



Squire SS-100 Registry

CLBCOM 62
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MEMBER JOHN FULTON

has returned to Dallas from his recent employment in Saudi Arabia. Those wishing to contact him can find his home address and phone number on your current Squire SS-100 roster. Welcome home, John.

THE ORIGINAL SQUIRE SS-100 SEATS

are again a topic of conversation. This month, member Bill Lieske and I drove our two Squires from Phoenix to Los Alamos, NM to visit members Sid & Sarah Weaver. The trip is over 600 miles each way and took about twelve hours including meal, fuel and potty stops. The two roadsters performed flawlessly, except for the completely numbed condition of my butt. You will recall from prior newsletters that I do not have the original seats in my Squire. An earlier owner had installed Ford Mustang seats that look great and work well on the short trips around town but are hard as a rock on any trip longer than a couple of hours. So, if any member would like to trade seats or sell yours outright, please contact me.

POWER STEERING FOR YOUR SQUIRE SS-100

is also in the news again this month. Why? Because I now have it on my own Squire. During this months trip to Los Alamos we installed the used and/or rebuilt power steering hardware that had been secured and reconditioned by Sid Weaver, hereinafter referred to as "Junk Yard Dawg". Old "Dawg" had made repeated trips to Santa Fe and Espanola to secure the necessary parts and had them ready to install when we arrived. Total cost to install the unit on my Squire? \$111.00 - but that included some swapping around of parts and services between Dawg and myself. It also included the fact that the control valve removed from the donor Ford was pretty beat up. Sid determined that it should be replaced with a rebuilt unit that cost \$95.80 over the counter. Actually, he paid just \$42.25 for all the parts from the donor car and another \$15.00 for power steering fluid, steel to make brackets and an additional drive belt and another \$35.00 for NAPA rebuild kits for the power piston, the theory being that you may as well make it like new while it's all apart and on the ground where you can get at it. So, total parts cost should come in at around one hundred bucks, depending on the condition of the parts from the donor car. This is mentioned only as a general guideline and makes no consideration for labor cost should you not be a do-it-yourselfer. If you fall into that category and wish to install power steering on your car my personal recommendation would be to secure the services of a good frond-end shop that's equipped to both rebuild and realign front end steering mechanisms. (continued).

So, my power steering unit is installed and performing well but you should understand that I was not unhappy with the way it steered before the changeover. Admittedly, I had to grunt when turning the wheel at a dead stop but that's such a tiny portion of the daily driving experience that I had decided I could live with it. What I did want to do is be able to tell the rest of you "how to do it" and in this I had much assistance from Bill Lieske and Sid Weaver. Sid and I crawled around and did most of the manual labor and Bill sketched and wrote up the procedure. I have included with this newsletter the first two pages of Bill's initial writeup that he is now in the process of re-editing and adding detailed drawings. To include the final installation instructions with this or any other newsletter would bend our postage budget badly but if you have a sincere desire to pursue power steering for your Squire, write or call me and I'll send them along.

Your next question will most likely be "how well does it work"? The answer is - it works perfectly - but with reservations. At a dead stop you can turn the steering wheel lock-to-lock with your little finger. However, that same amount of finger pressure can almost put you in the next lane at 75 to 80 MPH, where I tend to drive, so I had to learn to drive my Squire all over again on the trip home. Is it worth the \$\$ and effort? Well, that's up to you but after watching member Nick Cuneo almost have his third heart attack while cranking his way out of Mark Offenbergs's driveway I decided we had better address the problem. The next challenge we intend to work on? Power assisted brakes.

Below: our three Squires at Los Alamos, New Mexico with the beautiful Sangre De Cristo mountains in the background. Wish these darn photos copied better because the view is spectacular!



Paul Hall

INSTALLATION OF POWER STEERING ON THE SQUIRE SS-100

By: Bill Lieske, edited by Sid Weaver and Art Stahl

Forward

Any owner of a Squire SS-100 should agree that the steering characteristics of these automobiles is objectionable as originally equipped and when compared with power steering equipped cars that we have become accustomed to. Even with the addition of a larger diameter steering wheel, the effort required to steer the car at slow speeds is excessive. Most of our ladies simply won't try to drive the cars for this reason.

