

THE BANKS BRAKE

Upon inspection I found the casting (cast iron) of the brake's elbow was massive, and the surfaces of the elbow were engineered to meet with the turbo on one end and the exhaust down tube on the other end. The butterfly within the elbow was also machined to fit perfectly. All other parts seemed to be manufactured to meet or exceed industry standards.



Top view



Side view



The open/close butterfly

As with most accessories for your truck, the shop you choose to perform the work is the key to which product you choose. I hold Banks products and the Banks organization in high regard.

My participation in the installation was limited to taking photos and asking questions. Kevin, the technician from Banks, was a seasoned professional and had everything installed in less than six hours. I would allow two days for the weekend warrior (myself included) to undertake this task.

The exhaust brake is actuated by a vacuum pump. A new vacuum pump is a part of the Banks exhaust brake kit. The pump is engine driven and mounted below the CP3 injection pump. The factory serpentine belt is replaced by a new, slightly larger serpentine belt. The electronics are all plug-n-play; no T-taps or soldering are required.



The parts of the Banks Brake kit.

I had an opportunity to talk with Gale Banks, Peter Treydte (Banks' test group manager), and Brad from the engineering department at Banks. We discussed the capabilities of this brake and I was anxious to see and feel this brake in action. Gale Banks told me, "This new brake will far exceed anything you have experienced in the past, with any brake, including our own exhaust brakes!" Let's give it a try.

I have had experience with other Banks brakes. One was an inline brake on my '04 (equipped with an automatic transmission) and the other was a turbo mount on my '99 Turbo Diesel (equipped with a standard transmission). I was very satisfied with both. I have also had experience with a BD brake on my '99 truck and a Pacbrake on my '94 truck, both of which produced satisfactory results. I have also driven, but not owned, several Third Generation trucks equipped with Pacbrakes and BD brakes, all of which provided satisfactory results. Remember what I said about choosing the right shop and the right product.

For my product review we chose a highway (California Highway 138) with a 6% grade. The road is lightly traveled. The 6% grade extends for several miles with more than one mile of the road as straight as an arrow. I had a 10,000 pound trailer in tow and I was behind the wheel for the entire test.

LIFE'S A BEACH Continued

All tests started at the top of the grade. I reached a rolling speed of 40 mph before cresting the grade. When I reached the crest I removed my foot from the accelerator and assumed a coast mode using the exhaust brake as follows.

The following are the results with **No Exhaust Brake activated**:

Fourth Gear: the vehicle rapidly exceeded 60mph (more than 20mph over the starting speed), and **heavy** use of the foot brake was required to keep the vehicle at a safe speed.

Third Gear: the vehicle exceeded 60mph, and moderate use of the foot brake was required to maintain a safe speed.

Second Gear: the vehicle was able to maintain a speed of 55 mph, 15 mph faster than the starting speed.

First Gear: I was unable to start the test at 40mph and chose 25mph as a starting point. I did not complete this phase of the test as I was concerned that damage might occur to the transmission or engine caused by excessive speed and excessive rpm.

The following are the results with the **Banks Exhaust Brake activated**:

Fourth Gear: the vehicle speed increased to 60mph and that speed was maintained with **very light use of the service brakes**.

Third Gear: the vehicle maintained a speed of 51mph, **no service brake required**.

Second Gear: the vehicle slowed to 29mph, **no service brake required**.

First Gear: I started the test at 25mph. I was immediately slowed to 15mph, holding that speed to the bottom of the long grade. **No service brake required.** This first gear feature was very impressive.

With the electronic plug-n-play feature, it is my understanding from the folks at Banks that this is the only exhaust brake that will operate in first gear for trucks equipped with automatic transmissions for years '03-'07. I independently drove two Third Generation trucks equipped with competitive brakes and neither of them allowed for brake operation in first gear.

This new vacuum-operated Banks brake that is designed for '03-'07 automatic trucks is impressive and deserves your purchase consideration. However, as the editor cautioned, be sure to understand the warranty implications of this, or any other brake, that you might install on your truck.

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