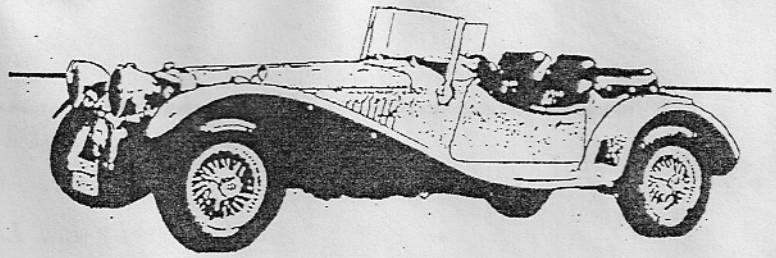


SQUIRE SS-100

CLBCOM #28
OCTOBER, 1992

Jeez..... It's already time for me to fulfill my promise and do the October news bit.

Got a neat card from Art, somewhere in Germany - Munchen (Munich) and he was on his way to Austria. I suspect that he is travelling some by air and some by train. We can wager that if there is a German car museum somewhere, he will take pictures.

I'm not into subscribing to a bunch of car magazines, and have had no communications from within the group during the past few weeks so don't have any newsy car related stuff to report, except for Mech. Data Sheet #0027 from John Fulton which details a darned good idea. The trough type areas between the front fenders and hood and the low spots where the running boards and the rear fenders blend together are *traps* for falling or splashing water. John provides a very good answer to this in the form of easily installed drain pipes. I'm going to add these on my Squire body, for sure.

John also says that he is constantly haunted by the possibility of the original engine mounts breaking and having his engine hit the pavement, as has happened on a few other Squires. I tend to agree that this is some kind of a hazard, and had this modification made on my frame. In a near future CLBCOM, I hope to have an accurate drawing and bill of materials that can be followed by any competent welder.

I would consider this relatively inexpensive (considering the alternatives) fix to be one of *recall* proportions were the original manufacturer available and accountable. Think of it this way: You are cruising along at 55-60 MPH and cannot avoid a chuck-hole in the pavement. *Kerthump* followed by *Kerbang*, - the Kerbang being the sound of your engine hitting the pavement! Not a pleasant thought. Unless you have your Squire on permanent display, this modification should not be put off.

An interesting sidelight on this.... I recently had my Squire frame inspected by an Arizona DMV field man, as required by State law prior to application for full registration. This man was an experienced body and frame man before a bad back brought him into bureacratic employment. He was fascinated by the car and asked question after question. Since the motor mounts and cross brace looked new, he asked about them. I had told him something of the history of the Squire SS-100's and he wanted to know if there were any other Squires of this type in Arizona. I told him that I know of only one other (Art's) and that the same fix had been made on his car. He told me that the only other vehicle that he had heard of that could lose a motor in this way was a 1947 International pickup truck. Hmmmm.....

If you haven't tired of my prose by now, follows a few pages of my little *Saga* series. Art will be back for the next CLBCOM issue. Bill Lieske

◆ *The Saga of Squire SS-100 Serial No. 11044545* ◆

By Bill Lieske

Chapter V

Last month I reported that things were going along rather briskly. The chassis is going together well, despite finding that the new transmission bell housing is enough different than the old one that the original starter will not fit. Apparently there was a greater area for the business end of the starter to fit into in the old housing. So, I'm now in search of another starter that will fit in the space available, is designed for the same number of teeth (159) on the starter ring, etc.

A few weeks ago, the automotive section of the Arizona Republic newspaper featured a new process for removing paint and other stuff from fiberglas without damaging its surface called Media Blasting. A local concern, *Stripping Innovations,* operated by John Hamilton and his family does this work. After meeting John, seeing some work in process, and becoming infected by his enthusiasm about the process, I took my weather beaten Squire body over to him.

This is truly a great innovation! Using only 7 to 9 pounds of pressure, but with a huge volume of air, very small pieces of plastic media are used to wear away paint, undercoating, bondo and any other stuff that is overlaid on fiberglas. In about 3 hours of blasting time Shawn Jenkins, John's step son, really cleaned up the body, inside and out. For anyone who really wants to clean up a car body of any kind for restoration and painting, I highly recommend this process I isn't cheap, but it certainly is effective, compared to the usual sanding and scraping otherwise required. A copy of the newspaper article is attached.

