30 YEARS 1975 2005

Shelby Life

Shelby American Automotive Club – Motor City Region

Volume 31, Issue 2

April 2006

President's Corner *by Tom Greene, President SAAC-MCR*

2006 SAAC-MCR Holiday Party

SAAC-MCR members who attended the Holiday Party at the Edsel Ford Estate *Rich Tweedle Image*

The end of 2005 came and we celebrated our past year with our annual holiday party. Every year in recent memory we have had a stellar event. We thoroughly enjoyed those events holding each celebration at a really good venue, with great food and of course sharing this set of memorable events with our fellow members and great friends.

While I was much anticipating seeing the Edsel and Eleanor Ford estate for my first time, I was a bit concerned that because of our truly outstanding past events, we had set the bar so high that we would have difficulty living up to those lofty standards. If we didn't live up to those standards, we would not be able to once again proclaim our "best ever holiday party". In the end, we proved I needn't have had a concern. This year's event was once again a fantastic event – in a fantastic venue, with fantastic friends, and an absolutely fantastic service group. BUT – I get ahead of myself. We would not have had this memorable party in this memorable venue, with great food and drink, all delivered by the outstanding professionals of the Ford estate – had it not been for the efforts of our party director, Mrs. Betki's husband, Randy.

To say the logistics of getting the party set up with all the approvals required was "a bit difficult" is like saying that becoming a member of Mensa requires "above average intelligence". The abbreviated outline includes; Randy getting approvals from the Eleanor and Edsel Ford home, the insurance companies, the Grosse Pointe police department, confabs (no fee charged) with folks of the legal profession, and discussions with the chief of police himself accompanied by lots of coordination between all of those somewhat bureaucratic groups. Randy pulled it all off, and the result was – as we all saw it – terrific. We all thank you Randy for sticking with it, even when it got very daunting, and bringing it to a successful conclusion.

Back to the event itself; we were greeted by some friendly folks who work at the Ford home, starting with Carl who was really

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Inside this issue:

2006 SAAC-MCR Track Events *by Darius Rudis, Competition Director*

We are seeking car enthusiasts to participate in our 2006 SAAC-MCR open track events as drivers and spectators. Our ultimate goal is to provide a highly educational, fun and safe event for everyone involved. These are NOT racing events!

We cannot have a successful event without qualified and experienced instructors who are willing to pass along knowledge and understanding to our students. Above all else, we will conduct the event and ourselves in a safe manner.

I have been instructing for the many years now, and I enjoy riding/driving with people and having them learn what high-performance driving is all about. Making sure that they do it in a safe and controlled environment, and come back with a huge grin on their face makes it all worthwhile. There is more to driving than just driving fast. You have to enjoy the driving experience. That's what I tell every student, "I want you to come back in safe, and I want you to leave with a huge smile". If I fail to achieve these 2 simple goals, then I didn't do my job correctly.

I understand that each student has different expectations from the event. Some are experienced drivers, and really want to sharpen their skills. Others, it's a first time, and just need to build their enjoyment of the sport. I don't push my students to go fast. Some students are timid, and just wish to be "on a racetrack". So I make sure they are safe, show them the line, and let them judge how hard they wish to push their daily

Cars coming off Hill Top Turn at the Waterford Hills Race Course. The driver of the car in the foreground is learning the correct line from an instructor. The driver of the Corvette is also getting safety pointers from an instructor.

driver (that still has the payment book in the glovebox). Faster and harder isn't always necessarily their goal.

Most of all, at these events we meet some new friends, some old friends, and often communicate and share stories. When we leave we still share stories (especially over the internet) from on-line message boards, and keep in touch before/after the every event.

If I were to make a brochure, this it what it would say:
SAAC-Motor City Region holds four open track events a year.

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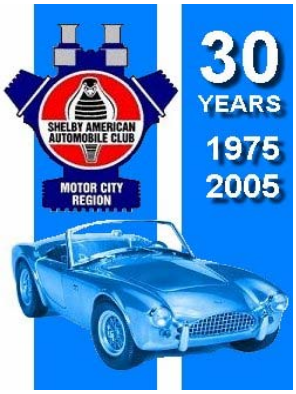


Membership Report *by Rich Tweedle, Membership Dir.*

SAAC-MCR Membership Status: We Have 91 members

New members include: ***Tom & Theresa Young, Jeff & Chris Gage, Michael Elwood, Jeffery & Rebecca Seaman, Vinnie & Malinda Sanchez, Gerald & Janet Garascia, Jimmy & Pam Attard,***

Fog Light Control *by Steve White*

SN95 Mustangs, like most Fords, have fog lights that only operate with the headlights on & in low beam. This means you can't operate with the fog lights only, or with only park lights on or with high beams on. I imagine the logic was that if you were able to operate the fog lights without the other lights, you'd have no other lights on the car, but have forward lighting to see at night, & thus a dangerous condition. Likewise, operating the fog lights with the park lights - such as if one did so at dusk, the driver might forget they didn't have their headlights on as they'd have instrument lights & tail & side lights operating in another potentially unsafe condition. As for deactivating with high beams, the purpose of fog lights is to place light low, as high light actually worsens vision when operating in a moisture environment like fog or a snow storm, as the light reflects off the moisture droplets.

While these may be valid concerns, I personally have to have control of my own destiny & determine myself when I operate which lighting combination. Also, being raised in the great west, there are large open spaces of desert where you want as much light as possible – down low & up high, to blanket the road ahead for any thing that might be in the road ahead, such as animals large & small or tire debris, etc. My dad, being an electrical engineer & tinkerer, would rewire his trucks headlights so the low beam element would also be on with the high beams, as well as having aircraft landing lights!

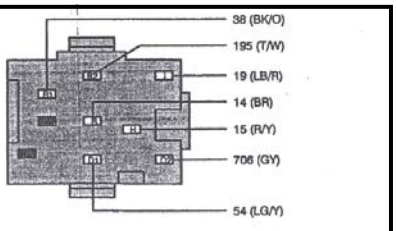
In the past I remember I had seen a number of articles in the various Mustang magazines on how to override the factory wiring for the fog lights to give more individual control to the driver, but not on the SN95. I watched for two years to see if anything turned up for the SN95, but when I didn't, I finally decided to figure it out for myself. One of the tricks is that the power runs through the multifunction switch, so it can switch the lights off when the high beams are switched. After several simple attempts, I finally struck on the solution that involved running a new wire to the fog light switch.

What follows is a simplified description of the change:

1) Disconnect the individual terminal to Circuit 13 of the fog light switch harness connector.
2) Tape the removed terminal over, as this will still be hot whenever the low beams are on, so as to not allow it to accidentally touch something & short out
3) For added protection, bend the removed wire/ terminal back against it's harness & wire ty-wrap it in place to secure it out of the way.
4) Find a new separate terminal that will fit over the blade on the fog light switch for Circuit 13 that you just removed, & with a length of wire crimped to this new terminal (I chose red, as the original was red with a black tracer) route it & tap it into Circuit 14 of the headlight switch harness (large gauge brown wire).

