

Cosworth Vega MAGAZINE

OFFICIAL PUBLICATION OF THE COSWORTH VEGA OWNERS ASSOCIATION

P.O. Box 1783, Bloomington, IN 47402

October 1986

ROUNDUP '86



New Bedford, Massachusetts is a beautiful old New England seaport, steeped in history; and even 200 plus years after its founding displayed many of the solid New England characteristics so typical of this part of the country.

We learned about the history of the whaling industry, a major force in the beginnings of New Bedford, and we also found that even conservative New Englanders like to have a good time, drive fast, and have a sense of humor.

Dani and I represented the California regions at the Roundup. Travelling 3500 miles across America, we arrived in New Bedford early Friday afternoon and registered with Danny Chieppa and Merideth Persson (our Roundup hosts), received our information packet, and found our way to our rooms to clean off the inch of road dust we weary travellers had accumulated.

Many Cosworth owners had already arrived, and it is always great to say hello to old and new friends. A wall sized map displayed all of the regions, and Roundup attendees were encouraged to leave their signatures on the

states they had come from to attend Roundup '86.

On Friday evening the Executive Council consisting of the elected officers and the Regional Directors in

Continued on page 5

In This Issue

Heart of an Indy Car	4
Four Wheel Disc Brakes	4
Cosworth #0002	6
Regional News	9
Technical Tips	10
Roundup Attendees	16
The Champions!!	17
Classified Advertisements	19
New Autocross Rules	21

cosworth vega

OWNER'S ASSOCIATION

1986-1987 Officials

1310 Spring Street	President- Deb Thomas Des Moines, IA 50315	(515) 285-7294
5603 Edwards Drive	Vice-President (Membership and Finance) - Clark Kirby Arlington, Texas 76017	(817) 465-6596
Post Office Box 1783	Vice-President (Merchandise and Promotion) - Bob Chin Magazine Editor and Publisher - Bob Chin Bloomington, Indiana 47402	(812) 339-0838
809 Springdale	1987 Roundup Chairman - Gene Von Gunten New Windsor, Maryland 21776	(301) 635-6435
	Technical Advisors	
Mark Grimm - Grimm Cheverolet	Morton, IL	(309) 263-2241
Gary Hill - Hi-Torque Specialists	Pheonix, AZ	(606) 252-2764
Bill Hutton - Hutton Motor Engineering	Clarksville, TN	(615) 648-1119
Bob Maloy - RAM Engineering	Santa Ana, CA	(714) 582-1503
D.J. Martin - Independent	Hillsborough, NC	(919) 477-6162
Carl Rumberger - Performance Dynamics	Sacramento, CA	(916) 488-3114

REGIONAL DIRECTORS

**Region I - Massachusetts, Rhode Island
Connecticut, New Hampshire, Vermont**
Danny Chieppa
81 Brownell Street
New Bedford, MA 02740
(617) 993-6764

REGION II - New York, New Jersey
Maurice Schechter
17 Driftwood Lane
Glen Cove, NY 11542
(516) 676-5467

**REGION III - Pennsylvania, Delaware, D.C.,
Maryland, Virginia, West Virginia**
Gene Von Gunten
809 Springdale
New Windsor, MD 21776
(301) 635-6435

**REGION IV - N. and S. Carolina, Georgia,
Alabama, Tennessee, & Mississippi**
Fred Kieffer
3649 Highgreen Drive
Marietta, GA 30067
(404) 971-4958

REGION V - Florida
John Mathe
555 Belcher Road, So. Q-208
Largo, FL 33541
(813) 530-7600

REGION VI - Wisconsin
Assigned to Region XI

REGION VII - Kentucky and Ohio
Assigned to Region X

REGION VIII - Michigan
John Cowall
9677 Fox
Allen Park, MI 48101
(313) 388-1026

**REGION IX - Iowa, Minnesota, N. and S. Dakota,
Montana, Kansas and Nebraska**
Fred Thomas
1310 Spring Street
Des Moines, IA 50315
(515) 285-7294

Region X - Kentucky, Ohio and Indiana
Bob Chin
2444 Brittany Lane
Bloomington, IN 47401
(812) 339-0838

REGION XI - Illinois and Missouri
Mark Grimm
532 Nelson Street
Morton IL 61550
(309) 263-8828

**REGION XII - Texas, Louisiana, Arkansas
and Oklahoma**
Clark Kirby
5603 Edwards Drive
Arlington TX 76017
(817) 465-6596

**REGION XII - Arizona, Utah, New Mexico
and Nevada**
Paul Cornell
8421 East Cortez
Scottsdale, AZ 85260
(602) 948-3996

**REGION XIV - Oregon, Washington, Alaska
and Idaho**
Richard Lang
1020 22nd Street, N.E.
Salem, OR 97301
(503) 363-4797

REGION XV - Northern California
Jay Bortolotto
5962 Angelo Drive
Loomis, CA 95650
(916) 652-9015

REGION XVI - Southern California
Bob Maloy
Post Office Box 910
El Toro, CA 92630-0910
(714) 582-1503

MESSAGE from the PRESIDENT

I would like to start by saying how pleased I am to have been chosen to serve you for the 86-87 year. I have several definite goals I would like to see the CVOA achieve in the next year, and I'm sure that with everyone pitching in, we will be able to meet these goals.

We had great fun at the Round-Up in New Bedford during the first weekend in August. Our hosts, Dan Chieppa and Meredith Persson, did a wonderful job planning the weekend's festivities. We enjoyed several activities we had never experienced before, including a billiards game played like miniature golf. It was great fun and several of us made par on a few of the holes. The rally took us through some beautiful old neighborhoods in which we spent almost a whole roll of film taking pictures of the old mansions. The speed event was a short, tight course, offering a lot of variety for the Solo II buffs, and everyone had a great deal of fun. The Concours was very enjoyable since there were so many fine Cosworths. We all had a hard time choosing our favorite for the People's Choice Award. As usual, we saw many old friends and made many new ones. We were amazed at how the second generation of CVOA enthusiast had grown! Several members bring the entire family every year, and we all enjoy seeing the kids grow up.

In the Friday night directors' meeting, several objectives were set forth. One of the items was to start reporting requirements for all regional directors. Hopefully, this will increase regional activity and give the members some additional return for their dollar. Also it was decided to appoint a Club Historian. I've been shaking the bushes and we have several hot prospects for this title. In the next few weeks I'll decide on one or two people and let you know in the next issue who those people are. This is an area where we can all become involved by sending all the information we have collected individually to the Club Historian, thereby making his job a little easier. By round-up time next year, we should have some pretty interesting stuff to show the membership.

One of the goals I have set for the next year is the development of guidelines for both concours and the speed events at the national round-ups. In this issue you will find the autocross guidelines. These were developed by a consensus of opinion among several of the directors who autocross a lot. We have tried to touch on important issues without getting too technical. The purpose of this is that everyone will know ahead of time which class they belong in. If you would like to upgrade or downgrade your Cosworth to a different class, there will be plenty of time to do so. We have yet to start on the concours guidelines, but Bob Maloy has graciously volunteered to have a go at the first rough draft. Go for it Bob, I appreciate the help on this. We would love to have some input from anyone who has ideas on the subject. Be sure to drop a line to either Bob or myself or give a call with your ideas. All suggestions will be considered and the rules will be developed by a consensus of all opinions.

Another goal I have set for the next year is a more active female membership. Being one to jump right in there with
continued on page 4

LETTER FROM THE EDITOR

Owning a Cosworth Vega has many special pleasures. One of which is the need to be mechanically inclined, a so called shade tree mechanic. This is especially true with a Cosworth. Many people have heard of the Cosworth, it seems that few people have actually seen or knew that they were ever made, and very few mechanics have had experience working on them. Luckily for me there has never been a problem with the electronic fuel injection in over 140,000 miles, just the normal repair and replacement of worn parts. The Cosworth Vega Shop Manual has been a good friend for all these years and has seen many a day under the hood of my Cosworth.

So being a shade tree mechanic in the true sense of the word, I have even accomplished engine rebuilds and clutch replacements in the parking lot of where I live. It is not uncommon on a weekend to see the front of the building look like "little Kentucky" with parts and tools everywhere, but usually I get everything back together and cleaned up before the day is over with.

Another reason I perform most of the work myself is that I know what I am getting in terms of parts and labor not only counting the savings in dollars! It is also easier for me to apprise the condition of my Cosworth and what other maintenance items need to be done in the future. It is awfully hard to trust someone who is working on your Cosworth that has never worked on one before. Leaving your Cosworth overnight at the shop at the mercy of the mechanics and knowing that they might have to take it out for a test ride is a thought that I don't like to have!

The worst experience I have had was when I had to take the Cosworth to get a front end alignment. The first thing the garage told me was that they couldn't align the front end due to the Cosworth wheels! They didn't have the proper adapter for wheels like the Cosworth. They then told me of a garage that would have the special adapter to mount the alignment gauge to the outside of the rim. Once my Cosworth was at the alignment shop, the dreaded waiting started. Thoughts of what could be wrong with the front end of the Cosworth and the appropriate cost involved in the labor and parts gave me that dreaded butterfly feeling in my stomach. I just hate being at the mercy of a garage when the repairs are beyond your means. Luckily for me this time the repairs were limited to a tie rod end and the cost of the wheel alignment.

Many people take their Cosworths to the garage or shop to get worked on. Being a Chevrolet, they expect that the service required will only take a few hours to do and that the parts are readily available on the parts shelves. For those people that are going to take their Cosworths in for service, if work is needed in the special Cosworth items, don't expect the work to be accomplished overnight. Some parts are hard to find (or almost nonexistent) which makes the needed repairs to be done take that much longer to do. So take it

continued on page 4

President, con't from page 3

the guys, and do what they do, I am somewhat at a loss as to how to accomplish this. Therefore, I would really like to hear from you gals on some ideas on what we can do to get the ladies more involved. If you let me know what you would like to see in the future, we can work up activities both regionally and at the round-ups to make your involvement in the Club more enjoyable.

