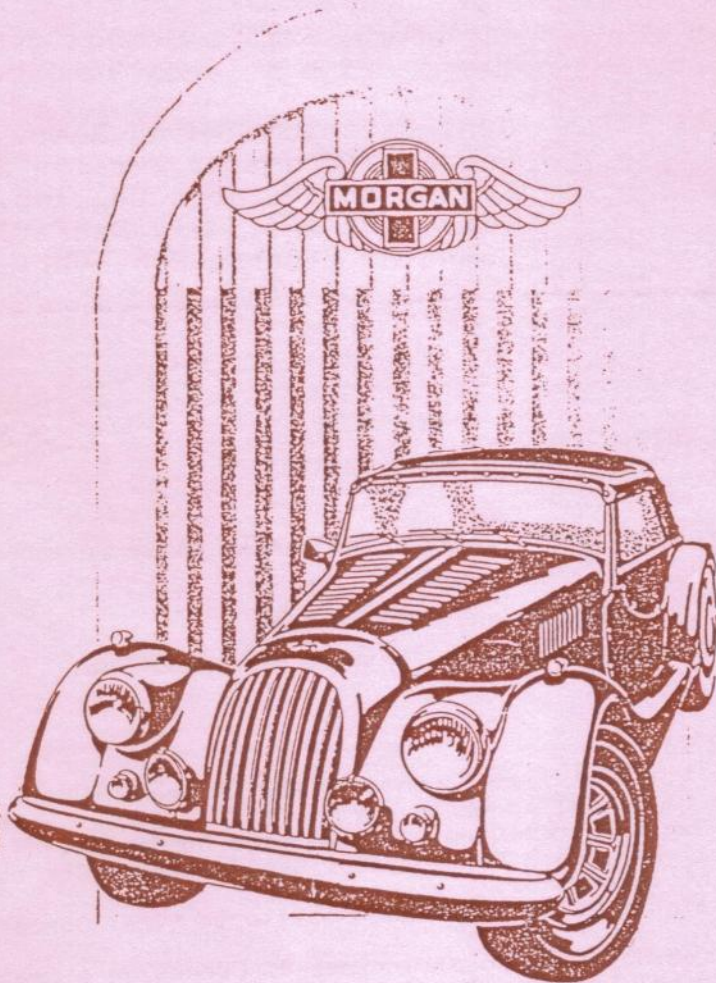




THE BLURB

OCT 87



Calendar of Events

1987

- October 18; Octoberfest, Cambridge Ont.
Host Chris Charles.
- December 12; Christmas Party, Soho, Toronto
Hosts Brian & Linda Rumohr.

CLUB EXEC: Genl Factotum, Audrey Beer.
Regalia/Treasurer Marlies Sands.
Editor to be, John Collins,
Title not set, Gary MacFarlane.
Computer records, Ron Lohr.



MOGFEST 87.

SUNDAY OCT. 18 1987

OKTOBERFEST

Oktoberfest at Chris Charles residence- early afternoon

B.Y.O.B. and Potluck Dish

The Charles Residence features an Indoor Pool

Directions:

Take Hwy 401 west from Toronto to Hwy 24 South (Cambridge)
South on 24 to Galt down to Hwy 8.

Left on Hwy 8 (Coronation Blvd, becomes Dundas St.)

Count 3 lights, look for Chrysler Dealership on Corner.

Turn Right onto Main.

Count 2 lights after which Main splits to right Concession
to left.

Charles residence is on the corner of Conession & Peck.

(White House) Look for Moggies unless your first there, then
look for the club banner.

SUPPORT YOUR LOCAL CLUB
PAY YER DUES:::

BLURB BLATHERINGS

Always hated that Prez's Piece, never could get it together, never liked how it came out, wasted pages doing it, so last time scrapped the whole thing and sat here letting my true thoughts flow, wadayerno I got response. so here goes nothing again.

Had great ideas as to future Blurbs starting with this one, made my resolution that for the future as Meet turn-out was pittiful we would concentrate on communication with the Blurb & forget all meets after Octoberfest, give em all a rest from seeing each other or any commitments (us too) & see what happens, cancelled the prposed Fall, Run, & thats IT. A vegetarian year-no meets, as Al Sands put it.

As of yesterday I discover I have just under 1 week to produce this Blurb get it printed and OUT; for Reg and I take off next Tuesday for 2 weeks in the UK, just like that, luckily I am more or less up to date with the office work so here goes.

Numbers were down for the Niagara Meet, 22 Registered, 48 for the Banquet, we nearly broke even on expenses, I had the best time there in years as there wasnt the work to do. fantastic. Asked for imput for future Niagara Meets, one received sounded good, alternate years at Niagara with one year somewhere else, like Kingston, in between, then your club Exec discussed all suggestions and came up with the final decision that having no-one in any alternate locations to do all the bookings/set up/ etc, it would fall on us and neither of us have the time etc to travel all over Ontario which is what would be needed, we have excelent rapport with people in Niagara who are willing to assist us, great food/location/lodgings at prices not to be found anywhere else/lots of other places around for members to go. so we stick with what we have as stated so well in a letter printed in this Blurb, Gary can say it far better than I.

Our friendly Scribe from past years has now agreed(after having his arm re-set)to become our Editor as of end of this year, so you only have to put up with my amature attempts for one more Blurb and then John Collins takes over. Our new member from Guelph Ron Lohr has already fed his membership copy into a computer and sent me mailing labels, plus Gary has made offers to help too, FINGS IS LOOKING UP:: Marlies Sands will be taking over as Treasurer,so all thats left is for me to get hold of a Printer who can turn out good reproduction of photo's and we are all set for go again. Are you with us??if so get those memberships in. My apologies for sounding so down recently, but with personal health problems I could really see this club floundering if I had to start treatment I now feel better knowing we have a crew working together and ready to keep things going. So here's to a good 1988 year for us all in the club.

ARB.

CHRIS IS
MOVING
BUSINESS
LOCATION.

STOP PRESS

C.M.C. ENTERPRISES LTD.

NEW BUSINESS PREMISES

AS OF NOV. 1/87

1138 KING ST, KITCHENER
PHONE NUMBER REMAINS THE
SAME.

It's many a long year since I have been forced to concede that Alan Sands was the best man at a Morgan Meet, but he was on Saturday, August 15 at the "Round-Up" at the McCowan Farm. Hosts Peter and Heather decided there was, to borrow from an old cowboy song, "A Love Knot in my Lariat", and were married in a delightful ceremony on the lawn in the bright sunshine. Alan was the Best Man.

Those not in the know had assumed that the bagpiper, who was performing sporadically throughout the day, was there merely to placate the assembled members of the Campbell Clan (Heather's side of the family, of course), whose attendance just happened to coincide with that of the "lucky" thirteen Morgans. In reality, he was to pipe us all into position for the wedding, which can best be appreciated through the photographs accompanying this article, since Zena Cherry impersonation is not my strong suit.

The ensemble then moved into the barn to congratulate Peter & Heather, and to enjoy a splendid meal of barbecued beef, accompanied by the usual excellent selection of pot-luck contributions. A few of the more adventurous souls joined the newlyweds wending their way around the dance floor as the evening progressed. Eventually, the campfire was lit, the iron kettle suspended from the mighty wooden tripod manoeuvred into position, and fresh corn-on-the-cob simmered to its succulent best.

Those who stayed overnight emerged the next morning to a healthy breakfast of eggs and sausages, and a surprise slice of birthday cake provided for one of Peter's daughters-in-law. At last, engines were fired up, and journeys home through sunlit sideroads were begun, as another successful Hog Mog event ended.

I'm sure all members who attended, as well as those who did not, will join me in wishing Peter & Heather much happiness in the years to come. At the very least, Heather will notice a significant decline in the quantity of washing-up from that experienced on her first morning as Mrs. McCowan!

John Collins

THE SMOKE THEORY

There is a "new" theory of electronics floating around lately. I first saw it in the journal from MOSS MOTORS, and reported it in this column some months ago. It has cropped up again in the Alfa Club newsletter and the Side Mount Mirror of the Classic Car Club. It was not until this latter reading that the full ramification of this theory struck home. It was so simple! So obvious that we did not see it. It seems that an amateur radio group had discovered how IC circuits work. They say that smoke is the thing that makes ICs work because everytime you let the smoke out of an IC circuit, it stops working. They have verified this through numerous experiments.

And then it dawned on me. Of course! Smoke makes ALL things electrical work. Remember the last time smoke escaped from your Lucas voltage regulator? Didn't it quit working (if not all of the smoke got out it probably still worked, but not as good as it used to)? I sat there and smiled like the idiot that I am. It is the wiring harness that carries the smoke from one device to another in your MORGAN! When the harness springs a leak, it lets the smoke out all at once, and then nothing works. The starter motor requires a large quantity of smoke to operate properly, and that is why the wire going to it is so large.

Feeling very smug, I continued to expand my hypothesis. Why are Lucas Lectors more likely to leak than say Bosch? Hmm Ah! Lucas is British, and all things British leak! The top on Barbara's SNOBMOG leaks water, all British engines leak oil, British shockers leak hydraulic fluid, and British tyres leak air. The British government leaks secrets (ours is not much better there)...so naturally, Lucas lectrics MUST leak smoke. QED.



GUMDROP

© 1987 United Feature Syndicate, Inc

3-23

"THE ORTHODONTIST WANTS TO KNOW IF YOU WANT A BILL, OR IF HE SHOULD JUST SEND YOU THE PAYMENT BOOK FOR HIS MORGAN"

Dear Audrey

Enclosed is a cheque for Niagara. Once again we really enjoyed ourselves. I thought the Queenston Heights location was excellent for both the Concours and the Banquet.

