

FAOS



How do I determine what size turbo blanket I need for my turbocharger?





Your turbo blanket selection should be based on the outer diameter of the casing of your turbocharger's "hot side" (which houses the exhaust-fed impeller). Therefore, you should either look up or manually measure the diameter of your turbocharger's hot side, as described in the above figure, and purchase the appropriately-sized turbo blanket. Our PTP universal turbo blankets are tailored to fit perfectly turbochargers with external wastegates without any modification. If your turbocharger has an internal wastegate, however, you may need to make a simple modification to allow it to fit appropriately. (e.g., cut away a portion of the turbo blanket)

Please use the following table to determine the appropriate size for your turbo blanket:

Hot Side Diameter 5	Universal Turbo Blanket Sizes: T3
to 6 inches	turbo blanket
6 to 7.5 inches 7.5 to	
8.5 inches 8.5 to 10.5	Large T4 turbo blanket
inches	

Please note that we also offer turbo blankets that are custom designed to fit Subaru WRX, Hyundai Genesis, and FP turbochargers.



What are the benefts oA using a turbo blanket?



There are several substantial benefits of using a turbo blanket. Here are just a few:

First, 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.

Second, 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.

Third, 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.



Will a turbo blanket damage my turbocharger?



No. There is a misconception that the heat retained by the turbo blanket will cause damage to the turbocharger. This is not correct. Turbochargers are designed to handle well in excess of peak engine exhaust temperatures. Maintaining the heat of the exhaust within the turbocharger will not damage the turbocharger. However, as with all turbocharged vehicles, whether utilizing OEM or aftermarket turbochargers, it is very important to not shut off the engine directly after periods of heavy acceleration. It is advised by us, as well as all OEM and aftermarket turbocharger manufacturers, to allow a period of time to let the oil (and in some cases water) circulate and cool the turbocharger. We recommend that before shutting off the vehicle after periods of heavy acceleration, you should allow one to two minutes of idling to allow the turbocharger to cool down effectively. You may also consider purchasing a turbo timer to allow the engine to idle for a predetermined amount of time after you have left and locked your vehicle.



Would you recommend installing a turbo blanket/heat wrap over ceramic coating?



Yes. Our turbo blankets and wraps have been proven through extensive testing to be much more effective than ceramic coating in isolating exhaust heat and reducing under hood temperatures. However, if you already have ceramic coating, the additive effect of using the turbo blanket/wrap, as well, would only increase the beneficial effects.



What is the life expectancy of an installed turbo blanket/heat wrap?



If cared for appropriately and installed correctly, PTP turbo blankets and heat wraps will likely outlive the vehicle in which they're installed. Our turbo blankets are made of incredibly resilient, high quality materials, which have been rigorously tested for durability and longevity.