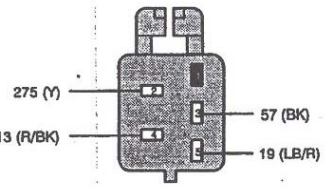
This will allow you to operate the fog lights, if desired, when ever the park lights are on, the low beams are on, or the high beams or on. If you want to be able to operate the fog lights when no other lights are on, typically how most people wire their aftermarket fog lights, then you'll have to select another wire to derive power to the fog lights from.

Take control of your own fog lights, instead of letting Ford think for you!



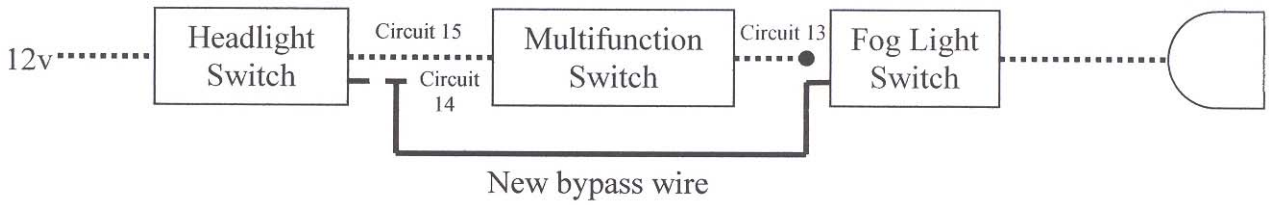
C228 (GRAY)
MAIN LIGHT SWITCH

PIN	CIRCUIT	CIRCUIT FUNCTION
B1	38 (BK/O)	Battery Power to Main Light Switch
D1	54 (LG/Y)	Interior Lamp Switch Feed
R	14 (BR)	Exterior Lamps Feed
B2	195 (T/W)	Main Light Switch Feed
H	15 (R/Y)	Headlamp Dimmer Switch Feed
D2	706 (GY)	Courtesy Lamp Switch to Courtesy Lamp
I	19 (LB/R)	Instrument Panel Lamps Feed
IGN	—	NOT USED
DN	—	NOT USED



C305 (GRAY)
FOG LAMP SWITCH

PIN	CIRCUIT	CIRCUIT FUNCTION
1	—	NOT USED
2	275 (Y)	To Fog Lamp Relay
3	57 (BK)	Ground
4	13 (R/BK)	Dimmer Switch
5	19 (LB/R)	Illumination



Chronicle of a Tiger Repair *by John Logan, concurred by Doug Jennings*

Part Two, from Straighten to Show

Last month we discussed how the Tiger was damaged, disassembled and dipped. This month we will discuss some of Doug's methods of straightening, painting and reassembly.

The Repair

The repair process starts with mounting the body in a cage specifically designed for the Sunbeam bodies. The cage is large enough to allow working clearance and will roll over to allow work on all areas of the body.

Key dimensions on the body are checked against standard Rootes factory dimensions. The underbody body rails are then straightened, stretched and aligned as necessary until they meet the standards.

A Damaged Area Requiring replacement

Next, the damaged panels are bumped out. This process requires years of Doug's experience to know when to stretch, where to hammer, how to shrink or when an area needs to be cut out and replaced. The front fender is jacked forward and bumped out requiring only a replacement of a small, complicated area where the fender joins the cowl. See the circled area in the photo above. One hard part to repair is the front lip of the grill opening. It has an inner reinforcement that doesn't allow access to straighten it. First, the spot welds are drilled out so that the reinforcement can be separated from the lip. The lip and reinforcement are bumped and straightened individually and then fitted together and re-welded. The chrome surround is used to guide the final shape.

The original inner and outer panels of the hood are straightened somehow. Don't ask me how; it must have been by magic. There are no indications of damage or rework.

The front and rear valance panels were both badly damaged. The top or flat area of the front is replaced with a reproduction panel and the curved lower part is bumped out. The rear valance panel is repaired with parts from Doug's donor car stash.

Rear Valance Panel Removed for Repair

Like most Sunbeams, especially V8 Tigers that experience extra stress, there are areas that require repair due to fatigue. To strengthen the body, Doug re-welds many seams, joints and spot-welds and adds reinforcements, especially around the rear spring attachment points.

(Continued on page 5)

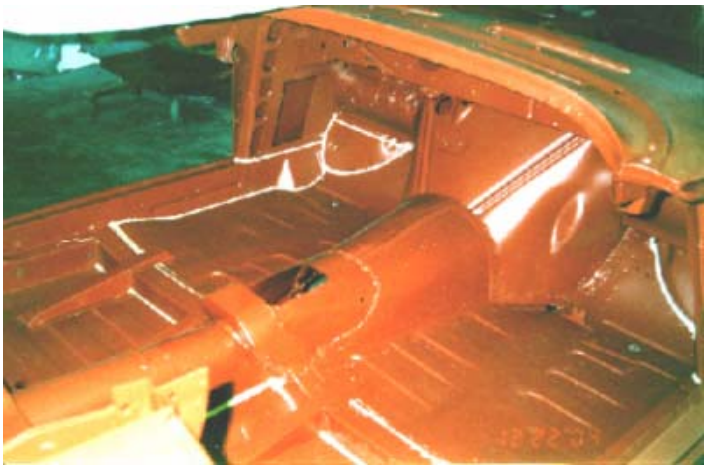
Tiger Repair *(Continued)*

(Continued from page 4)

Preparing for Paint

Cleaning before Paint

Before any paint is applied to the body, it is washed with soap and water, then with metal prep rust remover and allowed to dry. The seams are heated with a butane torch to make sure they are completely dry. At this point it is very important that all seams and surfaces are free of any dust or residue.



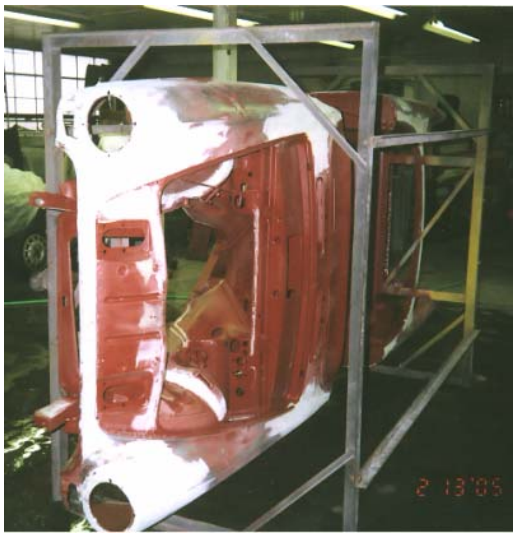
Primed Body Caulked with Sealer

Since the final color of the car will be red, PPG's DP-78 red epoxy primer is chosen. It is applied to both sides of the metal, heavy enough to seep into the welded seams of the body, doors, hood, trunk lid and inside the rails. All seams of the body are then caulked with a high quality sealer.