As this information is assembled (November, 1995) a few owners have done something about that situation, specifically, the three contributors to this write-up. Insofar as we know, Sid Weaver was the first owner to successfully install power steering on his Squire. Sid's car, by the way, was also equipped with power brakes by a previous owner, so at this writing, it appears to be the only Squire fully power equipped. I included power steering when a Mustang II front end was installed in my Squire, several months ago.

The power steering mechanisms from a pre-owned automotive parts salvage emporium (AKA: *junk yard*) 1979 Ford Granada were used for these conversions. From various automotive manuals it appears that some Ford Granada and Mercury Monarch cars from 1977 through 1981 models were equipped with power steering, either as a factory or dealer installed option. The parts that are unique to this conversion include steering system components such as *cross links, drag links, idler and idler arm*, supplemented by a *hydraulic cylinder, control valve assembly, special pitman arm, power steering pump, hydraulic hoses* and a few other bits of hardware.

During a Squire cruise trip to Sid's home in the Los Alamos, New Mexico area on a recent weekend, Art Stahl's Squire was converted to power steering. The job was master minded by Sid, assisted by Art and kibitzed by Bill. Actual work time was perhaps six hours, with time out for discussions, minor arguments, swapping yarns, running to the hardware store for nuts, bolts, etc. Sid had located the required power steering components prior to our arrival, cleaned everything up and was very well prepared for the job. Except for a few bits of hardware that couldn't be found in his nut and bolt collection, everything was ready to go.

It was, perhaps, a rather bold thing to do such a job under the circumstances, since little road testing was possible before starting back to the Phoenix, Arizona area, a trip of almost 600 miles. We can report that the car performed beautifully, albeit Art's need to adapt to the resulting quick response and easy steering wheel effort for the first couple of hundred miles. I followed Art all of the way, sort of as a *chase pilot*, and can report that nothing fell off the car during the trip, at least that I could see! With this second successful Squire SS-100 power steering adaptation experience behind us, we are providing this write-up as a guide to those who might undertake such a project or have a chosen mechanic accomplish the job. We believe that this conversion is well worth the time, effort and

expense. The improved operation of your Squire in road handling and most importantly and ease of slow speed handling and parking certainly justifies the accomplishment of this feature.

Parts Acquisition and Preparation

Obviously, the first task is to go junk yard hopping to find the proper power steering components. You will be looking for a donor car *that has not been front-end damaged*, since you want unmolested parts to work with. The usual situation is to find that the car that you want is sitting flat on the ground, often without wheels, so you might have to get the yard operator to take his wrecker or fork lift and either tip the car over on one side or prop it up on something so that you can safely get underneath it if you are going to salvage the parts yourself. In rare cases, you can get the yard's mechanic to take the parts off for you for an additional (And usually exorbitant) fee. In any case be sure that you get all of the parts shown on the attached list. Things like belts and small hardware can be found at almost any auto supply store or Ace hardware store, except for the replacement Pitman Arm, which usually can only be purchased from a Ford agency parts department..

You should become familiar with the nomenclature of all the steering system parts. Look at the attached drawings and photos to find and identify:

- The *main cross link*(1). This is a part about three feet long with two ball joint sockets about 13 inches apart. On one end is the weird looking *control valve assembly*(2) with the places to install the hydraulic hose fittings that go to the *steering pump*(3). Long hoses with suitable fittings are for connecting the fluid pressure from the power steering pump to the control valve. And returning fluid back to the pump.
- The two *drag links*(4). Each of these have an *adjustment sleeve*(5), a *ball joint*(6) on the outer end and a ball joint connected to the main cross link. These parts are threaded to permit adjusting steering system centering and toe-in adjustment of the wheels.
- At the right side of the assembly you will see the *idler arm*(7) along with it's *idler link*(8). The link has two holes in it that mounts to holes in the lower right front of the donor car's frame.
- The *hydraulic cylinder*(9) has two short hoses from the control valve and is anchored to the *cross link* at one end. At the other end there is a *control rod*(10), equipped with some special washers, sleeves and rubber mountings.
- You should have purchased the replacement *Pitman Arm*(11) from a Ford parts department, a *drive belt*(12), some pieces of angle iron to make mounting brackets, a curved slotted pump mounting and tension adjusting bracket and the various nuts, bolts and washers called out on the parts list.

With all of this stuff together, you are ready to begin.