In closing, I would like to say that I have adopted an "open door" policy. If you have any ideas, suggestions, complaints, or whatever, I would like to hear from you. My main goal is to see that we are responsive to the needs of the membership. In short, this is your Club, so be involved.

Deb Thomas

HEART OF AN INDY CAR

By Laura Hill

Back in 1975 when I saw my first Cosworth Vega I fell in love. I ran home and told my husband about the cute little black and gold Vega I had seen. I also told him I wanted one. Of course he knew exactly what I was talking about, but he merely laughed at me. His only comment was, "Do you know how much they want for those babies?"

That was then, This is now. Today we own two Cosworth Vegas, a 1975 for Gary and a white 1976 for me.

I love the euphoric feeling of driving my Cosworth Vega. I love the power. I love the handling. But most of all, I love knowing I am one of an exclusive group of people lucky enough to have enjoyed the Cosworth Vega experience.

I get a kick out of talking to people about my car. The fact that Arizona allows us to have Historic Vehicle license plates guarantees I have plenty of opportunities for this. But obviously I am no expert. I can only say those very basic facts: four cylinder, double overhead cam, four valves per cylinder, naturally aspirated and limited production." If anyone wants more technical information, I just refer them to my husband.

But sometimes even my sparse

mechanical information is too much for a nonmechanical mind. When I get a blank look, I just tell people that a Cosworth Vega is a Vega with the heart of an Indy car.

Gary and I drive our Cosworth Vegas on a daily basis, despite the fact that Chevrolet was not inspired to put air conditioning in them, and so far neither is Gary. I like knowing I have all the performance I need at my fingertips. My Cosworth Vega is truly a car I am proud to own.

On any given day you can see me motoring around the city of Phoenix with a smile on my face from the enjoyment of owning a truly fine automobile.

Expanding The Cosworth Potential Part I -Disc Brakes

by Gary Hill, High Torque
Specialists (602) 252-2764

After building and installing some 2.6 liter engines in '75 and '76 Cosworths recently, we had the occasion to test the braking capability and other dynamic capacities of the '75-'76 chassis. In this article we will discuss modifications to the Cosworth brakes.

The conventional change over to the larger and heavier Monza front disc seems to be the most efficient in terms of performance per dollar for the performance capability of the Cosworth Twin Cam. Consider that on the average the front disc brakes carry approximately 70% of the total braking load. Therefore, by adding the Monza conversion you gain a 27% increase in hydraulic piston area and a 26% increase in friction pad area. You could quickly assume that this combination would generate some pretty good deceleration numbers, but with every rose you get a thorn.

The OEM drum brakes have shown a number of problems for proper balance and efficiency. First among many was the fact that they could not dissipate anywhere near the kinetic energy potential of the front brakes with the '75 Cosworth being the worst with only 1 1/2" wide drums compared to the '76 Cosworth with 2" wide drum brakes. Second, they have disproportionate

Editor, con't from page 3

easy on the Service Manager, he's doing the best job he can with what little he has to work with!

Bob Chin

#2172 & #1253

engagement pressures and timing which causes handling problems. Energy input on the chassis in different time intervals causes a load/preload condition to exist. Chassis dynamics during braking gives chassis and braking engineers nightmares as they have to solve the complex equations of chassis dynamics, hydraulic brake pressure control, weight transfer, spring, and shock rates to achieve the proper response and control. The desired result is to slow your vehicle as quickly and as straight as the manufacturing budget will allow.

What we have done at HI TORQUE SPECIALIST is to apply the Monza front disc brake conversion and use the "old" front disc and calipers for a rear disc brake conversion. If you have been paying attention, the respective proportions of the old disc to the Monza disc brakes is what we are looking for. This front/rear combination makes for a well balanced set-up that requires no pressure/flow modification of any kind.

The adaptation is pretty straight forward. We used the original left and right calipers. The rotors have a four bolt pattern on a four inch bolt circle which already matches the Cosworth wheels. The present lug nut studs are pressed from the new rear rotors. The center hub of this rotor is machined flush to the wheel mounting surface on the front side and the back side is also machined so this surface is flat. The center hub is then machined to fit over the the rear axle hub. The finished product is similar to the Corvette and Camaro rear disc brake rotors. Longer wheel studs are used on the axles and the machined rotor is placed on the axle. A weldment is then made to adapt the caliper to the disc. The drum brake backing plate is removed and the caliper is placed in its original placement in relation to the rotor with the caliper mounting adapter. After bolting both ends on, you will discover that the rear wheel calipers tend to have some lateral movement because of the

continued on page 8

Continued from page 1

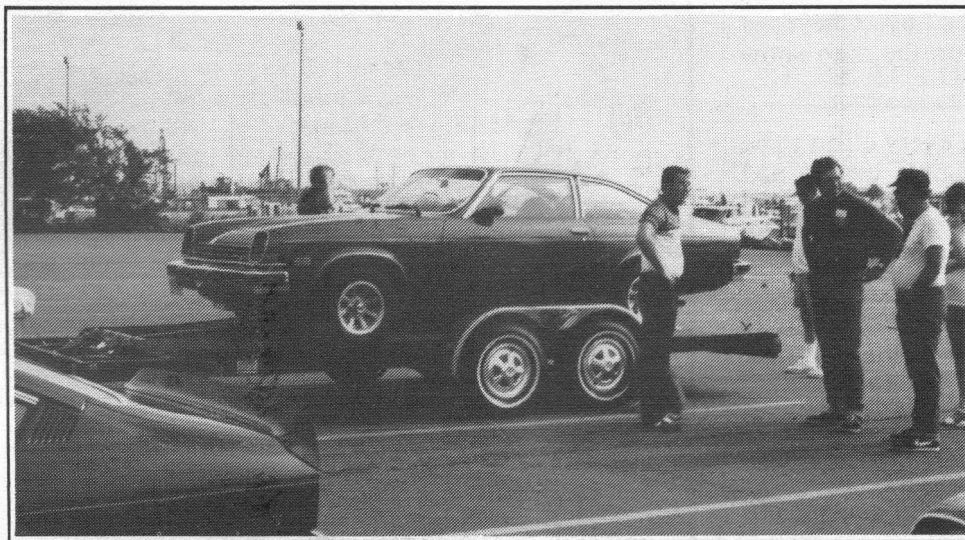
attendance gathered to handle the club's business matters and to elect new officers for the upcoming year's activities. Other matters under discussion were reorganization of two regions to better serve the membership, the locations for the 1987 and 1988 Roundups, making available a complete listing of members, use of the club's finances to recruit new members, and

Secretary will retain their posts for the upcoming year.

Three regional changes were made. Region VI, Wisconsin, has been merged with Region XI. Region VII has been temporarily assigned to Region X until a new director can be found. Northern California (Region XV) has a new Regional Director

produced from membership dues, paid advertising in the National Newsletter, and the sale of various club merchandise such as past issues of the club magazine, technical bulletins, decals, jacket patches, etc.

Danny Chieppa and Meridith Persson were excellent hosts and many well-organized events filled the remainder of the weekend. A Concours for



Winner of Concours and People Choice Award: Patrick Hayes, #3042

additional services to be provided members in the near future to make your membership even more valuable.

The new President of C.V.O.A. is Deb Thomas of Des Moines, IA. Deb and her husband Fred Thomas have been very active in the club since its founding in 1979, and have served as Co-Regional Directors for Region IX. Deb brings much experience to her post as President with several years experience in S.C.C.A. club work in both the administrative and competition end. She has driven in competition in both S.C.C.A. road racing events as well as Solo I and II, and is consistently among the winners at C.V.O.A. National events. Deb will bring her energetic personality to bear on your club's business during the next twelve months.

Bob Chin, V.P. of Promotions and club magazine editor, and Clark Kirby, V.P. of Finance and Club

Jim Bortolotto, a member of C.V.O.A. since its inception.

Sites were selected for the 1987 and 1988 Roundups. Gettysburg, Pennsylvania will be the site in 1987, and hard lobbying allowed us to bring the Roundup back to the West in 1988 and the primary site under consideration is Reno, Nevada since Reno is one day's drive from so many major cities on the west coast.

Clark Kirby, V.P. Finance, reported that the club purchased an Apple Macintosh computer during the 1985 fiscal year for the use of the club magazine editor, Bob Chin. Bob Chin, Editor of the national Cosworth News will be helped by Bob Maloy, who has a laser printer which will assist in producing higher quality National Newsletters at cost savings to the club. Clark also reported that the club treasury held a surplus of \$2553.79 after all expenses at the end of fiscal 1986. Club revenues of \$12,149.52 were

judging the cleanest and best maintained Cosworths, a Sightseeing Rally which led us by beautiful old victorian homes and the surrounding countryside, 1/4 mile "drags" against police radar (courtesy of the New Bedford Police Department), a swap meet for car-related peripherals, and an Autocross set up in a vocational school parking lot were some of the weekend activities for auto enthusiasts. A guided tour of the "old" New Bedford with our personal tour guide provided by the New Bedford Whaling Museum, a delicious catered picnic, a great afternoon at a water sports park with several long slides, or for the faint-of-heart, a miniature golf game played with cue sticks and bumper pool-like fairways and greens proved to be breaks from driving-driving-driving and cars-cars-cars!

