briefly, in early July on the phone. I was rather impressed, with the fact that someone out there beside's myself has an interest in these car's. The only difference is, you went one "big step" further, and started a club. Thanks! This obviously save's my butt from having to aquire the information, and tip's that you've gathered through your experience. Just that alone, is worth 10 times the amount of the $40 joining fee. But, of course, I'm pleased to pay the $40. Anyway's I hope to read your articles for some good tech tip's and other SC owners article's. Keep it Flying!

Greg Perri
11 Frederick St.
Brampton, ONT
Canada LGY 1G3

Dear Mr. Hull,

I would like to thank you for taking the time to start the Super Coupe Club Of America. I'm glad to hear that ther are so many other people out there who love their Super Coupes. I hope that, with help of other members and myself, we can keep the club going, and share with others our pride.

Thank You,

David Rabiega
7435 S. Chapel Dr.
Oak Creek, WI.
53154

95 SC 5spd.
Chamelon Blue, K&N Filter, Overdrive Pulley

Dear Bill,

I just received my June issue of Chargin' Thunder today. I must say you are doing a great job, who knew you weren't an editor. As you mentioned in your letter the twenty five dollars I initially paid to join our club is not enough to cover all of the cost. To help with this I have enclosed a check for the fifteen dollar difference. I sincerely hope the other members are compelled to help out with the financial difficulties of the SCCOA. Currently I cannot afford to do any serious modifications to my 1990 35th Anniversary edition T-bird SC, but I have many things planned. The newsletters have been very helpful and informative in this area. However I can afford to order a $12 T-shirt and a $15 hat. I would have ordered them when you sent out the letter but I did not have any idea what they looked like. It was a good idea to put pictures of them on the back of the newsletter. Hopefully more members will be ordering these.

I live in the fingerlakes region of New York State and would like to be able to meet some of the other members in my area (Central/Western New York). Would it be possible to publish a list of members so that we could share our enthusiasm of the T-bird and the SCCOA. Finally I as others have, would like to offer any help that I am capable of to help promote the Club in my area. Thanks for all the hard work Bill.

Sincerely,

Brad E. Dileo
69 Geneva St.
Clyde, NY 14433
315-923-2471

P.S. I'M NOT HOCKING MY FAMILY JEWELS!!

S.C. Club of America
Bill Hull President

Dear Bill,

Enclosed is survey sheet and also my order for club T-shirt.

I've really enjoyed my first two issues of Chargin' Thunder and already have learned a lot. I've still got a long way to go though!

My son William (G.W. Burke 111) got me into this and it's great. He has a white '93 with modifications and I just bought a red '90 stock. We're gonna take some pictures of them together and we'll send you some copies for future use if needed.

I'm ordering a special license plate to read: 9T-BIRD

Right now I'm still trying to figure out what I've got. But I do know one thing- I've got ONE HOT T-BIRD!

Thanks,

Bill Burke
1308 Weatherbee Dr.
Winston-Salem, N.C. 27103
910-765-1799

Mr. Hull,

I appreciated your effort to explain your organization to me during our phone conversation Tues 9-10. Thanks for rushing out copies of your 1st two newsletters. I'm sure they will be very helpful as I rebuild.

If your offer still stands, I'll have my engine man contact you as soon as we get further into building the beast to put back under the hood of my '89.

Sincerely,

Jeff Fiesinger
9801 StoneLake Blvd. #1125
Austin, TX 78759
512-418-7345

Clint Badberg
3022 Marcy St.
Omaha, NE 68105

Dear Super Coupers,

Thank you for the opportunity to join your club. I bought my so far unphotographed, (I plan to send a picture as soon as I take one.) '89 T-Bird SC on July 26 of this year and found myself rather disappointed with the coverage this vehicle received in all formats, i.e. magazine, TV, etc....

However, I was pleased, after a couple of days of searching, to find a very good World Wide Web page named the Thunderbird's Nest and was very pleased to find out that I was not the only one who had an acute desire to see how much more I could get out of my wonderful new car. This is how I came about finding the information on your great club and have enclosed with this letter the $40 fee so that I may enjoy the exclusive rights and privileges encompassing membership in the Super Coupe Club of America.

Thank you also to Bill Hull for setting me in the right direction to performance upgrades for my Bird and I hope to get an opportunity to meet and converse with other T-Bird lovers such as myself in the near future.

Sincerely,

Clint Badberg

PS Just a little trivia. If the T-Bird isn't as great as other so called performance vehicles than someone tell me how many times the Ford Thunderbird has won at Winston Cup races... I don't know just curious. (a T-Bird won the Miller 400 today... hehehe)

17JUL96

Dear Bill

I have enclosed a check in the amount of $45 for membership into the Super Coupe Club of America. I'm so glad to have found a place where I can learn more about my new car and get the inside scoop on parts and tech stuff. My car is a 1989 SC with a 5 speed, VIN 1FAPP64R1KH204449. It's white with leather interior. She's got 96K miles but I picked her up for the very reasonable price of $7200.

My most immediate need is for spark plug wires. If you would please enclose your sources for the wires we spoke of on the phone it would be greatly appreciated. The car is running poorly at this time due to arcing of the plug wires.

The other things I could use some information on is the seat covers we spoke of and I'm also interested in a deck lid spoiler, factory type if there is such a thing. As I said I have found very little information on the SC and I'm unsure if they came equipped with spoilers from the factory.

I'm enclosing my phone numbers and address, feel free to call any time.

John Craven
7022 Jeanne RD.
Lemon Grove, CA. 91945

Work phone (619) 537-4760, Home phone (619) 462-8954.

I'm looking forward to your news letters, and being active in the SC Club. If there is anything I can do for you or the club please let me know.

Sincerely,

John Craven

Supercoupe Club of America
2239 Banbury
Charlottesville,
Virgina 22901

Dear Sir,

Please find attached a $40 check for Supercoupe Club of America dues, please sign me up.

I own a white 91 Supercoupe, auto, all the extras, CD, Sun Roof, Leather, etc..

Been doing performance modifications:

* Ported heads, intake and ext. manifolds
* High Lift Cam (reground .488 lift, 260 deg.)
* Stiffer Valve Springs (70 pounds on the seat)
* Overdrive Pulley (2.84 inch)
* Larger Air Mass, (77MM, adjustable mixture control)
* 36 Pound Injectors
* Adjustable Fuel Regulator
* Hand built throttle body to mass sensor duct (3 inch dia. big help.)
* K&N Filter
* Gutted & opened up Air Box (the one in the finder well)
* TransGo Shift Kit (mildest setting)
* 245/50 tires

Boost is about 11 to 11.5 PSI with all the mods. (was15 PSI before port job and cam change.)
Idle vac 15 inches in neutral, A/C off & engine hot.
1/4 mile about 102 mph (Fuel mixture adjusted by the "seat-of-the-pants").
Idle a little rough, a slight miss and tends to stall at times.
I talked with Bill on the phone, he thinks I have a intake leak, I could use a hint on how to find it.

Sincerely,

Charles Warner
51850 NW Outback Lane
Forest Grove, OR 97116
Evening Phone (503)357-5444 E-Mail: ChasW500@AOL.COM

Tues, July 23 1996

Bill,

I finished reading Chargin' Thunder from March and June 96. What a wealth of information! I also enjoyed talking to you on the phone Tuesday Afternoon (July 23). The Mods I have done on my 94 SC are: Vortech MAF from C&L, K&N filter, quick-and-dirty ram air (Removed right front fog light and fender air box), 89 SC pulley (put my boost-o-meter at 14psi), AOD-E recalibration kit from Baumann Engineering (excellent!), MotoRad performance thermostat from Summit Racing (195 F but with a much larger bore than normal. Helps to keep the engine temp down).

I have since removed my Vortech MAF meter and re-installed the stock one. The car experienced a slight amount of surging under WOT at high speeds (recently at 110 MPH passing a car uphill, but also at 70-80 MPH.) The engine runs great, and smoother with the stock unit and I can't tell the difference with respect to performance. Maybe the sampling tube was not appropriate for the 36 lb injectors that are stock with the 94-95 SC ? Joe Scott of Scott Performance Products called C&L, they said the sampling tube was the same regardless of the size of my stock injectors! (19lb, 24lb, 30lb, 36lb). I called Vortech and they said they have different size sampling tubes for different size injectors. The unit C&L sent me had the same sampling tube as a mustang with 19lb injectors. I verified this through the part number on the box with Vortech tech support. I returned the unit to Joe Scott and applied the money to other products. Such is life.

My next upgrade will be exhaust. I've been considering Borla and Flowmaster, but the Tracking Products Dual system that you sell sounds like an excellent choice. I'd be grateful if you could let me know who else has installed the Tracking Products system on their 94-95 SC so I can chat with them about it. (which Dynomax mufflers should I use?). I'm also curious to know if anyone has converted their non-lock traction assist rear axle(I have an auto trans), to traction-lock. I know that the anti-lock brakes kick in if i spin the tires under 35 MPH.

I am ready to buy an exhaust system and a high flow SC outlet hat. But for now, I've included $15 more toward my membership ($40 total), as well as funds to buy:

1) Hanes Polo's SCCA, size: L, color: red.....$28.
2) All Sport Polo's SC, size: M, color: blue.....$30.
3) Jacket SCCA logo, size: L, color: grey.....$49.

Shipping?.....$7.
Additional Membership fee.....$15.
Total.....$129.

I can see that I will be busy for quite a while implementing the performance upgrades you talk about in Chargin' Thunder. Thanks!

Stan Barber
618 N. Inyo St.
Ridgecrest, CA 93555
619 375 1620

29 Aug 96

Dear Mr. Hull,

First I would like to thank you for taking the time to start the SC club. I have been almost completely in the dark about my SC. Second, your car is absolutely beautiful. Keep up the great work.

Let me tell you about my SC. It is a 1989, white, 5 speed and titanium leather. I purchased it from a retired Warrant Officer at Ft. Belvoir Virginia in December 1994. It had 42000 miles and still had the original tires. Now it has 60000 miles and the Belgium weather has taken its toll. The SC has everything but, of course, the locking fuel door. I've added a rear wing, splash guards and tinted windows. Also a K&N conical air filter, C&L 73mm mass air, overdrive pulley, Dynomax exhaust(planning to upgrade), Jacobs wires and a hypertech chip.

I plan to purchase the supercharger adapter plate, so can you drop me a note on the deposit? Also being in the Army, I don't make allot of money, so I plan to upgrade slowly. I will be keeping the stock super charger and engine(for now). Can you give me your opinion on what size injectors, throttle body, rear end gears and fuel pump to use? I know nothing about removing the induction system. Also do you have any basic info on how an intercooler works and how to install the fan for it? I know you are thinking this guy knows absolutely nothing, but I have built engines before. They have been your basic Pontiac V-8. Supercharging is all new to me. "Charging Thunder" has answered so many of my other questions. Its great! Please keep up the good work! If I can do anything to help please let me know.

Also, I would like to thank you for going out of your way to contact all the manufactors that you did and convinced them to produce all the high performance parts for the SC. I know you stuck your neck out. Now maybe us members will get our act together and buy these parts before we lose them.Thanks again.

I have enclosed pictures and my club membership.

Sincerely,
Robert Griffin

Robert C Griff

Charging Thunder September 12, 1996

I began on the Thunderbird SC project at Ford Motor Co. beginning sometime in 1986. While working on this project there were several times that I was asked what my job was. I had many different answers, however, the best answer I think was the following: I am the customer representative for powertrain function. My assignment was to test the vehicle to determine if the future customer expectations were being met by the powertrain. The response I was most often greeted with was, "How do you get a job like that?" This question was usually asked when I was on a test trip with four to eight Supercoupes, stopping for gas in some far-out place like Monument Valley, Arizona. One day when I was complaining about my travel schedule, my wife reminded me, "There are thousands of people who would die for a your job." I agreed. I, in fact, loved my job; it was a challenge and, above all, fun. I was not alone; there were a lot of very dedicated people working on this program.

This is true of all the vehicle programs at Ford. However, for some programs the dedication comes easier. The Supercoupe program was great because it was a new engine concept. The engine was to use a Roots blower and port fuel injection. A lot of people would not have agreed that there was anything new about a Roots blown engine. After all they had been around for years. This may have been true for the Roots Supercharger, but add the port fuel injection and it was an all new ball game. Port fuel injection is so wide spread now that is easy to forget what a great advantage it is over carbureted engines. However, it is port fuel injection and electronic ignition control, plus knock sensors, that has made supercharged engines so appealing.

So what was the appeal of looking at supercharged engines? There were several, depending on what your interest may be. If you're the vehicle designer, you like it because you can design the vehicle for one engine package, but optional power is available that normally would have required package space for a much larger engine. If you are the powertrain designer, the appeal is fuel economy with high performance.

When considering performance and fuel economy as it relates to engine design, the main choice is engine displacement. The larger the displacement the more power potential. Who hasn't heard the old Hot Rodder statement, "There no replacement for displacement." This statement has a lot of truth to it in terms of maximum power. However, it is also true that fuel economy suffers at the hand of displacement. This is normally a result of engine pumping loss and frictional horsepower being increased as a result of the larger engine.

So what are the other main options for increasing power for an engine without increasing displacement. Doing this would yield more power without a huge fuel economy penalty. The approach most often taken is to increase the engine breathing by using more valves and overhead cam shafts. This approach works somewhat, but has the drawback of having the most HP increase at high engine RPM. To make this power available to the driver requires the axle ratio to be increased. This has a very negative impact on fuel economy. As a result only a slight gain in fuel economy is realized. The horsepower gain from supercharging can be realized without increasing the engine RPM and therefore not requiring the use of a higher axle ratio. Now we have got the result we were looking for, more performance without the loss of fuel economy.