On that topic, I feel that both the date and the location for the meet are fine. On the other hand I have no objection to changing either providing that there is good reason to do so and, in the case of the location, a suitable one can be found. The only good reason I can think of for a different location is that we've had it at Niagara for a number of years and some people would like a change. But where? No one has been able to come up with a location which is as attractive, conveniently located and has adequate accommodations. As far as the date, there will always be conflicts and no matter what date (or location) is chosen you will never be able to satisfy all of the people all of the time. So unless a major conflict arises I would leave the date where it is.

The success of the meet (and the club) shouldn't be measured by numbers alone. Being able to get together with a few friends who share a common interest is important too and I can assure you that many of us would make the trek (regardless of date and location) for this alone.

As for work in the club, my previous offer to help still stands. I could handle Memberships/Mailing lists and/or Treasurer and perhaps try to come up with some ideas for the meet to help freshen it up.

Best wishes to you and your family

Gary

Gary Macfarlane

4;

SUPPORT YOUR LOCAL CLUB:
PAY YER DUES:

IS THIS YOUR LAST BLURB?
IF YOU DIDNT PAY YOUR DUES IT IS:

*Dear Gary,
what Title would you like. Meet Chairman, Events Chairman, Social Convener, Head Judge (though that was threatened to Ray as winner of the Judges Award) either for the full year or Niagara, consider yourself on staff.
Audrey*

Audrey Beer
R.R. #3
Bolton, Ontario
L7E 5R9


Dear Audrey:

Just a note from one of your fans out there who "is listening".

While I can't offer any tangible solutions to revitalizing the club, I do want to let you know that from my point of view your efforts are truly appreciated.

I'm sure you saw this some time ago, but for your information, I enclose a letter that I wrote to Sports Illustrated after they published the enclosed Morgan article.

Best regards,



CBW:jg
Enclosures

IS THIS YOUR LAST BLURB ?

A MOGGING I KNOW WE'LL GO

By Peter George

The way my wife and I annually consummate our rites of Spring prompted me to consider to recount the tale of "The Tough and The Timid - Harwich Ferry, England" for this article. However, I remembered that in my last narrative I promised to detail electrical modifications made to my then-newly-purchased "Nat". And, to even add more insult to injury, not only am I off on a new adventure, but I haven't yet completed "The grand Grand Avenue Retreat", ~~not~~ ^{NCC} "The Wretched Wire Wonder" experiences.

So, to be fair to all who are expectantly waiting with wiring diagrams and circuit testers, I will expound electrical detail according to Peter George. Consequently, the T and T story will be shelved for the interim and the ending to "The grand Grand Avenue Retreat" will be recounted when I have a paragraph or two left to fill. Also, hopefully, by that time the Statute of Limitations will have been reached. Therefore, on to electrical detail. Nothing reinforces lessons learned (unlearned?) like negative consequence. To illustrate things not to do electrically, I will continue on with the Wretched Wire Wonder's 4 seater plus 4, and by doing so, will also end this sordid tale.

Let us once again return to that fateful Saturday afternoon so long ago (this narrative is starting to sound like an old Lone Ranger serial), when yours truly was on the point of buying a Morgan. My first quick inspection showed loose wires everywhere. A more thorough investigation revealed extensive damage. The voltage control unit was burned, the insulation on the battery cables had melted, the starting circuitry was just strands of wires, and there were ominous signs of a near disaster behind the dash. This Morgan was Springtime bad news! A complete electrical re-wire would be necessary before a wheel would turn again.

I am positive that the owner had planned to connect into a live source behind the dash. Unfortunately, he did not realize that firstly there is a limited fuse protection for these behind the dash circuits, and secondly these live circuits are continually powered through the control unit and ammeter. Obviously this gentleman wired a connection to ground from one of these sources and burned out his control unit. Everyone understands "a connection to ground". To avoid this possibility, I have changed Nat's systems. The ignition switch has a dedicated feed from the control unit, and the ignition switch live side now feeds the light switch. In this secondary connection from ignition switch to light switch I have installed a good quality in-line fuse. Now the control unit has some protection.

Next, I believe this gentleman did not know that the starter solenoid is simply a switching relay. A switching relay uses a manually energized circuit to switch on another circuit which carries a greater current. You turn on the ignition key, press the starter button, and by doing so, the starter solenoid closes its primary circuit and the starting motor is consequently activated.

In his attempt to start the car so he could drive it to the local garage to be repaired, he did his next piece of nastiness. He burned out starting circuitry. He did this by simply reconnecting the battery cable to the wrong terminal on the starter solenoid.

I must admit, I did admire the man's tenacity. He had created a problem and he was purposefully determined to make it worse. He was resolved. He would re-wire the car himself. His resolution remained firm until the last integral connection was undone. His defeat, as you have guessed, was heralded in the Toronto Star under the heading: "Cars For Sale". If this gentleman had followed my earlier recommendations, would he have had any problems? The car was still parked on his driveway late that Fall. For all I know, it could still be there.

*if you didnt pay your
dues it is,*

I have always enjoyed burning up the midnight Summer roads; and to be aware of functioning rear lights, I have incorporated the following modifications. In order to explain what I've done, I must first state that our friend Joe uses both parallel and series wiring techniques. For example, dash instrument lights are wired in a series configuration; and road lights, for safety reasons, are wired in a parallel configuration. Once again, I will assume everyone knows the difference between parallel and series circuitry.

Good quality in-line fuses have been installed in all three rear light circuits, (2 for tail lights and 1 for brake lights). Each of the two tail light circuits powers small under-the-dash lights. These two lights are in series with the rear lights, and will indicate circuit problems.

The extent of Nat's electrical re-work has not been limited to just providing basic electrical circuit protection, but also includes devices that would cause a "hot-wire artist" heartburn. Maybe in a future article I should mention a few of these twists. But please be advised that thwarted thieves have been known to throw ripped off spare tires into canals.

Nostalgia

by PHILIP SINGERMAN

A CHANCE MEETING WITH AN OLD LOVE
DRIVES THE AUTHOR TO DISTRACTION

It was a flawless morning in late spring. I was driving north along Highway A1A, the coast road, not far from Daytona Beach, Fla., when the low-slung roadster, traveling very fast, passed me from the opposite direction. It was a yellow Morgan, frog-eyed and sassy, the first one I had seen on the road in years. I pulled over, got out of my car and sat down on a sand dune, awash in a sea of memories nearly 20 years old.

I had owned a Morgan once, a red one, a 4/4 Competition, built in 1965. It had chrome wire wheels and a thick leather "bonnet strap" pulled tight across its long, louvered hood. Like every Morgan, it was idiosyncratic and ornery—a conveyance that demanded accommodation. You might one day leave it, wild, unre-

dictable lover that it could be, but you would never stop loving it. Morgans have been called the first and last of the real sports cars, and in terms of bouncing, jouncing and high-spirited performance the title is accurate. The only air conditioning is the wind in your face, the only cruise control a powerful right foot.

The wooden body frame of my Morgan was attached to a steel chassis. The floorboards were really boards. You could peek through the spokes of the spare tire, which was set in a round opening in the slanting rear deck, and see honest-to-goodness English ash. Each spring, for as long as I owned that car, I would crawl underneath, poke for dry rot with an ice pick and then brush on wood preservative wherever I could reach. The firmness of the black leather seat cushions could be varied by inflating or deflating their rubber bladders. The front suspension, designed in 1909 by H.F.S. Morgan himself, was lubricated by a shot of oil, which one could release by briefly stepping on a button before setting out for a ride.

WELL, DID YOU
CHECK TO SEE
IF YOU PAID

SO LOOK IN THE
LAST BLURB, IF
THE WHITE INSERT
IS STILL THERE
& YOU WERE NOT
AT NIAGARA,
CHANCES ARE THIS
IS YOUR LAST
ISSUE.

Peter George

Whether you stepped on the button or not, my Morgan had a certain speed at which a mysterious vibration occurred. At precisely 48 mph the steering wheel transformed itself into a jackhammer, while the tires did an independent flamenco dance on the pavement and the front fenders rattled like a tin roof in a hailstorm. At 51 mph the car rode as smooth as could be. I rebuilt the front end twice and succeeded in adjusting the parameters of the seizure to 46 and 49 mph, but I was never able to get rid of it.

When it rained, water dripped in under the windshield and under the doors. The windows, or side curtains, as they were called, were removable. But even when fastened in place, they flapped like the wings of a crazed goose. The gearshift knob was beside the driver's right hand, as one might expect, but the lever bent at a right angle and disappeared under the dashboard where it dropped down into the transmission. This made shifting the car a push-pull operation much like playing shuffleboard.

But don't get me wrong. Discomfort

and weirdness aside, my Morgan was a dream. It was lithe and quick. The faster it went, the better it hugged the road until 46 mph. Its Weber carburetor hissed like an angry python. Its snarling exhaust set my body a quiver from toe to throat. On a moonlit night, with the top and windows tucked behind the seats and the pavement rushing by at 100 mph inches from my elbow, I felt more at one with a machine than at any other time in my life.

I bought my Morgan in 1966 for \$2,300 from a young couple in New York City. They had just had a baby and needed a vehicle with more room. Both of them cried when they handed me the keys. I was living on eastern Long Island in those days, and as I drove the car home on a broiling summer afternoon on the jammed-up Long Island Expressway, a middle-aged woman in the next lane, riding in a chauffeur-driven Rolls-Royce, handed me a chicken-salad sandwich and an ice-cold Coke. "Thanks," I shouted. "How about a ride?" she yelled. I said fine, and as neither the Rolls nor the Morgan was moving, she walked over and climbed in beside me. I followed the Rolls to her home in the Hamptons, which was only slightly smaller than the American Museum of Natural History. "Young man," she said, "I haven't had this much fun since I flew a crop duster on my grandfather's farm."