The Sunday evening awards banquet allowed the chow-hounds among us

Cosworth Vega #0002

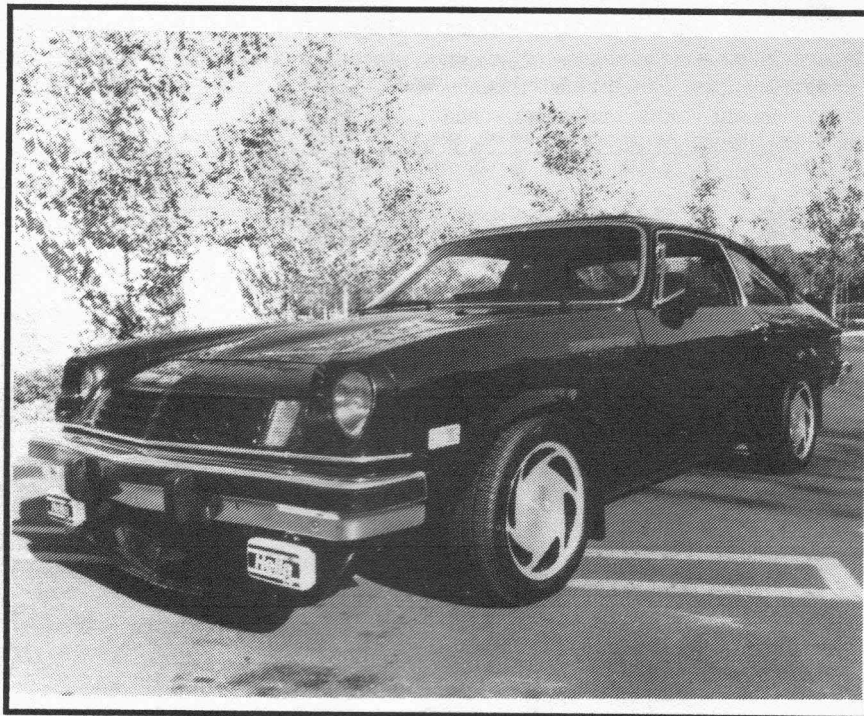
By Bob Maloy

This vehicle is a re-creation of Cosworth Vega #0002. Some of the parts utilized in the construction of this vehicle were originally installed on the Cosworth used by Chevrolet during 1974 on the auto show circuit.

We have made every effort to be true to the original design and concept, with some 1986 updates in the instrumentation and suspension departments.

The original #0002 was found sitting on a palette in a storage room at the G.M. Tech Center in 1980. The car had been well stripped, but several components remained, enabling this re-creation. G.M. could neither sell

continued on page 13



RAM Engineering

P.O. BOX 910

El Toro, CA 92630-0910

(714) 582-1503 Office or (714) 953-1032 (Shop)

- We are the people who built the "Best Engineered Cosworth" at Roundup '86. They didn't.
- We are the people who are giving away a beautiful 1975 Cosworth Vega to say thanks to our customers. They aren't.
- We have it in stock for shipment NOW, they usually don't.
- We are #1. No if's, ands or buts.
- We service Cosworth Vega's ONLY. No Volkswagens, no Audis, no Buicks. Not even my wife's Volvo or my daughter's Rabbit. Not Pat's wife's Toyota. Just Cosworths. Period. Have your Cosworth engine built by the founder of CVOA.
- We sponsor the only Cosworth Vega currently competing in SCCA GTA Sedan class, and driven by Sy Schienberg. They aren't.
- Member, Society of Automotive Engineers, Registry #1842299405...are "they".

If you demand the best, call us, not "them".

Roundup '86

continued from page 5

to get their fill of excellent food. Then awards and door prizes were presented. They were provided by Region I, Region II, RAM Engineering, and Hutton Motor Engineering. RAM Engineering (Pat Brogan and Bob Maloy) provided some of the door prizes -- Chevrolet racing jackets, Cosworth of England T-shirts, and an Autoweek auto trivia game, as well as many of the awards.

Region I provided colorful whaling T-shirts and other gifts for all of the children present, and they provided many other weird and wonderful prizes for the adults, including some specially autographed by the mayor of New Bedford copies of Moby Dick, Henry Melville's classic saga of whaling. Region II provided license plate covers and other automobile related "stuff". Bill Hutton of Hutton Motor Engineering provided sets of cam carrier bolts and washers in a gold irridite finish for each car in attendance.

Many awards were given for participation in Roundup events and for contribution to the club's development. All of the awards are listed elsewhere in this issue, (pg's. 17,18) but the western

Regional Newsletter and Outstanding Regional Director. In addition, an engine built by RAM Engineering for Keith Meiswinkle of Wallkill, NY won the Best Engineered award.

as the Cosworth Vega Owners Association in maintaining records and histories of as many cars as possible over the years. Vega GTs massaged into Cosworth Vegas have



The featured speaker for Roundup '86 was Mr. Lowell C. Paddock, the Senior Editor of Automobile Quarterly, one of the most prestigious automobile publications in the world. Mr. Paddock's topic was titled, "Of 25 Built, Only 36 Remain", making the point that valuable collector car replicas have been "manufactured" by both the well meaning and unscrupulous alike. Lowell Paddock foresees the

already surfaced and as time passes more and more of this type of activity will take place.

Monday morning found several cars still in the parking lot of the Skipper Inn with several casualties of the weekend's festivities still recuperating in their rooms. Everyone had a great time (thanks to Danny Chieppa and Meridith Persson and Region I) and we all look forward to next year's Roundup in Gettysburg, Pennsylvania which will be hosted by Gene Von Gunten and Region III.



region is proud to have brought home three awards: Dani Maloy - Second Place, Autocross Women driving D. J. Martin's Cosworth) and Bob Maloy - Outstanding

day when bogus Cosworth Vegas will be offered for sale to collectors as the genuine article and he stressed the value of specialty cars clubs such

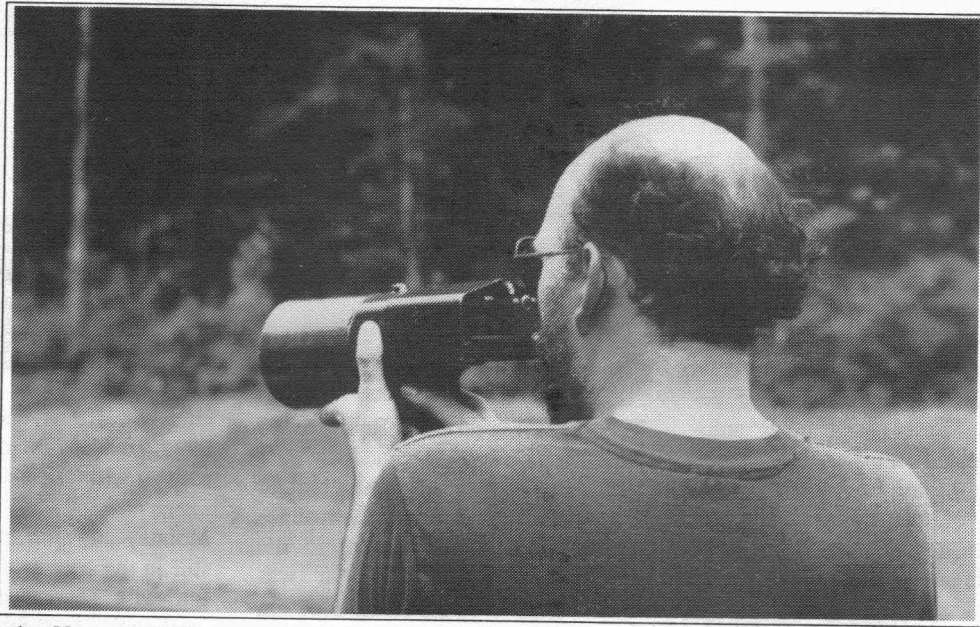


Brakes, continued from page 4

C-clip retainers on the axles. This is normal for the calipers to float in the mounting brackets. The main item to find now is a master cylinder that has double internal check capacity. In order to keep the relationship between the brake pedal and the brakes, an approximate 7/8" bore master cylinder

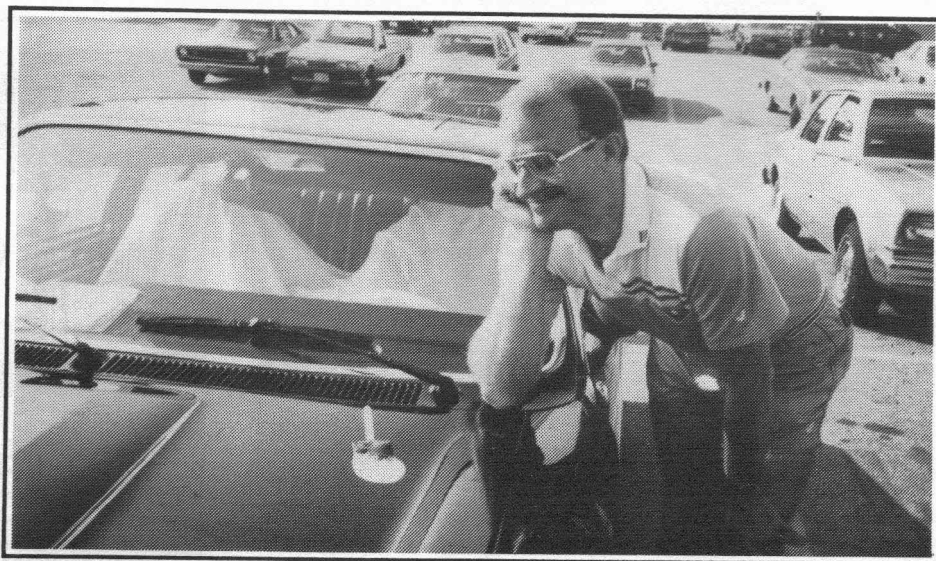
So much for the work. When it is all finished, and if you truly enjoy the thrill of driving a responsive vehicle, this is one of the most gratifying modifications that you can make to your Cosworth. If there are any questions about how to attempt to make this conversion, please don't hesitate to give me a call. Remember that when working with the braking system of a car, it is serious business and should be

**This is National
Take A Cosworth
To Lunch Month**



will be required. If you do your homework right, you will find it available in aftermarket suppliers. Finally, the fabrication of brake lines to the rear disc calipers, the addition of fluid, and the bleeding of brake lines and calipers, completes the conversion.

left to experts or those that are competent with working on brake systems.