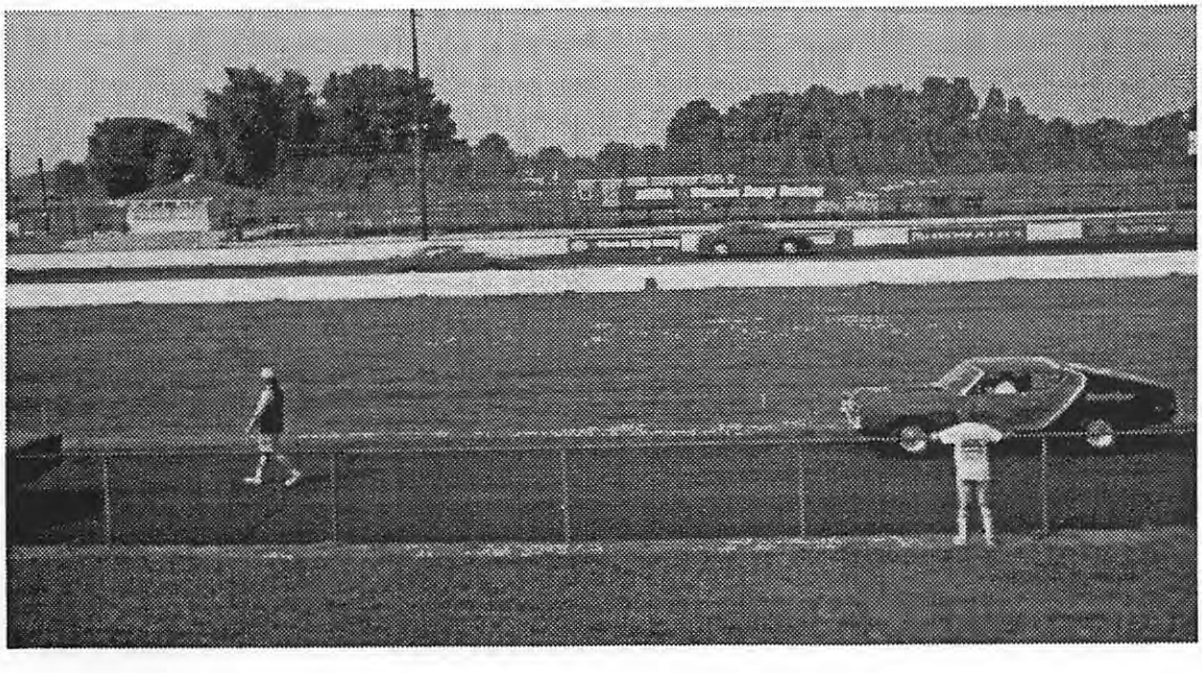
As much as I like talking about the powertrain of the Supercoupe, I like talking about the complete vehicle even more. You have to understand, however, when it comes to the total vehicle, I am not a Ford expert. I'm just one customer, much like you. I have owned several performance vehicles, and my current everyday driver is a 1989 Supercoupe with 107,000 miles.

I love this vehicle, and I am sure some of this appreciation comes from the fact that I also have worked on and helped design a small part of it. I currently work on the Mustang program and therefore I am sure I have given more thought to performance vehicles than most people. I have also listened to other people give their thoughts concerning performance cars. I don't think there are any people more outspoken about their vehicles and their expectations than Mustang people.

The Supercoupe experience along with the Mustang have helped me form the opinion that performance vehicles fall into two categories. One category I call " trophy vehicle" and the other I call the "everyday drivers." The trophy car is easy to define; it is the Corvette or the Dodge Viper. People buy these vehicles for all the obvious reasons, fast, exciting, looks and "fun to drive." However, you don't buy these vehicles to put 100,000 miles plus on. No, you buy these vehicles to put in the garage to take out on weekends for a short ride and then wash and polish and restore to its garage again until next weekend. Sometime you might take a short two-day trip. However, over the long haul, these cars may get as many as 30,000 miles in five years. This is not to put down such behavior. There many people that enjoy their vehicle in this manner , and I know taking such a vehicle to the dragstrip or an autocross is a blast. This behavior is not wrong, just different from the person who buys their performance vehicle as an "everyday driver." This is where the Supercoupe shines; it is fun to be in all day! I have a son and daughter in North Carolina. Anytime there is a chance to drive my Supercoupe to N. C. , I look forward to the trip knowing I get to drive the "The Coupe" over the West Virginia Turnpike.

Tom Johnson
Ann Arbor, Mi

Columbus Expo '96 Labor Day



Neal Frisbee putting a 13.06 106.00 on Bill McKinley's Nitros-Assisted 5-speed 14:03 at 99 MPH

Russ Jamison
42-60 Main Street #5F
Flushing, NY 11355
(718)539-0482
August 26, 1996

Bill Hull
SC Club of America
2239 Banbury Street
Charlottesville, VA 22901

Bill,

I am interested in information regarding joining your club. I first heard of you from your Super Ford article a while back, but more recently, I was given one of your cards by a guy I met at a car show, (who has a blue LX 5 liter with some work done to it, and who says he met you guys at Carlisle...), but even more recently, I received a phone call from Bill Evanoff. After a discussion with him, I think you have exactly what I've been looking for.

Currently, (my setup in the last T.I.X. newsletter is old), I have a 90 red SC w/AOD, leather, sunroof and the JBL system. Mods are: Auto Specialties under/overdrive pulleys, 9" K&N conical + heat shield with the air silencer removed, SPEARCO intercooler, Hypertech chip, C&L 73mm mass air, 63mm ported (stock) throttle body, Dynomax (super turbo) cat-back exhaust, 10" Art Carr 2800-stall non-lockup converter with the solid input shaft, Level 10 prepped AOD (includes shift kit, Koline steels and extra Blue Plate Special clutches and an aux. cooler), 180 degree thermostat, platinum plugs w/MSW wires, 245/50's all around, Performance Friction brake pads (from Baer Claw), Accel fuel pressure gauge, 8000 rpm tach with shift-light and a Auto Meter boost gauge. Currently, best time has been 14.40 @ 94.9 (60'=1.91), but that was on a 85+ degree day with the street tires spinning halfway through second. I'm looking into 16" street slicks (Hoosiers) on stock rims and 3.73's, which will hopefully propel me into the 13.9's. However, Bill E. told me you had a source for headers which I am very interested in, as well as discussing some of your other mods, (i.e. extrude-honing the intercooler tubes...Why not just replace them w/3" mandrel bent tubing?) So, please let me know what I need to get a subscription, and feel free to call me if you need more information.

Thanks,

Russ

Enc.: 3 pictures (side view, rear 3/4 view, engine view(old))

SAMUEL GROSSMAN
ATTORNEY AND COUNSELOR AT LAW
73-48 188TH ST.
FRESH MEADOWS N.Y. 11366

(718) 264-0777
~~(212) 227-7683~~
FAX (718) 264-1471

July 17th 1996

Mr. Bill Hull
Super Coupe Club of America
2239 Banbury Street
Charlottesville, VA 22901

Dear Bill:

Enclosed please find my check in the sum of $40.00 as and for membership in the SCCA. My SC is a 1990 which I have owned since new. It is a red five-speed, with the leather interior, and every option, except the engine block heater. The car now has 42,000 miles. The license plate reads SC-TBIRD.

I ran the car in the quarter-mile. It ran 14.6 at 94m.p.h. The modifications were a Tracking Technology exhaust, K&N airfilter, supercharger overdrive pulley, Hypertech powerchip, and a balding set of the stock GT+4's. Since then I have put in the 3.55 rear and put on new tires. I'm getting a lot of rear wheel hop when I come off the line, and my times are slower. Any advice?

I'm noticing that top speed with the 3.55's is only about 120 m.p.h. Is there any way to have the best of both world's.

If I may burden you with one more question. About a year ago I had to have the supercharger replaced. I brought the car to my Ford dealer, who had helped me in installing some of the goodies. When I got the car back I noticed that I wasn't getting the same boost as before. Sure enough, the mechanic neglected to install the pulley. When he did try to fit the overdrive pulley he told me it wouldn't fit the new supercharger. Is there a different pulley I should be using. The new part number for the supercharger is listed on the enclosed work order. Any information would be appreciated.

I read your June 1996 issue, sent to me by Tracking Technology. It was wonderful, keep up the great work.

Very truly yours,

Samuel Grossman

Checkered Flag
ENTERPRISES
1944 VENTURA BLVD., CAMARILLO, CA 93010 (805) 987-6171

Super Coupe Club of America
2239 Banbury Street
Charlottesville, Va 22901
August 4, 1996

Dear Bill;

After speaking with you on the phone the other day, and reading the Chargin Thunder Newsletters that you sent to Bob McGinnis at Magnuson Products, I have decided to join your Super Coupe Club. Enclosed please find my check for $40, and welcome to it. I have been looking for an organization by and for Super Coupe owners. We have a real unique and collectable car that we can be proud of.

As you can see from the photo that I sent you earlier, that my car is a Rusty Wallace black on black MGD Replicar, which only has the Eaton-Magnuson "S" Blower modification and a K&N air filter so far. It is my daily driver and now has almost 120,000 miles. I couldn't believe how much more power it had after my modifications, and now I am planning to start at the "back end" and improve the exhaust system.

As you can guess, my wife and I are huge NASCAR fans. As a matter of fact, we own and operate a NASCAR apparel, souvenir and collectable retail store in Southern California. Anytime you get out our way, stop in and see us.

Enclosed please also find my order for some of the SCCA clothing. I also enclosed an extra $10 to cover the cost of shipping. Please let me know if that is not enough.

Tom

Tom Tucker, Owner
Checkered Flag Enterprises

SUPER COUPE CLUB of AMERICA
C/O of BILL HULL
2239 BANBURY STREET
CHARLOTTESVILLE, VIRGINIA
22901

8-27-96

Dear Bill,

Thank you for forming S.C.C.of A. Please find my check for $40.00. I look forward to reading the clubs newsletter and gaining more and much needed knowledge about my car. I have a '90 SC 35th anniversary edition whichIlike very much, (I love my wife- I worship my car!) and intend on keeping it "forever". Therefore any information I can get will be appreciated and necessary for my long range plans. It will be welcome additions to my set of T-Bird service manuals.

A little about myself: I am a manufacturing design engineer with a capacitor manufacturer. I have raced in my distant past; drag, road race (SCCA), and circle track. My wife and I are avid NASCAR fans. She is also a T-Bird driver. I do most of my own maintenance and have restored three cars.

Again thank you for starting the club.

Sincerely,

HUGH ROLL
2914 DINEEN AVE.
SCOTTSBLUFF, NB.
69361

Mark Hasenyager (Member #7)
1962 E. Buena Vista Dr.
Tempe, AZ 85284

Dear Bill,

Intimidation ... No, procrastination ... Yes !!! I am one of those procrastinating club members who have called you on weekends, telling sobbing accounts of the futile search for go fast parts for FORD's now orphaned SC. Now that you have created a home for us orphans by providing us SC fanatics with a means to satisfy our need for speed, we have let you down by not ordering the parts that will lead us to salvation. Well I will procrastinate no more! Here is my order for headers and other good stuff plus some back membership dues to cover the costs of running a club. I hope other members will put their money where their mouth is and support the club by buying parts, shirts and other things. I bet other members have the same problem as I do... limited time caused by distractions from making it through the daily grind. However I realize you must have the same troubles, which makes it that much more amazing that you have been able to put together a club as great as the SCCA. The June '96 newsletter was better than the first and the best car club newsletter I have seen. If it were up to you this club will continue to improve and garner attention. The effort and work you have put in is already bringing parts manufacturers and other car enthusiasts to respect the SC for the great car that it is. But it isn't up to you entirely. You can't continue to spend your own money to sponsor the club and keep it at the level of quality that it is at now. It's up to us the club members to let it continue to be the success that you have made it. The club is a service run by it's members, a club can't be a one man show. It's too bad I couldn't show my support by being at the Carlisle All-Ford Nationals, but that would have been too long of a trip from Phoenix Arizona. I hope that other members will get off their butts and show their support by buying the parts they asked for, ensuring the continued success of the SCCA.

Mark Hasenyager

Saturday, Sept. 15, 1996

Don & Shelley Goss
107 Appaloosa Way
Smithfield, Va. 23430
(757) 255-2039 Home
(757) 441-8210 Work

Bill Hull
President & Editor
Super Coupe Club of America
2239 Banburry Street
Charlottesville, Va. 22901

Bill,

I would like to thank you for the prompt reply. The newsletters are very interesting and informative. Enclosed is a check for our membership into the SC Club of America. I was hoping that one day in the future somebody would start a club just for Super Coupe owners. Enclosed is a picture of my wife's second baby. (First, is our daughter Kristen.)

Our Super Coupe is a 1990 model that we ordered. It is titanium with blue leather interior. Our car is original except for battery, tires, and braking system mods. We have all the original paperwork, sales literature, window sticker, maintenance records, and a copy of the certificate of origin for our SC. The mileage on our SC is over 115,000. Our plans are to add some aftermarket goodies such as headers, exhaust system, mass air sensor, and a K&N air filter kit. Once these items are completed, we plan to start on the suspension of our Super Coupe. As you can probably tell from the picture, my wife and I take excellent care of our SC.

My wife and I have been big fans of the Super Coupe since it was introduced in 1989. I guess you could tell that my wife and I love our SC. We are also interested in purchasing a 1995 Super Coupe with every option.

Again Thank You.....If you have any questions, or if I can be of any help, Please call me any time.... I am interested in assisting you with a registry for the Super Coupe Owners, and also I would be willing to help you with the newsletter.

Sincerely,

Don & Shelley Goss

Bill Hull, President
Super Coupe Club of America
2239 Banbury Street
Charlottesville, VA 22901

Dear Bill,

Thank you for your quick response to my requests. I received the copies of Chargin' Thunder and read both from start to finish that evening! Enclosed is a check for $40, which I believe to be well worth it.

Also enclosed is a picture of my '95 SC. I have the five-speed manual with 3.23 gears in back. At the current time, I'm saving for my dream house, so I have no immediate plans to modify my bird. I purchased my Moonlight Blue/ Gray SC in Nov.'94 and have already accumulated 44k miles! I LOVE driving this car. My previous car was a Camaro IROC-Z, however when I started working for Ford, I wanted a Ford product. Previously being a GM man (sorry) , the only product that I lusted after from Ford was the SC. I'm ecstatic to say I wasn't let down! This car hits 60 much faster, is roomier, more comfortable, and gets much better mileage than the Camaro ever did.

Finally, its great to see and hear your enthusiasm through the magazine and over the phone. Keep up the great work, please let me know of any get-togethers planned later this year in the mid-west.

Sincerely,

David Wilson
36188 Crompton Circle
Farmington Hills, MI 48335
H(810)477-8483
W(313)390-9105

September 13, 1996

"GET BLOWN OR GET BLOWN AWAY!"

Let me start by saying "Hello" to all the club members out there. I'm new to the club and quite surprised at the membership count and the quality of the newsletter that Bill puts out.

I would also like to thank my wife, Vicki, for her understanding of why I feel I have to make the car go faster! And a bit of advice, if you plan on doing major engine work, get a friend to help. I can't tell you how many Sundays my best friend, Tom, spent under my car or wrenching on the engine with me.

