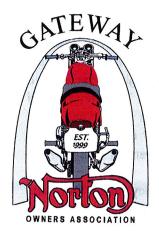
## Gateway Norton Owners News #33



# "To Promote the Use and Pride of Norton Motorcycle Ownership"

Compiled by Marty and Peggy Dupree
September 2007





### Important Notice

If you did not received an e-mail from me last week, please e-mail me so I can update my records. Thanks, Marty madx2@att.net



#### PRESIDENT'S COLUMN

Ernie Trakas

#### COME & GONE

There is a scene about halfway through the first Godfather movie where Marlon Brando's character, Don Vito Corleone meets with the heads of the other five organized crime families. At this point in the movie, the Don has recovered from the attempt to assassinate him, and his oldest son, along with the son of another crime boss is dead, and the mob wants peace. Don Vito, seated at the table, rises, looks around the room, opens his arms and says, "How did things ever get this far?" Well, that's how I sometimes feel about riding. Not that I do so much, mind you. No, it's because I hardly do any at all!

Motorcycling has been one of my passions for a long time. For years I'd stretch summer into fall, fall into winter on the seat of a bike. There was a time when everything revolved around something having to do with, or on a motorcycle. Remember when you'd look for any excuse to take your bike out? As I write this, summer has come and gone, and I can count the number of rides I've taken on one hand. Now, I could say, I don't have the time, or I don't make the time... but, the truth is I don't take the time.

It's not just me either. My long time friend and racing partner Don, yea that Don, suffers from the same malaise. We were talking the other day and he mentioned that he had put more gas in his lawnmower this summer than in his bike. How many of us can say the same?

So, as Don Vito so aptly put it, how did it ever come to this? Family and job usually come first, as they should, but kids and career have always been there and never stopped me before.

In my garage sit an R100S and a 907ie, both road worthy and ready. The bikes regularly move visitors to flights of fancy, but apparently not me so much anymore. A couple of weeks ago I took the Commando out for the first time this summer. It was August and I was up on the Norton for the first time all year! I needed to get the bike inspected. It's August and I was just getting around to having it inspected! Not all that long ago I'd take late night-all night rides on the Commando. Sweet, moonlit two-lanes, all to myself, free of all traffic. And, when I had my full, I'd stop for coffee, eggs and bacon at the Eat Rite Diner before heading home to a shower and work. Sleep held no sway over the full moon then. Or, how about Sunday morning meet ups with the boys followed by a hundred miles of speed driven clear-headedness. How did things ever get this far?

I blame the absence of planned playtime. These days, parents plan play dates for their elementary school-aged children, but we take little time to do the same. I'm not sure, but I'd bet as a club we haven't done one ride all summer. At least I don't think we have, and I know I didn't take the time if we did. So, I suggest we consider a set, scheduled monthly club ride. The same weekend each month, at the same meet up spot. Whoever shows, great. Whoever doesn't, we'll miss 'em. After that, whatever and wherever is fine with me.

Ride 'em, don't hide 'em.

El Presidente'

#### Club Campout!!!!

I know this is short notice but Rocky Top will be held September 28-30 at the same place as the last 2 years, Council Bluffs Recreation Area. This is primitive camping (no electricity or water at each site), primitive toilets (non-flushing) and the showers will be closed. We hope this doesn't discourage anyone because it really is a beautiful place and we have had a blast the other times. I will be cooking up dinner for everyone on Saturday so even if you can't come for the whole weekend, take time to ride down for dinner!! If dinner isn't enough of a reason to get you to attend come see what Mike (Evel Knievel) French attempts to jump!!!! I will be sending an email next week with more information. Make sure I have your e-mail address!! If you don't have email and plan to attend, call me. Marty 636-398-4049

Basic directions: from St. Louis, take Highway 21 (Tesson Ferry) to Potosi. Turn right on Hwy 8, go  $\frac{1}{4}$  mile turn left on HwyP which dead ends at Hwy C. Turn right. Go about 200 yards and turn left on Hwy DD. 7-8 miles the highway widens. Campground is on left. Note: it takes about 2-2 $\frac{1}{2}$  hours from St. Louis

#### Everyone's dues were due on July 1.

Please look at your newsletter envelope for YOUR expiration date. It is the number after your name. If it reads (7-07), you are in arrears. Please send Joe Jump a check made out to him, or cash, for your past dues @ \$5 per year. Thank you very much.