Surface Finishing

Using Parts as a Guide to Bumping

The body is now ready for the final bumping. Parts such as doors, hood, trunk lid, light rims, modesty panels, etc. are attached to the body as a guide and the metal is formed to fit them.



Finishing the Mudded Surface

Tiger Repair *(Continued)*

(Continued from page 5)

When the metal has been worked as close as possible to the final shape, it gets another application of an epoxy primer to cover the worked areas. Now the entire exterior surface is coated with an epoxy filler or "mud". This material is used in lieu of a high fill primer. The mud is applied, filed, block sanded and refilled until all bumps and depressions are gone and the final surface contours are achieved. It is then given a coat of PPG's K36 Acrylic Urethane primer and blocked sanded in preparation for the final paint.

The Color Coat

Before Doug and Steve could start painting the car, I of course had to decide the color I wanted. After attending the 2005 Detroit Auto Show and seeing the entire selection of new, wild show car colors, I decided I would stick with red but I wanted something brighter then the stock Carnival Sunbeam red or Guardsmen red. I chose the Corvette Victory red.

The doors, hood and trunk lid are now removed for painting. The bottom and interior surfaces are painted with a two-part PPG acrylic enamel paint called Delstar. Steve then sprays the outside surfaces with a PPG Base Coat - Clear Coat acrylic urethane paint called Concept.

Final Assembly

All the carefully stored parts are found and installed on the body in a sequence that eases accessibility. For instance, it's much easier to install all the brake and clutch cylinders and lines when there is no powertrain in the way. Doug has done this so often he doesn't need a written sequence but us amateur restorers should have one.

Final Assembly

The re-assembly with required adjustments is similar to the following sequence.

1. Under dash items such as wipers and vents
2. Rear wiring harness
3. Fuel tanks and lines
4. Brake cylinder and lines
5. Powertrain with front crossmember
6. Rear suspension
7. Driveshaft
8. Radiator
9. Door and trunk seals
10. Doors, trunk lid
11. Heater
12. Side windows and mechanisms
13. Dash pad
14. Windshield
15. Front wiring harnesses and all lamp assemblies
16. Instrument panel with attached wiring
17. Alarm
18. Cruise control
19. Steering column
20. Wheels
21. Exhaust system
22. Interior panels
23. Carpet
24. Brake fluid, coolant, oil
25. Battery

(Continued on page 7)

Tiger Repair *(Continued)*

(Continued from page 6)

26. Check electrical
27. Top
28. Start engine
29. Hood
30. Align Front End
31. Road Test

The "Repair" has proven successful.

When the car was finished, I drove it 200 miles from Dayton, Ohio to Dearborn, Michigan in 3 1/2 hours with only a five-minute delay due to a loose electrical wire. In the last six months it has traveled 2400 miles to events including a 900-mile round trip to a yearly gathering of the Tigers East Alpines East club held in Alexandria Bay New York.

Finished and On Display

During this summer of 2005 the car received first places, in its class of many Sunbeams, in the two largest All British judged shows in Michigan. It got a popular first place in its small class in our June, 2005 Shelby American Automobile Club show. It has been on display in several collector car events and in cruises in the Detroit area throughout the summer of 2005.

Street Dyno *by Steve White*

While it is becoming easier to find chassis dyno time to test what your cars performance is, with many performance shops adding dynos, at costs of $75-150 for 2-4 runs it can easily get expensive to test to quantify the improvement for each change you make. There is another method that is essentially free. While you won't get a hard horsepower number, unless you have some type of performance computer such a G-Tech Pro or similar device, you can at least quantify if the change has actually improved performance or not.

This low buck method mimics a dyno run, & sweeps the engine through its RPM range. First you need to find a deserted stretch of road late at night or an industrial road (take your own risks as far as laws & safety are concerned). Then, lightly accelerate into 2nd gear & hold the RPM steady at the point you want to start at (I pick 2,000 RPM, as it's a low speed to give a wide RPM band to run, but not so low as to bog the engine). When you're ready, start your stop watch running (I recommend a digital wrist watch that has a stop watch feature, as you can operate it while keeping both hands on or near the steering wheel for safety) at the time you stab the throttle. When you reach your maximum RPM, say 6,000 RPM, stop the stop watch & safely slow the car down & pull over & check the time.

The result you get is the time it took you to accelerate from 2,000 RPM to 6,000 RPM, just like a dyno run. By doing it in second gear, & only second gear, you avoid wheel spin, & take out the chance for error in a gear shift. Of course if you have a supercharged car you may have to adjust the RPM & gears to avoid wheel spin. Also, by starting at a relatively low RPM & 2nd gear, you're starting out at a low MPH, such as around 20MPH – depending upon your final gear ratio, so your ending speed won't be outrageously high (& hopefully still in or close to the speed limit of the road you've selected) for example 60 MPH.

I make at least two runs in each configuration, & check for close results to know it's a legitimate test – if not I

(Continued on page 19)

25th Annual Gorno Ford Winter Swap Meet *by Rich Tweedle*

Our 25th annual Swap Meet at Gorno Ford in Woodhaven was held on Sunday, the 19th of February, moved forward due to the ever later date for Autorama. A good sized crowd came to look at the many automotive wares for sale or trade. If you need it or want it, it was probably there. Due to this date also being the day of the Daytona 500 and the less than stellar amounts of discretionary spending, the crowd and number of vendors were down from last year.

A '68 Mustang, engines, manifolds-both intake and exhaust, carbs, taillights, trim pieces, steering wheels, interiors, fenders wheels, and wheel covers, self-generating flashlights (crank-operated), a display of designs for embroidered work on shirts and jackets, John Yarema with a trailer-full of tires and wheels along with a Thunderbolt-type fiberglass hood for a '67-68 Mustang, axle shafts, housings, transmissions and shifters, Ray Stitt, owner of Thundercolt, with his tables of Ford parts, Jim Seisser with hats, magazines, manuals, hat pins and models, others selling manuals and magazines, just anything you may think of for your car, garage or den. If you have an understanding wife, maybe even the (gasp!) living room. And, oh yeah, Mike Nyberg had a Toro snow blower for sale. He still has it and for $60 it can be yours. It's a 20"Snowmaster. I've had mine since '76 and it still works.

BIG THANK YOU'S to the people who worked this event. We cannot put these events on without membership help and support. Kurt Fredrickson, with help, set up the areas on Saturday evening and pretty much ran everything on Sunday, Bob Grant operated the bay doors all day, Craig Shefferly and Lee Swonder had the club table, selling t-shirts, jackets and pins and displaying flyers for Show 'n Go and other events. Erin Garzaniti, Phil Jacobs and Bud Koss spent much of the day collecting monies at the doors. Seven people renewed their memberships while at the meet, raising our membership to 91. Everyone pitched in to sweep and clean the shop areas after the crowds and vendors departed.