My car ran 13.08 and 13.18 at 106 mph at the meet in Columbus, Ohio in 88° weather. So, I'm beating on a cool night, it will post high 12's with 12.5 at 110 mph, the new goal for next year.

My car is a daily driver and averages about 20 mpg on the highway. The following are some engine modifications I've done:

- 73 mm Mass air
- 70 mm Throttle body
- Matched and ported blower intake (throttle body mounts onto it)
- Model S blower with ½" spacer on the outlet
- Stock inter-cooler and tubes
- Port matched intake
- Ported heads with larger diameter valves
- Modified factory exhaust manifolds
- Borla exhaust (no converters but two Dynomax muffles plus center Borla muffler)
- Reground camshaft
- Roller rockers
- O-ringed heads held on with studs
- New pistons, rings and bearings
- Monster in-tank fuel pump
- Stock injectors
- 60 horsepower NOS kit
- Drive line is an AOD rebuilt by Precision Industries
    - First up-shift at 5,800 rpm
    - Second to third shifts at 5,400 rpm
    - Overdrive at 5,000 rpm
    - 2,800 rpm stall lockup converter
    - Hardened input shaft
    - Wide ratio 1st and 2nd gears
    - 3.73 to 1 rear end gears

If you're interested, the rest is some advice if you plan on modifying your SuperCoupe. I've heard a lot of comments about blown head gaskets and I think this is why....

You have to remember this is a high-compression engine at full boost. The factory compression ratio is around 8.4 to 1. With every 3.7 pounds of boost, you get 1 full point of compression. So, if you run twelve pounds of boost, the engine has the equivalent of 11.6 to 1 compression ratio. Basically, the engine has a 200° F thermostat with an electric cooling fan that doesn't come on until 222° F. Then, I'm sure some cars have pulled into the gas station and didn't fill up with the 92 or 93 octane fuel at $1.53 a gallon, but something perhaps a bit more economical?

With the high temperature and high compression and perhaps not the best fuel, it's easy to see how detonation can occur and be severe enough to blow a head gasket or God forbid, something worse.

There is also the other side of the story. .I definitely don't recommend running the engine hard before the temperature gage is off the blue square. The block is cast iron and the heads are aluminum. Let the two metals come up to temperature and more importantly, expand. The expansion of the head puts more pressure on the head gasket which helps it seal. Besides, the computer keeps the timing retarded until the engine comes up to temperature.

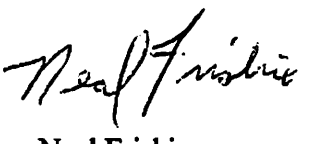
What I guess I'm trying to say, is the engine will do fine if left stock at twelve (12) pounds of boost, but at sixteen (16) pounds, you have to change things. Temperature is critical - run a 180° F thermostat with the cooling fan on all the time.

Detonation is what blows head gaskets. So what causes detonation? **Heat and a lean mixture.** The cooler the combustion chamber stays, the higher boost you can run.

Now some might think this is radical thinking but I view the head gasket as the fusible link in the engine. If I have some type of failure, like a clogged fuel injector or a fuel pump not capable of keeping up, I want the head gasket to blow (due to detonation from lean mixture) instead of melting a hole in the piston which gets extremely expensive to repair compared to a $100 gasket kit.

With all this said, these cars will run faster than your high output V8s, with some modifications. I'm a welder-fabricator by trade and do all my own engine work. If you want a modified blower top; exhaust manifolds opened up; larger throttle body or cylinder head work done and you can't find a job shop interested in your one-of-a-kind project, I think I can help.

I can be reached at (216) 366-5979, if any of you have comments or questions.



Neal Frisbie
Elyria, Ohio

Thomson, Richard

From: Thomson, Richard
To: TB_LIST
Subject: Overdrive Pulley installation
Date: Friday, July 19, 1996 3:54PM

SC overdrive pulley installation:

First, you will need a 6in 3 arm pulley puller which is available for rental or loaner from most auto part stores. If you choose to buy one it may cost you $60 bucks for a good one.

Next, you will need a 18mm socket with a 5in extension on a 3/8 or 1/2in ratchet. It is better if you have two 18mm sockets and two ratchets.

Then, You need to remove the nut holding the blower pulley on by holding the belt and pulley with one hand and backing off the nut with the ratchet.

Then, You need to loosen the tension on the lower belt (crank shaft to half shaft) and loosen the belt tensor on the upper belt (half shaft to blower pulley). This car has three belts on it.

Once the belts are removed you need to use the pulley puller and attach it to the blower pulley and slowly remove it from the shaft. Once removed clean off the shaft and check the fluid level by using an allen wrench to remove the black cap on the right side of the supercharger, It should reach the bottom of the opening. You can order more fluid from you local ford dealership if needed.

You may need to replace your belts if you have any cracking in them. (Rule of thumb every 2 years or if there are 3 cracks per inch) The belt that is recommended for the smaller pulleys is a Gates belt KO80390 and can be picked up at many auto parts stores. (Keep the old belts as emergency replacements) After cleaning the shaft put the new pulley on lining the slit on the pulley with the pin of the shaft (easier to see once the pulley is off). Now you may need an impact wrench since banging the pulley on the shaft will only damage the seal on the supercharger. I push the pulley on as far as I can, then by holding the pulley and using an impact wrench I tighten the nut down. Since most people don't have an impact wrench try holding the pulley while tightening the nut on as far as you can then slip the new belt in place and with the help of the tension on the belt finish tighting the nut . The shaft will only show about 2 threads when the pulley is seated properly. Also applying some WD-40 helps the whole process.

Finally, put the belts back and check that all ribs are seated on the pulleys. Crank the car up and check all belts again.

Note: To help increase the tension you can replace the belt tensior pulley for the supercharger with one that is about 2/8 in larger than the stock one. The diameter is 3in as compared to 2.8in for the stock one. This helps increase the tension for the blower belt and thus reduce the chance of it slipping. FOMOCO part # F4S26C348A $20 Trak Auto part # 231107 $25

Rich Thomson, Va
95 SC

35TH ANNIVERSARY THUNDERBIRD REGISTRY
CHARLES S. CORYELL
14 CLOVER COURT
MONTROSS, VIRGINIA 22520
(804) 493-9367

September 10, 1996

Super Coupe Club of America
c/o Bill Hull President
2239 Banbury Street
Charlottesville, Virginia 22901

Dear Bill,

As you requested (ordered?) I'm sending you this letter for print in the upcoming edition of "Chargin' Thunder".

Now that the SCCA is well established we need to find as many 35th Anniversary Edition owners as possible. I believe that the forming of these clubs will send some very important messages to our favorite car manufacturer.

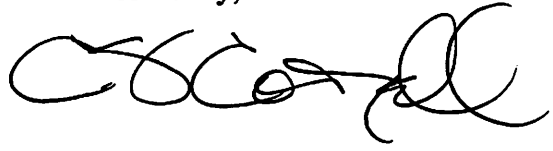
The first of which is that there are other late model enthusiasts besides the Mustang and SHO crowds and that we dearly love our **REAR WHEEL DRIVE WORLD CLASS PERFORMERS!** Others include the documentation of these rare birds, release of promotional materials, forming data bases and networks to ensure that we all have a place to turn when our SC's aren't running so hot (need to run hotter) or just to check originality.

To this end I'm building a data base for the 35th Anniversary Edition and urge the owners of these cars to contact me via mail, phone, pony express , or drive by and give me the following information:

Name, address, phone
VIN, Door data plate codes
Options, and anything else they feel is important.

I've done the groundwork with the Thunderbird Club Center and hope to have more information on these cars soon. Maybe some packages the dealers forgot to issue also. Thanks for your help.

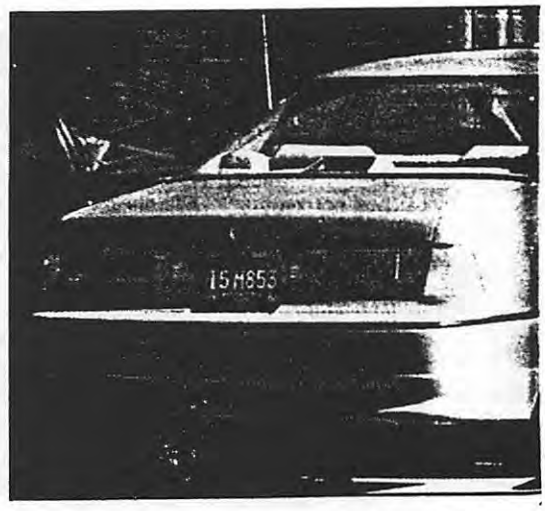
Sincerely,



SUPER 'BIRD!

Ford takes stratospheric flight with the new, supercharged Thunderbird SC

By Kevin A. Wilson



Imagine Buick Grand National power in a BMW 635CSi-like chassis.

Now abolish the Grand National's turbo lag, make the BMW bigger and more space-efficient and cut its price by more than half. The tangible offspring of this flight of fantasy will hit Ford showroom floors in spring of 1989.

Promising? You bet. Spy photos of the 1989½ Ford Thunderbird SC (Super Coupe, the replacement for the Turbo Coupe) have been circulating for well over a year now. With the design and engineering virtually complete, Ford has lifted the disguises off most prototypes and information is trickling out—unofficially—about this supercharged V6 sports/luxury coupe.

Exciting stuff first: Expect something like 240 hp, 0-60 mph times near 7.0 seconds, and a sticker price just over $20,000. If Ford can hit that price target (and much can happen within 18 months to change it), the T-Bird SC would be something of a bargain performer, strongly undercutting the price of anything similar from Japan or Europe. Maybe there's something to this business of a weak dollar, after all.

Keep in mind this is a new *rear-drive* platform—a rare commodity from an American automaker in recent years. GM shut down the plants that made most of its big rear-drive coupes (Buick Regal/Cutlass Supreme), and is replacing those models with smaller, front-wheel-drive GM10 coupes.

But Detroit has been rethinking its rush to front-drive. At GM four-wheel drive is the engineering hot ticket to overcome fwd's deficiencies in sporting cars; in addition, rear-drive is touted for the 1992 Camaro/Firebird and a Cadillac sedan. Chrysler, so far, is staying front and 4wd.

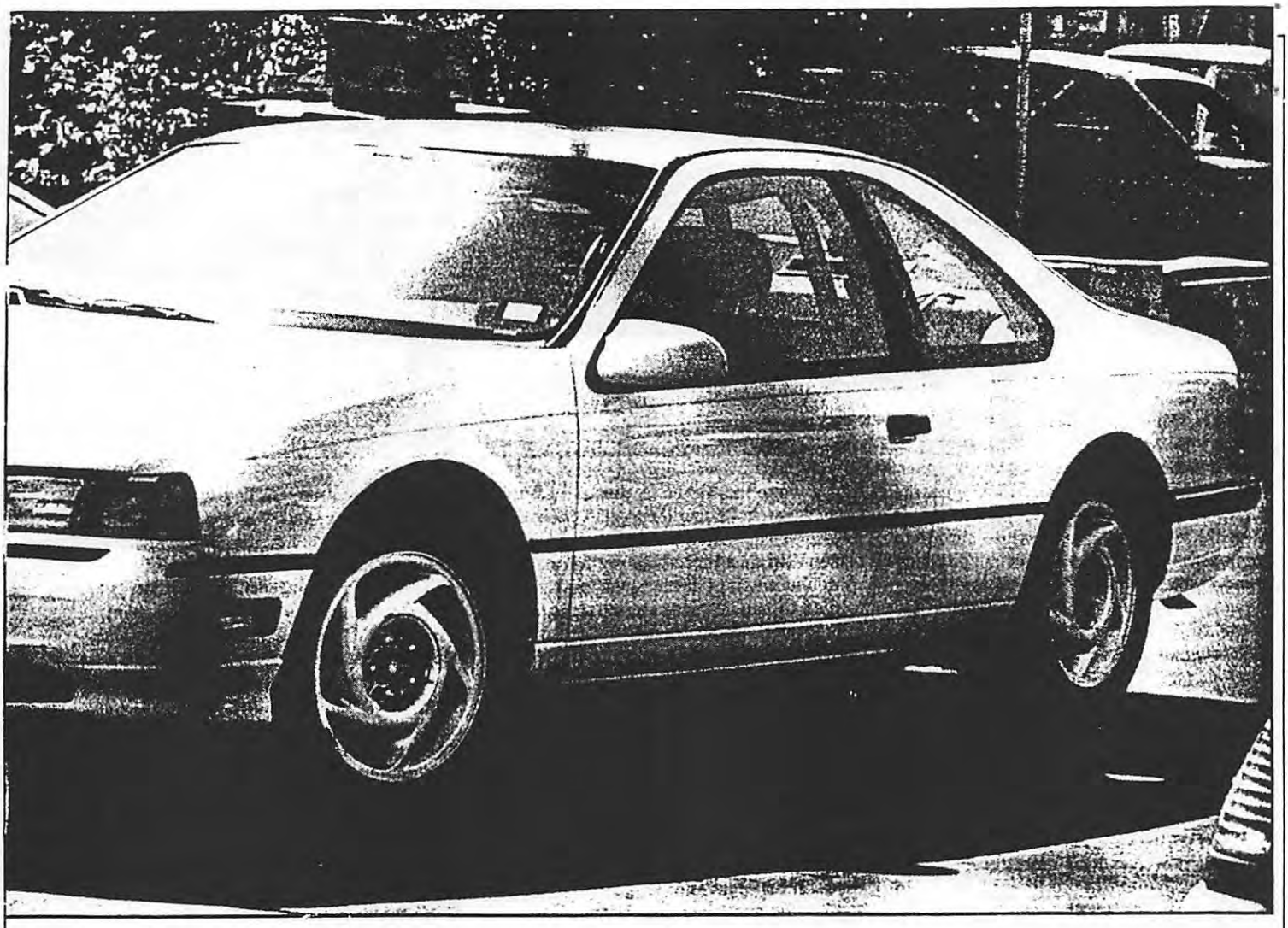
Over at Ford, the T-Bird SC is but one model the company will build on its new rear-drive MN12 platform. It will also be used for more sedate T-Birds, a Cougar, a Lincoln LSC, the next-generation Mustang and maybe, just maybe, a Lincoln two-seater. Although work on the platform was begun before Ford established its "centers of excellence" worldwide product planning strategy, the new large car platform could also become a sedan overseas.

