

PERFORMANCE CATALOG

TURBOCHARGERS | INTERCOOLERS | VALVES | ACCESSORIES



Turbochargers | Intercoolers | Valves | Accessories

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OUR HISTORY

The heritage of our turbo business began in 1936 when young Cliff Garrett formed his company in a tiny, one-room office in Los Angeles. Cliff founded the company that would later become the Garrett Corporation. Number of employees, 1. Number of customers, 1. In the 1950s, it successfully added boosting a Caterpillar C9 tractor signaling the birth of automotive turbocharging.

With over sixty-five years of boosted experience, Garrett technology has been utilized by nearly every major global auto maker, resulting in approximately 100 million vehicles with our products and an average launch rate of 100 new applications annually spanning from gas, to diesel, fuel cell, and racing and performance applications.

From the world's first turbocharged production car – the Oldsmobile Jetfire Rocket – to the first Garrett turbocharged car to win the Indianapolis 500, Garrett's industry-leading technology and patented designs are used daily for both OE and aftermarket vehicle applications.

Today, our Garrett legacy in the automotive industry helps create some of the most innovative and high-performing turbochargers in the world that can enable a four cylinder turbocharged engine to perform like a non-turbocharged V6 engine while providing 20-40% greater fuel efficiency. Garrett's global engineering network continues to inspire technological innovation around the world.

The products contained in this catalog are performance aftermarket parts that are not legal for street use in certain states or countries, unless a type-approval/executive order has been obtained e.g. by the distributor of the product. Check with your distributor before using in any vehicle on a public road or highway. You should check with your state or applicable country authorities to find out whether these products are legal for street use in your state or country. Applicable laws may also prohibit tampering with parts or vehicle design elements affecting emissions on vehicles intended for use on public roads. You are responsible for ensuring that the use of this product complies with all applicable laws, regulations and ordinances (including, but not limited to, emission, noise, safety, and

type-approval/executive order). Any vehicle modifications using the products in this catalog are completed AT YOUR OWN RESPONSIBILITY and AT YOUR OWN RISK. A vehicle modification using these performance aftermarket products may affect or void a vehicle's warranty, operating license/registration or type-approval/executive order. You should consult your local laws, as well as the owner's manual and service manual of your vehicle. You should also contact your vehicle's manufacturer to determine what effect modifications may have on safety, warranty, performance, and other aspects of your vehicle. These products generally may be used on racing vehicles that will never be driven on public roads or highways.



WHY CHOOSE GARRETT TURBOCHARGERS

A turbo is a high technology product that requires superior design and intensive capital to produce. It must meet severe requirements that only a world class manufacturer can achieve.

Garrett is one of the few turbocharger manufacturers that subjects our turbos to several OE qualification tests. These tests ensure Garrett produces a safe and reliable turbo for OE applications. When you buy a Garrett turbocharger you can be sure it is reliable.

On-Engine Durability - More than 1,000-hours of general turbocharger durability, is run on-engine in one of Garrett's engineering laboratories.

Gas Stand Cyclic Durability - A several hundred hour durability test is conducted on a gas stand where the turbo is run past its normal operating limits.

Compressor & Turbine Housing Containment - A compressor/turbine wheel is weakened to hub burst at a specific speed. No portion of the wheel is allowed to penetrate a containment shroud surrounding the turbocharger. A test to ensure safety. See full article at www.GarrettMotion.com

Shaft Motion - The maximum tolerances of the bearing system are tested for rotordynamic stability beyond the maximum turbocharger operating speed. This means no bearing problems and a long turbo life.

Thrust Bearing Capacity - A test that stresses the thrust bearing at extreme conditions. This test makes sure your Garrett turbocharger can tolerate the load you put it through.

Compressor & Turbine Seal - Multiple turbochargers are run on-engine under conditions designed to cause seal leakage. No significant leakage is allowed during these tests.

Heat Soak Back - A turbocharger instrumented with thermocouples is taken beyond maximum operating temperature and shut down hard! Repeat the test four more times and make sure maximum temperatures stay within our strict limits to avoid oil coking or build up inside the center housing. This is particularly critical for high temperature gasoline applications.

Compressor & Turbine Performance - The entire operating range of both the compressor and turbine are mapped on one of Garrett's performance gas stands. These test cells are calibrated to strict standards to assure accuracy and consistency.

Compressor & Turbine Blade Frequencies - Garrett has strict requirements for compressor and turbine blade natural frequency. This is critical on large trims where the blade must be stiff enough to withstand potentially damaging vibrations.

Thermal Cycle - A several hundred hour endurance test that cycles the turbocharger from low temperature to glowing red every 10 minutes. To ensure a long turbo life, no cracking of the turbine housing or distortion of the heat shroud are allowed.

Rotor Inertia - A measurement made to document the rotational inertia of Garrett's compressor and turbine wheels. Garrett's turbochargers are known for their high flow / low inertia characteristics.

Shaft Critical Speed - An analytical test that ensures that destructive shaft critical speeds are well out of the turbocharger operating range. For example, large wheels may require a large shaft diameter to avoid the shaft bending critical speed.

Wheel Fatigue - Garrett will only sell compressor or turbine wheels that have passed a cyclic fatigue test. Garrett runs tests on a regular basis to ensure quality and to constantly improve our products.

Turbo Vibration - The entire turbocharger is vibrated and monitored on Garrett's large shaker table to ensure product durability.

HOW DOES A TURBOCHARGER DELIVER MORE AIR INTO THE ENGINE?

Engine power is proportional to the amount of air and fuel that can get into the cylinders. All things being equal, larger engines flow more air and as such will produce more power. If we want our small engine to perform like a large engine, or simply make our larger engine produce more power, our ultimate objective is to deliver more air into the cylinder. By installing a Garrett turbocharger, the power and performance of an engine can be dramatically increased.

(1) Compressor Inlet: Opening through which ambient air passes before entering the compressor.

(2) Compressor Discharge: Ambient air is then compressed which raises the air's density (mass/unit volume).

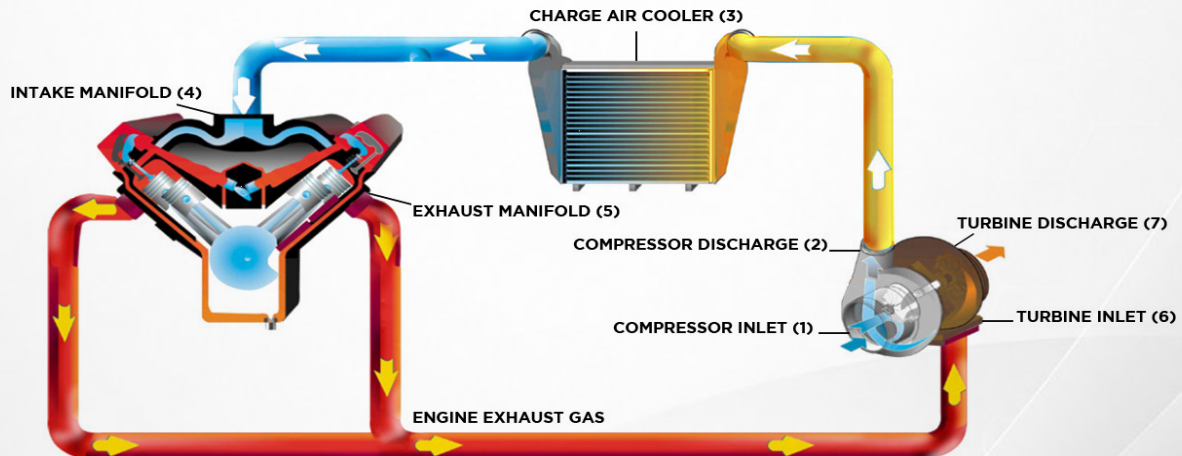
(3) Charge Air Cooler (aka Intercooler): cools the compressed air to increase its density and to increase resistance to detonation.

(4) Intake Manifold: Directs dense air into the engine's cylinders. Each cylinder draws in an increased mass flow rate of air. Higher air mass flow rate allows a higher fuel flow rate (with similar air/fuel ratio). Combusting more fuel results in more power for a given displacement.

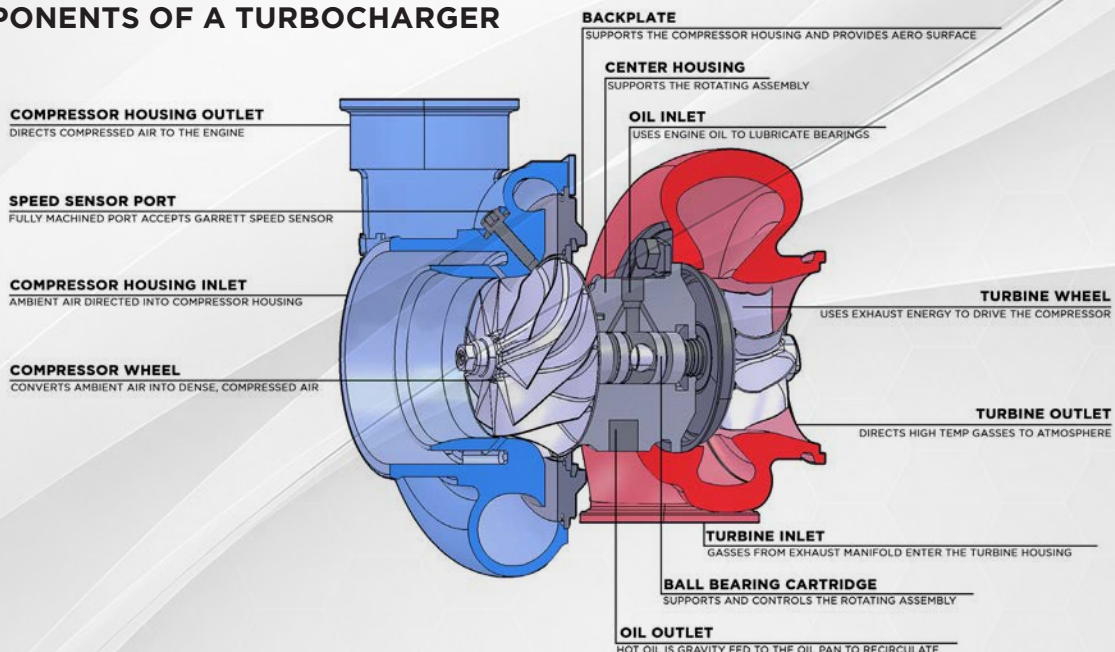
(5) Exhaust Manifold: Directs burned fuel and exhaust gases from the cylinders towards the turbine.

(6) Turbine Inlet: Directs high temperature exhaust gas towards the turbine wheel. The turbine creates back pressure on the engine which means engine exhaust pressure is higher than atmospheric pressure.

(7) Turbine Discharge: A pressure and temperature drop occurs (expansion) across the turbine, which harnesses the exhaust gas' energy to provide the power necessary to drive the compressor wheel.



COMPONENTS OF A TURBOCHARGER

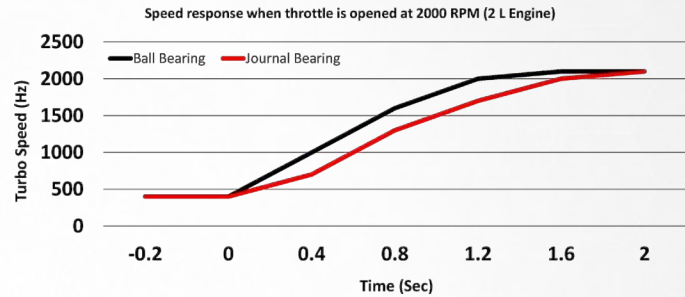


BALL BEARING TECHNOLOGY

Ball bearing innovation began as a result of work with the Garrett Motorsports group for several racing series where it received the term the “cartridge ball bearing”. The cartridge is a single sleeve system that contains a set of angular contact ball bearings on either end, whereas the traditional bearing system contains a set of journal bearings and a thrust bearing.

Turbo Response – When driving a vehicle with the cartridge ball bearing turbocharger, you will find exceptionally crisp and strong throttle response. Garrett Ball Bearing turbochargers spool up 15% faster than traditional journal bearings. This produces an improved response that can be converted to quicker 0-60 mph speed. In fact, some professional drivers of Garrett ball-bearing turbocharged engines report they feel like they are driving a large, normally aspirated engine.

Reduced Oil Flow – The ball bearing design reduces the required amount of oil required to provide adequate lubrication. This lower oil volume reduces the chance for seal leakage. Also, the ball bearing is more tolerant of marginal lube conditions, and diminishes the possibility of turbocharger failure on cold start conditions.
Read more at www.GarrettMotion.com



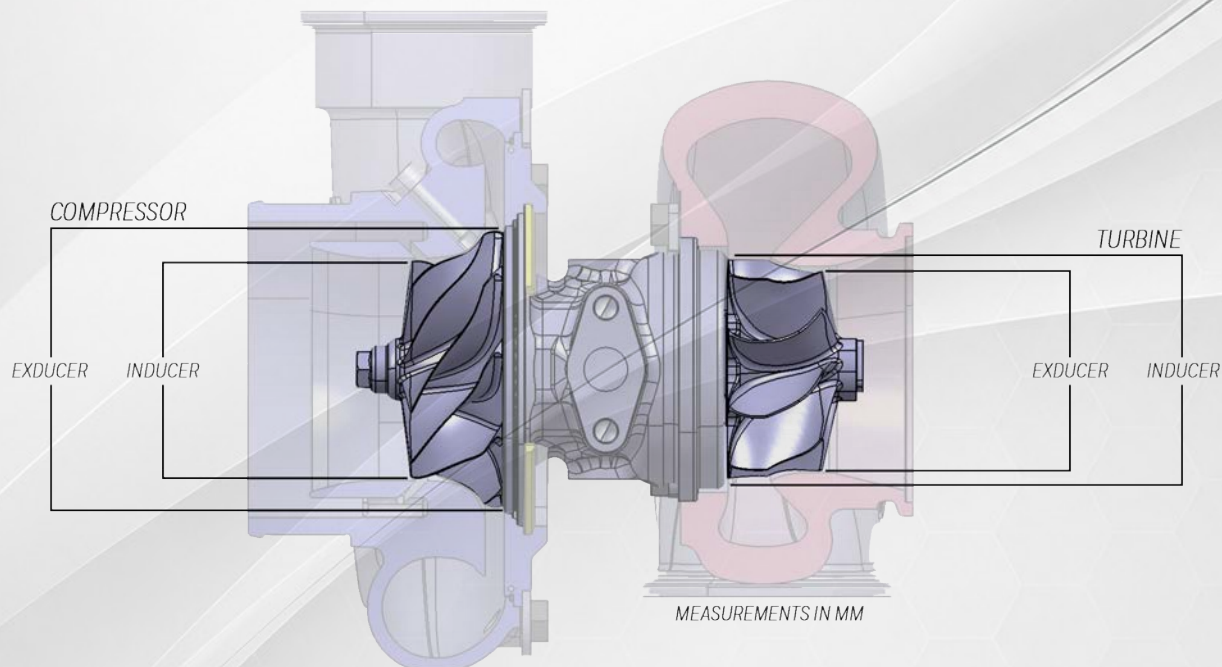
Improved Rotordynamics and Durability – The ball bearing cartridge gives better damping and control over shaft motion, increasing reliability for both every day and extreme driving conditions. In addition, the opposed angular contact bearing cartridge eliminates the need for the thrust bearing, a common weak link in the turbo bearing system.

WHEEL TRIM

Trim is a common term used when talking about or describing turbochargers. For example, you may hear someone say “I have a GTXxxxx”. What is trim? Trim is a term used to express the relationship between the inducer and exducer of both turbine and compressor wheels. More accurately, it is an area ratio. Based on aerodynamics and air entry paths, the inducer for a compressor wheel is the smaller diameter. For turbine wheels, the inducer is the larger diameter.

The trim of a wheel, whether compressor or turbine, affects performance by shifting the airflow capacity. All other factors held constant, a higher trim wheel will flow more than a smaller trim wheel. However, it is important to note that very often all other factors are not held constant. So just because a wheel is a larger trim does not necessarily mean that it will flow more.
Compressor Trim = $(\text{Inducer}^2 / \text{Exducer}^2) \times 100$
Turbine Trim = $(\text{Exducer}^2 / \text{Inducer}^2) \times 100$

WHEEL MEASUREMENTS EXPLAINED



HOW TO READ A COMPRESSOR MAP

The compressor map describes each compressor's performance characteristics, including efficiency, mass flow rate, turbo speed, choke line, surge line, and pressure ratio. Below is a figure that identifies these aspects.

Efficiency Islands: Efficiency Islands are concentric regions that represent the compressor efficiency at any point on the map. The smallest island near the center of the map is the highest or peak efficiency island. As the rings move out from there, the efficiency drops by the indicated amount until the surge and choke limits are reached.

Mass Flow Rate: Mass Flow Rate is the mass of air flowing through a compressor over period of time and is expressed as lb/min. As a very general rule, turbocharged gasoline engines generate 10.0-11.0* horsepower at the flywheel for each lb/min of airflow. So, an engine with a target peak horsepower of 400 Hp will require 36-40 lb/min of airflow to achieve that target. Many people use Volumetric Flow Rate (expressed in cubic feet per minute, CFM or ft³/min) instead of mass flow rate. Volumetric flow rate can be converted to mass flow by multiplying by the air density. Air density at sea level is 0.076lb/ft³. Mass flow can be physically measured, but in many cases it is sufficient to estimate the mass flow when choosing the proper turbo.

Turbo Speed: Turbo Speed Lines are constant turbo speed measured in RPM. As turbo speed increases, the pressure ratio and mass flow increases. Turbo speed lines are very close together at the far right edge of the map indicating a potential turbo over-speed condition. Maximum turbo speed will be noted with the following symbol. **MAXIMUM TURBO SPEED** ⚠

Pressure Ratio:

Where:

$$\pi_c = \frac{P_{2c}}{P_{1c}} \quad \pi_c = \frac{P_{2c}}{P_{1c}}$$

= Pressure Ratio
= Absolute Outlet Pressure
= Absolute Inlet Pressure

Absolute Pressure: It is important to use units of Absolute Pressure for both P_{2c} and P_{1c}. Absolute Pressure at sea level is 14.7 PSia. In units of PSia, the "a" refers to "absolute". This is referred to as standard atmospheric pressure at standard conditions.

Gauge Pressure: Measures the pressure above atmospheric, so a gauge pressure reading at atmospheric conditions will read zero. Boost gauges measure the manifold pressure relative to atmospheric pressure, and thus are measuring Gauge Pressure. In units of PSig, the "g" refers to "gauge". This is important when determining P_{2c}.

Calculating P_{2c}: For example, a reading of 12 PSig on a boost gauge means that the air pressure in the manifold is 12 PSI above atmospheric pressure. For standard atmospheric conditions, 12 PSig + 14.7 PSia = 26.7 PSI absolute compressor outlet pressure (P_{2c}). The pressure ratio at this condition can now be calculated: 26.7 / 14.7 = 1.82

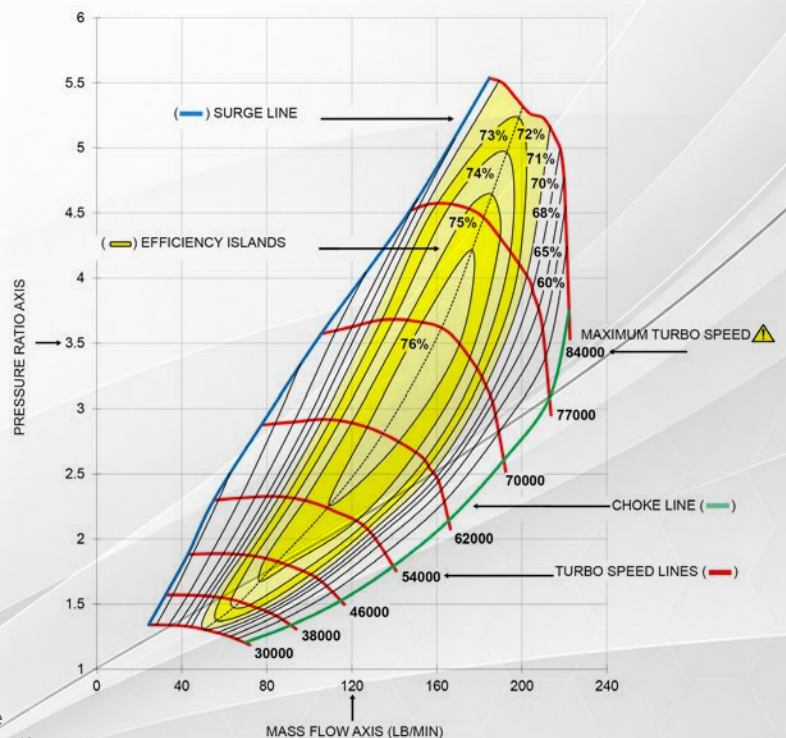
Depression: A pressure loss upstream of the compressor caused by any restriction from the air filter or restrictive ducting. Depression can be 1 PSig or more on some intake systems. In determining pressure ratio, the absolute pressure at the compressor inlet (P_{1c}) is often LESS than the ambient pressure, especially at high load. Taking into account the 1 PSig intake depression, the pressure ratio is now: (12 PSig + 14.7 PSia) / 13.7 PSia = 1.95

Elevation: Higher elevations can have a significant effect on pressure ratio. Turbo speed increases to compensate for increases in altitude. Substitute the actual atmospheric pressure in place of the 14.7 PSI in the equations above to give a more accurate calculation.

For example, at Denver's 5000 feet elevation, the atmospheric pressure is typically around 12.4 PSia. In this case, the pressure ratio calculation, taking into account the intake depression, is: (12 PSig + 12.4 PSia) / (12.4 PSia - 1 PSig) = 2.14 Compared to the 1.82 pressure ratio calculated originally, this is a big difference.

Choke Line: The Choke Line is the right hand boundary of the compressor map and defined at the point where the efficiency drops below 58%. In addition to the rapid drop of compressor efficiency past this point, turbo speed also approaches or exceeds the recommended limit. If your actual or predicted operation is beyond this limit, a larger compressor is necessary.

Surge Line: Surge is the left hand boundary of the compressor map and represents a region of flow instability. This region is characterized by mild flutter to wildly fluctuating boost from the compressor. Continued operation within this region can lead to premature turbo failure due to heavy thrust loading. Surge will decay once the turbo speed finally slows enough to reduce the boost and move the operating point back into the stable region. This situation is commonly addressed by using a Blow-Off Valve (BOV) or bypass valve. A BOV functions to vent intake pressure to atmosphere so that the mass flow ramps down smoothly, keeping the compressor out of surge. In the case of a recirculating bypass valve, the airflow is recirculated back to the compressor inlet.



* Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. Horsepower numbers represented in this catalog are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.

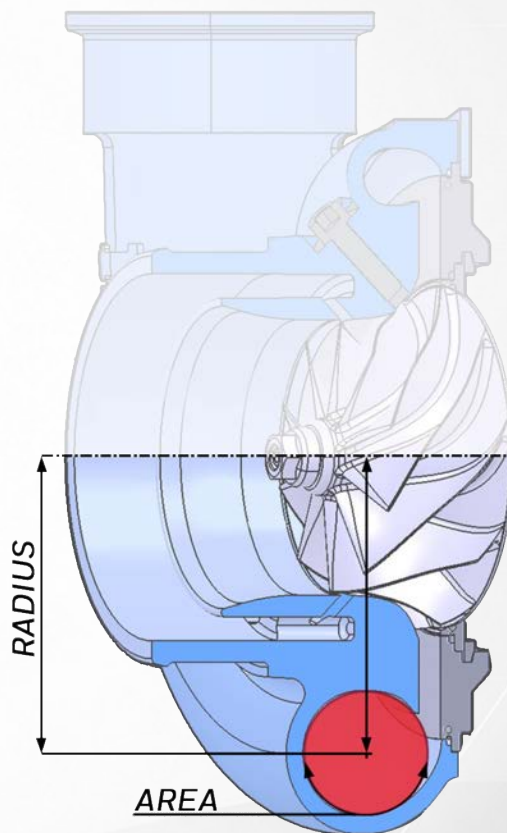
A/R (Area/Radius) describes a geometric characteristic of all compressor and turbine housings. It is defined as the inlet (or, for compressor housings, the discharge) cross-sectional area divided by the radius from the turbo centerline to the centroid of that area.

Compressor A/R - Compressor performance is comparatively insensitive to changes in A/R. Larger A/R housings are sometimes used to optimize performance of low boost applications, and smaller A/R are used for high boost applications. However, as this influence of A/R on compressor performance is minor, there are rarely A/R options available for compressor housings.

Turbine A/R - Turbine performance is greatly affected by changing the A/R of the housing. Using a smaller A/R will increase the exhaust gas velocity into the turbine wheel providing increased turbine power at lower engine speeds and resulting in quicker boost response. The smaller A/R also causes the flow to enter the wheel more tangentially, which reduces the ultimate flow capacity of the turbine wheel. This will increase exhaust back pressure and reduce the engine's ability to breathe effectively at high RPM, adversely affecting peak engine power.

Using a larger A/R will lower exhaust gas velocity, and delay boost response. The flow in a larger A/R housing enters the wheel in a more radial fashion, increasing the wheel's effective flow capacity, resulting in lower back pressure and more power at higher engine speeds.

When deciding between A/R options, be realistic with the intended vehicle use and choose the A/R to bias the performance toward the desired power band characteristic.



HOW DO I CHOOSE THE RIGHT TURBO

The primary input in determining which turbocharger is appropriate is to have a target horsepower in mind. This should be as realistic as possible for the application. Remember that engine power is generally proportional to air and fuel flow. Once you have a target horsepower identified along with your engine displacement, you begin to hone in on the turbocharger size, which is highly dependent on airflow requirements.

Other important factors include the type of application. An autocross car, for example, requires rapid boost response. A smaller turbocharger or smaller turbine housing would be most suitable for this application. While this will trade off ultimate power due to increased exhaust back pressure at higher engine speeds, boost response of the small turbo will be excellent. Alternatively, on a car dedicated to track days, peak horsepower is a higher priority than low-end torque.

Plus, engine speeds tend to be consistently higher. Here, a larger turbocharger or turbine housing will provide reduced back pressure but less-immediate low-end response. This is a welcome trade off given the intended operating conditions.

Selecting the turbocharger for your application goes beyond "how much boost" you want to run. Defining your target power level and the primary use for the application are the first steps in enabling your Performance Distributor to select the right turbocharger for you.

Scan the distributor locator QR code below to be directed to the Garrett distributor locator for turbo matching assistance.

BOOST ADVISER



SCAN TO TRY BOOST ADVISER

Boost Adviser is a free online tool that helps you quickly find the right Garrett turbocharger for your engine combination and horsepower target.



FASTER RESPONSE



IMPROVED EFFICIENCY



RELIABLE POWER



REDUCED TURBO LAG



garrettmotion.com/racing-and-performance/boost-adviser/



ENTER YOUR ENGINE PARAMETERS

Input key engine and operation parameters for your project.



Horsepower Target



Engine Displacement



Fuel Type



RPM Range



Altitude & Temperature



Intercooler Type



Single or Twin Turbo



ANALYZE THE CALCULATIONS

Boost Adviser calculates your engine's airflow needs and operating range.

Here are your calculations.

SAVE SEARCH INPUTS

	Mid Range RPM	Max Power RPM
Power at crankshaft (HP)	392	799
Torque at crankshaft (Lb-Ft)	571	699
Boost gauge pressure (PSI)	10.66	17.40
Intake manifold temp (°F)	115	132
Pressure ratio	1.79	2.24
Corrected air flow (LBS/MIN) per turbo	34.84	71.03

The maximum power stated for each turbocharger has been calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel power. Performance results are highly dependent upon your vehicle's modifications and tuning/calibration.



392 HP
Mid Range Power



799 HP
Max Power



34.84 lb/min
Mid Range Airflow



71.03 lb/min
Max Power Airflow



FIND YOUR MATCH & DEALER

Review the recommended products and connect with a local dealer.



RECOMMENDED TURBOCHARGERS
Based on your engine calculations and operating range.



G-XRace G42-71 71mm
Garrett G-XRace G42-71 71mm
952766-5006S

FULL SPECS BUY NOW



G-XRace GXR47-76 116 exd
Garrett G-XRace GXR47-76
76.6mm Turbocharger

FULL SPECS BUY NOW



G-XRace GXR45-82 82.9mm
952766-5001S

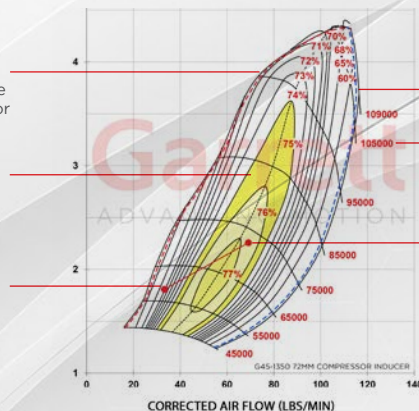
FULL SPECS BUY NOW

HOW TO READ THE COMPRESSOR MAP

Surge Line- avoid operating left of the surge line to prevent compressor surge

Efficiency Islands- higher values mean lower intake temps and better performance

Mid-Range RPM- operating point: 1.79 PR | 34.84 LBS/MIN



Choke Line- avoid operating right of the choke line

Turbo Speed- turbo shaft speed points. Do not exceed maximum RPM

Max-Power RPM- operating point: 2.24 PR | 71.03 LBS/MIN



IMPORTANT: Boost Adviser results are a starting point. Working with a Garrett distributor ensures you get the best performance, reliability, and drivability from your turbo.



WORK WITH A GARRETT DISTRIBUTOR

Garrett distributors have the knowledge and experience to help you narrow down your options and choose the right turbo for your build.



Application expertise to match your goals



Support with installation, tuning, and optimization



Access to the latest Garrett technology and product updates



FIND A DEALER NEAR YOU
Our global network of distributors is ready to help.

FIND A DEALER

G-SERIES II

Whether you're a kit maker or an owner of a high-performance vehicle, now you can harness the power of motorsport legends and experience the durability of champions in your car with the NEW G-Series II universal Performance Turbos line from Garrett. Designed with the same quality and craftsmanship that has powered motorsport legends for over 4 decades. G-Series II turbochargers are available in multiple frame sizes to suit your individual needs, whether as a complete new turbo or as a CHRA swap to upgrade your G-Series I Turbo.



Power Of Legends. Durability Of Champions.

Only the best of the best qualify to compete in prestigious Motorsport races, like the 24 Hours of Le Mans. It takes a combination of unparalleled skill, relentless hard work, and cutting-edge technology to reach the podium and achieve immortality. Those who succeed become legends.

For over 40 years, Garrett has been the name behind the legends of motorsport, powering the winners of the most prestigious races, including the Le Mans champions of the last 25 years. Our turbochargers are engineered by a team of 1300 engineers and tested across five R&D centers around the world, to deliver unmatched performance and reliability.



GARRETT G-SERIES II OVERVIEW

The next evolution of Garrett's high-performance turbocharger platform, building on the proven capabilities of the original G-Series lineup with expanded airflow capability and high-flow efficiency.



Developed for performance builders, tuners, racers, and enthusiasts, the G-Series II lineup is designed to support a wide range of power levels and engine combinations across modern performance platforms.

The platform introduces updated compressor aerodynamics that increase airflow and widen the operating range while maintaining the durability and reliability that Garrett turbochargers are known for.

From responsive drift builds to extreme half-mile exotics, G-Series II expands the performance potential of the Garrett G-Series family while maintaining compatibility with many existing installation configurations.

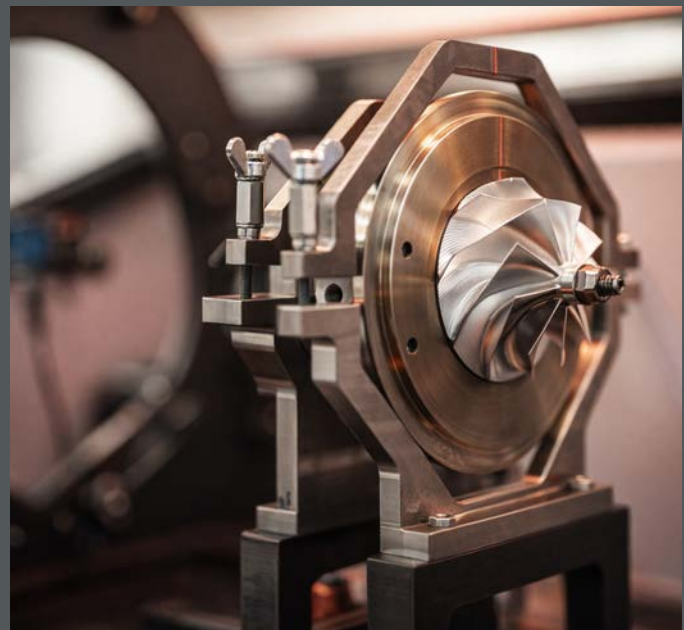
EXPANDING THE CAPABILITY OF THE G-SERIES PLATFORM

G-Series II was developed to give builders greater performance while maintaining the durability and reliability that performance applications demand.

As modern performance builds continue to push higher horsepower levels, builders need turbochargers that can deliver more airflow while maintaining efficiency across demanding operating conditions.

Garrett engineers focused on expanding the performance capability of the G-Series platform through improvements in compressor aerodynamics and flow performance, allowing the next generation of builds to take advantage of greater airflow potential.

At the same time, the platform was designed to maintain compatibility with many existing installation configurations, giving current G-Series users a practical upgrade path while supporting new high performance builds across a wide range of applications.



40+

Years of turbocharger engineering

1300

Engineers supporting development

Global

Research and development centers

BUILDING ON THE ORIGINAL G-SERIES PLATFORM

G-Series II was developed to expand the capability of the original platform with improved compressor aerodynamics, increased airflow, and high-flow efficiency while maintaining a practical upgrade path for existing G-Series users.



UPDATED COMPRESSOR AERODYNAMICS

New compressor aero improves the performance potential of the platform and helps extend capability where builds demand more flow.

BETTER EFFICIENCY AT HIGH-FLOW RATES

G-Series II boost airflow and high-flow efficiency, widening the operating range and supporting more power.

UPGRADE PATH FROM GEN I

G-Series II maintains compatibility with Gen I compressor and turbine housings, many Gen I users can upgrade through a CHRA replacement path rather than starting over with a completely new supercore.

Compare G-Series II Models

Use this chart to compare horsepower capability, engine displacement range, wheel sizing, turbine housing options, and key configuration differences across the G-Series II lineup.

G-Series II Product Features	G25-585	G25-700	G30-725	G30-825	G35-990	G40-1000	G40-1250	G42-1325	G42-1585	G45-1610
Turbo Reference Model	4849	5449	5455	5855	6262	6270	7170	7375	7975	7982
Horsepower Rating (BHP)	585	700	725	825	990	1000	1250	1325	1585	1610
Displacement Range (L)	1.0 - 3.0		2.0 - 3.5		2.0 - 5.5		2.0 - 6.0		2.0 - 7.0	
Compressor Wheel Ind (MM)	48	54	54	58	62	62	71	73	79	79
Turbine Wheel Exd (MM)	49		55		62	70		75		82
T25 Inlet Turbine Housing (A/R)	0.49		X		X	X		X		X
T3 Inlet Turbine Housing (A/R)	X		.83 1.01		.83 1.01		X	X		X
T4 Divided Inlet Turbine Hsg (A/R)	X		1.06		1.06	.85 .95 1.06 1.19		1.01 1.15 1.28		1.01 1.15 1.28 1.44
V-Band Inlet Turbine Hsg (A/R)	.72 .92		.61 .83 1.01 1.21		.61 .83 1.01 1.21	.85 .95 1.06 1.19		1.01 1.15 1.28		1.01 1.15 1.28 1.44
Standard Rotation	Y		Y		Y	Y		Y		Y
Reverse Rotation	Y		Y		Y	X		X		X
Internally Wastegated	Y		Y		Y	X		X		X

Legend: Y = Available X = Not Available

WHY CHRIS FORSBERG SWAPPED FROM G30-660 TO G-SERIES II G25-700

In professional drifting, the best turbo choice is not always the biggest frame size. Chris Forsberg's move to a smaller G-Series II frame shows how improved response, controllable torque, and usable power delivery can matter more than simply chasing a higher theoretical top-end ceiling.

Chris Forsberg and his team downsized from a pair of Garrett G30-660 54mm turbochargers to a pair of Garrett G-Series II G25-700 54mm turbochargers on his Formula Drift Nissan Z. On paper, stepping down from a G30 frame to a G25 frame may sound like giving up performance. In practice, it was a move focused on improving how the power arrives.

In drifting, immediate throttle response, boost recovery after lifts, and controllable torque during transitions can be more valuable than maximizing peak airflow at the very top of the rev range. That is exactly where G-Series II changes the equation.

With updated compressor aerodynamics, increased airflow capability, and improved efficiency, the G-Series II G25-700 helped support a result of 940 wheel horsepower while still prioritizing response and driveability.

G-SERIES II IN ACTION

Going Down a Frame Size to Go Faster

Why Chris Forsberg Swapped from a G30-660 to a G-Series II G25-700

Forsberg downsized frame size to support faster, more controllable power delivery with G-Series II

WHY THIS MATTERS

VEHICLE	ENGINE	TURBO CHANGE
2023 Nissan Z	BoostLogic VR38DETT 3.8L	Twin G30-660 → Twin G-Series II G25-700

RESULT
940 wheel horsepower with improved response and control

MIDRANGE POWER GAINS IN PAC PERFORMANCE DYNO TESTING WITH G-SERIES II G40-1250



Pac Performance in Sydney, Australia conducted back-to-back dyno testing using a Mazda RX-3 two-rotor to compare the Garrett G-Series II G40-1250 against the previous generation G-Series I G40-1150.

Both turbochargers were tested using the same engine calibration and identical A/R turbine housing to isolate the performance difference.

Back-to-back dyno testing by Pac Performance using a Mazda RX-3 two-rotor showed the G-Series II G40-1250 delivering significantly more midrange power than the G-Series I G40-1150 under identical test conditions.

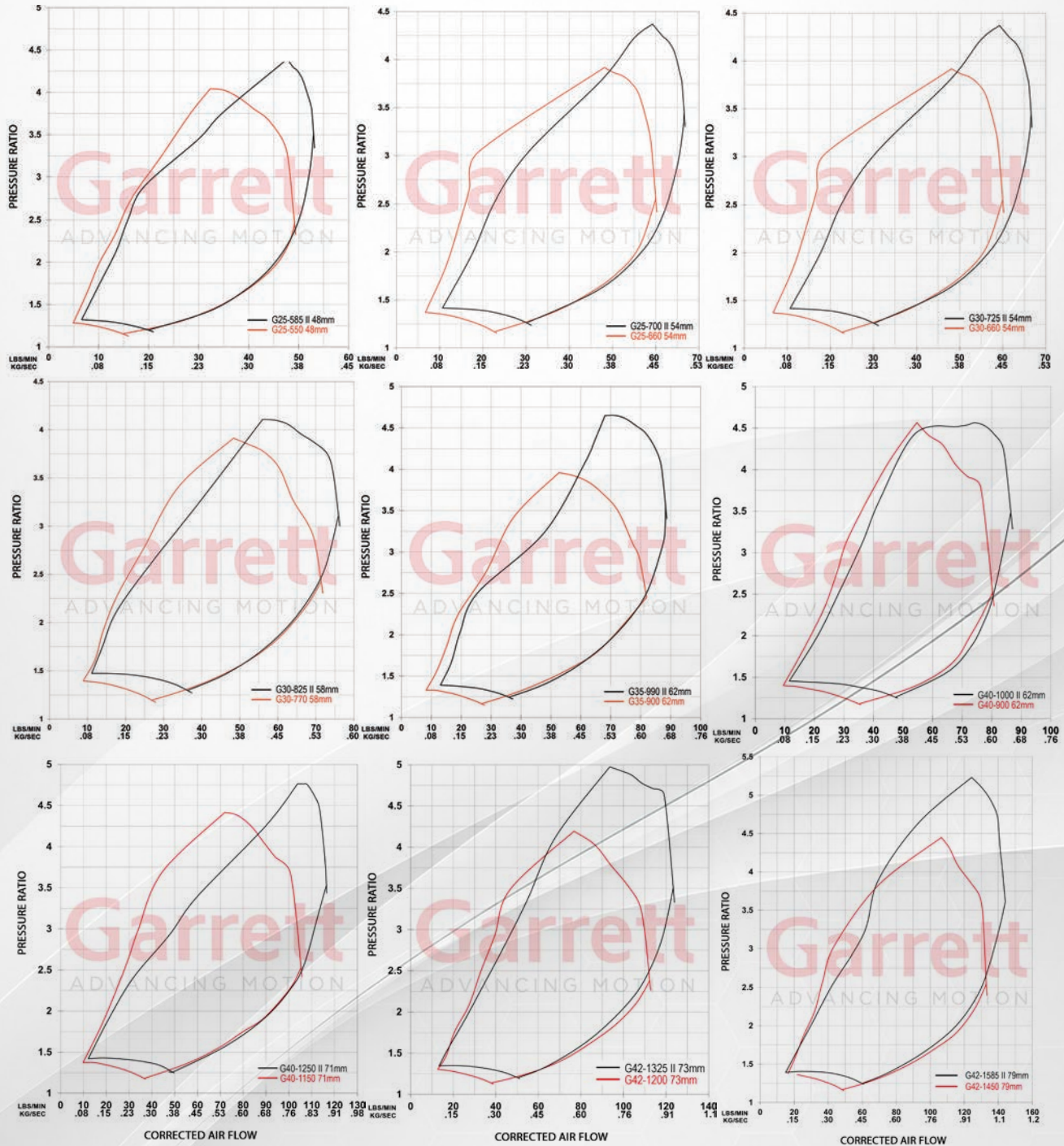
At 7500 RPM, the G-Series II produced approximately 475 horsepower versus 200 horsepower from the previous generation.

With up to 10 percent higher compressor flow and a direct CHRA upgrade path, G-Series II delivers increased power potential while maintaining the same turbo size.

COMPRESSOR MAP OVERLAYS

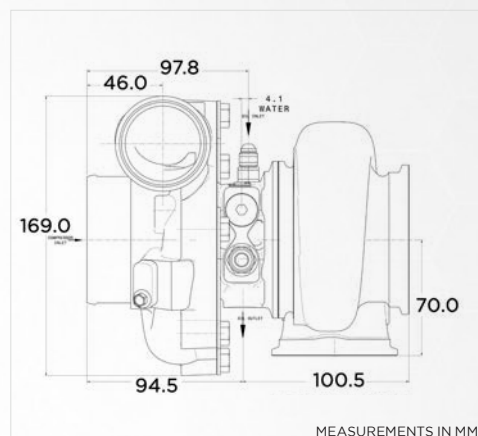
The compressor map overlay illustrates the airflow and pressure ratio differences between the previous G-Series Gen I turbocharger and the current G-Series II design. In key operating regions, the G-Series II compressor provides increased airflow capability at comparable pressure ratios, expanding the usable operating range and supporting higher horsepower potential where engine demand allows.

To fully realize these gains, ECU calibration is necessary to optimize performance when upgrading from a previous-generation turbocharger.