#### CALENDAR OF EVENTS

Sep. 15-16 British Car and Cycle Tour and Show at Creve Coeur Lake.

www.stlouismaclub.com (go to events page for details)

Sep. 28-30 Rocky Top Club Campout. See page 2 for details.

Oct. 14 Fall Colors Ride. See below for details.

Oct. 19-21: Barber Vintage Festival. <a href="https://www.barbermuseum.org">www.barbermuseum.org</a> for details.

Winter: Get-together at club member John Eiler's. Tell us when, John, and we'll

be there.

#### FALL COLORS RIDE

(I received this e-mail from John Wuebbeling so I will quote it directly.)

Hi Marty. Ruth and I are planning to host the Fall Colors Ride again this year, October 14, depending on Rocky Top and how many folks are going to the Barber Vintage Days, October 19 through 21. I am going to check with Dale Knaus because he runs the motorcycle show in Louisiana around those dates and I was thinking it would be good to at least stop by as a group and check it out.

We have been lucky with the weather except last year it was cloudy with light rain and the fall colors were not very good either. I got some feedback that the previous rides were a bit fast and I was going to slow it down last year, but with the weather not cooperating, I picked up the pace and skipped a couple of good stops. Having said that, we will cancel the ride if the weather is crappy. We will likely start out at the St. Peters Hardee's, Hwy. 70 and 79 around 9am. Similar route as previous years and we may cross on the Winfield Ferry again or stay on the Missouri side, depending on weather, then ride back to my place for food and drinks. Hope to see you and our other friends this fall. Cheers. John W For info updates, call me at 636-332-9990.

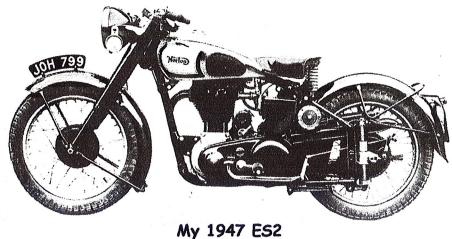
#### WELCOME TO OUR NEW MEMBERS!!!

We have acquired 4 new members this year. They are: Carl Bardy, Bill Henkel, and father and son Frank and John Murray. Welcome guys. Please feel free to write a little something about you and your bikes as an "ice breaker" for the newsletter. Pictures are always appreciated. Of course, this applies to everyone reading this.

#### McNAIR PARK MOTORCYCLE SHOW

Steve Hurst reported that three club members won trophies for their bikes: John Wuebbeling for his Norton, Monty Parsons for his BSA, Jeff Hurst for his Kawasaki. The icing on the cake was our club won the trophy for "Club Participation." Steve says he will bring it to the next club function.

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Marty Dupree

Since very little was submitted for the newsletter and since we have several new members (and several old members with poor memories) I thought I would retell my tale of woe with this machine. These were printed in the EMU Epicurean in 1998 and I apologize to members who have read this before. As you read this keep in mind that this Norton was "despatched" from England on Sept. 2, 1947 to Fergoda's Motorcycle shop in California.

#### Installment #1 - June 1998

For you who don't know (or have forgotten) let me recap the history of this bike. In 1947, Norton produced 10 single cylinder models of which 6 were road going motorcycles. They were: 16H, 490 cc S.V., Big 4, 633 cc S.V., Model 18, 490 cc O.H.V., ES2, 490 cc O.H.V., Model 30, 490 cc O.H.C., and the Model 40, 348 cc O.H.C. The side valve cycles and the Model 18 were rigid framed while the ES2 and overhead cam models had plunger rear All of the models had the new suspensions. Roadholder telescopic forks with hydraulic damping and shared some other components: gearbox, (with different ratios of course), battery carrier, headlight, tail light, seat, front fender and stays to name a few. The model specific differences become apparent as you go up the price range. The plunger suspension requires different rear mudguard stays, toolbox, and centerstand so my ES2 shares cycle parts with the top of the line overhead camshaft "International".

It was 1992 and I was out of town when I heard about this '47 ES2. It was located in O'Fallon, IL (about 2 miles from Gary Hollowich's house) and was on my way home. I called the number and got the owner's son. "Dad's not home but yes, you can stop by and look at it." The frame, motor,

transmission and rear wheel were together outside leaning up against the house under a sheet of plastic. The rest of the parts were in the basement but I didn't feel comfortable going in with the parents not home so I said I would call his father that evening.

