



Not All Power Steering Fluids Are Created Equal

Having trouble with power steering pumps failing prematurely? Not sure why? We might have a simple answer for you — power steering fluid. Read on, you might be surprised.

The Elusive Problem

Recently, a service dealer called CARDONE's Technical Hotline regarding a premature failure issue with power steering pumps. Because CARDONE's foundation is built on delivering quality products, they were determined to get to the bottom of the issue and sent two engineers to the shop to find out what was going wrong and why. After three days of replacing multiple pumps, hoses, a rack and pinion, and basically rebuilding the customer's entire steering system, the replacement pump was still running noisily and operating at close to 320° (normal operating temperature is around 180°). Through process of elimination, they eventually replaced the power steering fluid with another brand, and the pump ran beautifully. This led to an in-depth investigation on why fluid brand makes such a difference in pump performance.

The Testing Process

During extensive lab and on-car testing, CARDONE engineers learned that there are many substandard power steering fluid brands on the market that lack the additives necessary for proper lubrication of the pump. More specifically, additives such as viscosity improvers, friction modifiers and anti-foaming agents are not present. Use of a substandard fluid eventually causes the steering system to overheat and the pump bushing to break down. At this point, the pump no longer holds pressure, which results in a total loss of assist. In fact, during the testing process, pump failure due to substandard fluid was recorded in as little as 20-30 minutes after installation!

The Solution

So what power steering fluid should you use? For complete system replacement and top offs, refer to the vehicle manual or an O.E. vehicle information system (Mitchell's, Alldata, etc.) to find the recommended fluid for your

application. A fluid that meets O.E. standard typically has specific application information printed on the label. A general statement claiming the fluid meets O.E. requirements DOES NOT guarantee good fluid quality. Currently, there are no API (American Petroleum Institute) standards established for power steering fluid, which is why there are so many questionable brands out there. The only standards you can trust today come from the O.E.

The Results

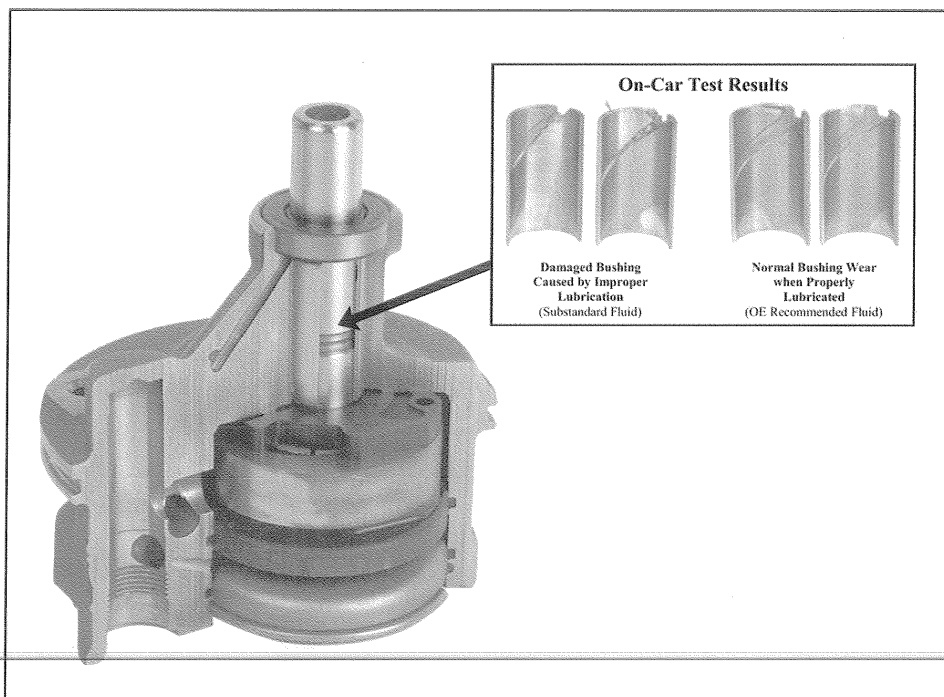
Service Dealers who switched to a recommended power steering fluid greatly improved their customer satisfaction and reduced their number of comebacks. If you are uncertain of your power steering fluid quality, refer to CARDONE's list of recommended fluids and part numbers at cardone.com under the A1 CARDONE Steering section. The fluids listed there have undergone independent lab testing to determine their lubricating qualities and additive packages. Not all fluids have been tested yet, so check back often to review any updates as additional fluids are tested and found to meet the minimum standards.

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