We very much want to thank George and Cindy Gorno for the use of the dealership and to Ryan McFadden and his fiancé Crystal for their help. Very nice people to work with.

People looking for bargans in the Gorno Ford Repair Area

John Yarema sold several tires and wheels. He thought the swap meet was a success.

Many shoppers in the Gorno Ford Write Up Area

2006 Holiday Party *(Continued)*

(Continued from page 1)

geeked that the Shelby club members were going to be there that night and he stressed that Edsel sometimes comes by in his 427 Cobra, and that the people who work there really enjoy the cars. I told him that it was unlikely that anyone would be driving their vintage cars that night, but the people there that night shared a common love for the cars that Shelby built. Carl was merely a harbinger of the rest of the good people to come and Lois was just as knowledgeable as she was friendly.

Our tour of the home was very interesting and provided insight into the Ford family values and after following up last year's visit to Henry and Clara's home, Fairlane showed that homes with great features and functional opulence ran in the family – with the son's home eclipsing the parent's. The home was simply elegant, and reflected someone designing something "their way". I think we all enjoyed our visit to seeing how the other folks live.

Everyone we met that night was helpful, caring, supportive and just downright friendly. Our chef was as humble as she was talented and Stephanie and Linda were just the happiest and friendliest wait staff folks you ever saw. It was reported by Mr. Animal that the aggregate group of people in the employ of the estate said "the Shelby Club is welcome to come back here anytime, they are friendly and fun to be around".

Their comment brings home my point perfectly. We, the members of SAAC-MCR, are an extended family of fine folks with diverse backgrounds, chosen fields of endeavor, employment status (some of YOU members are now retired) – and – we strive to leave every place we visit a better place than the when we arrived. We did just this at the Ford Estate, so be proud, be very proud.

Outstanding chef and wait staff. From R to L: Jessica, Stephany, Linda and Joe

2006 SAAC-MCR Track Events *(Continued)*

The driver of this 427 Cobra is getting instructions on when passing is allowed on the straight section of the track

(Continued from page 2)

These events are designed to teach you the proper line around a race course and make you a better driver in a safe and controlled environment. The student will learn proper braking techniques, how and when to down shift, the correct apex through a corner and proper hand on steering wheel position. All entrants must be 18 years or older with a valid drivers license and must wear seat belts and a helmet. Their car will go through an inspection prior to entering the track. All first time drivers will attend classroom training and be accompanied by an instructor on the track. It will be up to the instructor to determine when the student is ready to solo. The event is divided into four run groups depending on horsepower and driver's ability and experience.

To summarize: Our track events are gaining in popularity because they are well organized, safe, very reasonably priced, and designed to maximize the driver's enjoyment and track time. You can see the Track Events schedules and information by logging onto our web site www.SAAC-MCR.com . We even have online registration and online Paypal payment options.

Don Eichstaedt's Experience at Kar Kraft *by Don Eichstaedt*

Don Eichstaedt, a former SAAC-MCR member, worked at Kar Kraft during Ford's Total Performance era. He had many interesting experiences during that period in Ford's racing history. He has owned and still owns several interesting cars. This article, written by Don, is based on several questions submitted to him by the editor.

KAR KRAFT - THE BEGINNING

The GT40 program was run entirely in England at what was called Ford Advanced Vehicles. Some people from Car Research went over there to help out - Roy Lunn (who was in charge), Chuck Mountain and Ron Martin. The cars were designed, built and developed in England, and raced in Europe and Nassau. In 1964 after several fiascos, the program was turned over to Shelby. Phil Remington and others worked on the aerodynamics, cooling, durability handling, brakes, etc., using some aircraft and aerodynamics assistance from Ford Aeroneutronics. They made it a winner at Daytona 1965. The car came in second at Sebring behind a Chaparral.

The new ZF 5-speed transmission that Ford had contracted for became available for LeMans 1965 - 6 GT40's ran at LeMans, but all 6 DNF'd. The car earned a 3rd at Monza and a DNF at Targo Florio. At the end of the GT40 project in England, Roy Lunn and the other Ford people came back to the U.S. It was decided that Ford needed an outside facility like the one in England, Ford Advanced Vehicles that had done the GT40. This was done for flexibility outside the main Ford system. Ed Hull, Chuck Mountain and Nick Hartman knew each other as local SCCA sports car racers. Nick Hartman started Kar Kraft in the upstairs of his father¹s machine shop in Dearborn. In the beginning, the designers and mechanics were "moonlighting" from Ford Research (with management's permission). The nucleus of the GT40 team came from Research also. Kar Kraft was contracted to Ford Special Vehicles and functioned as its Vehicle Engineering Dept.

The engineers, designers and mechanics were eventually transferred to full time at Kar Kraft, and additional people were hired to carry the work load. One of the first projects for the new Kar Kraft was to design the racing brakes so that the brake rotor could be easily changed during a race.
They then went on to design a racing automatic transmission and the Kar Kraft 4 speed transaxle that was used to win LeMans.

After a short stay at a shop on Telegraph Rd, Kar Kraft moved to the 10611 Haggerty Street address in Dearborn where most of its work was performed: the GT40 MarkII's, with 427 engines, and GT40 Mark IV's, the Boss 302 and 429 prototypes, the Mustang TransAm race cars along with many other projects. Some of the most talented racers in the Detroit area worked there at one time or another.

Kar Kraft located at 10611 Haggerty Street in Dearborn, Michigan

In November, 1970 Ford canceled the K/K contract and pulled out of nearly all racing. The Ford equipment, projects and most personnel, including the Limousine, were transferred back to Ford Special Vehicles. A new shop was soon setup in the basement of Body Engineering where we could continue to work. K/K continued working on projects for other companies for a few years and then joined with another person to become Triad located in Troy, Michigan.

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Kar Kraft *(Continued)*

(Continued from page 10)

LEMANS - 1966 - MARKII¹S

Ford could see that the GT40 Mark I was not going to be competitive against the new Ferraris. So after much discussion of the alternatives, Kar Kraft was told to put the 427 engine into a GT as a test project. This was a rush job! as they only had 6 months before the LeMans Race! It was first
Tested at DPG and then later in the week at MPG. Phil Remington and Ken Miles (from Shelby) came to Michigan. Miles got the car up to 210 MPH. It was decided to race this car at LeMans in 1965. A second car was rushed to completion. One of the cars set a qualifying record. Both cars led the early part of the race but neither car finished!

MkII¹s 1966 - Ford took the MkII and worked on it. A special dynamometer ran the engine, and transaxle as a unit - the bogie was 48 hours. They got to 45 hours before stopping. Everything on the car was tested, improved, tested again and finally it was judged ready for LeMans

You know the final results a 1/2/3 victory that started a little controversy as Ford tried to be too clever and stage a 3-way tie! but the car starting farthest to the rear was declared the winner - having traveled the most distance in 24 hours! This is all covered in great detail in 3 SAE reports presented in Jan 1967.

