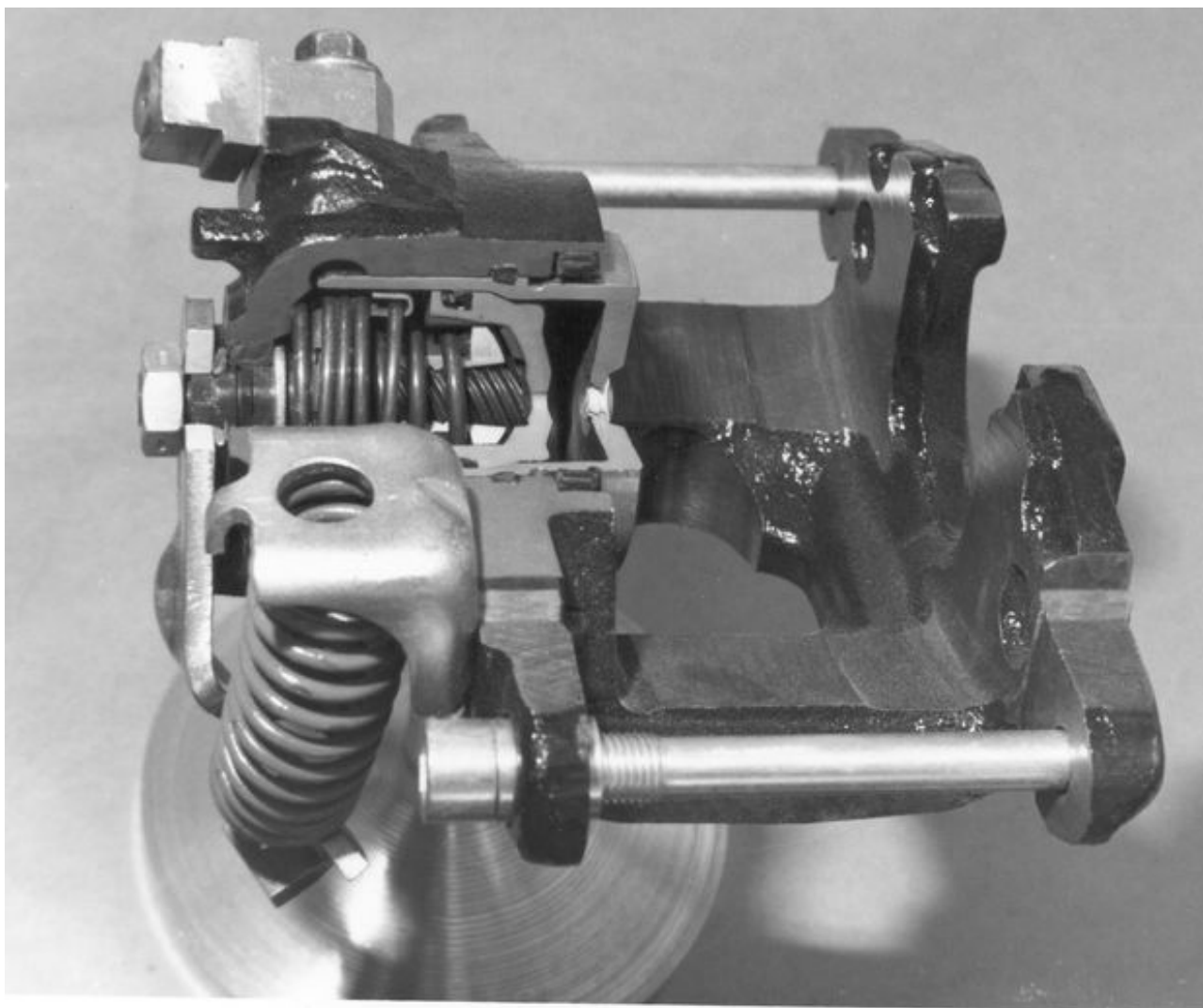


How It Works: Rear Disc Caliper with Parking Brake



If the parking brake uses the rear disc-brake shoes instead of a separate set of drum-brake shoes, there is a mechanism in the caliper piston cylinder to push the piston and apply the rear brakes when the driver operates the linkage. That mechanism, which is connected to the parking brake linkage, has a screw setup to compensate for the fact that in normal foot-brake operation, the piston automatically moves out to adjust for brake-shoe lining wear. The type shown here is a common design. There is a cone behind the piston and it moves with the piston when the foot brake is applied. When the parking brake is operated, the brake lever turns the screw on which it is mounted (it also is an adjusting screw threaded through an adjusting nut). The nut can't turn because it's splined into the cone. With the inboard brake shoe in place, the piston (and shoe) can't turn either. So the lever operation causes the piston to be pushed out to apply the disc-brake shoes. When the lining wears, some clearance develops between the piston/cone and the nut. When the foot brake is released, hydraulic pressure in the caliper cylinder also is released. The adjusting spring then causes the nut to thread out on the adjusting

screw to take up the clearance.