Clark Kirby, club jokester, plays a prank on Lou and Harriet Marr with a fake melting ice cream bar.

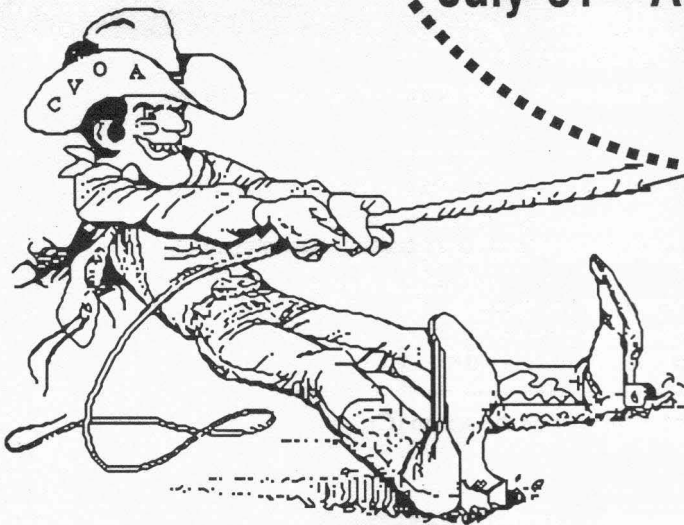
Plan Now

to attend

Roundup '87

Gettysburg, PA

July 31 - August 2, 1987



Regional

News

REGION I

Danny Chieppa and Meredith Persson were very busy with a well planned National Round-Up. Their fears of rain ruining all of the well-planned events were soon forgotten when the Round-Up kicked into high gear. The Round-Up was well attended and really well organized! Our thanks to Danny and Meredith for making the 1986 Round-Up a success!

REGION II

Summer is nearly over, and the 1986 CVOA Round-Up has come and gone. For us the Round-Up is the highlight of owning a Cosworth. To own a car that just sits in the garage is just a waste but to take your car to a meeting and show off your pride and joy to others who will appreciate it is very rewarding.

The Cosworth is also a driving car. To participate in a round-up and it's activities is a very good way to renew interest in your Cosworth; like remembering the first day you bought it. The National Round-Up is also the largest collection of technical experts on the Cosworth Vega. It is always a wealth of information to help cure even the smallest problems.

The next Region I event will be Sunday, September 14th in Wallkill, NY. A fun rally starting at 10:00AM around the scenic Catskill mountains area. A tour of a local winery and a barbeque is included.

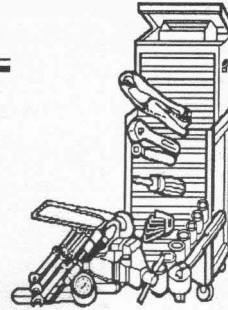
REGION III

Six members from Region III made it to the 1986 Round-Up and it seems that almost every member won something. Among those in attendance were John Chidester, Bob Gallahan, Lewis Jackson, Mark Manjarrez, Dan McNally,

continued on page 11

Technical Tips

by Bob Maloy
RAM Engineering



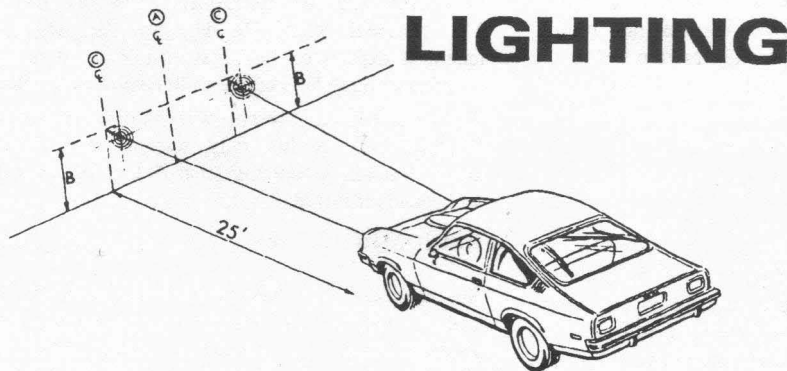
Brake fade can be caused by the heat of the header acting on the fluid in the lines that run along the firewall in the engine bay. **Brake fluid does wear out.** Replace the fluid in your brake system at least every two years or 24,000 miles. **It's only your life that's at stake.**

Intermittent fuel pump failure can be caused by the tiny grommets connecting the power to the in-tank pump getting loose and causing an short. This is especially prevalent in cars using "Octane +" additives and/or "race gas." The fuel actually melts the plastic connectors, causing the fuel pumps to cease operation. **This is a nasty problem to try to diagnose, since the problem is buried in the tank.** The fix...drop the tank and replace the in-tank pump. Use a Monza pump, available at any good parts house.

HOW TO AIM YOUR HEADLIGHTS

Tools necessary: Yardstick or tapemeasure No.2 Phillips screwdriver

1. Aiming should be done with one-half a tank of gas, with no extra weight in the trunk besides the tire and jacking equipment.
2. Select a level surface and position the vehicle perpendicular to a wall or screen twenty-five feet away.
3. Determine exactly where the center line of the vehicle would be if it were extended to the screen (A).
4. Measure the distance between the center of the headlamp and the ground.
5. Mark the same height on the wall or screen (B).
6. Measure the distance between the two headlamps and recreate it on the screen (C).
7. Turn on the low beams.
8. The edges of the "hot spot" of the beam should fall on the screen as shown in the illustration.
9. Adjust the headlamp so the "hot spot" falls within the specifications mentioned in step 8.
The adjusting screws are accessible without removing the headlamp bezel. They are located at the "12 o'clock and 9 o'clock" position.



Regional News , continued

Dave von Gunten, and of course, Region III's fearless director and high speed Cosworth caravan leader, Gene von Gunten. The 1987 Round-Up will be held in Region III at the Gettysburg National Battlefield area. Gene is already soliciting help from other Region III members for his various committees.

The 3rd Annual Fall Picnic at the von Gunten family farm was September 21. On the menu was steamed crabs. Gene von Gunten is not a slouch on his regional events. Let's hope he has steamed crabs on the menu for the 1987 Round-Up!

Also of mention is that Gene has been assigned to be head of the Nominating Committee for any National Offices for CVOA. Hopefully this will make the elections of new officers easier to accomplish as names will be available to vote on before meeting at the National Round-Up.

REGION IV

Fred Kieffer sends greetings from Georgia and another hard luck story from Mike Dillon. Once again Mike Dillon went to a car event (SCCA Solo II Autocross) in his Cosworth only to have it stall on the starting line just long enough for him to miss all of his turns. It started up after it was too late, but never gave him a problem once on the way home. As you may recall this happened to him before at the Indianapolis Speedway Track Tour at the 1985 Round-Up. Face it, Mike. You're jinxed!

Fred Kieffer, Mike Dillon and Mike Malis made it to another round of SCCA Solo II Autocross events later on (Mike Dillon brought a Renault Encore as his Cosworth was not running) and Mike Malis and Fred took 4th and 5th places respectively. That's pretty good for each of them having at least one DNF!

Fred Kieffer took home 3rd place in the 70 & Up Modified Class at the Dixie Classic Chevy Club Car Show in June. He gave the people who after he had taken the time to explain the engine to them called his Cosworth "just a Vega" some food for thought by comparing their "just a Vega" comments to calling a Shelby "just a Mustang" or a GTO "just a Tempest". What a great comeback. Everyone in CVOA should remember those quotes for future use with those who cannot truly appreciate the Cosworth Vega!

REGION V

No news received from Region V.

REGION VIII

No news received from Region VIII.

REGION IX

It seems that Region IX has given us our newest and first woman president ever! Congratulations Deb Thomas for being elected the new CVOA president! Deb has already started working on updating old club rules and making new ones which will improve the direction of the club. Keep up the hard work, Deb!

The Thomas' had several CVOA related visitors during the month of July with a visit from Jerry Bailey of Manhattan, Kansas and a visit from Mark and Barb Rock and their family from Strongsville, Ohio. Fred and Deb met up with the Rocks again in August at the National Round-Up.

By the way, the Thomas' recently purchased an orange Cosworth, #3082, which brings their Cosworth total to five at present. Why not just start your own Cosworth showplace? Pretty soon they'll have one in every color. Congratulations on the new addition to your "family", Fred and Deb!

REGION X

Region X had a regional meet July 12 at the Auburn, Cord, and Duesenburg Museum in Auburn, Indiana. Thanks to Bob and Ann Syrus for attending along with Bob Chin and his father-in-law, Kent Weeks.

The weekend of July 26th saw Bob and Stacy and Shawn Muench at Indy Raceway Park for SUPER CHEVY SUNDAY. The weekend was a scorcher and many people were glad to have their coolers handy. The Chin's came home with a first place trophy for #1253 in the unrestored category (their only competition was a family truckster type of station wagon).

