

Turbocharger upgrades

03-09-2025













Key Points



- Performance & reliability
- Higher- flow, pressure ratio and efficiency compressor and turbine wheels
- Upgraded (thrust)bearings to accompany bigger compressor and turbine wheels
- Direct replacement, plug and play on all connections
- Future upgrades and improvements













BMW 558

5800

0,00

0,05

0,10

0,15

Airflow m3/sec

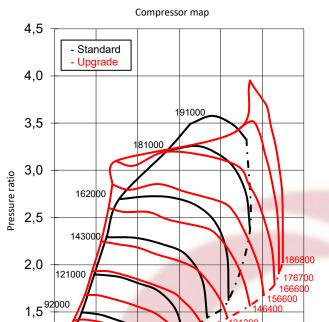
0,20

0,25

0,30

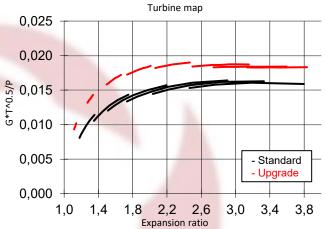
1,0





MT389-09200 / MT389-09210 (5B563A3 / 5B563A4)





	Original	Upgrade
Compressor wheel exducer diameter	56.0mm	58.0mm high flow
Turbine wheel inducer diameter	47.0mm	54.0mm
Bearing system	Standard	Upgrade
Compressor wheel specification	Fully Forged Machined (FFM)	Fully Forged Machined (FFM)
Turbine wheel specification	1050°C Mar−M	1050°C Mar-M
Engine output	333kW (453hp) - 370kW	588+kW (850+hp)
	(503hp)	















BMW 558



Description

The Van Der Lee Turbo Systems upgrade turbochargers for BMW S58 engines have an upgraded compressor and turbine wheel, along with ported shroud, an increased thrust capacity bearing system and improved oil sealing capacity by a motorsport type double piston ring design.

Developed as a drop-in replacement to the original turbochargers, these turbochargers will enable a reliable power output of 850+bhp (with supporting vehicle modifications), with an unrivalled transient response and time to torque performance through application of the latest compressor and turbine aerodynamic design for increased flow and efficiency, in a small package.

These turbochargers are tested and validated on a BMW M4 GT3 with a 120-hour consecutive track test and 120-hour consecutive dyno test to guarantee its reliability.

This set comes standard with choice of inlet pipes for original BMW pipe connections, Eventuri pipe connections or motorsport hose style connections.

Key characteristics

- 58mm forged machined, high flow compressor wheel
- 54mm 1050° C Mar-M, high flow turbine wheel
- Increased capacity thrust bearing
- Motorsport type double piston ring design
- Ported shroud
- CFD and FEM analysis proven
- 850+bhp