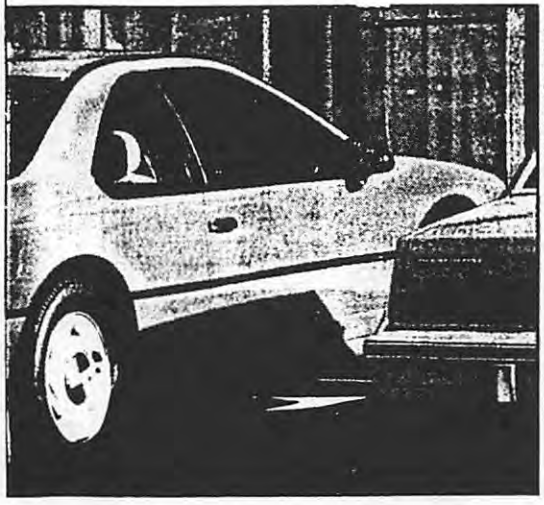
For America, the SC is the cutting edge of Ford's high-performance line for the 1990s. It's no coincidence that we compare it to the Grand National and the BMW Six Series: Both those cars were among Ford's performance targets in developing the SC.

Compared to today's Thunderbird Turbo Coupe (built on the Fox platform that started life as the Fairmont), the upcoming model is more sophisticated and somewhat larger. Its 108 inch wheelbase is 4.0 inches longer than the Turbo Coupe's. It is also longer overall, wider and lower than today's car, but those dimensions each differ by just under 2.0 inches.

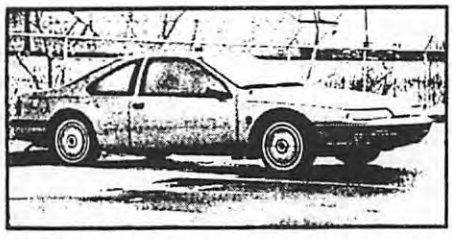
Greater sophistication includes independent rear suspension. Descriptions make it sound suspiciously like the underpinnings of the German-built Ford Scorpio, with some changes: semi-trailing arms with Dearborn-added toe-change control links to tame the suspension-induced oversteer common to this design. If it is, indeed, lifted from a Ford of Europe design, there's also an all-wheel-drive package that could be adapted for the Super Coupe. This package could also see use on the upcoming Mark VIII LSC and maybe a two-seat roadster based on Ghia's Vignale show car that has been making the auto show circuit.

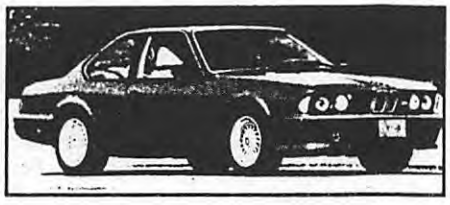
Electronically controlled adjustable shock absorbers take a big leap forward on the SC. Most such systems today have two or three shock valvings, often indistinguishable except at high speeds. The SC's system will





Michael Ber photo





Though it didn't do well in style clinics, Ford's '89-90 T-Bird SC, with lines like BMW's Six Series coupe (right), is striking

have at least six separate shock valvings, producing evident differences in ride and handling.

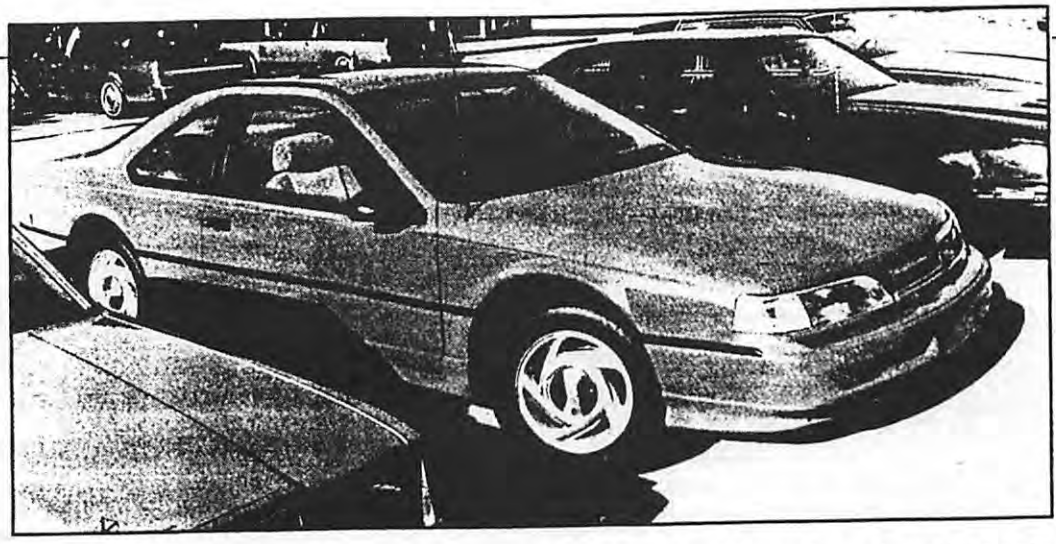
The base Thunderbird will continue to use the 3.8-liter V6 that was upgraded this year (it's also offered in both the Taurus/Sable and the new Lincoln Continental) with multipoint fuel injection teamed with a tuned intake manifold, a revised block incorporating a balance shaft to smooth vibration, and a revised camshaft. It makes 140 hp at 3800 rpm and a healthy 215 lb ft torque at 2400 rpm. Its pushrod valvetrain is hardly the high-revving state of the engine-builder's art (it's basically an old V8 chopped down and modernized), but its traditional American virtues of low-revving torque and relative quiet make a good base for hot-rodding.

But the base Thunderbird is transformed into Rolling Thunder with installation of the new Eaton supercharger. This Roots-type blower with intercooler has been public knowledge since 1985. The one Ford uses is the largest of three Eaton has developed and displaces 90 cubic inches.

The power gains from supercharging—and the necessary engine changes—are similar to those involved in turbocharging. The belt-driven supercharger's advantages over a turbo installation include better throttle response and low-rpm torque, the ability to disengage with an electromechanical clutch when it isn't contributing to the power curve, easier packaging, less underhood heat and, perhaps, lower costs.

These advantages have a handful of automakers turning to superchargers rather than turbos as a relatively inexpensive means of getting more power (compared to the cost of an all-new engine). Toyota broke the supercharging ice for the modern era with the MR2 Supercharged introduced this year. Volkswagen will supercharge its GTI and the upcoming Corrado sports coupe and the Quantum replacement.

Some engineers have expressed concern about durability, a question that arises not because of any inherent weakness in a supercharger but because of the limited amount of experience automakers have with modern units. In theory, a supercharger can be made of cheaper materials yet last longer than a turbo, since it doesn't spin nearly as hard, nor is it subjected to as much heat. Typical turbochargers turn more than 100,000 rpm at full boost. In comparison, the



Michael Ber photo

Eaton/Ford installation has been loping in SC prototypes at between two and four times engine speed, or perhaps a leisurely 24,000 rpm tops.

But until there's more real-world experience, Ford is being conservative. It has opted not to make the first SCs with the maximum power levels registered on the dynamometer: 275-300 hp with the supercharger spinning at four times the engine rpm. Latest word is that the supercharger will be driven at a little more than three times crankshaft speed, which means it will force into the engine roughly 2.5 times the amount of air it would ingest on its own while absorbing about as much power as an air conditioning compressor. In this way Ford and Eaton hope to make the supercharger last the life of the car, or at least 100,000 miles—nearly twice as many miles as today's better turbos are good for.

We could confirm only that the car would have "over 220 hp," but extrapolating from power figures for tests of emissions-legal engines with the supercharger running three and four times crankshaft rpm, we estimate the SC will have 240-250 hp and 325-335 lb ft torque at under 2500 rpm. That's nearly as much power and far more torque at far fewer revs than a BMW M6 generates (256 hp, 243 lb ft at 4500 rpm) and in the same league with the Grand National. As with today's Turbo Coupe, those who choose the five-speed manual gearbox will get more horsepower than those who opt for the four-speed automatic, but the slushbox has been uprated to handle more torque than the 300 lb ft of the Mustang GT's V8.

With the SC's 3400-pound curb weight, that should mean 0-60 mph times, depending on gearing, in the high 6.0 to low 7.0 second range. Automatic SCs (which may be the version with the minimum of "over 220 hp") may not hit 60 mph until nearer the 8.0-second range. Expect both power enhancements and weight reductions in following model years.

Those who've seen prototypes on the road report outstanding performance. A staffer who spotted an SC on the street gave chase in a Mustang GT and was left cleanly behind. Another spy watched an SC burn a month's worth of tire tread and disappear, leaving nothing but a cloud of smoke and a deep growl in its wake.

Ah, yes, noise. It's one big objection to Toyota's MR2 Supercharged (*AutoWeek*, Dec. 28) and why VW has designed a new type of supercharger it calls the G-lader. Ford and Eaton have taken pains to combat noise. Gains were made by twisting the three vanes on each rotor 90-degrees and machining them within a tolerance of 0.02 inches. We're told the supercharger generates 50 dB of unc[illegible] blends in with other underhood sounds. If so, they've beaten the problem we noted after driving an early prototype (*AW*, Oct. 28, 1985).

Responding to Pressure

Chevrolet's powerful Corvette gave rise to Ford's first attempt at supercharging

This isn't the first time Ford has fitted a supercharger to a Thunderbird. In 1957, in the midst of a horsepower war, the company offered an optional Paxton supercharger on its then two-seater as a counter to Chevrolet's Corvette.

Joe Kress photo

Ford claimed 300 horses for supercharged 1957 Thunderbird

Overall the '57 Thunderbird was not as sporty as its rival from General Motors, but the supercharged 312 cu. in. V8 helped the Ford hold its own. While the Vette boasted a maximum 283 horsepower from a fuel injected 283 cu. in. V8 ("one horsepower per cubic inch"), Ford claimed its blown 'Bird produced 300.

Like the dollar, horsepower today isn't what it was in 1957. Unlike the dollar, however, one horsepower today is worth a lot more than it was back then, thanks to changes in the standard measuring procedure. Thus Ford's 300 hp figure should be taken with a grain of salt.

Still the first supercharged Thunderbird was no slug. Its 0-60 mph time was about seven seconds and it ran the quarter mile in the mid-15 second range.

Fuel economy was exceptional for the time as well—as long as the supercharger was kept on its leash. One Ford engineer averaged an even 20 mpg on a round-trip from Detroit to Seattle. If the blower was kept busy, though, mileage could drop into the low double digits.

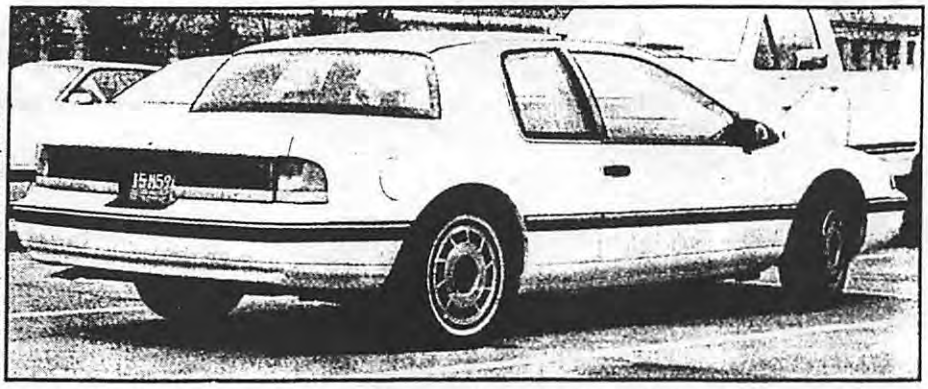
The other drawback to the blown 'Bird was the fuel pump. It was asked not only to deliver gas to the four-barrel Holley, but also to pressurize the carburetor so the supercharger could go about its business. And there were times when the pump just was not up to handling both tasks, leaving the driver with plenty of gas back in the tank but no way to get it up to the engine.

Of the more than 20,000 Thunderbirds made during the 1957 model year fewer than 300 were equipped with the supercharger. Part of the reason was that the supercharger was a $613.44 option atop the 'Bird's $3,408 base price.

Low sales alone probably would have doomed the supercharged Thunderbird. But what really killed the beast was Ford's decision to downplay the car's sporting image while emphasizing its personal luxury quotient. So in 1958 the car grew to a four-seater and lost its supercharger.

In so doing, Ford sold more cars, but killed off a landmark American design.

—James D. Sawyer



Jim Dunne/Popular Mechanics photo

Lincoln-Mercury division's version, Cougar (above), shares Thunderbird platform and mechanicals, but will get that model's patented near-vertical (and stately) backlight

Also working quietly on the driver's behalf will be a traction control system. Operated by the same electronics that control the four-wheel disc brake's anti-lock system, traction control prevents acceleration-induced wheelspin by modulating the throttle or lightly applying brakes. An unconfirmed rumor says the SC's system, like the one that works so well on Europe's BMW Seven Series cars, incorporates a driver-operated defeat switch. Either that's true, or the system didn't operate on the wheel-spinning prototypes we spotted.

Exterior styling is sleek and shares elements with other sporting Fords of the next generation (the soon-to-be-introduced Probe, for instance). In fact, the hoodline is so low that today's 5.0-liter V8 won't fit under it. The SC differs subtly and tastefully from lesser T-Birds in having a body-width cooling "slot" just above the bumper, dual cooling scoops flanking a molded-in "SC" logo on the bumper with integral air dam, side skirts, rear wake modifier and wider, differently styled alloy wheels.

Some say the new shape didn't test well at clinics with owners of today's T-Bird. The same happened with that car and the Taurus/Sable before they were introduced, though. Keeping in mind that more cars all the time are adopting more-rounded styling, we suspect the new shape will be heartily accepted by the time it hits the roads.

Greater effect on styling may come from NASCAR racers, who say they'd have to extend fender bulges into the hood for front wheel clearance—something the rulemakers may frown upon unless Ford cranks out a special street edition with similar panels. Of course, that needn't be an SC: Rumors are floating around of a special-edition T-Bird with the 3.0-liter 30-valve Yamaha SHO V6 destined also for the Taurus.

And the V8 Thunderbird isn't beyond resurrection, either. Today's 5.0-liter doesn't fit, but the platform was designed to accomodate the new modular family of engines due to start showing up in 1990-92 models (*AW*, Oct. 26). This includes an overhead-cam 4.6-liter V8 that is definitely destined for T-Bird/Cougar. Ford engineers aim to match the 225 hp of today's Mustang GT motor, though probably at higher rpm, as in European designs.