Many bad omens appeared the 28th of July for Bob and Stacy Chin as they prepared to leave for the 1986 Round-Up. Bob's neighbor had the misfortune to paint some chairs outside downwind of #2172 on that day causing Bob to have to strip ALL the wax off the car and re wax it. Not a good day for Bob. Too bad he had to get up the next day because things seemed to steadily get worse. As the Chin's headed north at 4:00 AM on the 30th they noticed a peculiar blue smoke pouring out of the rear of #2172. The farther they went, the heavier the smoke got. Fearing that they would not make it to Massachusetts, they turned around to switch to #1253 and then leave again at 8:00 AM. Figuring to drive until they felt like stopping, they drove to Pennsylvania and could not find one vacancy in any hotel they stopped at. Finally at 10:00 PM with no dinner and a pretty tired crew, they were forced to stop in the Poconos and pay an arm and a leg for a less than average hotel room (not even a heart shaped tub). Fortunately things got better for the rest of the trip and they enjoyed the Round-Up with the rest of the gang.

The next event for Region X will be a trip to the Corvette Plant in Bowling Green, KY on October 10. So far Mark Rock, Harry Deel, Shawn and Shane Muench, Bob and Ann Syrus, Mike Dillon, Fred Kieffer and another Georgia member are planning to come.

REGION XI

Members of Region VI (Wisconsin) are now members of Region XI. Welcome to all these members!

Mark and Becky Grimm attended this year's National Round-Up. Also attending from Region XI were Bob and Diana Felker, Jim and Carol Stallwitz, and Greg and Arnie Gibson.

On September 28th, there will be a Regional meet with a autocross as the main event. It will be held in Mossville, IL

Regional News , continued

REGION XII

Clark and Jean Kirby attended the 1986 Round-Up minus their Cosworth. For this reason neither Kirby entered any event. Clark spent Saturday morning judging Concours, being a member unbiased by his own car's presence. The rest of the time the Kirby's spent sightseeing and getting to know new members and catching up on news with old members.

Clark and Jean took 3rd place at the 4th Annual Auto Expo in Austin, Texas. It seems that the event was a little biased towards friends of the promoters (and judges) and the car that took first place in his class was not even cleaned up, much less show quality. Many car owners disputed the judging practices, but not much else was done. Let's hope this experience didn't ruin it for Clark and Jean or the other participants. Maybe practices will change next year.

REGION XIII

No news received from Region XIII.

REGION XV

A big welcome to Jay Bortolotto, new director for Region XV. Jay-relieved Carl Rumberger who has now moved to the distinguished position of Technical Advisor. Good luck with your new duties, Jay and Carl!

September 14 saw Region XV meet at Marine World in Vallejo, California for some Cosworth Fun.

Carl Rumberger supplied some technical advice on the Cosworth water pump and an oil leak update. These technical bulletins will be included in the next issue of CV Magazine.

REGION XVI

During July, Region XVI members gathered at the world famous Palomar Observatory near the San Diego area for a tour of the observatory, a picnic, and a trivia game. Welcome back, Larry Abbott after a five year absence from the club!

The annual Rose Bowl Rallye took place September 28th with George and Claire Harrington acting as Rallymasters. Starting at the world famous Rose Bowl in Pasadena, CA. the event, a combination of Rallye and Olympic Triathlon (an egg toss, the dreaded wet sponge in the bucket game, and holding a cucumber between your knees and hopping fifty or so feet and dropping it in a very small bucket) attracted 20 participants. The First Place Driver and Navigators were Arthur and Carol Crittenden with a PERFECT score! Second, Chris Wheaton, Driver and John Bissot, Navagator. Third Place went to Bill and Arlene Duncan. Everyone gathered at the Round Table Pizza for free pizza and fun after the three hour event.

Bob and Dani Maloy made the long journey to New Bedford but not in #0002! Time ran out to get #0002 road ready, so their Volvo was once again put in service. The events of the trip to New Bedford would require a seperate story all together. Bob's rendition of the 1986 National Round-Up events appears in this issue.

Cosworth owners like yourself tell us that the major roadblock to having an engine rebuilt, or a complete restoration is, in a word, **MONEY**.

We have been working with a major lending institution and there is a good possibility of our being able to offer long term financing (12 -36 months) on major repairs and complete restorations.

The key is YOUR interest in a program of this being available to you for engine rebuilds or complete "remanufacturing" to 1986 quality and performance standards.

With the price of 1987 cars going through the roof, it may make sense to consider having your Cosworth completely rebuilt, from the ground up for about half the cost of a comparable new car.

In these time of rising prices and depreciating values having a "new" car that will appreciate rather than depreciate may make sense to you.

Of course, you would have to qualify for the credit extended.

If you would be interested, let us know. Just drop a line to RAM Engineering. All you have to say is "I'm interested". If there is an ample response we will pursue the idea further.

Interest rates will be substantially below current credit card rates.

P.S. Don't forget the drawing for a 1975 Cosworth Vega, #1937. Have you entered the contest yet? See the last issue of CVOA News for details.

RAM Engineering
Post Office Box 910
El Toro, CA 92630-0910
(714) 582-1503

nor give away the the chassis since the particular vehicle had never been smog certified with the installed equipment and to do so would have opened them up to serious liability and emissions certification problems.

This car has several "one-of-a-kind" features, for a Cosworth Vega:

Automatic transmission
Factory air conditioning
8 way Power seats
Power windows
Power steering
Power Brakes
Pre-production (52mm x2) intake system
Eight quart oil system
MECCA/NASCAR oil filtration system
Thermostatically controlled oil cooler
16 quart, six core radiator
Thermostatically controlled electric fans
Tilt column with all controls operational
Cellular telephone
160 M.P.H. speedometer
G.M. "Economy gauge"
Orange instrumentation lighting
Kenwood 100 watt per channel stereo
with ten speakers and power antenna
Hella 200mm 100 watt driving lights
Aircraft type electronic compass
Specially constructed hi-flow radiator
100 amp alternator with remote regulator

Driving management system in console
includes:
Accelerometer
Trip management system
'G' meter
Specially engineered suspension components
Oil pressure and temperature gauges
Chevrolet Vega factory accessory wind
wings
Electronic cruise control
Dual radar detection equipment
Full Recaro Spectrum interior, including
headliner
Special custom carpets
Automatic inside rear window louvers
which can be adjusted from the drivers
seat and close when the ignition is
off.
Marchal 55/100 watt head lamps
Space saver spare with correct G.M.
CO² filler bottle
Nardi "Cosworth" steering wheel
Hand formed aluminum front engine
drive belt cover

The construction of this car took approximately 2600 hours. All of the wiring is hidden and where passed through a panel, bushings have been installed. In addition, a complete electrical relay and fuse system was engineered and installed to control the circuits to the various electrical and electronic devices. G.M. chassis wiring color codes have been followed closely throughout the installation.

Engraved fuse panel diagrams in the passenger footwell area detail the electrical system. Genuine G.M. parts were utilized wherever possible throughout in keeping with the "factory original" concept.

Even the cruise control is out of sight, mounted in the left inner fender, and only the control cable enters the engine bay. The speedometer cable no longer intrudes into the engine bay, but has been installed inside the car, away from the heat of the

aluminized exhaust header. Note the polished aluminum special pulleys and the relocated alternator and power steering pump, as well as the polished stainless steel heat shield near the power steering pump. The air conditioning compressor is mounted where the alternator formerly was located to shorten the air condition hose runs, and to keep the system isolated as much as possible from the heat of the exhaust system. All mounting brackets had to be hand fabricated for this "one-of-a-kind" Cosworth. No chrome plating is used, and all bright components are polished aluminum or stainless steel.

The exhaust header has been Aluminized* for better heat retention. A redesign of the exhaust system was required with the installation of the automatic transmission, since clearances were substantially

changed underneath the car. A low restriction exhaust system has been installed.

In the suspension department, special springs were wound to compensate for the additional weight of the power components and to improve the car's handling. Yet to be installed are Delrin* bushings mounted in aluminum to further increase the car's cornering potential. The front and rear sway bars were particularly designed for this car to accommodate the complete suspension design concept, and to maximize the potential of the Fulda* VR 205-15-50 tires mounted on Centra* "Type 8" wheels provided by Plus One, Inc. of Santa Ana, CA, the United States importer for Centra Wheels and Fulda* tires.

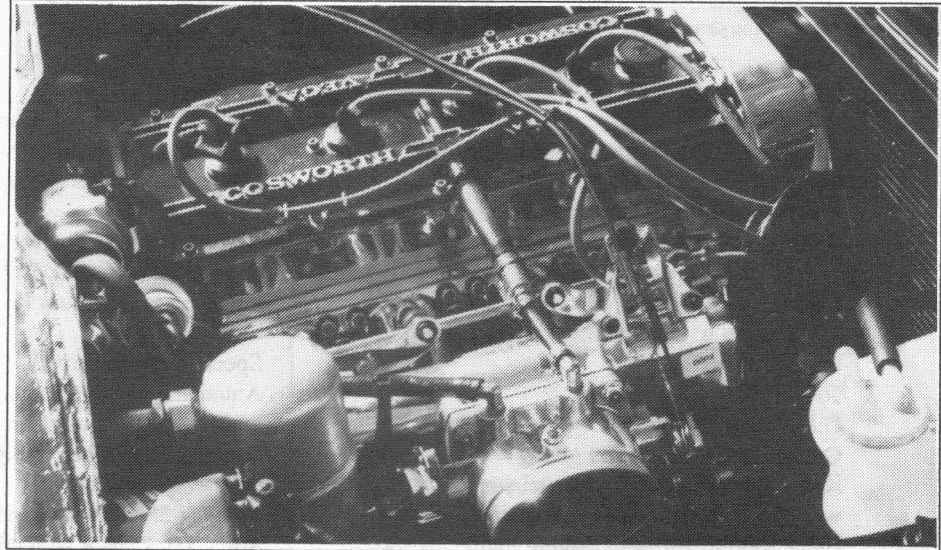
The car is powered by a high performance engine designed and built by RAM

#0002, continued

Engineering. A RAM developed computer simulation program computes an estimated 204 h.p. with 140 lb/ft of torque using the Chevrolet pre-production intake manifold and unleaded gasoline along with other engine modifications. Total displacement has not been revealed. A stock Cosworth Vega develops 110 hp @ 5600 rpm and 107 lb/ft of torque @ 4800 rpm. The transmission is an air cooled G.M. M38 with additional external oil cooling. A nine inch torque convertor has been matched to the power curve of the engine and to the transmission and rear axle gear ratios.

regulator directly in the air stream in the low pressure area just in front of the windshield. In addition, dual 10" thermostatically controlled fans pull masses of cool air through the radiator and into the engine room. To date, we have encountered no difficulty with the distributor

especially for his assistance in preparation of the automatic transmission cooler hard lines, to Sy Schienberg and Kevin McCarthy for their help, and to Pat Brogan, who worked long hours as the project engineer and head wrench during the



A major problem with this, or any Cosworth, is the control of the high underhood temperatures that can destroy the voltage regulator and distributor module. The problem increases with large displacement engines, as they produce more heat. The solution to this was to use a special high temperature alternator of the type used in emergency vehicles with a remotely mounted voltage

module, but remote mounting will prove a simple task should it be required in the future.