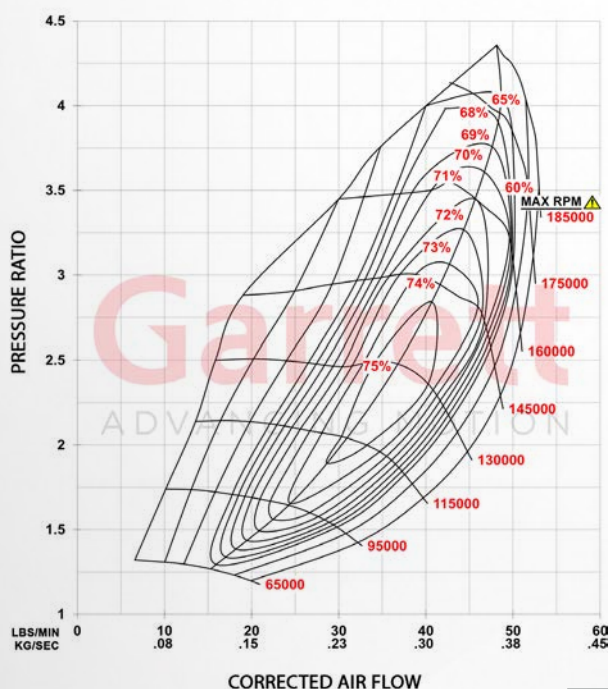


Garrett G-Series II G25-585

Displacement: 1.4L - 3.0L



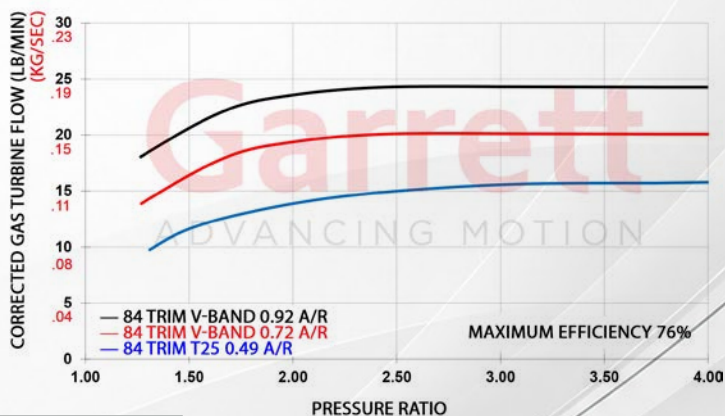
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ New compressor aero increases power and performance
- ◆ Up to 10% higher compressor flow compared to G-Series Gen I at peak pressure ratio and peak turbo rpm
- ◆ Direct upgrade path for Gen I customers with just a CHRA swap
- ◆ Utilizes Gen I compressor and turbine housings
- ◆ Mar-M turbine wheel rated up to 1050°C
- ◆ Oil restrictor and water fittings included

TURBINE FLOW

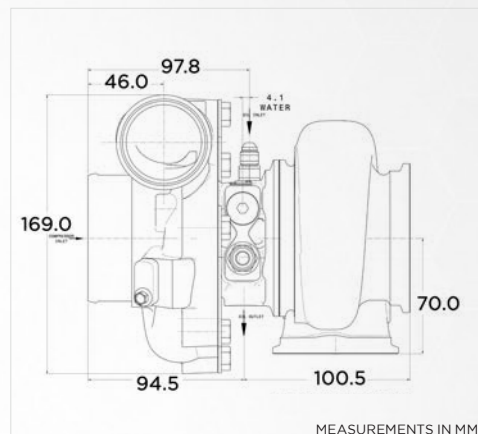


Supercore PN	CHRA PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934075-5001S	934074-5001S	Standard Rot	4849	585	48mm	60mm	54mm	49mm
934114-5001S	934113-5001S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet		Outlet		Wastegate	Divided
740902-0069	Standard	0.72	V-Band		V-Band		External	N
740902-0068	Standard	0.92	V-Band		V-Band		External	N
740902-0076	Standard	0.72	V-Band		V-Band		Internal	N
740902-0077	Standard	0.92	V-Band		V-Band		Internal	N
740902-0080	Standard	0.49	T25		V-Band		Internal	N
740902-0073	Reverse	0.72	V-Band		V-Band		External	N
740902-0074	Reverse	0.92	V-Band		V-Band		External	N
740902-0078	Reverse	0.72	V-Band		V-Band		Internal	N
740902-0079	Reverse	0.92	V-Band		V-Band		Internal	N
Turbo PN	Rotation	A/R	Inlet		Outlet		Wastegate	Divided
934076-5001S	Standard	0.49	T25		V-Band		Internal	N
934076-5002S	Standard	0.72	V-Band		V-Band		Internal	N
934076-5003S	Standard	0.92	V-Band		V-Band		Internal	N
934115-5001S	Reverse	0.72	V-Band		V-Band		Internal	N
934115-5002S	Reverse	0.92	V-Band		V-Band		Internal	N

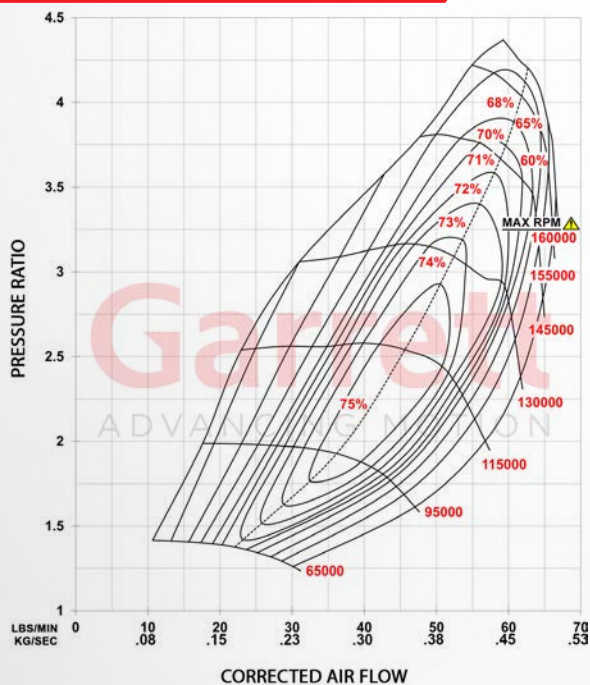
Garrett G-Series II G25-700

Displacement: 1.4L - 3.0L

G-SERIES II



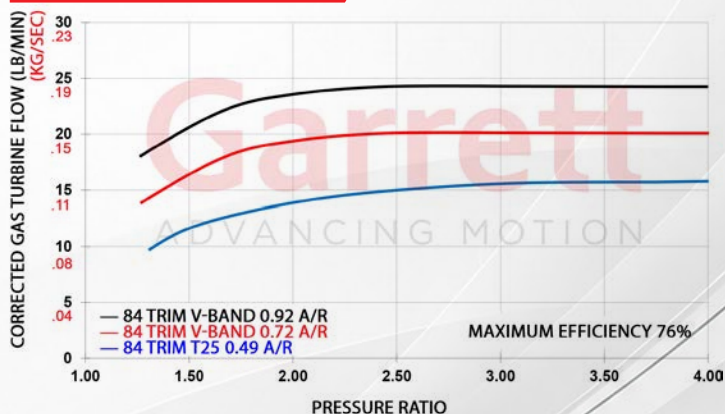
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ New compressor aero increases power and performance
- ◆ Up to 10% higher compressor flow compared to G-Series Gen I at peak pressure ratio and peak turbo rpm
- ◆ Direct upgrade path for Gen I customers with just a CHRA swap
- ◆ Utilizes Gen I compressor and turbine housings
- ◆ Mar-M turbine wheel rated up to 1050°C
- ◆ Oil restrictor and water fittings included

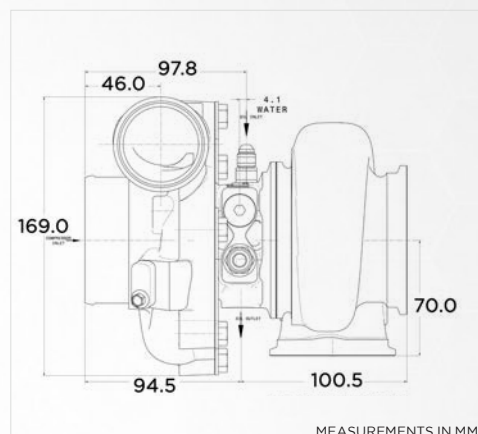
TURBINE FLOW



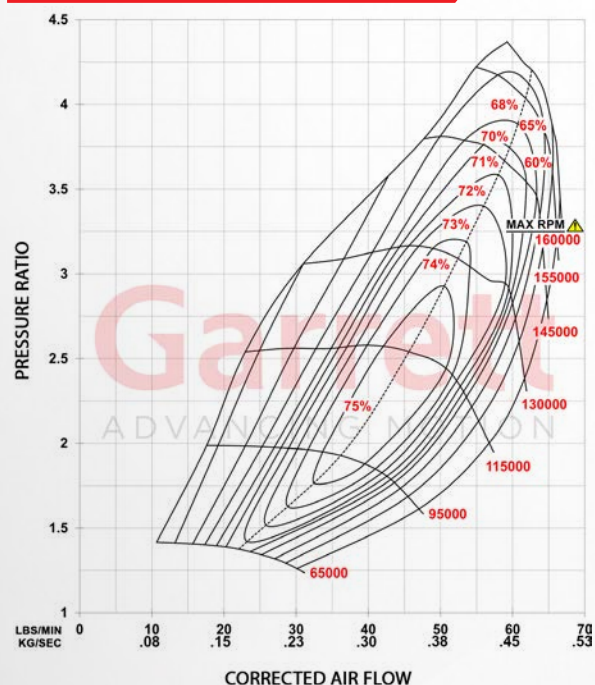
Supercore PN	CHRA PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934075-5002S	934074-5002S	Standard Rot	5449	700	54mm	67mm	54mm	49mm
934114-5002S	934113-5002S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet		Outlet		Wastegate	Divided
740902-0069	Standard	0.72	V-Band		V-Band		External	N
740902-0068	Standard	0.92	V-Band		V-Band		External	N
740902-0076	Standard	0.72	V-Band		V-Band		Internal	N
740902-0077	Standard	0.92	V-Band		V-Band		Internal	N
740902-0080	Standard	0.49	T25		V-Band		Internal	N
740902-0073	Reverse	0.72	V-Band		V-Band		External	N
740902-0074	Reverse	0.92	V-Band		V-Band		External	N
740902-0078	Reverse	0.72	V-Band		V-Band		Internal	N
740902-0079	Reverse	0.92	V-Band		V-Band		Internal	N
Turbo PN	Rotation	A/R	Actuator Calibration		Inlet	Outlet	Wastegate	Divided
934076-5004S	Standard	0.49	Assembled and calibrated with a 0.5 bar actuator		T25	V-Band	Internal	N
934076-5005S	Standard	0.72			V-Band	V-Band	Internal	N
934076-5006S	Standard	0.92			V-Band	V-Band	Internal	N
934115-5003S	Reverse	0.72			V-Band	V-Band	Internal	N
934115-5004S	Reverse	0.92			V-Band	V-Band	Internal	N

Garrett G-Series II G30-725

Displacement: 2.0L - 3.5L



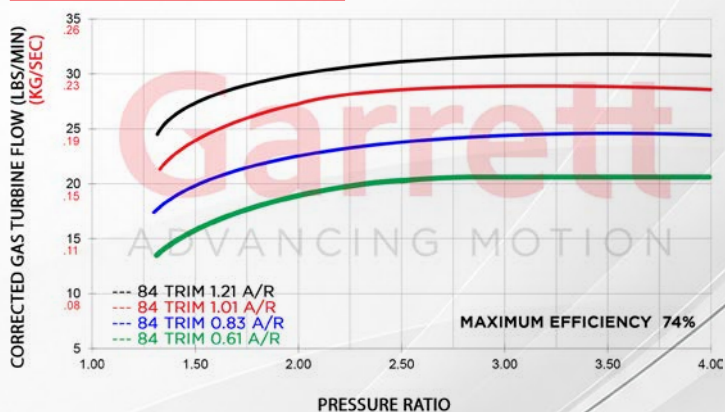
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ New compressor aero increases power and performance
- ◆ Up to 10% higher compressor flow compared to G-Series Gen I at peak pressure ratio and peak turbo rpm
- ◆ Direct upgrade path for Gen I customers with just a CHRA swap
- ◆ Utilizes Gen I compressor and turbine housings
- ◆ Mar-M turbine wheel rated up to 1050°C
- ◆ Oil restrictor and water fittings included

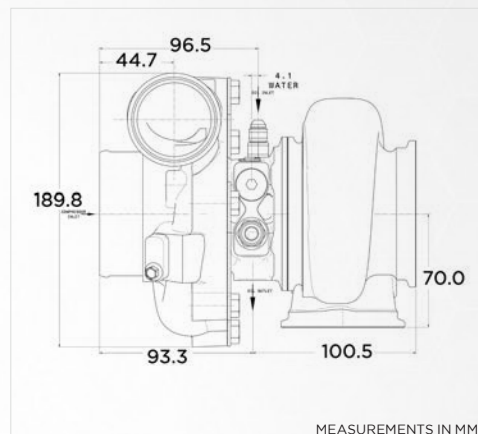
TURBINE FLOW



Supercore PN	CHRA PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934117-5001S	934116-5001S	Standard Rot	5455	725	54mm	67mm	60mm	55mm
934121-5001S	934120-5001S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet		Outlet		Wastegate	Divided
740902-0092	Standard	1.06	T4		V-Band		External	Y
740902-0090	Standard	0.83	T3		V-Band		External	N
740902-0091	Standard	1.01	T3		V-Band		External	N
740902-0086	Standard	0.61	V-Band		V-Band		External	N
740902-0087	Standard	0.83	V-Band		V-Band		External	N
740902-0088	Standard	1.01	V-Band		V-Band		External	N
740902-0089	Standard	1.21	V-Band		V-Band		External	N
740902-0094	Standard	0.83	V-Band		V-Band		Internal	N
740902-0095	Standard	1.01	V-Band		V-Band		Internal	N
740902-0100	Reverse	0.83	T3		V-Band		External	N
740902-0101	Reverse	1.01	T3		V-Band		External	N
740902-0096	Reverse	0.61	V-Band		V-Band		External	N
740902-0097	Reverse	0.83	V-Band		V-Band		External	N
740902-0098	Reverse	1.01	V-Band		V-Band		External	N
740902-0099	Reverse	1.21	V-Band		V-Band		External	N
Turbo PN	Rotation	A/R	Actuator Calibration		Inlet	Outlet	Wastegate	Divided
934118-5001S	Standard	0.83	Assembled and calibrated		V-Band	V-Band	Internal	N
934118-5002S	Standard	1.01	with a 0.5 bar actuator		V-Band	V-Band	Internal	N

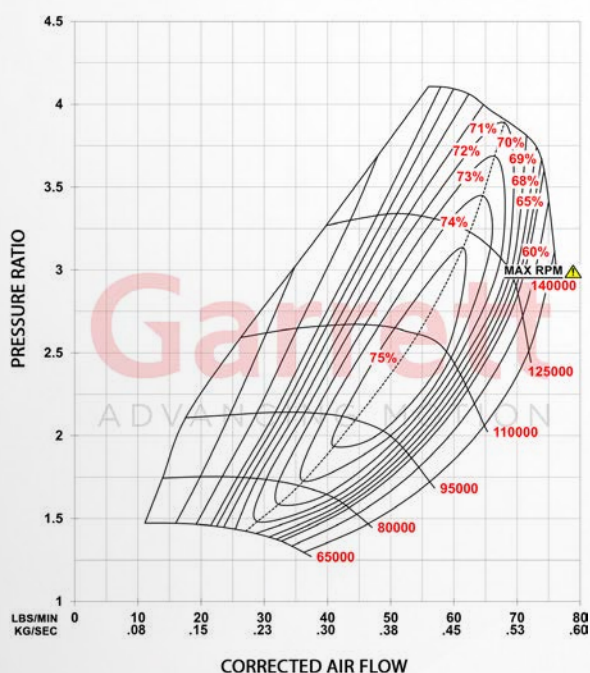
Garrett G-Series II G30-825

Displacement: 2.0L - 3.5L



G-SERIES II

COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ New compressor aero increases power and performance
- ◆ Up to 10% higher compressor flow compared to G-Series Gen I at peak pressure ratio and peak turbo rpm
- ◆ Direct upgrade path for Gen I customers with just a CHRA swap
- ◆ Utilizes Gen I compressor and turbine housings
- ◆ Mar-M turbine wheel rated up to 1050°C
- ◆ Oil restrictor and water fittings included

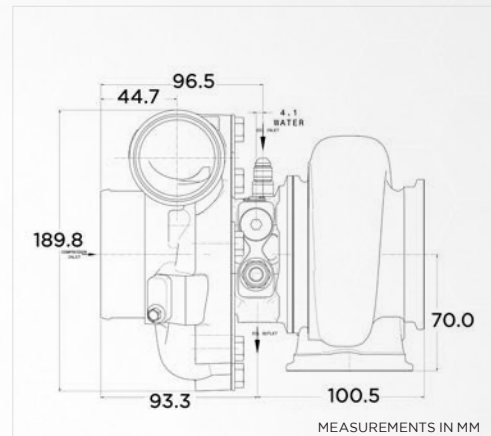
TURBINE FLOW



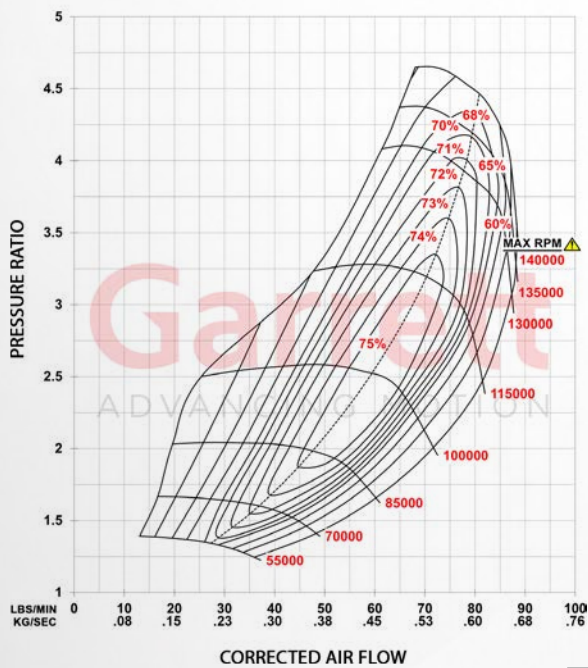
Supercore PN	CHRA PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934117-5002S	934116-5002S	Standard Rot	5855	825	58mm	71mm	60mm	55mm
934121-5002S	934120-5002S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet		Outlet		Wastegate	Divided
740902-0092	Standard	1.06	T4		V-Band		External	Y
740902-0090	Standard	0.83	T3		V-Band		External	N
740902-0091	Standard	1.01	T3		V-Band		External	N
740902-0086	Standard	0.61	V-Band		V-Band		External	N
740902-0087	Standard	0.83	V-Band		V-Band		External	N
740902-0088	Standard	1.01	V-Band		V-Band		External	N
740902-0089	Standard	1.21	V-Band		V-Band		External	N
740902-0094	Standard	0.83	V-Band		V-Band		Internal	N
740902-0095	Standard	1.01	V-Band		V-Band		Internal	N
740902-0100	Reverse	0.83	T3		V-Band		External	N
740902-0101	Reverse	1.01	T3		V-Band		External	N
740902-0096	Reverse	0.61	V-Band		V-Band		External	N
740902-0097	Reverse	0.83	V-Band		V-Band		External	N
740902-0098	Reverse	1.01	V-Band		V-Band		External	N
740902-0099	Reverse	1.21	V-Band		V-Band		External	N
Turbo PN	Rotation	A/R	Actuator Calibration		Inlet	Outlet	Wastegate	Divided
934118-5003S	Standard	0.83	Assembled and calibrated		V-Band	V-Band	Internal	N
934118-5004S	Standard	1.01	with a 0.5 bar actuator		V-Band	V-Band	Internal	N

Garrett G-Series II G35-990

Displacement: 2.0L - 5.5L



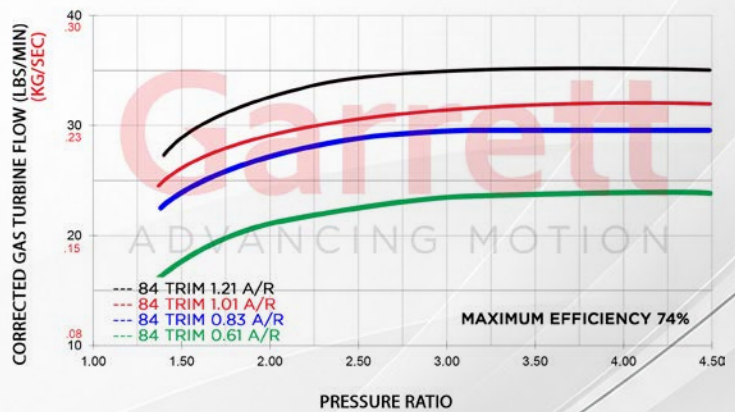
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ New compressor aero increases power and performance
- ◆ Up to 10% higher compressor flow compared to G-Series Gen I at peak pressure ratio and peak turbo rpm
- ◆ Direct upgrade path for Gen I customers with just a CHRA swap
- ◆ Utilizes Gen I compressor and turbine housings
- ◆ Mar-M turbine wheel rated up to 1050°C
- ◆ Oil restrictor and water fittings included

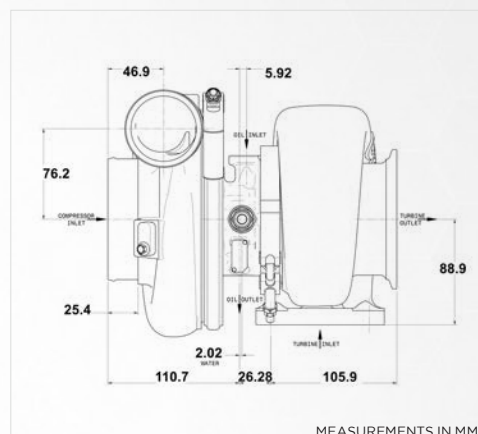
TURBINE FLOW



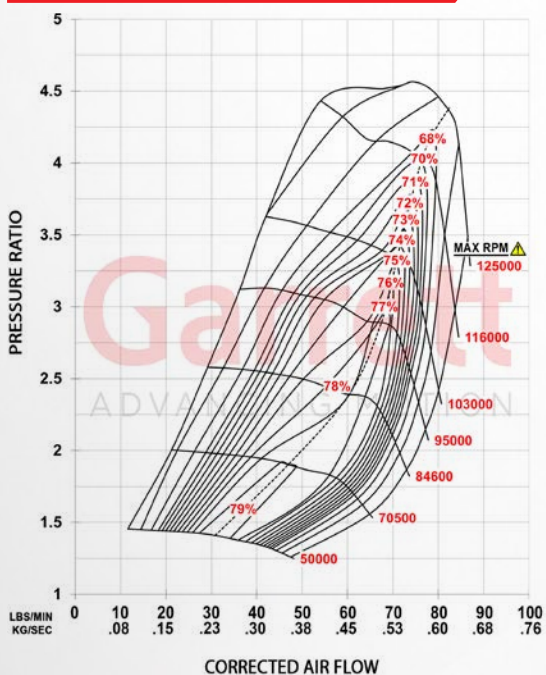
Supercore PN	CHRA PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934123-5001S	934122-5001S	Standard Rot	6262	990	62mm	76mm	68mm	62mm
934126-5001S	934125-5001S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet		Outlet		Wastegate	Divided
740902-0108	Standard	1.06	T4		V-Band		External	Y
740902-0106	Standard	0.83	T3		V-Band		External	N
740902-0107	Standard	1.01	T3		V-Band		External	N
740902-0102	Standard	0.61	V-Band		V-Band		External	N
740902-0103	Standard	0.83	V-Band		V-Band		External	N
740902-0104	Standard	1.01	V-Band		V-Band		External	N
740902-0105	Standard	1.21	V-Band		V-Band		External	N
740902-0110	Standard	0.83	V-Band		V-Band		Internal	N
740902-0111	Standard	1.01	V-Band		V-Band		Internal	N
740902-0116	Reverse	0.83	T3		V-Band		External	N
740902-0117	Reverse	1.01	T3		V-Band		External	N
740902-0112	Reverse	0.61	V-Band		V-Band		External	N
740902-0113	Reverse	0.83	V-Band		V-Band		External	N
740902-0114	Reverse	1.01	V-Band		V-Band		External	N
740902-0115	Reverse	1.21	V-Band		V-Band		External	N
Turbo PN	Rotation	A/R	Actuator Calibration		Inlet	Outlet	Wastegate	Divided
934124-5001S	Standard	0.83	Assembled and calibrated		V-Band	V-Band	Internal	N
934124-5002S	Standard	1.01	with a 0.5 bar actuator		V-Band	V-Band	Internal	N

Garrett G-Series II G38-1000

Displacement: 2.0L - 5.5L



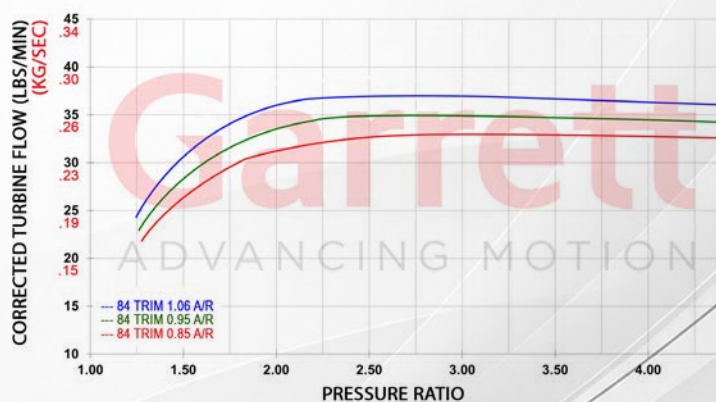
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ New compressor aero increases power and performance
- ◆ Up to 10% higher compressor flow compared to G-Series Gen I at peak pressure ratio and peak turbo rpm
- ◆ Direct upgrade path for Gen I customers with just a CHRA swap
- ◆ Utilizes Gen I compressor and turbine housings
- ◆ Mar-M turbine wheel rated up to 1050°C
- ◆ Oil restrictor and water fittings included

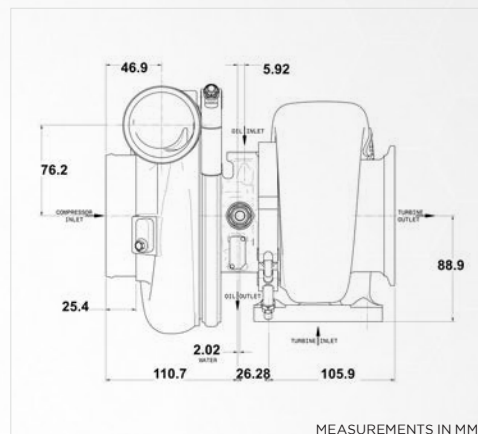
TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
938272-5003S	G38-1000	6266	1000	62mm	88mm	74mm	66mm
Turbine Kit PN	A/R	Inlet	Outlet	Wastegate	Divided		
757707-0037	0.85	V-Band	V-Band	External	N		
757707-0038	0.95	V-Band	V-Band	External	N		
757707-0039	1.06	V-Band	V-Band	External	N		
757707-0042	0.85	T4	V-Band	External	Y		
757707-0043	0.95	T4	V-Band	External	Y		
757707-0044	1.06	T4	V-Band	External	Y		

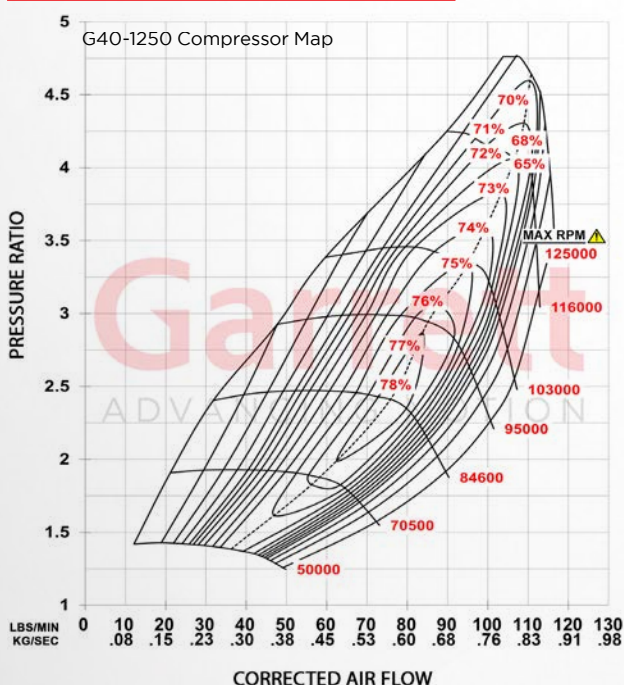
Garrett G-Series II G40

Displacement: 2.0L - 6.0L



MEASUREMENTS IN MM

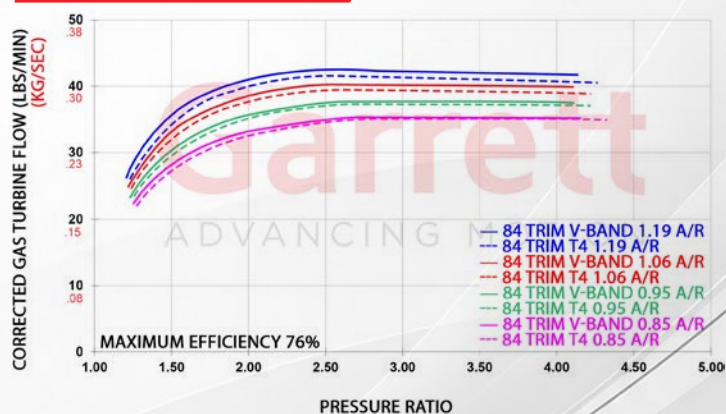
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ New compressor aero increases power and performance
- ◆ Up to 10% higher compressor flow compared to G-Series Gen I at peak pressure ratio and peak turbo rpm
- ◆ Direct upgrade path for Gen I customers with just a CHRA swap
- ◆ Utilizes Gen I compressor and turbine housings
- ◆ Mar-M turbine wheel rated up to 1050°C
- ◆ Oil restrictor and water fittings included

TURBINE FLOW



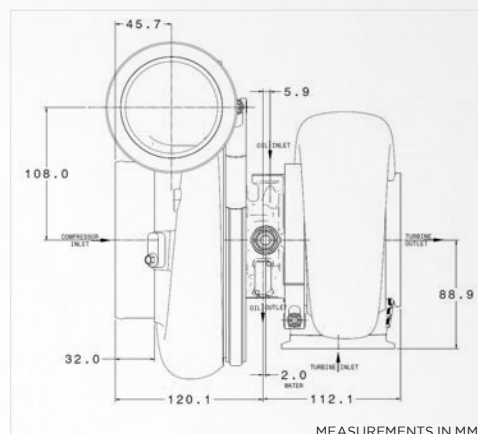
Supercore PN	CHRA PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
938272-5001S	938271-5001S	G40-1000	6270	1000	62mm	88mm	77mm	70mm
938272-5002S	938271-5002S	G40-1250	7170	1250	71mm	88mm		
Turbine Kit PN	A/R	Inlet	Outlet	Wastegate	Divided			
757707-0027	0.85	V-Band	V-Band	External	N			
757707-0028	0.95	V-Band	V-Band	External	N			
757707-0029	1.06	V-Band	V-Band	External	N			
757707-0030	1.19	V-Band	V-Band	External	N			
757707-0032	0.85	T4	V-Band	External	Y			
757707-0033	0.95	T4	V-Band	External	Y			
757707-0034	1.06	T4	V-Band	External	Y			
757707-0035	1.19	T4	V-Band	External	Y			

Garrett G-Series II G42

Displacement: 2.0L - 7.0L

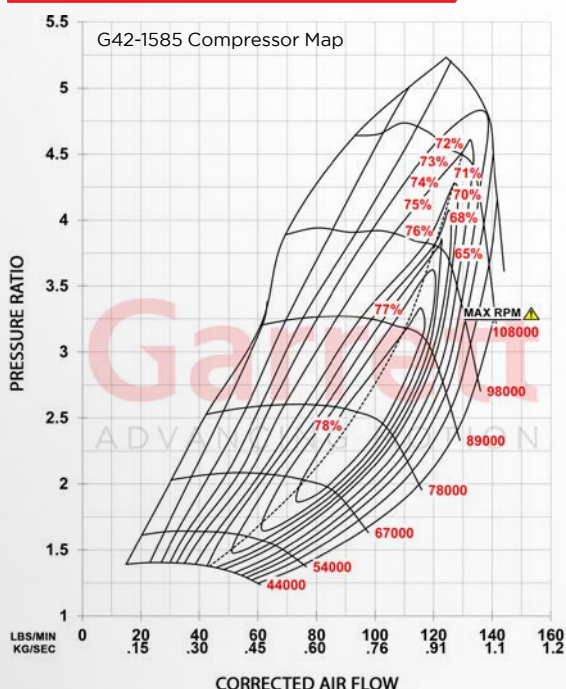


G42-1325 Compact



MEASUREMENTS IN MM

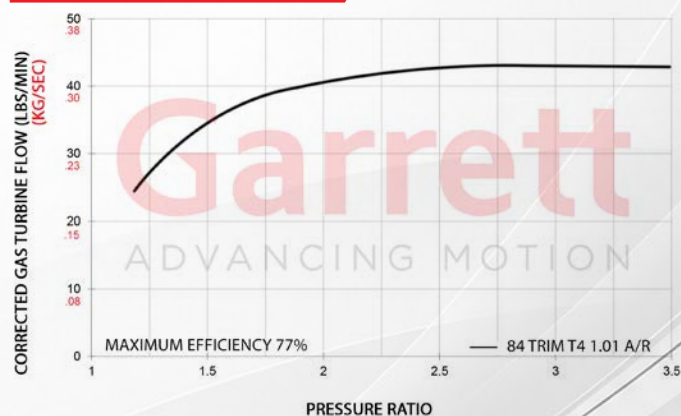
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ New compressor aero increases power and performance
- ◆ Up to 10% higher compressor flow compared to G-Series Gen I at peak pressure ratio and peak turbo rpm
- ◆ Direct upgrade path for Gen I customers with just a CHRA swap
- ◆ Utilizes Gen I compressor and turbine housings
- ◆ Mar-M turbine wheel rated up to 1050°C
- ◆ Oil restrictor and water fittings included

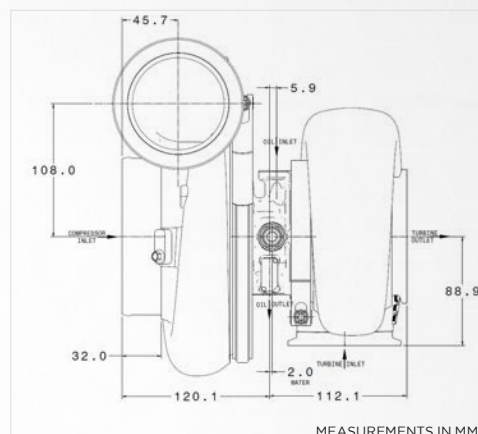
TURBINE FLOW



Supercore PN	CHRA PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
938339-5001S	938338-5001S	G42-1325C	7375	1325	73mm	91mm	82mm	75mm
938339-5002S	938338-5002S	G42-1325	7375	1325	73mm	91mm		
938339-5003S	938338-5003S	G42-1585	7975	1585	79mm	98mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided			
757707-0011	1.01	V-Band	V-Band	External	N			
757707-0012	1.15	V-Band	V-Band	External	N			
757707-0013	1.28	V-Band	V-Band	External	N			
757707-0014	1.01	T4	V-Band	External	Y			
757707-0015	1.15	T4	V-Band	External	Y			
757707-0016	1.28	T4	V-Band	External	Y			

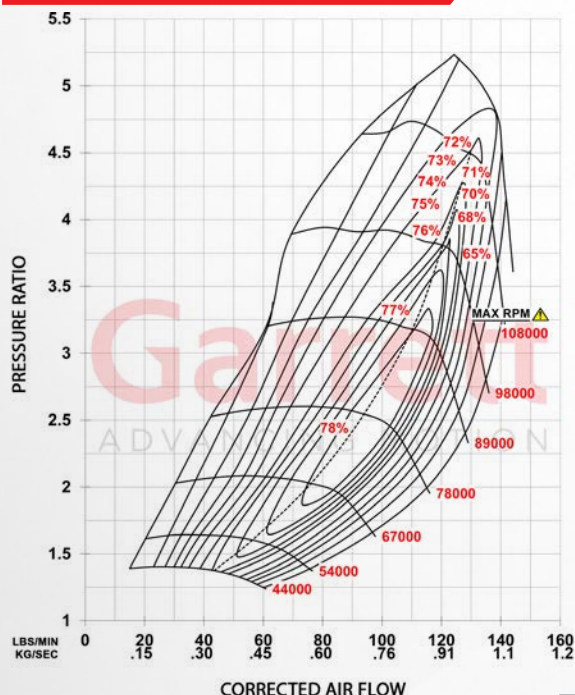
Garrett G-Series II G45-1610

Displacement: 2.0L - 8.0L



MEASUREMENTS IN MM

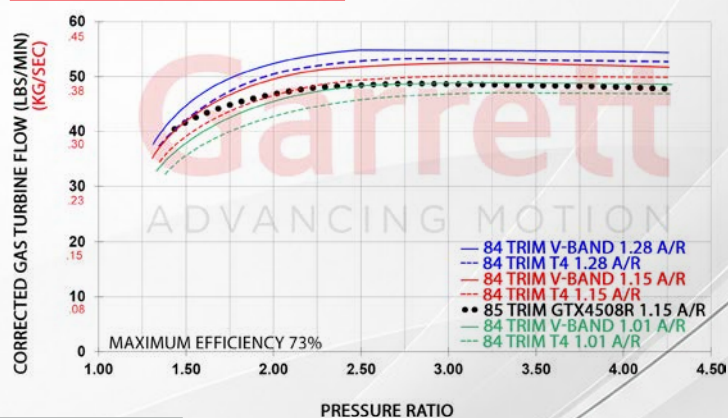
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ New compressor aero increases power and performance
- ◆ Up to 10% higher compressor flow compared to G-Series Gen I at peak pressure ratio and peak turbo rpm
- ◆ Direct upgrade path for Gen I customers with just a CHRA swap
- ◆ Utilizes Gen I compressor and turbine housings
- ◆ Mar-M turbine wheel rated up to 1050°C
- ◆ Oil restrictor and water fittings included

TURBINE FLOW



Supercore PN	CHRA PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
938339-5004S	938338-5004S	G45-1610	7982	1610	79mm	98mm	89mm	82mm
Turbine Kits:	A/R	Inlet	Outlet	Wastegate	Divided			
757707-0019	1.01	V-Band	V-Band	External	N			
757707-0020	1.15	V-Band	V-Band	External	N			
757707-0021	1.28	V-Band	V-Band	External	N			
757707-0022	1.44	V-Band	V-Band	External	N			
757707-0023	1.01	T4	V-Band	External	Y			
757707-0024	1.15	T4	V-Band	External	Y			
757707-0025	1.28	T4	V-Band	External	Y			
757707-0026	1.44	T4	V-Band	External	Y			



G-SERIES

Garrett G-Series turbochargers feature our highest flowing turbine aero technology to create the perfect blend of efficiency and performance, in a compact package. The architecture and advanced features of the G-Series product line are tailored to meet the demands of hard core competitors, and provided up to 20% more power than our GTX product line.



The AMS Performance Prime Cuts Chop Shop ALPHA OMEGA Huracan project was started with one goal in mind, to build the world's fastest Lamborghini. As an authorized Performance Distributor of Garrett Motion, AMS has firsthand testing data and on-track experience to know what works and what doesn't. The car has utilized a number of different Garrett turbos throughout its stages to meet the horsepower needs to go faster and faster. From GTX3584RS, G35-1050, G42-1200 Compact, and now a pair of G42-1450 turbos with a 79mm compressor which allows the car to make over **2000 wheel horsepower**.

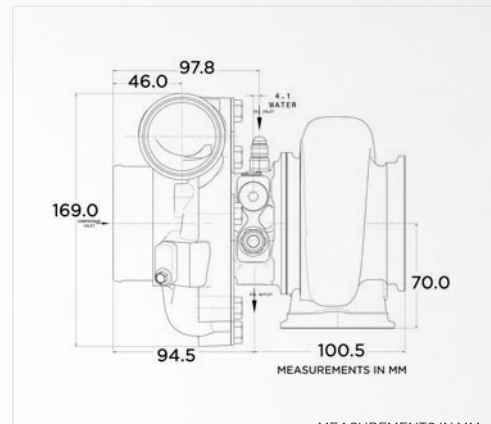
AMS PERFORMANCE - Prime Cuts Chop Shop Alpha Omega Drag Huracan



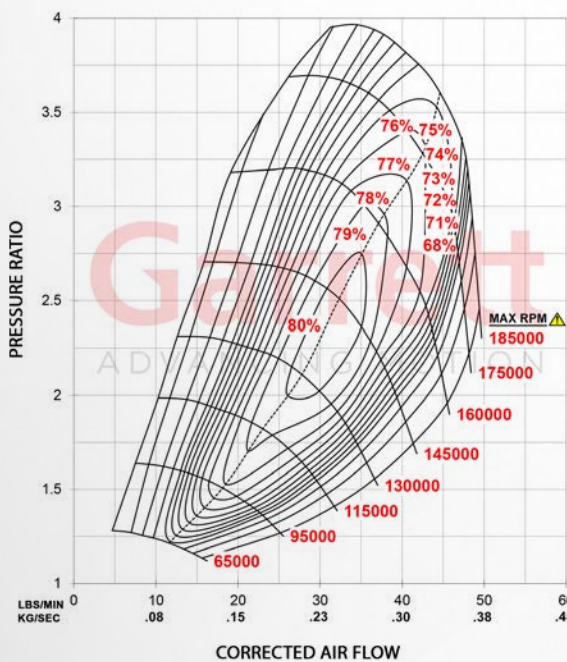
Reliability is always a priority when working in a competitive racing environment. With an entire race team, vehicle transporter, tools, tires, consumables, and more sent to support the vehicle at race events across the country, teams cannot afford to sit on the sidelines due to a mechanical failure. The testing and inspection procedures that Garrett implements in their manufacturing processes are second to none in the industry and is why they are well known as offering the most reliable turbocharger solutions on the market. This reliability has allowed the AMS team to remain competitive in numerous events as well as set the world record of 7.33 sec @ 194 mph quarter mile with the ALPHA OMEGA Huracan.

Garrett G25-550

Displacement: 1.4L - 3.0L



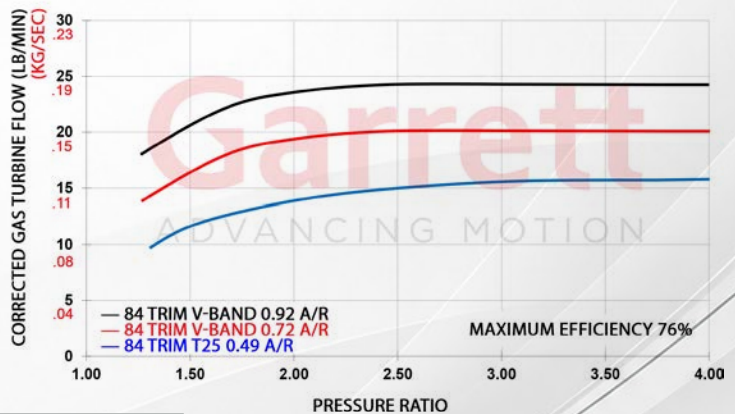
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ G-SERIES COMPRESSOR AERODYNAMICS FOR MAXIMUM HP
- ◆ G-SERIES TURBINE WHEEL AERO WITH IMPROVED EFFICIENCY
- ◆ STANDARD AND REVERSE ROTATION CONFIGURATIONS
- ◆ TURBINE WHEEL CONSTRUCTED OF MAR-M ALLOY RATED UP TO 1050°C
- ◆ FULLY MACHINED SPEED SENSOR AND PRESSURE PORTS
- ◆ OIL RESTRICTOR AND WATER FITTINGS INCLUDED

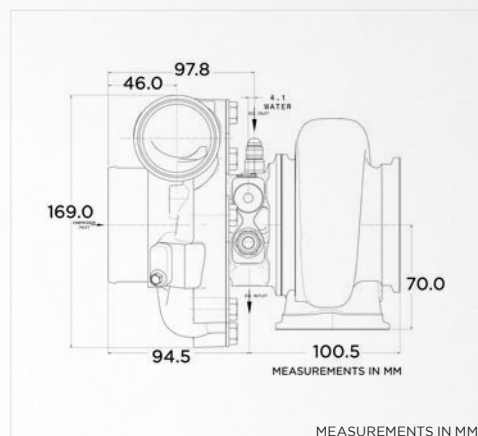
TURBINE FLOW



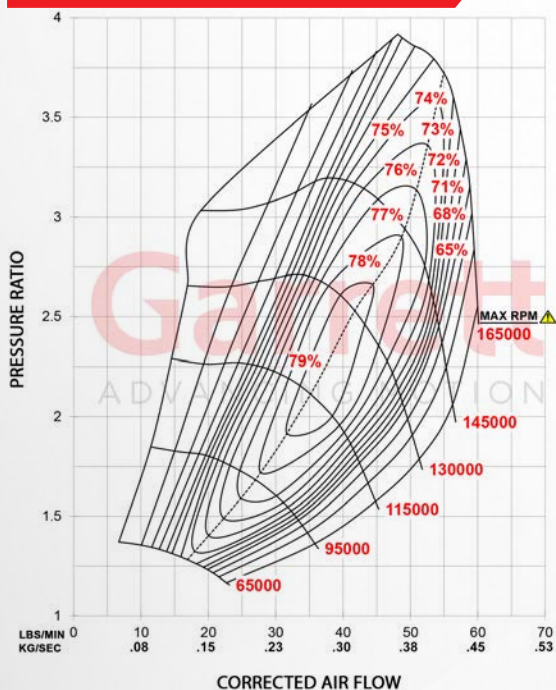
Supercore PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
858161-5002S	Standard	4849	550	48mm	60mm	54mm	49mm
871388-5001S	Reverse						
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0069	Standard	0.72	V-Band	V-Band	External	N	
740902-0068	Standard	0.92	V-Band	V-Band	External	N	
740902-0076	Standard	0.72	V-Band	V-Band	Internal	N	
740902-0077	Standard	0.92	V-Band	V-Band	Internal	N	
740902-0080	Standard	0.49	T25	V-Band	Internal	N	
740902-0073	Reverse	0.72	V-Band	V-Band	External	N	
740902-0074	Reverse	0.92	V-Band	V-Band	External	N	
740902-0078	Reverse	0.72	V-Band	V-Band	Internal	N	
740902-0079	Reverse	0.92	V-Band	V-Band	Internal	N	
Turbo PN	Rotation	A/R	Actuator Calibration	Inlet	Outlet	Wastegate	Divided
877895-5001S	Standard	0.49	0.5 Bar	T25	V-Band	Internal	N
877895-5003S	Standard	0.72	0.5 Bar	V-Band	V-Band	Internal	N
877895-5004S	Standard	0.92	0.5 Bar	V-Band	V-Band	Internal	N
877895-5007S	Reverse	0.72	0.5 Bar	V-Band	V-Band	Internal	N
877895-5008S	Reverse	0.92	0.5 Bar	V-Band	V-Band	Internal	N

Garrett G25-660

Displacement: 1.4L - 3.0L



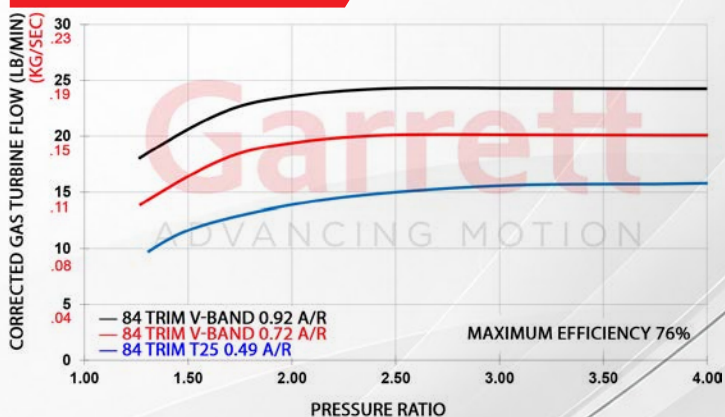
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ G-SERIES COMPRESSOR AERODYNAMICS FOR MAXIMUM HP
- ◆ G-SERIES TURBINE WHEEL AERO WITH IMPROVED EFFICIENCY
- ◆ STANDARD AND REVERSE ROTATION CONFIGURATIONS
- ◆ TURBINE WHEEL CONSTRUCTED OF MAR-M ALLOY RATED UP TO 1050°C
- ◆ FULLY MACHINED SPEED SENSOR AND PRESSURE PORTS
- ◆ OIL RESTRICTOR AND WATER FITTINGS INCLUDED

TURBINE FLOW



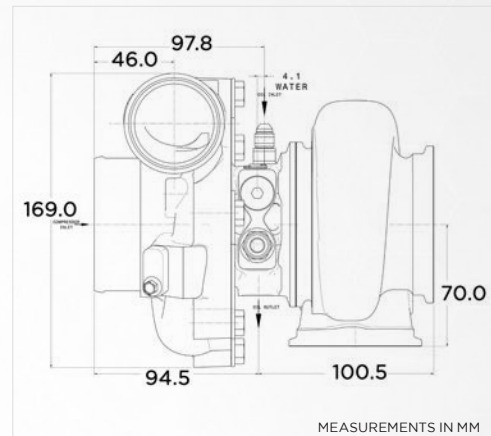
Supercore PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
858161-5003S	Standard Rot	5449	660	54mm	67mm	54mm	49mm
871388-5002S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0069	Standard	0.72	V-Band	V-Band	External	N	
740902-0068	Standard	0.92	V-Band	V-Band	External	N	
740902-0076	Standard	0.72	V-Band	V-Band	Internal	N	
740902-0077	Standard	0.92	V-Band	V-Band	Internal	N	
740902-0080	Standard	0.49	T25	V-Band	Internal	N	
740902-0073	Reverse	0.72	V-Band	V-Band	External	N	
740902-0074	Reverse	0.92	V-Band	V-Band	External	N	
740902-0078	Reverse	0.72	V-Band	V-Band	Internal	N	
740902-0079	Reverse	0.92	V-Band	V-Band	Internal	N	
Turbo PN	Rotation	A/R	Actuator Calibration	Inlet	Outlet	Wastegate	Divided
877895-5002S	Standard	0.49	0.5 Bar	T25	V-Band	Internal	N
877895-5005S	Standard	0.72	0.5 Bar	V-Band	V-Band	Internal	N
877895-5006S	Standard	0.92	0.5 Bar	V-Band	V-Band	Internal	N
877895-5009S	Reverse	0.72	0.5 Bar	V-Band	V-Band	Internal	N
877895-5010S	Reverse	0.92	0.5 Bar	V-Band	V-Band	Internal	N

Garrett G30-660

Displacement: 2.0L - 3.5L

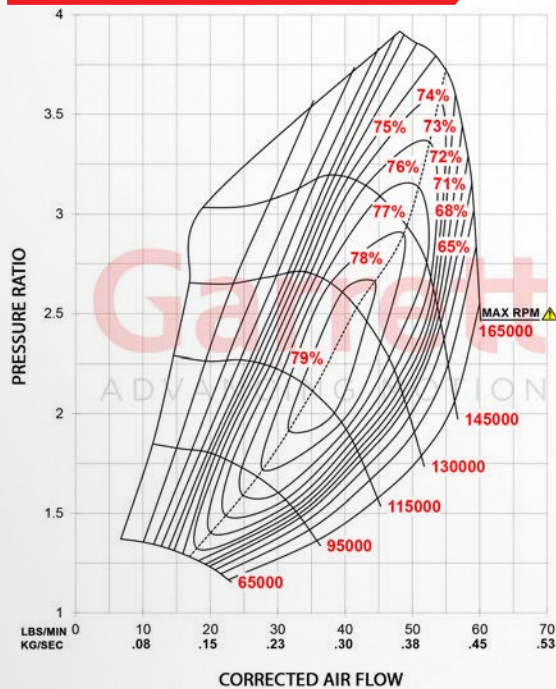


REVERSE ROTATION



MEASUREMENTS IN MM

COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ G-SERIES COMPRESSOR AERODYNAMICS FOR MAXIMUM HP
- ◆ G-SERIES TURBINE WHEEL AERO WITH IMPROVED EFFICIENCY
- ◆ STANDARD AND REVERSE ROTATION CONFIGURATIONS
- ◆ TURBINE WHEEL CONSTRUCTED OF MAR-M ALLOY RATED UP TO 1050°C
- ◆ FULLY MACHINED SPEED SENSOR AND PRESSURE PORTS
- ◆ OIL RESTRICTOR AND WATER FITTINGS INCLUDED

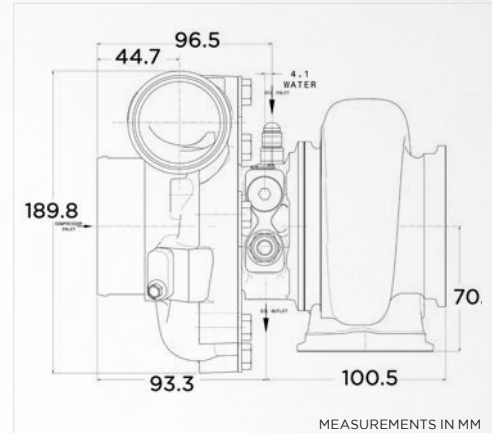
TURBINE FLOW



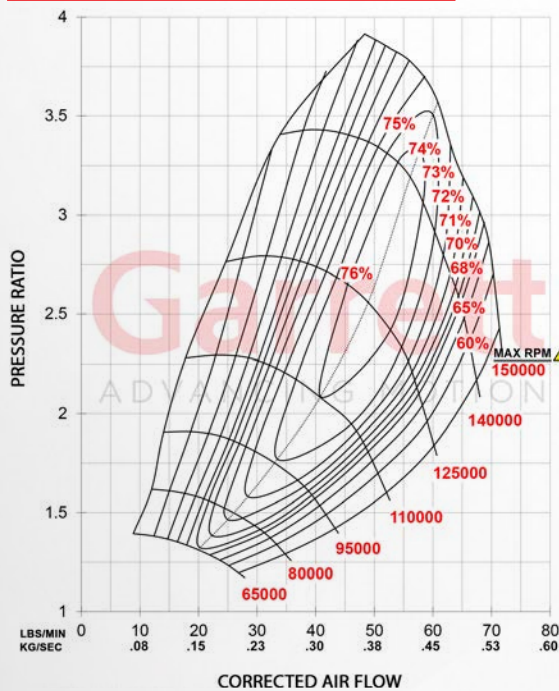
Supercore PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
880693-5001S	Standard Rot	5455	660	54mm	67mm	60mm	55mm
880694-5001S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0092	Standard	1.06	T4	V-Band	External	Y	
740902-0090	Standard	0.83	T3	V-Band	External	N	
740902-0091	Standard	1.01	T3	V-Band	External	N	
740902-0086	Standard	0.61	V-Band	V-Band	External	N	
740902-0087	Standard	0.83	V-Band	V-Band	External	N	
740902-0088	Standard	1.01	V-Band	V-Band	External	N	
740902-0089	Standard	1.21	V-Band	V-Band	External	N	
740902-0094	Standard	0.83	V-Band	V-Band	Internal	N	
740902-0095	Standard	1.01	V-Band	V-Band	Internal	N	
740902-0100	Reverse	0.83	T3	V-Band	External	N	
740902-0101	Reverse	1.01	T3	V-Band	External	N	
740902-0096	Reverse	0.61	V-Band	V-Band	External	N	
740902-0097	Reverse	0.83	V-Band	V-Band	External	N	
740902-0098	Reverse	1.01	V-Band	V-Band	External	N	
740902-0099	Reverse	1.21	V-Band	V-Band	External	N	
Turbo PN	Rotation	A/R	Actuator Calibration	Inlet	Outlet	Wastegate	Divided
880704-5002S	Standard	0.83	0.5 Bar	V-Band	V-Band	Internal	N
880704-5003S	Standard	1.01	0.5 Bar	V-Band	V-Band	Internal	N