JUNE 1966

In June 1966, after the LeMans race, I had an opportunity to go to work at Kar Kraft thru a friend of mine who already worked there. (my ex-Corvair crew chief). My first assignment was to work in design on the front end sheet metal for the proposed mid engine sports car based on a Mustang Floor pan called the Mach 2.

After that prototype was built, I was given the job of supervising the build of the J-Cars, later to become the Mark IV. I took over that job after the 2nd car had been built (J2). After the Mark IV was made the prime LeMans race car, the shop worked 14 hours a day (8 hours on Saturday). We had a ½ evening shift of mechanics and technicians from the Research Garage come over to fabricate parts. I directed the build of 6 more one for Sebring, one for the LeMans test in April and 4 for the LeMans Race

MARK IV

The forerunner of the Mark IV was the J-Car as it was called in reference to the FIA Appendix "J" which were the controlling regulations at that time under which it was designed. It was originally designed with an almost horizontal tail section known as "the bread van". The J-Car had an innovative aluminum honeycomb chassis to be stronger and weigh less. The J-Car chassis was more complicated to build than the Mark I & II's GT¹s which had a steel chassis with the suspension brackets part of the chassis or welded on. The build of the J-Car chassis involved fabricating the suspension brackets. heat treating and machining the brackets, and installing the brackets on the chassis with adhesive and rivets. Then the chassis was taken back to Brunswick in Muskegon for the bonding of the brackets to the honeycomb chassis in an auto-

The J-Car chassis was more complicated to build than the Mark I & IIGT's

(Continued on page 12)

Kar Kraft *(continued)*

(Continued from page 11)

clave (a big oven).

The J-Car went to the 1966 LeMans test but was not faster than the MkII¹s and was parked. At that time, the decision was made to go with the known but heavier Mark II and make it stronger and faster. After the 1967 Daytona disaster with all of the broken transmissions, it was decided to take the J-Car and work on it. The MarkII's were not faster than the new Ferraris. Phil Remington from Shelby, along with 2 of his sheet metal men and 2 clay modelers from Ford Styling came over to help revise the J-Car as time was very short. They and some of Kar Kraft personnel reworked the front end of the vehicle on an existing vehicle while Ed Hull redesigned the tail section. The plan was to revise the body but they could not redo the center section which was already being built in quantity in California. Testing the new body shape in the Dearborn Wind Tunnel indicated less drag. After testing at the Arizona Proving Grounds and Daytona, the single vehicle was taken to Sebring 12 Hour Race as a final test!! The rebodied J-Car was renamed the Mark IV!

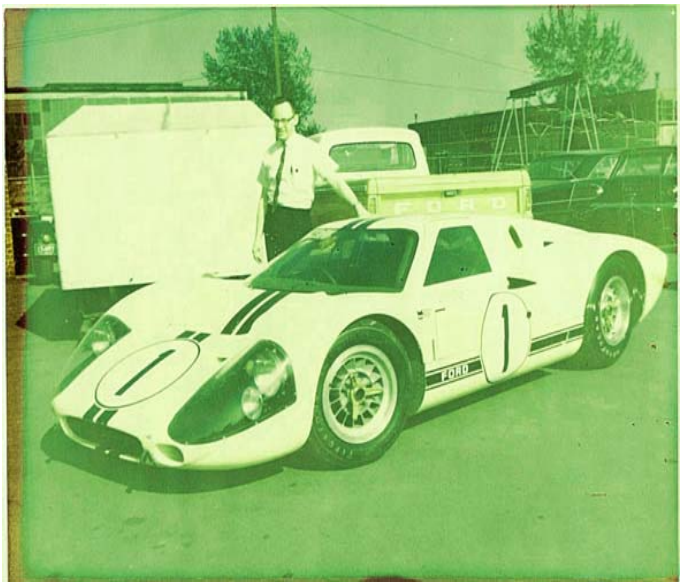
SEBRING 1967 - The first win - after a mid-afternoon battle with the Chaparral, the lone Mark IV won its first race. They had come out side by side after pit stops. The Mark was faster but was not picking up all of the fuel in the tanks and thus the Chaparral caught the Mark IV as it came out of the pits. Shelby Racing handled the new Mark IV while Holman & Moody (H&M) had a Mark IIB for back up.

LEMANS 1967 - The basic race cars were fabricated and assembled at Kar Kraft in Dearborn - then shipped to the 2 race teams for installation of the engine and transmission, paint and to race prep them. It was decided to save time, to not build complete running cars as the race teams would

Just take them apart to make sure everything was done right as they were responsible for the race performance, plus they added small details of their own. Shelby Racing and H & M each had 2 new MARK IV¹s. H&M had 2 Mark IIB's and Shelby had one as backup vehicles.

I was assigned to H& M as a Kar Kraft/MKIV liaison and Jim Mason was assigned to Shelby. The No. 1 Red Mark IV won the race driven by Dan Gurney and AJ Foyt. McLaren and Mark Donohue finished 4th. The other 2 Mark IV¹s had been damaged in accidents. For additional information and details see Ref. Nos. 1 & 2 at the end of this article.

After the race, FIA changed the rules - no engine larger than 5 liters (305 cu in) was to be eligible for next year's LeMans Race - that killed the MARK IV program!!



Don standing next to a Ford GT Mark IV

John Wyer took GT40's and made them into Mirages and won LeMans 2 more times in 1968 and 1969 with Gurney/Weslake 305 cu.in. engines.

1967 - KAR KRAFT

We had to consolidate - so some one else took over the shop. I was given a lot of car projects, 50 car build proposals, and projects from other Ford departments to keep Kar Kraft busy.

REF: No.1: "Ford: The Dust and The Glory - A racing History" by Leo
Levine. 1968, 630 pages.
REF: No. 2: "The Inside Story of the Fastest Fords" by Karl Ludvigsen, 1970

Don't Blow Your Top

by Steve White

One of the complaints levied against the venerable small block Ford is its head sealing ability (or potential lack thereof). The main cause of this is that this engine family only has four head bolts per cylinder. Competitors, designs have up to five equally spaced head bolts, to provide more uniform head clamping. High strength head bolts or even head studs help, but don't always solve the issues.

