

WHY USE A TURBO BLANKET?



There are several substantial benefits of using a TURBO BLANKET. Here are just a few:

A turbo blanket protects components within your engine bay.

The turbo blanket isolates the heat produced by your turbocharger, and prevents that heat from damaging, or even igniting, components surrounding the turbocharger within your engine compartment, such as plastic and rubber hoses and electrical wiring, as well as painted surfaces, such as the engine bay and the surface of the hood. Also, it prevents areas of localized high temperature from damaging the engine itself. For example, a common cause of head gasket failure in turbocharged vehicles is localized heating of a portion of the engine. The heat differential between the portion of the engine near the turbocharger and the rest of the engine can cause warping of the head, and thus, head gasket failure. This has been a known cause of head gasket failure in both OEM and aftermarket turbocharged vehicles.

A turbo blanket improves the performance of your turbocharger by keeping "the hot side hot"

In keeping the exhaust gases within the turbocharger hot, turbocharger efficiency is improved. As you may know, the hotter a gas is, the more expansive it is. Within a contained system of a specified size, the more expansive a gas is, the greater the pressure derived and thus, the greater the flow of gas to escape the containment. With this increased pressure and flow rate for a given engine RPM, the acceleration of the turbocharger's impeller is increased as compared to the same turbocharger with the engine at the same RPM but with cooler exhaust gases. This equates to faster spool up of the turbocharger, as well as greater attainable levels of boost. What a driver will experience with a turbo blanket is greater turbocharger responsiveness. The faster spool up of the turbocharger means less turbo lag and a more linear power curve.

A turbo blanket improves the performance of your turbocharger by keeping "the cool side cool."

As you may know, it is very important to keep engine intake air cool. This is why intercoolers are often utilized with turbochargers. Similar to above, the cooler a gas is (such as intake air), the more dense it is. The more dense the intake air, the more oxygen it contains per unit volume. The more oxygen reaches the engine, the more power can be obtained. In keeping the heat of the exhaust gases contained within the hot side of the turbocharger and away from the cool side of the turbocharger and the intake path, more oxygen per unit volume reaches the engine, and thus, more power.

What Makes A PTP Turbo Blanket Different?

Every PTP Turbo Blanket is hand-crafted in North America, and quality is guaranteed. The PTP Turbo Blanket is very well known in the industry for its high standards for material selection, design, and construction, and also for its ability to provide these high quality products at an affordable price. It is important to note that, as unfortunate as it is, there are many imitation turbo blankets out there - often made in China. These imitation turbo blankets are manufactured using much inferior materials for construction. Imitation turbo blankets can be ineffective or worse, they can be dangerous if flammable materials are used.

PTP Turbo Blankets and wraps are the result of years of product research and development. The exact same materials that are used in our turbo blankets and wraps are currently being used in multiple military applications. Our materials are on the cutting edge of heat insulation technology.

PTP is proud to say that the performance benefits of our turbo blankets have been tested and confirmed by one of the most highly-regarded automotive testing facilities in the nation. In May 2014, The University of Texas at Austin's Engines and Automotive Research Program issued a comprehensive analysis of the gains achieved through the usage of a PTP turbo blanket on a 6.7 L Cummins diesel engine (bench dyno testing). The report, *Performance Improvements of Turbocharged Engines With The Use of a PTP Turbo Blanket*, stated that, "...[i]n all cases [PTP turbo blanket usage] resulted in an improved boost performance in the intake and a significant time-to-torque advantage of the engine . . ." (p.V)" Matthews and Bickle further state that their measurements "showed that the key feature of the PTP Turbo Blanket was improvement of turbocharger performance and engine acceleration which will result in improved vehicle acceleration."