

Bendix Brake

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AlliedSignal Offers Bendix Low-Drag Calipers for GM Applications

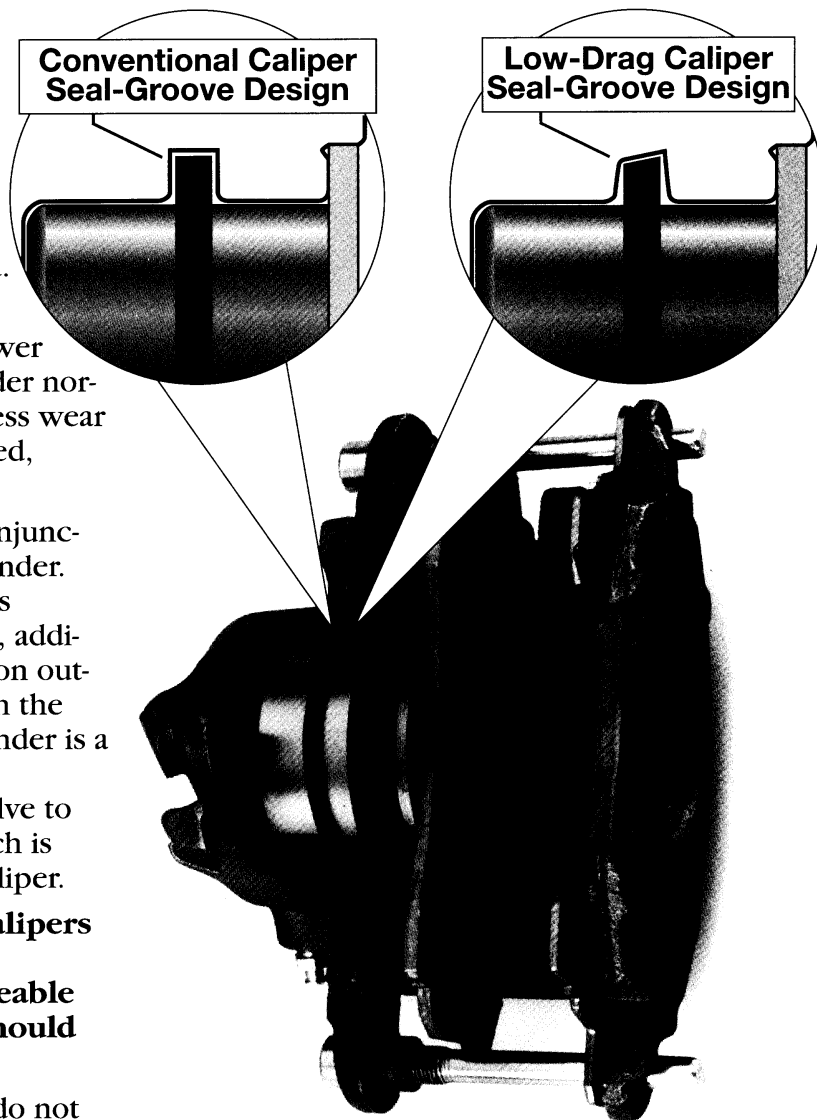
In 1980, General Motors introduced the Low-Drag caliper. Low-Drag calipers utilize a special seal-groove design which retracts the piston deeper into the caliper bore than a standard caliper. This allows for reduced disc pad contact with the rotor when the brakes are not applied.

The result of this reduced contact is increased fuel economy due to the lower amount of resistance at the wheel under normal driving conditions. In addition, less wear occurs when the brakes are not applied, effectively extending disc pad life.

Low-Drag calipers must be used in conjunction with a Quick Take-Up master cylinder. Because the Low-Drag caliper piston is retracted deeper into the caliper bore, additional fluid is needed to push the piston outward until the pad makes contact with the rotor. The Quick Take-Up master cylinder is a step-bore design which uses a large volume/low pressure chamber and valve to deliver a greater volume of fluid, which is necessary to activate the Low-Drag caliper.

GM Low-Drag and conventional calipers are externally indistinguishable. However, they are not interchangeable from a function standpoint and should never be interchanged.

Most loaded caliper remanufacturers do not differentiate between Low-Drag and conventional, listing just one model to cover many years of applications. Although this deviates from the Original Equipment recommendations for these applications, it allows them to



consolidate their product offering. However, this becomes a problem because there is no consistency of product; a given model may

have either a Low-Drag or conventional remanufactured core in the box.

The consequences of using the incorrect caliper for a specific application include:

1. Using a conventional caliper with a Quick Take-Up master cylinder can lead to an excessively high brake pedal. In addition, lower fuel economy and increased pad wear can be expected.
2. Using a Low-Drag caliper with a conventional master cylinder can lead to an excessively low brake pedal. This can lead to driver

“uneasiness” and customer dissatisfaction.

3. Combining a conventional caliper on one side with a Low-Drag caliper on the other can lead to uneven braking, regardless of the type of master cylinder on the vehicle.

AlliedSignal offers a full line of Bendix Low-Drag calipers for GM vehicles. Bendix Loaded Calipers follow Original Equipment recommendations and specify Low-Drag or conventional calipers where appropriate for the application.



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