My Morgan was that kind of car. It seemed to do something to people, make them act crazy, throw caution to the wind and have a little fun. Two weeks later I was doing about 75 in a 40-mph zone. I came around a corner, and there was a cop, leaning against the fender of his cruiser. He had me cold. I didn't even bother to hit the brake. Then, out of the corner of my eye, I saw him smile at me and wave. He never moved.

Once I missed the turn for the public beach in Southampton. I turned around in the driveway of an oceanfront estate and a man came running toward me, waving wildly. I thought I was going to be arrested for trespassing. Estate owners had little patience with the longhairs, or "freaks," as we were called then. The next thing you know I was driving this man to town for cigarettes and hot-dog rolls, and then I spent three days cavorting with him and his friends.

continued

Another time, I came out of a restaurant and found a note under the windshield wiper. "Lordy, what a car!" it read. "Can I have a ride?" There was a phone number and a woman's name at the bottom. I called her up. We went for a ride one beautiful fall afternoon, and when I dropped her off she took a small camera from her purse and had me take a picture of her sitting behind the wheel. I never saw her again. I wonder if she saved the photograph.

I left Long Island shortly after that and moved to Gloucester, Mass., where I tended bar. People came from all over to see the Morgan, which had assumed legendary proportions, in part because it beat a GTO in a race between Gloucester and Rockport. "Hot damn," said an enormous Finn who ran a fishing boat thereabouts. "A four-cylinder engine and it beat that big monster? Lemme buy that car a drink." One night everyone in the bar sang a song to the car. It was to the tune of *Down by the Old Mill Stream* and, as I recall, began, "Down at the High Line Bar, In my Morgan car." Think of it. Twenty-five or 30 adults standing in a parking lot at 1 a.m. singing to a car.

I sold my Morgan one spring to pay a debt. I put an ad in *The New York Times*, and the first person who saw the car bought it. He drove 250 miles to my front yard, took one look at the car and said, "I'll take it." "Don't you want to drive it?" I asked. "Sure, I'll drive it," he said, "but I'm going to buy it anyway." After it was gone, a number of generous friends and relatives told me they would gladly have put up the money I needed and kept my Morgan in storage until I could afford to buy it back. "We wouldn't even have driven it," they all promised. "It would have been enough just to have it around." But they were too late, and the man I'd sold it to wouldn't sell it back, not even for \$1,000 more than he had paid me; an era in my life was over.

Since then I've owned cars that were faster, handled better and were more expensive than my Morgan, but no cop has ever smiled at one of them, no woman has ever left a note on one of their windshields, and no bar full of people has ever burst into song at their presence.

In 1978, nine years after I sold the car, I traveled to the Morgan factory in England. I wanted to see what kind of people build a car that combines contemporary

swiftness with manufacturing techniques that were abandoned by the rest of the auto industry before WW II. I found the Morgan Motor Co., Ltd. housed, as it has been since 1910, in an interconnected row of barnlike brick buildings. There were no robots, no conveyor belts. Morgans are built by hand. In the dispatch bay two long rows of new Morgans sat awaiting shipment. Above them, a stuffed owl presided, as it has for 30 years. It was placed there to ward off any sparrows that might fly down and scratch the new cars' paint.

Down the line were the various assembly shops. The wood shop, where the rolling chassis is taken to be fitted with handcrafted sections of ash and where the coachmakers carefully hang the wooden doors after the rest of the frame is in place; the panel-beater shop, where men with special hammers beat the steel panels and nail them to the frame; the area where the cars are wired by hand; the place where they are painted. There were around 100 employees at the factory, almost all of them trained on the job. Turnover has always been virtually nonexistent. Tuffy Burston, foreman of the machine shop, has been there the longest—since 1916. "Yes, they're wonderful autos," he said. "Of course, I've never owned one. I don't know how to drive." [Burston died recently, making Tony Brough the senior employee, with 45 years of service.]

The next day I met Peter Morgan, son of founder H.F.S., and now the owner of the company. Morgan, a handsome, well-dressed man, sat warming himself by the ubiquitous coal stove. "We make 350 or so cars per year," he told me. "I'd like to get production up to between 400 and 500, but not by sacrificing the way they're built."

Morgan, who learned automotive design as a child sitting in his father's study next to the company's machine shop, is saddened by American regulations that have kept him from directly exporting his cars to the U.S. since 1972. The engine in the Morgan does not conform to U.S. exhaust emission standards, and the cost of developing an engine that continues to meet changing U.S. specifications is prohibitive for so small a company.

But you can still buy a Morgan in this country. An enthusiast named Bill Fink, proprietor of Isis Imports in San Francisco, brings in 24 or so each year. In his shop he fits them out to run on propane

continued

instead of gasoline. He also does all manner of structural modifications—about 100 hours' worth for each car—to bring them up to government safety standards. There's a six-month waiting list for his cars, which cost \$22,000 for four-cylinder models and \$26,000 for those equipped with V-8s. Doctors, lawyers and bankers buy them. They have ceased being affordable to aspiring writers tending bar for a living.

I had been sitting in the sand 10 minutes or so when I decided to find that yellow Morgan. Maybe, I told myself, it was one of Fink's conversions. I had never seen one of those. Maybe it was an old one, completely restored, stripped down and repainted. Maybe, by some astounding coincidence, it was mine. I jumped into my car and began driving furiously south on A1A, looking down every conceivable turnoff as I went. Finally, I spotted the car in the parking lot of a 7-Eleven. I zoomed into the lot, jammed on my brakes and leaped out. Suddenly I got a glimpse of my own foolishness. What the hell was I doing? What was I chasing?

What would I say to these strangers, who might take me for a lunatic? I walked over to the Morgan. A man and woman in their early 30s sat sipping orange juice. In the luggage compartment behind them was a large Irish setter. The three of them eyed me warily. "I had a Morgan once," I said. "It was red." The man looked at me silently for a moment. Then he raised his left hand, made a circle with his thumb and index finger, and smiled. "Yes, indeed," I said, and I got back into my car and drove away.

END

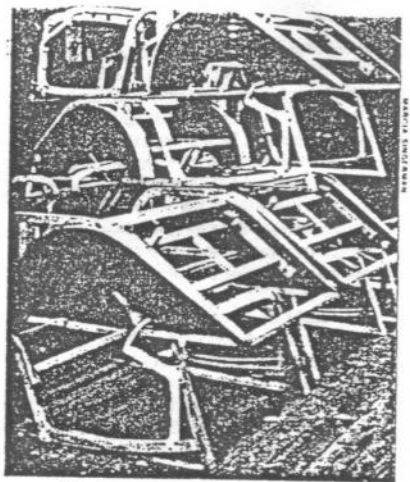
MORGAN BUFF
Sir:

I was absolutely captivated by Philip Singer's article (*Nostalgia*, June 24) on the red Morgan. His romance with the car parallels mine in every respect but one—mine was stored, his was sold.

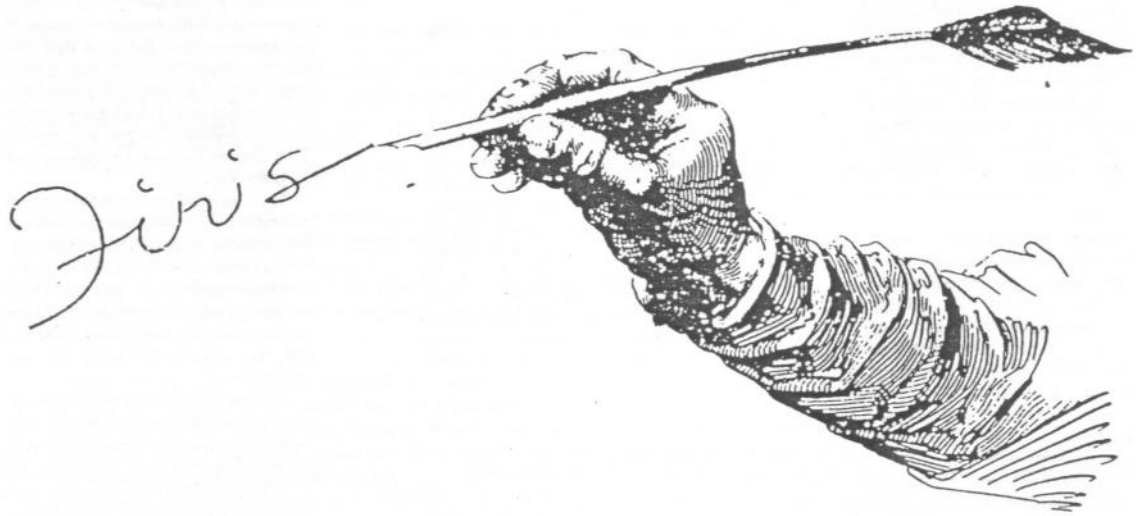
Now, 20 years after the purchase of my "new" Morgan, I have a spotlessly refurbished red model that, unfortunately, my teenage sons drive as much as I do.

These cars should be passed from generation to generation!

COLIN D. WATSON
Toronto



Wooden frames are piled high at the factory.



this remaining space reserved for
contributed articles

"I'VE GROWN ACCUSTOMED TO HER FACE..."

About seven or eight lifetimes ago on the Veranda at the Mimslyn, at about 3 in the afternoon, we were all drinking out of Nichol's (bottomless) cooler and waiting for the afternoon's scheduled rainsquall to sweep some of the murk out of the steamy Shenandoah valley. Bob Lehr carefully picked his way up the Great Lawn, looking like a peddler carrying a gunney sack from one hand, wearing loud shorts, and a single-digit-MOG T-shirt. Bob mounted the last step and finally stood before us; without a word and in his best Poker-Face, he reached into the sack and handed out a fistfull of flat, stamped-metal crescent wrenches that nobody could immediately identify.

