

SQUIRE SS-100 CLUB

CLBCOM 25
JULY, 1992

Michael Lindgren is now an official member of our group. He can be reached at P.O. Box 178 or 131 Glenlawn Ave., Sea Cliff, NY 11579 Area 516+759-2275 which is both his residence and business number. His business, by the way is called Cinema Resources and he leases classic and racing cars to film companies. His Squire #11005525 is jet black and BEAUTIFUL! I have included some xerox copies of snaps he sent but as usual they do not do the car justice. Other than a wood grain dash his Squire seems to be exactly as they shipped it from Italy. Mileage is 14,750. He did mention that he does not have rigid side curtains but instead, his snap and zipper onto the top.

A few interesting things are showing up as work progresses on Bill Lieske's car: First, some prior owner has added 2-1/2" to the spring hanger box where the front end of the rear springs are anchored to the chassis. I have made a simple sketch showing the addition. This added length has the effect of adding that amount of travel before the car "bottoms out". I believe some of our other members have made similar modifications to the rear spring travel and avoided all the extra leaf, re-arching and gas shocks that I went thru. However, Lieske still plans to add gas shocks in the rear to achieve firm sports car handling.

Second, the transmission saddle, or the under-brace that the tranny and rubber tranny mount rests on, appears to be held on with just four bolts. Not so!! In checking mine some time ago I noted what appeared to be some small tack welds between the saddle and the main chassis. Why they both welded and bolted the saddle seems a genuine case of overkill but I suspect there was a reason. Manufacturers tend not to do things without one. There are four small tack welds at the very top of the saddle, fore and aft. There are four more on the two outside plates, near the top. We decided to remove the welds for ease of tranny removal in the future. Remembering that there is no engine, tranny or floor boards, we used a 4-1/2" angle grinder on the four top welds and with a much tighter area to grind on the side plates, a 1/4" die grinder with a small cutting disc did the job. There was some small shifting after the welds were cut and we had to ream out the bolt holes with a 31/64" bit to reinstall the four bolts. This grinding procedure will be more difficult with the floorboards, engine and tranny in place but a lot easier than removal of the headlight assembly, grill, radiator and engine just to remove the transmission. Hopefully, you will NEVER have to remove your tranny.

Third. When I first purchased my Squire it only had one key so I drove it to a good lock shop and had another key made. The locksmith said it was definately a Fiat pattern so I have assumed right along that the entire steering column, top to bottom was Fiat. In cleaning the top of Lieske's steering box that's bolted to the frame I noted that the box was stamped FoMoCo and there was a removeable I.D. tag affixed with the legend SMA-B1. I took this tag to our local Ford dealer and he has identified the steering box as being from the '73-'77 Maverick. He asked if my car had power steering because this particular box was geared for power assist. So, now we know what the lower portion of the steering gear is and it's logical to assume that the tie rods are part of a matching set?

Further, Bill Lieske did a little research on the steering box and we find it's very easy to adjust the play in the steering wheel. Just as you would adjust a set of tappets, slip an 11/16" box end wrench over the securing lock nut while holding a large screwdriver on the adjusting bolt. After loosening the lock nut an appropriate amount, turn the adjusting bolt clockwise to where you remove easy travel. Reset the lock nut and sample the play in your steering wheel. It may take a few tries 'til you get it right. Last, there seems to be a vented ingress bolt that I suspect may be to add lubrication of some kind. I'll have to check this and get back to you.

It surprises me how many Squires I've seen that don't have front shock absorbers. Bill Lieske's car arrived with none and he wanted some. I checked mine and they are Monroe #2067, just a plain old shock. (Not heavy duty). We purchased two (\$15.99 each here in Phoenix) and the bottom section has to be altered with a hacksaw to fit the Squire receptacle. Self explanatory once you look at it. I recall Tim Sharon (Los Angeles) installed a set a few months ago and they caused the front end to shimmy so he removed them. Has anyone else had that particular problem?

Member Tom Niswonger wrote from Ohio to say his disability is getting worse and he has some real difficulty entering and exiting his Squire and therefore he is forced to sell it. His is an exceptionally clean, low mileage car and if you know anyone interested, pass the word. Asking \$13,500.