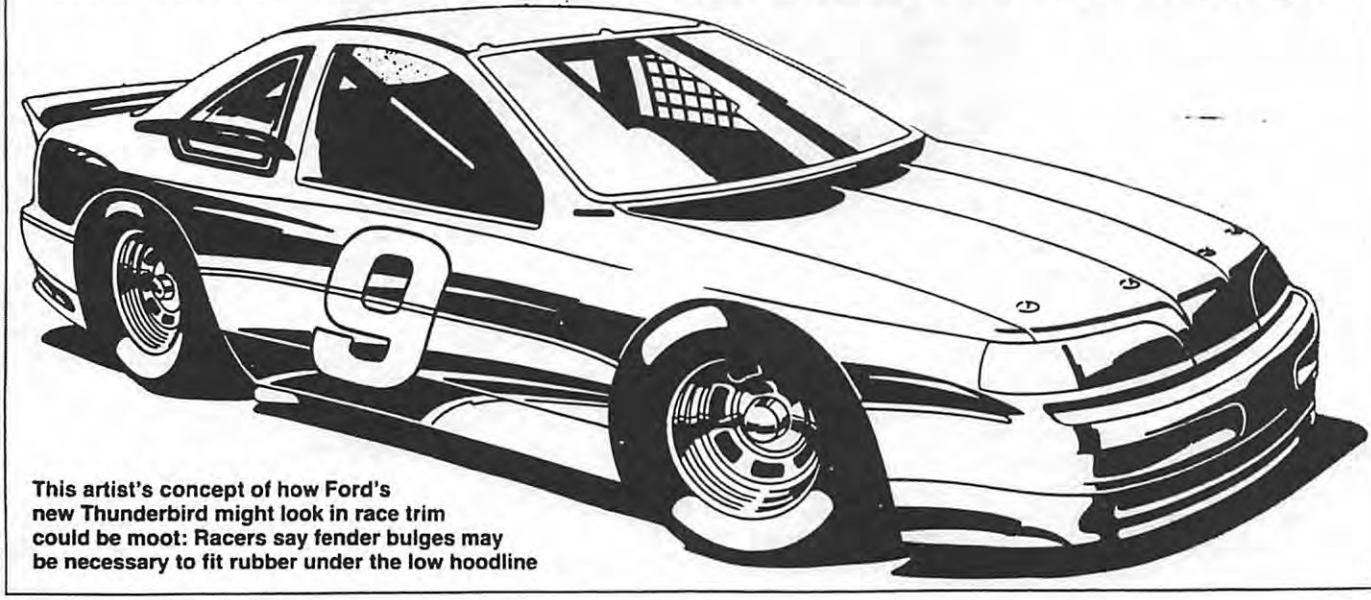
The T-Bird SC's interior, too, is reportedly very European in flavor, with curved shapes and subdued colors—one source noted similarities to BMW's Seven Series. Full analog instrumentation will be standard in the SC, and may move with the adjustable steering wheel as does the gauge cluster in the new Mazda-built Probe. If a digital system makes production, it will be optional. The center console extends into the backseat area (as on the BMW Six Series), appearing to divide it into two separate buckets.

Insiders say meeting the target weight was a problem—a consequence of the high level of engineering content, the need to isolate noise, and the trimmings expected on a $20,000 car. One response: GE-produced plastic fenders at all four corners to help slash 300 pounds. Slimming regimes and toying with the supercharged motor have pushed the debut of the T-Bird behind its original schedule. Ford had hoped to put the car on the market with the rest of its '89s next fall, but the introduction is now slated for spring of calendar 1989, meaning the first cars could be designated 1990 models.

The T-Bird SC would seem to consolidate Ford's growing eminence among enthusiasts and to do so while giving 50,000 buyers each year a European-like sporting coupe in an American-sized and priced package. If it's as good on the road as it is on paper, we expect it'll be a winner. ■

Superbird for the Superspeedways...

And short ovals, too. NASCAR gets an even sleeker 'Bird for racing flight



Paul Manz illustration

This artist's concept of how Ford's new Thunderbird might look in race trim could be moot: Racers say fender bulges may be necessary to fit rubber under the low hoodline

You might be a Supercoupe fanatic (or racer) if....

* The requirements you give your real estate agent are (in order of importance):
  1) 8 car climate controlled garage with an attached shop.
  2) Outside parking for 6 cars, a motorhome, a crew cab dually, a 28'enclosed trailer and a 34' 5'th wheel.
  3) 3 phase 220V outlets in the garage for your welder.
  4) A grease pit.
  5) Convenient to a hazardous waste disposal site.
  6) 15' ceiling in the garage for a lift.
  7) Deaf neighbors.
  8) Across the street from a paint/body shop and near a muffler shop with mandrel bending equipment.
  9) Some sort of house with a working toilet on the property somewhere or hookups for the motorhome.

* you bought an SC before buying a house.

* you bought an SC before buying furniture for the new house.

* your garage holds more cars than your house has bedrooms.

* you buy new parts because you don't know where you put the spares.

* you find that you need a new house because you've outgrown your garage and the neighbors are threatening violence if you park one more vehicle on the street or in the front yard.

* you have paid $3.50 a gallon for gas without complaining.

* you sit in your SC in a dark garage and make car noises and practice speed shifting, while waiting for your motor to get back from the machine shop.

* you look at the purchase of tools as a long term investment.

* your wife says, "If you buy another set of tires, I'm getting a new mink". (But honey, these are for the 17" wheels I bought last month).

* Your children are named after famous NASCAR drivers (and one or more of them were conceived in the back of your SC).

* you have an immaculate car which you drive one day a week, and the vehicle that gets you around the other 6 days is rusted, covered with duct tape, and has a pair of Vise Grips holding the clutch cable together. You promise yourself you'll fix it right after this season, or when you need your Vise Grips for something else.

* you have enough spare parts to build another car.

* more than one parts supply house recognizes your voice and greets you by name when you call.

* you have car parts in your cubicle at work.

* the guys at the local tire store laugh when you come in.

* your Christmas list begins with a Magnuson blower and Eibach springs (and your "significant other" knows what these are).

* you have a separate drawer for "garage clothes".

* your first date involves asking her/him to crew for you.

* your criteria for selecting a significant other includes auto repair skills. Air tools optional.

* your family remembers your hair color as "grease".

* you astound the clerk at Sears by bringing in a snapped breaker bar every other week or so.

* your family brings the couch into the garage so they can spend some time with you.

* a neighbor asks if you have any oil, to which you query "synthetic or organic?" and they reply, "vegetable or corn."

* you tell a friend you need to clean up the head this weekend and they think you mean the toilet.

* you always do a toe and heel down shift while whoever might be your passenger gives you a real funny look.

* you buy real cheap tires for your other cars, so you can save $$$ for the real (race) tires.

* you can't stand anyone telling others how to drive. Of course, you are the best.

* you will gladly pay up to $6 for a bottle of engine oil.

* you hate long distance driving, but you will gladly drive 800 miles to the race track or an SCCA outing (Carlisle PA or Columbus OH so far...any suggestions for next season?).

* you've found your lawnmower runs pretty good on 108 octane (but doesn't particularly care for the blower, even with a large pulley).

* you've got 3 immaculate SC's always road ready, but your wife has to nag you for 2 months before you fix the headlight in her car.

* your "daily driver" is continuously being mistaken for an abandoned car as you haven't taken the time to wash it in over a year.

* you think the last line of the Star Spangled Banner is: "Racers, start your engines!".

From the internet (modified slightly). Source unknown

The Inquirer Business
Saturday, June 1, 1996

What's the word? Soon it reportedly won't be Thunderbird. Or Cougar. Or Lincoln Mark VIII.

Ford to drop some well-known cars, documents say

By Noelle Knox
BLOOMBERG BUSINESS NEWS

DEARBORN, Mich. -- Kiss the Ford Thunderbird goodbye.

Ditto for its twin, the Mercury Cougar. The Lincoln Mark VIII? Gone. Bid farewell also to the Ford Escort Coupe.

All these Ford Motor Co. cars will be dead by the end of the decade, according to company and supplier documents obtained by Bloomberg Business News.

In a key rethinking of its product strategy, Ford is tentatively planning to shift much of its multibillion-dollar development budget away from cars to sport-utility vehicles and light trucks, which show no signs of waning in popularity.

``This is a serious acknowledgment that the market has completely changed," said Michael Schmall, director of automotive forecasting for J.D. Power & Associates, a marketing and information firm.

Ford's profits hang in the balance, as U.S. consumers increasingly turn to the automaker that can best satisfy their craving for minivans, pickup trucks and the like. Ford sees light trucks accounting for half of industry sales in the United States by the end of the decade, up from 43 percent last year and just a third in 1990.

Ford and other manufacturers also make more profit on each light truck than they do on many cars. For example, Ford can make a $4,500 profit on a Ford Explorer sport-utility vehicle, compared with a slim $500 on a Contour, according to David Healy, an analyst with Burnham Securities.

Moreover, to sell its Lincoln Continental, with its leather seats, wood-paneled dashboard and power everything, Ford is offering a generous -- and profit-shaving -- $2,750 rebate right now.

``They [ Ford ] recognize as clearly as they can that trucks and trucklike products are where the action is going to be over the next several years," said Joseph Phillippi, an analyst with Lehman Bros. ``Their whole [new] product-development strategy is geared to answering that customer demand."

Ford executives declined to discuss the company's strategy.

So far this year, about 55 percent of Ford's sales have been sport-utility vehicles, minivans or pickup trucks -- known collectively as light trucks in the industry -- up from 30 percent in 1990.

By contrast, sales of Ford's Lincoln models have plunged 35 percent from their peak in 1990 of 231,600 units. Ford says some of the decline reflects its move to cut low-profit sales to rental-car agencies by almost 70 percent, but industry analysts say Lincoln's glory days are long gone.

``Lincoln's problems have occurred because they are selling to an older, dying audience," said Schmall, at J.D. Power. The average buyer of the Lincoln Town Car, Lincoln's best-seller, is 65 years old, he said.

And sales of the sporty Thunderbird fell 20 percent last year, while sales of the Mercury Cougar were off 46 percent, as two-door coupes, including the doomed Escort Coupe, continued to fade in popularity.

The Mark VIII remains a poor seller despite a costly redesign by Ford for the 1993 model year. It will be killed in four years, according to the documents obtained by Bloomberg.

Ford also has deferred indefinitely its plans to revamp the Lincoln Continental and Town Car after the 1998-model year changes.

Ford instead now plans to spend its money on the Lincoln Navigator sport-utility vehicle, which will be launched next year, as well as a still-unnamed entry-level luxury car.

The Thunderbird and Cougar will be killed in about two years, the documents indicate. Ford will use the Lorain, Ohio, plant that assembles the two models to build a new small sport-utility vehicle. Ford plans to keep the Cougar name for a new car it will build in Flat Rock, Mich.

General Motors is grappling with the same problems that Ford is. GM is converting two of its car-assembly plants into truck plants and is trying to reshape its luxury division in the face of declining sales. The automaker also plans to introduce the Cadillac Catera this summer as an entry-level luxury car.

THUNDERBIRD INFORMATION EXCHANGE

8421 EAST CORTEZ ST. SCOTTSDALE AZ 85260
602-948-3996

AUGUST 1996

PRODUCTION STATISTICS

SOURCE: AUTOMOTIVE NEWS

NORTH AMERICAN PLANT LOCATION: LORAIN,OHIO USA FOR US&CANADA

ALL MN12	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
TBIRD V8	0	0	16,232	12,562	19,587	66,657	94,155				
V6	102,059	82,636	59,543	57,119	106,234	51,056	14,927				
V6 SUPERCHGD	12,809	21,966	7,039	4,212	3,891	2,647	5,741				
5 SPEED MAN.	8,041	6,067	1,905	1,256	1,038	722	574	N.O.			
TOTAL TBIRD	114,868	104,602	82,814	73,893	129,712	120,360	114,823	77,700			
COUGAR	102,275	76,467	63,701	49,254	79,700	71,026	60,201	40,700			
MN12 YEARLY TOTAL	217,143	181,069	146,515	123,147	209,412	191,386	175,024	118,400			
CUM TOTAL		398,212	544,727	667,874	877,286	1,068,672	1,243,696	1,362,096			

THUNDERBIRD	V8	V6	V6 SC	5 SPD	TOTAL
1989	0	102,059	12,809	8,041	114,868
1990	0	82,636	21,966	6,067	104,602
1991	16,232	59,543	7,039	1,905	82,814
1992	12,592	57,119	4,212	1,256	73,893
1993	19,587	106,234	3,891	1,038	129,712
1994	66,657	51,016	2,647	722	120,360
1995	94,155	14,927	5,741	574	114,823
1996			N.O.	N.O.	77,700
1997					
1998					
1999					
yearly cumulative total	*209,223*	*473,534*	*58,305*	*19,603*	*818,772*