"Sidescreens!", he said as he continued on his way through the big door.

Bob had made up a set of funny wrenches that lock the sidescreen brackets on most Moggies without mauling the chrome. Since Stephie's and my 4-place has no fewer than 8 of those little rascals, I felt like Moses receiving the stone tablets. I've carried ours in the glove box faithfully for years. Then one day, we lent the car out to do a TV spot with a nice gentleman named Mark with large biceps. He put just a little too much English on one of the screen brackets and the wrench broke: he was reasonably apologetic and we were reasonably forgiving.

It's strange how we become accustomed to things. I can't remember what life was like before that fateful arrival of the little wrench; channel-locks and rags, vice-grips and cardboard, electrohydraulic jiminywackers with double reciprocating do-jiggers.....nothing was quite as elegant or quite as effective...or quite as unobtainable as the little wrench. At MOG 15, almost 10 years later, I asked Bob where he got them and he couldn't quite place it.

Speaking of too much English, Dean Meyer and I were bachelors the other night and so we stepped out for beer, burgers, and broken hearts. We took his machine and headed over the hill towards the boarder. While I'm a nervous passenger on these nighttime backroad jaunts and Dean gleefully contributes to this condition, I looked up from counting heart-beats long enough to see that he could run deep into corners, brake gracefully, goose the throttle, and power-out on the other side. While I use a similar technique, it seemed that he was making corners faster than I did. His 4-place and mine should be about the same in weight, power, and tires so we never figured it out.

About a month or so after the outing with Dean, Chip and I took turns driving each others 4-place up and down the approach road to the Harbourtowne in St. Mikes. We've each worked on both cars and it was a chance to judge the quality of our craftsmanship. As Chip powered my car up to the turnoff for the Inn, I saw his leg go for the brakes...nothing happened...then I saw his thigh muscles double in size, and his face turn white as we finally slowed and slid into the driveway. It finally dawned on me....."DISK BRAKES!" Chip and Dean both had disk brakes.

All you folks with disk brakes don't know what it's like to stop a Moggie at full chat with nothing more than these little demi-tasse drums, dreadfully overpowered by the super-sticky Michelins and 16" rims. Chip's car slows and stops almost like a real automobile by comparison. I know all you big guys with biceps and tattoos are gonna say, "That wimpy ol' Spider, he couldn't even trip over his own rope...I only own Morgans with drum brakes (better yet: cable actuated drum brakes) and I never have any trouble."

"True!", I reply (ignoring the lie) "but it's really what you're used to." If you're a disk-braker, you can't even imagine what life was like before they put those Mega-Binders (that would even stop Stacey Bondon's Pontiac) on the front end of your little Malverne Cuisin-Art.

It felt like a Noggin-in-Hell, and we were all raiding Tony Newton's micro-sized cooler for relief from the 100 degree heat and searing sun. It was MOG 16; we stood 'round the flag pole at the Harbourtowne. I saw Bob Lehr (for the first time in a year), in the words of T. S. Eliot, "...like a crab scuttling across the floors of the ocean". He noticed us and, almost as an afterthought, changed course and came towards us. As he approached, he reached into his pocket and handed me a small, crescent-shaped piece of flat metal. "Ah, Spider John..." was all he said and then continued back out into the heat-haze so that none of us were sure that he had ever been there at all. I looked down at the little wrench in my hand and tried to recover from the surprise.

That, Gentlemen, is True Morganeering!

Spider J. C. Bulyk
Purdys, NY

September 15th, 1986 ©

techspeak

Reprinted from *THE FORMAT* January 1979

The following tech article is a reprint from 1957 by Chuck Talbott. Since very few of us have been members all that long, and Morgans haven't changed that much, we can basically look upon this as a new article. Thanks to Carolyn Klein for going through the archives and selecting this helpful "how-to" for the month of January.

THINGS TO CHECK PERIODICALLY WITH A MORGAN:

1. Tighten:

- a) rear wheel backing bolts (4 on each side) from back side. On earlier Morgans the brake drum is easily removed, giving access to bolt heads;
- b) U-bolts — snug, but not so tight as to bend the base plate;
- c) 3/16 and 1/4 Whitworth bolts on front suspension and engine hangar assembly — use ample torque, but avoid stripping;
- d) diagonal stabilizer bars linking kingpin base-plate to chassis;
- e) rear U-joint coupling bolts;

f) battery stay bolts (periodically). Loose nuts may work off, allowing bolt to drop and break off in motion. This, in turn, might permit the battery to strike the rotating U-joint. When possible, stake the top nuts; g) wheel lug nuts, with tool kit wrench. Otherwise, do not exceed 50ft. lbs torque. Excessive torque may mean a cracked wheel, and, on older models, sharply reduced lug fatigue life.

2. Your radiator should be mounted as loosely as possible without allowing slippage of bottom attachment. Permit a little free play at the radiator end of the stay-rods attached to the fire wall.

3. Check the fit and tightness of door hinges for proper closing. Body twist will affect the ease of closure. Door rattles can be minimized with weather stripping or by shimming a worn rubber guide at the back of the door. Lubricate the latch mechanism with a light oil.

4. Body twist and sway can be reduced by removing the screws holding the two wooden cross bars to the floorboards at the base of the rear squab (behind the seats). Drill through the old holes into the metal flooring plate with 1/4 drill (install coach bolts and washers).

5. Whenever possible, replace British grease nipples with American Zerk fitting (1/4-26 thread).

6. Improved lubrication and prolonged clutch life will result from installing a Zerk fitting in lieu of the British grease nipple over the clutch throw-out sleeve. *Note:* too much grease means clutch slip!

7. One cure for engine missing under load may be the installation of Bosch 175T1 plugs.

8. If tappets are noisy with the engine hot, the cold tappet clearance may be reduced to as low as .010 on intake and exhaust.

9. Use MG bonnet rubber on the aft end of bonnet — stops squeaks and holds water from entering your tool tray.

10. Don't use too much water on back fenders during washing. Excess water may enter tail-lamp circuit. *Cure:* cut a 3/16 drain hole at the bottom rear of the rubber lamp cover.

NOTE: In regards to tightening running gear bolts, use ample torque; but, to avoid stripping, the following table will serve as a guide for tightening nuts and bolts which clamp mating structural steel components together, as recommended by several screw manufacturers:

Bolt Diameter (Ft. lbs.)

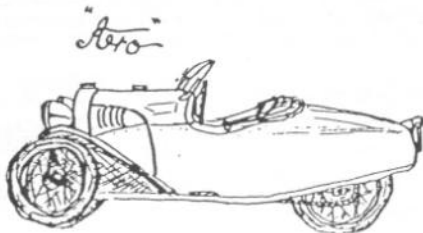
1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4 and 1.

Recommended Torque:

8, 15, 28, 42, 63, 90, 125, 210 and 500

There are many exceptions to the above, depending on the nature of the installation. If your owners manual or the "Motor Trader" pamphlet on Morgan dictate specific torque, or if other tech articles so advise, use lower values. In the case where a machine screw is tapped into cast aluminium, use about half the torque listed in the table.

A few bits on vibration . . . An appreciable amount of front-end noise and oscillation can be traced to a loose cross-tie rod behind the radiator on the "round nose" Morgans. This loose rod has been known to cause wheel shimmy.



OBTAIN FINAL DETAIL
FOR THE CHRISTMAS
PARTY -- LOCATION, TIME
ETC.

PAY YER DUES.

FOGGY FROGGY DEW?



OFF IN A FOG

We have all been asked many times, "Which are better, amber or clear fog lamps?" I personally have always preferred amber, though I didn't know why. Those in the "know" have always said that the amber light reflects less glare than white light and that makes sense to me. Of course, the whole idea behind fog lamps is to cut the glare of the light as it reflects off of the fog droplets.

The truth of the matter is that amber or yellow lenses cut the light output by as much as 25%, a significant reduction. Yellow lights are a French idiosyncrasy. In France, all headlamps and even back-up lights must be yellow. When I figure out why the British drive on the wrong side of the road, then I might be able to start understanding the French.

Well, I recently found out in an Alfa newsletter that fog lamps are amber and French headlamps are amber for a very good reason, called physics. Fog is an aerosol of translucent liquid water droplets which are of a size that scatters blue light more strongly than red or yellow light. Penetration of the longer wavelengths (red and yellow) into the fog is therefore greater than blue. You have to get the blue out, which the amber filter does effectively. Red is not sensed well by the human eyeball, so yellow/amber is the preferred colour. This is why duck hunters or skiers will (in poor visibility) often wear yellow "shooting glasses." The 25% reduction in light output is a small price to pay for the avoidance of blue backscatter which obscures the view of what you are crashing into. It still does not explain why the French use yellow when it is not foggy though, does it?

Another key to fog lamp performance is getting the light down low and well spread. Keeping it low helps reduce light reflection back into your eyes from the mist in the air. This is why high beams are not the way to go in the fog. The wide pattern gives you points all around to guide you since long range penetration is not good in the fog. Study the pattern of a good fog lamp and you will see that it has a wide pattern and does not go very far. Fog lamps are even more effective if mounted under the bumper, but that is ugly. Pick up trucks with fog lights on the roll bar must be using them for either broad beam or decorative value. I'll let you decide which.

The best lighting change that you can make to your MORGAN (not for fog) is to replace your old sealed beams with a high quality halogen conversion. These have sharp horizontal cutoff that helps reduce glare to other drivers and keeps the light low (good for fog). The high beam is almost like a driving light, especially if you use higher wattage bulbs. 55/100 works good for a MORGAN.