The owner said he bought it in his college days (late 60's) "back East". He disassembled it in his basement in the 70's with the intention of restoring it. The restoration got sidetracked when he needed to add some rooms for his growing family so he took the "big lump" outside and covered it up.

"It's all there in the basement", he said so we agreed on a price (\$200) and a day when my son and I could pick it up. When we arrived in my truck we loaded the "big lump" first then started bringing up pieces from the basement. It became obvious that "it's all there" meant the things he had were all there...not everything that would constitute a complete and correct bike.

When I got home and was able to take inventory this is what I found.

Missing items included: 0-80mph Smith's chronometric speedometer, instrument panel, handle bars, some handle bar controls, tool box, solo seat, battery carrier, center stand, gas tank knee pads, voltage regulator, chain guard, rear license plate holder and stop lamp.

Incorrect items included: aluminum fenders with home made flat bar stock fender stays, a goofy looking dual seat, a chain guard from a Schwinn bicycle, a Triumph muffler, a late 60's Lucas stop light with a 1973 Illinois license plate attached to what appeared to be a piece of plastic milk bottle, a Dellorto SS1 carburetor with bellmouth velocity stack, and a broken gear shift lever with a rod welded on.

Correct items included: Lucas mag/dyno combination, Lucas Altette horn, Lucas 8" headlight (with broken lens), and the Amal AU 276 carburetor.

Finding so many things incorrect and missing did bum me out a little but for \$200 I figured I couldn't go wrong. This project is the perfect example why you should find the most complete, correct motorcycle you can afford. For me, that's about \$200.

I tried about 2 years to find the genuine parts that I needed but had very little luck. I joined the International Norton Owner's Club and placed ads in their newsletter as well as the EMU Epicurean but received no replies. I did find a man in Florida with an 8" headlight lens, EMU advertiser Baxter Cycle had a toolbox, a guy in Minneapolis/St. Paul traced his instrument panel that I have since had fabricated, and Accessory Mart had several things including NOS clutch and brake levers, and a used gear change lever. I have ordered many other parts through the years that I will go into in future articles.

My original "big plan" was to have it on the road for its 50th birthday (1997) but I obviously failed. The new "big plan" is to shoot for this year, as it is

Norton's 100th anniversary. I figured if I was going to make this goal I needed to get off my bum.

In February, my first step, with the help of my brother-in-law, was logging onto the Internet. We found the Norton Owner's Club (in England) website. When I found out they would accept my personal check in U. S. dollars (a big plus) I wrote down the information and joined.

Next, I got a printout of recommended dealers and sent identical letters to 8 companies that handled single cylinder stuff requesting a battery carrier and centerstand. (By the way, if you write an overseas company and require a response you need to send along an International Reply Coupon. This will pay first class postage to any Universal Postal Union member country. They currently (1998) cost \$1.05 and are available at full service post offices.) Of the 8 only 3 responded and of those only 1, Export Spares, had the parts I wanted...and genuine Norton to boot. They also accepted Visa which is the way to go if you feel comfortable sending your number through the mail. The parts arrived in short order and were the last of the cycle parts I needed.

In March I purchased several things from Dragon Motorcycle Services in England. I already had their price list and since the prices were good until April '98 I had to get cracking. It turns out they don't accept credit cards and require payment by check, in pounds sterling, drawn on a U.K. bank. Needless to say, it was quite a hassle. After placing my order they wrote back with a grand total including estimated shipping. My bank, Mercantile, had to get this check from the St. Louis main office, which took 3 days, and had a service charge of \$15.50 over and above the monetary conversion.

My next step was to convince Mike French that we should swap labor (he'll do the bike, I'll work on his house) and to take the rolling chassis and motor to his basement.

#### Installment #2 - October 1998

Mike made quick work of dismantling the bike and determined the frame wasn't bent or twisted and

that no brazes were cracked. To prepare it for powder coating I took it, the motor mounts and

clamp-on side stand to my brother-in-law Tim to be bead blasted.

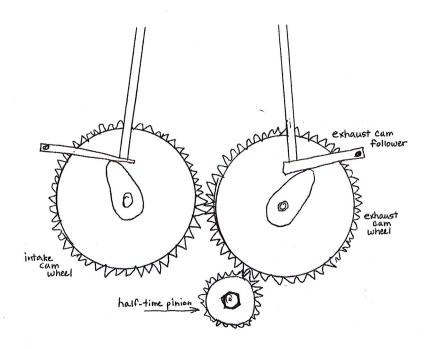
I didn't hear from him for 3 weeks so I gave him a "How's it going?" phone call. "Almost done, but I can't find your motor mounts." Visions of another batch of letters to England flashed through my head but he has since found them. Using his bead blaster I have been able to strip and prime most of the sheet metal so those parts are protected and awaiting the trial assembly stage before I paint them.