Things are moving fast. Michael Lindgren called from New York and said he has located another Squire in Boston. It's been in storage for some time and the engine, tranny and drive shaft are missing but he is still going to buy it and restore it. Therefore, his Black Beauty is for sale. It's the fifth one in the manufacturing sequence and he says it's very original, just as it came off of the boat. Black paint, top and interior with a wood dash. Mileage is 14,800 and it's in mint condtion both mechanically and in appearance. Has both tonneau and spare tire cover. Asking \$14,000.

While helping Phoenix member Bill Lieske rebuild his headlights I noted the brand name "Carello" on the inside frame. That's the same name noted on some of the original Squire tail lights and the back-up light. Looks like all the lights, with the exception of the fog lights, are Carello who are, I believe, the largest automotive electric component manufacturer in Southern Europe, kind of like Lucas in England and Bosch in Germany.

Again on Lieske's car, the original gas tank was a mess. It had been full of water, was full of debris and it had been leaking. So the decision was made to replace it, using the same shop that made the replacement tanks for both mine and Ed Spielmans cars. This time however we could not re-use the original Jaeger sending unit. The poor thing had been exposed to water for so long that it had rusted solid. The replacement was made with a standard German VDO sending unit Model #226-001. This is a superior unit compared to the Jaeger original. The electrics are the same so there is no rewiring involved. However, if you were hooking one up to the original tank two things are required. First, you will have to make an adapter plate to secure it to the tank. Second, the original Jaeger unit has the gas pick-up tube as an integral part of the unit and the VDO unit does not. It is therefore necessary to install a separate 1/4" fuel pick-up tube from the top to the bottom of the tank when using the VDO unit.

I'll tell 'ya, most towns have at least one shop that makes custom gas tanks for trucks, campers, ect. Just look in the yellow pages. Before you spend a lot of money to repair an inferior tank or sending unit the best advice I can give you is have the whole thing replaced for under two hundred dollars and be done with it! At that time you can also install a 2" snap top quick-fill gas cap and also get rid of that mickey mouse arrangement that came on the car.

With this issue I have included Bill Lieske's Squire Saga-Chapter 3 and his nifty detail and sketch on how to repair or replace the brake\clutch pedal assembly.

Ed Stahl

0 511 010 158 MODEL ZZ6-001

Fuel-level sender

Transmetteur pour niveau d'essence

Emission de nivel

1

2

3

4

5

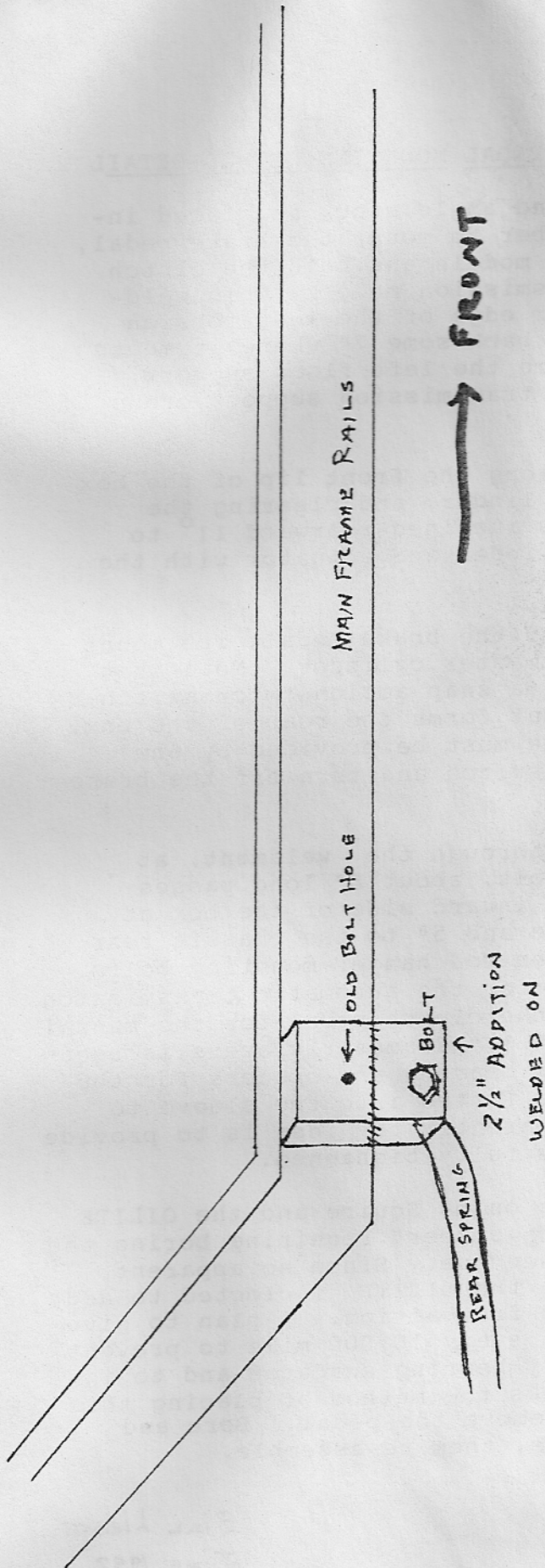
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7