BATH TOWELS

More wit & wisdom from Bob Mcgueria (from way Back East):

"I'm often asked (actually only twice) what is the single most important item to carry with you on a MORGAN tour. The answer comes from the book A HITCHHIKERS GUIDE TO THE UNIVERSE, by Don Adams. As in intergalactic travel, the most useful item in a MORGAN is the ordinary bath towel. The towel has many more uses than any other tool that you could carry. Here are but a few:

"If it's raining and you don't have the top (rooc) up, use the towel to dry off when you reach your destination.

"If it's raining and you do have the top up, use the towel to dry off when you reach your destination.

"Holding diagonal corners, spin the towel like a jump rope. This makes it into a fat rope which can be used to stuff into the craft holes in the side screens.

"On a long trip, take a break at a rest area. Spread the towel on the ground and lay on it face down. This will restore the feeling to your posterior.

"The towel can be used as a wit to remove the radiator cap from a hot engine.

"If you are a graduate of the Chuck Hairless School of Impulsiveness, you can use the towel as a bandage on your scalded hand after removing the radiator cap without the towel.

"If you are the Ted Glover type, use the towel to dust off your MORGAN.

"If you are the Bill Boyles type, use the towel to tie the fender (wing) back on the car.

"If you are the Joel Ketone type, use the towel to wave surrender when you can't figure out why the car won't start.

"If the towel is draped over your head and neck, with the corners tied around the top of your head, you'll get much quicker service at most 7-11 stores."

Feel free to substitute names you know for Glover, Boyles, and Ketone. Everybody knows Chuck Harris!

Woodhale Cottage
Brockenhurst
Hampshire
SO4 7QL. England
telephone 05902-2091



Janet Hill Ventures
LIMITED



..... you SHALL go to the Ball.

CHRISTMAS CARDS

Exclusive design by Don Jellyman. (As illustrated)
Actual size = 6" x 4 1/4" (11cms x 15cms)
'Seasons greetings' in nine languages inside.
Printed in green on high quality card with envelopes to match. **£1.50 for 10**

WINDSCREEN STICKERS

(1) Another exclusive design by Don Jellyman.
As Illustrated 12" x 3" (30cms x 8cms).
Printed on P.V.C. White on Black.
Internal or External fixing. State choice. **£0.95p Each**



(2) LOVE MORGAN
As Illustrated. 4" x 4" (10cms x 10cms).
Printed on P.V.C. Black on Red.
Internal or External fixing. State Choice. **£0.75p Each**



WOVEN CLOTH BADGES MORGAN PLUS 4 WINGS.
Gold with Black Cross. MORGAN +4 in White. 2" x 4 1/2" (5cms x 11cms) **£3.00 Each**

UNION JACK BONNET BADGES (METAL)
Enamelled & Chromed, with fixing nuts & bolts. 2 1/4" x 1 1/2" (6cms x 4cms) **£4.00 Each**

BOOKS

*** NEW *** NEW ***

"THE COMPLETE BOOK OF CONCOURS" by Ken Hill **£12.95**

"THE FOUR-WHEELED MORGAN, VOLUME II" by Ken Hill **£7.95**
"THREE-WHEELERS" (Includes Morgans) by Ken Hill **£1.25**
Ken Hill will autograph and dedicate any of his books to the person of your choice

TABLEMATS

Heat resistant plastic.
Size 15 1/2" x 10 1/2" (40cms x 27.5cms)
Exclusive design by Don Jellyman. Entitled :-
'Morgans Meet - The Lygon Arms, Broadway,
Worcestershire, England.
With map of the Three Counties on back
£1.50 Each



** NEW ** NEW ** NEW **

MORGAN QUARTZ WALL CLOCKS



Small size :- 4 1/2" x 8" (120 x 200mm),
with 3" (76mm) Clock Face and separate
Morgan design the same size. Select
your choice of design from the four
illustrated left. Designs & Clock face
printed black on stainless steel, with
brown 'hessian' border and polished
wood surrounds. Upright format.

£19.00 Each



Large size :- 17 1/2" x 9" (440 x 225mm)
Picture & caption as for the tablemats
above. Beautifully **HAND COLOURED** on
Titanium. Picture 8" x 6" (200 x 152mm)
with separate clock 6" (150mm). With
brown 'hessian' border and polished wood
surrounds. These clocks will grace
ANY SITTING ROOM OR OFFICE.

MOGTECHTIPS



MOGTECHTIPS

MOGTECHTIPS is a monthly publication devoted entirely to technical data on MORGANS. The tips are sent in by subscribers and edited by Fred Sisson, who puts out a class publication. To subscribe for a year takes two tips and about \$10.00 (the money is only for stamps etc. if a year costs less, your subscription is extended).

MOGTECHTIPS is published by Fred Sisson, 5807 Western Hills Drive, Norcross, GA, 30071.

This months article is made up of a sampling of those tips and I will sprinkle a few through future Potpourri from time to time.

SPECIAL TOOLS (Fred Sisson)

I like good tools! They are your contact with the car while tinkering. Would you wear sandals to play tennis, play golf with a baseball bat (sounds good to me...ed.)? OK, then why work on your MORGAN with junky/wrong tools? Of course reality creeps in here someplace, but still, we've all experienced the pleasure of using just the right tool to do a weird job, or maybe felt like a genius when we've figured how to modify a tool to do a specific task.

What's the best tool? Well look to the pro for advise, not the guy behind the counter. The amateur buys lots & looks for the cheapest. The pro buys only what he needs and buys the best that he can afford. Good tools are a lifetime investment and will pay for themselves many times over, both in \$\$\$ and in pleasure.

I have rebuilt several exotics with the tools in my little red box. Over the years I've added just the right stuff so that I can get most things done. It's a weird, eclectic collection. Then I bought ten grand worth of Snap-On from a retired mechanic (for a fraction of ten grand). Socket sets to 1" drive, all kinds of special drives and pullers. Weird stuff plus all of the standard stuff in complete sets!! Hog Heaven! I had to search Snap-On catalogues to figure out what some of the stuff was designed for.

The point is, that you can do a lot with minimal tools. However, having the RIGHT tool for a particular job is wonderful. There are ways and there are ways. Lets share some solutions that we come up with, jury-rigged or Snap-On, makes no difference. Its a learning process. Following are a few examples:

CROWFOOT WRENCH

Use a crowfoot wrench with an extension and you can torque the head on a Plus 4 without removing the rocker shaft. Be sure to set the valves after torquing.

GO-NO GO

Try a "GO-NO GO" feeler gauge next time you set your valves or points. They are usually ground to 0.002 difference on the ends. Makes quick work of the valve procedure. I would prefer 0.001 difference though (I just use two gauges .001 different..Ed.).

DWELL METER

Setting points with feelers is standard procedure, but a dwell meter does a better job. Not expensive either. You might be surprised at the dwell reading after setting the points with feelers.

ENEMA BAG

Use an enema bag to fill your differential! Hang it high, insert one of the little plastic goodies in the filler cap, pour in the 90 wt, open the clip and go have a cup of coffee. No muss, no fuss. Write the capacity of various things you want to fill on the bag. Pour in the required amount, no more. Very little spillage this way & you don't have to watch for overflow.

SCREWDRIVERS

Snap-On Phillips screwdrivers are wonderful! I have hated phillips heads forever. Then I bought Snap-On drivers. Three will do just about everything. Big, Medium, & short. No matter what kind of tools you have, at least buy these three Snap-Ons. Now I replace every slot-head with a phillips. The difference is incredible.

BENT NOSE

Another tool that I've been without and never needed is a pair of curved-nose needle-nose pliers. Now I use them all of the time. Buy a pair. I'll bet you will say the same after a week.

It's what's up FRONT that COUNTS !

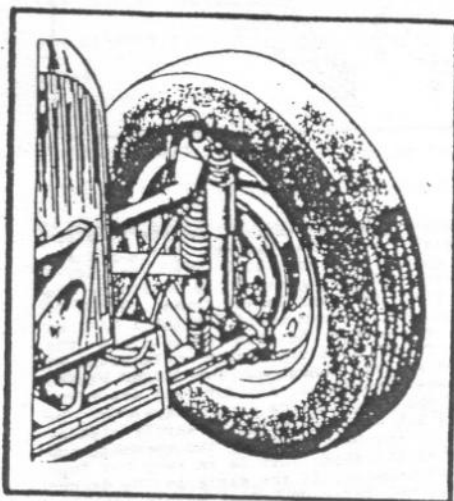
THE CARE AND FEEDING OF MORGAN FRONT SUSPENSION

The basis of this article (containing more than you ever wanted to know about front suspension) was written by Don Morrill in 1971, and is presented here with some changes, updates, and a few added sections.



INTRODUCTION

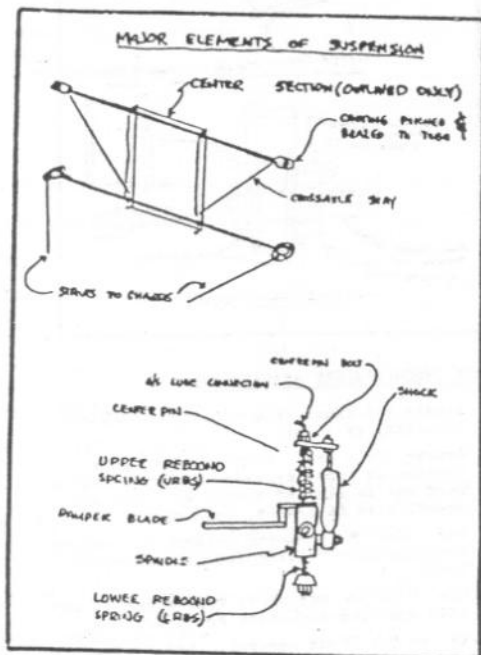
A high wear point on the MORGAN, and believe it or not, there are FEW, is the brass bushings that are pressed into the front wheel spindles, and ride on the vertical kingpin (center pin). To check for wear, jack up the front end and have someone wiggle the front wheel about the horizontal (hold the top and bottom), and look for movement of the lower end of the spindle with respect to the lower rebound spring. Bushing wear results in a certain vagueness in steering, and a feeling of front end looseness, but otherwise is not serious except in the extreme. Wheel shake is NOT cured by rebushing. Although the shake may disappear at first, when the bushings wear in the shake will return. Wheel shake is usually caused by loose damper blades or square wheels.