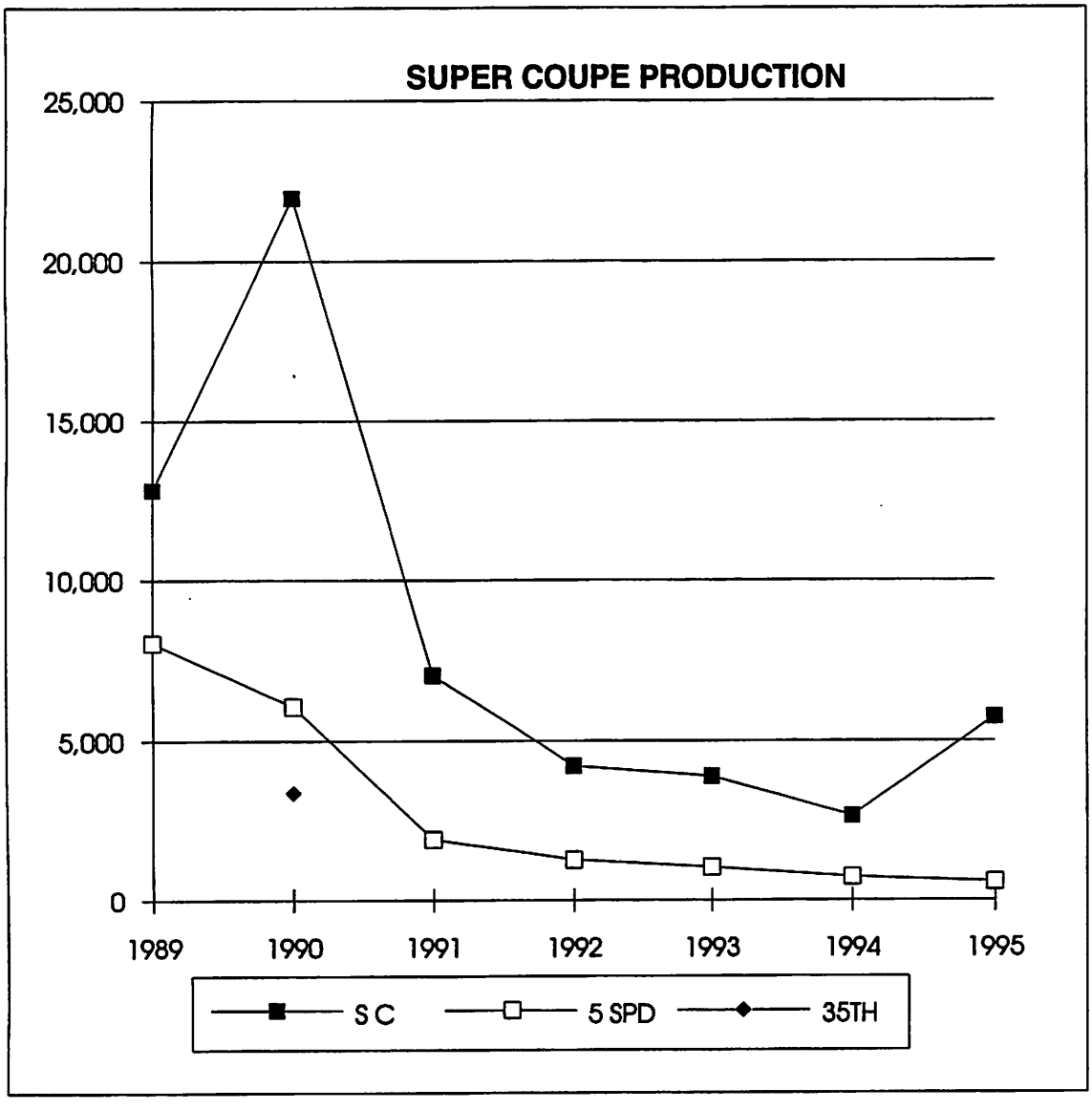
N.O. = NOT OFFERED NOTE: ALL 1996 FIGURES ARE ESTIMATES.

PRODSTAT.XLS

THUNDERBIRD INFORMATION EXCHANGE
8421 EAST CORTEZ ST. SCOTTSDALE AZ 85260
602-948-3996

RARE MN12s

	1989	1990	1991	1992	1993	1994	1995	TOTALS
S C	12,809	21,966	7,039	4,212	3,891	2,647	5,741	58,305
5 SPD	8,041	6,067	1,905	1,256	1,038	722	574	19,603
35TH		3,371						3,371



Special Vehicle Engineering

August 7, 1996

Mr. Bill Hull, President
Super Coupe Club of America
2239 Banbury Street
Charlottesville, VA 22901

Dear Bill,

I would like to thank you for the two copies of the "Chargin Thunderbird" newsletter you recently sent me. As an avid T-bird fan, I fully support your efforts to keep the Thunderbird movement alive and well.

If you are ever in the Detroit area, please give me a call and maybe we can get together. In the meantime, "Keep the Faith."

Sincerely,

O. John Coletti

OJC:das

CHIPS AND DIPS

by Bill Evanoff

Sienfeld fans will surely remember the episode where George had a heated discussion with a party guest about dipping his potato chip more than once. George felt no shame from double dipping his chips, but are we as performance hungry Supercoupe owners being double dipped by aftermarket chip manufacturers when we spend $200+ for a chip?

First, lets develop an understanding of what a chip does and how it does it. Basically, an after market chip (or module as the Ford units are also referred to) is a parasitic type device that latches on to the J3 (small) connector of the electronic engine controller (EEC). The chip, which is actually a custom circuit with a custom read only memory (ROM), overrides the stock E-PROM (chip) on the EEC. The EEC then runs with the aftermarket ROM. These chips typically do two things to potentially enhance performance. 1) advance the timing, and 2) alter the air/fuel mixture entering the engine.

Most aftermarket chips sold are EPA/CARB legal, but each application should be evaluated separately. Emissions legality though does not mean your vehicle will pass all emissions tests or the chip won't hurt vehicle emissions long term. Ford builds a lot of safety factors into their engine calibrations to ensure that every vehicle built, no matter how it is driven or cared for, will pass that year's emissions tests (with a safety factor) after ten years of vehicle life and 150K+ miles. The aftermarket does not have to demonstrate such robustness in their parts, nor do they have to do it with a combination of parts unless the parts are sold as a kit. In other words, an ABC brand chip may pass an emissions test on a non-modified SC, but add intake changes, a pulley, or exhaust changes and it may not pass. This lack of robustness allows the aftermarket chip makers to run more fuel and timing than the original equipment processor and thus a gain in performance may be realized. It depends entirely on the vehicle and the parts used. Chips generally are designed to have their greatest effect on performance under wide open throttle (WOT) situations. The chip manufacturers I spoke to had also designed part throttle responsiveness to be effected above 1200 rpm Chip companies operate on the idea that "rich is good" during WOT. Catalytic converter life will suffer as the unburned fuel is burned off in the cat., raising its temperature beyond its normal operating range. How much suffering obviously depends on the amount of time spent at WOT.

Fuel economy changes with an aftermarket chip are generally not an issue since they have their largest impact upon the processor at WOT. Most people don't floor the pedal when they set the cruise control on the highway, but city

driving mileage can be reduced 5 to 10 mpg less than normal with a heavy foot. Premium fuel, rated at 93 octane minimum, is definitely required to prevent knocks and pings. If a smaller supercharger pulley has been added to the car, this may push the octane requirement even higher.

Superchips advertises a gain of 35 HP with their module/pulley combination. A representative from their company said that their SC module alters full throttle as well as part throttle response (of course it does, because the pulley is working all the time). Extra fuel is added, timing is advanced up to six degrees and the rev. limiter may be changed or eliminated. On vehicles with electronically controlled transmissions, the shift characteristics can be modified to firm up gear changes (some people have called this the electronic equivalent of a shift kit). If so equipped, top speed governors can also be eliminated. Other than the pulley provided, the vehicle is assumed to be stock by Superchips. They recommend 93 octane gas. The company rep. I interviewed on the phone guessed that about two weeks of development goes into a typical module before it goes on sale. He could not comment specifically on the 3.8 SC application. Custom modules are available to meet modified vehicle needs. Contact Superchips @ 407-260-0838

Hypertech quoted a gain of 20 HP with their module for a '90 SC. A company rep. claims zero to 70 mph times should drop .5 seconds and quarter mile times should improve .3 seconds. A '92 SC has also been tested and dropped a whole second going to 70 mph and improved .4 seconds in the quarter. Their module modifies timing and fuel delivery from 1200 rpm to full throttle. It is claimed to be emissions legal and premium fuel is highly recommended. A vehicle is assumed to be stock, but the rep. noted that modified vehicles should realize similar gains as those quoted above. On the average, a week of dyno. time is spent developing an aftermarket application. A 30 day money back satisfaction guarantee is available if a Hypertech module is purchased from their factory. Factory pricing is typically about $100 higher than other sources though. Custom modules are available to meet modified vehicle needs. Contact Hypertech @ 901-382-8888

JET was the third manufacturer I contacted. They offer a module for the SC which they claim will add 16 to 18 HP. Their modifications effect the car throughout the entire powerband. Once I started pressing their phone rep. for details, he claimed I should talk to their engineer. He was on vacation but was to return the next day. The rep. assured me that the engineer would return my call to fully answer my questions. I never received a call back from JET. Contact JET @ 714-848-5515

So, how well do these electronic wonders work? The answer to that question depends on who you talk to. Responses will range from "Great" to "Garbage". Magazines will usually hype the products of the companies who buy advertisement space. When is the last time you read a bad report of a aftermarket product in a national magazine? Don't the tested items always put the stock pieces to shame? So the typical printed reports will give rave reviews. Talking with other club members and Ford development engineers will also give a variety of answers. Here are several comments/experiences from chip owners (not all SC owners) and some Ford engineers.

- "I can say that my chip definitely works and is effective. I know this, because the chip advances the timing so far that the car pings on 92 octane, and the air/fuel is so rich that I have shot unburned gasoline out my pipes before. Luckily, the car behind me had functional windshield wipers!" (5.0L Mustang owner-Hypertech chip)

- " I could notice a seat of the pants increase in performance, but had too much pinging even on good gas. I removed my smaller pulley thinking that was a problem and the pinging subsided but so did some of the performance feel. I eventually removed the chip and added back the pulley. Want a used chip?" (1993 SC owner - Hypertech chip)

- "The Superchip for the 4.6L bird adds 8 degrees of spark ALL the time, way over sparked for most modes. I know for instance that a 4.6L bird can tolerate more spark than we have calibrated in Dearborn with low miles, but weather with low humidity, or increased mileage can eliminate this cushion. I have personally come into contact with how some of these chips are developed and let me say it isn't very ethical. In fact, aftermarket chips violate copywrite law." (Ford MN-12 Powertrain development engineer)

- "I have been involved in making aftermarket systems for SVO and answered questions for suppliers such as Kenny Bell and Roush, as well as adapting and calibrating SVO systems for our off-road racers. From that experience I can tell you that the aftermarket systems are not nearly as sophisticated as our OEM modules which may cause the aftermarket units to have some shortfall in areas such as cold starting and operation, quick transient response, etc..." (Ford truck powertrain/transmission calibration engineer)

- "A complete waste of $230! No E.T. decrease, No MPH increase, NOTHING - Even on race gas. This may be due to the fact that I have already moderately modified my car to increase performance. Also, a friend of mine blew a piston clean through his cylinder block two weeks after installing the Superchips module/pulley combination. He should have been forewarned when

his boost gage began to easily peg itself, way over 15 lbs." (1990 SC owner - Hypertech)

- "A definite seat of the pants difference on my almost stock car. Maybe .1 to .15 second decrease at the strip. I feel the major advantage to a chip is the elimination of the speed governors and the increase in the rev. limiter. Installation is a major pain and when the chip is installed the processors housing won't screw back together....I duct taped it. My dealer would really hassle me about the chip and fought me on warranty repairs. I probably removed and reinstalled it over ten times whenever it was serviced. I have since sold my '89 with the chip and bought a '95. I won't be buying another chip for my '95." (1989 and 1995 SC owner - Hypertech)

- The following three comments are from an internet T-bird talk group:

Sorry folks...on the other Ford news groups, it has been talked to death; but Superchips just don't work on and EEC-IV engine computer. The only system that WILL work is the Calibrator, built by Mike Wesley. It is not on the market quite yet but will go for about $300 when available. FoMoCo sued Wesley to stop him from selling it but he won out. They never sued any of the other guys...does that tell you something? The reason the other chips don't work is that they are "foolers", altering the signal streams from various sensors to trick the computer into altering its open-loop program. The difficulty is that any advantage starts going away when the computer goes into closed loop. Once that happens the EEV-IV starts altering its tables to adapt to the new signal streams...soon you notice no difference. Now there are many little tricks to accomplish the same thing, it's just that the Superchip is the most expensive and least effective. I'm not saying that chips don't work...just that they don't work on Ford EEC-IV's. All the books written on the subject agree, otherwise have a ball - it's YOUR money!

In response to the above letter:

I currently have a Superchip in my car. I have noticed a dramatic performance increase in the higher rpm areas, in ALL gears. Now, if in the future, the chip becomes useless and the computer eventually "teaches" the chip not to do what it is currently doing, then I'll agree. Right now, you sound like any other salesman for a performance product. Mine is better than yours...blah blah blah. If anyone actually puts Mike Wesleys Calibrator in and notes significant differences over a long period of time, then maybe you are right. I currently know a number of Mustang/T-bird owners who have either the Hypertech or Superchip in their cars. Most for at least a year or more. All have NOT noticed any drop in performance since initially putting the chip in. I think if Mike wants to promote his Calibrator then he should do a straight comparison, SC with a Hypertech/Superchip installed and a SC with his

Calibrator. Select a pool of people and let them run the tests. Not the makers of the chips or his best friend. Those are some big accusations you are throwing around out there!

Response back to the above letter:

And how are your muffler bearings holding out??? Just Kidding! Whatever floats your boat. I know how the EEC-IV works, and I don't know how any chip that doesn't replace the factory tables can continue to work, but if it does for you...that's great. I also know a "number" (as you called it) of people who have experienced the performance drop off (or no performance gain) and returned their chips to the manufacturers (or at least tried to). I don't make any money from any part or add-on and further more have no axe to grind as I haven't installed ANY chip and don't intend to. I also don't have to justify to myself spending some bucks on installing a chip that may not work as advertised.

Remember, chip manufacturers have no idea how you have modified your particular vehicle. They have to make an assumption regarding the starting point for each application and that is usually assumed to be "stock". Only recently have kit chips become popular. 5.0L Mustangs for example are routinely modified with the Cobra options and Hypertech has developed a chip specifically for vehicles upgraded with those parts.

If I have painted a negative picture regarding aftermarket chips, this article wasn't originally intended to be one. The feedback from chip owners, ex-chip owners, numerous Ford engineers and even the manufacturers has not given me a warm fuzzy feeling about these products. If any conclusion or recommendation can be stated regarding aftermarket chips it is certainly "Buyer Beware". Everyone you talk to will give you their opinion, and we all know what they can be worth. Buying automotive performance products is supposed to be fun. Heck, it is fun! If you didn't enjoy it, you wouldn't be reading this article now. So don't the aftermarket products we all buy usually live up to your expectations? If they didn't, the company you bought from would soon go out of business. Hypertech and others have been around for at least ten years or more. Are their products really that bad? It's a shame that a detailed study similar to the one described by the internet reader has not been done. This would surely put the many questions to bed permanently. Until this is done, its still "Buyer Beware"! Happy shopping.