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16.5	8.25	11.			
17	8.5	11.4			
17.5	8.75	11.8			
18	9	12.			
18.5	9.25	12.3			
19	9.5	12.6			
19.5	9.75	13.			
20	10	13.4			
20.5	10.25	13.8			
21	10.5	14.2			
21.5	10.75	14.6			
22	11	15.			
22.5	11.25	15.4			
23	11.5	15.7			

INCHES

THIS DEVICE WILL NOT WORK
WITH THE FREGGER GAUGE
DO NOT USE IT!
D. J. St. John 12-1-66



Note: If you kneel down at the right rear wheel well you can observe this detail just under where the rear of the running board starts. I have no additional metal welded to mine but Bill Lieske's car #11044545 has had 2-1/2" added to the bottom and the securing bolt dropped the same distance. Art Stahl

SQUIRE SS-100 BRAKE AND CLUTCH PEDAL MOUNTING METHOD DETAIL

A box welded from steel sheet and angle stock is placed inside the left lateral frame member to mount the brake pedal, only, on automatic transmission models and both the clutch and brake pedals on manual transmission models. This weldment is placed about at the rear edge of the left torsion rod hanger assembly and extends back some 7" where it meets with 1/8" x 1" straps that become the left floor support. These straps extend back to the transmission support cross member.

Appropriate holes are located along the front lip of the box for mounting the brake master cylinder, and clearing the brake actuator rod. This lip is inclined rearward 11° to properly position the master cylinder and actuator with the brake pedal.

Figure #1 shows a cutaway view of the brake pedal, its mount along with the actuator rod and master cylinder. Note that the brake light actuator switch, a snap action "microswitch," is located on the angle piece that forms the rear of the box. Sufficient spring return pressure must be provided by the master cylinder to depress this switch and turn off the brake lights when is is not depressed.

Figure #2 shows a cross section through the weldment, at A - A as noted in Figure #1. A bolt, about 8" long passes through the frame member and the inward side of the box at 1 1/4" above the bottom of the frame and 5" to the chassis rear from the centerline of the torsion rod hanger mounting bolts. The detail shows the brake pedal for the automatic transmission models and relative position of the clutch pedal for the manual transmission models. A series of 1 1/4" diameter spacers is used between the 0.825" diameter inner bearing and spacers for the pedals. An OILITE sleeve is press fitted into the sleeve to which the pedals are welded. Apparently the idea is to provide a solid assembly when the bolt is fully tightened.

Water had sat in the box weldment on my Squire and the OILITE was rusted solidly to the "bearing-spacer" requiring boring the spacer out and lathe turning a new one. Since no apparent impregnated lubricant was left in the OILITE, I elected to add a "ZERK" fitting to ensure future free action. I plan to give this a shot of chassis lube about every 10,000 mile to prevent the pedal from sticking due to dry bearing surfaces and to inhibit future wear. Figure #3 shows the method of placing this fitting. Take the bolt out and remove the pedal. Bore and tap a hole to suit fitting threads, then re-assemble.