When I acquired the bike, the engine was "frozen" from sitting outside many years. I had been

squirting "Liquid Wrench" into the cylinder in preparation for the day it would be disassembled. Mike called to say he had torn down the motor and had "good news/bad news".

The "good news" was, surprisingly, the piston top said "STD" which meant I could get a .20 over replacement and move on to the "bad news". When I asked what it was he suggested I come over to see for myself.

A little background information is needed now. Beneath the timing cover the mechanics look like this:



The half-time pinion is taper fit on the crankshaft and drives the exhaust cam wheel. The oil pump worm is a one piece affair with "nut flats" machined on it. This is tapped with left hand threads and screwed onto the end of the crank, securing the half-time pinion. Someone in this engine's past apparently tried to take it off not knowing it had L.H. threads and broke off 3 of the 6 nut flats. Mike had to chisel it off so it will have to be replaced. Bad news #1.

Bad news #2 was that the splined, pressed fit, pivot spindle of the exhaust cam follower had

gotten sloppy which caused it to "wallow". This scored the face of the follower. If I can't find a replacement item I'll have it refaced and have a new spindle machined and fitted.

- #3. The cam wheels and cam lobes are also machined from one piece of metal. The wallowing cam follower caused the outer edge of the cam lobe to wear badly. I'm looking for a new one but may have to have this one built-up and reprofiled.
- #4. The oil pump was seized. The good news is Mike soaked it in parts cleaner for a couple of days, freeing it up. It appears to be serviceable.

- #5. The exhaust valve guide was worn and unusable. Both sets of guides, valves and valve springs will be replaced.
- #6. Two of the bottom fins of the cast iron heads were broken off. One is gone but the other was secured to the one above it with a wood screw. Does anyone have a scrap cast iron barrel or head from which I can take a "donor fin"?
- #7. The main bearings were shot. (More about this later.) The good news was the big end bearing had apparently been replaced (judging by the hammer blows on the flywheel) and was still good.
- #8. When Mike showed me the piston I thought it looked different from the pictures in the manuals...taller crown and deeper valve cutouts. The standard bore for the ES2 is 79mm with .20, .40, and .60 thousandths oversized pistons available. This monstrosity measured 84.5 mm!! This means I need a piston and cylinder liner. Inside the piston are the numbers AE 13052, K61, 402, AM. Does anyone know for what it was originally intended?
- #9. Fearing a standard ES2 liner would be too small, I e-mailed RGM Motors in England. I explained my situation and asked for the outside diameter of the liner they sell. Their answer was "too small". They said they had one that measured 85mm (for the model "Big 4", a 600cc side valve) that would have to be shortened and then an oversized (82mm) piston would be used. Not wanting to open that can of worms, I decided to turn it over to Gary Hollowich. He has found a suitable oversized liner and will install it.

To cheer myself up I decided to source out the main bearings. I needed two roller bearings (one

for each side) and one ball bearing (for the drive side). These bearings measure 2-1/4" outside diameter, 1" inside diameter, and 5/8" thick. "Great!" I thought. "Common sizes. These shouldn't be too expensive or hard to find."

I called Accessory Mart in Cincinnati and learned they wanted \$26.84 for the ball bearing and \$117.94 each for the rollers. Figuring I could do better at a local bearing supply house I made several calls only to find out that metric sizes are no problem, imperial sizes are a different story.

I went to Bruening Bearings, located in Earth City. They had the ball bearing for \$22.60. The sales lady, furiously punching the computer keys, stated the rollers were available but would have to be ordered in. "How much?" I asked. More key punching..."Oh, this can't be right!" she said. "\$346 each!" I asked if they were for the space shuttle and she assured me they were not. "I'll get back with you if I can't find them elsewhere." I didn't go back.

After seeing an ad in Classic Bike stating "Cheapest bearing prices in the UK" I contacted the company, Draganfly Motorcycles, and have since acquired all three bearings for \$84.16 and \$12 of that was shipping. Finally, some real good news.

