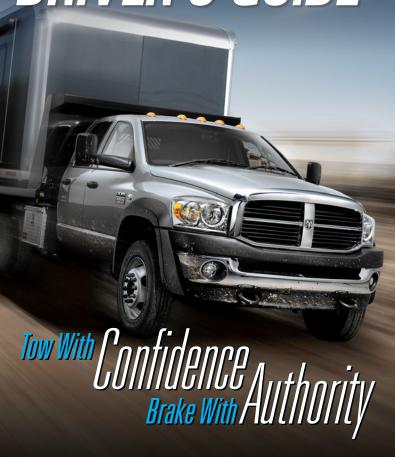
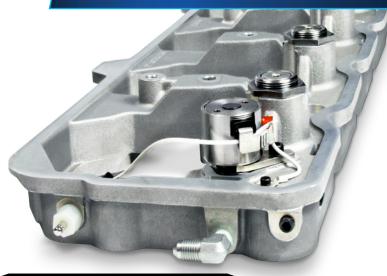
P67 LOADLEASH ENGINE BRAKE OPERATION DRIVER'S GUIDE



HELPING YOU ACHIEVE OPTIMUM RESULTS FROM YOUR LOADLEASH ENGINE BRAKE



III PACIIBRAKE

# III DRIVER'S GUIDE I



### **FUNCTIONALITY**

Pacbrake's P67 LoadLeash, for Cummins 6.7L diesel engines, is an engine brake which works in tandem with the vehicle's variable geometry turbo (VGT) exhaust brake. It functions by holding the exhaust valves slightly off the seat during the complete engine cycle, with the VGT providing exhaust backpressure and increased boost pressure.

# Two braking cycles are achieved:

- The first braking cycle is accomplished <u>during the exhaust stroke</u> when the piston is pushing the cylinder pressure past the open exhaust valve against the "closed" VGT.
- The second braking cycle occurs <u>during the compression stroke</u> with the piston is pushing the cylinder pressure past the open exhaust valve against the "closed" VGT.
  - The expansion stroke is eliminated by the open exhaust valve.

With work being done on both the compression stroke and exhaust stroke we are now doing retarding work on two engine cycles.

#### **OPERATION**

For optimal braking, the following switches must be in the 'ON' position:

- Tow/Haul (to provide auto-downshifting in RAM / Sterling trucks with auto transmissions)
- LoadLeash Switch
- Exhaust Brake Switch

An alternative method is manually downshifting using the +/- switch on the column selector. This can be achieved with the Tow/Haul 'OFF' and the Exhaust Brake & LoadLeah Switches 'ON'.

**NOTE:** It is advised to have engine up to operating temperature before using the LoadLeash as stalling of the engine may occur.

## **DRIVING IMPRESSIONS**

Pacbrake's LoadLeash, used in tandem with the VGT exhaust braking feature, will result in a 50% increase in retarding HP when measured at the rear wheels.

The LoadLeash engine brake provides over 300 RHP. In addition to enhanced control and reduced brake fade, Pacbrake's LoadLeash can extend service brake life by up to 5 times!

"Seat of the pants" feel is noticeable, particularly above 2500 RPM with a heavy load. Manual downshifting may be required. The LoadLeash is stronger at all RPMs and in most cases will control the vehicle/load in a chosen gear without the rapid downshifting and high engine RPM experienced with the exhaust brake use alone.

The LoadLeash engine brake meets all municipal sound bylaws.