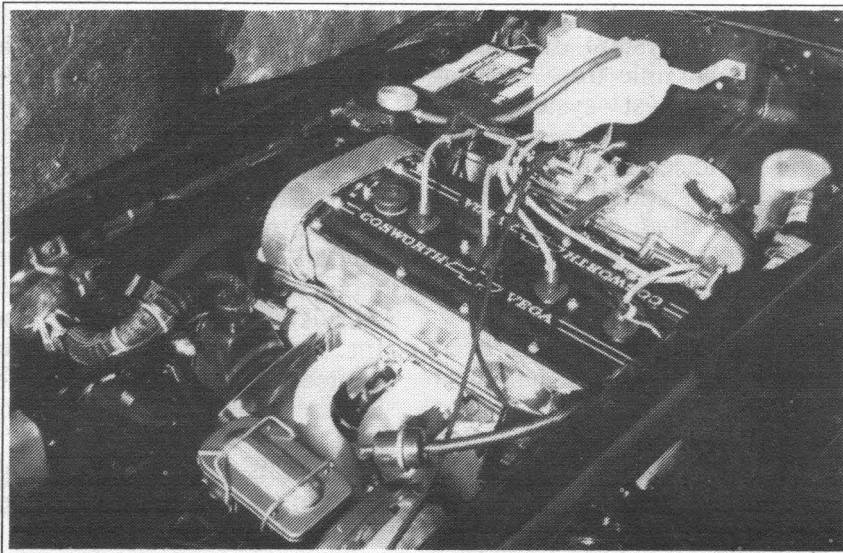
**"145 MPH
top speeds
are probable"**

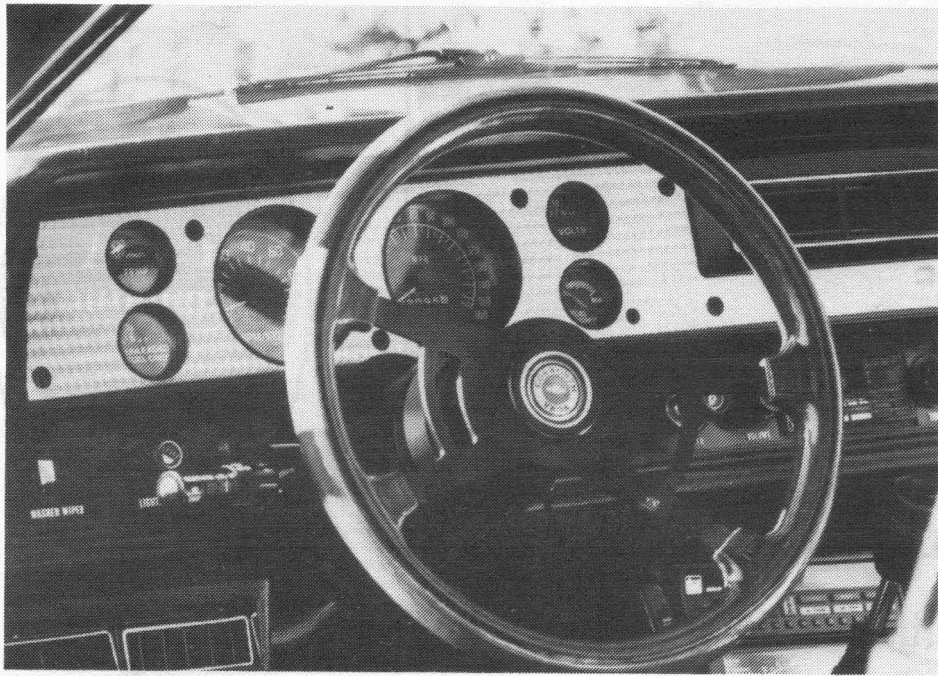
Special thanks go to Neal Willams for fabrication of the many brackets and heat shields used in the car, to Dave Elliot of San Antonio, TX,

installation as well as for the design and fabrication of the many special instrument and chassis wiring harnesses. And finally, to all of our Region XVI members who have encouraged us during the construction of the car over the past four years.

How does it perform? With just 1000 miles on the engine, it's too soon to have accurate figures, but a top speed in the neighborhood of 145 m.p.h. is anticipated with a quarter mile time in the 16's. We'll let you know after the break-in period is complete and we have some documented road test figures.

With this project, we at RAM Engineering had the opportunity to go deeper into every detail of the Cosworth Vega's chassis, electrical, braking, power handling, cooling and other systems that ever before. We learned many of the secrets hidden deep in the body panels, the wiring harnesses, and the hydraulic systems, all to the benefit of future customers.

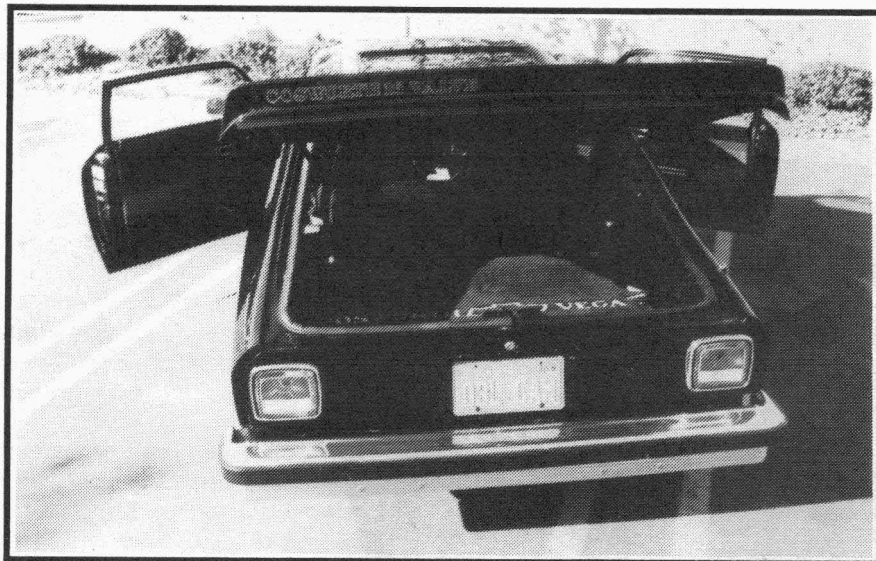




Much care and patience has gone into the construction of this very special Cosworth Vega - we hope you enjoy it as much as we do!

More photos on page 16





1986 Cosworth Vega National Round-Up Attendees

Eric Bluebond, Cherry Hill, NJ #1384

John Chidester, Bowie, MD #0069

Dan Chieppa & Meredith Persson, New Bedford, MA #2517

Bob & Stacy Chin, Bloomington, IN #1253 & #2172

John & Kathy Cowall, Allen Park, MI #0803

Mike Dillon, GA #?

Robert Dorgan, Pittsfield, MA #1715

Cliff & June Eroskey, Euclid, OH #3504

Robert & Diana Felker, Charleston, MO #0289

Tim & Lynn Foy, Fort Wayne, IN #2239 & #3163

Alan & Arlene Friskney, Fort Wayne, IN #3130

Robert Gallahan III, Rockville, MD, #0703

Gregg & Arnie Gibson, Crystal Lake, IL #?

Mark & Becky Grimm, Morton, IL #3028

David & Marcia Haskell, Salem, MA #0762

Patrick & Marion Hayes, Monson, MA #0199, #2481, #3042, #3173

W.S. Hutton, Clarksville, TN #3078

Lewis Jackson, Upper Marlboro, MD #2215

Laurence Johnson, Massapequa, NY #3486

Fred Kieffer, Marietta, GA #3236

Clark & Jean Kirby, Arlington, TX #0078

Dan McNally, Verona, PA #0374, #?

Bob & Dani Maloy, El Toro, CA #0002, #1937

Mark Manjarrez, Region III, #?

Lou & Harriet Marr, Ann Arbor, MI #1000

D. J. Martin, Hillsborough, NC #0444

Keith & Barbara Meiswinkel, Wallkill, NY #0334

Dennis Micek & Rose Guida, Dearborn, MI #?