Garrett G30-770

Displacement: 2.0L - 3.5L



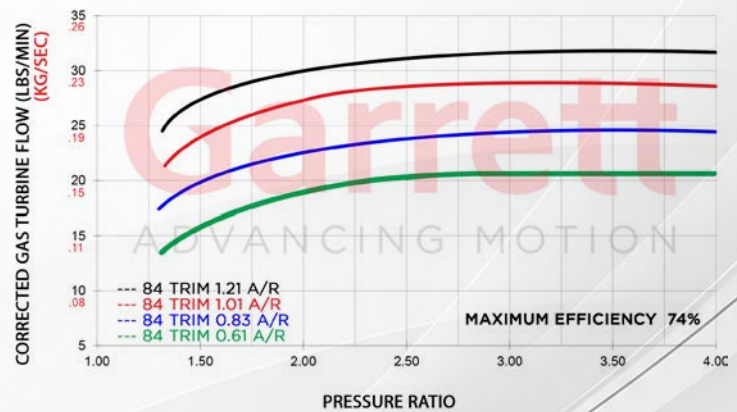
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ G-SERIES COMPRESSOR AERODYNAMICS FOR MAXIMUM HP
- ◆ G-SERIES TURBINE WHEEL AERO WITH IMPROVED EFFICIENCY
- ◆ TURBINE WHEEL CONSTRUCTED OF MAR-M ALLOY RATED UP TO 1050°C
- ◆ FULLY MACHINED SPEED SENSOR AND PRESSURE PORTS
- ◆ OIL RESTRICTOR AND WATER FITTINGS INCLUDED

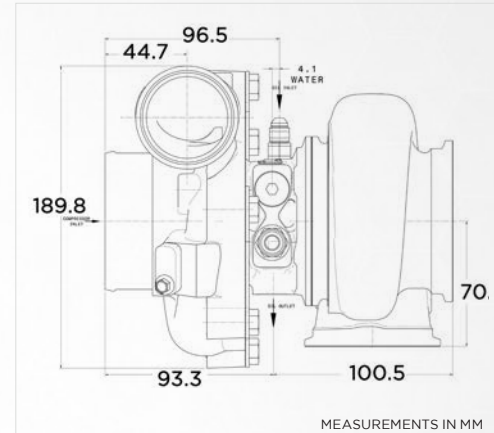
TURBINE FLOW



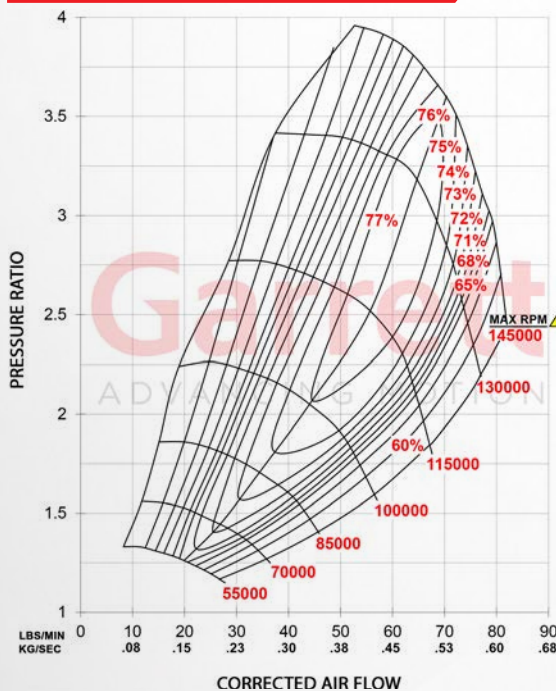
Supercore PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
880693-5002S	Standard Rot	5855	770	58mm	71mm	60mm	55mm
880694-5002S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0092	Standard	1.06	T4	V-Band	External	Y	
740902-0090	Standard	0.83	T3	V-Band	External	N	
740902-0091	Standard	1.01	T3	V-Band	External	N	
740902-0086	Standard	0.61	V-Band	V-Band	External	N	
740902-0087	Standard	0.83	V-Band	V-Band	External	N	
740902-0088	Standard	1.01	V-Band	V-Band	External	N	
740902-0089	Standard	1.21	V-Band	V-Band	External	N	
740902-0094	Standard	0.83	V-Band	V-Band	Internal	N	
740902-0095	Standard	1.01	V-Band	V-Band	Internal	N	
740902-0100	Reverse	0.83	T3	V-Band	External	N	
740902-0101	Reverse	1.01	T3	V-Band	External	N	
740902-0096	Reverse	0.61	V-Band	V-Band	External	N	
740902-0097	Reverse	0.83	V-Band	V-Band	External	N	
740902-0098	Reverse	1.01	V-Band	V-Band	External	N	
740902-0099	Reverse	1.21	V-Band	V-Band	External	N	
Turbo PN	Rotation	A/R	Actuator Calibration	Inlet	Outlet	Wastegate	Divided
880704-5005S	Standard	0.83	0.5 Bar	V-Band	V-Band	Internal	N
880704-5006S	Standard	1.01	0.5 Bar	V-Band	V-Band	Internal	N

Garrett G30-900

Displacement: 2.0L - 3.5L



COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ G-SERIES COMPRESSOR AERODYNAMICS FOR MAXIMUM HP
- ◆ G-SERIES TURBINE WHEEL AERO WITH IMPROVED EFFICIENCY
- ◆ TURBINE WHEEL CONSTRUCTED OF MAR-M ALLOY RATED UP TO 1050°C
- ◆ FULLY MACHINED SPEED SENSOR AND PRESSURE PORTS
- ◆ OIL RESTRICTOR AND WATER FITTINGS INCLUDED

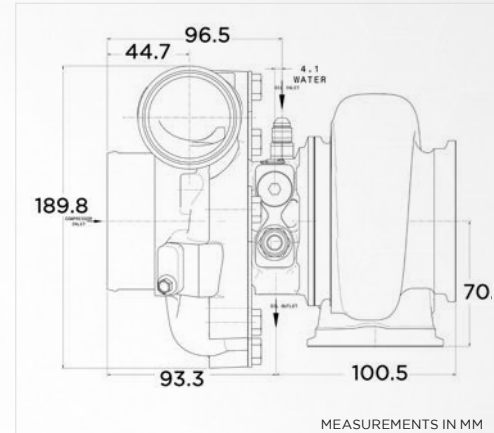
TURBINE FLOW



Supercore PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
880693-5003S	Standard Rot	6255	900	62mm	76mm	60mm	55mm
880694-5003S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0092	Standard	1.06	T4	V-Band	External	Y	
740902-0090	Standard	0.83	T3	V-Band	External	N	
740902-0091	Standard	1.01	T3	V-Band	External	N	
740902-0086	Standard	0.61	V-Band	V-Band	External	N	
740902-0087	Standard	0.83	V-Band	V-Band	External	N	
740902-0088	Standard	1.01	V-Band	V-Band	External	N	
740902-0089	Standard	1.21	V-Band	V-Band	External	N	
740902-0094	Standard	0.83	V-Band	V-Band	Internal	N	
740902-0095	Standard	1.01	V-Band	V-Band	Internal	N	
740902-0100	Reverse	0.83	T3	V-Band	External	N	
740902-0101	Reverse	1.01	T3	V-Band	External	N	
740902-0096	Reverse	0.61	V-Band	V-Band	External	N	
740902-0097	Reverse	0.83	V-Band	V-Band	External	N	
740902-0098	Reverse	1.01	V-Band	V-Band	External	N	
740902-0099	Reverse	1.21	V-Band	V-Band	External	N	
Turbo PN	Rotation	A/R	Actuator Calibration	Inlet	Outlet	Wastegate	Divided
880704-5008S	Standard	0.83	0.5 Bar	V-Band	V-Band	Internal	N
880704-5009S	Standard	1.01	0.5 Bar	V-Band	V-Band	Internal	N

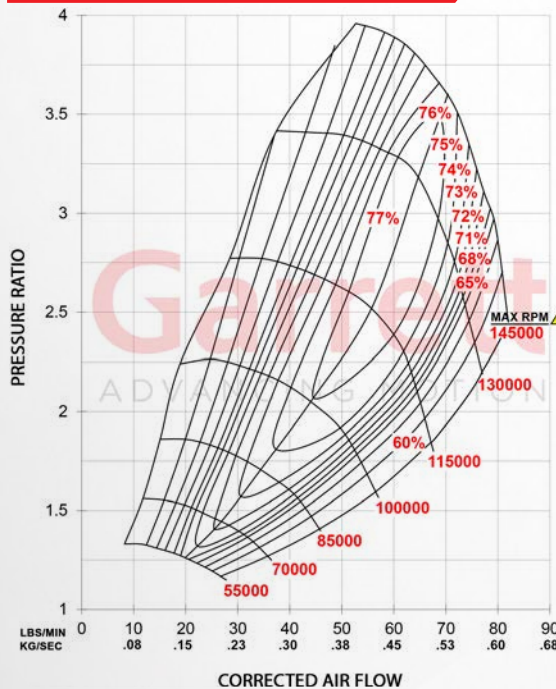
Garrett G35-900

Displacement: 2.0L - 5.5L



G-SERIES

COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ G-SERIES COMPRESSOR AERODYNAMICS FOR MAXIMUM HP
- ◆ G-SERIES TURBINE WHEEL AERO WITH IMPROVED EFFICIENCY
- ◆ TURBINE WHEEL CONSTRUCTED OF MAR-M ALLOY RATED UP TO 1050°C
- ◆ FULLY MACHINED SPEED SENSOR AND PRESSURE PORTS
- ◆ OIL RESTRICTOR AND WATER FITTINGS INCLUDED

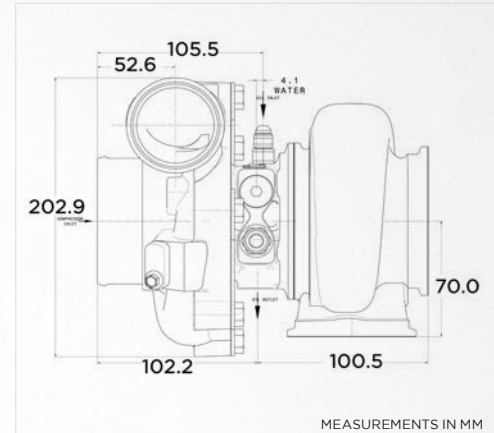
TURBINE FLOW



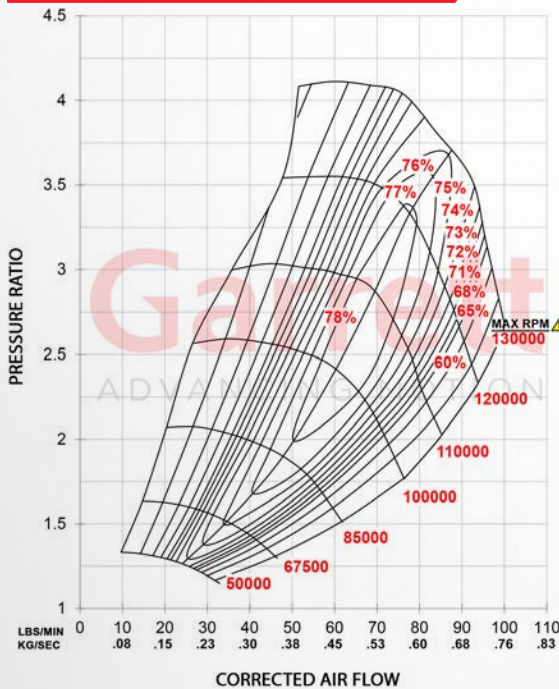
Supercore PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
880695-5001S	Standard Rot	6262	900	62mm	76mm	68mm	62mm
880696-5001S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0108	Standard	1.06	T4	V-Band	External	Y	
740902-0106	Standard	0.83	T3	V-Band	External	N	
740902-0107	Standard	1.01	T3	V-Band	External	N	
740902-0102	Standard	0.61	V-Band	V-Band	External	N	
740902-0103	Standard	0.83	V-Band	V-Band	External	N	
740902-0104	Standard	1.01	V-Band	V-Band	External	N	
740902-0105	Standard	1.21	V-Band	V-Band	External	N	
740902-0110	Standard	0.83	V-Band	V-Band	Internal	N	
740902-0111	Standard	1.01	V-Band	V-Band	Internal	N	
740902-0116	Reverse	0.83	T3	V-Band	External	N	
740902-0117	Reverse	1.01	T3	V-Band	External	N	
740902-0112	Reverse	0.61	V-Band	V-Band	External	N	
740902-0113	Reverse	0.83	V-Band	V-Band	External	N	
740902-0114	Reverse	1.01	V-Band	V-Band	External	N	
740902-0115	Reverse	1.21	V-Band	V-Band	External	N	
Turbo PN	Rotation	A/R	Actuator Calibration	Inlet	Outlet	Wastegate	Divided
880707-5002S	Standard	0.83	0.5 Bar	V-Band	V-Band	Internal	N
880707-5003S	Standard	1.01	0.5 Bar	V-Band	V-Band	Internal	N

Garrett G35-1050

Displacement: 2.0L - 5.5L



COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ G-SERIES COMPRESSOR AERODYNAMICS FOR MAXIMUM HP
- ◆ G-SERIES TURBINE WHEEL AERO WITH IMPROVED EFFICIENCY
- ◆ TURBINE WHEEL CONSTRUCTED OF MAR-M ALLOY RATED UP TO 1050°C
- ◆ FULLY MACHINED SPEED SENSOR AND PRESSURE PORTS
- ◆ OIL RESTRICTOR AND WATER FITTINGS INCLUDED

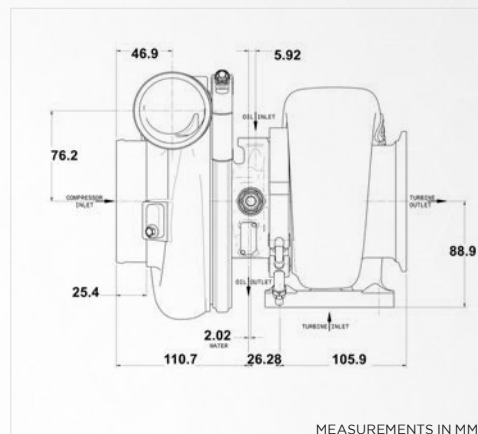
TURBINE FLOW



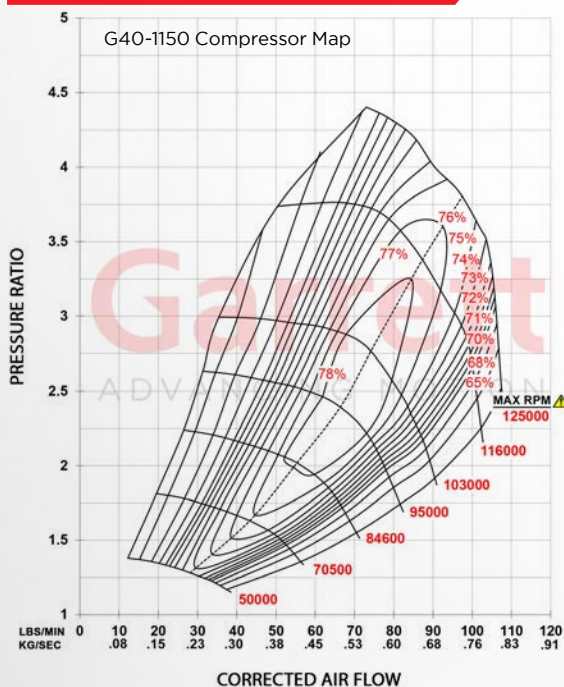
Supercore PN	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
880695-5002S	Standard Rot	6862	1050	68mm	84mm	68mm	62mm
880696-5002S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0108	Standard	1.06	T4	V-Band	External	Y	
740902-0106	Standard	0.83	T3	V-Band	External	N	
740902-0107	Standard	1.01	T3	V-Band	External	N	
740902-0102	Standard	0.61	V-Band	V-Band	External	N	
740902-0103	Standard	0.83	V-Band	V-Band	External	N	
740902-0104	Standard	1.01	V-Band	V-Band	External	N	
740902-0105	Standard	1.21	V-Band	V-Band	External	N	
740902-0110	Standard	0.83	V-Band	V-Band	Internal	N	
740902-0111	Standard	1.01	V-Band	V-Band	Internal	N	
740902-0116	Reverse	0.83	T3	V-Band	External	N	
740902-0117	Reverse	1.01	T3	V-Band	External	N	
740902-0112	Reverse	0.61	V-Band	V-Band	External	N	
740902-0113	Reverse	0.83	V-Band	V-Band	External	N	
740902-0114	Reverse	1.01	V-Band	V-Band	External	N	
740902-0115	Reverse	1.21	V-Band	V-Band	External	N	
Turbo PN	Rotation	A/R	Actuator Calibration	Inlet	Outlet	Wastegate	Divided
880707-5005S	Standard	0.83	0.5 Bar	V-Band	V-Band	Internal	N
880707-5006S	Standard	1.01	0.5 Bar	V-Band	V-Band	Internal	N

Garrett G40

Displacement: 2.0L - 6.0L



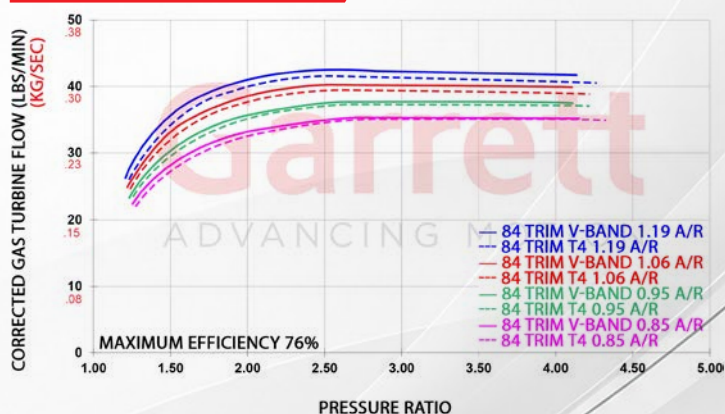
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ 32% MORE COMPRESSOR FLOW (COMPARED TO GTX4088R)
- ◆ 16% MORE TURBINE FLOW (COMPARED TO GTX4088R)
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ FULLY MACHINED SPEED SENSOR AND PRESSURE PORTS
- ◆ WATER FITTINGS INCLUDED WITH SUPERCORE
- ◆ STAINLESS STEEL V-BAND AND T4 TWIN SCROLL TURBINE HOUSINGS

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine inducer	Turbine Exducer
860777-5003S	G40-900	6270	900	62mm	88mm	77mm	70mm
860777-5002S	G40-1150	7170	1150	71mm	88mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
757707-0027	0.85	V-Band	V-Band	External	N		
757707-0028	0.95	V-Band	V-Band	External	N		
757707-0029	1.06	V-Band	V-Band	External	N		
757707-0030	1.19	V-Band	V-Band	External	N		
757707-0032	0.85	T4	V-Band	External	Y		
757707-0033	0.95	T4	V-Band	External	Y		
757707-0034	1.06	T4	V-Band	External	Y		
757707-0035	1.19	T4	V-Band	External	Y		

COMPRESSOR MAPS:



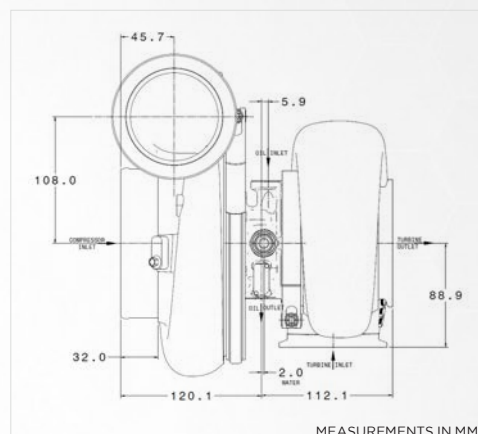
G40-900 62mm



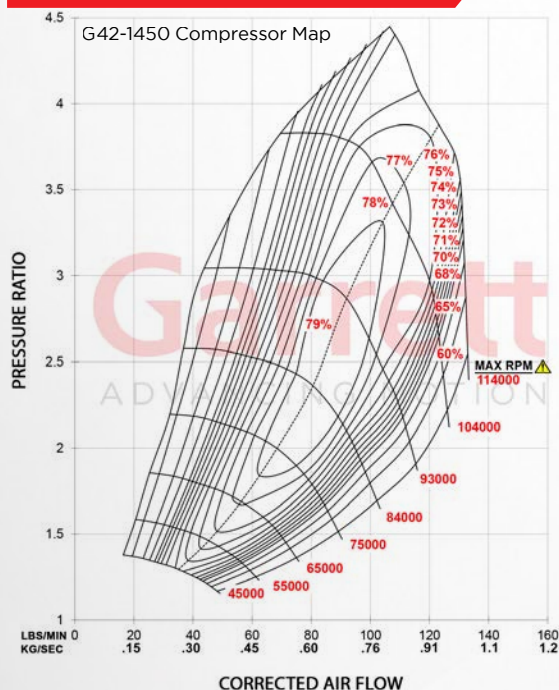
G40-1150 71mm

Garrett G42

Displacement: 2.0L - 7.0L



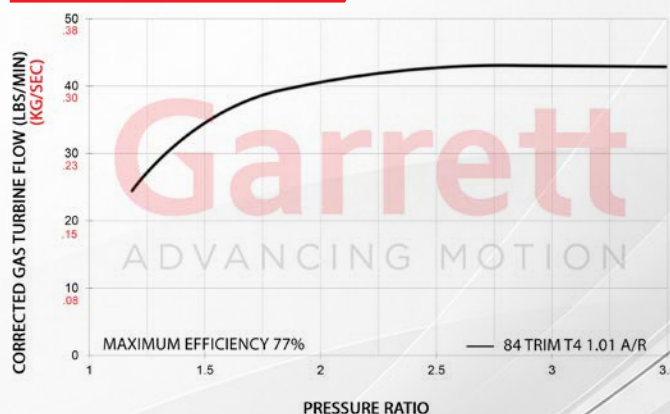
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ GARRETT G-SERIES COMPRESSOR AERODYNAMICS FOR MAXIMUM HP
- ◆ FULLY MACHINED SPEED SENSOR AND PRESSURE PORTS
- ◆ NEW TURBINE WHEEL AERO FOR INCREASED EFFICIENCY AND FLOW
- ◆ STAINLESS STEEL V-BAND AND T4 TWIN SCROLL TURBINE HOUSINGS
- ◆ WATER FITTINGS INCLUDED

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
860778-5002S	G42-1200C	7375	1200	73mm	91mm	82mm	75mm
860778-5004S	G42-1200	7375	1200	73mm	91mm		
860778-5006S	G42-1450	7975	1450	79mm	98mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
757707-0011	1.01	V-Band	V-Band	External	N		
757707-0012	1.15	V-Band	V-Band	External	N		
757707-0013	1.28	V-Band	V-Band	External	N		
757707-0014	1.01	T4	V-Band	External	Y		
757707-0015	1.15	T4	V-Band	External	Y		
757707-0016	1.28	T4	V-Band	External	Y		

COMPRESSOR MAPS:



G42-1200C 73mm



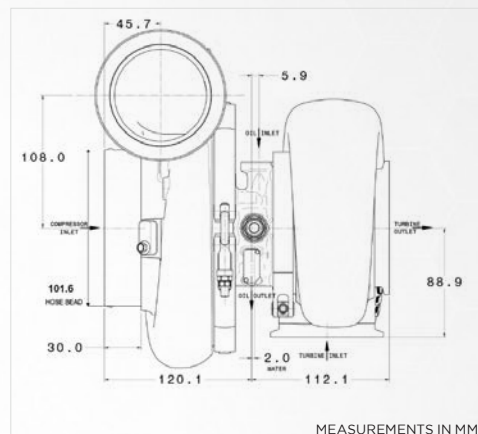
G42-1200 73mm



G42-1450 79mm

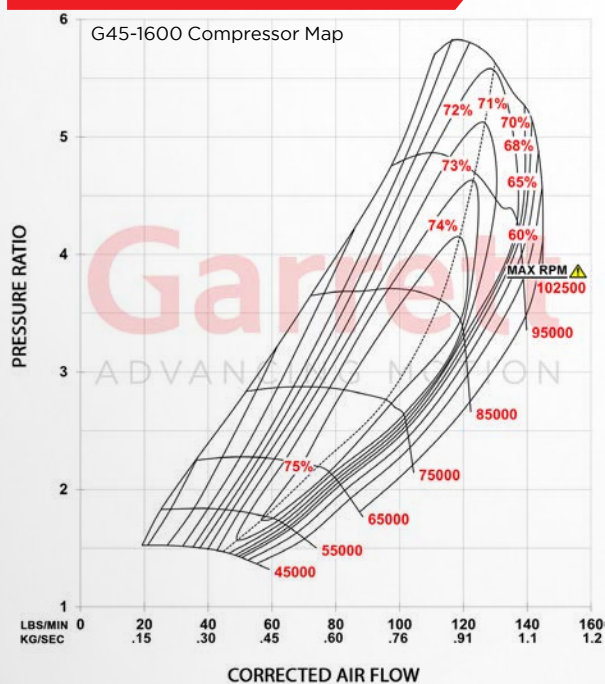
Garrett G45

Displacement: 2.0L - 8.0L



MEASUREMENTS IN MM

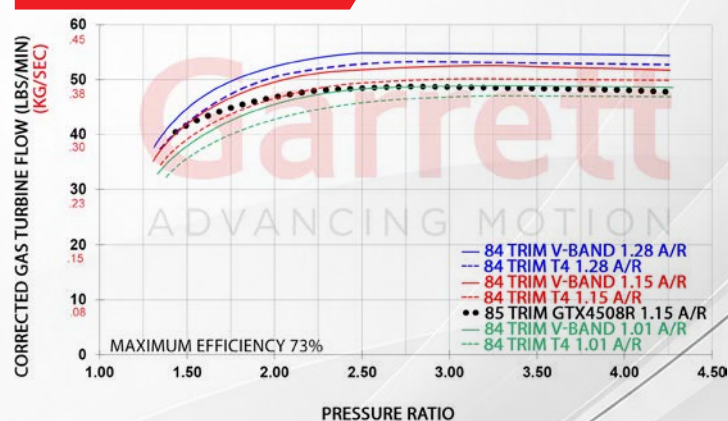
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ 16% MORE FLOW COMPARED TO GTX4508R 76MM
- ◆ 14% MORE TURBINE FLOW COMPARED TO GTX45R
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ STAINLESS STEEL V-BAND AND T4 TWIN SCROLL TURBINE HOUSINGS

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
888169-5007S	G45-1475	7982	1475	79mm	98mm	89mm	82mm
888169-5005S	G45-1500	7682	1500	76mm	109mm		
888169-5006S	G45-1600	8082	1600	80mm	109mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
757707-0019	1.01	V-Band	V-Band	External	N		
757707-0020	1.15	V-Band	V-Band	External	N		
757707-0021	1.28	V-Band	V-Band	External	N		
757707-0022	1.44	V-Band	V-Band	External	N		
757707-0023	1.01	T4	V-Band	External	Y		
757707-0024	1.15	T4	V-Band	External	Y		
757707-0025	1.28	T4	V-Band	External	Y		
757707-0026	1.28	T4	V-Band	External	Y		

COMPRESSOR MAPS:



G45-1475 79mm



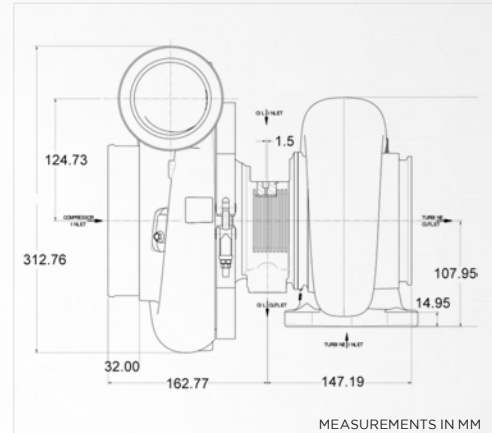
G45-1500 76mm



G45-1600 80mm

Garrett G47

Displacement: 2.5L - 10.0L



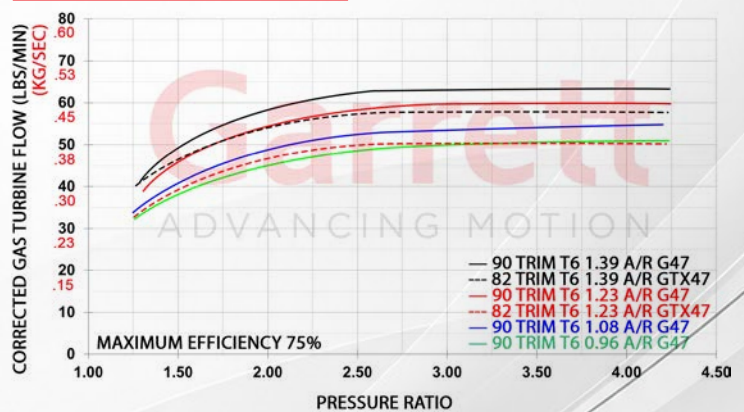
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ OUTLINE INTERCHANGEABLE WITH GTX GEN II TURBOS
- ◆ 20% MORE COMPRESSOR FLOW THAN GTX47
- ◆ UP TO +9% BETTER SPOOL (EST BY FLOW, EFFICIENCY, AND INERTIA)
- ◆ ONE-PIECE LIGHTWEIGHT ALUMINUM CENTER HSG/BACKPLATE

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
880547-5023S	G47-1550	7688	1550	76mm	109mm	93mm	88mm
880547-5024S	G47-1650	8088	1650	80mm	109mm		
880547-5025S	G47-1650	8088	1650	80mm	120mm		
880547-5026S	G47-1850	8888	1850	88mm	120mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
761208-0075	0.96	T6	V-Band	External	N		
761208-0076	1.08	T6	V-Band	External	N		
761208-0077	1.23	T6	V-Band	External	N		
761208-0078	1.39	T6	V-Band	External	N		

COMPRESSOR MAPS:



G47-1550 76mm

G47-1650
80/109mm



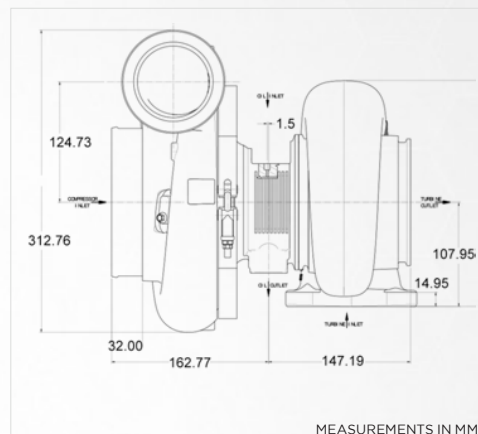
G47-1650
80/120mm



G47-1850 88mm

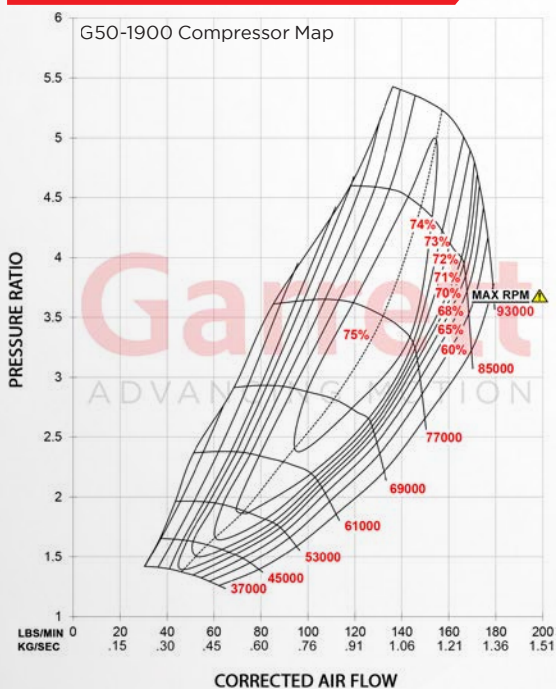
Garrett G50

Displacement: 2.5L - 11.0L



MEASUREMENTS IN MM

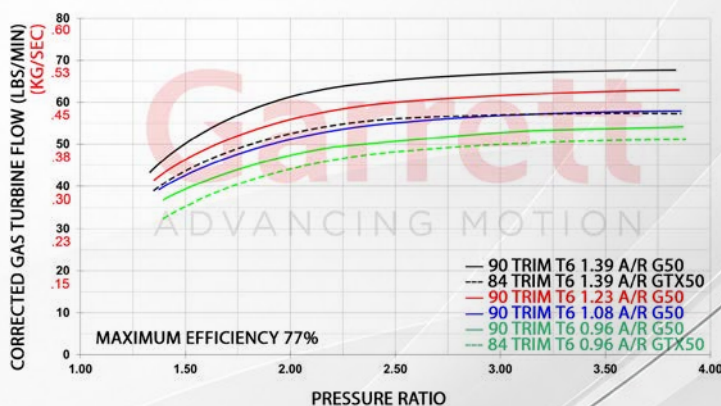
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ OUTLINE INTERCHANGEABLE WITH GTX GEN II TURBOS
- ◆ 23% MORE COMPRESSOR FLOW THAN GTX47
- ◆ UP TO 12% BETTER SPOOL (EST BY FLOW, EFFICIENCY, AND INERTIA)
- ◆ ONE-PIECE LIGHTWEIGHT ALUMINUM CENTER HSG/BACKPLATE

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
880547-5027S	G50-1700	8094	1700	80mm	109mm	99mm	94mm
550547-5028S	G50-1900	8894	1900	88mm	120mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
761208-0079	0.96	T6	V-Band	External	N		
761208-0080	1.08	T6	V-Band	External	N		
761208-0081	1.23	T6	V-Band	External	N		
761208-0082	1.39	T6	V-Band	External	N		

COMPRESSOR MAPS:



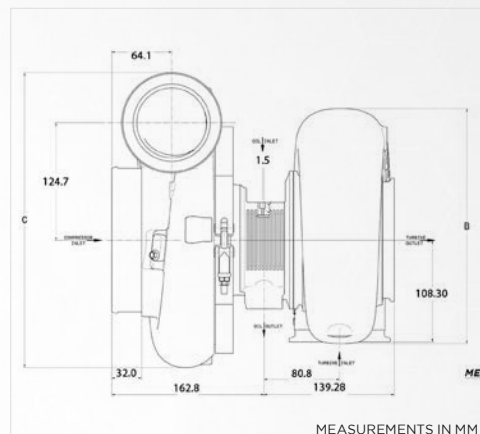
G50-1700 80mm



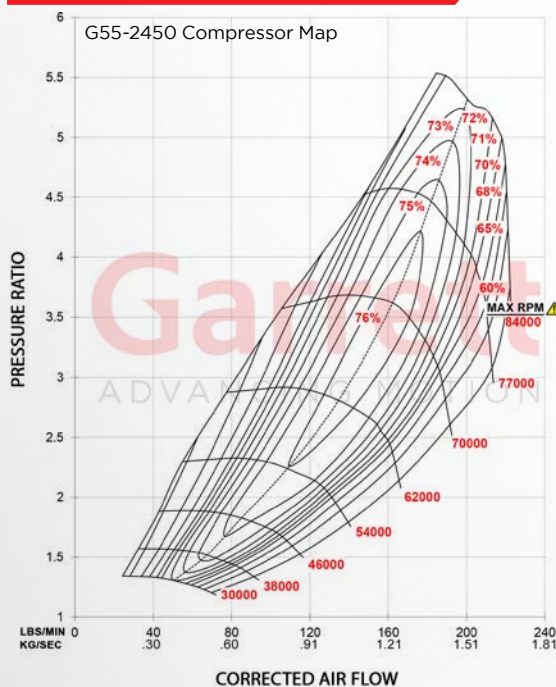
G50-1900 88mm

Garrett G55

Displacement: 3.0L - 12.0L



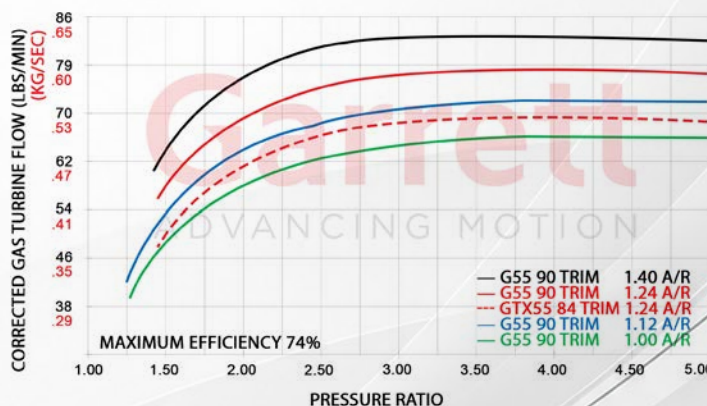
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ 106MM TURBINE EXDUCER (+4MM COMPARED TO GTX55)
- ◆ 15% MORE TURBINE FLOW COMPARED TO GTX55
- ◆ 6% INCREASE IN SPOOL-UP PERFORMANCE
- ◆ STAINLESS STEEL TURBINE HOUSINGS IN T6 AND V-BAND INLET
- ◆ ONE-PIECE ALUMINUM CENTER HOUSING (28% LIGHTER)
- ◆ OUTLINE INTERCHANGEABLE WITH GTX55 GEN II TURBOS

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
880547-5001S	G55-1850	8506	1850	85mm	133mm	112mm	106mm
880547-5002S	G55-1950	8806	1950	88mm	133mm		
880547-5003S	G55-2100	9106	2100	91mm	133mm		
880547-5004S	G55-2250	9406	2250	94mm	133mm		
880547-5005S	G55-2450	9806	2450	98mm	133mm		
880547-5021S	G55-2650	0206	2650	102mm	144mm		
880547-5022S	G55-2900	0606	2900	106mm	144mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
761208-0069	1.24	V-Band	V-Band	External	N		
761208-0070	1.40	V-Band	V-Band	External	N		
761208-0071	1.00	T6	V-Band	External	N		
761208-0072	1.12	T6	V-Band	External	N		
761208-0073	1.24	T6	V-Band	External	N		
761208-0074	1.40	T6	V-Band	External	N		

COMPRESSOR MAPS:



G55-1850 85mm



G55-1950 88mm



G55-2100 91mm



G55-2250 94mm



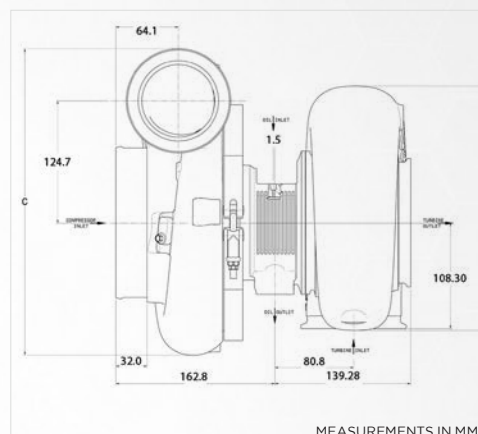
G55-2650 102mm



G55-2900 106mm

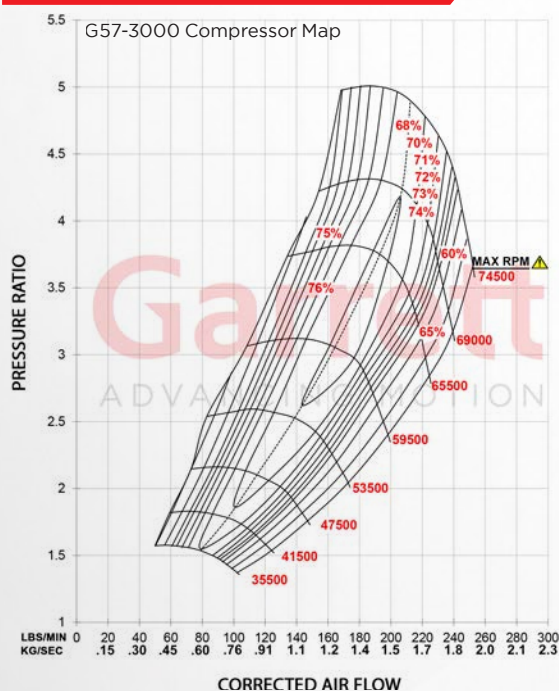
Garrett G57

Displacement: 3.0L - 12.0L



MEASUREMENTS IN MM

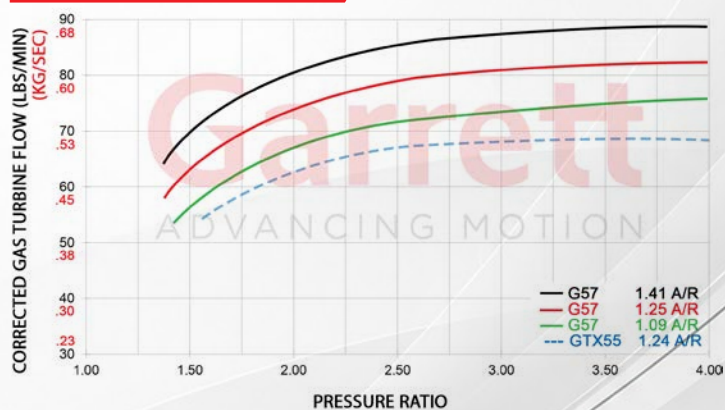
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ 28% MORE TURBINE FLOW COMPARED TO GTX55
- ◆ STAINLESS STEEL TURBINE HOUSINGS
- ◆ ONE-PIECE ALUMINUM CENTER HOUSING (28% LIGHTER)
- ◆ OUTLINE INTERCHANGEABLE WITH GTX55 GEN II TURBOS

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
880547-5031S	G57-2000	8812	2000	88mm	133mm	118mm	112mm
880547-5032S	G57-2350	9412	2350	94mm	133mm		
880547-5033S	G57-2550	9812	2550	98mm	133mm		
880547-5029S	G57-2750	0212	2750	102mm	144mm		
880547-5030S	G57-3000	0612	3000	106mm	144mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
761208-0083	1.09	V-Band	V-Band	External	N		
761208-0084	1.25	V-Band	V-Band	External	N		
761208-0085	1.41	V-Band	V-Band	External	N		

COMPRESSOR MAPS:



G57-2000 88mm



G57-2350 94mm



G57-2550 98mm



G57-2750 102mm

G-XRACE

***WHEN XTREME POWER MEETS XTREME
PERFORMANCE***

Winners aren't born – they are built. Reputations are forged through skill, speed and consistency. Racers push their skills, their cars, and their turbos to extreme limits. When the stakes are high, only the best turbo will take you to the finish line. Garrett G-XRace is built for those who know that winning comes from being the quickest, pass after pass, race after race.



G-XRACE



G-XRACE



When Xtreme Power Meets Xtreme Performance



7.930
200.74



Prayoonto Racing's Yerral Lopez became the first front-wheel drive K-Series to reach 200 MPH in the 1/4 mile thanks to the GXR45-73

WHY G-XRACE

Winners are Built

Winners aren't born – they are built. Reputations are forged through skill, speed and consistency. Racers push their skills, their cars, and their turbos to extreme limits. When the stakes are high, only the best turbo will take you to the finish line. Garrett G-XRace is built for those who know that winning comes from being the quickest, pass after pass, race after race.

Powered by Decades of Leadership in Motorsport

If you want to be the quickest, the G-XRace Series is your ultimate advantage. Born from decades of powering professional motorsport winners, this turbocharger carries a legacy of proven success. It's made for racers who push the limits to the extreme – and win.

A Heritage of Innovation

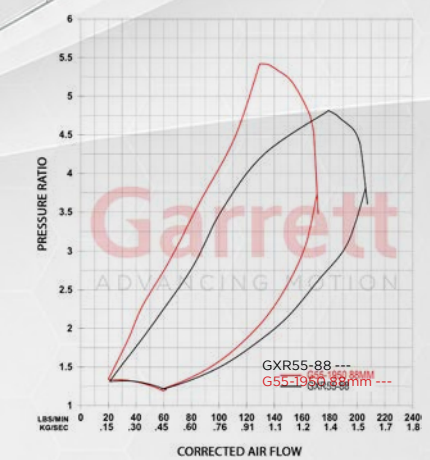
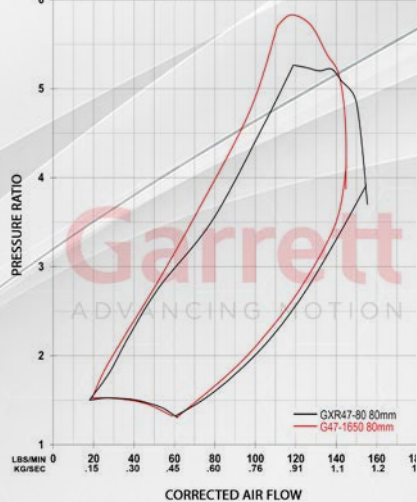
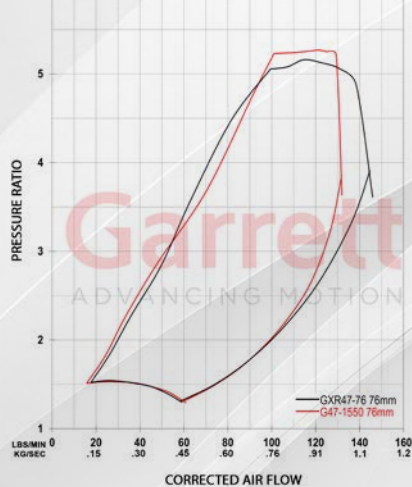
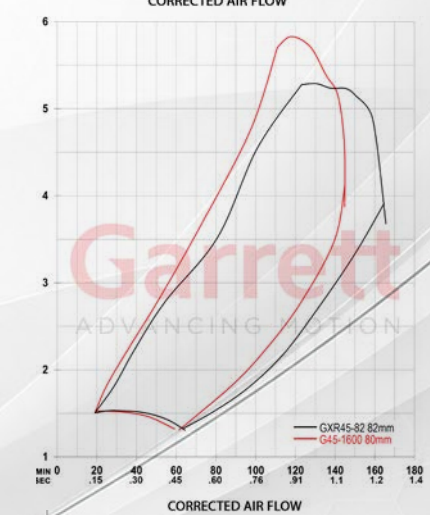
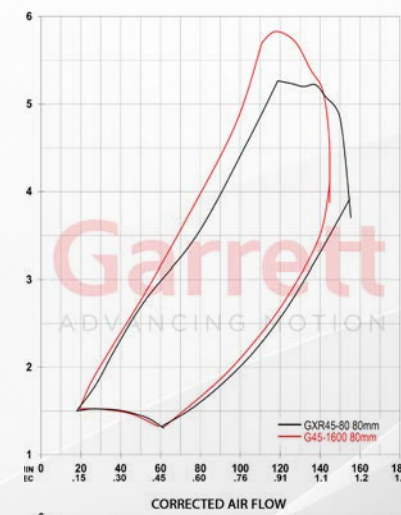
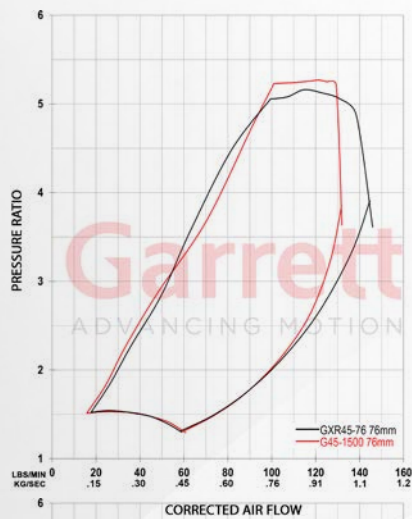
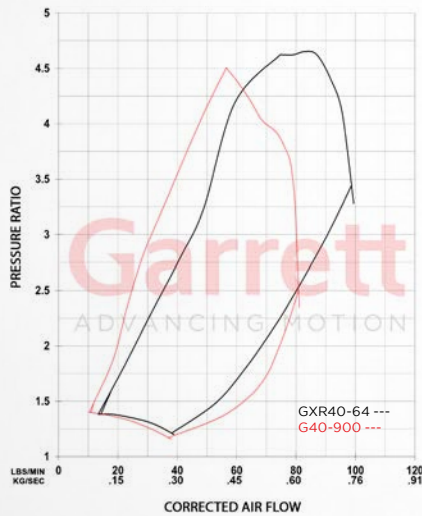
Backed by over 70 years of engineering and innovation, G-XRace turbochargers are engineered by a global team of 1300 engineers across five R&D centers for xtreme durability and xtreme performance.