I ordered the complete piston, valves, guides, valve springs and many other parts from RGM Motors on August 26<sup>th</sup>, 1998. They shipped the order on Sept. 9th and I received it Sept. 14th!

#### Installment #3 - March 2001 The Downhill Slide

I'm sure many of you are wondering why this restoration has taken 2-1/2 years to get to this point. As you can tell from the last 2 installments this bike was purchased as an incomplete basket case. Restoring such an old British machine has many obstacles. Since there is not an overabundance of plunger framed Norton's in the U.S., detailed close-up pictures are hard to come by. Used parts are scarce and over-priced. People with spares are reluctant to part with them and I don't blame them. When I did find spare parts it

entailed sending e-mails and letters to England. The lag time between ordering and arrival was sometimes a month or more. All of the reproduction sheet metal parts I bought had to be drilled, tweaked or in some cases partially refabricated. Little jobs that we thought would take 30 minutes took hours. But ultimately the biggest time delay was me.

When I took the bike to Mike's I told him I wanted to help as much as possible so I could learn what makes the old girl tick. I want to be able to do my own scheduled maintenance and any "roadside" maintenance if in the unlikely event that she doesn't get me home. I mean, what are the odds that a 56-year-old British machine with Lucas electrics would fail to complete its duly appointed rounds? With our incompatible work schedules and living 45 minutes apart meant there was little time that we could work on it together. Mike waited for my help, but finally had to do it by himself. Anyway, let's get caught up with where the project is at right now.

Many of the fasteners were trashed. If a pair of pliers would fit the nut or bolt that's what had been used to remove them. Since I intend to ride this classic, I decided to replace them with stainless steel items. Andy Molnar in England was my source because he offers price lists for specific bikes. It is very convenient to look down the list and order, by description, the exact item you need. I purchased all the necessary nuts, bolts, studs, and washers for the forks, fenders, engine, and some of the gearbox. Each item is bagged and numbered so you don't have to strain your brain trying to figure out what goes where. With all of the different thread pitches used back then it can be very confusing.

Once I acquired some of the engine parts, Mike was able to start the assembly. The valves, springs and guides were probably the easiest, most straightforward part of the whole restoration. Since the 18 pound cast iron head was missing a fin, Mike made one the right size and shape and brazed it along with the two broken fins in place.

After replacing the main bearings, the crank was set in and the cases bolted together. When the end float was measured it required some shimming. After the cases were split and correctly shimmed they were reassembled and secured with new stainless steel crank case study and nuts.

I bought an oil pump worm gear from Accessory Mart to replace the one Mike had to chisel off. It appeared to be left over from World War II because it was unused and covered in cosmolene. I suspect there are thousands of them around the former British Empire but that didn't make it cheap.

I couldn't find a replacement exhaust cam follower so I turned it and the barrel over to Gary Hollowich. He machined a spindle from tool steel and fitted it into the follower. He milled the face so it is good as new. To find a suitable cylinder liner, Gary turned to Cincinnati Sleeve Corporation. Since the barrel had been bored so much the liner choices were pretty slim. Finding one at least 84.5 mm o.d., less than 79 mm i.d. and tall enough wasn't easy. He consulted their catalog and one for a Massey-Ferguson tractor was selected, turned to the correct dimensions and installed in the barrel.

What to do about the worn exhaust cam wheel had me scratching my head. I knew that the model 16H (490 cc side valve) shared some crank case parts with my 490 cc o.h.v. engine. Since 16H parts are plentiful (more left over War stuff) I checked the specs and it revealed different valve timing for the two models. Drat! They were not interchangeable.

To complicate matters, for 1947 only, Norton employed "quietening ramps" to the cams of some overhead valve engines. Where normal lobes are symmetrically shaped, the '47 engines with a "Q" after their serial numbers have lobes with a "bulge" on the leading edge. Theoretically, this eases the cam follower up the lobe making it more mechanically quiet. It must not have been one of their better ideas because in 1948 they did a major motor redesign including the valve gear.

Having a damaged cam wheel and assuming that a used one might be worn too, I decided to have mine reprofiled. My fears that a U.S. firm would have the specs, experience and ability to do the job made me uneasy. All this left me feeling like I was between Scylla and Charybdis. That's when I saw in the workshop services section of the RGM "cam shafts stellited and Motors catalog, reprofiled - £11 per lobe". A quick e-mail to them confirmed cam wheels are included in that offer so I mailed mine off. I didn't hear from them for about a month so I e-mailed them again. "Yes, we got it. We're waiting to get a few more before starting" was pretty much their Approximately 3 to 4 weeks later it arrived. It was beautifully machined and cost £18 (£11 plus £7 shipping). That's less than \$30 total! What a bargain.