However, another weakness (at least on early designs) is the gasket sealing area around the steam hole in the block. The steam hole is a hole as near the high point of the water jacket around the cylinder to allow any steam that is generated in the block to rise up and escape the block into the cylinder head. Steam (or air bubbles) gets created by the flow of the coolant by capitation in the water pump, through the torturous path of the water jacket, and trying to turn any corners in it's route. From the cylinder head, the coolant circulation travels to the intake manifold crossover, through the thermostat, out the thermostat housing, and into the radiator. In the radiator, the vapor can be separated out and vented to the recovery tank and not re-ingested into the engine. Better yet, if you have a properly designed coolant degas bottle system included, then, there is even less chance any vapor will be brought back into the engine. (See Shelby Life Vol. 29, Issue 2)

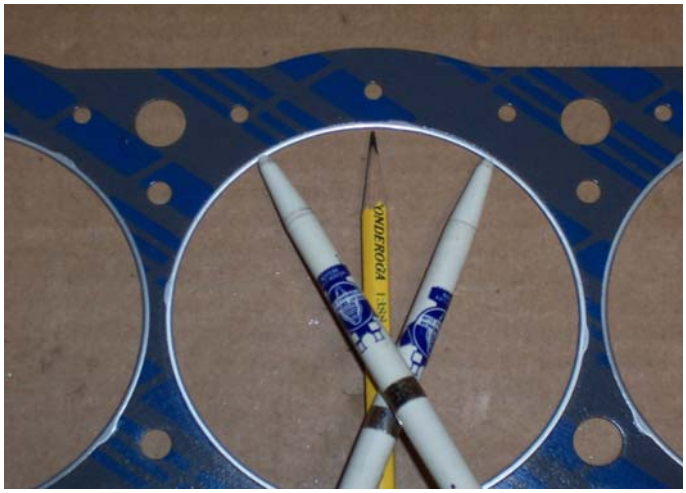
In the small block Ford, the factory steam hole is at the 12 o'clock position. This is good from a steam exit position, as vapor rise to the high point, but in this design, the hole is very close to the cylinder wall (~0.325"). If you look at the cylinder head gasket, in addition to this hole, there are two additional holes, one at ~ 11 o'clock & the other at the 1 o'clock position. These other two holes are also placed farther back from the cylinder wall (~0.475"), giving ~50% more gasket sealing distance. The slight draw back is they are not at the highest point. However this distance is minimal, and of minor concern compared to the gain in sealing area and strength.

To take this all into account and improve the sealing power, while retaining the steam hole, two steps are necessary:

1) plug the factory 12 o'clock steam hole
2) drill a new steam hole using the gasket as a template

To plug the steam hole, there are many methods, up to and including welding the hole shut. However, this would require decking the block to clean up the weld surface, not everyone can weld cast iron – especially in your back yard. An easier and cheaper way that almost any one can do is to tap the hole and screw in a set screw to below the deck surface. I use a set screw length roughly equivalent to the deck thickness, don't tap it quite all the way through, so you still have some tapered threads from the tap. This serves like a pipe thread to wedge it in place. I also use Loc-tite for added insurance. Naturally, you must make sure you screw the set screw to just below the deck surface, or you'll have other gasket sealing issues! The last step in sealing up the original hole is to carefully take a flat file lightly across the deck, without causing other problems. It's

(Continued on page 18)



Head gasket holes at the top of the cylinder in the 11, 12 and 1 o'clock positions

12 and 1 o'clock holes in the head

2006 Detroit AutoRama

By Mike Nyberg

SAAC-MCR members, Rich Tweedle , John Yarema and I attended the 54th Detroit AutoRama at Cobo Center, opening day, Friday March 3rd. There were was much to see with 1,000 vehicles on display. Besides the muscle cars, that are so popular today, there was a wide range of vehicles. Like the 1957 BMW Isetta owned by Darrell Shell of Commerce Township to the more famous Batmobile and the Heroes Truck, a $650,000 custom display honoring America's heroes.

The first order of business was to sign up to be come members of the Detroit Dream Cruise. Buying a membership helps pay for the police and clean up cost of Dream Cruise. We were given a T-shirt, hat, lapel pin dash plaque and windshield sticker for purchasing a membership. John and I were the first two persons to buy a 2006 Detroit Dream Cruise Membership and a Dream Cruise committee member took our picture next to the 2006 logo. The logo is available on the cruise's web site at www.woodwarddreamcruise.com.

We spent time talking to vendors about products we were considering to purchase to make upgrades to our cars. It was an opportunity to see and touch the parts. We also picked up many brochures and catalogs. I was looking for rear wings that would fit my 1994 Mustang open track car. Rich was looking for traction lock for his 1985 Mustang SVO. John has so many projects, he was looking at everything.

I was mainly interested in looking at Ford products at the show and there were many. The Ford Racing display had several interesting Ford products, including the Chip Foose Mustang and the 2007 Shelby Mustang GT500. We also picked a 2006 Ford Racing catalog CD.

We stopped and talked to Wayne Julian, the builder of the SN65 Mus-

(Continued on page 15)

John Yarema in the back ground admiring the Chip Foose Mustang

2007 Shelby Mustang GT500 at the Ford Racing Display

Randy Hayward's 1970 Shelby Mustang GT350

SN65 is a 2003 Mustang chassis, suspension and drive train with a 1965 2+2 body

2006 Detroit AutoRama

(Continued)

(Continued from page 14)

tang. He took a 2003 Mustang and cut the body off, leaving the chassis, power train and instrument panel. He then, grafted a 1965 2+2 body into to it. Since the '03 wheel base is longer than the 1965, he lengthened the hood and front fenders. It looked great in "Look at Me Yellow". He indicated it took 3,000 man hours to build the car and he would replicate it for $225,000.

We found two SAAC-MCR member's cars at the show. Randy Hayward had his yellow 1970 Mustang Shelby GT350 on display. He had a picture of him with Carroll Shelby on display as well.

Jim Binder had his black Shelby Continuation Model Cobra roped off with scansions made by Jeff Burgy. We talked to Jim about the adventure he had building the car. After several false starts he had the body assembled and painted by McLaren Performance Inc. in Livonia. The 1965 427 FE Sideoiler engine was build by ESI Racing Engines , a Division of JBA, in San Diego, CA. It displaces 448.5 CI and produces 523.5 HP/518.8#-FT torque at 5300 RPM's. The close ratio top loader transmission was rebuilt by Liberty's High Performance Products in Taylor. MI.

John Yarema worked on the original Stone Soup project, a 1965 Mustang, so he stopped and talked to the people that displayed all the previous Stone Soup cars. The 2006 project is a 1947 Dodge Pick Up in very bad shape. It is going to take a lot of work to make it a desirable muscle truck.

We spent about five hours looking at all the interesting cars and displays. We were tired and hungry, so we left the show to get something to eat and talk about what we saw. We are looking forward to the 2007 AutoRama.

Jim Binder next to his Ford 427 FE Sideoiler powered Shelby Cobra Continuation Model SN 4110

Jim's 427 Sideoiler produces 523.5 HP and 518.8 Lbs-Ft of torque at 5300 RPM's

Stone Soup's 2006 restoration project. It is going to require a lot of work

Jim has a fire suppression system and an Accusump located in the trunk of his Shelby 427 Cobra

Ford Five Hundred GT-R

by Mike Nyberg

A beautiful blue car that looked like stealthy Ford Five Hundred, caught our eye at the 2006 Detroit AutoRama. The car looked highly modified and we wanted to know more about it. It had several young people around it dressed in gray shirts with there name and Washtenaw Community College (WCC) embroidered on them. We asked who made this slick looking vehicle.