BILL LIESKE
JUNE 1992

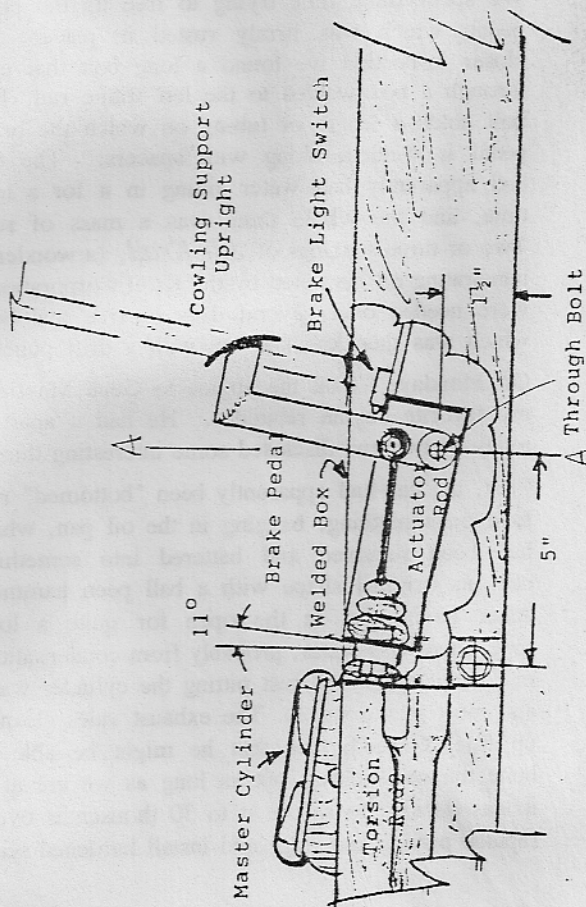


Figure 1 Squire SS-100 Brake Pedal Mounting

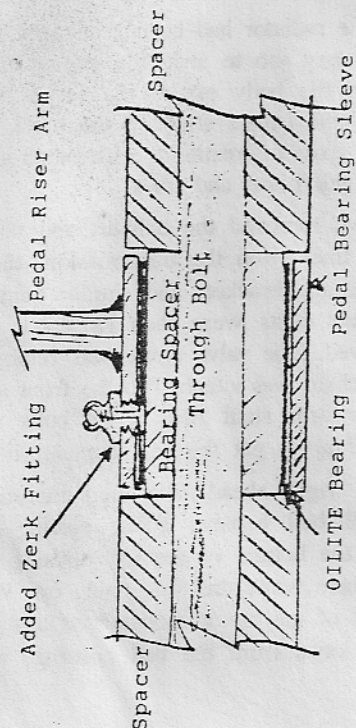


Figure #3: Added Zerk Fitting detail

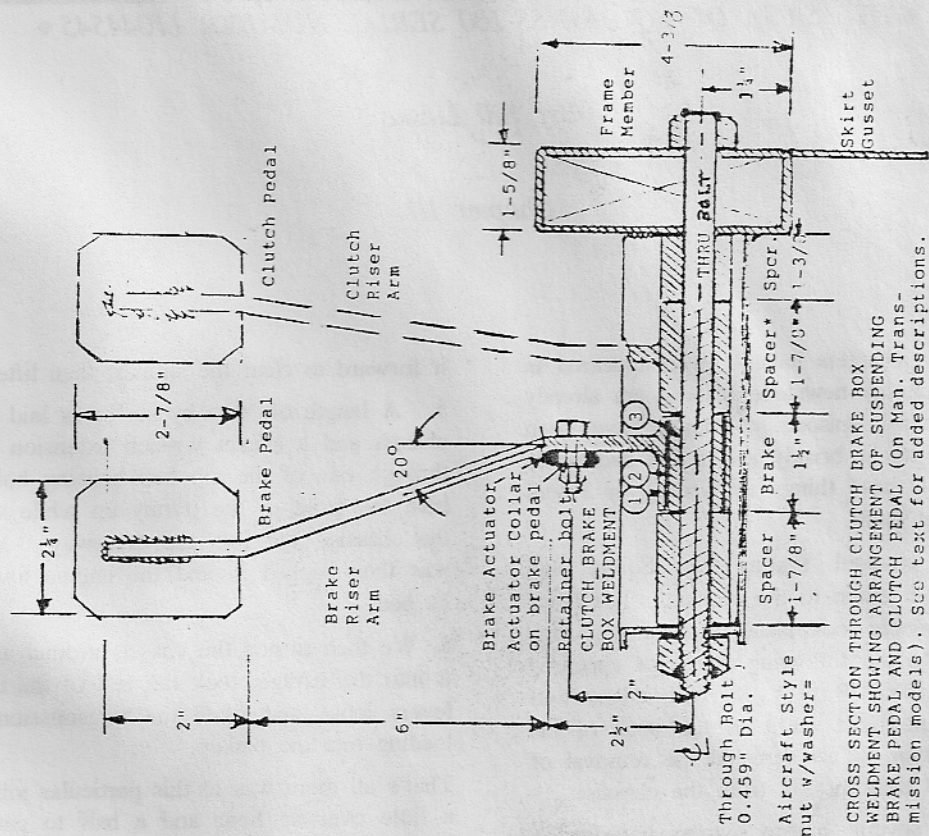


FIGURE 2

CROSS SECTION THROUGH CLUTCH BRAKE BOX WELDMENT SHOWING ARRANGEMENT OF SUSPENDING BRAKE PEDAL AND CLUTCH PEDAL (On Man. Trans-mission models). See text for added descriptions.

◆ THE SAGA OF SQUIRE SS-100 SERIAL NUMBER 11044545 ◆

By: Bill Lieske

Chapter III

The first two chapters haven't even appeared in Art Stahl's monthly newsletters and I am already starting the third episode. Things have been moving along rather briskly and I just had better place some of these things in writing or I will certainly forget them.

I previously covered finding my Squire and dis-assembling it down to the chassis. The latter of these occurrences took place on Saturday, June 6th, 1992. On the following day, Art appeared at my place at about 9:00 A. M. with a borrowed hydraulic engine hoist outfit in the back of his little S-10 pickup. This signaled the removal of the engine and transmission from the chassis.....

I'm sure that several Squire owners have either removed their engine or had it taken out for one reason or another. Since this may be one of the rare occasions to remove a Squire engine and transmission from an open chassis, the procedure should be of interest. The sequence that we used, along with comments, is as follows:

1. Since the radiator had been previously removed it was an easy job to strip the engine and other things with the body out of the way. We first took all of the excess stuff off the block such as carburetor, exhaust manifold, distributor and coil, fuel pump, all hoses and lines.

2. Next, we removed the exhaust and tail pipes, the cooler lines from the transmission, the accelerator cable and brackets and similar items. The engine mount bolts were then loosened, but not fully removed. The valve cover was removed and the lifting chain was attached to the front and rear 5/8" rocker arm shaft hold down bolts and the hoist jacked up to get the engine under lift.

3. Forging right ahead, we then loosened and removed all bell housing bolts, placing a floor jack under the bottom of the bell housing to hold things in place while this was going on. We then removed all of the motor mount bolts and joggled the engine loose from the bell housing, working

it forward to clear the splines, then lifted it clear.

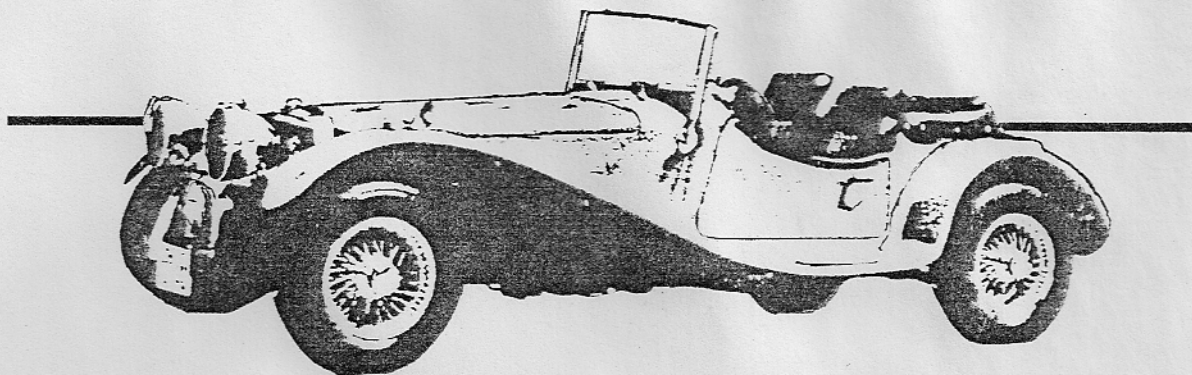
5. A length of "two by six" was laid across the chassis and a socket wrench extension was stuck through one of the top bell housing bolt holes to hold the front of the tranny up while we pushed the chassis out into the driveway. My pickup was then backed in and the engine lowered into its bed.

