

Ask Ronny

by Ronny Shaver @ Ronny's Garage

Answering Your Questions About Classic Car Care Service And Restoration

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Why Is My Steering So Difficult?

by Ronny Shaver

Rolls-Royce and Bentley began installing power assisted steering on some of their cars in the fifties and beginning with the Silver Cloud II and Bentley S2, all cars came with it. The early versions were minimally successful at best but by the time the Silver Cloud III and Bentley S3 were introduced the systems worked with the touch of a finger. The systems work wonderfully until they run low on fluid, then steering becomes difficult and that familiar growling noise occurs to alert the driver that the system is low on fluid. The cause of the growling noise is air being sucked into the pump mechanism. If your car makes this noise then check the power steering fluid level (with the car turned off) and top it off to the proper level. Most cars have a dipstick attached to the reservoir filler cap for convenience. Modern cars use specific fluids but most earlier cars use automatic transmission fluid so check the owner's manual to be sure. Remember to look on the garage floor for signs of leaks if your car needs steering fluid often. Running the car without fluid can cause serious damage to the pump and make the car dangerous to drive.

Prior to the use of power assisted steering, manual steering was the norm. Of course the steering worked fine when the car was moving, but parking the car was a workout. The early cars usually have much larger steering wheels to add leverage and help compensate for the difficulty turning at low or no speeds. It is very important that the steering box is in perfect order to minimize turning effort. During many years of repairing and servicing Rolls-Royces and Bentleys I have found time after time that steering boxes are overlooked during maintenance. Most of the pre-war and early post-war cars that I serviced have had empty steering boxes. The boxes are designed for 90w gear oil and have filler plugs at the top of the box where the steering column housing attaches. I have found that when a steering box comes into the shop empty, more often than not it has a leak. I used to fill them up with 90w gear oil and find a large puddle of fluid under the car later. Removing and resealing a steering box can be expensive and time consuming. The quick remedy is in using a different fluid.

Penrite makes a wonderful product called Steering Box Lube. It has great lubrication qualities and won't run out. The biggest drawback is getting it in the steering box. The viscosity is 1200w and has the consistency of thick honey so it doesn't pour easily into that little filler plug hole on the steering box. I usually set the Penrite bottle in the sunshine for an hour or two to get it warmed up and then pour it into the box with a funnel. Another trick is to use a hair dryer or heat gun to warm up the bottle. Patience is required because it takes some time for the fluid to fill the box. Make sure to work the steering wheel back and forth occasionally to help the fluid work its way around. The great thing about this lubricant is that it sticks to the worm gear and roller to keep them lubricated and won't run off. So that means the box does not need to be filled all the way to the top. Once the box is filled as much as your patience allows, drive the car a few miles and recheck, take a flashlight and look into the filler hole to make sure that the fluid is touching the gears. If your car starts to leak some fluid from the steering box, don't worry. Any lighter fluid in the box will rise and come out wherever the leak source is. Some repeated driving and topping off with Penrite will eventually stop the leak.

I want to make a quick note for Silver Cloud II/III and Bentley SII/III owners. The steering boxes on these cars have a section on the steering box called the transfer case. This section connects the steering shaft to the steering box proper with two gears. This small section requires 90w oil and usually is fine unless the steering box has been removed and not refilled. The case has a filler plug on the top and a fill

to plug on the front side. Remove both plugs and fill in the top hole until it runs out the front hole. This procedure is difficult because these plugs are hard to access.

One last thing on cars with manual steering, tire pressure is critical. Under-inflated tires can cause extra difficulty when turning the wheels, especially while parking. Always consult the owner's manual or shop manual for proper tire pressure specifications for your car.

Thank you for the questions and keep them coming. Please send your questions to Ronny at ronnyshaver@ronnysgarage.com.

Happy Motoring!
Ronny