Hugh Mullen, Hollister, MA #0513

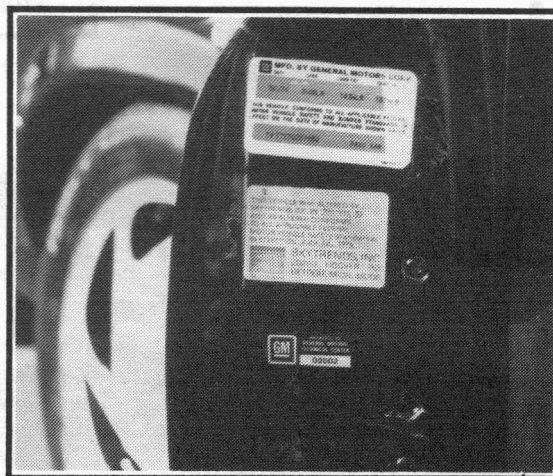
Brian Pecenco, Pawling, NY #0953

Walt Potchatek, Strongsville, OH #1674

Mark & Barbara Rock, Strongsville, OH #0971

Maurice Schechter, Glen Cove, NY #2664

James & Annette Shea, Colchester, CT #0340



Robert & Laurie Spinello, East Northport, NY #2673

Jim & Carol Stallwitz, Pekin, IL #2797

Robert & Ann Syrus, Poland, IN #1823

Fred & Deb Thomas, Des Moines, IA #0155, #1124, #1621, #2129

Robert Tripodi & Diane Christensen, Mineola, NY #2231

Gene & Dave von Gunten, New Windsor, MD #2214

1986 Roundup Champions

CONCOURS

Under 25K - Original

*First Place	Patrick Hayes	1976, #3042
Second Place	John Chidester	1975, #0069
Third Place	Dan Chieppa	1976, #2517

25K -75K

*First Place	Robert Felker	1975, #0289
Second Place	Alan Friskney	1976, #3130
Third Place	James Stallwitz	1976, #2797

75K and Over

*First Place	Brian Pecenco	1975, #0953
Second Place	Eric Bluebond	1975, #1384
Third Place	Not Awarded	

Best Restoration

*First Place	James Shea	1975, #0340
Second Place	Mark Grimm	1976, #3028
Third Place	Bob Spinello	1976, #2673

AUTOCROSS

AutoCross - Stock Class

*First Place	John Cowall	54.366 seconds
Second Place	Mark Rock	55.079 "
Third Place	Dan McNally	55.444 "

AutoCross - Non-Cosworth

*First Place	Walt Potchatek	53.852 seconds
Second Place	Fred Thomas	56.356 "
Third Place	Robert Tripodi	56.539 "

AutoCross - Female Drivers

*First Place	Kathy Cowall	58.841 seconds
Second Place	Dani Maloy	59.450 "
Third Place	Diane Christensen	59.716 "

*Award Plaques donated by RAM Engineering

1986 Roundup Champions

Special Awards

Outstanding Regional Directors:

Bob Chin
Clark Kirby
Bob Maloy

Best Regional Newsletter:

Bob Maloy

*Best Engineered Cosworth:

Keith Meiswinkel

*Most Unusual Cosworth:

Dan McNally (Customized by a guardrail enroute)

*People's Choice Cosworth:

Patrick Hayes

Lowest Mileage:

Patrick Hayes - 788 miles

Highest Mileage:

Brian Pecenco - 145K + miles

Lowest Dash Number:

John Chidester - #0069

Highest Dash Number:

Cliff Eroskey - #3504

Farthest Driven to Round-Up (Cosworth):

Bob Felker (2000 + miles)

*Fastest Time of the Day:

Mark Grimm

*Grand Champion:

Mark Grimm

Road Rally

Lewis Jackson
Walt Potchatek

*Clark Kirby received a special award for his years of service to the club.
Bob Maloy made the presentation.

Danny Chieppa and Meredith Persson received a plaque for hosting the 1986 Round-Up.

*Award Plaques Donated by RAM ENGINEERING

Classified

1976 COSWORTH VEGA #3099. Firethorn, buckskin cloth (seats appear to have never been sat on!), brand, spankin' new 42DCOE Webers (will also include complete EFI), 120 mph and 24 mpg capability (not necessarily at the same time), 5 speed with 4.10 posi, swing-outs, aux. light pkg., rear defogger, skytrend sunroof with sticker (fac.), dig. stereo with Kenwood speakers in custom boxes, Goodyear ST's plus 2 nose fenders, 1 right door with beige insert, 2 mint beige door panels, orig. engine decal, copy of factory invoice, owner-n-service manual (owner manual virginal). Can get AM-FM cassette original Delco radio for extra \$\$\$. 3rd place winner in over 75K class at 1985 Round-Up. New dash bezel goes with car. This is the Cosworth that's been parked in the driveway of your dreams! \$3,150.00. Must Sell!! Need money for new T/A! John Collins, (800) 336-0423, X250 M-F 10am-8pm, (703) 255-2301 (H). Vienna, Va.

Koni front shock absorbers, less than 100 miles, \$50.00, DOBI handling kit, includes; 1 1/8" front sway bar, 7/8" rear sway bar, front and rear coil springs, and urethane bushing sway bar links, \$200.00. Mike Dillon, (404) 920-0097.

FOR SALE: WHEELS AND TIRES

4 New Pirelli P-7's 205VR-13's with less than 20 miles, mounted on perfect refinished Cosworth factory wheels, replacement cost, about \$1800.00, all for just \$1000.00 O.B.O. plus freight. Bob Maloy, (714) 582-1503

4 NEW, never used 13" Solo I-II or Autocross special tread tires mounted on very good (not excellent cosmetics) Cosworth rims. These tires are DOT approved for the street, and will turn your Cos into an autocross terror. Tires are shaved, balanced in three planes and mounted. These tires are recaps using the special BANDAG process used at the Bondurant School of High Performance Driving on racing cars. All for just \$600.00 O.B.O., plus freight. Bob Maloy, (714) 582-1503

4 near new original equipment Goodyear BR70/13 tires on perfect factory '76 Cosworth wheels. Probably the only excellent set not on a car, and for sale. \$600.00 plus freight. Contact Bob Maloy, (714) 582-1503, we accept credit cards.

1975 Cosworth Vega wheels, 1 set; 4.11:1 Positraction rear end from 1976 Cosworth, plus misc. parts. Call for needs. Tom Pilcher (703) 451-1302.

PARTS AND MISCELLEANOUS

4 Pistons for your Cosworth. 10.5:1 compression, .070 oversize. No detonation! \$275.00 Call Slim, VA (804) 497-4960 before 9 PM E.S.T.

New: CV fitted block, cylinder heads, cam carriers, covers, original dash bezels, stripe kits, and much more.

Used: Fuel injection parts, positraction units engine parts, and much more. Must sell ASAP. Jim Dingell, (800) 336-0423 ext 257(W) or (703) 281-0078 (H)

Speed Pro Sealed Power piston ring set. 3.501 diameter standard bore for steel sleeved Cosworths. 1/16 compression ring width and 3/16th oil control ring width. \$25.00. Bob Chin (812)339-0838

PARTS WANTED

Complete Cosworth Vega with clean body and still stock. Price must be realistic. Please send photos (returnable) VIN#, dash#, miles and detailed description. Steve Larson, Palatine, IL

(312) 934-3672 (H)

MORE ADS ON PAGE 20

ADVERTISING POLICY

Business ads:

\$25 for up to 1/4 page
\$50 for up to 1/2 page
\$100 for a full page

Classified ads:

CVOA members shall be limited to one free 30 word ad per issue. An additional thirty words for CVOA members shall be \$5 extra. Photos are \$10 extra.

Classified ads:

Non-members will be charged \$15 for each 30 word ad per issue and \$1 for each additional word. Photos are \$10 extra.

**ADS MUST BE PREPAID AND
RECEIVED BY ISSUE DEADLINE
November 22, 1986**

The CVOA is not responsible for any advertised product and/or service. However, recurrence of complaints may result in denial of advertising space in the *COSWORTH VEGA MAGAZINE*.

1975 SUPERCHARGED COSWORTH VEGA II
Featured in January '86 Cosworth Vega Magazine. 3 years in making and \$20,000 plus invested, too many extras to list. \$9500 or best cash offer. Larry Brown, (213)376-8450

Classified Advertisements

1975 COSWORTH VEGA #1117. Black, black cloth, 78,000 miles, solid body, brand new Eagle NCT's, new clutch, tinted glass, AM/FM factory stereo, rear speaker, defogger, aux. light package, Hutton Webers. \$2700. Rob Maroc, Hammond, IN 46324. (219) 931-7201.

1975 COSWORTH VEGA #1253. Black, black cloth, 26,000 miles. Posi, rear speaker, defogger, AM/FM factory stereo, good dash bezel, original muffler, floor mats, aux. lighting package, owner's packet and build sheet. \$4300 or best offer. Bob Chin, (812) 339-0838.

1975 COSWORTH VEGA #0824. Black with black and white cloth. Front and rear spoilers, specially built engine with Hutton Webers. Stock cams in car but Hutton BD3 cams go too! Driven very little in the past three years. Wife says the Cos must go! Asking \$4500 or make me an offer I can't refuse. Ben Terwillegar, Hamilton, OH 45013. (513) 868-6582.

1975 COSWORTH VEGA #1257. Black, black vinyl. 40,000 miles, good condition, AM/FM stereo, rear defogger. \$2800. Bob Balmes, (312) 593-1064.

1975 COSWORTH VEGA #1593. Black, black vinyl. 482 MILES. All options available when purchased. Absolutely perfect. Stored since new. Call Gus Bartoli or Dick Baumhauer, (301) 663-4904 (H), (304) 535-6371 (W).

1976 COSWORTH VEGA #3061. High miles, good condition. 5 speed. Must see! Only \$1950. Charles Doran, Fremont, CA (415) 656-5209 evenings.