To gain familiarity with the front suspension sketches are provided that show things ex-works. If your car has been repaired due to front end damage, a check is worthwhile to determine if everything is there, and properly installed. Most body-shops are relaxed about keeping track of attaching hardware, so some imagination might have been exercised during assembly. Most of the suspension hardware is Whitworth and holes are sized for the English bolts. If American Standard has been substituted, additional hole clearance will result.

Check for missing parts. As Mr. Morgan is not known for using two bolts where one will do, if your car is missing anything, the results

will catch up. Make sure the shocks are secure at both ends, that the damper blades are intact, that chassis stays are tight, and the center pin bolt and nut are tight. Have someone rock the steering wheel about center and check for vertical motion of the steering drop arm (See Morgan Owners Manual--the one that should come with the car), or motion of the damper blade components. Make sure the damper blade is sandwiched between chassis and metal strip but can move freely. Older (Drum Brake) MORGANS do not have the aluminum spacer as shown. The spacer is mounted on the chassis x-section but serves the same function.



AREAS THAT MAY REQUIRE ATTENTION

1. Shock absorber replacement
2. Upper Shock Bracket replacement
3. Damper Blade replacement
4. Front Wheel Bearings
5. Center Pin and Bushing replacement
6. Cross-Axle Stay adjustment

Brakes and steering will be considered another day.

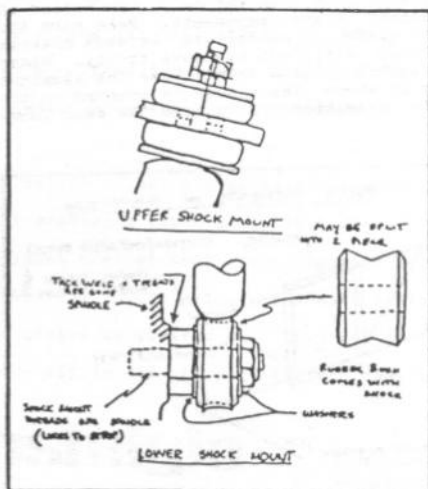
SHOCK ABSORBER REPLACEMENT

1. Use two 9/16" open-end wrenches to remove the two nuts at the top of the shock (one nut is used as a jam-nut).
2. Push strut into the body of the shock.
3. Remove the 5/8"-W nut at the bottom shock mounting stud.
4. Work off the shock.

Access for shock replacement is by jacking up the front end and removal of the wheels. I suggest putting a light coat of chassis lube grease on the rubber fittings at the bottom of the shock so it moves easily on the mounting stud.

REPLACEMENT SHOCKS (Front only)

Armstrong	AT7/1401/C	(Original Equip)
Monroe	1027 C1202	(Non-adjustable)
Gabriel	CSAA 45015	(Adjustable)
Koni	90-1021	(Adjustable)

UPPER SHOCK BRACKET REPLACEMENT

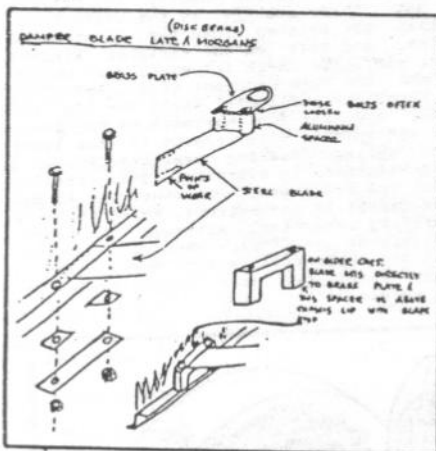
1. Remove the shock from the top attachment (bracket) as above.
2. Remove bolt that holds fender brace and bracket to upper cross-axle (this may be hard due to limited access at lower end); wrench size is 1/4"-W, open-end.
3. Use 3/16"-W open-end wrench to remove one-shot lube fitting from the center pin bolt.
4. Use 7/16"-W wrench to remove center pin bolt and free the Shock Mount Bracket.

Access as per Shock removal, but cross-axle must be resting on support, front wheels off the ground, to prevent the center pin from separating from the upper cross-axle. Car **MUST NOT** be moved with the center pin bolt removed. You can have the broken bracket welded or purchase one from Club Spares, or from Isis Imports, or from England.

DAMPER BLADES

Unless the brass portion that fits between the spindle and upper rebound spring has worn out or is missing, repairs will not require disassembly of the front suspension.

The damper blades are designed to prevent the upper rebound spring from influencing the steering due to spring "wind-up". In fact the damper blades attenuate minor front wheel shimmy, and thus its name. Unless you have an early Series I 4/4, you should have damper blades with parts layout generally as shown in the sketches.



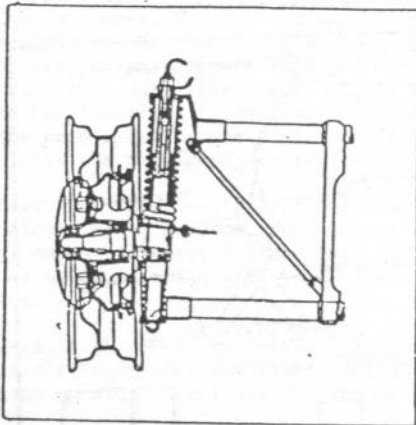
The damper blade assembly consists of the upper rebound spring sandwiched between the upper rebound spring and the stub-axle casting. A wide strip of spring steel is bolted to the bronze plate and runs to the frame, where it is either bolted down solid (Series I 4/4) or it is sandwiched between a plate and the frame. There is a triangular metal shim at each end of this sandwich. The damper blades lie between the shims. Any fore and aft movement of the damper blade can, therefore, be adjusted out with the shims by merely slaking one of the bolts holding the assembly and tapping on the shim. This is an easy but important adjustment. If the slack in the damper blades is not taken up, wheel wobble (shimmy) often results.

If the damper blades show excessive wear (see sketch), they should be replaced. Simply unbolt from the brass ring and slip them out of the clamp on the frame. Slip in the new blade and bolt to the brass ring. Do not forget to adjust the shims after replacement of the damper blades.

Have someone rock the steering wheel and note the fore and aft movement of the damper blade. Their movement should not exceed 1/32". If it does, adjust the shims.

FRONT WHEEL BEARINGS

Early (Drum Brake) cars up to about SN 420), have ball bearing front hubs with a distance piece between the two races. The outer race of the inside bearing is held in place by a screwed ring. This should be drilled and cotter pinned in place. Failure to do so may cause loss of the wheel (ask Ted Robinson). Later Disk Brake cars have roller bearings.



PART NUMBERS FOR BALL BEARING CARS

Inboard:	Federal	LS11
Outboard:	Federal	MS7
Seal:	Aeroquip	962492A

PART NUMBERS FOR ROLLER BEARING CARS

+4 and 4/4 (5/8" Taper)

Inboard:			
Inner Race (rollers/cage)	Timken	1999	
Outer Race	Timken	1922	
Outboard:			
Inner Race (rollers/cage)	Timken	03062	
Outer Race	Timken	03162	
Seal:	Aeroquip	962487A	

+8 and Racing Suspension +4
(3/4" Taper)

Inboard:			
Inner Race (rollers/cage)	Timken	14125A	
Outer Race	Timken	14274	
Outboard:			
Inner Race (rollers/cage)	Timken	09067	
Outer Race	Timken	09195	
Seal:	Aeroquip	900295A	

HUB REMOVAL

On Disk brake cars, the caliper will have to be removed. The caliper is attached with two bolts (18mm), usually safety wired together. **DO NOT** remove the brake hose from the caliper. Hang the works on a coat hanger in some out of the way place.

1. Remove the cotter key on the axle nut. On wire wheel hubs, rotate the hub until the two holes are aligned such that the pin can be worked out.

2. On Drum brakes, back-off the adjustment cams.
3. A 1 inch socket is required to loosen the spindle nut. Use 26mm if the nut has been bugged up a bit.
4. Slip the hub off. Ball bearing hubs will require a puller. Screw the spindle nut part way back on when breaking loose with the puller. This will prevent spreading of the spindle end from puller pressure.

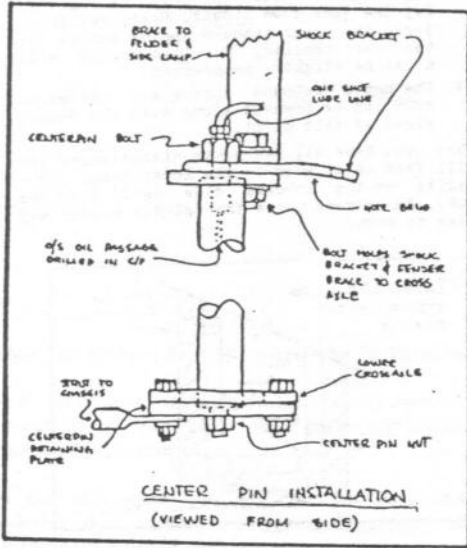
Clean the wheel bearings thoroughly and inspect them for any signs of pitting on either balls/rollers or races. Ball bearings can be spun (dry) while holding by the inner race at about 45 degrees from the horizontal. You can usually feel wear (pitting) as a "grabbing" feeling.