PRODUCT LINE OVERVIEW

G-XRace Product Features	GXR40-64	GXR42-68	GXR42-72	GXR45-67	GXR45-73	GXR55-88
Turbo Reference Model	6470	6875	7275	6782	7382	8803
Horsepower Rating (BHP)	1150	1400	1450	1475	1550	2350
Displacement Range (L)	2.0 - 6.0	2.0 - 7.0		2.0 - 8.0		3.0 - 12.0
Compressor Wheel Ind (MM)	64.9	68.9	72.9	67.9	73.9	88.9
Turbine Wheel Exd (MM)	70	75		82		103 106
T4 Divided Inlet Turbine Hsg (A/R)	.85 .95 1.06 1.19	1.01 1.15 1.28		1.01 1.15 1.28 1.44		X
T6 Divided Inlet Turbine Hsg (A/R)	X	X		X		1.00 1.12 1.24 1.40
V-Band Inlet Turbine Hsg (A/R)	.85 .95 1.06 1.19	1.01 1.15 1.28		1.01 1.15 1.28 1.44		1.24 1.40
Aluminum Backplate	•	•		•		•
Ball Bearing w/ Steel Cages	•	•		•		•
Inconel Turbine Wheel	•	•		•		•
Stainless Steel Turbine Housing	•	•		•		•

GXRACE

GXRACE COMPRESSOR OVERLAYS

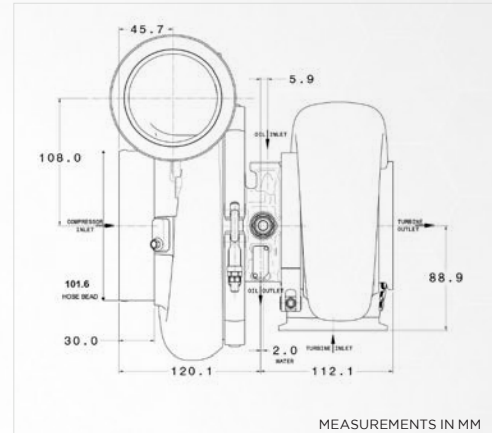


Garrett GXR38

Displacement: 2.0L - 5.5L

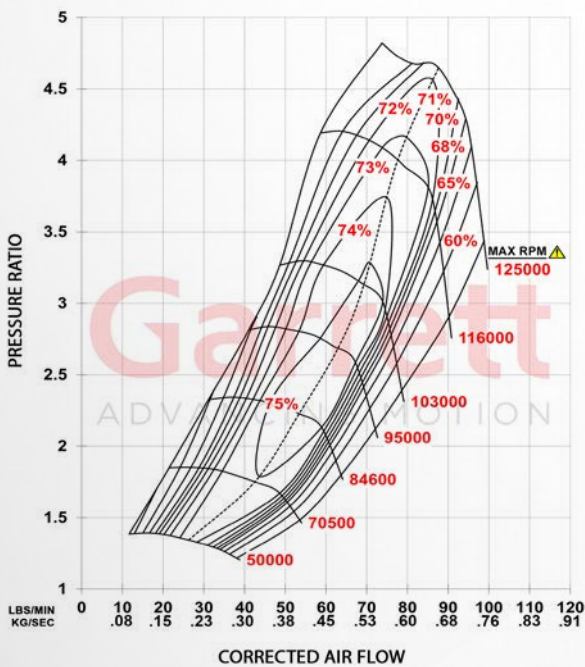


GXR38 HOSE OUTLET



MEASUREMENTS IN MM

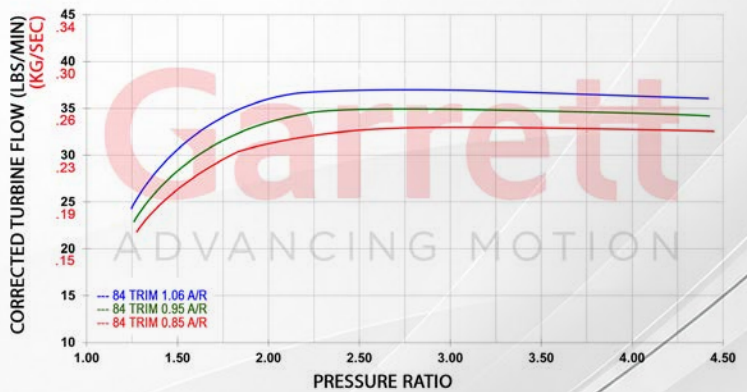
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ XBOOST TECHNOLOGY INCREASES POWER AND PERFORMANCE
- ◆ ENHANCED PRESSURE RATIO CAPABILITY AND HIGHER BOOST PRESSURE
- ◆ INCREASED EFFICIENCY AT HIGH FLOW RATES
- ◆ LOWER INTAKE TEMPERATURE
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ FULLY MACHINED FLANGE-STYLE SPEED SENSOR PORT FOR EASY SENSOR INSTALLATION AND MONITORING TURBO SPEED

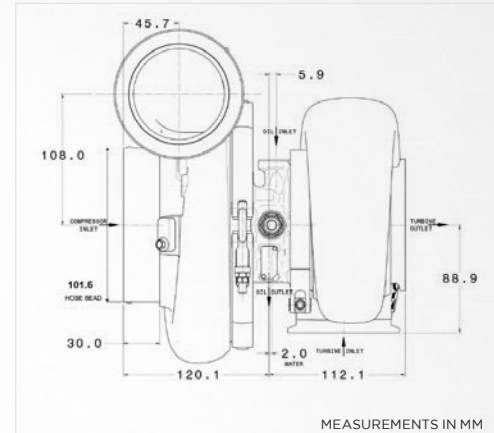
TURBINE FLOW



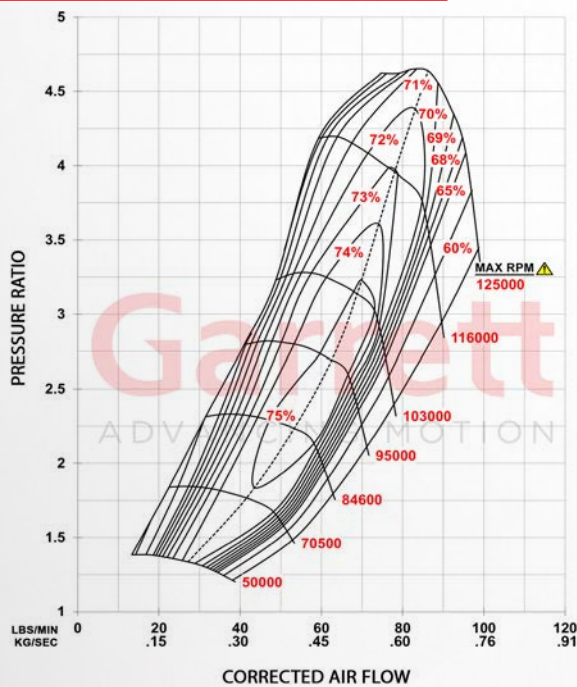
Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934173-5008S	GXR38-64 V-Band Outlet	6466	1150	64.9mm	88mm	74mm	66mm
934173-5009S	GXR38-64 Hose Outlet		1100				
Turbine Kit PN	A/R	Inlet	Outlet	Wastegate	Divided		
757707-0037	0.85	V-Band	V-Band	External	N		
757707-0038	0.95	V-Band	V-Band	External	N		
757707-0039	1.06	V-Band	V-Band	External	N		
757707-0042	0.85	T4	V-Band	External	Y		
757707-0043	0.95	T4	V-Band	External	Y		
757707-0044	1.06	T4	V-Band	External	Y		

Garrett GXR40-64

Displacement: 2.0L - 6.0L



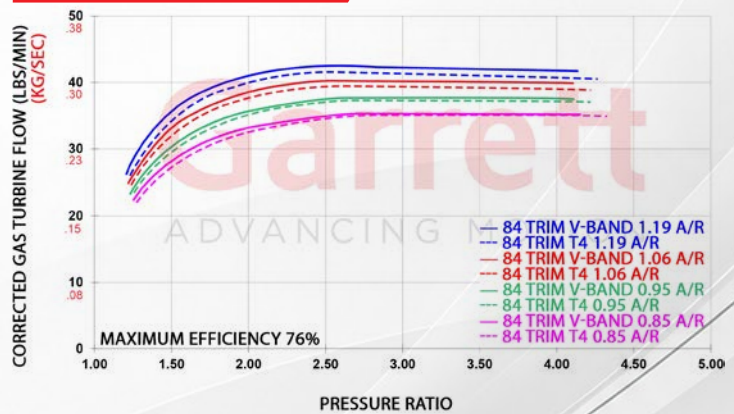
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ XBOOST TECHNOLOGY INCREASES POWER AND PERFORMANCE
 - ◆ +23% COMPRESSOR FLOW COMPARED TO G40-900
 - ◆ ENHANCED PRESSURE RATIO CAPABILITY AND HIGHER BOOST PRESSURE
 - ◆ INCREASED EFFICIENCY AT HIGH FLOW RATES
 - ◆ LOWER INTAKE TEMPERATURE
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ FULLY MACHINED FLANGE-STYLE SPEED SENSOR PORT FOR EASY SENSOR INSTALLATION AND MONITORING TURBO SPEED

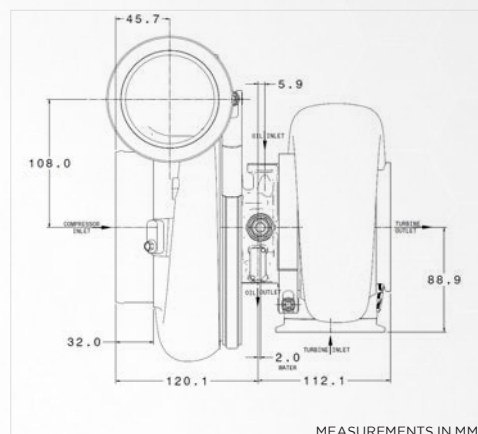
TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934173-5005S	GXR40-64	6470	1150	64.9mm	88mm	77mm	70mm
Turbine Kit PN	A/R	Inlet	Outlet	Wastegate	Divided		
757707-0027	0.85	V-Band	V-Band	External	N		
757707-0028	0.95	V-Band	V-Band	External	N		
757707-0029	1.06	V-Band	V-Band	External	N		
757707-0030	1.19	V-Band	V-Band	External	N		
757707-0032	0.85	T4	V-Band	External	Y		
757707-0033	0.95	T4	V-Band	External	Y		
757707-0034	1.06	T4	V-Band	External	Y		
757707-0035	1.19	T4	V-Band	External	Y		

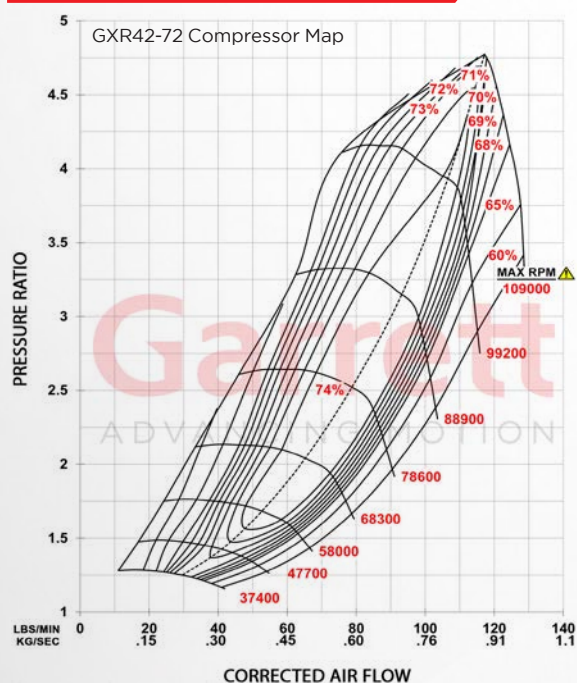
Garrett GXR42

Displacement: 2.0L - 7.0L



MEASUREMENTS IN MM

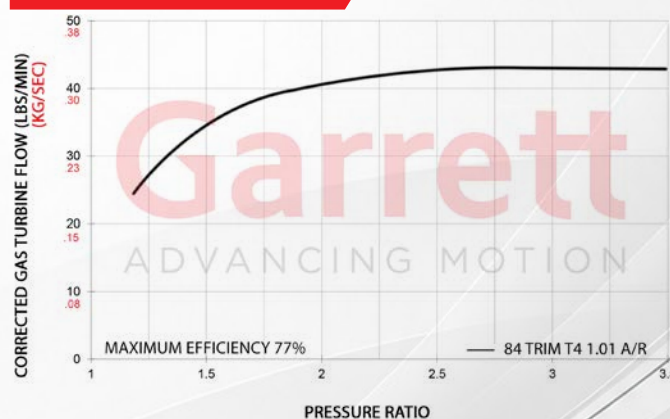
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ XBOOST TECHNOLOGY INCREASES POWER AND PERFORMANCE
- ◆ ENHANCED PRESSURE RATIO CAPABILITY AND HIGHER BOOST PRESSURE
- ◆ INCREASED EFFICIENCY AT HIGH FLOW RATES
- ◆ LOWER INTAKE TEMPERATURE
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ TWIN-SCROLL T4 AND V-BAND TURBINE INLET FLANGES AVAILABLE FOR RACERS WITH DIFFERENT ENGINES AND MANIFOLD DESIGNS

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934173-5001S	GXR42-68	6875	1400	68.9mm	104.9mm	82mm	75mm
952766-5006S	GXR42-71	7175	1300	71mm	94mm		
934173-5002S	GXR42-72	7275	1450	72.9mm	104.9mm		
Turbine Kit PN	A/R	Inlet	Outlet	Wastegate	Divided		
757707-0011	1.01	V-Band	V-Band	External	N		
757707-0012	1.15	V-Band	V-Band	External	N		
757707-0013	1.28	V-Band	V-Band	External	N		
757707-0014	1.01	T4	V-Band	External	Y		
757707-0015	1.15	T4	V-Band	External	Y		
757707-0016	1.28	T4	V-Band	External	Y		

GXR42-71 - IS FOR USE IN THE DTA LIGHT DRAG RACE CLASS WITH THE 71MM COMPRESSOR INDUCER RULE

COMPRESSOR MAPS:



GXR42-68



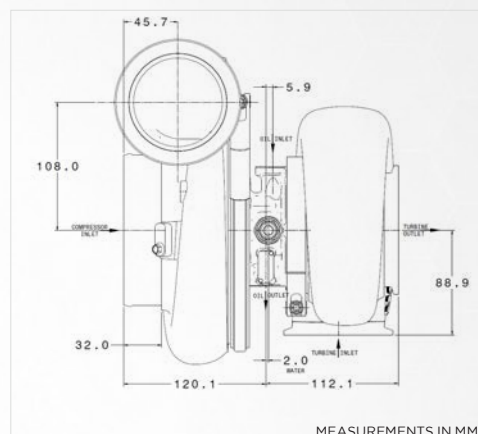
GXR42-71



GXR42-73

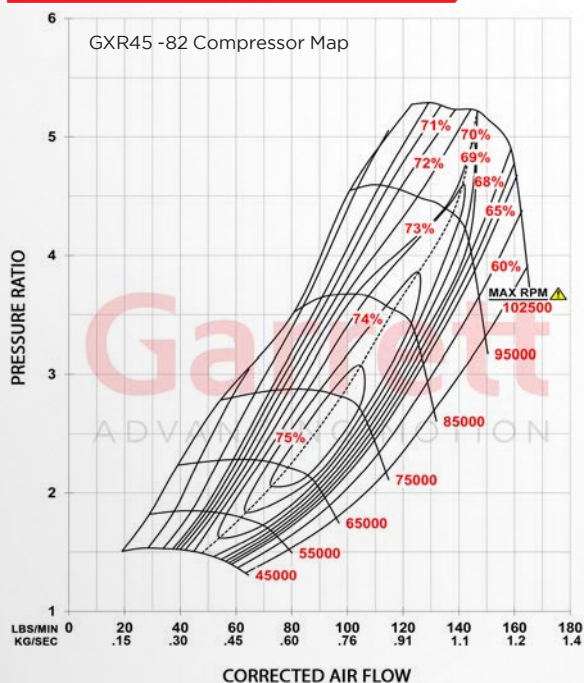
Garrett GXR45

Displacement: 2.0L - 8.0L



MEASUREMENTS IN MM

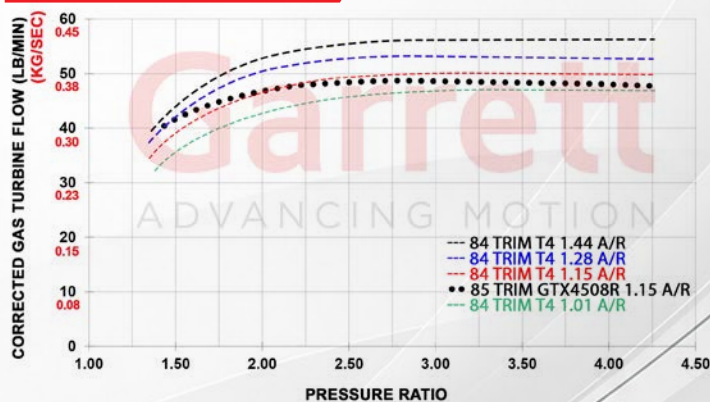
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ XBOOST TECHNOLOGY INCREASES POWER AND PERFORMANCE
- ◆ ENHANCED PRESSURE RATIO CAPABILITY AND HIGHER BOOST PRESSURE
- ◆ INCREASED EFFICIENCY AT HIGH FLOW RATES
- ◆ LOWER INTAKE TEMPERATURE
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ TWIN-SCROLL T4 AND V-BAND TURBINE INLET FLANGES AVAILABLE FOR RACERS WITH DIFFERENT ENGINES AND MANIFOLD DESIGNS

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934173-5003S	GXR45-67	6782	1475	67.9mm	104.9mm	89mm	82mm
934173-5004S	GXR45-73	7382	1550	73.9mm			
952766-5001S	GXR45-76	7682	1650	76.6mm	116mm		
952766-5004S	GXR45-80	8082	1750	80.9mm			
952766-5005S	GXR45-82	8282	1800	82.9mm			
Turbine Kit PN	A/R	Inlet	Outlet	Wastegate	Divided		
757707-0019	1.01	V-Band	V-Band	External	N		
757707-0020	1.15	V-Band	V-Band	External	N		
757707-0021	1.28	V-Band	V-Band	External	N		
757707-0022	1.44	V-Band	V-Band	External	N		
757707-0023	1.01	T4	V-Band	External	Y		
757707-0024	1.15	T4	V-Band	External	Y		
757707-0025	1.28	T4	V-Band	External	Y		
757707-0026	1.44	T4	V-Band	External	Y		

COMPRESSOR MAPS:



GXR45-67



GXR45-73



GXR45-76



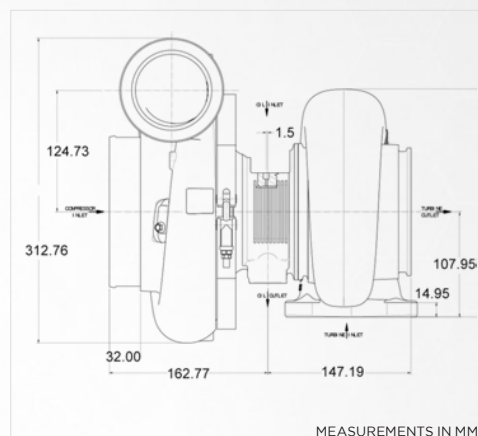
GXR45-80



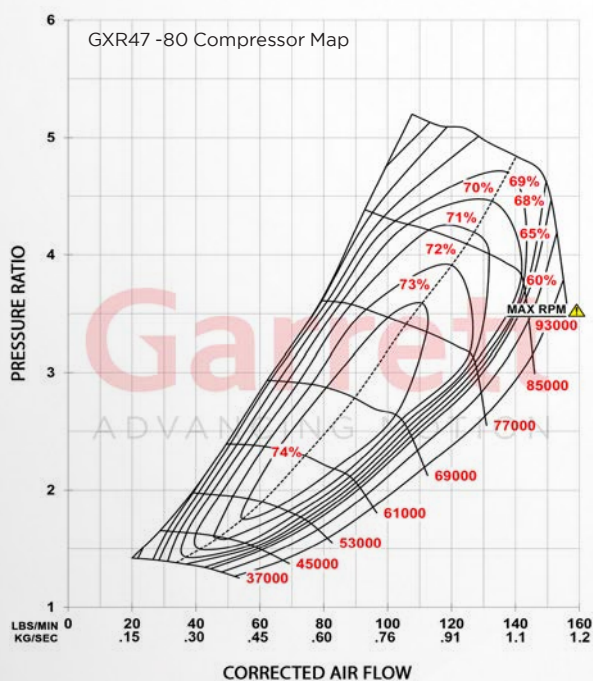
GXR45-82

Garrett GXR47

Displacement: 2.5L - 10.0L



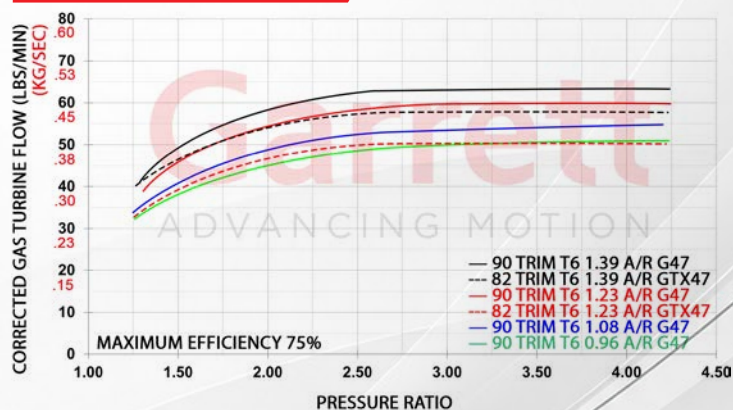
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ XBOOST TECHNOLOGY INCREASES POWER AND PERFORMANCE
- ◆ +12% COMPRESSOR FLOW (GXR47-80 COMPARED TO G47-1650)
- ◆ IMPROVED PRESSURE RATIO CAPABILITY FOR HIGHER BOOST PRESSURE
- ◆ INCREASED EFFICIENCY AT HIGH FLOW RATES PROVIDES COOLER, DENSER AIR TO BOOST POWER CAPABILITY
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE TO REDUCE TURBO WEIGHT
- ◆ FULLY MACHINED FLANGE-STYLE SPEED SENSOR PORT FOR EASY SENSOR INSTALLATION AND MONITORING TURBO SPEED
- ◆ FOR USE IN ULTRA STREET DRAG RACE CLASSES WITH 76.6MM A COMPRESSOR INDUCER RULE

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
953234-5001S	GXR47-76	7688	1700	76.6mm	116mm	93mm	88mm
953234-5004S	GXR47-80	8088	1800	80.9mm			
953234-5006S	GXR47-76	7688	1700	76.6mm	123mm		
953234-5007S	GXR47-80	8088	1800	80.9mm			
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
761208-0075	0.96	T6	V-Band	External	N		
761208-0076	1.08	T6	V-Band	External	N		
761208-0077	1.23	T6	V-Band	External	N		
761208-0078	1.39	T6	V-Band	External	N		

GXR47-76 - IS FOR USE IN ULTRA STREET DRAG RACE CLASSES WITH THE 76.6MM COMPRESSOR INDUCER RULE

COMPRESSOR MAPS:



GXR47-76



GXR47-80 - 116



GXR47-80 - 123

Performance Validation: GXR47-80 Real World Dyno Results

Independent testing of the Garrett G-XRace GXR47-80 109 turbocharger by Bruno Massel showed a major step forward in performance versus the previous G47 combination. On Bruno's 3.0L 2JZ, 183 cubic inch engine, the GXR47-80 produced 1,512 rear wheel horsepower at 55 psi of boost, even with the converter slipping roughly 10 percent.

According to Bruno, the new GXR47 delivered approximately 150 more rear wheel horsepower than the G47, with additional power still left in the combination. Testing was cut short after an injector failure pinched a ring on cylinder #3, preventing further pulls. Even so, the results showed the GXR47-80 to be a significant improvement and potentially within 150 horsepower of a G50-88 in this restricted setup.

"This new GXR47 is the real deal. It made 1,512 to the rear wheels at 55 pounds of boost and was easily 150 horsepower better than the G47."

— Bruno Massel

What makes the result even more impressive is the combination itself. Bruno's engine does not use a larger stroker crank, larger cylinder head ports, or more aggressive camshafts like some higher boost combinations targeting 100 plus psi. His class rules are restrictive, so the setup has to prioritize spool and usable performance without relying on nitrous. In that environment, the GXR47-80 proved to be an exceptionally capable piece.

Additional test data also showed 54 psi of back pressure to 55 psi of boost. For comparison, Bruno's prior G47 setup made 49 psi of boost at the track, while the new GXR47 made 55 psi on the dyno with a couple more psi still left. On this combination, each additional pound of boost is worth roughly 25 horsepower, highlighting the performance potential still available.



REAL WORLD DYNO VALIDATION

1,512 RWHP
@ 55 PSI BOOST

Tested by **Bruno Massel**
3.0L 2JZ Engine

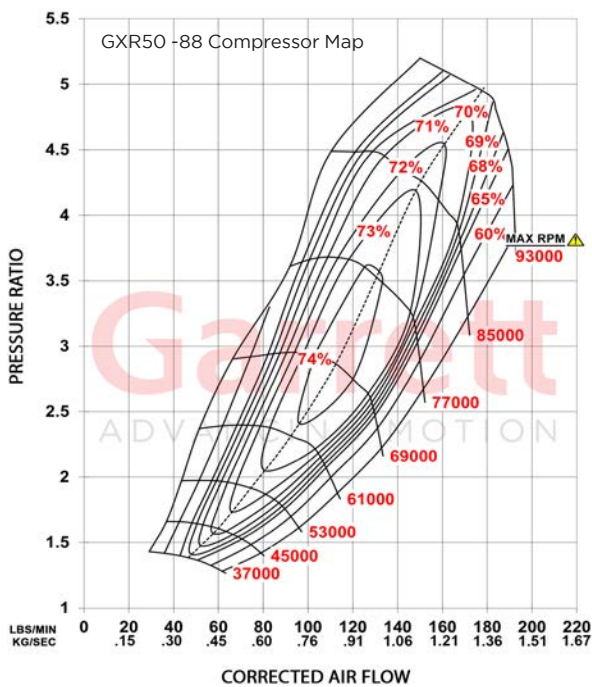
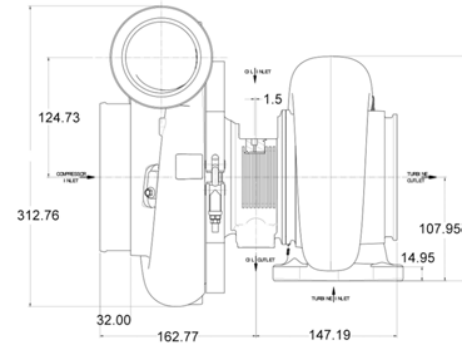
+150 HP vs Previous G47

The image features a large, detailed view of a Garrett GXR47-80 turbocharger on the right, with its compressor and turbine wheels visible. On the left, a blue race car is shown from a side profile, with its engine and turbocharger system exposed. A red arrow points from the car's engine area towards the turbocharger. The background is a dark, smoky, and fiery red, suggesting high performance and heat.

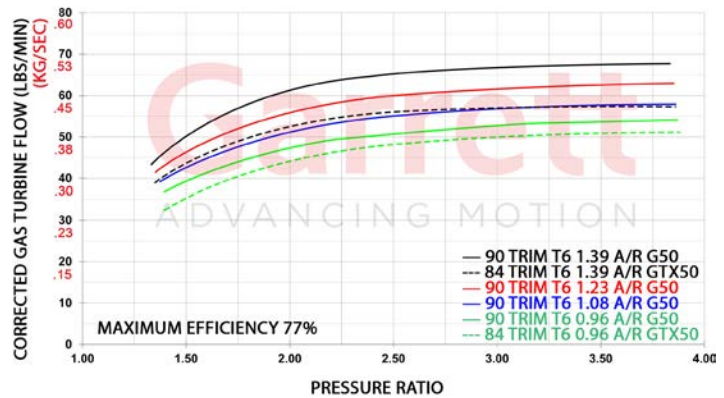
GXR50

2.5L - 11.0L

Garrett
ADVANCING MOTION



- ◆ XBOOST TECHNOLOGY INCREASES POWER AND PERFORMANCE
- ◆ +8% COMPRESSOR FLOW (GXR50-88 COMPARED TO G50-1900)
- ◆ IMPROVED PRESSURE RATIO ENABLES HIGHER BOOST PRESSURE
- ◆ INCREASED EFFICIENCY AT HIGH FLOW RATES PROVIDES COOLER, DENSER AIR TO BOOST POWER CAPABILITY
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE TO REDUCE TURBO WEIGHT
- ◆ FLANGE-STYLE SPEED SENSOR PORT FOR EASY INSTALLATION AND
- ◆ TURBO SPEED MONITORING FOR OPTIMAL PERFORMANCE AND TURBO LIFE



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
953234-5008S	GXR50-76	7694	1750	76.6mm	123mm	99mm	94mm
953234-5009S	GXR50-80	8094	1850	80.9mm			
953234-5010S	GXR50-88	8894	2050	88.9mm			
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
761208-0079	0.96	T6	V-Band	External	N		
761208-0080	1.08	T6	V-Band	External	N		
761208-0081	1.23	T6	V-Band	External	N		
761208-0082	1.39	T6	V-Band	External	N		

COMPRESSOR MAPS:



GXR47-76



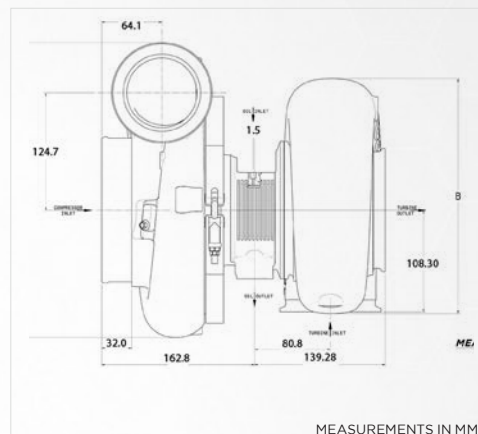
GXR47-80 - 116



GXR47-80 - 123

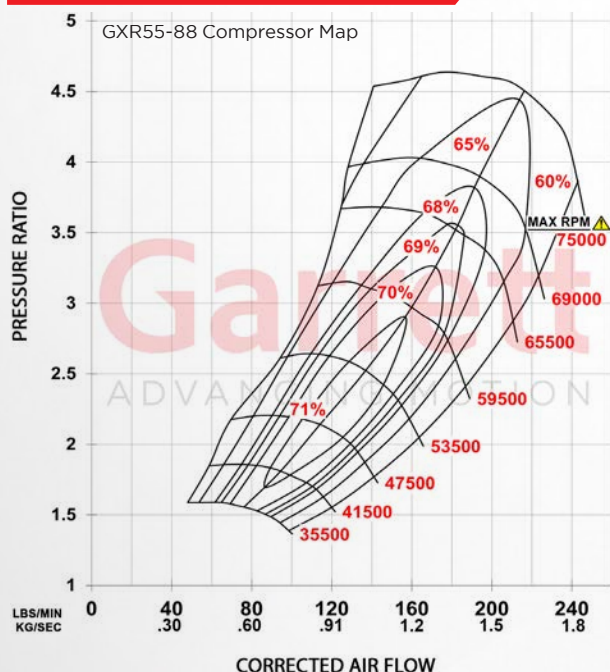
Garrett GXR55

Displacement: 3.0L - 12.0L



MEASUREMENTS IN MM

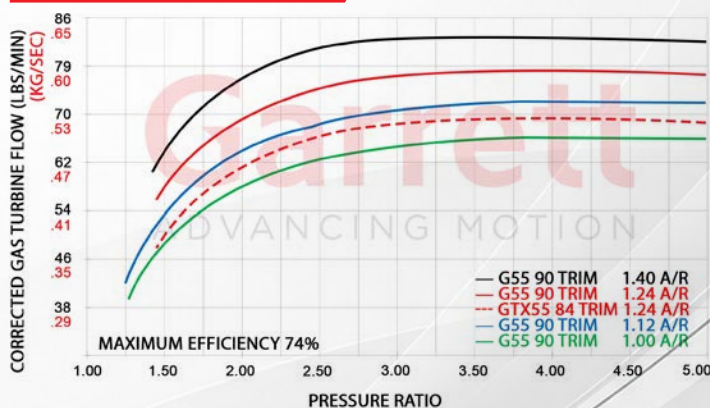
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ XBOOST TECHNOLOGY INCREASES POWER AND PERFORMANCE
- ◆ +21% COMPRESSOR FLOW COMPARED TO G55-1950
- ◆ ENHANCED PRESSURE RATIO CAPABILITY
- ◆ INCREASED EFFICIENCY AT HIGH FLOW RATES
- ◆ LOWER INTAKE TEMPERATURE
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ FULLY MACHINED FLANGE-STYLE SPEED SENSOR PORT FOR EASY SENSOR INSTALLATION AND MONITORING TURBO SPEED
- ◆ FOR USE IN DRAG RACE CLASSES LDR (LIMITED DRAG RADIAL), X275, AND CLASSES WITH 88MM COMPRESSOR INDUCER RULE. PLEASE VERIFY CLASS RULES BEFORE PURCHASING

TURBINE FLOW



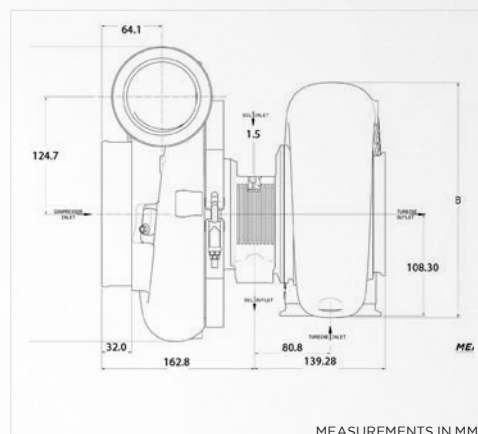
Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934174-5001S	GXR55-88 103TW	8803	2350	88.9mm	133mm	112mm	103mm
934174-5008S							
934174-5002S	GXR55-88 106TW	8806	2350	88.9mm	149mm	112mm	106mm
934174-5007S							
934174-5004S	GXR55-88	8806	2500	88.9mm	149mm	112mm	106mm
934174-5011S	GXR55-91	9106	2600	91.9mm			
934174-5012S	GXR55-94	9406	2700	94.9mm			
934174-5014S	GXR55-98	9806	2800	98.9mm			
Turbine Kit PN	A/R	Inlet	Outlet	Wastegate	Divided	TW	
761208-0069	1.24	V-Band	V-Band	External	N	106mm	
761208-0070	1.40	V-Band	V-Band	External	N	106mm	
761208-0071	1.00	T6	V-Band	External	N	106mm	
761208-0072	1.12	T6	V-Band	External	N	106mm	
761208-0073	1.24	T6	V-Band	External	N	106mm	
761208-0074	1.40	T6	V-Band	External	N	106mm	
761208-0086	1.24	V-Band	V-Band	External	N	103mm	
761208-0087	1.40	V-Band	V-Band	External	N	103mm	

5001S LDR Class, 5002S have a 0.25" map groove

5008S, 5007S have a 0.18" map groove

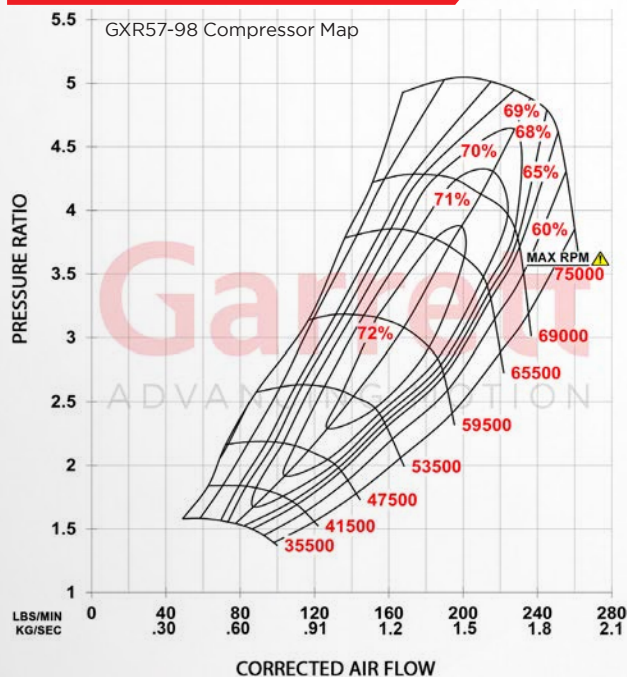
Garrett GXR57

Displacement: 3.0L - 12.0L



MEASUREMENTS IN MM

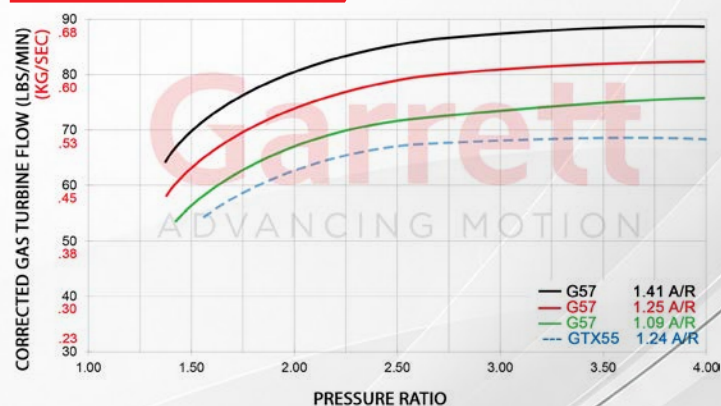
COMPRESSOR MAP



KEY PRODUCT FEATURES & BENEFITS

- ◆ XBoost Technology increases power and performance
 - ◆ +40% compressor flow (GXR55/57-88 compared to G55-1950)
 - ◆ Improved pressure ratio capability enables higher boost pressure
 - ◆ Increased efficiency at high flow rates provides cooler, denser air to boost power capability
 - ◆ One-piece aluminum center housing and backplate to reduce weight
 - ◆ Flange-style speed sensor port for easy installation and turbo speed monitoring for optimal performance and turbo life
 - ◆ For use in drag race classes, and classes with comp inducer rules
- *Please verify class rules before purchasing

TURBINE FLOW



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
934174-5009S	GXR57-88	8812	2600	88.9mm	149mm	118mm	112mm
934174-5013S	GXR57-94	9112	2700	94.9mm			
934174-5006S	GXR57-98	9812	2900	98.9mm			
Turbine Kit PN	A/R	Inlet	Outlet	Wastegate	Divided		
761208-0083	1.09	V-Band	V-Band	External	N		
761208-0084	1.25	V-Band	V-Band	External	N		
761208-0085	1.41	V-Band	V-Band	External	N		



GTX SERIES

GTX and GTX Gen II Series turbochargers are an evolution of the GT Series product line. The original architecture of the GT Series turbos remains however many design and performance features have been introduced over time. Ceramic dual ball bearings and forged fully-machined compressor wheels with GTX and GTX Gen II aerodynamics provide a larger horsepower range and maximize boost response.

The water cooled center housing keeps housing temperatures to a minimum. The turbine wheel is constructed from Inconel, a super alloy that maintains strength over prolonged exposure to high exhaust gas temperatures.

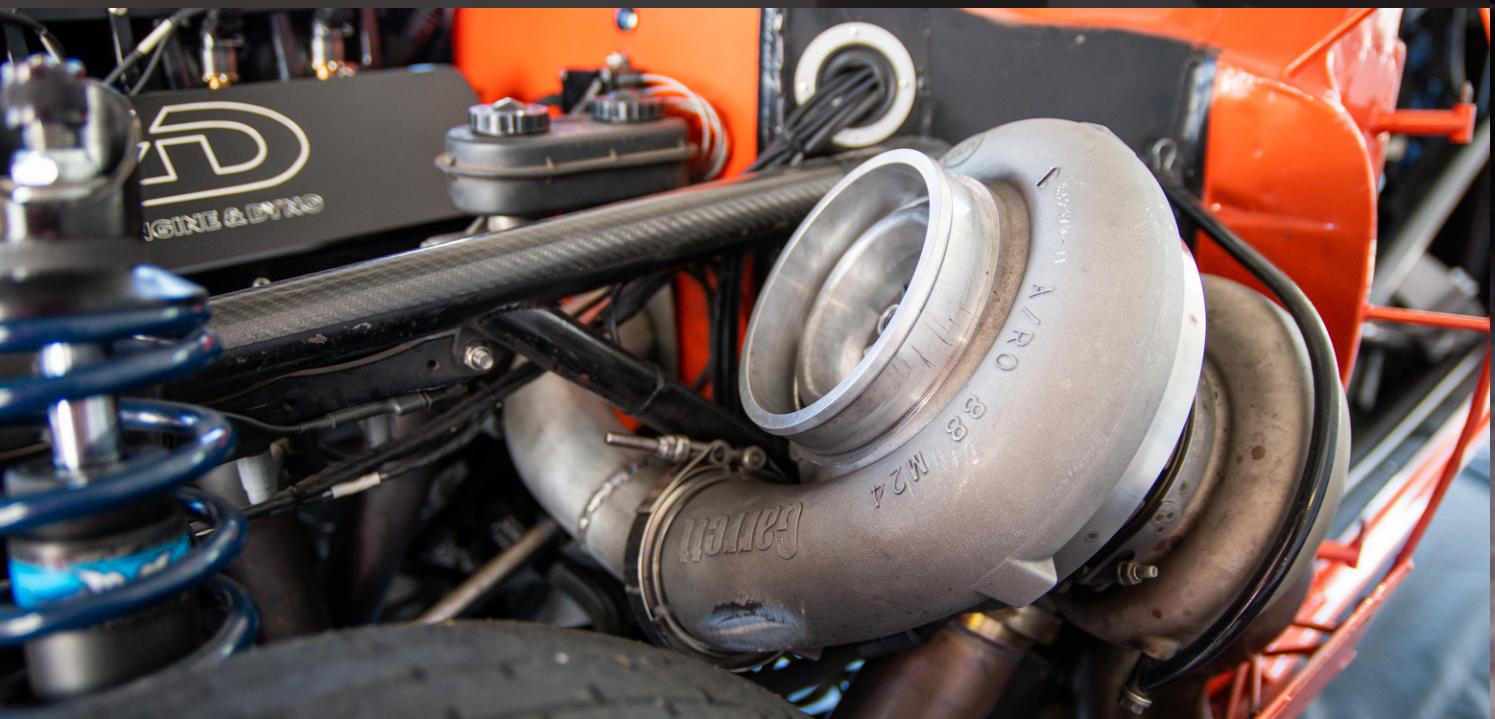
Turbine kits are offered in open volute and twin scroll, and a variety of A/R and flange configurations from T25, T3, T4, T6, and V-Band.

