

NOTCHY POWER STEERINGS, HOW TO SMOOTH THEM OVER

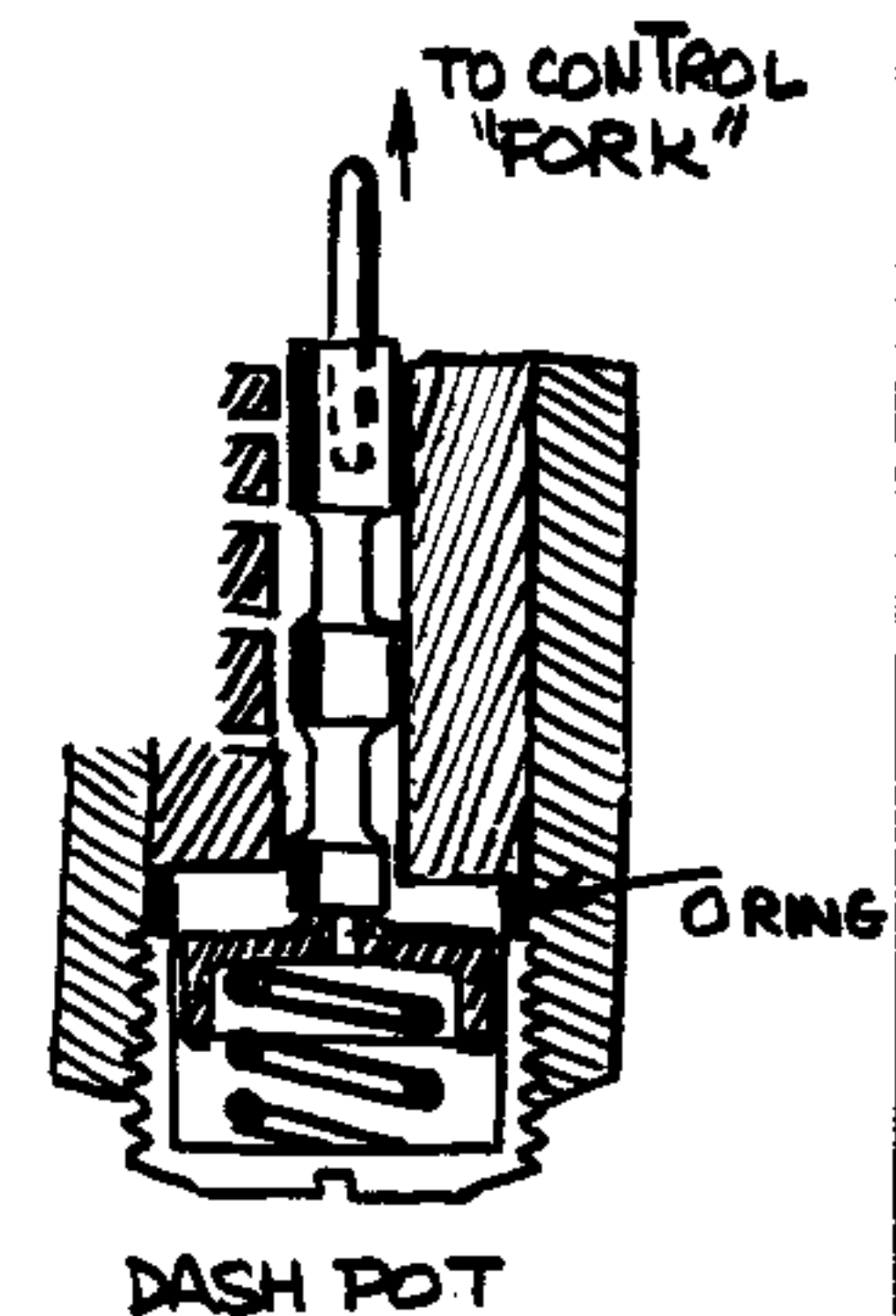
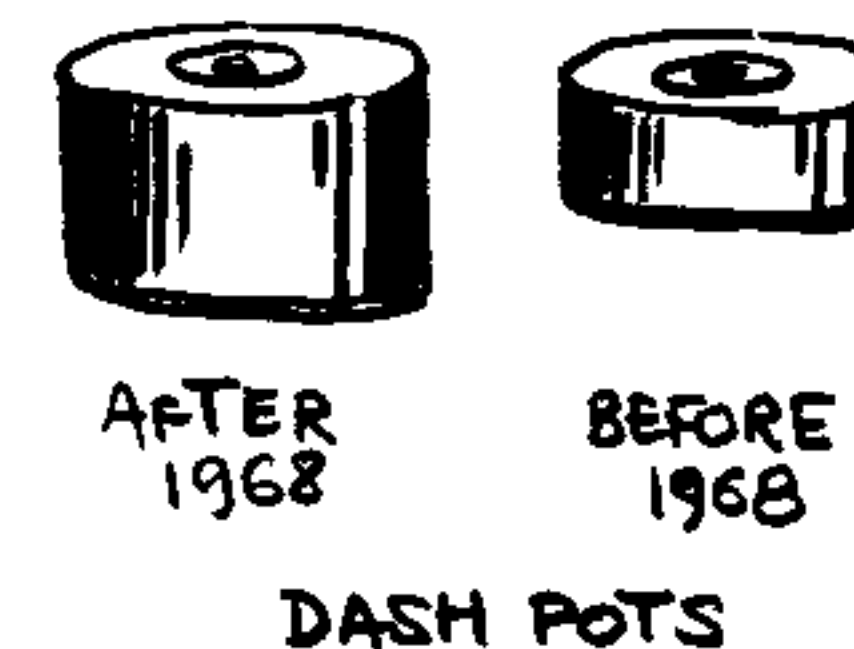
The new power steering units for LHM and LHS2, green and red fluids have what feels like a "notch" in the center position. This is not the center cam since it still is felt when the cam is removed. The steering units produced since about mid 1968 develop this notch rather quickly and the use of fluids that are not preferred by Citroens will make it appear.

The "notch" feels like the steering is resisting at first solicitation and then suddenly taking over, pulling your hands away too far, causing the car to swerve.

The steering is damped by dashpots situated below the spool valves, located within the casting wrapped up in a somewhat square boot or rubber dust cover. The same dashpots prevent the spool valves from opening too quickly, releasing pressure into the rack too brutally, ramming the rack's cylinder and possibly cracking it. They also prevent oscillations in the system, since they will correct errors in BOTH directions, unlike standard power steering units. The dashpots will correct errors in positions in the wheels caused by road irregularities and, of course, errors entered by a change only of the latter. As a matter of fact, the standard power steering units are only assisted power steerings, blindly helping along without knowing if the rack has reached the right position or not. The Citroen power steering is a Servo system, fully aware of what is going on at all times. The only trouble is that this is true when the dashpots let the valves open in time: let us say more than a few milliseconds and less than one second.

The dashpots are different before and after 1968. The old ones are about half as high as the new ones, that's all. Drop the pressure, remove the boot, unscrew the dashpots' covers, mark them right and left, they are matched to the pistons, keep the springs and remove the pistons. Remember what side they were on. Do not try to file them down, they are made of hard steel. Grind them down to what you want. Clean them and re-assemble. If you do not have new O rings reuse the old ones after turning them upside down. Tighten the covers to 14 ft. lbs. The steering will have no more notch, however it might start twitching when you let go of the wheel, like the old ones did.

The big advantage will be that the steering will respond instantly and will not overshoot anymore.



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