Pack the bearings with clean grease and install in the inverse of disassembly.

Be sure to cotter pin the retaining rings on inboard ball bearings.

On wire wheel hubs, be sure that the right side and left side are not mixed. Mark them on removal!

Tension tapered roller bearings by tightening them to 20 FT-Lbs of torque, and then back-off one "flat" on the nut.



DISASSEMBLY OF FRONT SUSPENSION

FIRST: Degrease the front suspension. If a 25¢ car wash is available, use it. (wheels off)! The front end becomes unbelievably greasy due to oil from the one-shot lube and road dirt. I cut this corner last time and am still tracking grease into the house. Kerosene is OK, never use gasoline if you value your life!

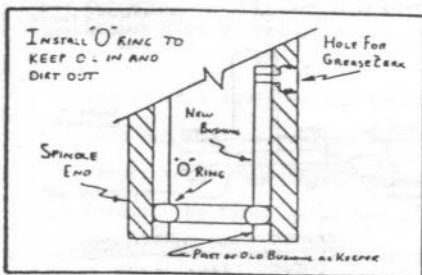
1. Remove Shock Absorber. (see above)

DISASSEMBLY CONTINUED

NOTE: Steps 2 through 4 may be disregarded if the front suspension is to be disassembled to replace the brass damper ring only.

2. Separate the spindle from the track rod. Remove the cotter key and castle nut (5/8 inch open end). Use a Snap-On puller (P/N CJS9A/CJ89-3) to separate. Clever people can get them off with a hammer, but I'm not one of them. Slip the puller "C" disk between the rubber seal and spindle arm and install the puller. Screw bolt end of puller onto the rod end bolt. Things will separate with a loud snap.
3. Remove Disk brake calipers. Hang the caliper on a wire as in hub removal. On Drum brake cars the fluid line must be broken.
4. Remove the hub (see hub removal).
5. Remove bolts (2) at the bottom of the suspension, one also holds a stay that attaches to the chassis (1/4"-W).
6. Place a jack which is about 8" extended, under the lower center pin retaining nut (between the bolts just removed). The car must be at least 12" off of the floor to remove the center pin.
7. Remove the one-shot lube fitting connection to the center pin (1/4"-W).
8. Remove the center pin bolt (7/16"-W). As the bolt is removed, the center pin will move down due to the spring force. However, the jack will permit control of this force. After the bolt is removed, let the jack down SLOWLY. Next, carefully jerk the upper rebound spring out at the top. Use caution, as this spring will still be slightly compressed.
9. The upper rebound spring and the cover tube can be removed along with the damper blade at this point.

When you have all the parts disassembled you will find major wear to the lower bush, primarily on the inboard side (away from the hub). In extreme cases the spindle holder may also be worn.

BUSHING FITTING

Removal and replacement of bushings consists of three major steps.

1. Remove the old bushings.
2. Install the new bushings.
3. Ream the bushings to fit the center pin.

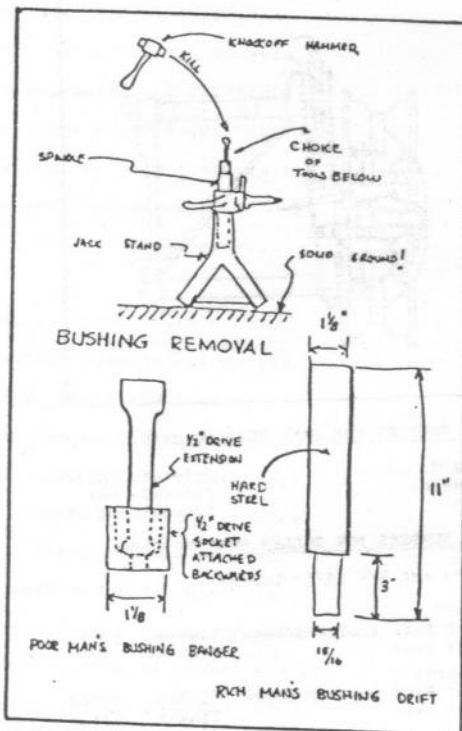
BUSHING REMOVAL

Removal requires a bushing tool (see sketch) that will push out the bushings and clear the

ID of the spindle. Use a jack stand to hold the spindle, and a drift (rich mans or poor mans) to drive out the bushing. A brass knock off hammer is about the right weight. Both bushings are driven out from the same side.

BUSHING INSTALLATION

Installation is best done using a hydraulic press (most auto machine shops can do this). In a pinch you can, with care, use the rich mans drift and drive them in.

BUSHING REAMING

The post-installation ID of the bushings is smaller than prior to installation. Therefore even though the bushings fit the center pin before installation, they will require reaming after installation. A reamer (J. C. Whitney, P/N 52-207) is adjusted progressively to remove more metal until the center pin will slide through the spindle with low resistance and very little play.

A MODIFICATION

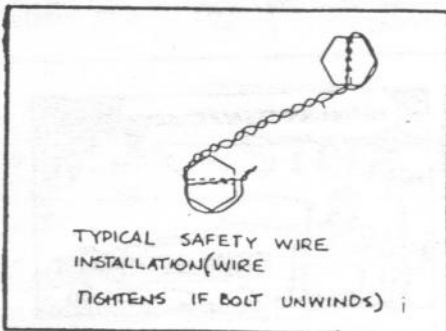
We have had good luck at extending bushing life, and keeping the front suspension clean, by installing an "O" ring to keep the oil in and the dirt out. Drive the bottom bushing in about 1/4" deeper during installation. Cut off about 3/16" from your old bushing. After reaming, insert an "O" ring in the bottom and hold it in place by driving in the 3/16 inch piece cut from your old bushing (see sketch). Be sure that the grease hole at the top end of the bushing is not obscured. If it is, drill it through, taking care not to bugger up the threads.

ASSEMBLY OF THE FRONT SUSPENSION

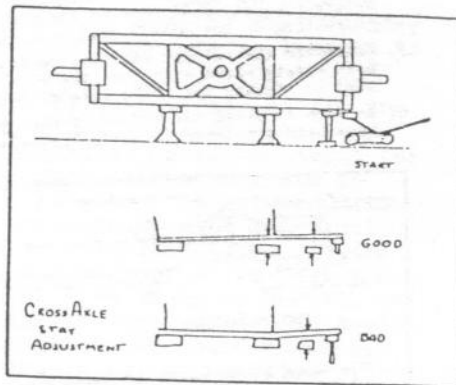
1. The lower C/P retaining plate must be removed from the old C/P and installed on the new one.
 2. Muscle the upper rebound spring and cover into position at the upper suspension member (don't forget the damper blade), and drop a screwdriver through the center pin bolt hole to hold the spring in position.
 3. Lubricate the spindle bushing area and C/P with chassis grease prior to assembly and perform a routine chassis lubrication when the job is completed.
 4. Slide the center pin up through the lower rebound spring, spindle, upper rebound spring, and cover. Place the jack under the center pin nut at the bottom.
 5. Work the center pin into the suspension using the jack. Watch out for the spindle hanging up on the cover (inside the upper rebound spring).
 6. You will probably find that the jack will not force the center pin completely in as the jack will lift the whole car! The retaining plate can usually be drawn home by using long bolts. These will have to be replaced after the top is secure. Remember this when placing the jack so a bolt can be inserted into the holes.
- NOTE: We have installed an eye bolt in the garage floor. The cross-axle can now be chained down so that it will not lift. The assembly can now be jacked right home. This is a must if the engine is out of the car while doing suspension work.

7. Install the center pin bolt from the top into the center pin. Use a small mirror and flashlight to center the pin under the hole. This can be difficult! When the center pin is under the hole, thread the bolt home, and this completes the assembly process.

NOTE: Do not try to thread the center pin bolt into the center pin by "feel". If you miss and cross thread the bolt, you will ruin both the center pin and the bolt. For the same reason, DO NOT use the center pin bolt to jack home the assembly.



8. The hub, if removed, can now be installed. If you have tapered roller bearings, adjust for minimum play (tighten the spindle nut to 20 ft-lbs, then back off one flat).
9. Install the steering track rod if removed.
10. Install the caliper when the hub is on (Disk brakes only). Be sure to safety wire the bolts properly (see sketch).
11. Install the one shot oil pipes.
12. Adjust Drum brakes.



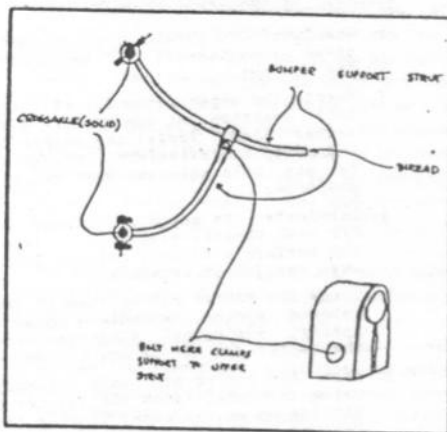
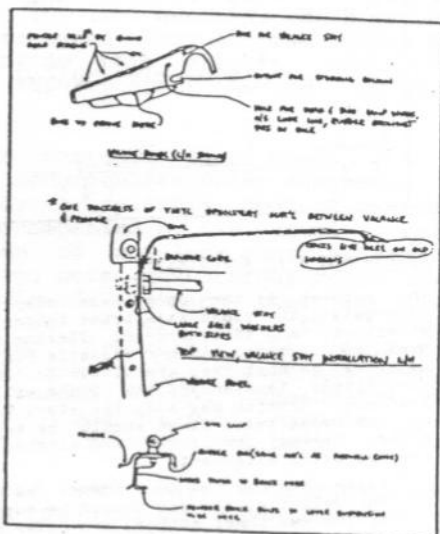
CROSS-AXLE STAY ADJUSTMENT

The purpose of the cross-axle stays is to triangulate the cross-axle beams into a rigid structure, and thus prevent flexing during bump and rebound. The cross-axle stays are adjusted so that they are always in tension. Too little tension and the front will sag. Too much tension may snap the stay. Tension on the cross-axle stays should be adjusted before having the front end aligned, and checked after alignment.