GEN II PRODUCT UPDATES

UPDATED FEATURES ON SELECT GTX TURBOCHARGERS



GEN II COMPRESSOR AERODYNAMICS FOR INCREASED HORSEPOWER RANGE (GTX28/30/35/47/50/ 55)
FULLY MACHINED SPEED SENSOR PORT FOR DATA ACQUISITION (GTX28/30/35/47/50/55)
LIGHTWEIGHT ALUMINUM BACKPLATE FOR WEIGHT REDUCTION (GTX47/50/55)

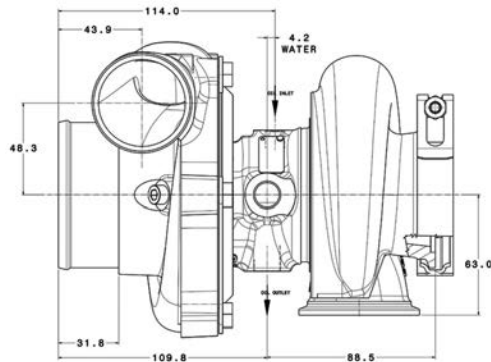




Garrett GTX28 GEN II

Displacement: 1.4L - 2.5L

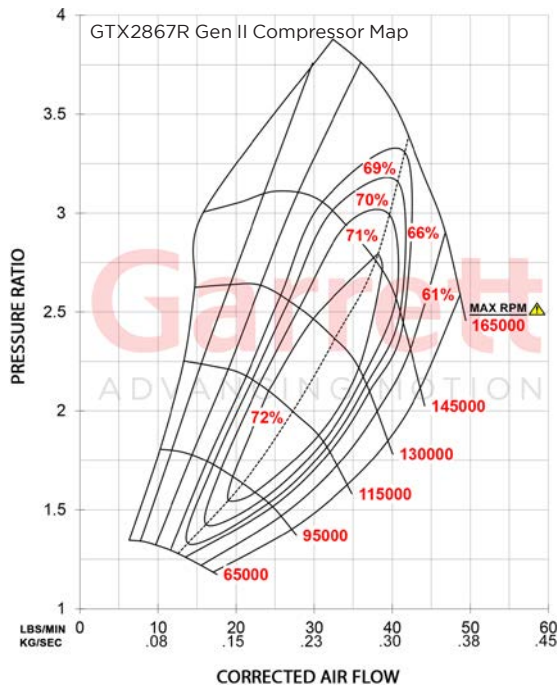
Garrett
ADVANCING MOTION



Measurements in MM



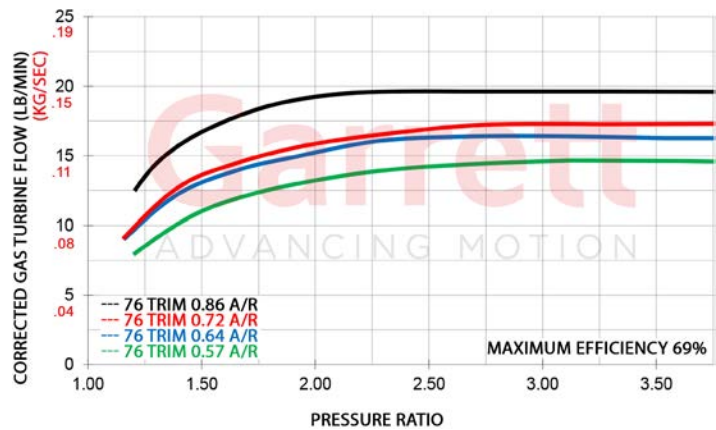
COMPRESSOR MAP



FEATURES:

Gen 2 aerodynamics feature increased horsepower range
Improved ported shroud design for surge resistance
Fully-machined speed sensor port. Details on pg. 88
Wastegate Actuators & Bracket Kit available on Pg. 89

EXHAUST FLOW CHART



Supercore GTX2860R	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
849894-5001S	Standard Rot	4647	475	46mm	60mm	54mm	47mm
Supercore GTX2867R	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
849894-5002S	Standard Rot	5047	550	50mm	67mm	54mm	47mm
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
827690-0001	Standard	0.57	V-Band	V-Band	Free Float	N	
827690-0002	Standard	0.72	V-Band	V-Band	Free Float	N	
827690-0003	Standard	0.64	T25	5 bolt	Internal	N	
827690-0004	Standard	0.86	T25	5 bolt	Internal	N	

COMPRESSOR MAPS:

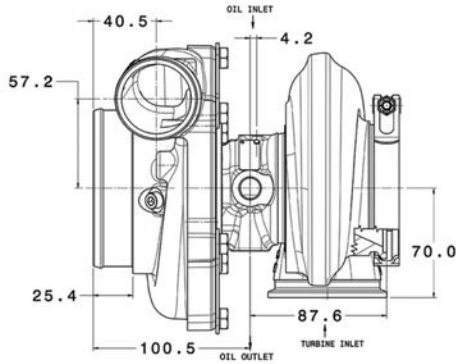


GTX2860R

Garrett GTX30 GEN II

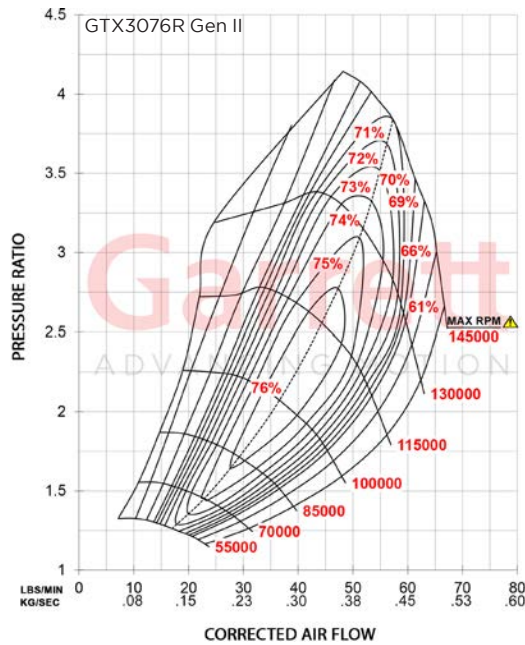
Displacement: 1.8L - 3.0L

Garrett
ADVANCING MOTION



REVERSE ROTATION

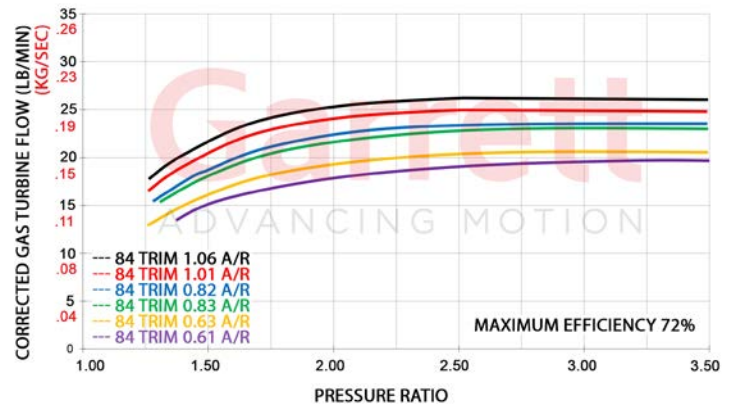
COMPRESSOR MAP



FEATURES:

Gen 2 aerodynamics feature increased horsepower range
Fully-machined speed sensor port. Details on pg. 88
Wastegate Actuators & Bracket Kit available on Pg. 89
Reverse Rotation configurations available

EXHAUST FLOW CHART



GTX GEN II

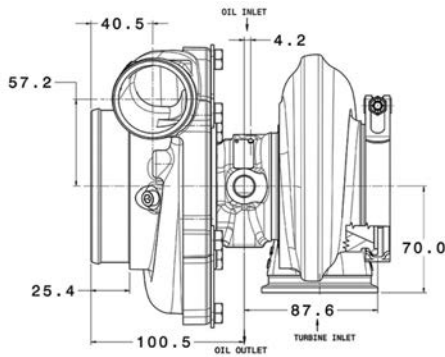
Supercore GTX3071R	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
851154-5002S	Standard Rot	5455	675	54mm	71mm	60mm	55mm
844621-5003S	Reverse Rot						
Supercore GTX3076R	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
851154-5001S	Standard Rot	5855	750	58mm	76mm	60mm	55mm
844621-5004S	Reverse Rot						
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0009	Standard	0.63	T3	V-Band	Free Float	N	
740902-0008	Standard	0.82	T3	V-Band	Free Float	N	
740902-0007	Standard	1.06	T3	V-Band	Free Float	N	
740902-0036	Standard	0.61	V-Band	V-Band	Free Float	N	
740902-0035	Standard	0.83	V-Band	V-Band	Free Float	N	
740902-0034	Standard	1.01	V-Band	V-Band	Free Float	N	
771300-0006	Standard	0.63	T3	5 bolt	Internal	N	
771300-0005	Standard	0.82	** T3	5 bolt	Internal	N	
771300-0004	Standard	1.06	** T3	5 bolt	Internal	N	
740902-0053	Reverse	0.61	** V-Band	V-Band	Free Float	N	
740902-0054	Reverse	0.83	V-Band	V-Band	Free Float	N	
740902-0055	Reverse	1.01	V-Band	V-Band	Free Float	N	

** 771300 Turbine Assembly – does not include bolts, clamps, or actuator

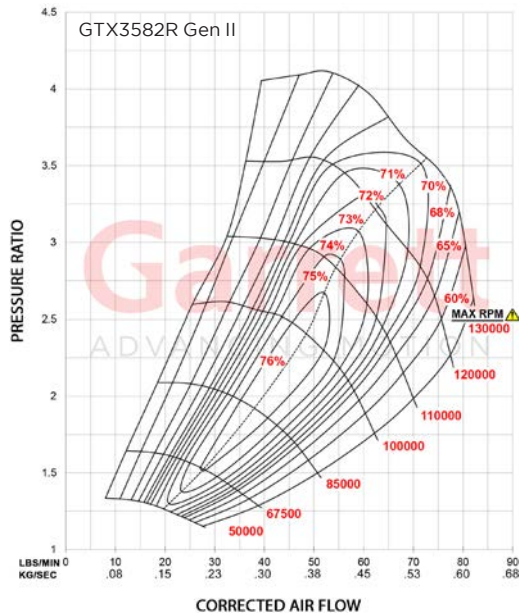
Garrett GTX35 GEN II

Displacement: 2.0L- 4.5L

Garrett
ADVANCING MOTION



COMPRESSOR MAP



GTX3576R

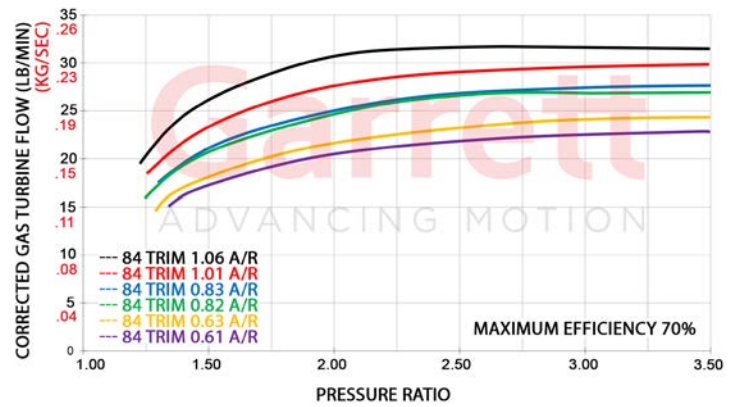


GTX3582R

FEATURES:

Gen 2 aerodynamics feature increased horsepower range
Fully-machined speed sensor port. Details on Pg. 88
Reverse Rotation options available

EXHAUST FLOW CHART



Supercore GTX3576R	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
851154-5003S	Standard Rot	5862	750	58mm	76mm	68mm	62mm
844626-5003S	Reverse Rot						

Supercore GTX3582R	Rotation	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
851154-5004S	Standard Rot	6662	900	66mm	82mm	68mm	62mm
844626-5004S	Reverse Rot						

Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0012	Standard	0.63	T3	V-Band	Free Float	N	
740902-0011	Standard	0.82	T3	V-Band	Free Float	N	
740902-0010	Standard	1.06	T3	V-Band	Free Float	N	
740902-0018	Standard	0.63	T4	V-Band	Free Float	N	
740902-0017	Standard	0.82	T4	V-Band	Free Float	N	
740902-0016	Standard	1.06	T4	V-Band	Free Float	N	
740902-0033	Standard	0.61	V-Band	V-Band	Free Float	N	
740902-0032	Standard	0.83	V-Band	V-Band	Free Float	N	
740902-0031	Standard	1.01	V-Band	V-Band	Free Float	N	
740902-0056	Reverse	0.61	V-Band	V-Band	Free Float	N	
740902-0057	Reverse	0.83	V-Band	V-Band	Free Float	N	
740902-0058	Reverse	1.01	V-Band	V-Band	Free Float	N	

COMPRESSOR MAPS:

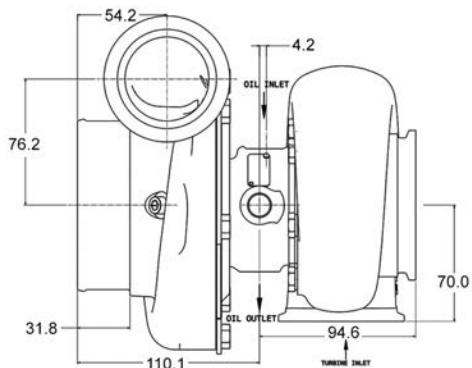


GTX2860R

Garrett GTX3584RS

Displacement: 2.0L - 5.5L

Garrett
ADVANCING MOTION

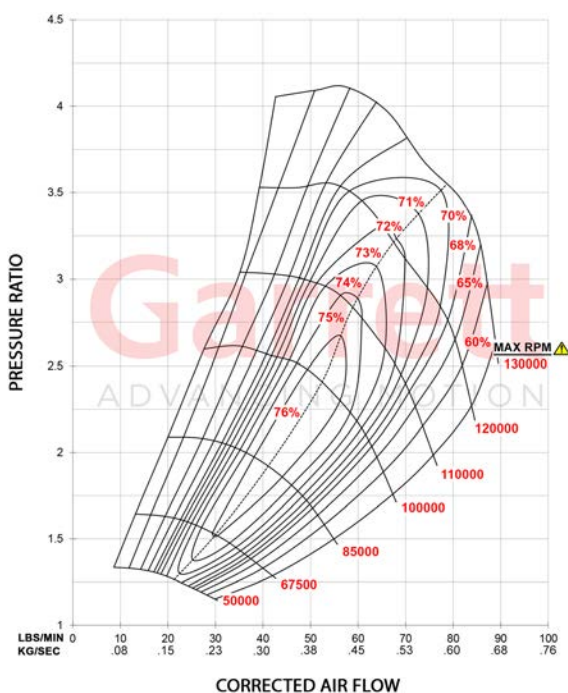


V-BAND OUTLET



HOSE OUTLET

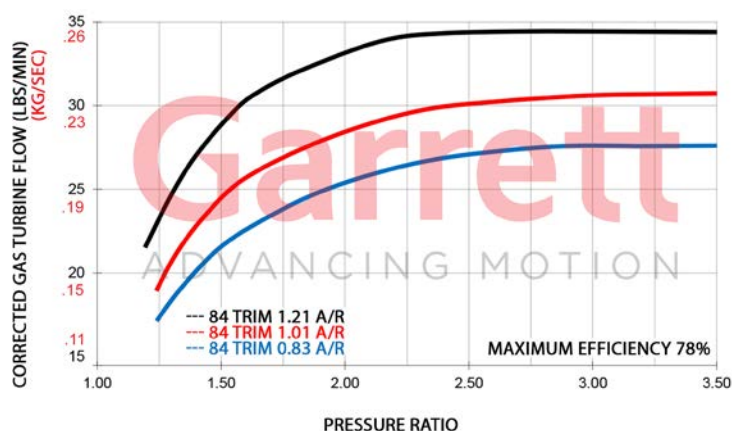
COMPRESSOR MAP



FEATURES:

- Gen 2 aerodynamics feature increased horsepower range
- "RS" high flowing turbine wheel
- Fully-machined speed sensor port. Details on pg. 88
- Comp outlet available in V-Band & Hose connection

EXHAUST FLOW CHART



Supercore PN	Compressor Outlet	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
846098-5001S	Hose	6762	1000	67mm	84mm	68mm	62mm
846098-5002S	V-Band						
Turbine Kit PN	Rotation	A/R	Inlet	Outlet	Wastegate	Divided	
740902-0067	Standard	0.83	V-Band	V-Band	Free Float	N	
740902-0066	Standard	1.01	V-Band	V-Band	Free Float	N	
740902-0052	Standard	1.21	V-Band	V-Band	Free Float	N	

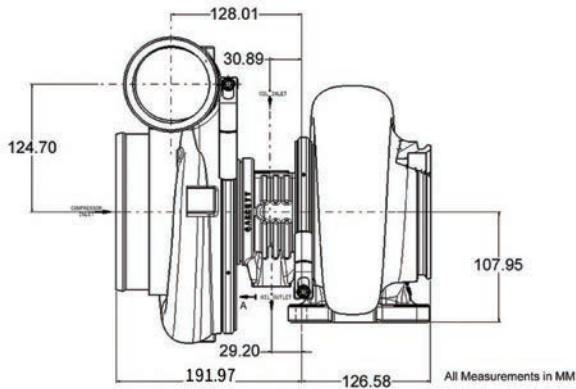
*GTX3584 turbine housings are not compatible with GT/GTX35 housings

GTX GEN II

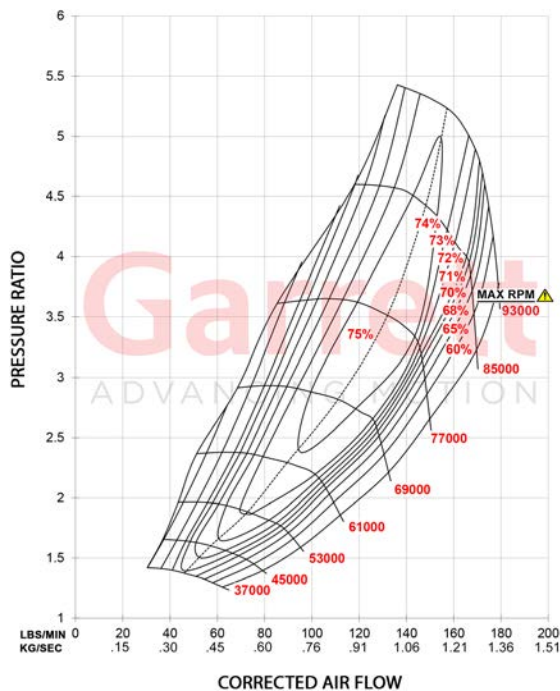
Garrett GTX47 GEN II

Displacement: 2.5L - 10.0L

Garrett
ADVANCING MOTION



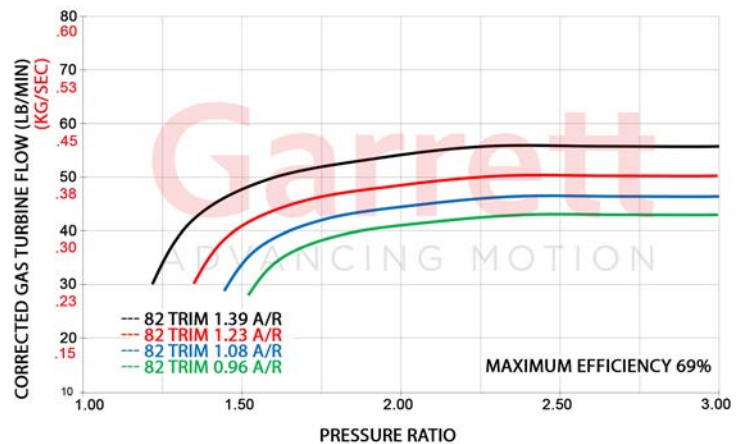
COMPRESSOR MAP



FEATURES:

- Gen 2 compressor wheel aerodynamics
- 9% increased compressor flow
- 76mm, 80mm, 88mm compressor inducer configurations
- 30% lower inertia than GTX

EXHAUST FLOW CHART



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
851285-5012S	GTX4709	8084	1625	80mm	109mm	93mm	84mm
851285-5015S	GTX4720	8884	1950	88mm	120mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
761208-0010	1.08	T6	V-Band	External	N		
761208-0011	1.23	T6	V-Band	External	N		

COMPRESSOR MAPS:



GTX4709R

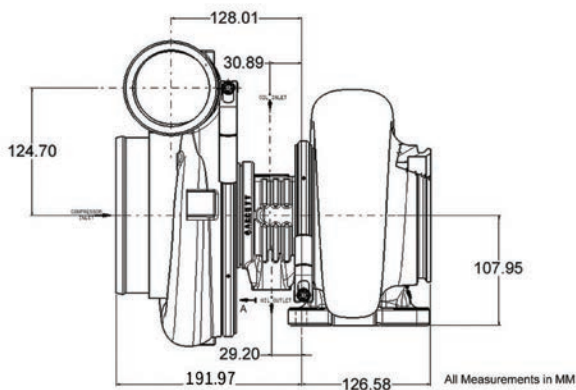


GTX4720R

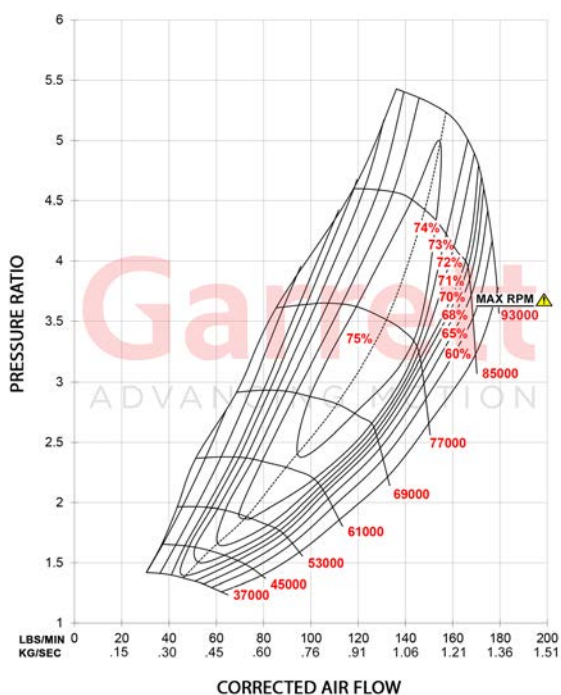
Garrett GTX50 GEN II

Displacement: 2.8L - 11.0L

Garrett
ADVANCING MOTION



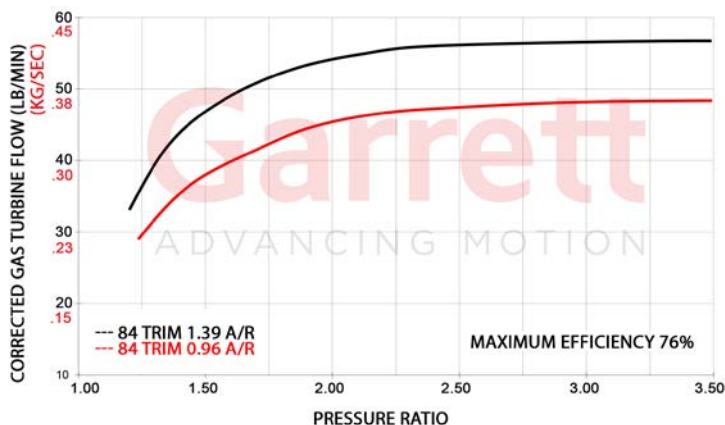
COMPRESSOR MAP



FEATURES:

- Gen 2 compressor wheel aerodynamics
- 9% increased compressor flow
- 76mm, 80mm, 88mm compressor inducer configurations
- 30% lower inertia than previous generation

EXHAUST FLOW CHART



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
851285-5017S	GTX5009	8091	1700	80mm	109mm	99mm	91mm
851285-5020S	GTX5020	8891	2050	88mm	120mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
761208-0030	0.96	T6	V-Band	External	N		
761208-0032	1.23	T6	V-Band	External	N		
761208-0033	1.39	T6	V-Band	External	N		

COMPRESSOR MAPS:



GTX5009R

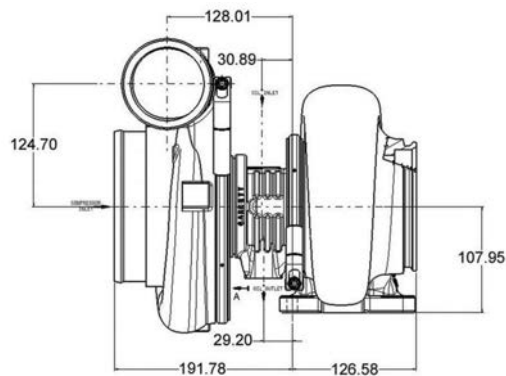


GTX5020R

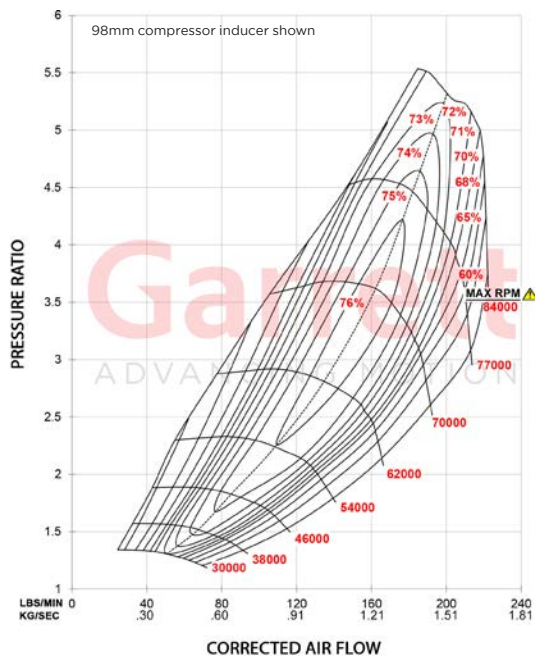
Garrett GTX55 GEN II

Displacement: 3.0L - 12.0L

Garrett
ADVANCING MOTION



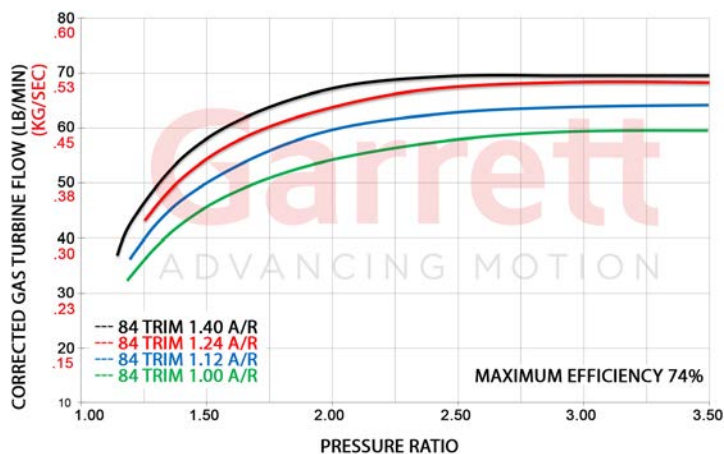
COMPRESSOR MAP



FEATURES:

- Gen 2 aerodynamics feature increased horsepower range
- NEW fully-machined speed sensor port
- Improved ported shroud design for surge resistance
- Lightweight billet backplate
- T6 and V-band turbine housing inlet options

EXHAUST FLOW CHART



Supercore PN	Model	Turbo Reference	Horsepower Rating	Comp Inducer	Comp Exducer	Turbine Inducer	Turbine Exducer
851285-5001S	GTX5533	8502		85mm	133mm	112mm	102mm
851285-5002S		8802		88mm			
851285-5003S		9102		91mm			
851285-5004S		9402		94mm			
851285-5005S		9802		98mm			
851285-5022S	GTX5544	0602		106mm	144mm		
Turbine Kit PN:	A/R	Inlet	Outlet	Wastegate	Divided		
*761208-0062	1.24	V-Band	V-Band	External	N	* Long outlet with cross bolts	
*761208-0063	1.4	V-Band	V-Band	External	N		
761208-0064	1.24	V-Band	V-Band	External	N		
761208-0065	1.4	V-Band	V-Band	External	N		
761208-0015	1.12	T6	V-Band	External	N		
761208-0025	1.24	T6	V-Band	External	N		
761208-0017	1.4	T6	V-Band	External	N		

COMPRESSOR MAPS:



85mm



88mm



91mm



94mm



98mm



106mm

GTX Gen II PERFORMANCE BENEFITS



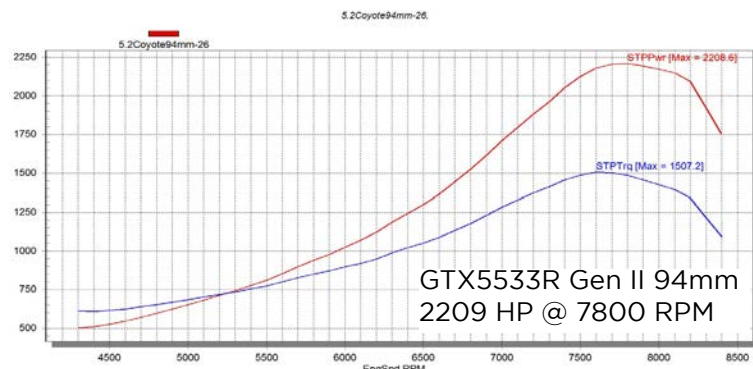
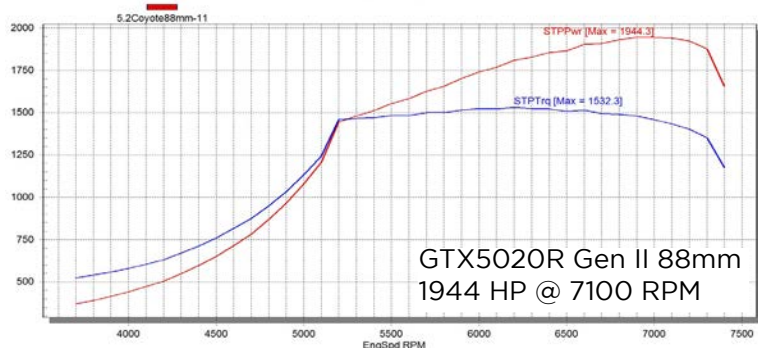
Modular Motorsports Racing develops high-performance engine products for Ford modular engines. Their in-house engine dyno uses the company's popular MMR 2000 long-block assembly. Beginning with a '11-'14 Coyote engine block, MMR knocks out the factory sleeves and adds an aftermarket set to ensure durability. The forged pistons designed by MMR and built by Manley, are fastened to MMR billet connecting rods with ARP 2000 bolts. A forged factory crankshaft has been selected. The 3.7-inch bore combined with the stock-stroke crankshaft brings the displacement of this engine to 5.2 liters. GTX5020R 88mm Gen II and GTX5533R 94mm Gen II turbos were tested in single turbo configuration to identify the turbo output with this engine combination.



Mark Luton (left) and Greg Seth-Hunter (right) inside the MMR dynocell. The Superflow dyno allows them to test components for performance gains without having to take the racecar to the track.



The turbochargers tested are the GTX5020R Gen II 76mm, 80mm, 88mm, and the GTX5533R Gen II 94mm. Tuning is performed by Mark Luton using Fuel Tech software.



GARRETT BOOST | CLUB LINE

Garrett Boost | Club Line turbochargers are high performance journal bearing products at a cost effective price range. GBC combines modern, high flowing aerodynamics with a robust journal bearing rotating group to make a powerful and affordable turbocharger.

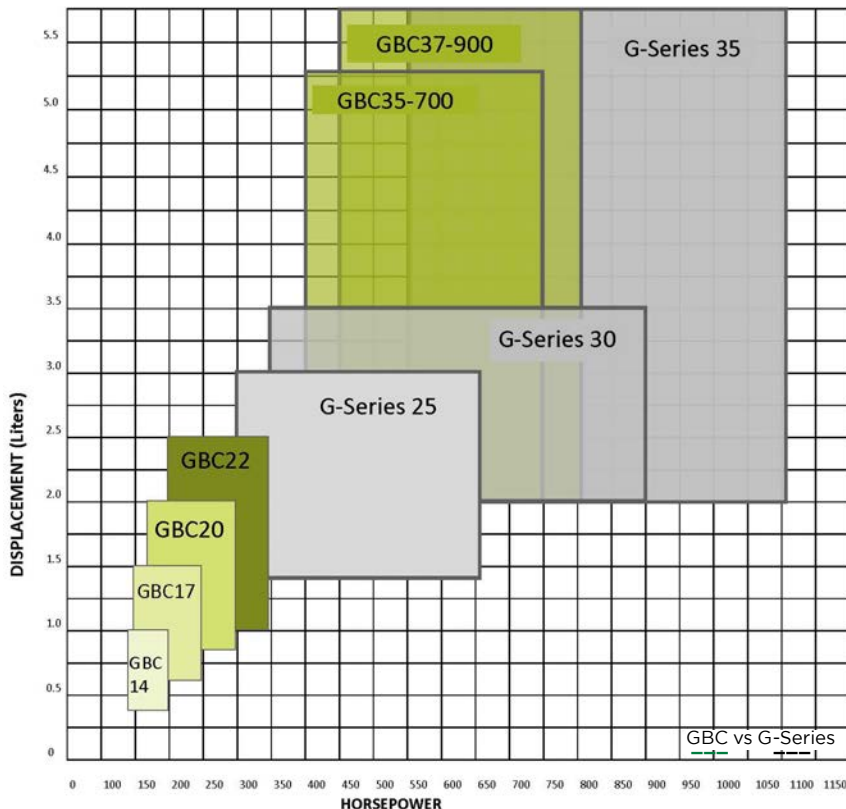


THE REPLACEMENT FOR **SMALL** DISPLACEMENT



GBC Product Features	GBC14-200	GBC17-250	GBC20-300	GBC22-350	GBC35-700	GBC37-900
Turbo Reference Model	3436	3640	3942	4446	5862	6765
Horsepower Rating (BHP)	200	250	300	350	700	900
Displacement Range (L)	0.4 - 1.0	0.6 - 1.5	0.8 - 2.0	1.0 - 2.5	2.0 - 5.0	2.0 - 5.5
Compressor Wheel Ind (MM)	34	36	39	44	58	67
Turbine Wheel Exd (MM)	36	40	42	46	62	65
3-Bolt Inlet Turbine Housing (A/R)	0.45	X	X	X	X	X
T25 Inlet Turbine Housing (A/R)	X	0.50	0.55	0.64	X	X
T3 Inlet Turbine Housing (A/R)	X	X	X	X	0.82	0.82
T4 Inlet Turbine Housing (A/R)	X	X	X	X	0.82	0.82
T4 Divided Inlet Turbine Housing (A/R)	X	X	X	X	0.95	0.95
Standard Rotation	•	•	•	•	•	•
Aluminum Backplate	X	X	X	X	•	•
Journal Bearing Rotating Group	•	•	•	•	•	•
Oil Cooled Center Housing	•	•	•	•	•	•
Inconel Turbine Wheel	•	•	•	•	•	•
Internally Wastegated	•	•	•	•	X	X

GBC CLUB LINE



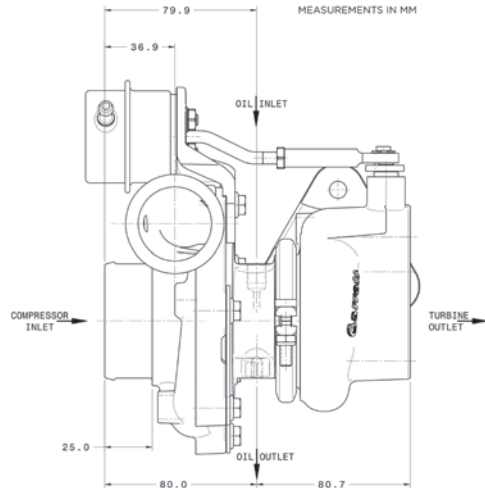
GARRETT BOOST | CLUB LINE FEATURES

- FRAME SIZES => 14, 17, 20, 22, 35, 37
- GBC (17|20|22) & (35|37) ARE OUTLINE INTERCHANGEABLE
- 150 - 900 HORSEPOWER CAPABILITY
- INTEGRATED WASTEGATE ASSEMBLY WITH CALIBRATED ACTUATOR (14|17|20|22)
- BILLET COMPRESSOR WHEEL WITH EXTENDED TIP DESIGN FOR HIGHER PRESSURE RATIO CAPABILITY
- GTX GEN II COMPRESSOR AERODYNAMICS
- MODERN TURBINE WHEEL AERODYNAMICS
- INCONEL TURBINE WHEEL MATERIAL
- DUCTILE IRON (SIMO+) TURBINE HOUSING MATERIAL
- JOURNAL BEARING ROTATING GROUP WITH 360-DEGREE THRUST BEARING
- OIL-COOLED CENTER HOUSING
- MACHINED BOOST SIGNAL PORT WITH INSTALLED PLUG

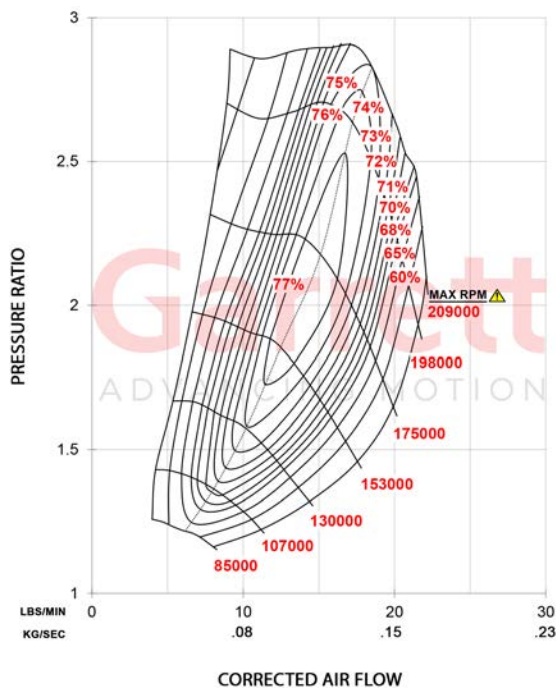
Garrett GBC14-200

Horsepower: 140 - 200
Displacement: 0.4L - 1.0L

Garrett
ADVANCING MOTION



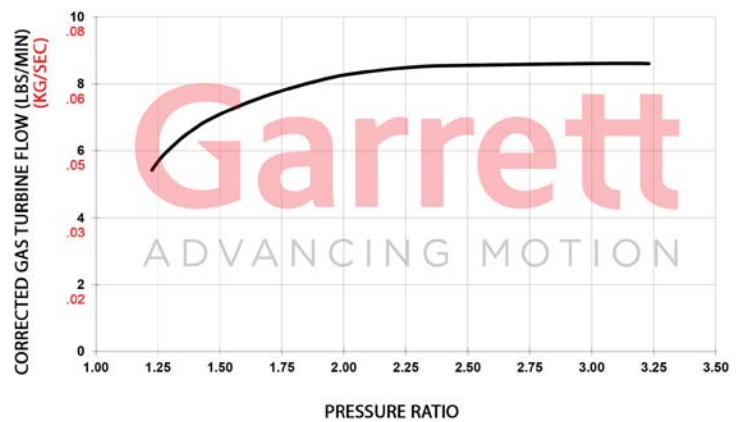
COMPRESSOR MAP



FEATURES:

- ◆ 34MM COMPRESSOR INDUCER
- ◆ SUPPORTS UP TO 200 HORSEPOWER
- ◆ FORGED FULLY-MACHINED COMPRESSOR WHEEL
- ◆ JOURNAL BEARING ROTATING GROUP
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ ENGINEERED FOR SMALL DISPLACEMENT ENGINES INCLUDING POWERSPORTS, PERSONAL WATERCRAFT AND AUTOMOBILES

EXHAUST FLOW CHART



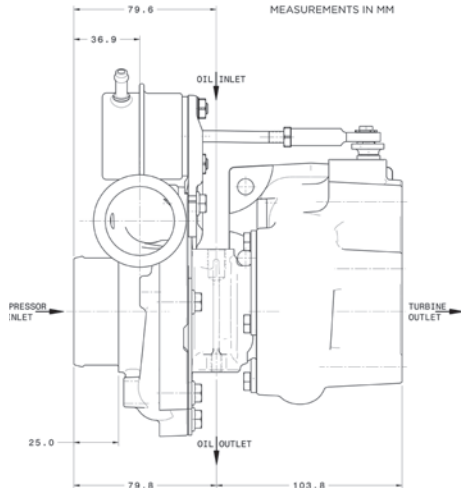
GBC14-200		Compressor			Turbine			
HP: 140-200	Disp: 0.4L-1.0L	Inducer	Exducer	A/R	Inducer	Exducer	Trim	A/R
Turbo PN: 896051-5004S		34mm	46mm	0.52	39mm	36mm	84	0.45
Turbine Wastegate Assembly		PN		A/R	Inlet	Outlet	Wastegate	Divided
Housing, V-Band Assy Included		827690-0010		0.45	3-Bolt	4-Bolt	Internal	N

Garrett GBC17-250

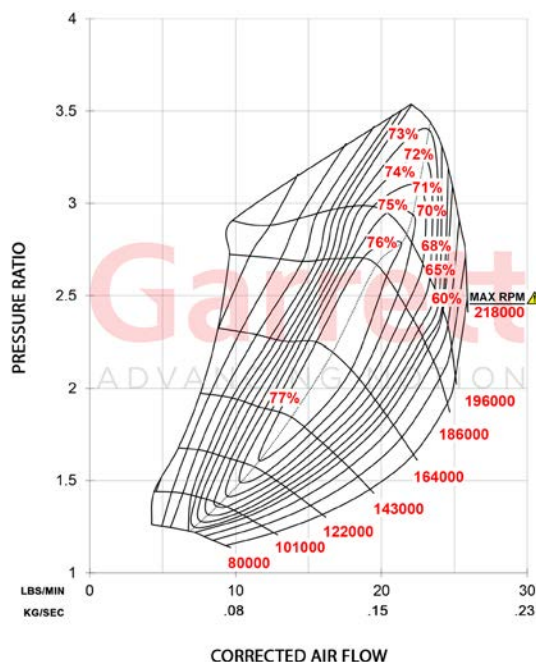
Horsepower: 150 - 250

Displacement: 0.6L - 1.5L

Garrett
ADVANCING MOTION



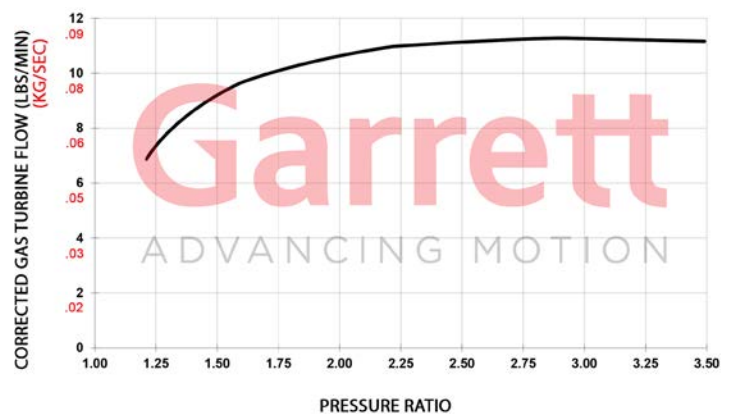
COMPRESSOR MAP



FEATURES:

- ◆ 36MM COMPRESSOR INDUCER
- ◆ SUPPORTS UP TO 250 HORSEPOWER
- ◆ FORGED FULLY-MACHINED COMPRESSOR WHEEL
- ◆ JOURNAL BEARING ROTATING GROUP
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ ENGINEERED FOR SMALL DISPLACEMENT ENGINES INCLUDING POWERSPORTS, PERSONAL WATERCRAFT AND AUTOMOBILES

EXHAUST FLOW CHART



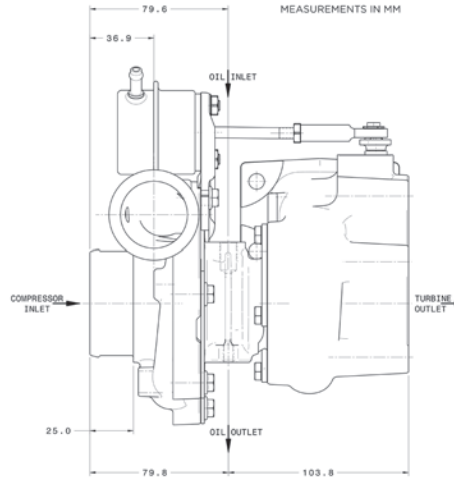
GBC CLUB LINE

GBC17-250		Compressor			Turbine			
HP: 150-250	Disp: 0.6L-1.5L	Inducer	Exducer	A/R	Inducer	Exducer	Trim	A/R
Turbo PN: 896052-5003S		36mm	49mm	0.52	44mm	40mm	80	0.5
Turbine Wastegate Assembly		PN		A/R	Inlet	Outlet	Wastegate	Divided
Housing, Clamps, Bolts, Inlet Gasket, Outlet Gasket Included		827690-0011		0.50	T25	5-Bolt	Internal	N

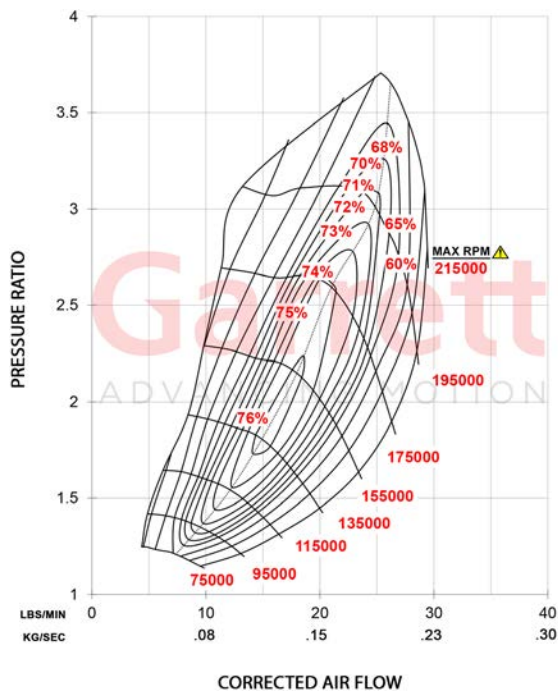
Garrett GBC20-300

Horsepower: 170 - 300
Displacement: 0.8L - 2.0L

Garrett
ADVANCING MOTION



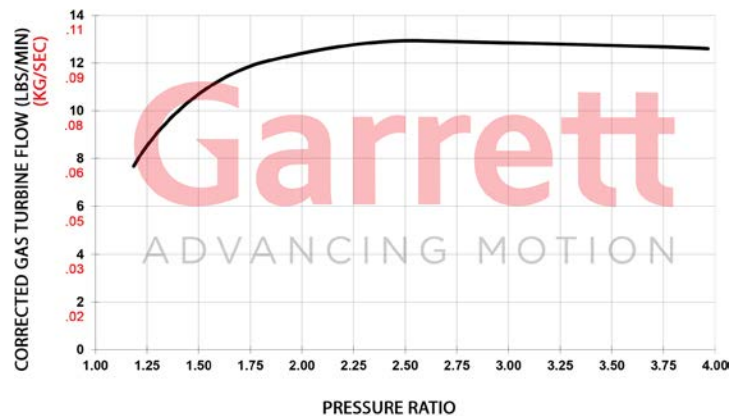
COMPRESSOR MAP



FEATURES:

- ◆ 39MM COMPRESSOR INDUCER
- ◆ SUPPORTS UP TO 300 HORSEPOWER
- ◆ FORGED FULLY-MACHINED COMPRESSOR WHEEL
- ◆ JOURNAL BEARING ROTATING GROUP
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ ENGINEERED FOR SMALL DISPLACEMENT ENGINES INCLUDING POWERSPORTS, PERSONAL WATERCRAFT AND AUTOMOBILES

EXHAUST FLOW CHART

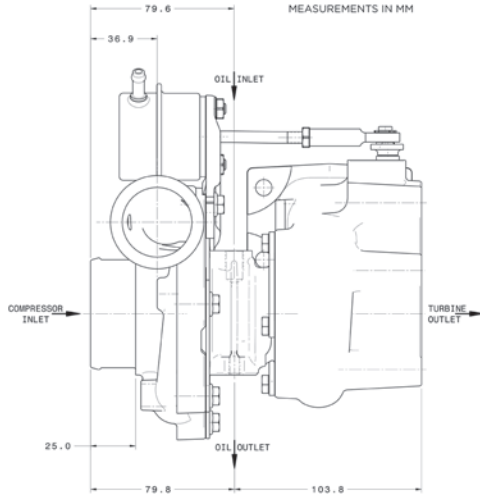


GBC20-300		Compressor			Turbine			
HP: 170-300	Disp: 0.8L-2.0L	Inducer	Exducer	A/R	Inducer	Exducer	Trim	A/R
Turbo PN: 896053-5003S		39mm	52mm	0.59	47mm	42mm	84	0.55
Turbine Wastegate Assembly		PN	A/R	Inlet	Outlet	Wastegate	Divided	
Housing, Clamps, Bolts, Inlet Gasket, Outlet Gasket Included		827690-0012	0.55	T25	5-Bolt	Internal	N	

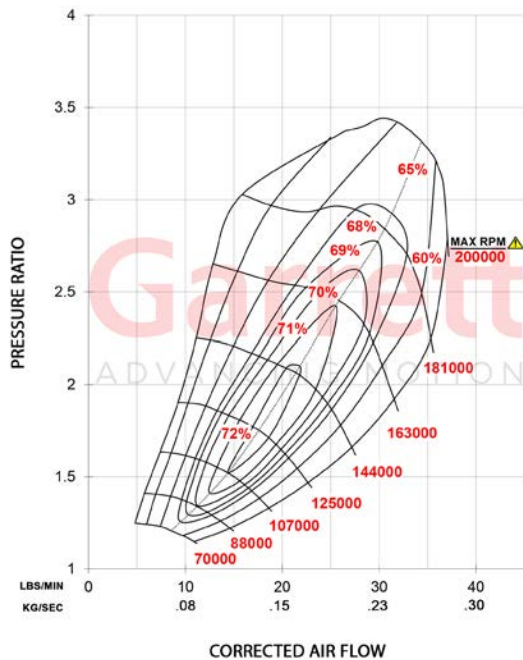
Garrett GBC22-350

Horsepower: 200 - 350
Displacement: 1.0L - 2.5L

Garrett
ADVANCING MOTION



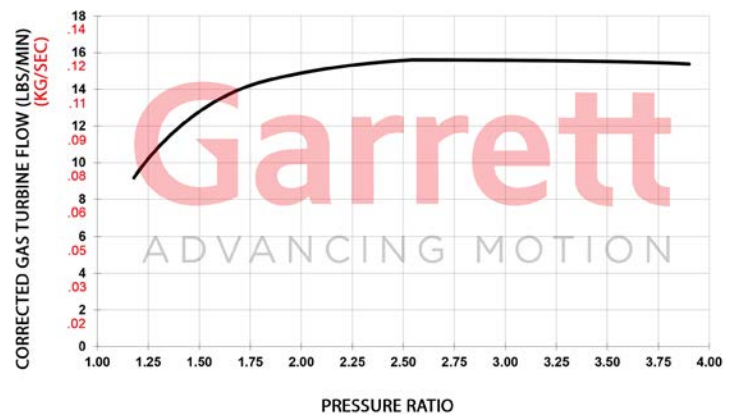
COMPRESSOR MAP



FEATURES:

- ◆ 44MM COMPRESSOR INDUCER
- ◆ SUPPORTS UP TO 350 HORSEPOWER
- ◆ FORGED FULLY-MACHINED COMPRESSOR WHEEL
- ◆ JOURNAL BEARING ROTATING GROUP
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ ENGINEERED FOR SMALL DISPLACEMENT ENGINES INCLUDING POWERSPORTS, PERSONAL WATERCRAFT AND AUTOMOBILES

EXHAUST FLOW CHART



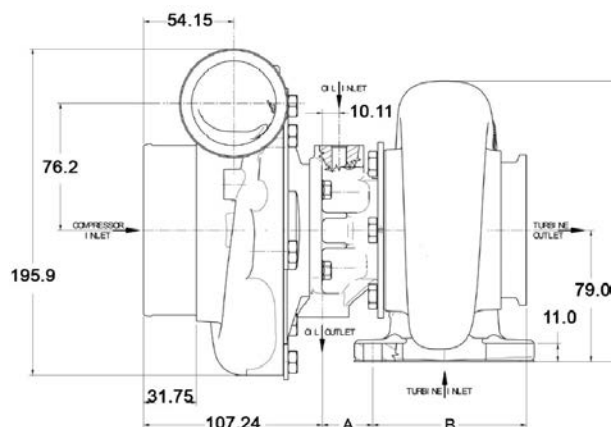
GBC CLUB LINE

GBC22-350		Compressor			Turbine			
HP: 200-350	Disp: 1.0L-2.5L	Inducer	Exducer	A/R	Inducer	Exducer	Trim	A/R
Turbo PN: 896055-5003S		44mm	56mm	0.59	50mm	46mm	84	0.64
Turbine Wastegate Assembly		PN	A/R	Inlet	Outlet	Wastegate	Divided	
Housing, Clamps, Bolts, Inlet Gasket, Outlet Gasket Included		827690-0013	0.64	T25	5-Bolt	Internal	N	