With these parts refurbished and in his hot little hands, Mike said he should be able to assemble it in an evening or so.

#### "HOUSTON, WE HAVE A PROBLEM."

That was the message waiting for me on my recorder when I got home one day. A call to Mike revealed an unforeseen development. After the head was installed and torqued, he gave the crank a gentle turn and "clunk", it stopped cold. He turned it backward about one full turn and it stopped again.

Remember that redesign in '48 I mentioned? Along with the valve gear changes Norton reduced the diameter and increased the width of the flywheels allowing a piston with a longer skirt to be used. Apparently the new piston I purchased was one of these. This meant taking off the head and barrel again so just enough could be cut off the piston skirt to clear the flywheels. With that problem solved, Mike was finally able to finish the engine and we installed it in the frame.

After all of the engine troubles, Mike "the Bike" was hoping for a simple straightforward gearbox rebuild. It wasn't to be. My gearbox is what's called the "upright" type. The layshaft is above the main shaft with an adjustable external linkage connecting the two camplate quadrants. 1950 saw the introduction of the "lay down" 'box. The

internals were basically the same but the linkage was now inside the shell.

The kick start pawl was chipped so it was replaced. Inspection of the cogs revealed first gear to have some wear on the teeth face but not enough to worry about. How long are you in first gear anyway? Several of the dogs were a bit knackered so he touched them up with a file. When the three bearings were replaced it became apparent the layshaft was bent. More letters to England, I thought. Thinking it looked a lot like a Commando's, Mike took his spare one and to our surprise it slipped right in! More good luck. Add it to my bill, Mike.

One of the two gear selecting indexing plungers was badly worn so both were replaced. Everything worked fine until the 'box was assembled. First and second gears could be engaged but not third and fourth. Adjusting the quadrant linkage made third and fourth work but first and second were now gone. Much head scratching and cussing ensued. Take apart the 'box. . . everything works put it back together. . .same old s\*\*t. Mike was at his wits end. Everyone he showed or explained it to had no answers. Finally club member Gary Creech thought the indexing plungers could be too long. Cutting a smidge off them made it work perfectly. Into the frame it went. With the engine, magdyno, primary and transmission in the frame, it was time to tackle the front end. That's where we'll pick up the story in the next installment.

#### **Contact Information:**

Ernie Trakas, President:
Joe Jump, Membership:
Marty Dupree, Newsletter:

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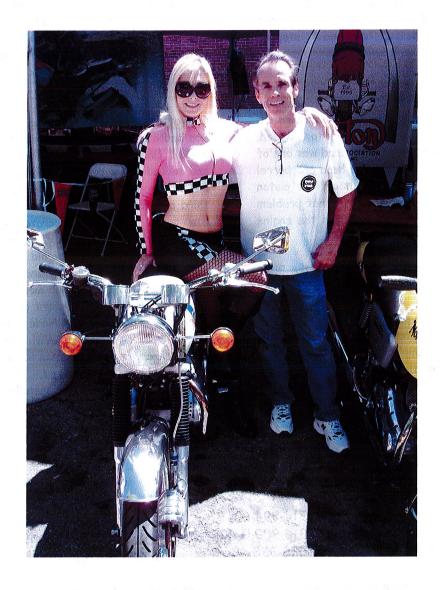
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Dues are \$5 per year running July thru June. They are non-prorated to keep bookkeeping simple. Make check payable to "Joe Jump" or send cash to Joe at: 435 West Argonne Dr., Kirkwood, MO 63122.

#### Back by popular demand: Win a Year's Membership Caption Contest!

I've picked on Mike French in the past, so this year we'll pick on Mike's neighbor, Dave Kaufman. This picture was taken at Moto Fest when he asked Natalie "The Umbrella Girl" to come over for a picture. What do YOU think is on their minds? Keep it clean, be nice, and the editor is the "decider." Call or e-mail your caption to me. The winner will be announced in the next newsletter.



# Send submissions to: Marty Dupree, 2637 Sneakwood Lane, Foristell, MO 63348 e-mail: madx2@worldnet.att.net Phone: 636-398-4049