1976 COSWORTH VEGA #2227. Professionally turbocharged. Special HD radiator, engine oil cooler. 5 speed, swing-out windows, black on black. 33,000 miles, very clean. No wrecks or rust. \$4600.00 or best offer. Tim Kingston, Lancaster, CA 93536 (805) 947-4980.

1975 COSWORTH VEGA #0030. Sunroof, all options, all original, 25,000 miles. Stored last 3 years. Must Sell. Will consider any reasonable offer. Jay Krasne, 12604 Clendenning Dr., Tampa, FL 33624. (813) 963-1873.

1975 COSWORTH VEGA #1244. Black, white interior, positraction, AM-FM factory radio, swing-out windows, rear defogger, 4 speed, good condition, 80,000 miles, all original. \$3,000.00. Jeff Dooley, 334-A Faller Dr., New Milford, NJ 07646.

Classified ads for the next issue
must be received no later than
NOVEMBER 22, 1986

COSWORTH  **VEGA**

Service Facilities Listings

Telephone *HOTLINE* Service

CARL RUMBERGER — FUEL and IGNITION SYSTEMS

**Performance
Dynamics**

DIST. AND CARB MODIFICATIONS • PERFORMANCE TUNING
2346 TOWER AVE. • SACRAMENTO, CA 95825 • (916) 488-3114

Hi Torque Specialists

Builders of Truly Unique Cosworths
up to 2.6 liters - 4 wheel disc with/without power
Power Steering Conventional/Variable Ratio
with/without air conditioning
Perfectionists at cyl. head restoration/modification
Bumper to Bumper restoration/modification
New process for Cosworth wheels
602-944-6131 Gary Hill
Phoenix, AZ

Technical assistance always available.

GRIMM CHEVROLET, INC. MORTON, ILLINOIS 61550

Cosworth Parts and Service

Ask for Mark Grimm

(309) 263-2241

We stock over \$7000. in Cosworth Parts
10% Discount to C.V.O.A. members - UPS Shipping

Hutton Motor Engineering

P.O. Box 3333

Clarksville, TN 37040

Bill Hutton (615) 648-3333

Specializing in High Performance Cosworth of
England Pistons, and expert motor and cylinder
head work, Same day shipping on most stock C-V
parts. We welcome your calls for technical
assistance.

RAM ENGINEERING

AUTOMOTIVE EXCELLENCE

POST OFFICE BOX 910,

EL TORO, CALIFORNIA 92630

(714) 582-1503

Robert A. Maloy, *Proprietor*

SOLO RULES

THERE SHALL BE FOUR CLASS FOR CVOA SPEED EVENTS. THEY ARE AS FOLLOWS:

A. STOCK CLASS

1. ENGINE

- a. Engine must have stock compression (170 p.s.i.).
- b. Stock Fuel Injection - no adjusting knobs on dash or under hood.
- c. Stock injector installed and stock air filter in place.
- d. Stock exhaust header.
- e. Stock spark plugs or wires or their exact equivalent in replacement parts.
- f. Stock interior engine parts i.e. pistons, cams, crankshaft, cylinder head.

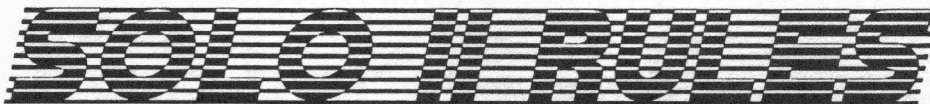
2. DRIVETRAIN AND EXHAUST

- a. Stock exhaust system including functional catalytic converter or their exact equivalent in replacement parts.
- b. Stock rear axle ratio, i.e. 4.10 rear ends ONLY on 76 with 5 speed transmissions.
- c. Positraction is allowed since it was a factory installed option.
- d. Stock shock absorbers or exact equivalent.
- e. Stock sway bars.
- f. Stock springs or exact equivalent. No cut springs which lower the car will be allowed in this class, but you may adjust them to the limits of the stock adjustment.
- g. Must have stock camber and caster on wheel alignment.
- h. Tire may be any brand, but must be the stock size or equivalent.
- i. Any tire pressure that the tire will safely bear will be allowed.

3. BODY

- a. Fiberglass bumpers and body panels will not be allowed as they reduce weight.
- b. any interior cosmetic items will be allowed i.e., consoles, secured stereo speakers, air conditioning, etc.
- c. Rear window louvers will be allowed as they do not affect performance or handling in any way.
- d. Front and rear spoilers will be allowed only if event speeds do not reach 60 mph, and straightaway lengths do not exceed 1/10 mile. At slower speeds spoilers have no aerodynamic effect.

COSWORTH VEGA OWNERS ASSOCIATION



MODIFIED CLASS

1. ENGINE AND DRIVETRAIN

a. Only two of the following performance items will be allowed before being bumped to Unlimited class.

Hot plugs

Above stock compression for any reason

Racing camshafts

Reworked cylinder head

High performance pistons

Non-stock crankshaft

Adjustable fuel injection

Turbocharging or supercharging

High performance headers

Non-functional or no catalytic converter

High capacity fuel pumps

Straight pipes on non-muffled exhausts

Non-Stock rear axle ratios

Non-stock tires (no racing tires allowed in this class)

Non-stock camber or caster

Non-stock sway bars

Fender flairs allowing wider tires

Fiberglass body panels or bumpers

Spoilers only if speeds exceed 60 mph or if straightaways exceed 1/10 mile.

UNLIMITED CLASS COSWORTH VEGAS

1. Anything is allowed

2. All Cosworths with more than two performance modifications (see Modified rules, above) will be included in this class.

UNLIMITED CLASS - NOT COSWORTH VEGA

1. Any car allowed as long as it is NOT a Cosworth Vega.

2. This class can compete for trophies within class only, but not for top time of day trophy.

We are proud to announce.....

The Cosworth Vega Fuel Injection Book, yes, book, because it contains **140 pages of all new, never before released information on the Cosworth fuel injection system.**

Sections by Bendix and G.M. engineers who helped design the system, new diagnostic tools for determining the condition of your temperature sensors in actual operating conditions, not just "cold" in the car, how to exactly set the throttle position switch, a common cause of poor performance, how to quickly check out the MAP sensor without disconnecting the computer, and much, much more. Information that has never been released to the public, now available in this massive volume of information.

Profusely illustrated with photographs, diagrams, charts and graphs this book has been five years in compilation and production. Edited by Robert A. Maloy, Ph.D., S.A.E., the recognized authority on the Cosworth fuel injection system, and based on eleven years of practical working experience with the system.

This book contains systems diagrams, wiring diagrams, explanations of how each part of the system interrelates to every other part of the system, how to "set up" your EFI for the best performance as well as economy.

Written in easy to understand language, no Cosworth Vega owner should be without this reference book. You can save hundreds of dollars on repairs and hours of time by being able to correctly identify a problem, rather than "fishing" for a solution.

This book is spiral bound so you can lay it flat while using it as a handy reference.

If you're serious about your Cosworth, you need this book.

LIMITED AVAILABILITY

Just \$24.95, includes shipping

RAM Engineering
P.O. Box 910
El Toro, CA 92630-0910

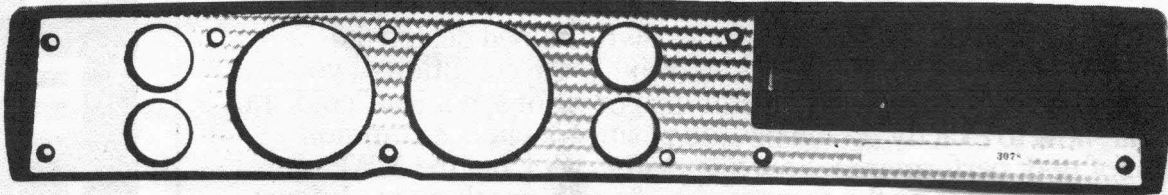
or call (714) 582-1503

*we accept VISA, Master Card, and American Express Cards
or you may order with a money order, personal check
or C.O.D. if you prefer.*

**F
U
E
L
I
N
J
E
C
T
I
O
N**

**HUTTON
MOTOR ENGINEERING**

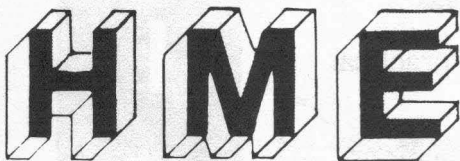
THANKS FOR YOUR BEZEL DEPOSITS



NEW DASH BEZELS ARE NOW ON ORDER

Expected Delivery: October

Some units still available.



**: DEDICATED TO PRESERVING
YOUR COSWORTH**

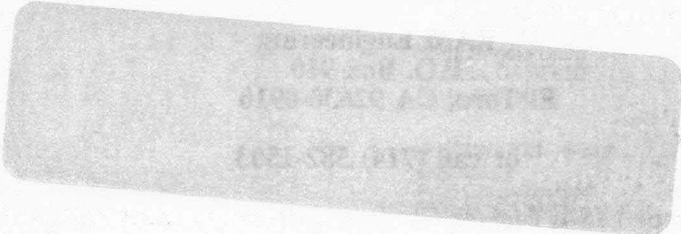
P.O. BOX 3333, 1815 MADISON AVE. • CLARKSVILLE, TENNESSEE 37043-3333
TELEPHONE: (615) 648-3333

**Cosworth
Vega** MAGAZINE

OFFICIAL PUBLICATION OF THE COSWORTH VEGA OWNERS ASSOCIATION

P.O. Box 1783, Bloomington, IN 47402

FIRST CLASS MAIL
U.S. POSTAGE
PAID
PERMIT #171
Bloomington, IN 47401



**FIRST CLASS
MAIL**

**POSTMASTER: Notify sender
of change of address.**