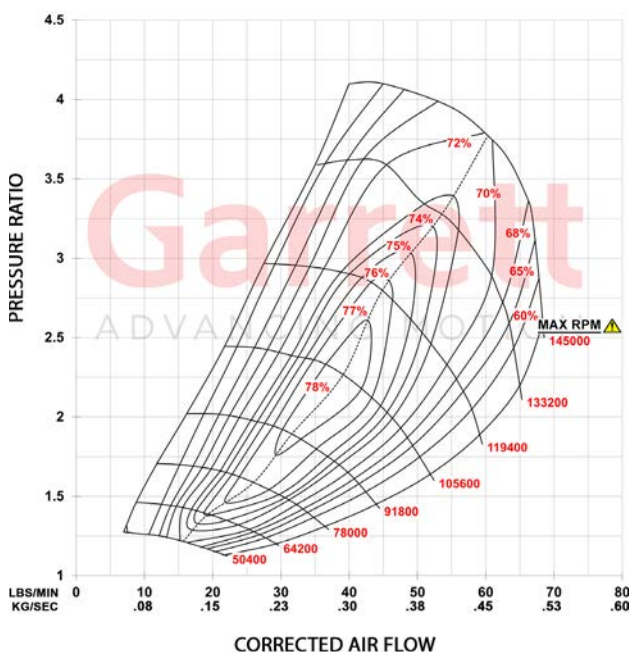
Garrett GBC35-700

Horsepower: 400 - 700
Displacement: 2.0L - 5.0L

Garrett
ADVANCING MOTION



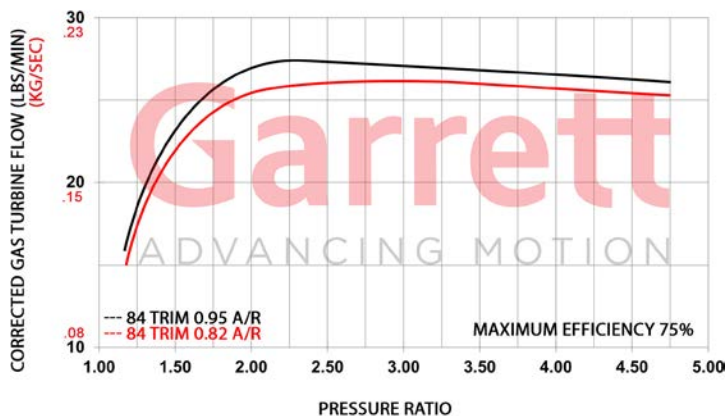
COMPRESSOR MAP



FEATURES:

- ◆ 58MM COMPRESSOR INDUCER | 76MM COMPRESSOR EXDUCER
- ◆ BILLET COMPRESSOR WHEEL WITH EXTENDED TIP DESIGN FOR HIGHER PRESSURE RATIOS
- ◆ JOURNAL BEARING WITH 360-DEGREE THRUST BEARING
- ◆ OUTLINE INTERCHANGEABLE WITH GBC37-900
- ◆ MACHINED BOOST SIGNAL PORT WITH INSTALLED PLUG
- ◆ MODERN TURBINE WHEEL AERODYNAMICS
- ◆ OIL-COOLED CENTER HOUSING

EXHAUST FLOW CHART

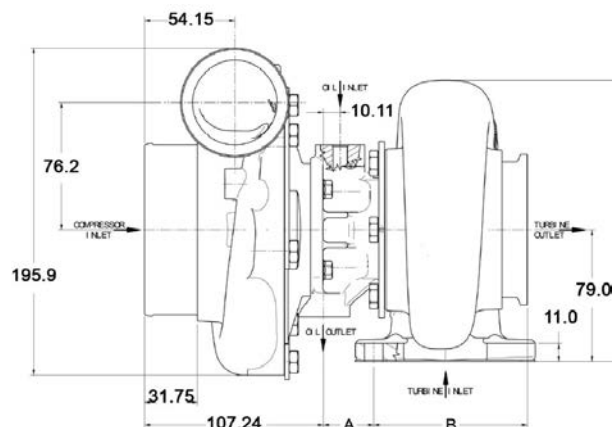


GBC35-700		Compressor				Turbine		
HP: 400-700	Disp: 2.0L-5.0L	Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim
		58mm	76mm	58	0.72	68mm	62mm	84
Supercore		PN						
		913840-5001S						
Turbine Kits: GBC35		PN		A/R	Inlet	Outlet	Wastegate	Divided
Free Float		740902-0123		0.82	T3	V-Band	External	N
		740902-0124		0.82	T4	V-Band	External	N
		740902-0125		0.95	T4	V-Band	External	Y

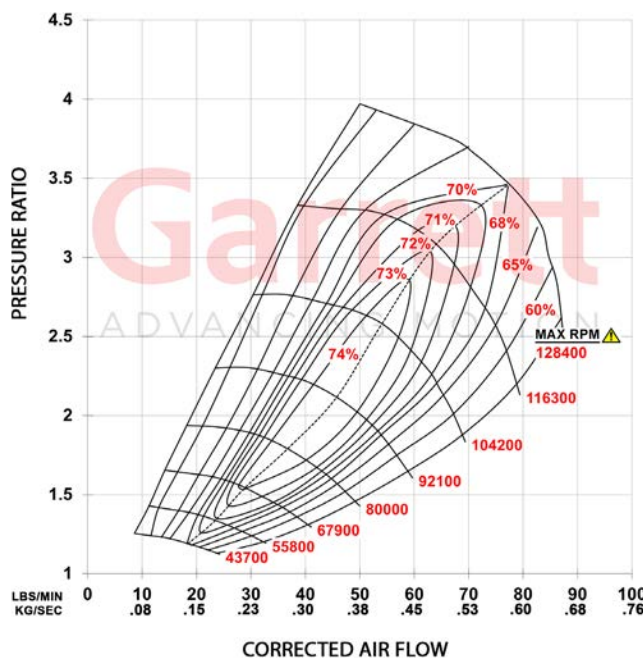
Garrett GBC37-900

Horsepower: 450 - 900
Displacement: 2.0L - 5.5L

Garrett
ADVANCING MOTION



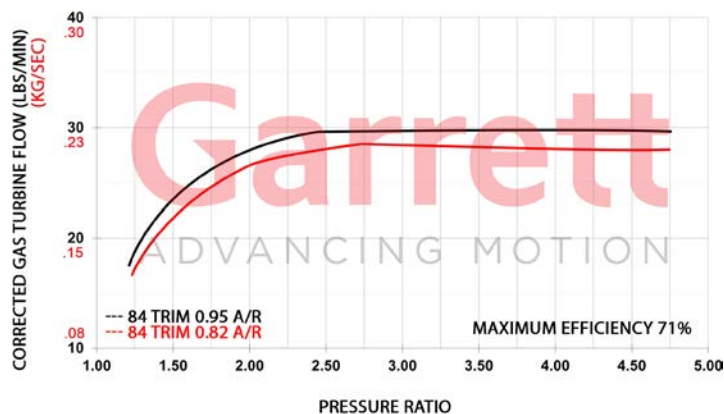
COMPRESSOR MAP



FEATURES:

- ◆ 67MM COMPRESSOR INDUCER | 84MM COMPRESSOR EXDUCER
- ◆ BILLET COMPRESSOR WHEEL WITH EXTENDED TIP DESIGN FOR HIGHER PRESSURE RATIOS
- ◆ JOURNAL BEARING WITH 360-DEGREE THRUST BEARING
- ◆ OUTLINE INTERCHANGEABLE WITH GBC35-700
- ◆ MACHINED BOOST SIGNAL PORT WITH INSTALLED PLUG
- ◆ MODERN TURBINE WHEEL AERODYNAMICS
- ◆ OIL-COOLED CENTER HOUSING

EXHAUST FLOW CHART



GBC CLUB LINE

GBC37-900		Compressor				Turbine		
HP: 450-900	Disp: 2.0L-5.5L	Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim
		67mm	84mm	64	0.72	73mm	65mm	80
Supercore		PN						
		913840-5002S						
Turbine Kits: GBC37		PN	A/R	Inlet	Outlet	Wastegate	Divided	
Free Float		740902-0126	0.82	T3	V-Band	External	N	
		740902-0127	0.82	T4	V-Band	External	N	
		740902-0128	0.95	T4	V-Band	External	Y	

GT SERIES

Garrett GT Series is the name that pioneered turbo technology and boosted drag racing and road racing teams to break hundreds of world records. The GT Series lineup is offered in both journal and ball bearing options, with sizes ranging from GT2052 to GT3582.

The cast compressor wheels feature original GT Series aerodynamics and provide maximum durability and longevity. Internally wastegated turbine housing options are available in all GT Series sizes.

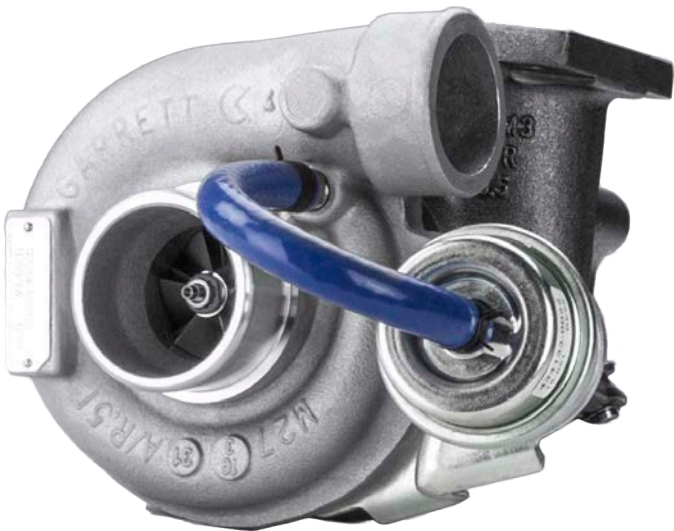
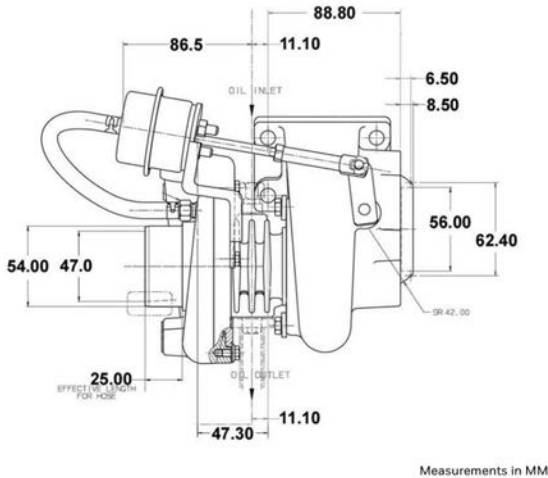
Turbine kits are offered in open volute and twin scroll, and a variety of A/R and flange configurations. For any performance need, GT Series turbochargers have you covered.



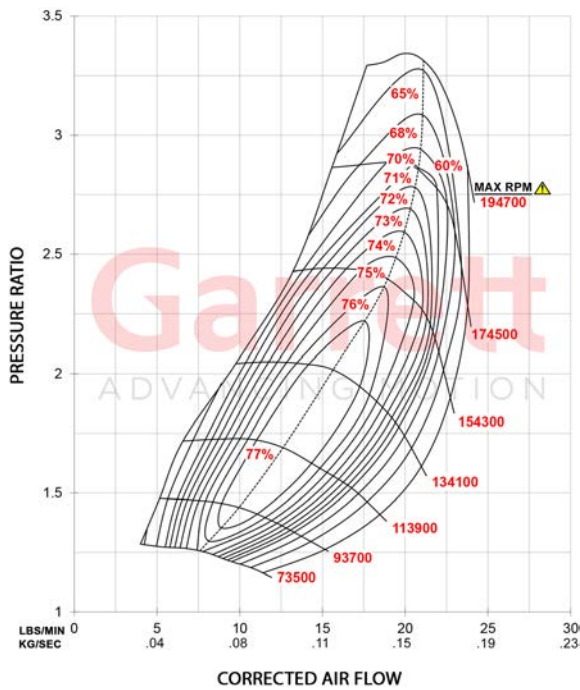


Garrett GT2052

Horsepower: 140 - 230
Displacement: 1.4L - 2.0L



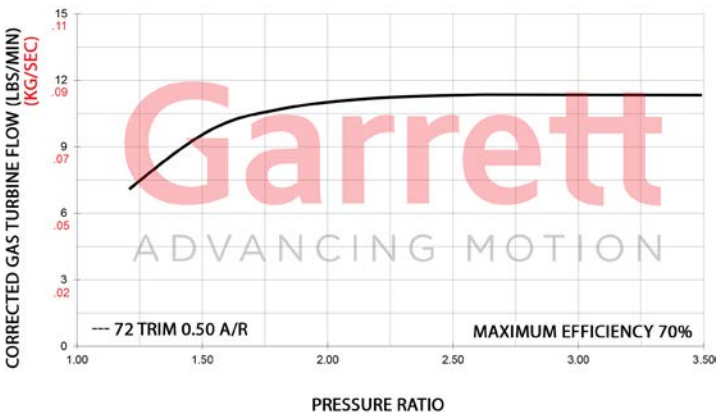
COMPRESSOR MAP



FEATURES:

- ◆ ORIGINAL GT SERIES AERODYNAMICS
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ SOLD AS A COMPLETE TURBO (INCLUDES TURBINE KIT)
- ◆ JOURNAL BEARING CONFIGURATION
- ◆ OIL COOLED CHRA

EXHAUST FLOW CHART



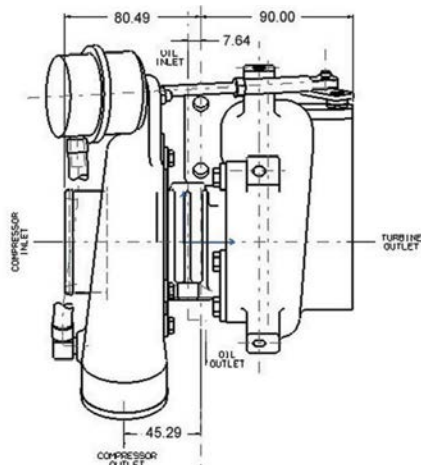
GT2052			Compressor			Turbine		
HP: 140-230 Disp: 1.4L-2.0L			Inducer	Exducer	A/R	Inducer	Exducer	Trim
Turbo PN: 727264-5001W			38mm	52mm	0.51	47mm	40mm	72
						A/R		
						0.50		

Garrett GT2252

Horsepower: 150 - 260

Displacement: 1.7L - 2.5L

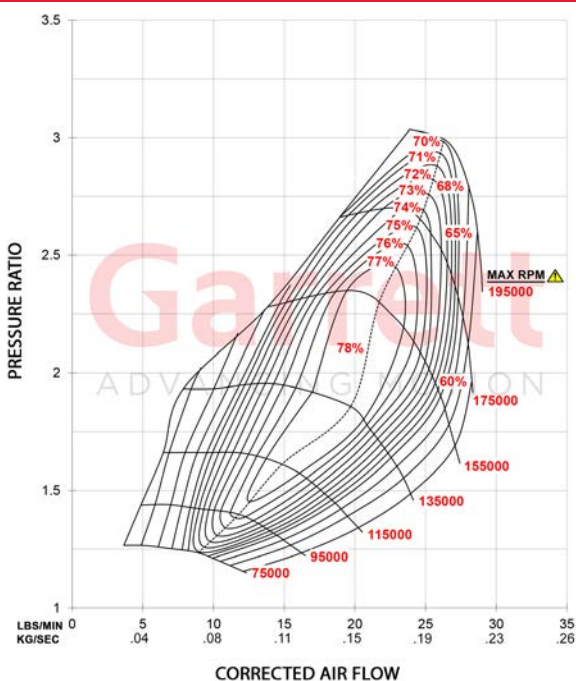
Garrett
ADVANCING MOTION



Measurements in MM



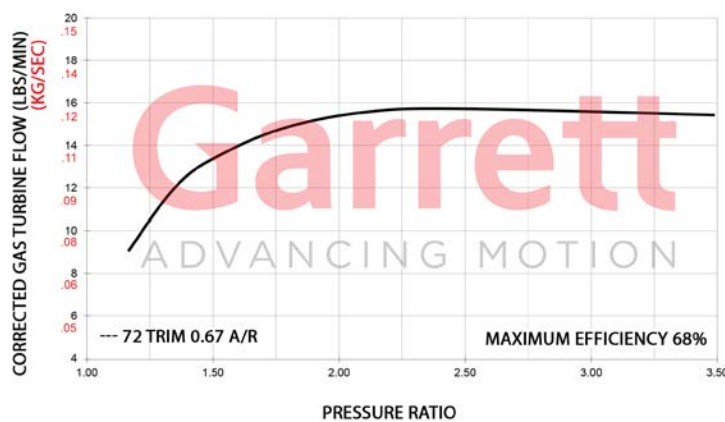
COMPRESSOR MAP



FEATURES:

- ◆ ORIGINAL GT SERIES AERODYNAMICS
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ SOLD AS A COMPLETE TURBO (INCLUDES TURBINE KIT & ACTUATOR)
- ◆ JOURNAL BEARING CONFIGURATION
- ◆ OIL COOLED CHRA

EXHAUST FLOW CHART



GT2252			Compressor			Turbine		
HP: 150-260	Disp: 1.7L-2.5L		Inducer	Exducer	A/R	Inducer	Exducer	Trim
Turbo PN: 452187-5006S			40mm	52mm	0.51	50mm	43mm	72
						A/R		
						0.67		

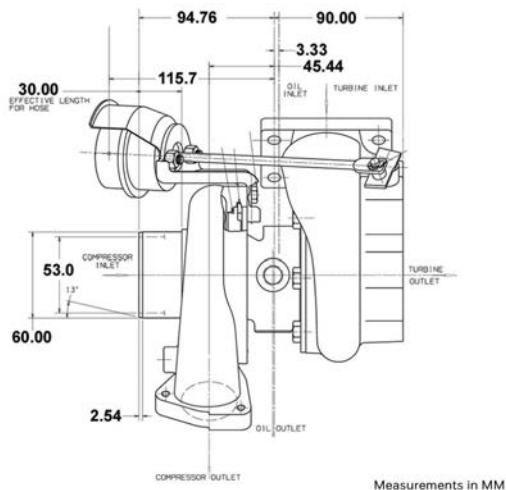
GT SERIES

Garrett GT2554R

Horsepower: 170 - 270

Displacement: 1.4L - 2.2L

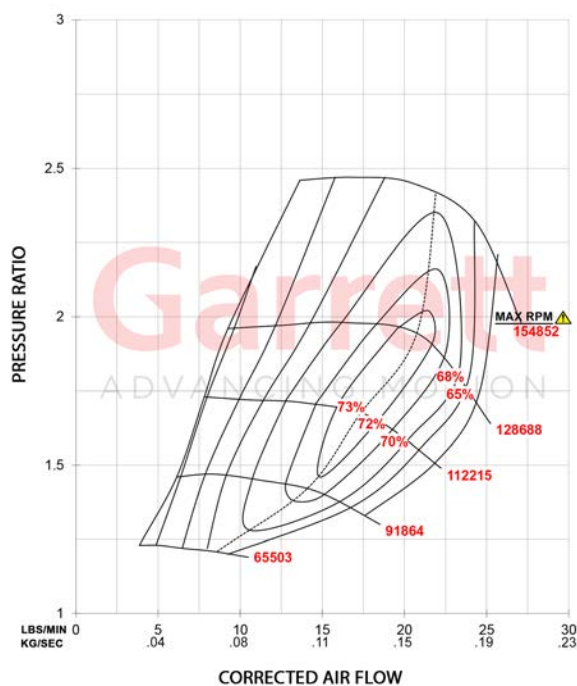
Garrett
ADVANCING MOTION



Measurements in MM



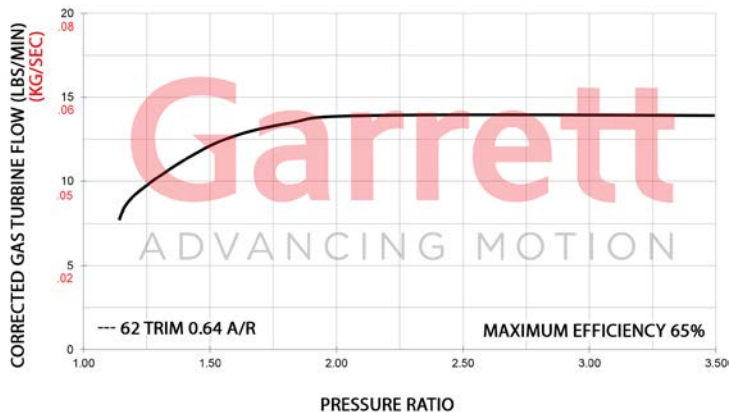
COMPRESSOR MAP



FEATURES:

- ◆ ORIGINAL GT SERIES AERODYNAMICS
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ SOLD AS A COMPLETE TURBO (INCLUDES TURBINE KIT & ACTUATOR)
- ◆ SMALLEST BALL BEARING CONFIGURATION AVAILABLE
- ◆ WATER COOLED CHRA

EXHAUST FLOW CHART



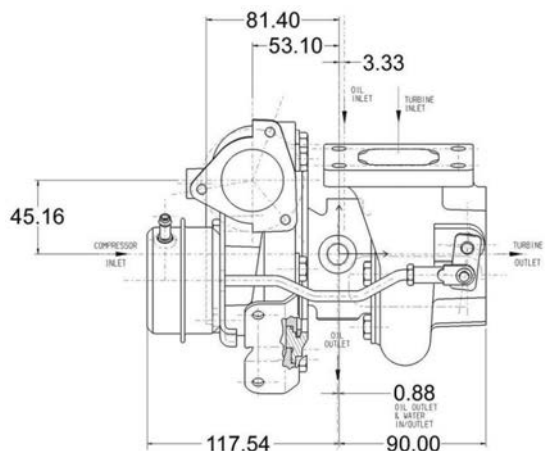
GT2554R		Compressor			Turbine			
HP: 170-270	Disp: 1.4L-2.2L	Inducer	Exducer	A/R	Inducer	Exducer	Trim	A/R
Turbo PN: 836023-5001S		42mm	54mm	0.80	53mm	42mm	62	0.64

Garrett GT2560R

Horsepower: 200 - 330

Displacement: 1.6L - 2.5L

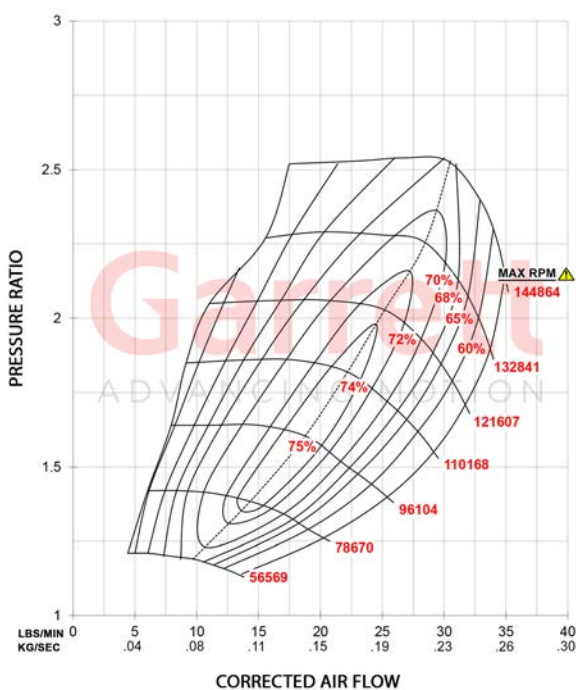
Garrett
ADVANCING MOTION



Measurements in MM



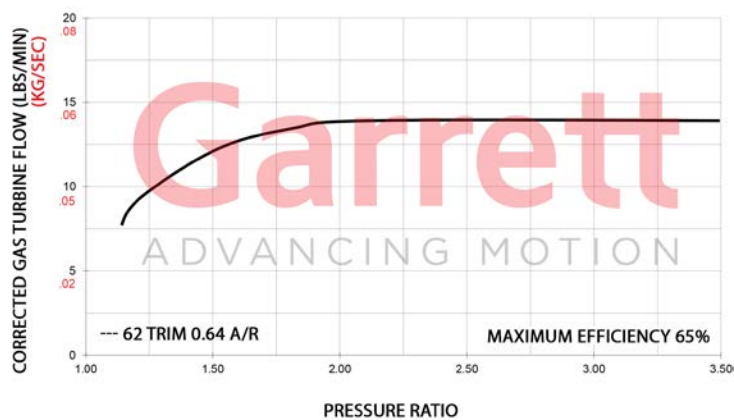
COMPRESSOR MAP



FEATURES:

- ◆ ORIGINAL GT SERIES AERODYNAMICS
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ SOLD AS A COMPLETE TURBO (INCLUDES TURBINE KIT & ACTUATOR)
- ◆ BALL BEARING CONFIGURATION WITH WATER COOLED CHRA

EXHAUST FLOW CHART



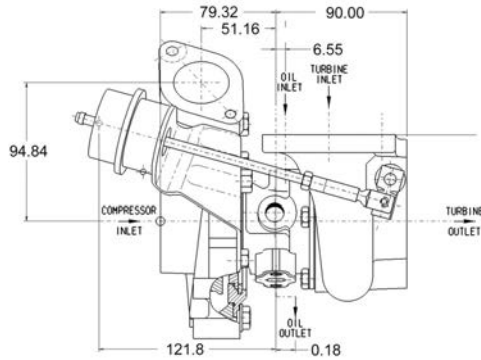
GT SERIES

GT2560R		Compressor			Turbine			
HP: 200-330	Disp: 1.6L-2.5L	Inducer	Exducer	A/R	Inducer	Exducer	Trim	A/R
Turbo PN: 836023-5004S		46mm	60mm	0.80	53mm	42mm	62	0.64

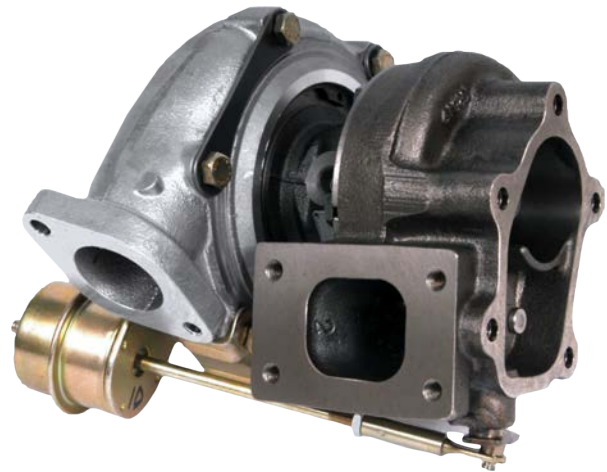
Garrett GT2860R

Horsepower: 250 - 360
Displacement: 1.8L - 3.0L

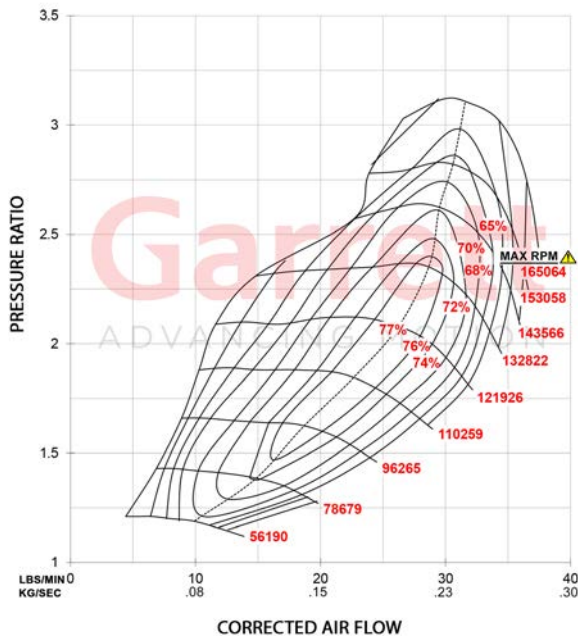
Garrett
ADVANCING MOTION



Measurements in MM



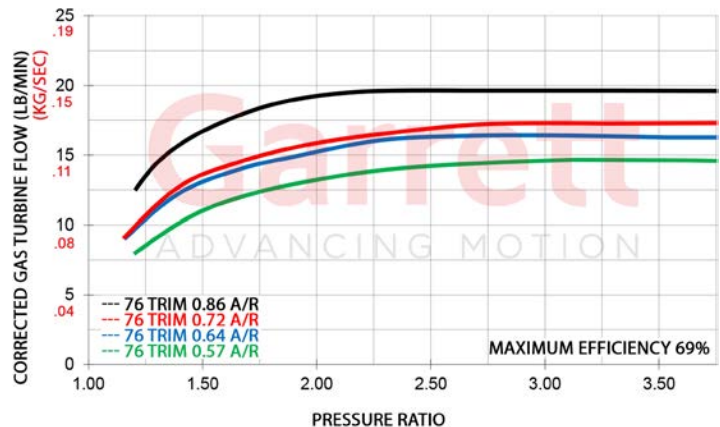
COMPRESSOR MAP



FEATURES:

- ◆ ORIGINAL GT SERIES AERODYNAMICS
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ SOLD AS A COMPLETE TURBO (INCLUDES TURBINE KIT & ACTUATOR)
- ◆ BALL BEARING CONFIGURATION WITH WATER COOLED CHRA
- ◆ V-BAND TURBINE HOUSING OPTIONS
- ◆ BOLT-ON UPGRADE FOR NISSAN RB26DETT

EXHAUST FLOW CHART



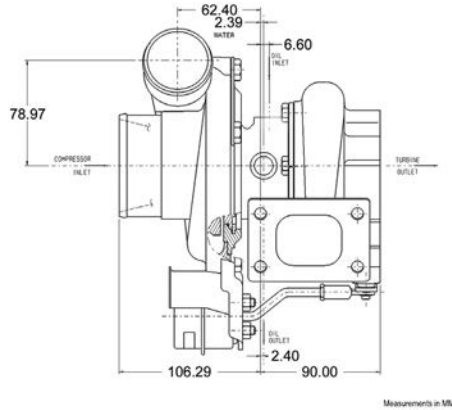
GT2860R		Compressor			Turbine			
HP: 250-360	Disp: 1.8L-3.0L	Inducer	Exducer	A/R	Inducer	Exducer	Trim	A/R
Turbo PN: 836026-5005S		47mm	60mm	0.60	54mm	47mm	76	0.64
Turbine Kits: GT28		PN			Inlet	Outlet	Wastegate	Divided
Kits not directly interchangeable.		827690-0005		0.64	T25	5-Bolt	Internal	N
Modifications required to the		827690-0004		0.86	T25	5-Bolt	Internal	N
exhaust system to fit.		827690-0001		0.57	V-Band	V-Band	External	N
		827690-0002		0.72	V-Band	V-Band	External	N

Garrett GT2860RS

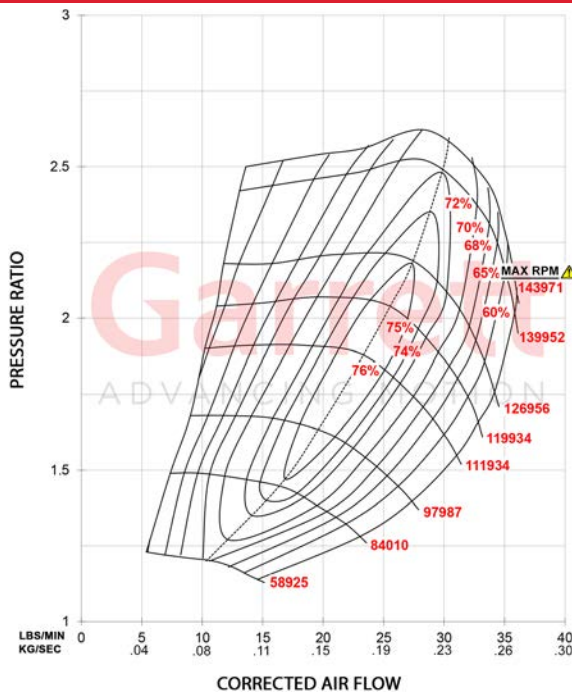
Horsepower: 250 - 360

Displacement: 1.8L - 3.0L

Garrett
ADVANCING MOTION



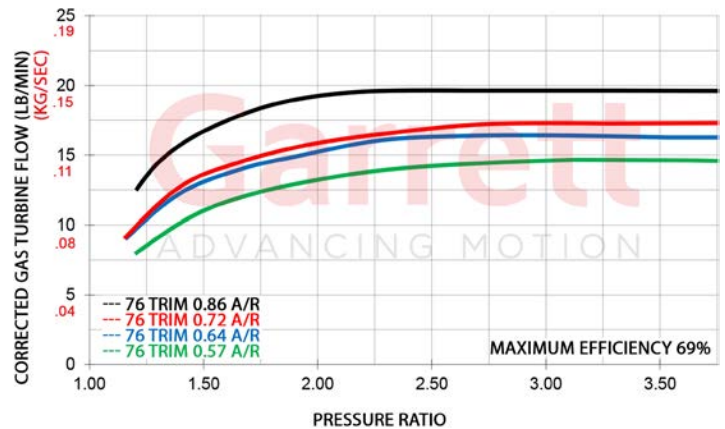
COMPRESSOR MAP



FEATURES:

- ◆ ORIGINAL GT SERIES AERODYNAMICS
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ SOLD AS A COMPLETE TURBO (INCLUDES TURBINE KIT & ACTUATOR)
- ◆ BALL BEARING CONFIGURATION WITH WATER COOLED CHRA
- ◆ V-BAND TURBINE HOUSING OPTIONS

EXHAUST FLOW CHART



GT2860RS HP: 250-360 Disp: 1.8L-3.0L	Compressor			Turbine			
	Inducer	Exducer	A/R	Inducer	Exducer	Trim	A/R
Turbo PN: 836026-5013S	47mm	60mm	0.60	54mm	47mm	76	0.86
Turbo PN: 836026-5014S	47mm	60mm	0.60	54mm	47mm	76	0.64
Turbine Kits: GT28	PN			Inlet	Outlet	Wastegate	Divided
Kits not directly interchangeable.	827690-0005		0.64	T25	5-Bolt	Internal	N
Modifications required to the exhaust system to fit.	827690-0004		0.86	T25	5-Bolt	Internal	N
	827690-0001		0.57	V-Band	V-Band	External	N
	827690-0002		0.72	V-Band	V-Band	External	N

GT SERIES

GARRETT CLASSIC



Garrett Classic Turbochargers seamlessly blend modern engineering with direct-fit installation, designed specifically for iconic European cars that ignited the auto industry's turbo revolution. Experience unparalleled performance and reliability, ensuring your vehicle maintains its legendary status while embracing cutting-edge technology.



Garrett Classic Turbo

Lancia Delta HF Integrale 16V / 16V Evo1

Part Number: 917375-5005W



Garrett | Classic Turbo incorporates modern engineering with direct-fit installation for the iconic Lancia Delta 2.0 16V HF Integrale and EVO 1. The modern journal bearing rotating group utilizes a 360-degree thrust bearing for improved reliability. This turbocharger includes a gasket kit for a direct-fit installation.

Garrett DSR PN	Model	Year	Garrett PN	OEM PN
917375-5005W	Lancia Delta HF Integrale 16V Evo 1	1991-1992	465553-5001S	7662974
	Lancia Delta HF Integrale 16V	1989-1991		46234219 7662974

FEATURES

- 360-degree thrust bearing to improve reliability and durability of the rotor system during extreme operating conditions
- Separate actuator bracket is mounted to the compressor housing to improve stiffness against engine vibration
- Robust turbine housing, engineered using of thermal simulation to avoid cracks and other failures
- Includes gasket kit 917890-0001 (Turbine inlet, oil inlet, oil outlet)
- Direct-fit installation



Garrett Classic Turbo

Lancia Delta HF Integrale

Part Number: 917375-5004W



Garrett | Classic Turbo incorporates modern engineering with direct-fit installation for the iconic Lancia Delta HF Integrale 8V, 16V | Lancia Dedra | Alfa 155 2.0 Q4 | Fiat Coupe 16V. The modern journal bearing rotating group utilizes a 360-degree thrust bearing for improved reliability. Garrett integrated the actuator bracket into the compressor housing to strengthen the turbocharger. This turbocharger includes a gasket kit for a direct-fit installation.

Model	Year	Garrett DSR PN	Garrett PN	OE PN
Lancia Delta HF Integrale (8V, catalytic converter) Lancia Delta HF Integrale 16V	1989-1991	917375-5004W	465103-5002S	76317230
			465103-5004S	77202760
			465103-5006S	76863370
			465103-5009S	77294710
Lancia Dedra 2.0 Turbo Integrale	1991-1994		465103-5009S	77294710
Alfa 155 2.0 Q4 16V Turbo	1992-1994		465103-5004S	77202760
Fiat Coupé 2.0 16V Turbo	1993-1996		465103-5004S	77202760

FEATURES

- 360-degree thrust bearing to improve reliability and durability of the rotor system during extreme operating conditions
- Wastegate actuator bracket is cast into the compressor housing to improve stiffness against engine vibration
- Robust turbine housing, engineered using of thermal simulation to avoid cracks and other failures
- Includes gasket kit 917890-0001 (Turbine inlet, oil inlet, oil outlet)
- Direct-fit installation



Garrett Classic Turbo

Renault 5 Turbo 1 & 2

Part Number: 920072-5003W



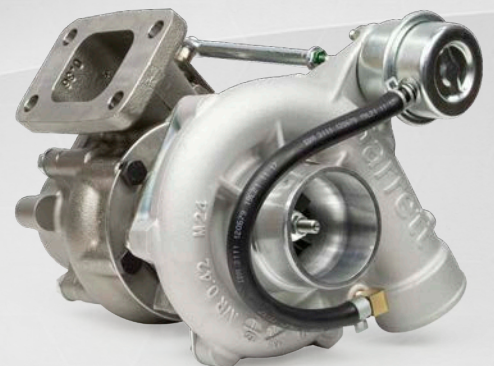
Introducing the Garrett Classic Turbo - the perfect blend of modern engineering and iconic design for your Renault 5 Turbo. Our state-of-the-art engineering technology ensures the ultimate driving experience by combining performance and reliability with direct-fit installation. It's journal bearing rotating group incorporates a 270-degree thrust bearing for enhanced reliability. We've integrated the actuator bracket into the compressor housing to ensure a stronger, more durable turbocharger that will keep your Renault 5 Turbo running smoothly for years to come.

Don't settle for anything less than world-class engineering and reliability for your automotive investment. By choosing Garrett Classic, the only original turbo, for the ultimate upgrade on your Renault 5 Turbo, you will increase the value of your car and you elevate your driving experience.

Garrett DSR PN	Model	Year	Garrett PN
920072-5003W	Renault 5 Turbo 1	1980-1982	465646-5003S
	Renault 5 Turbo 2	1983-1985	465646-5004S

FEATURES

- Carbon seal provides an oil-tight barrier for draw-through carburetor setups
- 270-degree thrust bearing to improve reliability and durability of the rotor system during extreme operating conditions
- Wastegate actuator bracket is cast into the compressor housing to improve stiffness against engine vibration
- Robust turbine housing, engineered using of thermal simulation to avoid cracks and other failures
- Includes gasket kit 917890-0002 (oil inlet, oil outlet)
- Direct-fit installation



GARRETT VENT | WASTEGATES



Garrett Vent | External Wastegates regulate turbocharger shaft speed by venting exhaust gas around the turbine stage of the turbocharger. CFD optimized design maximizes flow and delivers optimum boost control. Advanced thermal optimization increases durability of the diaphragm. The cap design makes spring changes and serviceability of the entire GVW lineup easier and more reliable to perform.



Garrett Vent | External wastegates are created by the engineers that designed G-Series and GTX Gen II turbochargers. Available in three sizes: 40mm | 45mm | 50mm and four color combinations: Red | Blue | Black | Silver. The valve housing is cast from high temp stainless steel and rated for exhaust temperatures up to 1050° C. CFD optimized for maximum flow and thermal efficiency. Our Nomex reinforced elastomer diaphragm provides exceptional durability and fatigue resistance.

Model	Base Pressure	Red	Blue	Black	Silver
GVW-40	1 Bar 14.5 PSI	908827-0001	908827-0002	908827-0003	908827-0004
GVW-45	1 Bar 14.5 PSI	908828-0001	908828-0002	908828-0003	908828-0004
GVW-50	1 Bar 14.5 PSI	908829-0001	908829-0002	908829-0003	908829-0004
GVW-60	1 Bar 14.5 PSI	908830-0001	908830-0002	908830-0003	908830-0004

Features:

- CFD tested for maximum flow and thermal efficiency
- Rated up to 1050°C peak exhaust temp
- Replaceable valve and bushing components increase service life
- Robust design for easy diaphragm replacement
- Liquid-cooling ports provide up to 52% reduction in temps
- Anodized aluminum actuator cover in four colors
Red | Blue | Black | Silver
- Three Sizes: 40mm | 45mm | 50mm | 60mm
- Springs | Fittings | Flanges | V-Bands included with kits
- Standard Base Pressure: 1 Bar | 14.5 PSI
- Maximum Base Pressure:
GVW-40: 25 PSI | 1.7 Bar
GVW-45 | GVW-50 | GVW-60 23 PSI | 1.6 Bar
- Minimum Base Pressure: 3 PSI | 0.2 Bar



Mechanical Data	GVW-40	GVW-45	GVW-50	GVW-60
Valve Diameter	40mm	45mm	50mm	60mm
Valve Mass	1.27kg 45oz	1.47kg 52oz	1.56kg 55oz	1.74kg 61oz
Max Spring Base Pressure	1.7 bar 25 psi (1:1 backpressure ratio)			
Minimum Spring Base Pressure	0.2 bar 3 psi (1:1 backpressure ratio)			
Port Fitting: Air	M10x1.0 to hose barb (Hose ID 6mm .25in)			
Port Fitting: Liquid	M8x1.0 to AN-3			

Material Data	GVW-40 GVW-45 GVW-50 GVW-60
Valve Housing	High temp stainless steel rated up to 1050°C
Diaphragm	High temp Nomex reinforced elastomer
Actuator Cover	Fully-machined anodized 6061 aluminum
Valve Guide/Bushing	Nitronic 60
Valve	High temp stainless steel with plated stem
V-Band	CNC machined 304 stainless steel
Flanges	Fully-machined 304 stainless steel
Springs	17/7 PH stainless steel

GVW-40

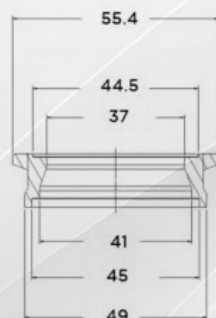
GVW-45

GVW-50

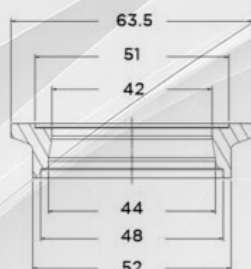
GVW-60



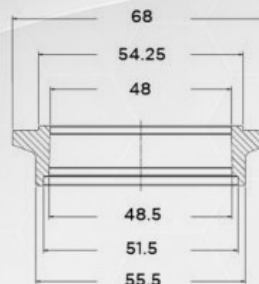
Inlet Flange Specs



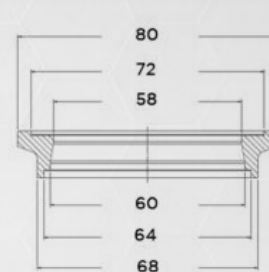
GVW-40: Interchangeable with Tial MV-S, MV-R



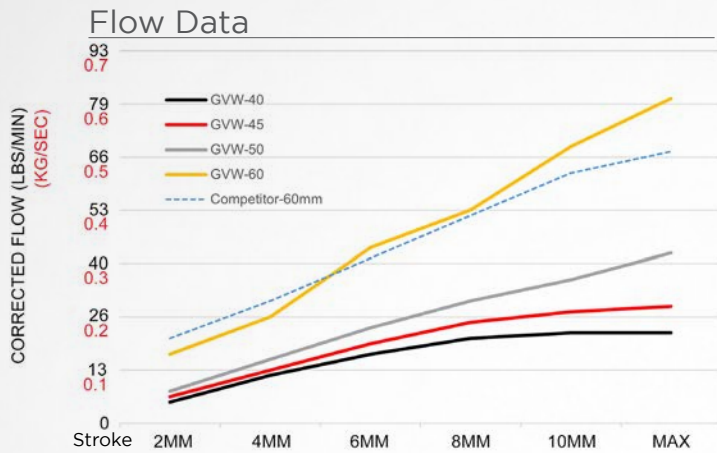
GVW-45: Interchangeable with Tial MV-S, MV-R & Turbosmart HyperGate



GVW-50: Interchangeable with Turbosmart Gen V ProGate 50



GVW-60: Interchangeable with Turbosmart Gen V PowerGate 60

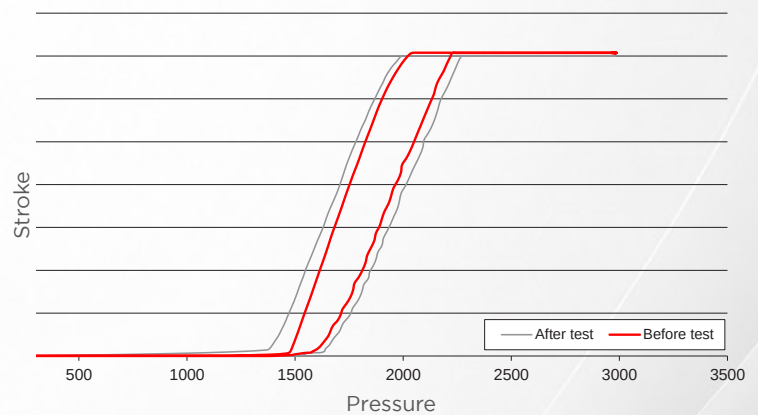


Actuation Durability Test Data

When researching and testing common shortfalls of wastegates, we observed how heat cycling and normal wear can rapidly change their actuation characteristics. Garrett engineers created GVW as a high flowing product with low degradation in performance over its lifespan.

Actuation data (opening and closing) in the chart was measured before and after extreme testing conditions. Results show the heat cycled GVW product maintains linear control of the wastegate as compared to the new product.

Precise actuation of the GVW provides accurate calibration settings and performance throughout the lifespan of the product. Accurate wastegates, allow for optimum performance of the turbocharger.



Spring Pressure Chart

									Base Pressure								
GVW-40	PSI	3	4	6	7	9	10	12	13	14.5	16	17	19	20	22	23	25
	Bar	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7
	Red	x					x	x			x						
	Blue		x						x	x		x			x	x	x
	Green			x			x		x				x			x	
	White				x			x						x	x		x
	Brown					x				x					x		
GVW-45 GVW-50	PSI	3	4	6	7	9	10	12	13	14.5	16	17	19	20	22	23	
	Bar	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.1	1.2	1.3	1.4	1.5	1.6	
	Blue	x				x	x		x	x	x				x	x	
	Green		x						x			x	x		x		
	White			x		x		x		x				x		x	
	Brown				x		x	x	x	x	x	x					
	Purple												x	x	x	x	
GVW-60	PSI	3	4	6	7	9	10	12	13	14.5	16	17	19	20	22	23	
	Bar	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.1	1.2	1.3	1.4	1.5	1.6	
	Blue						x	x					x			x	
	Green	x							x					x			
	White		x							x					x	x	
	Yellow				x		x					x	x	x	x	x	
	Purple			x							x						
GVW-60	PSI	3	4	6	7	9	10	12	13	14.5	16	17	19	20	22	23	
	Bar	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.1	1.2	1.3	1.4	1.5	1.6	
	Blue						x	x					x			x	
	Green	x							x					x			
	White		x							x					x	x	
	Yellow				x		x					x	x	x	x	x	
	Purple			x							x						

Spring pressures are calculated based on a 1:1 boost/backpressure ratio. Actual intake manifold (boost) pressure can vary

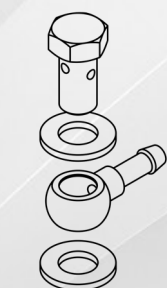
GARRETT VENT | EXTERNAL WASTEGATES

Ancillary Part Chart | Tightening Torque Specs

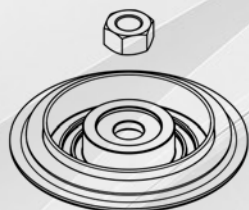


Description	Tightening Torque Nm ft-lb	GVW-40	GVW-45	GVW-50	GVW-60
Kit: Air Fitting (Banjo Fitting, Bolt, 2 Crush Washers)	15 11		910477-0001		
Kit: Diaphragm (Diaphragm Assy, Valve Stem Nut)	10 7	910476-0001	910476-0002		910476-0003
Kit: Valve/Bushing (Valve,Bushing,Seal Washer,O-Ring,Valve Stem Nut,Seat)	10 7	910478-0001	910478-0002	910478-0003	910478-0004
Kit: V-Band Inlet (V-Band, Bolt, Locknut)	15 11	910475-0001	910475-0003	910475-0004	910475-0005
Kit: V-Band Outlet (V-Band, Bolt, Locknut)	15 11	910475-0002	910475-0001	910475-0003	910475-0006
Bolt, Actuator Body	5 4		Bolt Not Available		
Bolt, Actuator Cap	2.5 2.0		894537-0001		
Bolt, V-band	N/A		894540-0006		
Bolt, Banjo Fitting	15 11		Included In Air Fitting Kit		
Bushing	30 22		Included In Valve/Bushing Kit		
Fitting, Water 8mm	10 7		895520-0001		
Fitting, Plug Air 10mm	15 11		895519-0001		
Flange, Inlet Weld	N/A	894649-0003	894649-0001	894649-0007	894649-0005
Flange, Outlet Weld	N/A	894649-0004	894649-0002	894649-0008	894649-0006
Locknut, V-band	15 11		905694-0001		
Nut, Valve	10 7		Included In Valve/Bushing Kit		
Seat, Valve	N/A	894648-0002	894648-0001	894648-0004	894648-0003
Spring, Red (See Spring Chart For Spring Pressure)	N/A	898344-0001			
Spring, Blue (See Spring Chart For Spring Pressure)	N/A		898344-0002		
Spring, Green (See Spring Chart For Spring Pressure)	N/A		898344-0003		
Spring, White (See Spring Chart For Spring Pressure)	N/A		898344-0004		
Spring, Brown (See Spring Chart For Spring Pressure)	N/A		898344-0005		
Spring, Purple (See Spring Chart For Spring Pressure)	N/A		898344-0006		
Spring, Black (See Spring Chart For Spring Pressure)	N/A		898344-0008		
Washer, Crush 8mm	N/A		895518-0002		
Washer, Crush 10mm	N/A		895518-0001		

GVW Replacement Part Kits



Air Fitting Kit



Diaphragm Kit



Valve/Bushing Kit



V-Band Inlet | Outlet Kit



GARRETT VENT | BLOW-OFF VALVES

Garrett Vent | Blow-Off Valves release excess boost pressure from the charge pipe when the throttle is closed, preventing damage to the turbocharger and other engine components, ensuring smooth operation and prolonging the turbo's lifespan.