MORE CHIPS AND DIPS...by Bill Hull

After reading "Ford Fuel Injection & Electronic Engine Control" by Charles O. Probst, SAE, an in-depth and all-inclusive book on how to understand, service, and modify late model Ford products, my long-time mistrust of after-market engine computer chips was confirmed, at least for me. When the author asked Bob Stelmaszczak, an engineer at SVT, "What about replacing the chip? What does that buy you?", Bob responded, "Generally speaking, replacing the chip will buy you a lot of trouble unless you have the resources to perform an entire engine calibration. Up to 1992, Ford EEC-IV systems are not designed to be reprogrammed. Therefore, changing the chip is not an option. If you purchase an aftermarket stand alone engine-control system, you may need an engine dynamometer, a qualified electronic technician, and most of all, a lot of patience. After all, you will be trying to duplicate the resources of the Ford Motor Company to re-map the engine. This includes all fuel flow and spark-timing values, during cold start, hot start, and all normal off-road engine operating conditions".

Later on in this book in section 6.6 "Chip Modules and Chips", the author goes on to write: It seems so simple, adding a chip to the control module to change the injection maps, and the spark-timing maps. You'll find plenty of offers of the "magic chip". Chip-changing is not as practical on Ford systems as on some of the others because the Ford chip is soldered in, and in some cases, encapsulated. The only way to change a current EEC system is with a chip module. Rather than replacing the original chip, chip-companies will sell you a chip module to be connected between the engine-control module and the harness to modify the output of the factory computer.

Unfortunately, it is difficult to hold a computer chip-module or "black box" in your hand and be able to tell what it can and cannot do, or what the tradeoffs or undesirable effects might be. The word is that some chips are "smoke and mirrors". There is plenty of opportunity for a small gain in one area - full-throttle acceleration, for example - at the expense of driveability, fuel economy, and exhaust emissions. Try to find out as much as possible about the product. It's real results that count.

Most after market computer chips are street-legal, but there are some cautions:

1. You must remove the warranty label from the control module to plug in the power module. Ford put that warranty label over that connector port to send you a message because nobody reads the factory warranty.
2. You must check for detonation. (Supercoupes

have a knock-sensor and the factory computer automatically retards timing under boost conditions or upon detonation, editors note)

3. Premium fuel is required (93 octane or better, factory manual recommends at least 91 octane on stock SC's, editors note).

4. Low-temperature thermostats are required for competition chips to lower possibility of detonation, and to run with cooler, denser intake air. (Hypertech, for one, recommends and provides with their chip a 160 degree thermostat. Their stated reason is to provide a cooler intake tract and therefore presumably, cooler, denser air. However, because the factory computer does not change from warm-up mode to normal mode until 177 degrees, a rich condition will continue AT ALL TIMES, much like leaving the choke partially on with a carburated car. In other words, Hypertech is trying to "fool" the factory computer into providing increased fuel by running rich. This adversely effects not only over-all fuel economy, but could allow raw fuel to wash needed oil off the cylinder walls, causing increased ring wear and fuel dilution of the crankcase oil, editors note).

Increased distrust of these products for the SC came after reading Vortech Engineering's catalog. Although they themselves market an after-market chip (mostly Mustang) their main thrust is the centrifugal supercharger market. In the back of their current catalog, in the "Commonly Asked Question" section on page 23, they ask and answer this question: " Should I use a computer chip with my supercharger system?" ANSWER - " Most computer chip manufacturers produce products which increase fuel delivery and ignition timing. BECAUSE OF THE GREAT MANY VARIABLES AND THE FACT THAT ADDING ADDITIONAL IGNITION TO AN ENGINE UNDER BOOST CAN CAUSE DAMAGING DETONATION, WE CAN NOT RECOMMEND THESE PRODUCTS." (Editors emphasis)

Last but not least, check out the following B.S. in the Superchips Inc. sales brochure written by Jamie Turvey, chief engineer??! He states "as with all pressure fed engines increasing the power output is easy. Simply increase the pressure!(by adding a smaller pulley). No warning about blown head gaskets, etc. They claim a power increase of 35HP, and a "massive increase in torque at the lower end". He states "in supercharged cars the boost pressure is tailing off at high RPMs. OH REALLY!!?? He further states "this does work to our advantage because when the engine is turning fast, there is little time to inject the fuel into the cylinder between strokes". GEE WHIZ!..I bet the SHO boys really have a problem with their 7000 RPM high winders, not to mention CART and Formula One engines, which routinely turn over 10 grand!! If, as Chief Engineer Jamie Turvey states, there is not enough time to inject fuel between piston strokes on EFI engines at high RPMs, maybe we should all just buy a Superchips module and go back to using Holly carburetors!? Nahhhh! Think Not!

Chief Engineer Jamie Turvey even gives conflicting performance figures for the Superchips module. After claiming a 35 HP increase, he further claims a 35% increase in torque at 3000 RPM. Let's see; 300 ft/lb times 35% equals a 105 ft/lb increase!! WOW!! He also claims over 25% increase in torque from 1500 RPM to 4500 RPM. Let's see again; taking 275 ft/lb for an average torque figure for the SC in this over-all power band and multiplying by 25% gives us an average increase of 68.75 ft/lbs. WOW AGAIN!! No wonder "this suddenly livens up this heavy car and makes it into a very quick car"!! He goes on to state "0-60 times will drop by around a second and the quarter mile times will drop by NEARLY that much as well". Why wouldn't quarter mile times drop by MORE than the 0-60 times, as these cars run much faster than 60 mph in the quarter mile??! OH, I FORGOT, down towards the finish line there is not enough time to inject fuel into the cylinders between piston strokes, so the car just sort of swoons and falls on its face at the end (make sure your seat belts are snug)!

What is this guy smoking, computer chip-enhanced pot, or what?? There is no way this Jamie Turvey, Chief Engineer at Superchips Inc. has ever driven a Thunderbird Supercoupe!! If anybody can convince me this horse-manure makes any sense, I will personally eat a copy of this Superchips Inc. brochure at the next Club meet, no salt, no pepper, no mayo!! I wouldn't install a Superchip module on my grand-kids Little Red Wagon, even if they made one for it (maybe they do!). On second thought, with 35 additional horsepower on the wagon, maybe I wouldn't have to pull it at all! I believe any horsepower increase from the Superchips combo is due to the over-drive pulley, while the chip goes along for a $225 ride. I will never install one on my beloved Supercoupe, but I might recommend one to a Camaro owner. HMMMM...

The factory control module is designed to give you performance, economy, driveability, emmission control, and more. It provides air fuel ratios to prevent destructive detonation, and limits engine speed to 6250 rpm to help prevent other kinds of damage. But with the right kind of know-how, and the willingness to risk the engine or the drivetrain, you may be one of those enthusiasts who can push beyond the built-in boundaries - GOOD LUCK!

Anyway, Club members, let me hear from you on this deep, dark subject. Many of you are using a CHIP; write and tell me of your personal experiences, and I will pass them on to other Club members in future installments of the WORLDS GREATEST (and only) publication dedicated solely to the Thunderbird Supercoupe, CHARGIN' THUNDER!!

Your humble editor -

FORD THUNDERBIRD SUPER COUPE

This car has the 3.8 litre supercharged engine developing 210 HP in stock trim. The car is powerful but heavy and this spoils the performance and takes the edge from the driving pleasure.

As with all pressure fed engines increasing the power output is easy. Simply increase the pressure! This is achieved by fitting a smaller pulley to the supercharger which increases the pressure to 15 PSI. This combined with significant fuelling and timing tuning to take full advantage of 92 octane gas gives an increase in power of 35 HP to 245 HP.

The comparatively small increase in HP belies a massive increase in torque at the lower end. This is because horsepower is developed at higher RPMs and in supercharged cars the boost pressure is tailing off at high RPMs. This does work to our advantage because when the engine is turning fast, there is little time to inject the fuel into the cylinder between piston strokes. But, because the boost pressure is higher in the 3000 to 4000 RPM reange, there is more time to inject the fuel and so a higher boost pressure can be used. This means that although the power developed at 5250 RPM is only 16% over stock, the increase in torque at 3000 RPM is nearer 35% and it is over 25% from 1500 RPM to 4500 RPM.

This suddenly livens up this heavy car and makes it into a very quick car. 0-60 times will drop by around a second and the quarter miles times will drop by nearly that much as well. The top speed will only increase by 5 MPH due to the drop off in boost at high RPMs. The car feels as if it wants to go and it makes passing other vehicles so much easier and safer. There is no down side, the slow running and cold starting remain exactly the same as stock. Gas mileage will suffer by about 1 MPG but it depends upon how hard you drive the car.

The kit consists of a new pulley and a chip which plugs into the back of the computer. We need to know the computer number when you order. The kit can be fitted in about 1 hour and a new belt is not needed for the supercharger. This kit is available from us or through any of our local dealers who will be pleased to fit it for you as well.

SUPERCHIPS Inc
1958 North County Road 427
Longwood
Fl 32750
Phone (407) 260 0838 Fax (407) 260 9106

What A Drag

The new BFGoodrich drag radial can be described in one word: Amazing.

BY JIM CAMPISANO

Photos by the author

Look back at the old musclecar-era road tests. Contrary to what many believe, there weren't but a handful of cars tested that ever actually put down a 12-second elapsed time.

Why is that? Certainly the cars were heavy, but the best of the lot absolutely had enough horsepower to compensate for that. Aside from driver ability (or lack thereof), the single most limiting factor was tire technology. How in the world could you harness a Hemi's 425 horsepower and 490 lbs.-ft. of torque with a set of F-70x15-inch Polyglas tires? You couldn't.

A quick check of the *Super Stock* magazine road test of the '69 Hemi Charger 500 backs this up. The best the 4-speed-equipped car could turn in showroom trim was a 13.84; not bad, but the all-telling mph said 103.68. This meant there was definitely a low-13-second ET in this car with some slicks.

Problem is, most of us drive our hi-po Mopars on the street with DOT tires. How do you harness all this energy, especially in a heavily modified car? Tire manufacturers have been addressing this issue since they used flag men to start drag races. In the early '60s, there were the famous Casler cheater slicks. For the last decade or more, M&H's Racemaster has been the cheater of choice for street rats everywhere. Little more than drag slicks with enough tread to qualify for DOT-certification, they hook like nobody's business. Their only drawback, however, is their soft sidewall. In a nutshell, they handle with all the dexterity of a drag slick. They just aren't that great for a muscular Mopar that sees heavy street duty.

What's a street freak to do? Well, the good folks at BFGoodrich, those same crazies who raced at Le Mans on street radials back in the '70s, recently introduced the BFG Comp T/A Drag Radial. Now, we've long been fans of the Radial T/A and the regular Comp T/A, especially for their prowess in going around corners. But a Drag Radial?

Believe it or not, yes. And it's not some limited-duty item, either. We mounted a pair of 235/60-15s on a set of cop car rims and bolted them to our trusty '65 Coronet 500 and used them on a semi-regular basis for the last few months. Despite a recent body-off redo and a 383 that drinks gas like it still costs 26 cents a gallon, this car sees between 100 and 200 miles a week.

In fact, they actually seem to handle better and are quieter than the Firestone Firehawk 225/70R14s we're running out back. The Drag Radials have an asymmetric tread pattern and come in five sizes so far: 235/60R15, 275/50R15, 255/50R16, P275/40R17 and 315/35R17. Their casing and tread design are both optimized to put as much power to the pavement as possible.

All this is nice, you're saying, but how do they work in the real world? They're amazing. We took the Dodge to Old Bridge Township Raceway Park (Englishtown, N.J.) for a round of testing. As is usually the case in the Garden State in August, it was nice and humid, with the temp hovering around 90° F.

Running the car on the Firestone radials was at best a dicey proposition. Just flooring the throttle would incinerate them, sending the 60-foot times into the 2.50 zone or worse. Launching at half throttle and flooring the car about 30 feet out would cut down on tirespin and reduce the 60-foot time accordingly. Obviously, this is not the way to get the most performance out of your Mopar.

On the 14-inch radials, we were able to get a best 60-foot time of 2.29 en route to a 14.227 at 98.34. Respectable, but hardly earth-shattering. We knew there was a better ET in the Coronet, and the Drag Radials would help us get it.

For the first pass, we tried a light hazing of the BFGs. The tires spun slightly, then hooked. We were rewarded with a 14.084 at 98.74. The 60-foot time was down to 2.20, but it was hardly the end-all we'd hoped for. We theorized that perhaps we should heat the drag tires more.

On the next run, we smoked the tires but good. This definitely worked. Our 60-foot time dropped to a wonderful 2.18, and we cleared the traps at 14.02 at 98.93.

The obvious question was, Could we equal the 14-flat we ran with 26x9x15 drag slicks? You bet! Another good smoky burnout and we pulled to the line. We ran our best-ever 60-foot (2.15) and tripped the Compulinks at 14.00 at 98.85.