1. Place the car on jack stands as shown. The weight of the car should be supported by the two inner stands. The outer stands could be distance measuring blocks.
2. Jack on the outer end of one side SLOWLY. The cross-axle should lift simultaneously from both the inner and outer stands (see sketch).
3. If the cross-axle lifts from the outer stand first, the cross-axle stay is too loose. Care should be taken not to jack the car too far off of the stands. 1/2" to 1" should be sufficient. If the outer end is more than 1/4" off of the stand and the inner end has not lifted yet, the stay is MUCH too loose.
4. Tighten the cross-axle stay until the cross-axle lifts off of both stands simultaneously. The cross-axle is now properly tensioned. No advantage is to be had by significantly increasing the tension.
5. Repeat the above steps for the other side.

SAFETY COMMENTS

1. During assembly assure that the hubs have not been reversed. Look at each knock-off and make sure it threads in the same direction as the rear wheel on the same side. If you have removed the hubs, and install them in the reversed direction (threads going the wrong way), you will loose a wheel. It is no fun---so check!
2. Check every nut and bolt again after you have put about 100 miles on the car. Also check for wheel bearing play and take-up if required.
3. Have the alignment checked after bushing replacement.
4. When working on the front suspension, the cross-axle must be seated on jack-stands or their equal. dont work on the car with it resting on the MORGAN jack.
5. Make sure the caliper securing bolts have been safety wired such that the wire will tend to tighten the bolts (see sketch).
6. Be sure to bleed the brakes if the pipes have been disconnected (Drum brakes).



ADJUSTING HEADLAMPS

Adjusting the headlamps on your MORGAN is a relatively simple task. All you need is a screwdriver and a wall to shine the lights on.

Park the car about three feet from your garage door (or other wall) with the lights on low beam. You may need to do this at dusk or even in the dark to tell exactly where the light is shining on the wall.

Mark the outline of the beam shining on the wall with a pencil and then move the car back 25 feet from the wall. The top of the low beam should be no higher than the top of the circle on the door, and no lower than the center of the circle.

If the beam shines outside the circle, use the screwdriver to turn the adjustment screws on either side and above the headlamp housing. Turning the screws will cause the beam to move left to right, or up and down on the wall. A little experimenting will show you how to adjust the lights to fit the marks on the wall.

Once the low beams are adjusted, the high beams should be in the right spot also.

If you install halogen headlamps, you will find that the highly concentrated, white beam does an excellent job of illuminating the road at night. However, halogen lights must be adjusted more precisely, because the beam is more concentrated and there is less margin for error.



FROM THE COMMENTS BELOW, IT APPEARS THAT THE SOUTHERN CALIFORNIA CLUB HAS CAUGHT US PILFERING THEIR MOG MART LISTINGS EACH MONTH. BUT, OF COURSE, I'M SURE THEY ARE GRATEFUL FOR OUR EXPOSING THEIR CLUB TO OUR "QUALITY" READERS.

Mog Mart--a list of adoptable Morgans

Mog Mart is published only as a service for our Morgan +4 Club members. Information shall be printed for three months, unless requested otherwise. This is NOT a paid advertisement, and we do not knowingly accept listings from dealers. The FORMAT and/or the MORGAN +4 CLUB accepts no responsibility for the accuracy of the information contained in Mog Mart.

*u/s
PRICES*

YEAR	MODEL	PRICE	DESCRIPTION	PHONE	STATE
1933	JAP 65	\$10,150	Wide track, Fresh engine	(312) 234-3558	IL
1934	RE Family	\$ 9,500	Restored	(816) 931-7201	MO
1937	4/4	\$ 8,500	Older Restoration	(619) 293-2013	CA
1937	4/4	\$16,000	Red/Tan. Restored	(816) 931-7201	MO
1933	4PASS	\$13,300	A fine example	(804) 340-7087	VA
1933	DHC	\$12,500	T84 engine.	(214) 631-8110	TX
1933	Plus 4	\$12,000	Straight & Sound	(201) 283-0685	NJ
1935	Plus 4	\$13,500	Older restoration	(804) 423-1566	VA
1936	4PASS	\$ 5,000	8ADDADS	(213) 827-8665	CA
1936	4PASS	N.P.	Linda Rawlings	(213) 831-3508	CA
1936	Plus 4	\$ 9,500	Restored; Red/Black	(818) 333-5671	CA
1936	Plus 4	\$10,500	Best in class MOG XVI	(804) 320-0360	VA
1936	Plus 4	\$12,500	Restored	(206) 357-8463	WA
1937	4/4	N.P.	Drive anywhere	(714) 889-3143	CA
1938	4/4 82	\$10,900	Wire wheels, Lov mileage	(413) 562-9084	MA
1938	4PASS	N.P.	Very nice car	(619) 466-8439	CA
1938	4PASS	\$12,500	XLMT	(315) 597-6865	NY
1938	DHC	\$13,500	Restored 1961	(315) 673-2734	NY
1938	Plus 4	Offer	Front end damage	(412) 367-0626	PA
1939	4/4	\$12,500	Runs good	(203) 377-6746	CT
1960	4PASS	\$ 7,200	Road	(818) 933-8164	CA
1960	4PASS	N.P.	Concours Winner	(303) 772-5729	CO
1960	DHC	\$14,000	RHD. Restored	(619) 589-7151	CA
1960	Plus 4	\$10,800	Lawrence Tune engine	(214) 458-0703 (EVE)	AZ
1961	4/4	N.P.	RHD.	(213) 922-7288	PA
1961	4/4	\$10,500	Royal sound system	(214) 458-0703 (EVE)	AZ
1961	4PASS	\$14,500	Blue/Blue. Xlat	(213) 434-2800 (DAY)	CA
1961	DHC	\$ 5,000	Requires Assembly	(714) 685-9654 (EVE)	CA
1961	DHC	\$10,000	Revy rebuilt engine	(714) 626-0646	CA
1961	Plus 4	\$12,500	BLK/BLK HIRT	(213) 434-2800	CA
1962	4/4	\$10,800	Needs Nothing	(307) 234-1574	WY
1962	Plus 4	\$14,500	Wire Wheels	(408) 649-8973	CA
1962	+ 4 +	\$17,000	XLMT, Show Car	(717) 354-7767 (Eve)	PA
1963	DHC	N.P.	Very nice condition	(312) 692-3245	IL
1963	Plus 4	\$13,800	Black/red interior	(619) 293-4070	CA
1964	+ 4 +	\$19,000	Res Restoration	(214) 867-1122	TX
1964	4 Pass	\$ 9,000	Xlat running condition	(301) 745-2023	MD
1964	Plus 4	\$ 9,300	RHD. Nice	(619) 589-7151	CA
1964	Plus 4	\$10,500	RHD. QUICK SALE	(213) 827-8665	CA
1965	TT	\$ 9,500	Yellow/Black int.	(205) 821-8900	AL
1965	Plus 4	\$12,000	Big Engine	(213) 458-1619	CA
1965	Plus 4	\$12,500	Original	(816) 931-7201	MO
1965	Plus 4	\$13,500	Exc Condition	(914) 343-9188 (Eve)	NY
1966	4/4	\$13,900	1600 GT	(203) 377-6746	CT
1966	4/4 8V	\$16,000	Carbon/Black leather	(703) 771-8300	VA
1966	Plus 4	N.P.	Xmission out but incid.	(714) 646-3756	CA
1966	Plus 4	\$10,500	White/Black.	(214) 631-8110	TX
1966	Plus 4	\$12,140	Headers, Comp cam.	(312) 234-3558	IL
1967	4PASS	\$13,500	Rusty Chassis	(703) 243-1846	VA
1967	Plus 4	\$13,500	Wire Wheels	(303) 651-3774	CO
1967	Plus 4	\$15,000	Frame up restoration	(818) 882-3237 (EVE)	CA
1968	4/4	\$10,500	Very good condition	(313) 644-6021 (EVE)	MI
1969	Plus 4	\$17,800	RESTORED	(514) 733-2447	CAN
1970	Plus 8	\$13,500	Excellent	(703) 243-1846	VA
1970	Plus 8	\$14,500	RHD. One owner	(303) 939-8237	CO
1970	Plus 8	\$26,000	Totally Restored	(804) 486-7737	VA
1971	Plus 8	\$17,000	40,000 Miles	(419) 874-0880	OH
1972	Plus 8	N.P.	13K Miles, Original	(313) 884-4547	MI
1972	Plus 8	\$18,500	24K Original miles	(205) 339-5216	AL
1977	4/4 4PASS	\$18,000	Restored!	(502) 936-3871	KY
1980	Plus 8	\$30,000	All Alloy Body	(212) 912-2350	NY
1982	Plus 8	\$24,500	Immaculate	(314) 421-3100	MO

*Editor's Note:
Spies have informed us that certain TEXAN "Mog Mart" rustlers may be "comin' out West" to Cambrla - - be on the lookout!?!*

P.S. You have my permission to print this--even if you do not ask. See you at MOGQUEST, TexMogs!

LAST REMINDER::: FORGOT THE PRICE
DUES ARE DUE::: ITS \$15.00
a real bargain

DONT SAY WE DIDNT WARN YOU,
AND YES PETER PFAHL YOU DID
PAY THIS TIME:



MRS. AUDREY BEER
R.R. 3
BOLTON, ONT.
L7E 5R9