GARRETT VENT | BLOW-OFF VALVES

High-Flowing Blow-Off Valves for Performance Engines

Garrett Vent | Blow-Off Valves are created by the engineers that designed G-Series turbochargers and GVW Wastegates. GVB-50 is a high-flowing BOV with a 50mm valve, available in four striking color combinations. Select between vent to atmosphere (VTA) and recirculating (RCV) housing options. Delivering a maximum flow up to 350 CFM | .21kg/s (RCV) as a result of advanced CFD design software used to simulate, visualize, and quantify airflow before manufacturing started (GVB-50R RCV). The proprietary designed, high-temperature Nomex reinforced elastomer diaphragm ensures unmatched durability and fatigue resistance. A plated stem and bushing lower friction and improve wear resistance.

GVB Blow-Off Valves are set to 10 PSI of base pressure and offer configurable rates from 0.2 Bar | 3 PSI - 0.9 Bar | 13 PSI. Unlike the other products on the market, Garrett includes five springs enabling fine tuning of the pressure setting to optimize BOV performance, and therefore overall turbo system performance. The single vacuum port streamlines functionality. Every kit contains- all fasteners, springs, fittings, V-bands, clamps, and flanges. For pricing and availability please contact an authorized distributor.

Spring Settings:

							Base Pressure		
GVB-50	PSI 3	4	6	7	9		10	12	13
	Bar 0.2	0.3	0.4	0.5	0.6		0.7	0.8	0.9
Red	x			x	x				x
Blue		x					x		
Green				x					x
White					x		x	x	
Brown			x					x	x



Model	Part Number	Base Pressure	Color	Description
GVB-50A	914956-0001	10PSI	Red	Vent to atmosphere
GVB-50A	914956-0002		Blue	Vent to atmosphere
GVB-50A	914956-0003		Black	Vent to atmosphere
GVB-50A	914956-0004		Silver	Vent to atmosphere
GVB-50R	914959-0001		Red	Recirculating housing
GVB-50R	914959-0002		Blue	Recirculating housing
GVB-50R	914959-0003		Black	Recirculating housing
GVB-50R	914959-0004		Silver	Recirculating housing
GVB-50R	913283-0001	Outlet Hose Adapter 1.00" (25.4mm)		
GVB-50R	913283-0002	Outlet Hose Adapter 1.14" (29.0mm)		
GVB-50R	913283-0003	Outlet Hose Adapter 1.34" (34.0mm)		
GVB-50R	913283-0004	Outlet Hose Adapter 1.50" (38.1mm)		

Features:

- CFD tested for maximum flow and thermal efficiency
- Replaceable components to increase service life
- Robust design for easy diaphragm replacement
- 6061 Anodized aluminum actuator cover and fully-machined billet housing
- Maximum flow 350 CFM | .21kg/s for GVB-50R
- Four outlet adapters for the recirculating valve. Adapters sold separately
- Base pressure 0.7 Bar | 10 PSI (blue and white spring installed)
- Configurable springs settings include: 3 | 4 | 6 | 7 | 9 | 10 | 12 | 13 PSI
- Wrought Aluminum Alloy Weld Flange
- 17/7 PH Stainless Steel Springs
- Plated stem and bushing for lowered friction and wear resistance
- High temp nomex reinforced diaphragm
- Stainless steel fittings and fasteners

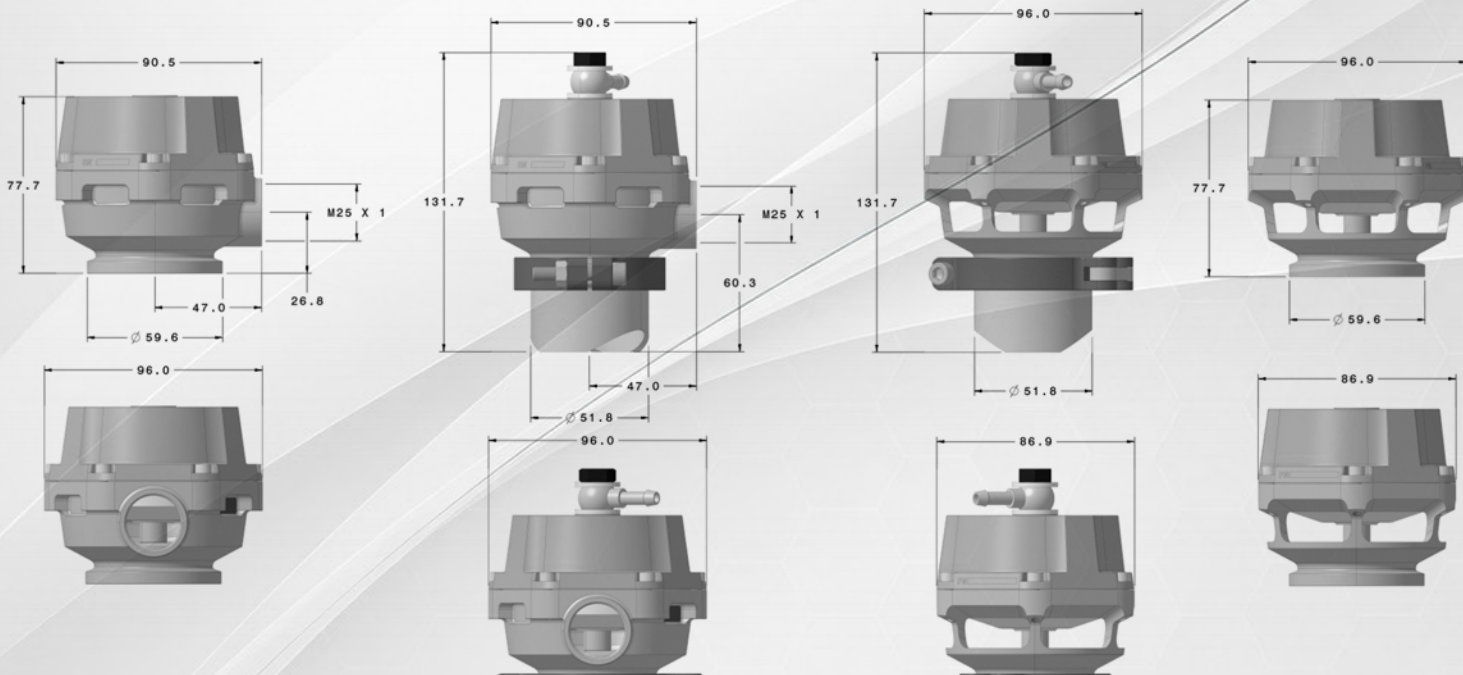


GVB-50R

GVB-50A

Flange Diagrams

- BOV flange dimensions interchangeable with Tial Q and QR





ACCESSORIES

Street Kit			Pro Kit			
						
PN	Kit Type	Description	Speed Sensor	Harness	Gauge	Bolt
781328-0001	Street	GTX Gen II GTX GT GTW	Y	Y	Y	
781328-0002	Pro	GTX Gen II GTX GT GTW	Y	Y		
781328-0003	Street	G Series GTX55 Gen II GTX50 Gen II GTX47 Gen II	Y	Y	Y	Y
781328-0004	Pro	G Series GTX55 Gen II GTX50 Gen II GTX47 Gen II	Y	Y		Y

Speed Sensors: Select Garrett turbochargers come standard with a fully machined speed sensor port. Just remove the bolt and screw in the appropriate kit for your application. GT and GTX Gen I turbos can be machined by a shop of your choice to retrofit the speed sensor port. G-Series turbochargers utilize a new and easy to install sensor that does not need to be calibrated. GT/GTX speed sensor kits not applicable with G-Series turbochargers.

Maximum Performance

Comparing boost levels and shaft speed on a compressor map, you can determine the ideal operating conditions to ensure peak power over a wider operating range. All Garrett Turbocharger Speed Sensor Kits are compatible with data loggers to enhance engine tuning capability. In addition, the Garrett-branded gauge's maximum speed recall function will retain the highest wheel speed for five minutes for easy mapping. The data gained from the Garrett Turbocharger Speed Sensor Kit can be used to closely estimate the engine's flow behavior without a flow bench. Flow information is invaluable for determining if the turbocharger is reaching its maximum performance, for validating the turbo match, and for ensuring that it is not over speeding, allowing you to avoid potentially damaging operating conditions. This kit could even be used in conjunction with an aftermarket ECU to limit compressor speed. The Garrett Turbocharger Speed Sensor Kit will help you be sure you've got the correct turbo for your needs!

Easy To Use

The Garrett Turbocharger Speed Sensor works with any turbocharger to accurately determine compressor wheel speed. The instructions include detailed drawings of the exact machining specifications for all Garrett GT and GTX Gen I catalog turbochargers as well as general guidelines for other compressor housing types. G-Series / GTX55 Gen II / and GTX50 Gen II turbochargers use a new sensor that eliminates the calibration process. The Garrett Turbocharger Speed Sensor Kit includes all necessary wiring for easy installation and simple data logging.



Boost Gauge: The Garrett Mechanical Boost Gauge is the perfect addition to your interior for the important job of accurately monitoring your boost levels. The gauge has a sleek design and features a black face, white back lit numbers and a brushed aluminum ring. The gauge monitors boost from 30 Hg of vacuum to 30 psi of boost and is available in PSI and BAR configurations.

Boost Gauge Components: gauge, mounting bracket, hose, fitting, mounting hardware.

Boost Gauge PSI Part Number: 773326-0001

Boost Gauge BAR Part Number: 773326-0002



Divided V-Band Inlet Adapter: The Garrett divided V-Band adapter is for enthusiasts that are fabricating divided exhaust manifolds. This adapter mates perfectly with GT/GTX 30 and 35 divided V-Band turbine housings and has two 2" recessed orifices that feed into the flange.

Turbine Inlet Divided V-Band Adapter: Compatible with GT/GTX 30 & 35 divided turbine housings.

V-Band Adapter Part Number: 813444-0001



V-Band Turbine Outlet Adapter: The Garrett V-Band outlet adapter is for fabricating the turbo down pipe. This adapter mates perfectly with the G25 | G30 | G35 | GT30 | GT35 | GTX30 | GTX35 turbine housing outlet. It has a 3" recessed opening feeding the flange.

V-Band Adapter Part Number: 774175-0001



Adjustable Wastegate Bracket: The Garrett Adjustable Wastegate Bracket allows for a greater range of motion to set up the compressor outlet and wastegate can. The bracket also allows for redirection of the actuator to keep vacuum lines away from heat or sharp edges. The adjustable actuator bracket is available for use on GT25R, GT28R and GT30R turbochargers.

V-Band Adapter Part Number: 773151-0002



Actuator Kits: Garrett actuator kits are for use on internally wastegated turbine housings. These kits are designed to regulate shaft speed by venting exhaust gas out of the turbine housing.

PN	Model	Bar	Actuator Assembly
480009-0009	G GT GTX28	0.5	Actuator
480009-0006	G GT GTX28	1.0	*Rod end, jam nut, bracket, heat shield, retaining clip not included
480009-0010	G GT GTX28	1.5	



Kit PN	Model	Bar	Actuator Assembly Kit
700187-0001	T25		Actuator (fixed rod), bracket, heat shield.
759498-0001	GT GTX28	0.5	
759498-0007	GT GTX28	1.0	Actuator, rod end, jam nut, retaining clip.
759498-0005	GT GTX28	1.5	*Bracket and heat shield not included
759498-0004	GT GTX35R	0.8	
759498-0008	G25	0.5	G-Series V-band standard rotation, actuator, bracket and bolts, rod end, jam nut, retaining clip.
759498-0009	G25	1.0	*Heat shield not included
759498-0010	G25	1.5	
759498-0011	G25	0.5	G-Series V-band reverse rotation, actuator, bracket and bolts, rod end, jam nut, retaining clip.
759498-0012	G25	1.0	*Heat shield not included
759498-0013	G25	1.5	
759498-0014	G25	0.5	G-Series T4 standard rotation, actuator, bracket and bolts, rod end, jam nut, retaining clip.
759498-0015	G25	1.0	*Heat shield not included
759498-0016	G25	1.5	

•759498-0004 for use with turbine housing wastegate family 771300

G-SMART

BLUETOOTH MODULE



Track your turbo's performance in real-time with the Garrett G-Smart Module. Transmit turbo speed and boost via Bluetooth with the free G-Smart application. This important data will allow users to see if they are operating the turbocharger within its recommended RPM limits to optimize durability and performance. The Garrett G-Smart Module is your turbocharger's ultimate companion, guiding you towards unparalleled performance.



PRISHOW
[FEATURED PRODUCTS]
SHOWCASE TOP 3
BEST ENGINE PRODUCT



Easy to Install and Setup

Say goodbye to tangled wires and tedious setups. Bluetooth functionality means no wires through the firewall for a quick, and easy installation. The plug-and-play harness accepts Garrett flange and threaded style speed sensors. Kits are available without a speed sensor for users who already have a speed sensor and with for those who don't have one. A 12V switched power and sufficient ground connection are all you need to get started. The Sensor Setup menu is loaded with existing Garrett Turbocharger part numbers, models, compressor wheel blade counts and max-rated turbo speed. Custom configurations can also be created for Garrett models without speed sensor ports or for non-Garrett manufactured turbochargers that utilize the same style speed sensors. For use with iOS and Android mobile devices. (Mobile device and mount not included.)

PN				Kit Description	Speed Sensor	Harness	Module
923586-0002	Module	Harness	Threaded Speed Sensor (GTX Gen II 28,30,35 and Custom Installation)		Threaded	Y	Y
923586-0003	Module	Harness	Flange Speed Sensor (G-Series GTX Gen II 47 50 55 PowerMax)		Flange	Y	Y
923586-0004	Module	Harness			No	Y	Y



Analyze Turbo Speed and Boost Pressure

With the device paired and the car running, the mobile device screen will light up with live turbo speed and boost pressure (if connected) in a dynamic gauge and graphical format. The gauge display features a constant live data feed and has a marker that freezes on peak turbo speed.

The graph plot length can display up to 120 seconds of live data. The live data feed can be paused allowing users to review data points within the plot length with a touch of the screen. Users can connect the analog output to an external data logger/ECU for complete data logging.

WARNING

The use of any turbocharger product above maximum turbocharger speed is at the owner's risk and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor can be installed into the compressor housing to monitor shaft speed.

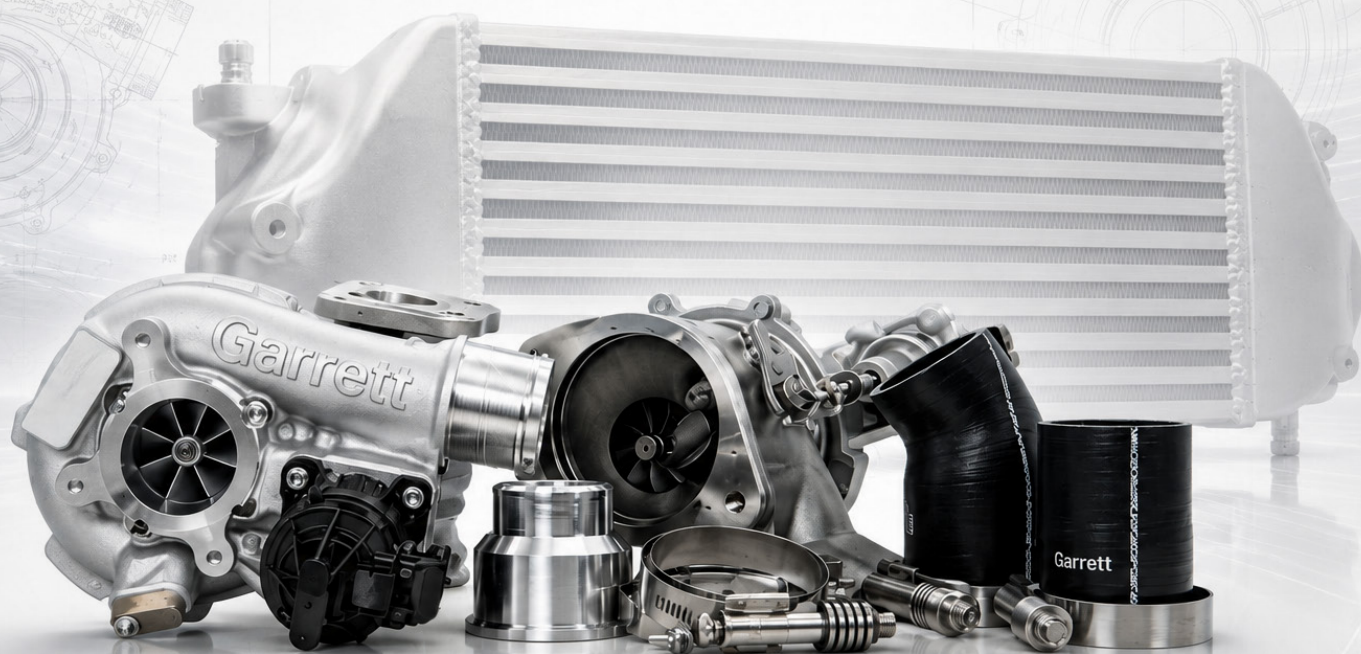


FEATURES

- Bluetooth operation transmits data from the module to the G-Smart application
- Modern display with live turbo speed and boost pressure (if connected) readings
- Gauge sweep will transition color (G,Y,R) signaling the approach to max-rated turbo speed
- Marker on gauge sweep indicates peak turbo speed
- Display up to 120 seconds of turbo speed and boost data in easy-to-view graphical format
- Compatibility with both Android and iOS devices
- Easy installation and configuration with preset Garrett models and part numbers
- Create custom configurations for Garrett turbochargers without pre-machined speed sensor port or non-Garrett manufactured turbochargers
- Min/Max Turbo speed and boost pressure stored in app for future analysis



POWERMAX



DIRECT-FIT. MAXIMUM POWER.



Intercooler Kits



Turbocharger Kits

Important product information:

Garrett Performance Kits are professional aftermarket products only designed for certain racing vehicles driven on particular racing tracks and shall only be used on racing vehicles that will never be driven on public roads or highways. Garrett Performance Kits are not legal for use in vehicles on public roads or other roads to which public road law applies. Any vehicle modifications using Garrett Performance Kits are AT YOUR OWN RESPONSIBILITY and AT YOUR OWN RISK. Only use Garrett Performance Kits in compliance with all applicable laws, regulations and ordinances (including but not limited to emission, noise, operating license, performance, safety and type-approval aspects). A vehicle modification using Garrett Performance Kits may particularly affect or void a vehicle's warranty, operating license or type-approval. Moreover, only use Garrett Performance Kits in compliance with all applicable racing and racing track provisions. It is YOUR OWN RESPONSIBILITY AND RISK to ensure that your Garrett Performance Kit fits your vehicle and area of application. YOU MUST ENSURE LAWFUL AND SAFE OPERATIONS AT ANY TIME. You should particularly consult the owner's manual and service manual of your vehicle. You should also contact your vehicle's manufacturer to determine what effects modifications may have on important aspects such as safety, warranty, performance, etc. Only install and use Garrett Performance Kits if you have fully read and understood this important safety information and if you fully agree with the terms and conditions set forth therein.



Garrett PowerMax Turbocharger -
Fiat 500 Abarth 1.4L (2009-
2023)



2015 - 2019 Ford Power Stroke
6.7L



2021+ Ford Bronco / 2024+
Ranger 2.7L



2022+ Ford Bronco / Ranger
Raptor 3.0L



2022+ Ford Ranger | VW Amarok
3.0L V6 Diesel



2020+ Volkswagen Golf R | Audi |
Cupra | 2.0L TSI EA888 EVO4
Engine



2020+ Volkswagen | Audi | Skoda
| Cupra | Seat 2.0L EA888 Engine



2014 - 2021 Volkswagen / Audi
2.0L TSI MK7 Stage 1 and Stage 2



2017-2020 Ford Raptor / F-150
3.5L EcoBoost Stage 2



2011 - 2017 F-150 | Expedition |
Navigator 3.5L EcoBoost



1999.5 - 2003 7.3L Ford Power
Stroke



2013 - 2018 Ford 2.0L EcoBoost
Focus ST | Escape | Kuga | Fusion
| Taurus | MKC | MKT | MKZ



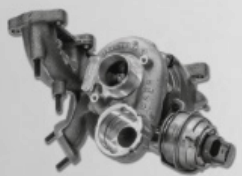
2014 - 2019 GM (Holden,
Chevrolet) Colorado 2.8L XLDE
Diesel



2011-2021 Ford Ranger PX1 PX2
PX3 | Everest and 2011-2020
Mazda BT50 3.2L



2007 - 2018 Toyota Land Cruiser
4.5L 1VD-FTV Turbo Diesel



2003 - 2011 Volkswagen 1.9L |
2.0L TDI Engines



2011 - 2016 6.6L Chevrolet / GMC
2500HD, 3500HD



2003 - 2007 6.0L Ford Power
Stroke



2004.5 - 2010 GM 6.6L Duramax



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

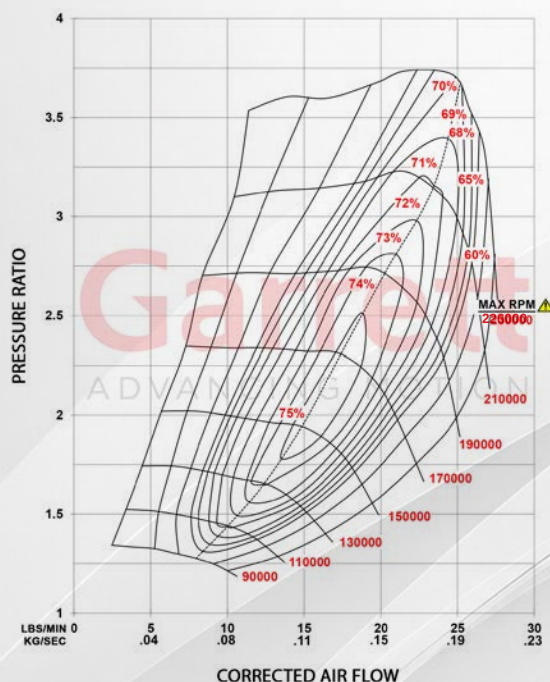
Application: Ford F-150 | Expedition | Navigator 3.5L (2011 - 2017)

This Garrett PowerMax™ turbocharger upgrade for the Ford 3.5L EcoBoost engine platform is engineered to increase engine performance capability while maintaining OEM installation specifications. This direct drop-in stage 1 upgrade provides 22% more flow than OEM and will support up to 300HP* from each turbo. Improvements in efficiency and flow can be attributed to the light weight forged fully-machined compressor wheel. Boost response of this PowerMax turbocharger compared to OEM has not been tested. This turbocharger kit comes fully assembled and calibrated and is outline interchangeable with the OE hardware to ensure a perfect fit every time. Contact your local authorized Garrett distributor for additional information and pricing.

**Please refer to the legal notice on page 92 before purchasing this product.*

Turbo PN	Power	Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
See Chart Below	300BHP 224kW (each)	MGT1749S	39mm	50mm	41mm	40mm

Part Number	Year	Model	Make	Engine	OEM PN	Notes:
881027-5001S	2011-2017	F-150	Ford	3.5L EcoBoost	CL3Z-6K682-C	Left Turbocharger
881028-5001S	2011-2017	F-150	Ford	3.5L EcoBoost	CL3Z-6K682-D	Right Turbocharger
881027-5002S	2013-2016	F-150	Ford	3.5L EcoBoost	DL3Z-6K682-E	Left Turbocharger
881028-5002S	2013-2016	F-150	Ford	3.5L EcoBoost	DL3Z-6K682-F	Right Turbocharger
881027-5002S	2015-2017	Expedition	Ford	3.5L EcoBoost	DL3Z-6K682-E	Left Turbocharger
881028-5002S	2015-2017	Expedition	Ford	3.5L EcoBoost	DL3Z-6K682-F	Right Turbocharger
881027-5002S	2015-2017	Navigator	Lincoln	3.5L EcoBoost	DL3Z-6K682-E	Left Turbocharger
881028-5002S	2015-2017	Navigator	Lincoln	3.5L EcoBoost	DL3Z-6K682-F	Right Turbocharger



WARNING: Maximum allowable turbocharger speed is 226krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

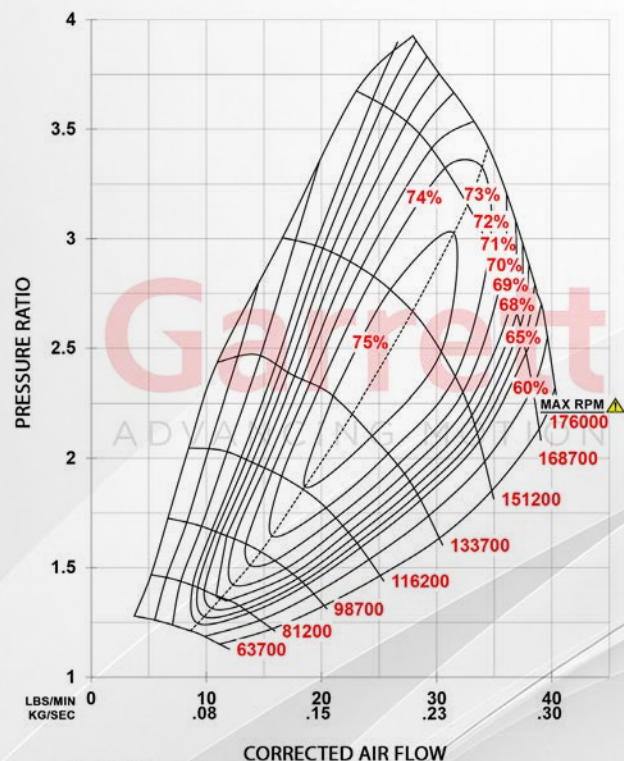
Application: Ford Raptor | F-150 3.5L (2017 - 2020)

The Garrett PowerMax™ Stage 2 turbocharger upgrade for the 2017 - 2020 F-150 and F-150 Raptor platform is engineered to increase engine performance capability while maintaining OEM installation specifications. This direct drop-in Stage 2 upgrade provides 54% more flow than OEM and will support up to 700+ BHP*. Improvements in compressor efficiency and flow can be attributed to the 60mm fully-machined compressor wheel. Turbine flow is increased by 52% compared to OEM with a 50mm Inconel turbine wheel and larger 0.45 A/R turbine housing. This turbocharger kit comes fully assembled, calibrated, and is outline interchangeable with the OE hardware to ensure a perfect fit every time. Includes stock inlet adapter and o-ring. Does not include gaskets.

**Please refer to the legal notice on page 92 before purchasing this product.*

Turbo PN	Kit PN	Power	Rotation	Comp Ind	Comp Exd	Turb Ind	Turb Exd
901654-5001W	911984-5003S	700BHP 522kW	Standard	45mm	60mm	50mm	46mm
901655-5001W			Reverse	45mm	60mm	50mm	46mm

CARB certification (EO D-871) means our product has been tested in accordance with manufacturer/OEM specifications and meets the emissions standards set by the state of California and is approved for use in all 50 states when used as a drop-in replacement for factory equipment.



Stock inlet adapter (for use with the stock intake system) and the 2.75 inch adapter (for use with larger than stock intake systems) have different performance potentials.

** Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.

Features:

- Direct-fit Stage 2 upgrade (LH & RH Turbos)
- Compressor housing inlet (2.75") is larger than stock to allow for increased flow and optimized surge port
- Adapter for stock inlet tube included with turbo kit
- CARB Certified D-871
- 700+ BHP capability **
- Complete assembly with calibrated electric actuator
- Billet compressor wheel with 54% increased flow
- Inconel turbine wheel with 52% increased flow
- Modern compressor and turbine wheel aero
- Tuned ported shroud for optimal compressor surge and choke performance
- Speed sensor port: use PN 781328-0003 (street kit) or 781328-0004 (pro kit)
- Journal-bearing rotating group



WARNING: Maximum allowable turbocharger speed is 176krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0003 (includes sensor and gauge), and 781328-0004 (includes speed sensor). Speed sensors sold separately.



POWERMAX™ DIRECT FIT PERFORMANCE INTERCOOLER

Application: Ford F-150 and Raptor 3.5L EcoBoost (2015+)
Supports Up To 750 Horsepower

The Garrett direct fit F-150 charge air cooler boasts an 83% larger core than stock to provide up to 40 °F reduction in air temperature and up to 30% reduction in pressure drop. Optimized end tanks improve air flow through the core. This direct fit performance intercooler is easily installed and can support up to 750 horsepower all while reusing the stock bolts, hoses, and clamps.

This direct fit performance intercooler installs in 2.5 hours and reuses the stock bolts, hoses, and clamps. Removal of the OE grill shutters required. For more information including Installation instructions please visit our website:
www.garrettmotion.com/racing-and-performance/performance-catalog/intercoolers/

Features:

- Supports up to 750 horsepower
- C.A.R.B Certified (EO# D-794)
- 83% larger core than stock
- Installs in stock location
- +16 horsepower at temperature saturation
- Up to 40 °F reduction in temperature
- Integrated drain plug to evacuate condensation

Part Number		870702-6001
Vehicle	Make	Ford
	Model	F-150
	Year	2015+
Engine	Type	3.5L / 2.7L
	Fuel	Gas
Size Specs	21" x 5.32" x 9.43"	



CASE STUDY: POWERMAX™ PERFORMANCE INTERCOOLER & TURBO

Application: Ford F-150 3.5L EcoBoost

Tested By:



PROJECT F-150 ECOBOOST - MAKING SERIOUS POWER WITH GARRETT'S POWERMAX TWIN TURBO AND INTERCOOLER UPGRADE

To validate performance claims and provide transparent, real-world data, Garrett partnered with MotoIQ — an independent and respected automotive testing authority. MotoIQ conducted controlled testing, gathered data and provided post-test analysis of the mentioned products. The following excerpts are taken directly from MotoIQ's writeup, which can be viewed in full by scanning the QR code at the bottom of this page.

The stock Ford F-150 intercooler and turbos are decent at their intended boost levels, but when tuning the stock ECU and turning up the wick is when their shortcomings become grossly apparent. Enter Garrett Advancing Motion with their bolt-on Powermax turbo and intercooler upgrades for the Ford F-150 EcoBoost. The compressor side of the stock turbos on the F-150 are not very efficient at higher boost levels. Couple that with the “just good enough” stock intercooler and you have a less than optimal situation for power increases. At higher boost levels, charge temps climb fast and really high! During our independent testing of some off-the-shelf tunes that turn up the boost we found intercooler inlet temps nearing almost 500 degrees, close to oven baking heat after just a few pulls!

Under these conditions, an upgraded intercooler really works well and is badly needed. Not only are these kinds of temps not good for power, but they're also not good for long term reliability. Our Project F-150 EcoBoost is a working truck, as the owner lives in a relatively remote area of Arizona. So reliability is a top priority, right alongside performance. Wanting more power without sacrificing reliability, we were all eager to test Garrett Advancing Motion's new Powermax twin-turbo and intercooler upgrades for the F-150 EcoBoost.

We used our in-house SuperFlow AutoDyn 30 for both our inlet/outlet temperature and for baseline horsepower numbers. Our Project Ford F-150 EcoBoost performed back-to-back dyno pulls to quantify heat saturation temps and quantity of pulls to reach heat soak between the OEM intercooler and the Garrett intercooler. The data we collected included inlet temperatures, outlet temperatures, ambient air temperatures and baseline power numbers (horsepower and torque).

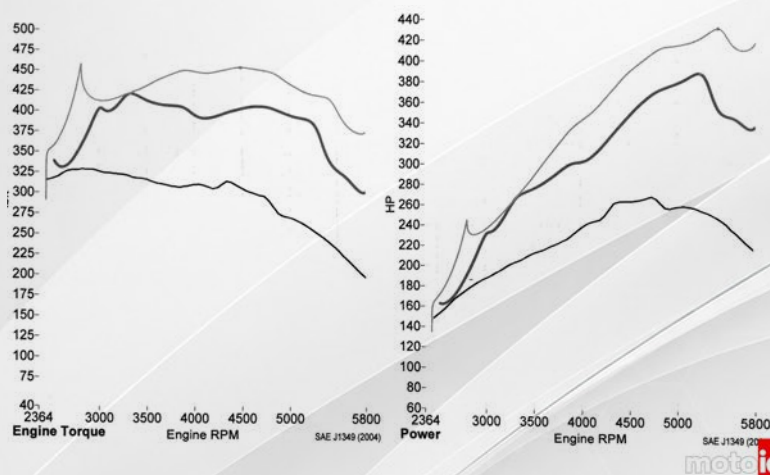
The difference in just charge air temps was impressive! Once the system heat soaked and stabilized our median charge air temps were now 118°, a 57° improvement over stock!

Next, the truck was taken to Church automotive testing to install the turbos and dyno the truck. Church uses a Dynapack wheel hub dynamometer. Church prefers this type of dyno, because they feel that it can load the engine very accurately to mimic road conditions.

Shawn Church started to tune our car using the HP Tuners tuning suite. HP Tuners allows full tuning of the cars many parameters. Modern ECU's are quite difficult to tune and are beyond the scope of most people even with aids like HP Tuners. Our goal was not to tune the car for the maximum power, but to keep close to stock boost levels with safe air-fuel ratios and ignition advance to show what the turbos alone could do.



OEM intercooler (left) and the Garrett PowerMax intercooler (right). The Garrett intercooler is 83% larger than stock.



The bottom lines of the graph are the stock OEM numbers. The middle lines are the power numbers at stock boost levels with the Garrett intercooler and turbos without the power limiting parameters of the stock ECU. The top lines are the power numbers with the Garrett parts and Church's custom tune.

The power made with only removing the torque limiting parameters of the stock ECU at stock boost levels is largely due to the cooler intake temps and the reduction in backpressure. If you recall, with the superior Garrett intercooler, we saw charge air temps that were cooler than stock. This sort of reduction is power that may actually be easier on the engine! With a light tune, our truck put out a whopping 431 whp and 454 lb/ft of torque! A huge 173 whp and 116 lb/ft improvement over stock. Church Auto said that with some minor changes like high flow downpipes and a power-oriented tune, we could expect up to 500 whp on pump gas!

When driving the truck, it was transformed with tons of newfound power and torque. Even though the Garrett turbos are larger, there was no perceptible increase in turbo lag. The response to transient throttle movement was still as good as stock! This is probably due to the greater efficiency of Garrett's aero and better matching to the engine's performance requirements.

In conclusion, the combo of the Garrett intercooler and turbos is an all-around win win and highly recommend. If you have an EcoBoost truck, these items are must gets! - **Mike Kojima MotoIQ**





POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

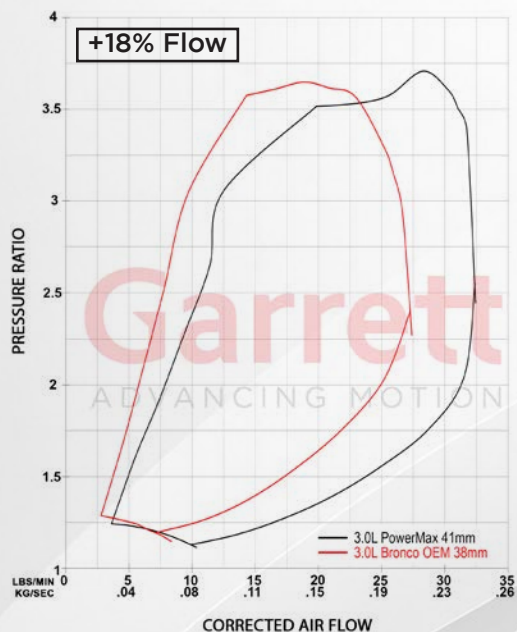
Application: Ford Bronco | Ranger Raptor 3.0L (2022+)

Trust the name that's been powering innovation for over 70 years. Garrett PowerMax turbochargers are engineered with OEM precision and built to outperform—from daily drivers to weekend track cars. With over 70 years of technology leadership and more than 130 million vehicles powered by our turbos, Garrett is the trusted choice for performance, reliability, and innovation.

**Please refer to the legal notice on page 92 before purchasing this product.*

Kit Part Number LH & RH Turbo	Engine	Power	Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
926432-5002S	3.0L V6 Twin Turbo	640BHP 477 kW	GT1752S	41mm	52mm	44mm	39mm

Make	Model	Year	Region	Trim	Engine	OEM Turbo
Ford	Bronco	2022	EMEA, NA, South Korea	Raptor	OEM Power Twin Turbo 3.0L V6 - Gas 418HP @ 5750 RPM	LH N2DZ-6K682-B RH N2DZ-6K682-A
	Ranger	2022	AUS, EMEA			
	Bronco	2023	EMEA, NA, South Korea			
	Ranger	2023	AUS, EMEA			
	Bronco	2024	EMEA, NA, South Korea			
	Ranger	2024	AUS, EMEA, NA			
	Bronco	2025	EMEA, NA, South Korea			
	Ranger	2025	AUS, EMEA, NA			



Product Features

- Direct-Fit Upgrade for the 2022+ Ford Bronco / Ranger Raptor 3.0L
- Kit part number contains complete LH & RH turbo assemblies with calibrated electric actuators
- Garrett is the OEM turbocharger for this application
- CARB Emissions Certified D-871-4
- Supports up to 640BHP | 477kW (+18% compressor flow and +6% turbine flow compared to the OEM turbo)
- 41mm compressor inducer compared to 38mm on the OEM turbo
- Stainless Steel turbine housing rated up to 950°C
- Fully machined sensor port to monitor turbo shaft speed: use PN 923586-0003 (G-Smart Bluetooth Module / App) or 781328-0003 (street kit w/ gauge) or 781328-0004 (pro kit w/o gauge)



CARB certification (EO D-871) means our product has been tested in accordance with manufacturer/OEM specifications and meets the emissions standards set by the state of California and is approved for use in all 50 states when used as a drop-in replacement for factory equipment.



WARNING: Maximum allowable turbocharger speed is 214.9krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0003 (includes sensor and gauge), and 781328-0004 (includes speed sensor). Speed sensors sold separately.

** Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



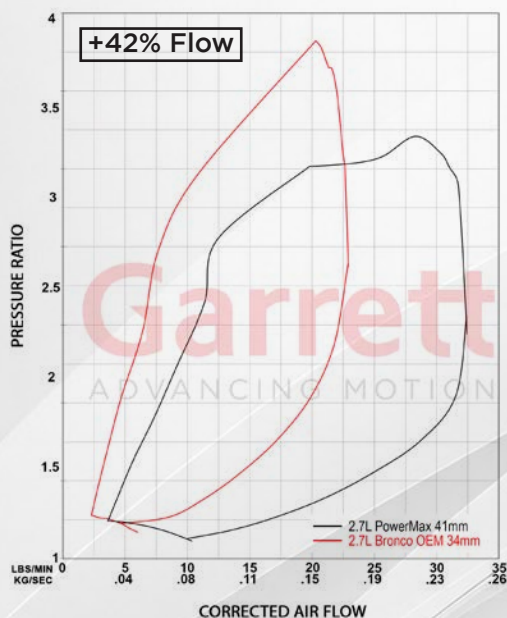
POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

Application: 2021+ Ford Bronco | 2024+ Ranger 2.7L

Trust the name that's been powering innovation for over 70 years. Garrett PowerMax turbochargers are engineered with OEM precision and built to outperform—from daily drivers to weekend track cars. With over 70 years of technology leadership and more than 130 million vehicles powered by our turbos, Garrett is the trusted choice for performance, reliability, and innovation.

**Please refer to the legal notice on page 92 before purchasing this product.*

Kit Part Number LH & RH Turbo		Engine		Power		Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
926432-5001S		2.7L V6 Twin Turbo		640BHP 477 kW		GT1752S	41mm	52mm	44mm	39mm
Make	Model	Year	Region	Trim				Engine	OEM PN	
Ford	Bronco	2021	NA	Badlands, Base, Big Bend, Black Diamond, First Edition, Outer Banks, Wildtrak				OEM Power Twin Turbo 2.7L V6 - Gas 330HP @ 5250 RPM		Garret OEM: LH MB3Z-6K682-D MB3Z-6K682-A MB3Z-6K682-F RH MB3Z-6K682-B MB3Z-6K682-E
		2022	NA, South Korea	Badlands, Base, Big Bend, Black Diamond, Outer Banks, Wildtrak						
		2023	EMEA, NA, South Korea	Badlands, Base, Big Bend, Black Diamond, Heritage Limited Edition, Outer Banks, Wildtrak						
		2024	EMEA, NA, South Korea	Badlands, Big Bend, Black Diamond, Heritage Limited Edition, Outer Banks, Wildtrak						
	Ranger	2024	NA	Lariat, XLT						
	Bronco	2025	EMEA, NA, South Korea	Badlands, Big Bend, Heritage Edition, Outer Banks, Stroppe Edition						
	Ranger	2025	NA	Lariat, XLT						



Product Features

- Direct-Fit Upgrade for the 2021+ Ford Bronco / 2024+ Ranger 2.7L
- Kit part number contains complete LH & RH turbo assemblies with calibrated electric actuators
- Garrett is the OEM turbocharger for this application
- CARB Emissions Certified D-871-3
- Supports up to 640BHP | 477kW (+42% compressor flow and +27% turbine flow compared to the OEM turbo)
- 41mm compressor inducer compared to 34mm on the OEM turbo
- Stainless Steel turbine housing rated up to 950°C
- Fully machined sensor port to monitor turbo shaft speed: use PN 923586-0003 (G-Smart Bluetooth Module / App) or 781328-0003 (street kit w/ gauge) or 781328-0004 (pro kit w/o gauge)

CARB certification (EO D-871) means our product has been tested in accordance with manufacturer/OEM specifications and meets the emissions standards set by the state of California and is approved for use in all 50 states when used as a drop-in replacement for factory equipment.

WARNING: Maximum allowable turbocharger speed is 214.9krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0003 (includes sensor and gauge), and 781328-0004 (includes speed sensor). Speed sensors sold separately.

** Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

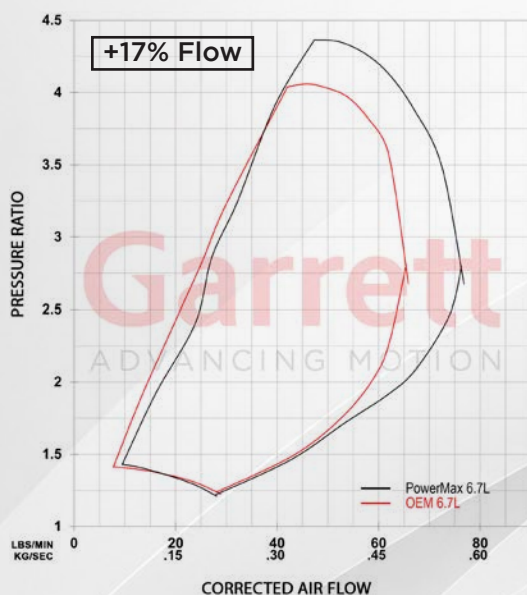
Application: Ford Power Stroke 6.7L (2015 - 2019)

Trust the name that's been powering innovation for over 70 years. Garrett PowerMax turbochargers are engineered with OEM precision and built to outperform—from daily drivers to weekend track cars. With over 70 years of technology leadership and more than 130 million vehicles powered by our turbos, Garrett is the trusted choice for performance, reliability, and innovation.

**Please refer to the legal notice on page 92 before purchasing this product.*

Kit Part Number	Year	Engine	Power	Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
951205-5001S	2015 - 2016	6.7L V8 Diesel	650BHP	AVNT3788R	63.5mm	88mm	72mm	62mm
951206-5001S	2017 - 2019							

Make	Model	Year	Trim	Engine	OEM PN
Ford	F-250	2015	King Ranch , Lariat, Platinum, XL, XLT	OEM Power 6.7L V8 -Diesel 440HP @ 2800 RPM 860LB-FT @ 1800 RPM	Garret OEM PN: FC3Q-9G438-BB Garrett Service PN: FC3Z-6K682-B
	F-350				
	F-250				
	F-350	2016	King Ranch , Lariat, Platinum, XL, XLT	OEM Power 6.7L V8 -Diesel 440HP @ 2800 RPM 860LB-FT @ 1800 RPM	Garrett OEM PN: FC3Q-9G438-BB Garrett Service PN: FC3Z-6K682-B
	F-250				
	F-350				
	F-250	2017	King Ranch , Lariat, Platinum, XL, XLT	OEM Power 6.7L V8 -Diesel 440HP @ 2800 RPM 925 LB-FT @ 1800 RPM	Garrett OEM PN: HC3Q-9G438-AC Garrett Service Replacement PN: HC3Z-6K682-A
	F-350				
	F-450				
	F-250	2018	King Ranch , Lariat, Limited, Platinum, XL, XLT	OEM Power 6.7L V8 -Diesel 440HP @ 2800 RPM 925 LB-FT @ 1800 RPM	Garrett OEM PN: HC3Q-9G438-AC Garrett Service Replacement PN: HC3Z-6K682-A
	F-350				
	F-450				
	F-250	2019	King Ranch , Lariat, Limited, Platinum, XL, XLT	OEM Power 6.7L V8 -Diesel 440HP @ 2800 RPM 925 LB-FT @ 1800 RPM	Garrett OEM PN: HC3Q-9G438-AC Garrett Service Replacement PN: HC3Z-6K682-A
	F-350				
	F-450				



Product Features

- Direct-fit turbocharger for the 2015 - 2019 Ford Power Stroke 6.7L V8 Diesel
- Garrett is the OEM turbocharger for this application
- 63.5mm compressor wheel for increased horsepower and torque
- Supports up to 650BHP | 485kW (+17% compressor flow compared to the OEM turbo)
- CARB emissions certified D-871-5



CARB certification (EO D-871-5) means our product has been tested in accordance with manufacturer/OEM specifications and meets the emissions standards set by the state of California and is approved for use in all 50 states when used as a drop-in replacement for factory equipment.



WARNING: Maximum allowable turbocharger speed is 125krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0003 (includes sensor and gauge), and 781328-0004 (includes speed sensor). Speed sensors sold separately.

**** Estimated Horsepower.** Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

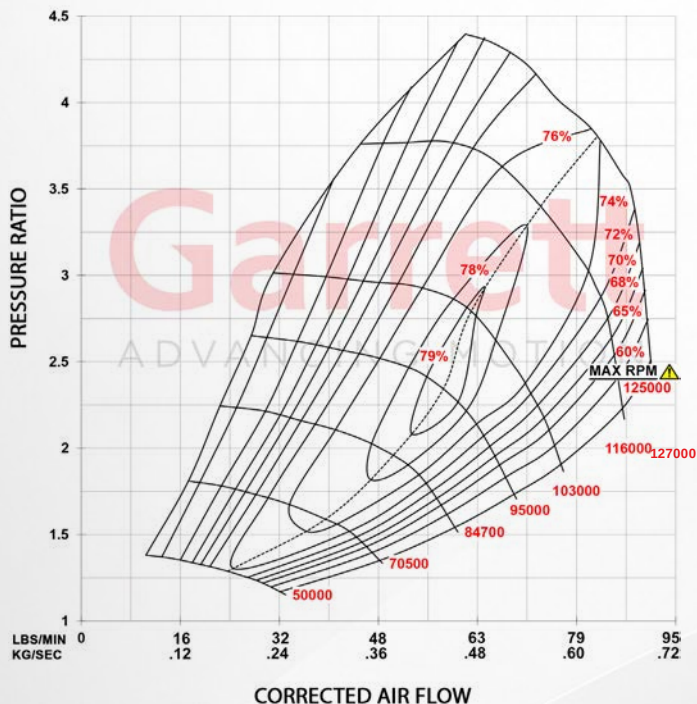
Application: Stage 1 Turbo Upgrade For 2011 - 2016 6.6L Chevrolet / GMC 2500HD, 3500HD

Part Number 886976-5004S

Supports up to 600WHP*

This Garrett PowerMax™ turbocharger upgrade for the Chevrolet and GMC 6.6L LML engine platform is engineered to increase engine performance while maintaining OEM installation specifications. This direct drop-in stage 1 upgrade provides 19% more flow than OEM and will support up to 600WHP*. Improvements in efficiency and flow can be attributed to the lightweight forged fully-machined compressor wheel. Boost response of this PowerMax turbocharger compared to OEM has not been tested. This turbocharger is outline interchangeable with the OE hardware to ensure a perfect fit every time.