6. We then turned the chassis around and backed it into the garage, took the rest of the cables and levers loose and lifted the transmission free for loading into the pickup.

That's all there was to this particular job! It took a little over an hour and a half to get it done. We spent some time trying to free up the brake pedal, which was firmly rusted in place. On closer inspection we found a long bolt that goes through a box welded to the left frame rail. This bolt holds a length of tubing on which the brake pedal is welded, along with spacers. The box had apparently had water sitting in it for a long time, and the whole thing was a mass of rust. Two or three soakings of *Sili-Kroil*, (a wonderful penetrating oil marketed by the Kroil Corporation*) were needed over several days to free this bolt, which was then knocked out with a drift punch.

On Monday, I took the engine to Gene Mayfield, my favorite engine rebuilder. He had it apart in a day or two and disclosed some interesting things.

First, the car had apparently been "bottomed" real hard on something, banging in the oil pan, which had been removed and battered into something near its original shape with a ball peen hammer! Also, having sat in the open for quite a long time, there was water, probably from condensation, in several cylinders, rust pitting the cylinder walls and most intake valves. The exhaust valves cleaned up fine! Gene figures that he might be able to hone the walls clean, but as long as we are at it it was decided to rebore it to 30 thousandths over, replace pistons and rings and install hardened seats



SQUIRE SS-100

for the exhaust valves. This will save some concern when regular leaded gas is no longer available. Gene also says that the only thing appearing to relate to an "industrial" version engine are step rotators on the exhaust valves. Otherwise, all parts seem to be stock 250 cubic inch Ford Six. By the way, John Fulton calculated that 250 cubic inches is just short of 4.1 Liters** for those of us that wish to compare displacement of these mills with the current metric rated engines.

All main bearings journals and throws are within tolerance, as are the camshaft and other rotating surfaces. This engine has about 12,000 miles on it and appears to have been abused somewhat during its prior operating life.

I also learned something when I took the transmission to a good tranny shop. Some rather severe cracks were found around the four lower holes through the aluminum bell housing where it bolts to the front of the transmission. They found me a crack free bell housing for \$35.00!

The various literature and specifications for the Squires lists a Ford C-3 automatic transmission. Mine is a C-4! It appears to be the original transmission. Mike, the tranny mechanic, told me that the old C-3 was a rugged, almost indestructible band box, but had a reputation for rough shifting among the three forward speeds, whereas, the C-4 is much smoother but much less reliable. My Squire, being the 44th one built, might have occurred during the changeover from C-3 to C-4 by Ford. Anyhow, since it is out in the clear, I am getting a complete transmission rework with a 24 month or 10,000 mile warranty.

Other things in process are: (1) Having the radiator rodded out and a more properly located lower hose inlet installed on it. (2) The gas tank was very rusty internally, and knowing of the problems that at least three other Squire owners have had with the original "petrol pots" I am having a new tank built by the same specialist that built Art's

new tank. (3) The carburetor was also frozen up with rust, so I found one just like it at a nearby junk yard (Ooops - Pre-owned Auto Salvage Emporium) and bought a kit to rebuild it. I have rebuilt many carbs and will find this to be a neat afternoon project in the near future.

As things are progressing, and if Art keeps nudging me, I could have this automobile together before you read this installment! But, the hot Arizona summer is before us and my good wife keeps hassling me about taking trips on airplanes to visit friends and relatives and the like. I am also still quite occupied with my business responsibilities, so having weekday time to work on the car is limited. There is still a lot to do or to have done..... I somehow get the feeling that this has become more of an obsession than a hobby!

I decided to do this installment on a desk top publishing setup using a program called Beyond Words. It is done in a magazine style format and printed out on an Epson *ActionLaser II* printer, for those of you that might be interested.

More of this next month.....

-End Squire SS-100 #11044545 Saga, Chapter III-

*"Sili-Kroil" is a product of:

Kano Laboratories, Inc.
Nashville, TN 37211

** Cubic inches X 16.39 = Cubic Centimeters.
Also, 1,000 CC = 1 Liter.

Thus, 250 CI X 16.39 = 4,097.5 CC or 4.1 liters, rounded. Reboring to 30 over will add about 6 CC per cylinder, which added to the 4,097.5 will make the displacement 4,133.5 CC. I suppose that I can engrave some "4.1 Litre" signs with complete honesty!