

# Bendix Brake

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## Measuring Bumper Gap – It's The Right Thing To Do

The calipers on a medium duty truck need servicing. You order the replacement calipers, remove the old ones, install the new ones and send the vehicle on its way.

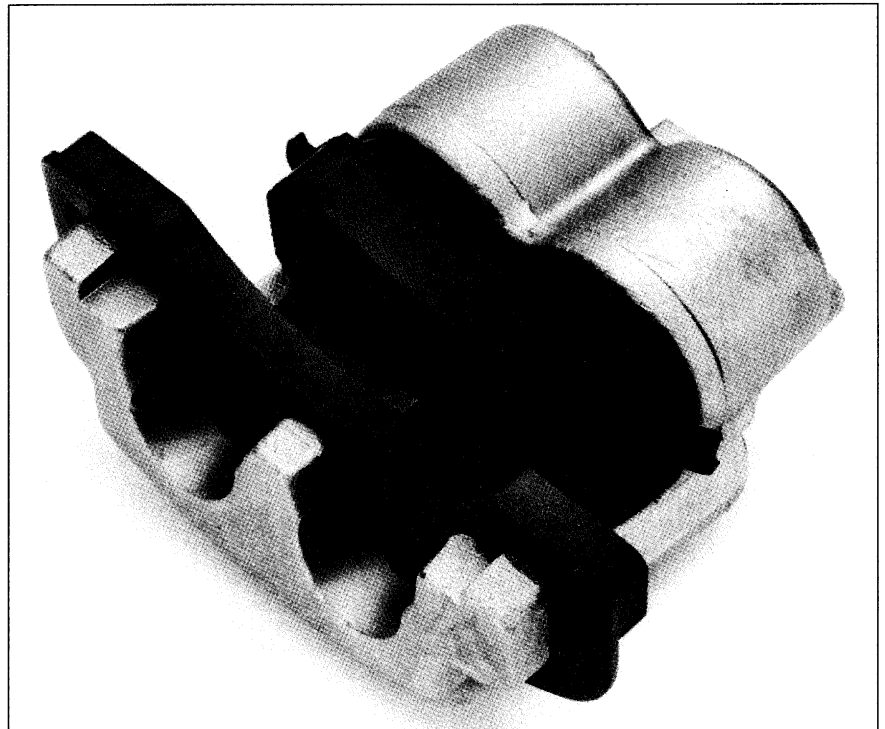
One question: Did you check the bumper gap? If not, don't be surprised if you have a comeback.

Most medium duty trucks use a sliding type caliper. With this design, the caliper assembly is manufactured with opposed V-way grooves which fit into the anchor plate on the vehicle. A support key and spring may be used in mounting. The caliper moves ("slides") along the mated surfaces of the caliper and the anchor upon brake application.

Because of the conditions that these vehicles are subjected to – extreme weight of both the truck and its cargo, combination stop-and-go and over-the-road operation – and the design of the caliper and anchor themselves, the V-way on the caliper and the mating surface on the anchor are prone to wear. If replacement calipers are installed without first checking and accommodating for this wear, the results could be excessive brake noise, uneven pad wear or, in extreme cases, the caliper can fall out of the

anchor and come in contact with the rotor or wheel rim, depending upon how the caliper is mounted. In any case, the vehicle owner is unlikely to be very happy and you could end up with a comeback.

The dilemma is that these calipers must be free to slide laterally but not so loose as to allow them too much end-to-end movement within the anchor. The amount of space between the caliper and the anchor which allows this end-to-end movement is referred to as the "bumper gap".



Whenever installing a replacement caliper on a medium duty vehicle, it is **imperative** to check the bumper gap. This is accomplished by temporarily installing the caliper on the vehicle, and then wedging the caliper tight against one side of the anchor while measuring the space (bumper gap) between the caliper and the anchor on the other side with a feeler gauge. If the gap is within acceptable tolerances, special oversize shims can be used to make up for the wear. If the gap is excessive, it may be necessary to replace the anchor or spindle itself.

**NOTE:** These are general instructions. Refer to the specific instructions for the vehicle and caliper in question. Every Bendix medium duty loaded caliper includes a detailed instruction sheet, complete with illustrations, specifications and recommended shims.

It is important to remember that wear can occur on both the caliper and the anchor. Using a brand new caliper does not eliminate the need to measure for bumper gap.

Measuring bumper gap should become part of every medium duty caliper installation. The little bit of extra time taken could end up saving big headaches down the road.



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