Without an actual count, I would estimate about 10,000 air bubble holes and voids in the fiberglas surface of this car body! This also revealed that a lot of filler, apparently bondo or something similar, was used at the factory for filling and contouring. The thing looked like it had a bad case of acne in its youth with all of those pock marks. and voids.....

Through references I found Danny Oakey, who is a body specialist and top level painter. Last Friday, August 14th, the body along with the hood and doors was taken to Danny's shop. He expects to have it filled, shaped and smoothed with undercoat and ready for re-installation on the chassis by the end of September.

I am now beginning to make plans for upholstery and finishing things out. The original seats are in horrible condition with the slides deeply rusted and the springs, mounts, etc. too far gone to rebuild without a ton of work. I had the opportunity to measure up the driver and passenger seats in a '65-1/2 or '66 Mustang and they look like they would fit fine. So, I'm hitting the junk yards for a set of them, or something similar.

Art has cleaned up all five wheels, as well as just about all other chrome plated parts. He spent untold hours of steel wool rubbing, application of *Eagle 1* two part chrome cleaner and has sore hands and fingers to show for his labor! Whatta Guy! They all have come out surprisingly well. The front bumper had a couple of real dings in it and was bent out of shape. It has been filled, straightened and re-chromed along with several other brackets and parts.

As I found the time, either cleaned up original parts and assemblies or new ones have been placed on the engine. This includes carburetor, air cleaner, alternator, fuel pump, fuel lines, disributor, water pump, fan (a monster variable pich type), fan belt, radiator, radiator hoses, oil filter, spark plugs, spark wires, vacuum lines and similar things. I found a starter that fits (last one in stock in Phoenix: $138.35 plus tax. (Wow!!) .

Despite these interesting activities, I relented to my good wife's hints and threats and we are leaving in the morning for an eight day flying trip to the Midwest and East Coast to visit relatives and friends. That's the status of things as of August 17th, 1992.

"On a few trips to Europe I was quite annoyed at the drivers constantly flashing their high beams at you during the day and blinking them off and on at night for God knows what reasons!"

The narrative now shifts to Saturday, September 26th! What with a couple of trips and a heavy load of special work in our electronics manufacturing operation, I have had only a day, here and there, to work on the Squire during the past month. The Arizona summer of 1992 has really hung in there..... In more than 24 years living in the Phoenix area I can't recall a summer that has been so continuously hot, humid and just plain nasty! It was 103 again today. Despite the heat, I managed to get in six or seven good hours of Squire time. Here are a few things that I did that should be of interest:

Timing The Engine. Like a dummy, I installed the valve cover, carburetor and exhaust manifold before installing the new plugs and replacing the distributor. Rotating the crankshaft a few times, I could not be sure that piston #1 was at top dead center on the timing mark and on the firing cycle so I could index the distributor properly. The solution to this was close at hand, after I thought it out for awhile. I have an old compression tester, on which the rubber seat that you put into the spark plug hole can be quite easily taken off. I also have an air compressor and a blow nozzle that fits into the rubber seat.

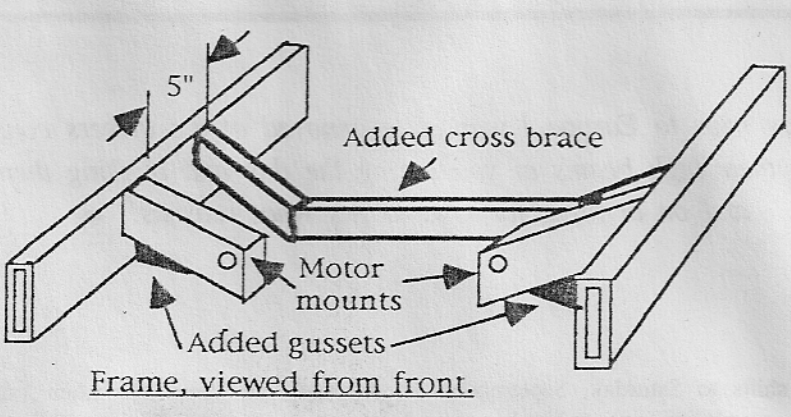
On the first try, blowing air into hole #1 resulted in air whooshing out of the exhaust manifold, indicating that the #1 cylinder exhaust valve was opening at the end of the power stroke. As I rotated the crankshaft another 180 degrees, air blew back out of the intake manifold, starting the intake stroke. After another 180 degrees I got back pressure, indicating that both valves were closed - the point at which the plug fires. How simple things can be when you think them through.....

