

The Centric Advantage

Centric Parts goes to great lengths to eliminate issues faced by installers when replacing brake calipers. Manufacturing processes designed to improve performance and reliability are standard with all Centric premium caliper units.



Brake hose mating surfaces on aluminum calipers are machined to restore them to original specs and to remove pitting and corrosion blemishes. This process eliminates potential leaking problems by reestablishing a clean surface between the brake hose fitting, crush washer and banjo bolt.

All threaded ports and bolt holes on calipers and brackets are chased to restore the threads to original spec. This reduces the chances of galling or cross-threading.



All bracket guide pin holes and caliper bores are thoroughly cleaned and brushed to remove any trace of old grease or debris that is a common source of caliper freezing or binding issues.



After machining and brushing, parts are re-dipped in an anti-corrosive emulsion to protect the surface from the possibility of corrosion.



All Centric brake calipers are shipped in Vapor Corrosion Inhibitor (VCI) bags. These non-toxic bags provide an additional level of corrosion resistance by providing a moisture barrier for the caliper body.



All reused steel pistons are bead-blasted in Centric's automated piston cleaning machine. Each piston is placed in a specially designed acetal resin sleeve that protects the seal contact area from the blast media.



All threaded bleeder and inlet ports are protected during the intense shot-blasting process by custom designed HDPE plugs, ensuring the integrity of the threads.

Finished calipers are shipped with fresh plugs to protect threads during transport. These plugs are designed to be reused when returning used caliper cores to prevent leaking of brake fluid.



All threaded hydraulic ports in aluminum caliper bodies are inspected to ensure pristine threading and fresh banjo bolts are pre-installed to prevent galling.



Premium Semi-Loaded Brake Calipers



Centric Premium Semi-Loaded Brake Calipers

There's a reason Centric Parts is the industry leader in remanufactured brake calipers – we hold ourselves to a higher standard, using only the latest machinery, production processes and custom-built testing equipment.

After tear-down and inspection each caliper core is cleaned in a solution of hot water (190°F) and degreasing detergent. This environmentally friendly process removes any residual oils, grease and brake fluid.

The clean & dry parts are then tumble blasted with steel shot to remove any remaining rust or scale. After shot blasting, all components are treated with a mineral oil and paraffin wax emulsion that prevents corrosion and preserves shelf life.

Every threaded inlet port & bleeder has its threads chased to eliminate cross threading during installation, ensuring leak-free performance for the life of the caliper. All bores are brushed and cleaned to ensure proper fitment and performance of the new boot and seal.

100% of Centric calipers undergo a pressure decay test after assembly. Protective HDPE plugs and VCI bags add a final layer of protection during shipping.

Centric Premium calipers include all necessary pad hardware where applicable. Replacing hardware when installing new calipers and brake pads reduces noise associated with vibration, promotes even pad wear and increases the service life of the brake pads.



Steel pistons are replaced where necessary and 100% of phenolic pistons are replaced guaranteeing correct operation of the caliper unit. Caliper piston replacement ensures smooth application of stopping power without caliper binding or freezing.



Centric Premium Semi-Loaded Brake Calipers feature new bleeder screws and bleeder screw caps with leashes, and include banjo bolts and crush washers where required.



Centric rear caliper units come complete with cable guides, brackets and return springs where applicable, and the pistons are clocked to easily accept pad nibs.

All caliper hardware is replaced where necessary, and all reused caliper hardware is re-plated. Plating of all hardware components prevents corrosion and extends service life. The re-plated hardware is electroplated with zinc, then coated with a clear super-seal. To further prevent corrosion, Centric uses a high viscosity silicone dielectric grease to lubricate all the guide pins, bolts and any moving parts that are susceptible to the galvanic corrosion that occurs between dissimilar metals used in components such as steel guide pins and cast iron brackets.



All rubber components are replaced to restore the caliper to like-new condition and performance. All rubber components are sourced from O.E. level manufacturers ensuring correct fit and function through the life of the caliper unit.



Light- and medium-duty truck, and high heat applications use high temperature silicone dust boots and seals for improved resistance to thermal fatigue.

Where applicable, Centric Premium brake calipers come complete with application-specific brackets. All caliper mounting brackets go through the same meticulous cleaning process used for the caliper bodies. In addition, all threaded mounting holes are chased and guide pin holes are thoroughly brushed. After cleaning and chasing the threads, the brackets are re-treated with the same anti-corrosion solution used on the caliper bodies.



Every caliper is tested for leaks using the same custom testing equipment you'd find on OEM caliper production lines. These pressure decay air testers are used on every caliper. A known quantity of compressed air is cycled through the caliper and the return volume is compared to the initial quantity. If the two quantities vary, the caliper is rejected. Fully 100% of all calipers get tested in this manner and no caliper gets packaged without first getting the green light from our testing equipment. This ensures that Centric Parts remanufactured calipers will work to original specifications for the life of the caliper.



Where necessary Centric Parts remanufactured caliper hydraulic connections are knurled to ensure proper sealing of the brake line to the caliper body, eliminating leaks. Centric uses caliper-specific fixtures during the knurling process to maintain perpendicularity of the mating surface.