Ford Motor Company gave the Washtenaw Community College, Custom Cars and Concepts instructors and students a challenge: Take two popular cars and make them into one. The Ford Five Hundred and the Ford GT became a Ford Five Hundred GT-R. This concept car has the look of a Ford Five hundred, but the mid-engine power train of a Ford GT. The car can hit 180 MPH with an adjustable rear wing and underbody belly pan. Plans are to use the car as a training car at the Ford Proving Grounds in Yuma, AZ.

The car was built by several Washtenaw Community College students under the direction of Automobile Service Technology Department Chair, John Mann and Instructor, Gary Sobbry. The team had to modify the Ford GT drive train frame to fit in the back seat and trunk of the Ford Five Hundred. They incorporated the Ford GT cooling package, brakes, suspension, steering, wiring and gages. While one group worked on chassis, power train and frame modifications, another group modified the body to incorporate Ford GT features into the Ford Five Hundred body. When all the modifications were completed, the paint group painted the car in Ford OEM Pearl Blue with LeMans style PPG Ice Pearl stripes and some ghosted graphics.

This project gives students in the Custom Cars and Concepts program at Washtenaw Community college an opportunity to build and expand on the core knowledge and skills acquired in the areas of machine tool technology, welding and fabrication, mechanics, and collision repair. It prepares them for employment in the automobile service industry. It also gives Ford Motor Company an opportunity to develop some interesting concept vehicles.

WCC Automotive Service Department Instructor, Gary Sobbry (Right most person in rear row) with a several of the students who worked on the Five Hundred GT-R

Students incorporated Ford GT style side scoops

Students fabricated the frame for the mid-engine Ford GT power train

550 HP Five Hundred GT-R uses Ford GT power train and chassis components, wrapped in a Ford 500 body

Annual Chili Cook Off

by Mike Nyberg

Several SAAC-MCR members, wives, significant others and family gathered at Dino and Erin Jessica Garzaniti's home, "Walking Stick", near Ann Arbor, to participate in the annual chili cook off. I asked Erin, "How did you come up with the name for your home?" She indicated she wanted an English sounding name. One day she was working in the yard and saw two walking sticks, her favorite insects, that was the inspiration for the name.

The group of SAAC-MCR members, wives, significant others and family who participated in the annual chili cook off.

Some of the group gathered in the kitchen for conversation and be close to the hors d'oeuvres. Others gathered in the family room to watch a video of a race and reminisce about past experiences. They were watching the 1989 Serengeti Vintage Cup Races at Watkins Glen presented by the SVRA on September 8-10, 1989. The occasion marked the 25th anniversary of the GT40 so it was the largest reunion of GT40's up to that time. The races are an annual event and the types of cars run the gamut, of what the SVRA allows.

Rich Tweedle remembers attending the race with Tom Greene, Kurt Fredrickson, Phil Jacobs, Ed Ludtke and Dean Ricci. Kurt Fredrickson ran his 1967 Sunbeam Alpine in Group 6 and won his class. Ed Ludtke did have his '65 Shelby GT350 entered but didn't run and Phil Jacobs ran his '68 Mustang Trans Am car.

We all gather in Erin Jessica's development workshop in the lower lever of the house to sample the eight pots of chili. There was a wide range of chili flavors. One pot had a yellow warning sign indicating the chili was very spicy (super hot), prepared by Randy Betki.

Everyone gathered in Erin Jessica's development workshop to taste the eight different chili recipes.

The chili cook off winner was Leslie Draybuck, Dino Garzaniti's sister. The title of her wining chili is "Big Mama's Chili", named by her two daughters, Amy and Chris. Her husband, Mike helped her make the chili by going and getting what ever ingredients she needed to make the winning recipe.

Big Mama's Chili Recipe

1 Lbs. Ground Beef
1 Lbs. Italian Sausage
1-14.5 oz. Can Black Beans
1-14.5 oz. Can Lt Kidney Beans
2- 14.5 oz. Can navy Beans
3-22 oz. Can Diced Tomatoes
2/3 Cup BaByribs Barbecue Sauce
½ Cup Hunts Ketchup
1/3 Cup Cumin Powder
½ Cup Water
2 t Dried Red Peppers
1/3 Cup Chili Powder
2 t Mrs. Dash Original Mix
½ Cup Diced Green Peppers
2 Medium Diced Onions

Brown and drain ground meats, add onions, green peppers and remaining ingredients then simmer.

Leslie Draybuck had the winning chili recipe.

SAAC-MCR Abridged Financial Report *by Craig Shefferly*

Item Description		Dec.	Jan.	Feb.
Beginning Balance	Checkbook	5,699.78	4,888.00	3,553.54
	Cash on Hand	45.00	45.00	45.00
Total Beginning Balance		5,744.78	4,933.00	3,598.54
Income				
Annual Memberships			750.00	350.00
Cash			59.00	
Winter Swap Meet				1,561.00
Paypal		106.51		
Holiday Party			1,900.00	
Club Jackets				425.00
Meeting			16.00	
Total Income		106.51	2,725.00	2,336.00
Expenses				
Hot Line Phone		24.16	24.16	24.16
2006 Club Calendars				310.76
Program Expenses		184.58	270.98	420.28
Member Reimbursements		709.55	423.19	698.73
Holiday Party			3,111.40	
Club Jackets Embroidery				321.50
EMS Ambulance Service				200.00
Newsletter			229.73	
Total Expenses		918.29	4,059.46	1,975.43
Income Over/(Under) Expenses		-811.78	-1,334.46	360.57
Ending Balance		4,933.00	3,598.54	3,959.11

Don't Blow Your Top *(Continued)*

(Continued from page 13)

best to do this as you prep the engine to go to the machine shop, so the deck is properly trued.

To create the new steam hole, use the gasket as a template to mark the block for a new holes position. I don't think it matters which one you use, but I always use the 1 o'clock position. This has the advantage of allowing the hole to line up with a steam slot cast into early heads. If you use the other position, use later factory heads or aftermarket heads that don't have this feature, then you will have to use the gasket as a template to once again drill a hole to line up with the one you just created in the block.

I learned of this weakness years ago when I stumbled across an old engine build-up article by Shelby American, this was a feature they used – but they went to the extreme of welding up the slot in the head, re-drilling a new hole in the head, for even more sealing strength. This sealing area weakness becomes more of a problem as you make more power. A mild street engine likely will not have a problem, but as you start approaching 400HP, it will be an issue. I have performed this operation on three engines so far, and have not had a single problem since using it – quite a significant improvement to the original design! Hope this tip can be of help to others out there in the low buck small block Ford performance world.