The Steering Column Control Levers. The wires that lead from the horn button, turn signal and light dimmer levers on the steering column had been modified considerably by prior owners, so we had cut them off when taking the chassis apart. I had taken this assembly apart and cleaned all of the switch wipers and had the column back in place, So, how was I to know which wire was which?

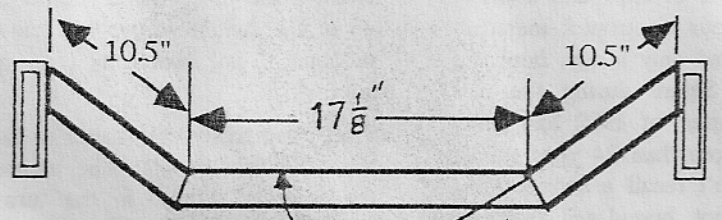
I used my trusty ohm-meter to bug them out with the following results. The shorter lever (nearest the steering wheel) is the turn signal and the longer lever is the headlight high-low beam control. The dimmer control lever when in its center position has one pair of wires in contact, color coded *white and slate.* When the lever is moved downward, contact is opened between the white and slate pair and two pairs of wires are in contact separately, *green-pink and yellow-black.* When the lever is moved upward, no contact is made between any of the wires. I can only conclude that this was meant to operate the low beams through the headlight switch in the center position, turn the low beams off and the high beams on, plus operate the high beam dash indicator light in the down position. When the lever is moved up, all headlights would then be off. Is this the way the factory wired Squires are? This can't be right unless this is some European thing about headlight flashing.....

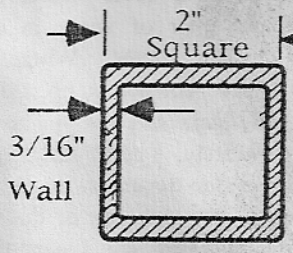
On a few trips to Europe I was quite annoyed at the drivers constantly flashing their high beams at you during the day and blinking them off and on at night for God knows what reasons! I'll have to find the answer to this before re-wiring things.

The Ignition Switch. I doped out the various functions of the terminals on the back of the ignition switch. There are two thin black wires that come out of the forward part of the switch that have continuity between them any time that the key is in the switch. I presume that this was to comply with a Ralph Nader idea, or to provide an interlock through the accessory wiring so that a buzzer sounds when the key is inserted but not turned to accessory, start or run positions.



Frame, viewed from front.





Cross section of square tubing used to fabricate the cross brace

See text for other details and recommendations.

SQUIRE SS-100 MOTOR MOUNT AND FRAME UPGRADE

At least two Squire owners have had the unfortunate experience of failure of the original motor mounts in the Squire SS-100 autos. The original mounts were bead welded to the side of the frame members, and no cross bracing was provided at or near these points. The 250 CID six Ford engine is not a lightweight! Through road shock, vibration and engine torque this mount arrangement is a true weak spot, since the weight of the engine and stresses that take place can break the welds loose resulting in a problem as serious as the front of the engine dropping to the pavement!

The upgrade of the mounts described along with the addition of a sturdy cross brace between the frame side members was devised and applied to three Squires thus far by Terry Becker, an extremely talented engineer and metal craftsman living in the Phoenix, Arizona vicinity. For those of you who find it inconvenient or impractical to ship or trailer your Squire to Terry (Please don't drive it, if it is more than 100 miles!) for this most important upgrade,

you should be able to find a competent welder to make the modifications and additions if you cannot accomplish the job yourself.

A sketch showing the location of the motor mounts and the added items is attached. Incidentally, this work can be accomplished without removing the engine from the car. Recommended steps are as follows:

1. Inspect both motor mount arms, all around the welds that attach them to the inner wall of the side frame members. You might find some spots that have already broken loose! Even if they *look* reasonably good, overlay a heavy bead of fillet, preferably using D. C. arc welding techniques.

2. Construct two gussets, made from 5/16" thick steel plate, to match the angle between the motor mounts and the frame as shown on the drawing. Weld these on the underside of the mounts, and to the frame members. If you wish to be completely satisfied, make two straps of 1/4" thick steel and weld from over the top of the frame member to about 3 inches along the top of the motor mounts.