If there is one drawback to the Drag Radials, it is that they have a tread life of only about 8,000 miles. Not tremendous, but for the average pampered street machine, that's about four to eight years' worth of tire. Not bad for a street radial that's as sticky as a drag slick. ●

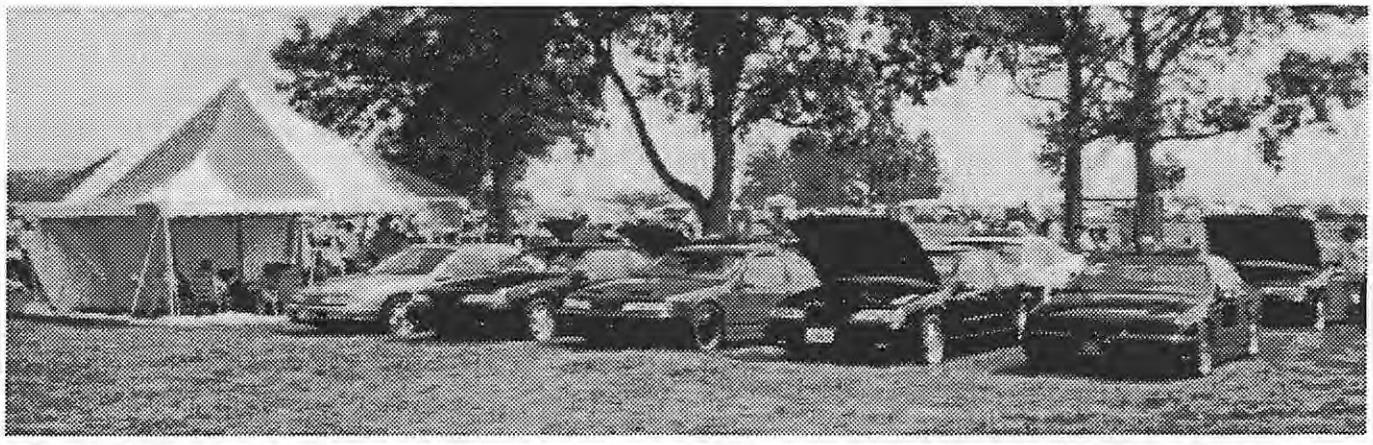
Source

BFGoodrich
3360 Gilchrist Rd.
Mogadore, OH 44260
216-733-0382

Columbus Expo '96 Labor Day

Members Gather in the Super Coupe Club Tent

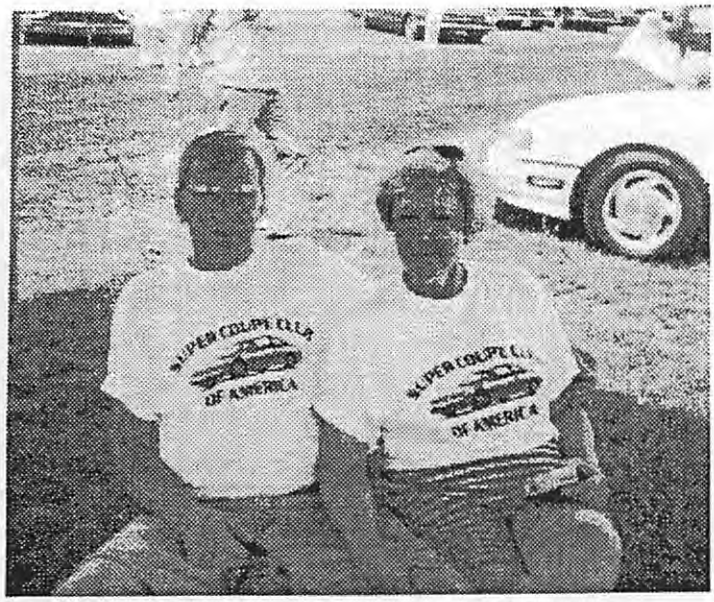
Super Coupes on Display



Tom Wilhelm's First Place SC

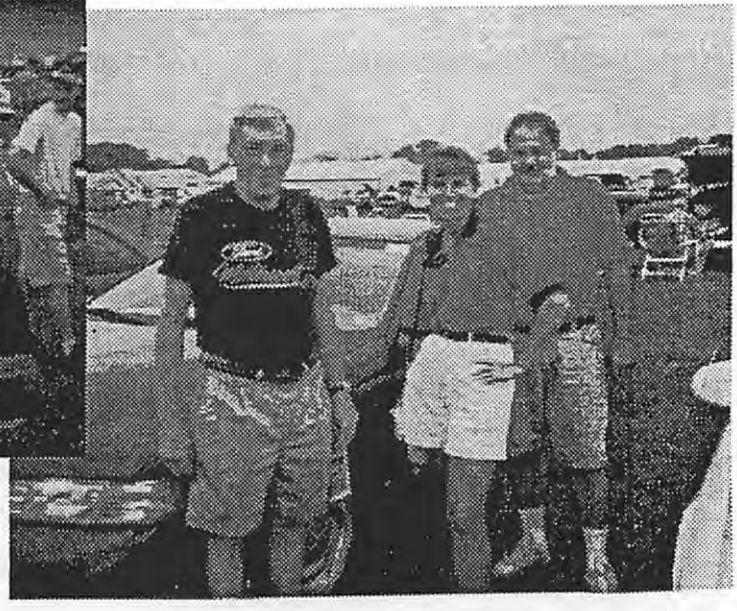
Tom's awesome lightning pick-up ... now if we can just find that fat, bearded guy that did the burn-out!

Carlisle Ford Nationals June '96



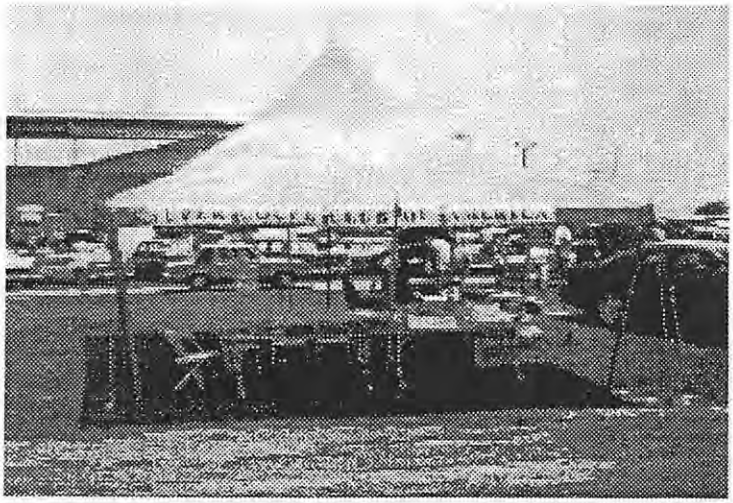
"Hanging Judge" Dick Adams with The Boss

Lined Up Super Coupes All In A Row!



Above: First Place Show Winner Michelle Morgan
Right: A Rose between two thorns - Lisa Leathery of Carlisle Productions with Dick Adams and Bill Hull

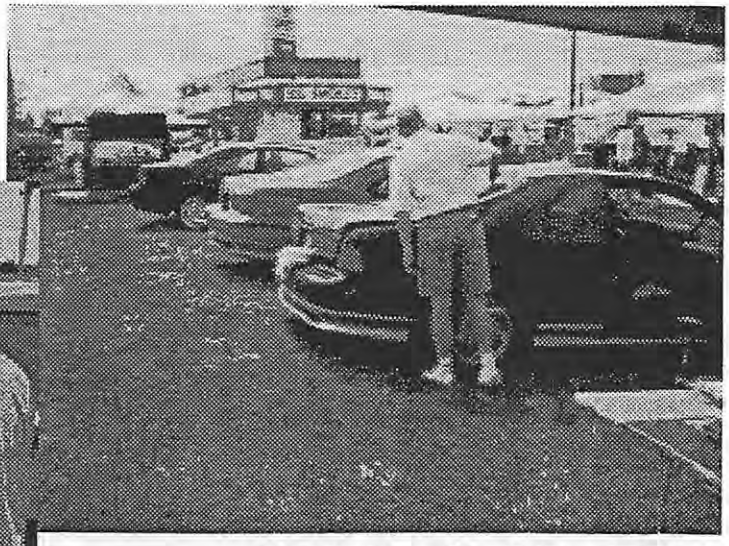
Carlisle Ford Nationals June '96



Our Tent Was the Place to Be!

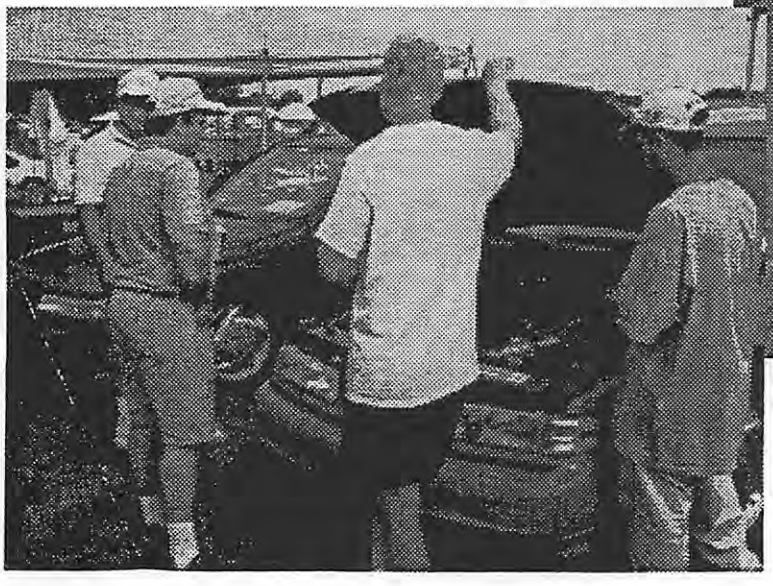
First Year Ever at Carlisle!
T-Bird Super Coupe Class!

Dr. Bill Evanoff with Fat, Bearded Person



Chuck Coryell polishing his 35th Anniversary

Barry Gibson, Rich Thomson & Barry's nephew, Lee-Lee



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PERFORMANCE PARTS PRICE LIST

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Prices Subject To Change
We Now Accept VISA/MasterCharge

We Accept

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SUPERCHIPS INC. Control Module ..... FREE (Just Kidding!)

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MAGNECOR 8.5MM Metal Core Spiral Wound Plug Wire Set $89.00

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K&N Lifetime Panel Air Filter - low restriction $36.95

K&N Conical Filter - attaches to Mass Air Body ..... 7" - $29.95
9" - $35.95

K&N Filter Charger Performance Kit $129.00

VORTECH/C&L 73mm Max-Flow Mass Air Meter $189.00

EATON-MAGNUSON PRODUCTS S Model High Flow
Supercharger complete with custom porting, matching intake plenum and pulley of choice... $1450.00
Exchange

Modified S/C Adapter Air Outlet $225+$60 Core $285.00

Stock Blower Pulleys 89-93, 94-95 ..... $49.00

SVO Blower Pulleys 5% overdrive $55.00

AUTO SPECIALTIES Blower Pulleys 10% overdrive
not recommended with stock exhaust system $49.00

AUTO SPECIALTIES 3-piece underdrive pulley set
25% Crank, 29% Water Pump underdrive, 3" alternator pulley 1000 RPM Charge $159.50

10" Low-profile Intercooler Fan $89.50

SPEARCO High Flow Intercooler coming again soon? $650.00

SPEARCO Intercooler Optimizer - Spray cooling system for intercoolers $130.00

BBK Throttle Body - must switch throttle linkage w/stock SC ..... 65MM - $199.00
70MM - $209.00

GRIFFIN High Capacity All Aluminum Radiators Direct Fit
50% more capacity than stock ..... Auto - $650.00
Man - $600.00

CRANE CAMS #HR 2081/294-13 lift. 509 Dur.206@.050 ..... $155.00 w/core
CRANE CAMS #HR 220/311-14 lift. 538 Dur.220@.050 ..... $155.00 w/core

CRANE Bolt-on Roller Rocker Set non-adjustable $299.00
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ARP Studs & Poly-locks $399.00

CARTECH Boost-Controlled Fuel Management Unit easily installed, fully adjustable. $209.00

BBK High Capacity Fuel Pumps w/screen ..... 1551ph - $99.00
1901ph - $139.00

SVO Fuel Injectors - set of 6 ..... 30lb/hr - $199.00
36lb/hr - $219.00
38lb/hr - $299.00
42lb/hr - $349.00

ARP High Strength Head Studs $119.00
ARP High Strength Main Studs, Rod Bolts ..... coming soon

EXTRUDE HONE Power-Flow ..... inlet-plenum - $99.00
upper I/C tube - $99.00
lower I/C tube - $199.00
I/C tube to
manifold adapter - $99.00
heads (pair) - $450.00

CRANKCASE Windage Trays $29.95

EXHAUST

Super Coupe Club Stainless Steel Short Tube Headers - 2"
(bolt on to stock exhaust pipes) $400.00
2-1/2" Collector $550.00

Super Coupe Club Stainless Steel Mandrel-Bent Exhaust Pipes ..... (pair) $100.00
with high flow cats - $325.00

All headers and exhaust are sold as off-road parts only
Include new gaskets, header bolts, and flanges

Super Coupe Club "True Dual" aluminized cat-back exhaust system,
follows factory routing, with h-pipe, ready for mufflers of choice ..... 2-1/4" $395.00
Stainless Steel add $200.00

DRIVE LINE

MOTORSPORT Ring Gear and Pinion Sets 3.08 to 4.10 includes shims & lube $189.00

CENTERFORCE Dual Friction Clutch Kit a racing clutch-pressure
plate for the street ..... 89-9 - $385.00
92-95 - $395.00
release bearing all - $39.50

ART CARR AOD and AOD-E Transmission Parts

11" Super-Torque Street Converter non-lockup 200-500rpm stall overstock AOD $299.00
10" H/D Super-Torque StreetIStrip
Converter 200-500rpm over stock - AOD & AOD-E $489.00

High Performance Trans Coolers $179.00
Regular Performance Trans Coolers $89.00

High-Tech Valve Body Shift Improver Kit - AOD & AOD-E $59.00

AOD Wide Ratio/Upgrade Kit incl. 2.84 lst gear,
high rpm needle pinion bearings, HD low inertia
6-plate high clutch assem., HD wide OD band,
60OOrpm intermediate one-way clutch, improved
lubrication, and needle bearing thrust washers $670.00

AOD HD Rebuild Kit $180.00
AOD Super Rebuild Kit $236.00
AOD-E Super Rebuild Kit $236.00

AOD 1-piece Input Shaft (non lock-up) $229.00

AOD Transmission, StreetIStrip w-1 piece input shaft Special Order $1695.00
AOD-E Transmission, Street/Strip Special Order ..... call for prices

SUSPENSION

EIBACH Springs (set of 4) lowers car I-1/2" $259.00

TOKICO Electronic Adjustable Illumina Shocks ..... 2 front - $275.00
2 rear - $215.00

BAER RACING High Performance Brake Conversions
HD calipers and cross-drilled rotors front only ..... call for prices

Carbon Metallic Brake Pads (non-asbestos) ..... front - $79.95
rear - $79.00

PERFORMANCE SUSPENSION TECHNOLOGY
High-Performance Sway Bars - front 1-11811 ..... $159.00
rear 3/4" or 7/8" - $159.00
POLYGRAPHITE Sway Bar Bushings pair $25.00
POLYGRAPHITE Stablizer Link Kits pair $25.00
POLYGRAPHITE HD Rear Bushing Sets set of 8 ..... $79.00

SUPER COUPE CLUB OF AMERICA SPECIALTY ITEMS

Super Coupe Club of America Hanes T,'s - L, XL $12.00
Cartoon T's 6 different mottos - L, XL $15.00
40th Anniversary T-Bird T's - L, XL $15.00
Hanes Polo's SCCA embroidered logo - M, L, XL $36.00
All Sport Polo's SC car logo - M, L, XL $38.00

Jackets SCCA embroidered on front large SCCA logo screen-print on back,
100% nylon shell, lined, washable - L, XL $49.00

Caps SCCA embroidered logo, mesh or cotton $12.00

Custom Super Coupe Seat Covers - 13 colors - Inserts 4 Colors $125.00

All Jackets, Hat, and Polos are available in the 5 original ('89-'93) Super Coupe colors:
Red, Silver-Grey, Navy, Black, White

We Accept