SAAC-MCR Abridged Meeting Minutes *by Kurt Fredrickson*

January 5
Tom Greene called the meeting to order at 8:00
New faces were Jimmy & Pam Attard, Jeff Seaman and Kevin Shaw brought daughters Shelby, Taylor, and Sandy
Competition Dir: Darius Rudis Dates T.B.A. for track events
Financial Dir: Craig Shefferly indicated we have around $5,000.00 balance
Editor's Report: Mike Nyberg thanked authors for their articles
Show Dir: Gary Roys talked about improvements on vote counting for Show 31
Membership Dir:Rich Tweedle indicated membership is growing fast !
Advertising Dir: Mike Riemenschneider is placing ads for the Winter SwapMeet
This&That: Sean Foltz leased an '06 Expedition and Kathy Betki an '06 Escape
Randy Brtki a.k.a. " Mr. Party Animal " talked about all the ordeals involved to get authority to have alcohol served at the Shelby Club's Holiday Party …Thanks Randy!

February 2
Tom Greene called the meeting to order at 7:58
New faces were Mike Elwood – owns a 69 Shelby ,Jeff Gage – owns a 67 Fastback and Rob Smith – owns a 70 Shelby
Competition Dir: Darius Rudis track dates T.B.A.
Financial Dir: Craig Shefferly indicated we have around $3,500.00 balance
Editor's Report: Mike Nyberg reviewed the list of proposed articles for the next newsletter
National News: Jeff Burgy talked about the National convention for this year
Show Dir: Gary Roys started to send out this year Shelby show dates
Membership Dir: Rich Tweedle indicated we have 80 paid members
Advertising Dir: Mike Riemenschneider indicated he has placed all the ads for the Winter Swap Meet and the Show & Go 31
This&That: Vito Campanaro bought a 69 Boss 429 in pieces and Lee Swonder sold his 66 Shelby he has owned for almost 40 years

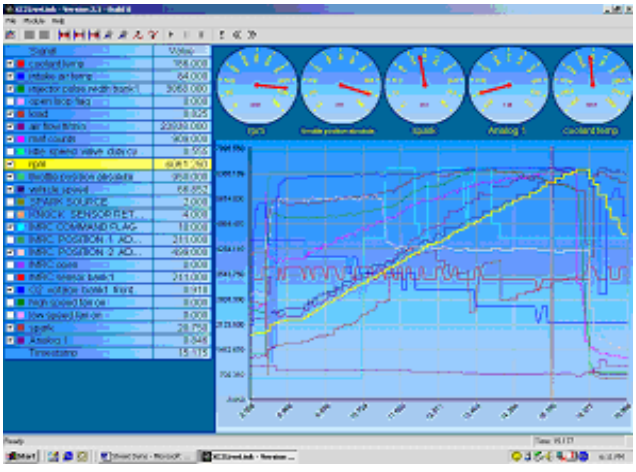
March 2
Randy Betki called the meeting to order at 8:00.
New faces were Bob and Sue Natkin and daughter Jenny, Bob is Ford's hydrogen fuel engineer, Eric Goldsmithwho has a Superperfomance Cobra and Kurt's new lady friend, Mary Ann Sexton
Competition Dir: Darius Rudis indicated Ann Roskie has retired from Waterford Hills and this is the last year for Snell 95 helmets for track use
Financial Dir: Craig Shefferly indicated we have $ 3,900.00 balance and the Winter Swap made a $ 900 profit
Editor's Report: Mike Nyberg thanked all the authors for getting their articles in early
National News: Jeff Burgy indicated the Shelby Museum in CO. is bringing a few Cobras to the National Convention at VIR
Membership Dir: Rich Tweedle membership is growing 95 members
Advertising Dir: Mike Riemenschneider Free ads are placed for Show&Go
This&That: John Moore drove to the meeting the first preproduction Shelby GT500 off the line …SWEEET !

Street Dyno *(Continued)*

(Continued from page 7)

scrap the runs & repeat them. Last summer I made at least 36 post 10PM runs on my selected test track while dialing in the revised ECU calibration changes on my 1996 SVT Cobra, so I have a good feel for the process & repeatability. On one night, I made a total of 16 runs in an hours time, including a chip change & an adaptive memory relearn drive loop (each chip of the SCT - Superchips Custom Tuning switch chip holds four programs – so I tested eight different calibrations in that brief period).

If you have the luxury of data logging, you can use it in this process to get all your engine parameters & use the data logger's time stamp to get an exact time – thus removing the human reaction time error. Once you think you have your best final configuration, then you can rent chassis dyno time to get your absolute HP numbers.



Superchips Custom Tuning's LiveLink2 data log screen provides engine parameters based on the data logger's time stamp.

Shelby American Automotive Club – Motor City Region

Dedicated to the preservation, care, history and enjoyment of the automobiles produced by Shelby America and/or Ford Motor Co.

Monthly Meeting, First Thursday of ea. Month
7:00 pm at Mama Mia's Restaurant
27770 Plymouth Rd., Livonia, MI
West of Inkster Rd.

Newsletter editor; Mike Nyberg
Phone: 248-969-1157
Email: tangobythelake@yahoo.com
Technical Editor: John Logan

We're on the Web!
www.saac-mcr.com

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Mailing Address Line 2
Mailing Address Line 3

2006 Events Calendar

Apr 1-2 Columbus Spring Swap, Ohio Expo Center, Columbus, OH

Apr 9 Fabulous Fords Forever, Knott's Berry Farm, Buena Park, CA

Apr 22-23 Kit Car Show, Knott's Berry Farm, Buena Park, CA

May 6 VSCDA Enduro at GingerMan, South Haven, MI

May 12-13 Mustang/All Ford Show, O'Neil Ford, Sellersburg, IN

May 18-21 Western States Cobra Bash, Sparks-Reno, NV

May 19-21 29th Annual Regional Spring Fling, Brown County State Park, Nashville, IN (www.indianasaac.com)

May 19-21 Kit Car Carlisle Show, Fairgrounds, Carlisle PA

Jun 2-4 All-Ford Carlisle Meet, Fairgrounds, Carlisle, PA

Jun 3 Volo Museum Shelby Show, Volo, IL

Jun 4 SAAC-MCR Show & Go 31, Ford World Headquarters, Dearborn, MI (www.saac-mcr.com)

Jun 5 SAAC-MCR Open Track, Waterford Hills, MI (www.saac-mcr.com)

Jun 8-11 SAAC Mid-America Meet, Tulsa, OK

Jun 22-25 London Cobra Show, London, OH

Jun 30-Jul 2 SAAC 31 National Convention, Virginia International Raceway, Alton, VA

Jul 31 SAAC-MCR GingerMan Open Track Event, "Hot Laps at GingerMan, South Haven, MI (www.saac-mcr.com)

Aug 19 12th Annual Woodward Dream Cruise, Pontiac to Ferndale, MI

Sep 3 SAAC-MCR Waterford Hills Open Track Event- "Labor Day Classic", Waterford, MI (www.saac-mcr.com)

Oct 8 SAAC-MCR Waterford Hills Open Track Event- "Harvest Happening", Waterford, MI (www.saac-mcr.com)

Oct 21 Fall Color Tour, to Lake, MI

A 1970 picture of neat Ford products parked in front of the Valley Ford dealership in Washington State. You could buy a 1970 Torino (not the 2006 Winter Olympics city) for $2899. *Image supplied by Bill Cook*