3. Secure a 44 inch long piece of two inch square by 3/16" wall steel tubing - the kind that is used for light trailer tongues and motor home frameworks.

Using the dimensions shown, cut the tubing to fit and weld in place as shown. Note that the centerline of this cross brace is located five inches toward the rear of the chassis from the back of the original motor mounts. It should be best to make the tubing up and tack weld it to shape on a completely flat surface first, and when everything fits, final weld it together and then to the frame as shown. Your oil pan should clear the cross brace by about one inch, which gives plenty of room for the engine to float on its mounts under any condition of driving.

4. Chip and wire brush all weld scarf and flux, undercoat and paint with a sturdy vinyl or urethane based spray paint.

You can now go out and drive your Squire over rough roads, dirt roads, hit pot holes and street gutters with complete peace of mind and the assurance that *your engine won't ever fall out on the ground!*

.....Submitted by:
Bill Lieske

Bill Lieske (Squire Serial Number 11044545)

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David Petkiewicz/The Arizona Republic

Shawn Jenkins cleans the paint off a Chevrolet Corvette using plastic-media blasting. The process allows paint to be removed from the Corvette's fiberglass body without damaging the surface.

Plastic blasting cuts damage

By Bob Golfen
The Arizona Republic

Stripping the old paint off a vehicle prior to painting is not a task to be taken lightly.

Most professional painters say it's not necessary unless the existing paint is damaged, cracked or peeling, or there are several layers of old paint on the car or truck.

Otherwise, stripping the paint down to bare metal is reserved for those doing restorations on antique or classic cars.

Stripping generally means applying hazardous chemicals that melt the old paint, which then must be scraped off and handled like toxic waste, or sandblasting, which can damage steel body panels and should never be used on aluminum or fiberglass.

A recent innovation being applied by a north Phoenix firm is plastic-media blasting, which is similar to sandblasting but uses various grades of plastic grit to remove paint, rust or decals

— *See* **NEW**, *page CL17*

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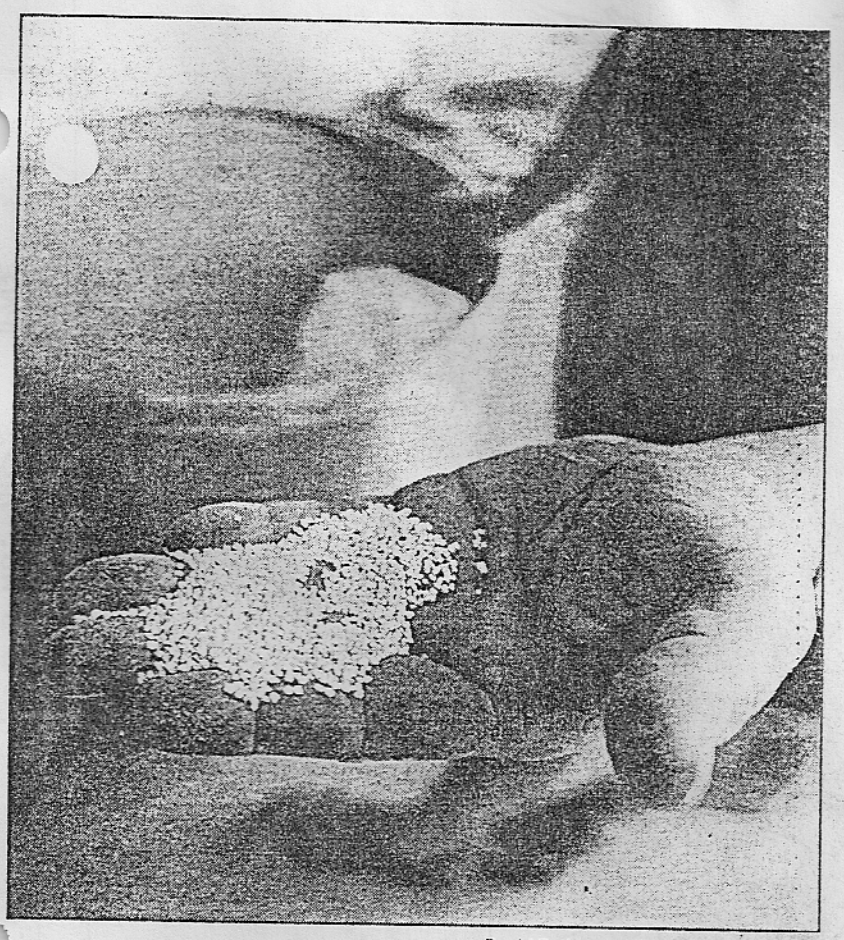


David Petkiewicz/The Arizona Republic

Pl -media blasting comes in several hardness gradings, with softer grades used on easily damaged surfaces, such as aluminum, plastic and fiberglass.

New plastic-grit blasting lessens damage to car body

— NEW, *from page CL15*

from most surfaces.

John Hamilton, who owns and operates Stripping Innovations with his wife, Jan, said the plastic material is blown through a low-pressure system, which is more controllable and creates less heat, reducing the danger of warped body panels.

The harder grades of plastic are used to quickly remove paint or rust from steel, while the softer grades are used to carefully remove paint from easily damaged materials, such as aluminum, fiberglass or plastic bumpers and trim.

"We can strip a Corvette body in two hours," he said, adding that an auto body can be stripped without destroying any plastic filler from previous bodywork.

The plastic material, which is very expensive compared with sand, is completely recycled through a complex system that separates out metal shavings, paint chips and dust fro the reusable plastic media.

"We have no trouble with enviro mentalists because there's no tox waste," Hamilton said.

After an eight-hour day, the was includes some paint chips and abo two cups of plastic dust, which removed by a model builder wh mixes it with rosin to make materi for modeling, he said.

One disadvantage to the system that unlike sandblasting, the machin ery is not portable, so that anythin that needs to be stripped has to b brought into the shop, 21442 N Central Ave.

As well as cars, trucks and boats Hamilton said, people bring in every thing from boxes of car parts an custom wheels to wrought-iron rail ings and antique wooden furniture.

"We do party boats with aluminum pontoons," he said. "We even do jet skis."

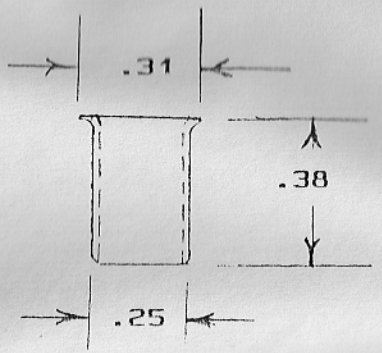
1. THIS MODIFICATION IS INTENDED TO ALLOW THE DRAINING OF ANY RAIN OR WASH WATER WHICH IS CAPTURED IN CERTAIN AREAS.

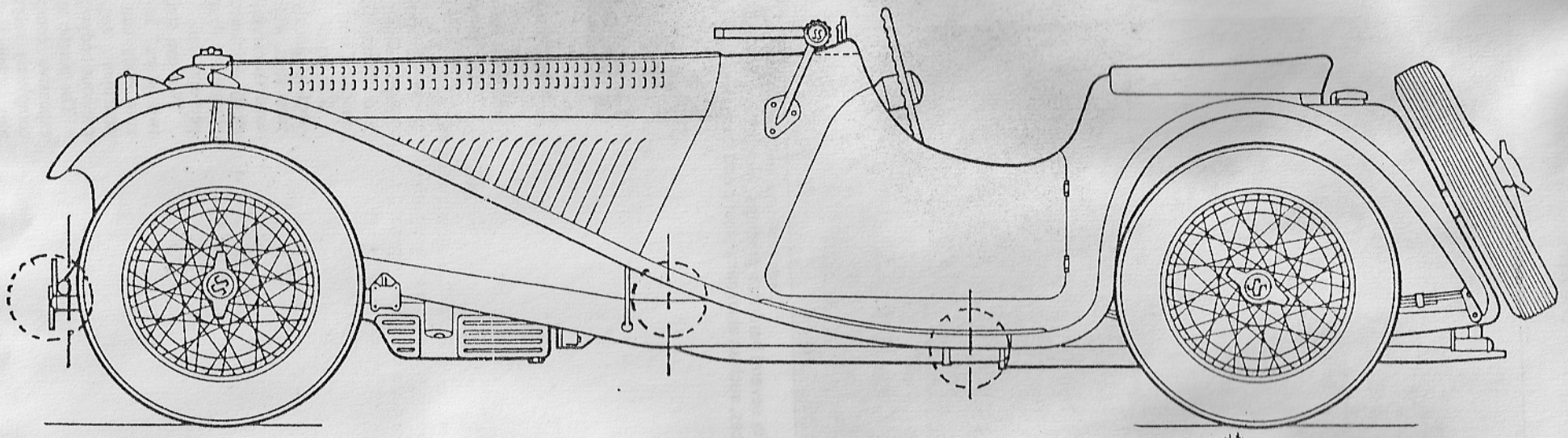
2. THE DRAIN PIPES COME IN MANY DIAMETERS AND LENGTHS TO ALLOW A WIDE CHOICE. THE ILLUSTRATED EXAMPLE IS ORIGINALLY PRODUCED AS AN ELECTRICAL WIRE CRIMP.

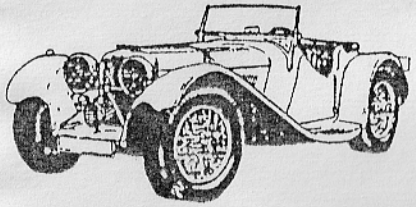
3. EXACT LOCATIONS ARE EASILY DETERMINED BY OBSERVING GEOMETRY OF COACH WHILE POSITIONED ON A LEVEL SURFACE.

4. WHEN CHOOSING A SIZE CONSIDERATION SHOULD BE GIVEN TO DRILL DIAMETER WHICH WILL ALLOW A PRESS FIT. CONTACT CEMENT MAY BE APPLIED IF DESIRED.

5. WHEN DETERMINING LOCATIONS IT IS RECOMMENDED THAT LOWER OBSTACLES BE OBSERVED. I.E., RUNNING BOARD SUPPORTS, CHASSIS FRAME.







SUBJECT: DRAINPIPES, COACHWORK				
SUBMITTED BY: J. FULTON	DRAWN BY: J. FULTON	DATE: 8 OCT 92	M D S No. 0027	PAGE 1 of 1

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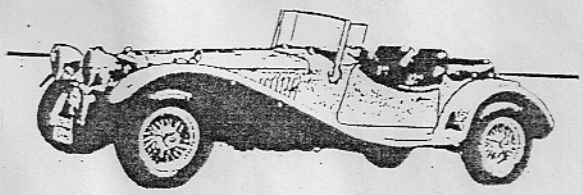

SQUIRE SS-100

MEMO

TO: John Fulton

From: Bill Lieske

Date: October 22, 1992

Hey, John.....

I have been home for a couple of days with some kind of an intestinal disorder and when I got to feeling better started to play with some of the capabilities of Microsoft Word on the MacIntosh IIci computer that we have. I found a rather neat (but limited) draw program hidden inthe thing.

So, I recalled the recent letter to you with the info regarding the frame upgrade on the Squire (among other things) and had some fun with the *draw* capabilities of the program. What I did, was, make a drawing of the the hand sketch that I sent you, albeit layed out differently. A copy of the entire thing is enclosed, for your perusal.

I probably will add this thing to the CLBCOM #28 that I will get together and mail late this month.

Having not heard from hisonner Art Stahl, I must presume that he is still running around Europe looking for some threads to his German heritage.

You might be interested in some recent developments. I had been very busy for several weeks and had not checked up on the fellow who has my Squire body to work on. When I did, I learned that he is in a peck of personal problems and had not touched the damned thing for over a month. So..... as soon as I feel physically able, I will borrow a trailer and go get the car body to be sure that it won't be subject to a lien or something like that if his pending divorce gets real nasty.

Crap! This sets my plans back a bit. I have the chassis within a few hours of ready for the body to go back on. Now, I have to go through the routine of finding and qualifying another guy who can and will finish the body work. And, get in line again to have the work completed. This could piss a guy off, completely..... If I weren't so damned old and decrepit, and didn't have the obligations of a going business to be involved in, I would say "To hell with it!" and finish the body work myself. I just may have to do just that if I can't find a reliable fiberglas and paint guy to do the thing.

This being the situation,, I see no way that I can be driving my car within the next several months. Well, I have a perfectly good VW powered Gazelle that sits in the garage 99.6% of the time. I'll dust it off and drive it for awhile, I guess. It doesn't have the class of a Squire but it runs like the dickens.

See yah later.....

Bill

Bill Lieske