**Please refer to the legal notice on page 120 before purchasing this product.*



Part Number		886976-5004S
Turbo	Model	GT3788V
	Comp Ind	65mm
Vehicle	Make	Chevrolet GMC
	Model	2500HD 3500HD
	Year	2011 - 2016
Engine	Type	6.6L Duramax LML
	Fuel	Diesel
	Cylinders	8



WARNING: Maximum allowable turbocharger speed is 127krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port can be machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Application: Stage 1 | 2 Turbo Upgrade For 2004.5 - 2009 6.6L Duramax Engines

Stage 1 | 2004.5-2009 Chevy / GMC 2500, 3500
Part Number 773540-5001s (590HP*)

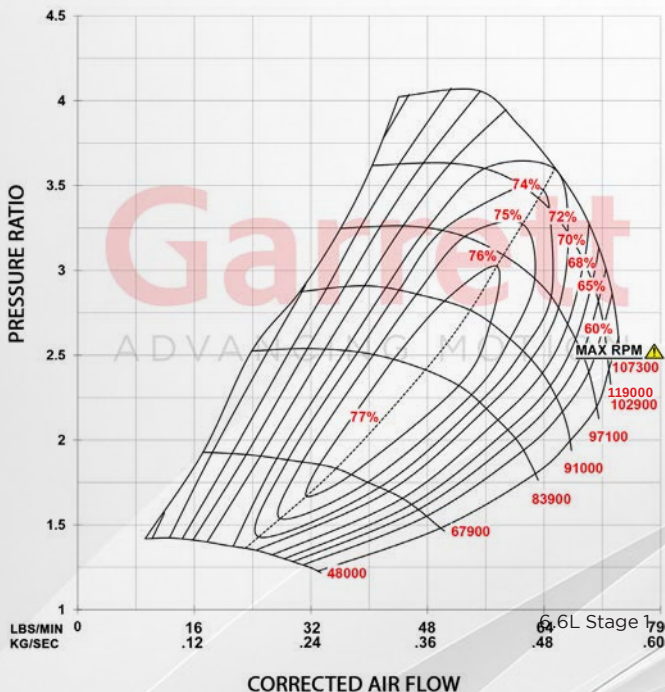
The Duramax Stage 1 turbocharger kit features Garrett patented Advanced Variable Nozzle Turbine AVNT™ design for increased compressor and turbine flow. The GT Series wheel design ensures top performance, lower back pressure and reduces intake and exhaust gas temperatures. The unique design features nine movable vanes which significantly increase turbine efficiency and improve engine performance from idle launch through peak torque. Patented integral electro-hydraulic actuation and proportional solenoid allow for infinitely variable control. Suitable as a performance upgrade or replacement for original equipment. Outline interchangeable with the OE turbo for a perfect fit each and every time.

Stage 2 | 2004.5-2009 Chevy / GMC 2500, 3500
Part Number 773542-5001s (630HP*)

The Duramax Stage 2 turbocharger kit features Garrett patented Advanced Variable Nozzle Turbine AVNT™ design for increased compressor flow and turbine flow. Utilizes nine movable vanes which significantly increase turbine efficiency and improve engine performance from idle launch through peak torque. Patented integral electro-hydraulic actuation and proportional solenoid for infinitely variable control. Larger compressor trim (52), plus larger GT40 turbine wheel and vanes. Outline interchangeable with the OE turbo for a perfect fit each and every time.

**Please refer to the legal notice on page 120 before purchasing this product.*

Chevy GMC Duramax Upgrade	Turbo PN	HP*	Compressor				Turbine			
			Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim	A/R
Duramax 6.6L 2004.5-2009 Stage 1	773540-5001S	590	65mm	94mm	48	0.58	73mm	67mm	78	0.90
Duramax 6.6L 2004.5-2009 Stage 2	773542-5001S	630	68mm	94mm	52	0.58	77mm	68mm	79	0.90



WARNING: Maximum allowable turbocharger speed is 119krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port can be machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Application: Turbo Upgrade For 1999.5 - 2003 7.3L Power Stroke Engines

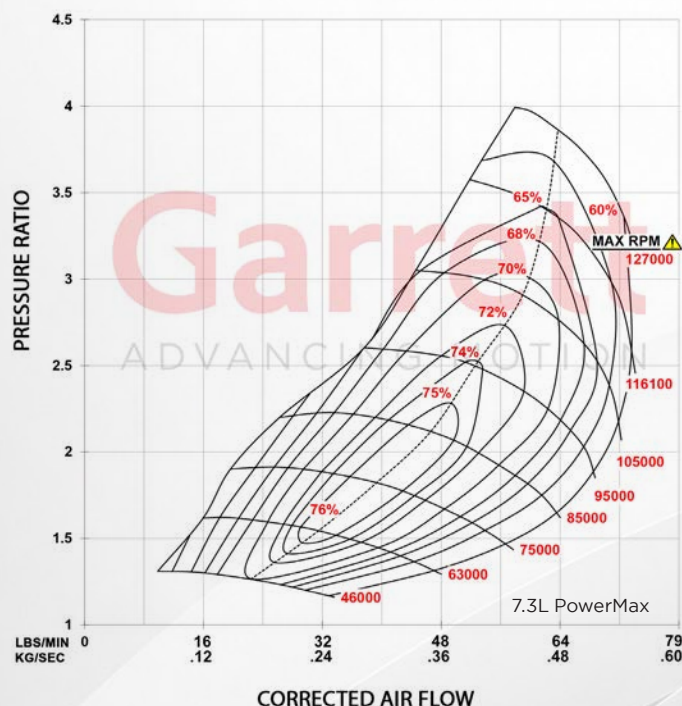
Applications: 1999.5 - 2003 F250 | F350 | Excursion

Part Number 739619-5004s (590HP*)

The GTP38R turbocharger contains an exclusive ball bearing cartridge for unbeatable response, efficiency, and durability. Elimination of the thrust bearing eliminates Failures at elevated boost levels. The 88mm GT compressor wheel provides 33% more flow than the stock 80mm wheel. A ported shroud housing improves compressor flow range for surge control. The kit includes a 1.00 A/R turbine housing for free flowing exhaust with reduced back pressure and up to 200° F reduction in exhaust gas temperature. Maximum recommended boost level is 40psi.

**Please refer to the legal notice on page 92 before purchasing this product.*

Ford Power Stroke Upgrade	Turbo PN	HP*	Compressor				Turbine			
			Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim	A/R
Power Stroke 7.3L 1999.5-2003	739619-5004S	590	66mm	88mm	56	1.00	76mm	68mm	79	1.00



WARNING: Maximum allowable turbocharger speed is 127krpm (7.3L) and 134krpm (6.0L). The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port can be machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

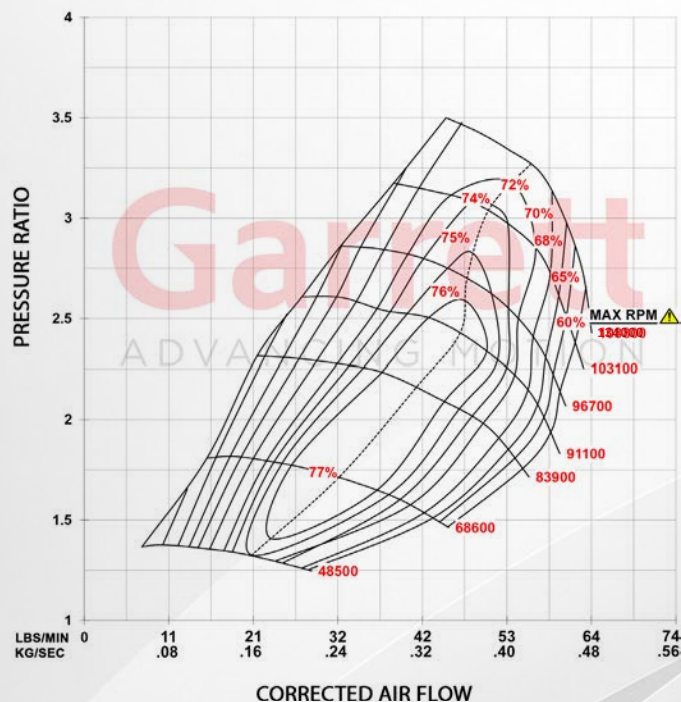
Turbo Upgrade for 6.0L Power Stroke Engines

Applications: 2003 Ford F-250 | F-350
Part Number 777469-5002S (560HP*)

Applications: 2004-2007 Ford F250 | F350 | Excursion
Part Number 772441-5002S (560HP*)

The GT3788VA Turbocharger features the Garrett patented Advanced Variable Nozzle. Turbine AVNT™ design for increased compressor flow and boost response. Utilizes nine movable vanes which significantly increase turbine efficiency and improve engine performance from idle launch through peak torque. Patented integral electro-hydraulic actuation and proportional solenoid for infinitely variable control. Larger compressor wheel over stock increases maximum power range while keeping turbo speeds down for the same power output. Outline interchangeable for a perfect fit each and every time.

Ford Power Stroke Upgrade	Turbo PN	HP*	Compressor				Turbine			
			Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim	A/R
Power Stroke 6.0L 2003 Stage 1	777469-5002S	560	64mm	88mm	52	0.58	73mm	66mm	84	0.90
Power Stroke 6.0L 2004-2007 Stage 1	772441-5002S	560	64mm	88mm	52	0.58	73mm	66mm	84	0.90



WARNING: Maximum allowable turbocharger speed is 127krpm (7.3L) and 134krpm (6.0L). The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port can be machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Application: Stage 1 Turbo Upgrade For 1.9L | 2.0L VW TDI Engines

VW 1.9L TURBO UPGRADE

Part Number: 778445-5002S 1.9L (175hp*)

The Garrett GT1749V is the first performance upgrade / replacement turbocharger available to the aftermarket for Volkswagen 1.9L TDI BEW Engines. The GT1749V comes equipped with a smart actuator, an industry exclusive, and a position sensor, which enables the turbocharger to communicate automatically with the Engine Control Unit (ECU). The kit is easy to install and suitable as a performance upgrade or replacement turbocharger. The Garrett VW TDI Kit also promotes a longer turbo and engine life span and increased reliability by lowering exhaust gas temperatures.

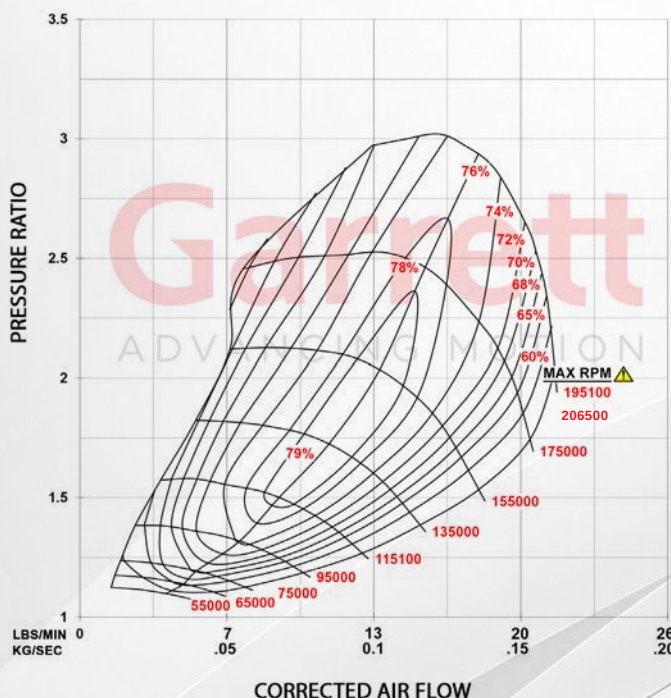
VW 2.0L TURBO UPGRADE

Part Number: 838946-5001S 2.0L (190hp*)

The Garrett GTA1749V is a performance upgrade / replacement turbocharger available to the Aftermarket for Volkswagen 2.0L TDI BKD/BKP/AZV engines. The GTA1749V comes equipped with a larger compressor wheel for increased flow and bolts directly to the stock engine manifold flange. The turbo is easy to install and suitable as a performance upgrade or replacement turbocharger. The Garrett VW TDI turbo also promotes a longer turbo and engine life span and increased reliability by lowering exhaust gas temperatures.

**Please refer to the legal notice on page 92 before purchasing this product.*

Volkswagen TDI 1.9L 2.0L Upgrade	Turbo PN	HP*	Compressor				Turbine			
			Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim	A/R
VW 1.9L TDI (BEW Engine) VNT	778445-5002S	175	36mm	49mm	55	0.46	43mm	38mm	76	0.61
VW 2.0L TDI (BKD Engine) VNT	838946-5001S	190	36mm	49mm	55	0.46	43mm	36mm	70	0.61



Replaces VW OE Part Numbers: 03G 253 010 J & 03G 253 010 J V100

Vehicles: 2.0L TDI BKD/BKP/AZV engines
 2003.10-2009.07 - Golf V Mk5 A5 (PQ35) (typ 1K)
 2005.08-2011.05 - Jetta A5 (PQ35) (typ 1K)
 2003.08-2010.05 - Touran (typ 1T) - [AZV for 136 HP]
 2005.09-2010.05 - Passat B6 (typ 1T) - BKP
 2004.02-2010.05 - Skoda Octavia Mk2 (typ 1Z)
 2nd gen. [AZV for 136HP]
 2009.01-2010.03 - Skoda Superb B6 (typ 3T)
 [BKD EA188]
 2005.07-2011.09 - Leon Mk2 (typ 1P)
 2004.03-2011.09 - Seat Altea
 2004.04-2009.05 - Seat Toledo 3
 2003.08-2007.05 - Audi A3 (Typ 8P)

Replaces VW OE Part Numbers: 038 253 019 S & 038 253 014 E Model: KP39 (3K)

Vehicles: 2003.05 - 2006 Volkswagen Beetle TDI
 2003.05 - 2006 Volkswagen Golf TDI
 2003.05 - 2005 Volkswagen Jetta TDI



WARNING: Maximum allowable turbocharger speed is 206.5krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port can be machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

Application: VW Golf | Passat | Arteon / Audi TT | A3 | S3 / Seat Leon / Cupra Ateca / Skoda Octavia 2.0L TSI (2014 - 2021)

Garrett PowerMax™ turbocharger upgrades for the Volkswagen and Audi 2.0L TSI engine platform is engineered to increase engine performance while maintaining OEM installation specifications. Stage 1 (485 BHP*) and Stage 2 (600 BHP*) upgrades maximize efficiency and air flow compared to the OEM turbocharger. High temperature, Mar-M alloy turbine wheel and twin scroll stainless steel turbine housings are rated for up to 1050° C. These turbochargers are fully assembled with a calibrated electronic actuator and ancillary components for direct OEM fitment.

**Please refer to the legal notice on page 92 before purchasing this product.*

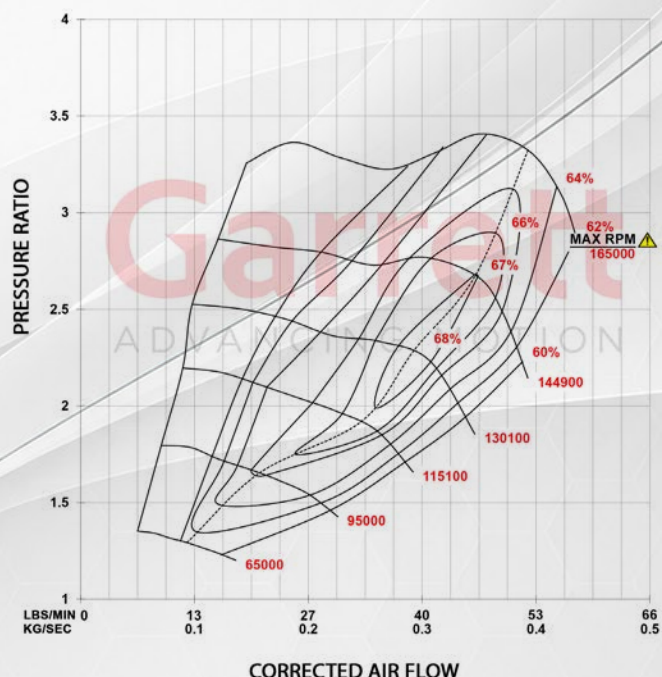
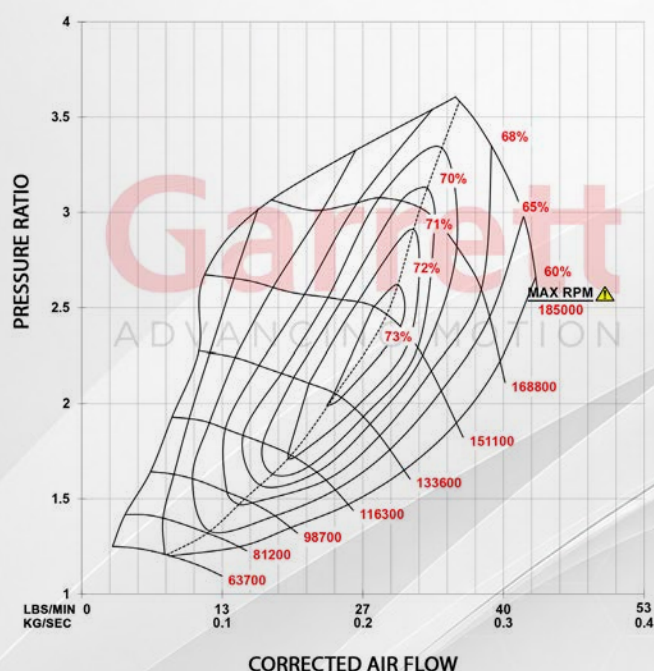
Part Number	Stage	Power	Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
898199-5001W	Stage 1	485HP 362kW	GT2260S	47mm	60mm	50mm	45mm
898200-5001W	Stage 2	600HP 447kW	G25-660	54mm	67mm	54mm	49mm

Stage 1 Features:

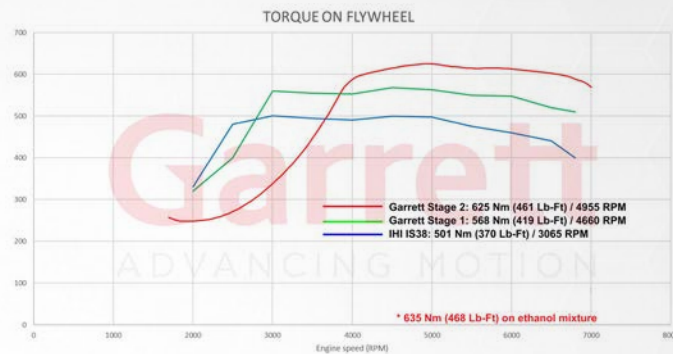
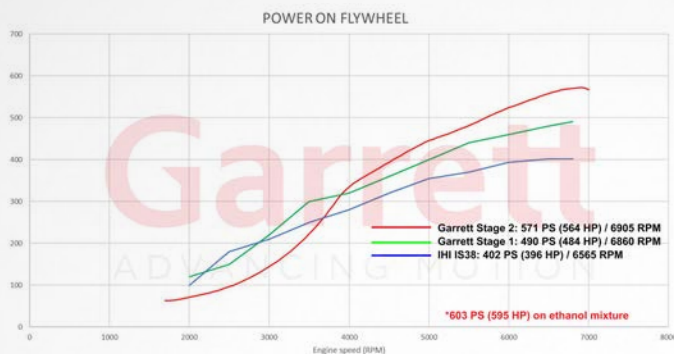
- Direct-fit stage 1 with 485HP | 362kW (flywheel) power capability (on-vehicle results)*
- Complete assembly with electronic actuator
- +17% compressor flow compared to IS38 turbo (stock Golf R)
- GTX Gen II compressor aerodynamics
- Mar-M alloy turbine wheel and twin scroll stainless steel turbine housing rated up to 1050° C
- Latest generation of journal bearing rotating group with 360° reinforced thrust bearing

Stage 2 Features:

- Direct-fit stage 2 with 600HP | 447kW (flywheel) power capability (on-vehicle results)*
- Complete assembly with electronic actuator
- +59% compressor flow compared to IS38 turbo (stock Golf R)
- G-Series compressor and turbine wheel aerodynamics
- Mar-M alloy turbine wheel and twin scroll stainless steel turbine housing rated up to 1050° C
- Latest generation of ball bearing rotating group



** Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



Make	Model	Year	Body & Trim	Engine	OEM Turbo
Audi	TT	2014 +	Base	2.0L L4 - Gas	IS20
Audi	TTS	2014 +	Base	2.0L L4 - Gas	IS38
Audi	A3	2015 - 18	Premium, Premium Plus, Prestige	2.0L L4 - Gas	IS20
Audi	A3 Quattro	2015 - 18	Premium, Premium Plus, Prestige	2.0L L4 - Gas	IS20
Audi	S3	2015 - 18	Premium Plus, Prestige	2.0L L4 - Gas	IS38
VW	Golf	2015	S, SE, SEL, Launch Edition	2.0L L4 - Gas	IS12
VW	Golf GTI	2015	Autobahn, S, SE	2.0L L4 - Gas	IS20
VW	Golf R	2015	Base	2.0L L4 - Gas	IS38
VW	Golf	2016	Base, S, SE, SEL	2.0L L4 - Gas	IS12
VW	Golf GTI	2016	Autobahn, S, SE	2.0L L4 - Gas	IS20
VW	Golf R	2016	Base	2.0L L4 - Gas	IS38
VW	Golf	2017	S, Wolfsburg Edition	2.0L L4 - Gas	IS12
VW	Golf Alltrack	2017	S, SE, SEL	2.0L L4 - Gas	IS12
VW	Golf GTI	2017	Autobahn, S, SE	2.0L L4 - Gas	IS20
VW	Golf R	2017	Base	2.0L L4 - Gas	IS38
VW	Golf	2018	S, SE, SEL	2.0L L4 - Gas	IS12
VW	Golf Alltrack	2018	S, SE, SEL	2.0L L4 - Gas	IS12
VW	Golf GTI	2018	Autobahn, S, SE	2.0L L4 - Gas	IS20
VW	Golf R	2018	Base	2.0L L4 - Gas	IS38
Audi	TT	2014-2018	Base	2.0L L4 - Gas	IS20
Audi	TT Quattro	2014-2018	Base	2.0L L4 - Gas	IS20
Audi	TTS Quattro	2014-2018	Base	2.0L L4 - Gas	IS38
Audi	S3	2013 - 16	Base	2.0L L4 - Gas	IS38
Audi	S3 (facelift)	2016 - 17	Base	2.0L L4 - Gas	IS38
Audi	SQ2 Quattro	2018-2020	Base	2.0L L4 - Gas	IS38
Seat	Leon Cupra	2014-2016	Base	2.0L L4 - Gas	IS20
Seat	Leon Cupra	2014-2018	280, 290	2.0L L4 - Gas	IS38
Seat	Leon Cupra (facelift)	2018-2020	290, 300, R	2.0L L4 - Gas	IS38
Cupra	Ateca	2018-2020	Base	2.0L L4 - Gas	IS38
Skoda	Octavia RS	2013-2016	Base	2.0L L4 - Gas	IS20
Skoda	Octavia RS (facelift)	2017-2020	Base	2.0L L4 - Gas	IS20
Skoda	Superb 4x4	2015-2019	Style, Ambition, SportLine	2.0L L4 - Gas	IS38
VW	Golf GTI	2013-2016	Base, Performance	2.0L L4 - Gas	IS20
VW	Golf R	2013-2016	Base	2.0L L4 - Gas	IS38
VW	Golf GTI	2016	Clubsport	2.0L L4 - Gas	IS38
VW	Golf GTI (facelift)	2017-2019	Base, Performance	2.0L L4 - Gas	IS20
VW	Golf GTI (facelift)	2019	TCR	2.0L L4 - Gas	IS38
VW	Golf R (facelift)	2017-2019	Base	2.0L L4 - Gas	IS38
VW	Passat 4MOTION	2018-2019	Base, Highline	2.0L L4 - Gas	IS38
VW	Arteon 4MOTION	2018-2020	Elegance, R-Line	2.0L L4 - Gas	IS38

OE Turbocharger Part Numbers

IS12 06K124713L
IS20 06K145874M
IS38 06K145722H

European Applications



WARNING: Maximum allowable turbocharger speed is 185krpm (Stage 1) and 165krpm (stage 2). The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0003 (includes sensor and gauge), and 781328-0004 (includes speed sensor). Speed sensors sold separately.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Application: Volkswagen Golf R /Audi A3 | | Cupra | 2.0L TSI EA888 EVO4 Engine

Introducing the 2020+ Garrett PowerMax direct-fit turbocharger, the ultimate performance boost for your 2.0L TSI EA888 EVO4 engine. Whether you drive an Audi A3, a Golf R, or a Cupra Formentor, this upgrade will boost your driving experience to the next level.

This direct-fit turbocharger upgrade produced a stunning 520BHP (383kW) and 425ft-lb of torque (576Nm) on a conservative tune on the dyno. During flow testing, this performance turbocharger supplied +20% compressor flow, and +37% turbine flow compared to the OE turbo. Garrett's latest generation of compressor and turbine wheel technology provide maximum flow and efficiency to this turbocharger, all within the OEM footprint.

But that's not all. The turbine wheel is constructed of Mar-M alloy rated for temperatures up to 1050°C. The stainless steel, internally wastegated turbine housing is also rated for temperatures up to 1050°C, ensuring durability and reliability under extreme conditions. Additionally, the turbine housing wastegate channel has been optimized for higher flow and performance control. The PowerMax turbocharger also comes with a fully machined speed sensor port so you can track turbo speed in your data logger or in Garrett's new [G-Smart Bluetooth Module \(sold separately PN 923586-0003\)](#).

**Please refer to the legal notice on page 92 before purchasing this product.*

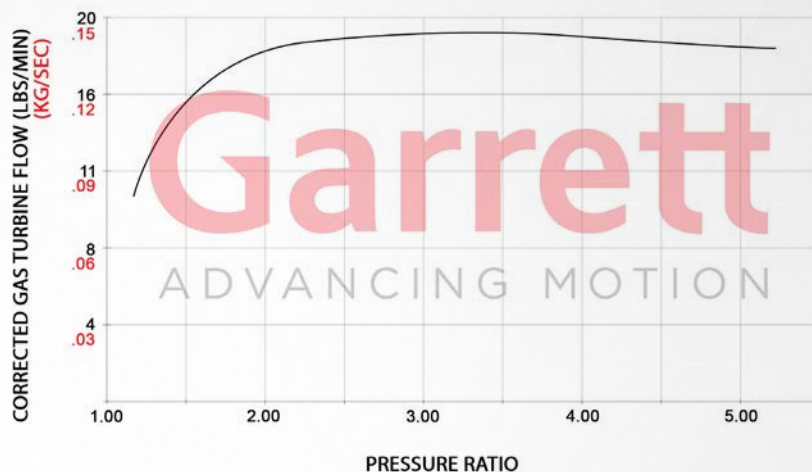
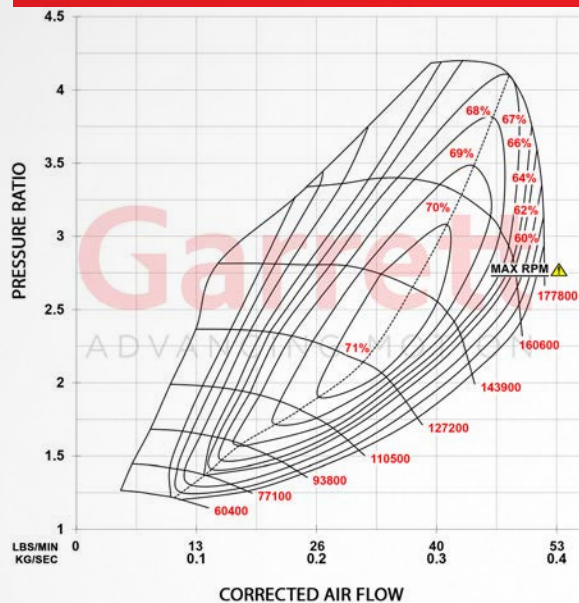
Turbocharger Reference Data:

Part Number	Power	Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
921474-5001S	550BHP 410kW	GT2563	51mm	63mm	58mm	50mm

Vehicle Applications:

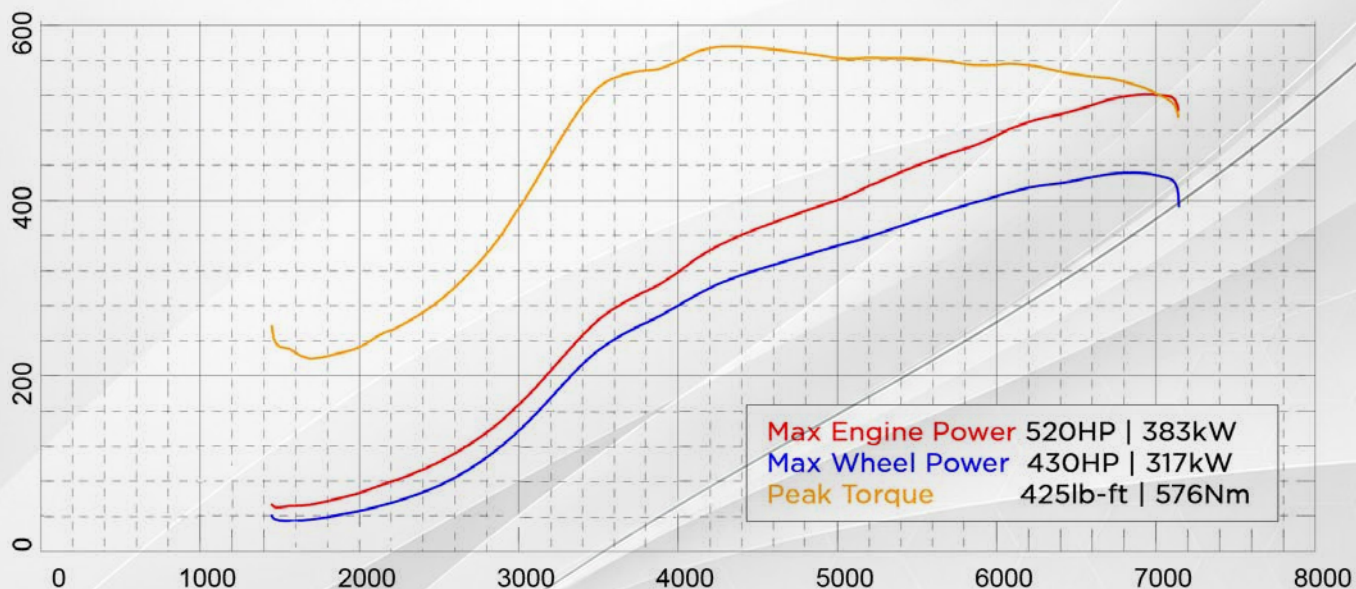
Make	Model	Region	Year	Engine	OEM Turbo
VW	Golf R	North America	2022+	EA888 EVO4 - Gas	06Q145703C (EU) 06Q145703F 06Q145703G 06Q145703H
VW	Golf VIII GTI Clubsport	EMEA	2020+		
	T-ROC R 4Motion		2022+		
	Golf VIII R 4Motion		2020+		
	Golf VIII Variant TSI R 4Motion		2021+		
	Tiguan TSI R 4Motion		2020+		
Audi	A3 Limousine S3 Quattro		2020+		
	A3 Sportback S3 Quattro		2020+		
	SQ2		2021+		
	TTS Quattro		2021+		
	Roadster TTS Quattro		2020+		
Cupra	Formentor 2.0 TSI 4Drive		2020+		
	Leon Sportstourer 2.0 TSI 4Drive		2021+		
	Leon Sportstourer 2.0 TSI		2021+		
	Leon 2.0 TSI		2021+		
	Ateca 2.0 TSI 4Drive		2020+		

* Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are based on actual on-vehicle testing.



Features

- Complete assembly with calibrated electric actuator for OE fitment
- 550BHP | 410kW turbo capability (on-vehicle results 520BHP | 383kW - with conservative tune)
- +20% compressor flow compared to OE turbo
- +37% turbine flow compared to OE turbo
- Customized modern compressor wheel aero for application
- Modern gasoline turbine wheel aerodynamics constructed of Mar-M alloy rated for up to 1050°C
- Stainless steel turbine housing rated for up to 1050°C
- Fully machined speed sensor port
- Integrated thrust bearing - reinforced for application



Vehicle Information:

- Location: Germany
- Golf R 2.0L TFSI (EA888 Evo4)
- Stock intercooler
- Custom downpipe
- Stock fuel system
- Fuel - 98 octane unleaded



WARNING: Maximum allowable turbocharger speed is 177.8krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0003 (includes sensor and gauge), 781328-0004 (includes speed sensor), or [G-Smart Bluetooth Module with sensor \(PN 923586-0003\)](#). Sensor Kits sold separately.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Application: 2020+ Volkswagen | Audi | Skoda | Cupra | Seat 2.0L EA888 Engine

Part Number: 917056-5002S Supports up to 447BHP (333kW)

Introducing the Garrett PowerMax™ turbocharger upgrade for the 2.0L EA888 Evo4 engine platform. Engineered by enthusiasts, for enthusiasts, this turbocharger upgrade isn't just about boosting your engine's capabilities, it's also about packaging it into your vehicle's existing OEM setup. This complete turbocharger with electronic actuator can help the engine produce up to an impressive 447BHP (333 kW), as proven by on-vehicle results.

GTX Gen II compressor aerodynamics increase turbocharger flow by a staggering 32% compared to the OEM turbo. Embrace the future of power with the high-temperature Mar-M alloy turbine wheel, paired with state-of-the-art turbine aerodynamics and a robust twin scroll stainless steel turbine housing capable of withstanding up to 1050°C of heat. Elevate your driving game, and experience performance like never before with PowerMax™.



**Please refer to the legal notice on page 92 before purchasing this product.*

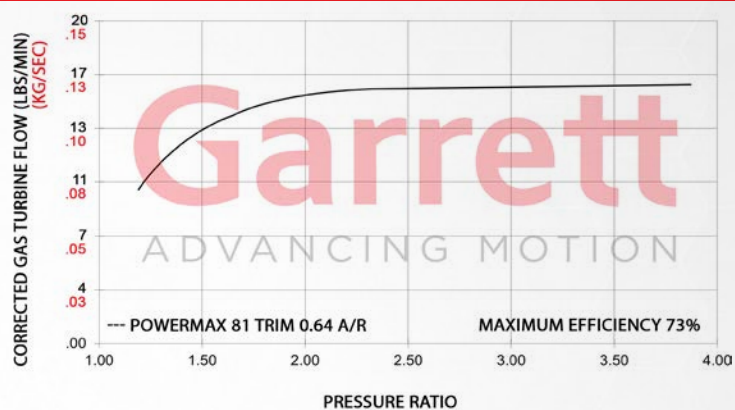
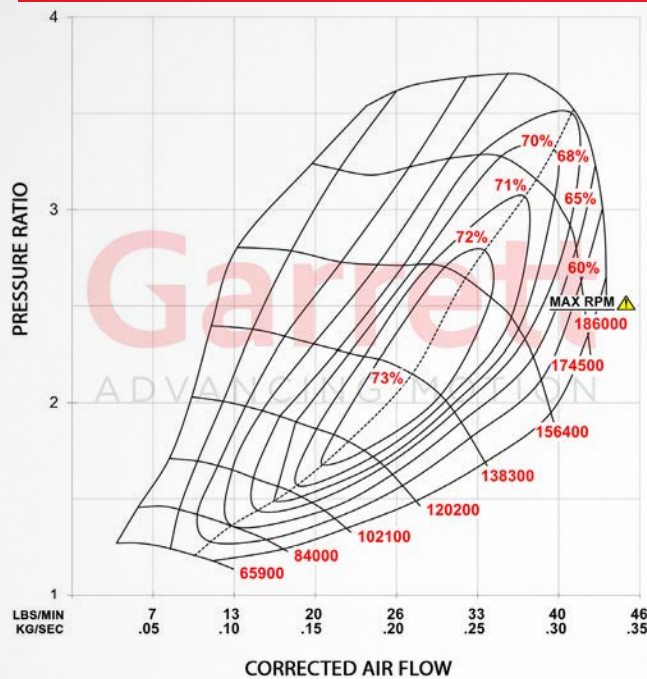
Part Number	Power	Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
917056-5002S	447BHP (333kW)	GT2260S	47mm	60mm	50mm	45mm

Vehicle Applications:

Make	Model	Region	Year	Engine	OEM Turbo
VW	Golf GTI	North America	2022+	2.0L EA888 Evo4 L4 - Gas	06Q145702B
VW	Golf GTI	Europe	2020+		
VW	Tiguan 2.0 TSI		2020+		
Audi	Q3 45 TFSI 2.0		2021+		
Audi	TT 45 TFSI 2.0		2020+		
Skoda	Kodiah RS TSI 4x4		2021+		
Skoda	Octavia RS		2020+		
Cupra	Leon 2.0 TSI		2021+		
Cupra	Formentor 2.0 TSI		2021+		
Seat	Tarraco 2.0 TSI		2021		

• Garrett is the OEM turbocharger for this application. For regions and applications not listed above please reference the OEM turbo part number for fitment.

* Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are based on actual on-vehicle testing.

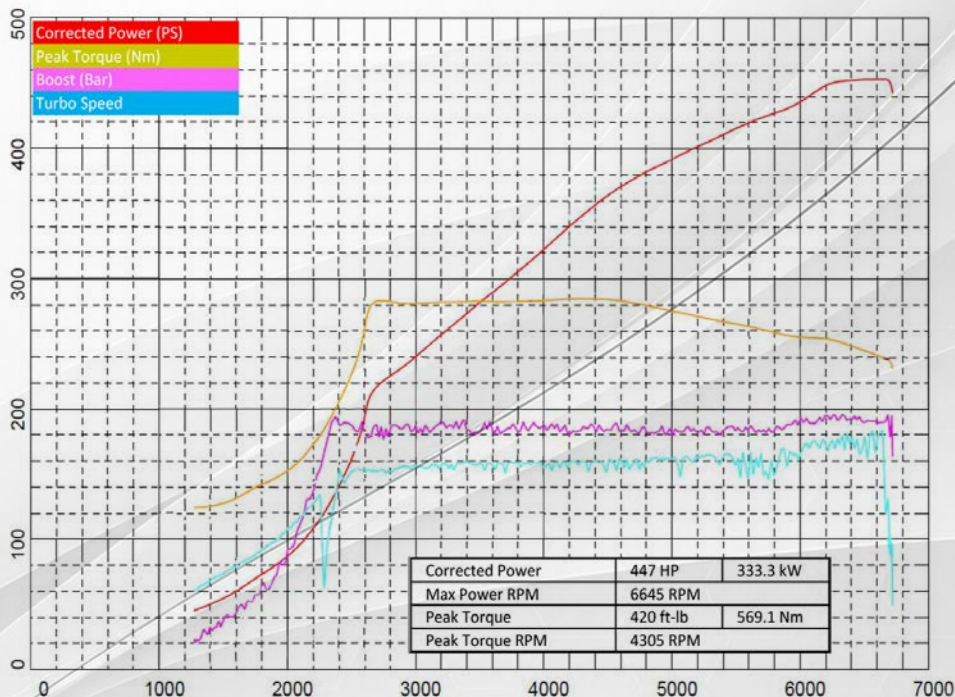


Features:

- Complete assembly with electronic actuator
- +32% compressor flow compared to the OEM turbo
- GTX Gen II compressor aerodynamics
- Mar-M alloy turbine wheel and twin scroll stainless steel turbine housing rated up to 1050° C
- Latest generation of journal bearing rotating group with 360° reinforced thrust bearing
- Direct-fit turbo with 447BHP (333kW) capability (on-vehicle results)*
- +50% turbine flow compared to OEM turbo

Vehicle Modifications:

- Location: Germany
- GTI 2.0L TFSI (EA888 Evo4)
- 917056-5002S Turbocharger
- Stock intercooler
- Custom downpipe
- Stock fuel system
- Fuel - 98 octane unleaded



WARNING: Maximum allowable turbocharger speed is 186krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0003 (includes sensor and gauge), and 781328-0004 (includes speed sensor). Speed sensors sold separately.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

Application: Fiat 500 Abarth 1.4L (2009 - 2023)

Trust the name that's been powering innovation for over 70 years. Garrett PowerMax turbochargers are engineered with OEM precision and built to outperform—from daily drivers to weekend track cars. With over 70 years of technology leadership and more than 130 million vehicles powered by our turbos, Garrett is the trusted choice for performance, reliability, and innovation.

**Please refer to the legal notice on page 92 before purchasing this product.*

Kit Part Number	Engine	Power	Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
953223-5001S	1.4L I4	250BHP 186 kW	MGT1446Z	36.2mm	46mm	39mm	34mm



Product Features

- Direct-Fit turbocharger upgrade for the 2009 - 2023 Fiat 500 Abarth 1.4L
- Replacement for Garrett OEM PN: 55275806 (812812-5006S)
- Supports up to 250BHP | 186kW (+26% compressor flow compared to the OEM turbo)
- Complete turbocharger assembly with calibrated actuator
- Fully machined sensor port to monitor turbo shaft speed: use PN 923586-0002 (G-Smart Bluetooth Module / App) or Speed Sensor Kit 781328-0001 (street kit w/ gauge) or 781328-0002 (pro kit w/o gauge)

Garrett worked with X-tuning to get real-world results on the new PowerMax Direct-Fit Abarth turbo that went into a 2019 Fiat Abarth 595 Competizione (1.4L T-Jet).

The customer wanted a faster, more emotional car that stays street-legal in Austria, without turning the setup into a fabrication project. This car was originally equipped with a OEM Garrett turbo, but the turbo ran out of power.

X-Tuning reported after installation and tuning:

- Stronger low-RPM response
- Linear torque + power delivery across the entire rev range
- Power curve extended to the rev limiter



WARNING: Maximum allowable turbocharger speed is 240krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0003 (includes sensor and gauge), and 781328-0004 (includes speed sensor). Speed sensors sold separately.

** Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



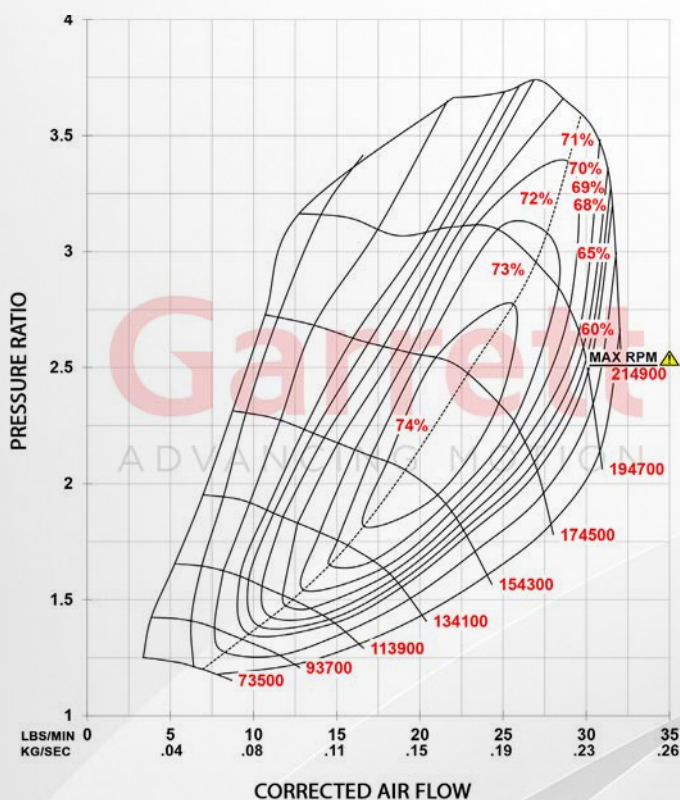


POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Applications: Stage 1 Turbo Upgrade For Ford 2.0L EcoBoost (2013 - 2018) Focus ST | Escape | Kuga | Fusion | Taurus | Lincoln

The Garrett PowerMax™ Stage 1 turbocharger upgrade for the 2013 - 2018 2.0L Ford EcoBoost engine platform is engineered to increase engine performance capability while maintaining OEM installation specifications. This direct drop-in turbocharger provides up to 16% more flow than OEM and will support up to 350 BHP* (260kW). Improvements in compressor efficiency and flow can be attributed to the 52mm fully-machined compressor wheel with advanced aero design. Inconel alloy turbine wheel and stainless steel turbine housings are rated for up to 950° C. This turbocharger kit comes fully assembled, calibrated, and is outline interchangeable with the OE hardware to ensure a perfect fit every time. Contact your local authorized Garrett® distributor for additional information and pricing.

**Please refer to the legal notice on page 92 before purchasing this product.*



Part Number		886195-5001S
Model	Year	Body & Trim
Escape / Kuga	2014 - 2016	SE, Titanium
Focus	2013 - 2018	ST
Fusion	2013 - 2016	SE, Titanium
Police Sedan	2014 - 2018	Base
Taurus	2013 - 2017	Limited, SE, SEL
MKC	2015 - 2017	Base, Black Label, Premiere, Reserve, Select
MKT	2016	Base
MKZ	2013 - 2016	Base, Black Label
Engine	Type	2.0L EcoBoost
	Fuel	Gas
	Cylinders	4



WARNING: Maximum allowable turbocharger speed is 214.9krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE INTERCOOLER

Application: 2013 - 2018 2.0L Ford Focus ST

The Garrett direct fit Ford Focus ST performance charge air cooler boasts a 115% larger core that helps reduce intake manifold temperatures by an average of 11 °F (6.1 °C) based on OBD II data. Optimized end tanks improve air flow through the core. This performance intercooler showed an increase of up to 25 HP (19 kW) and 9 lb-ft (12 N-m) of torque compared to OE during back to back dyno comparisons in a wind tunnel which generates air velocity that matches vehicle speed. During testing the heat saturation point increased from 4 dyno pulls to 8 dyno pulls.

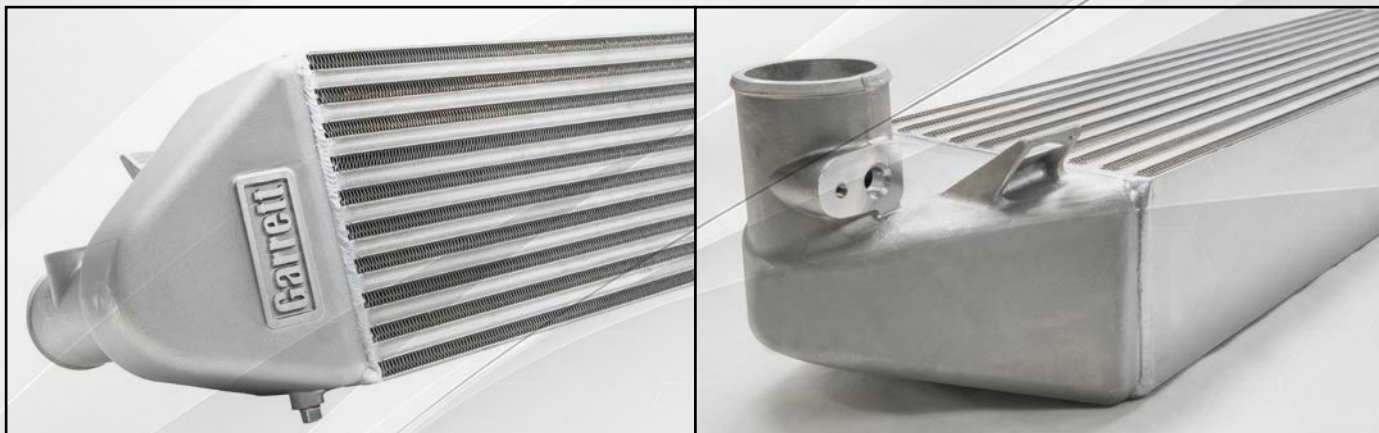
This direct fit performance intercooler installs in 1.5 hour and reuses the stock bolts, hoses, and clamps. Removal of the OE grill shutters required. For more information including Installation instructions please visit our website: www.garrettmotion.com/racing-and-performance/performance-catalog/intercoolers/

Features:

- Supports up to 670 HP (499 kW)
- 115% larger core than stock
- Installs in stock location
- Up to 25 HP (19 kW) and 9 lb-ft (12 N-m) of torque
- Average 11 °F (6.1 °C) reduction in intake temperature based on OBD II data
- Integrated drain plug to evacuate condensation
- Cast aluminum end tanks
- Advanced offset fin design
- Bar-and-plate construction

Part Number		880736-6001
Vehicle	Make	Ford
	Model	Focus ST
	Year	2013-2018
Engine	Type	2.0L
	Fuel	Gas
Weight	23 lbs / 10.4 kg	
Size Specs	26.3" x 4.3" x 7.8"	
	668mm x 109mm x 198mm	

*** Important:** For customers outside of North America, MAP sensor BV61-9F479-AA must be purchased separately and used for installation to ensure a proper fit





POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

Application: 2002 - 2016 Toyota 3.0L 1KD Diesel Hilux | 120 Prado

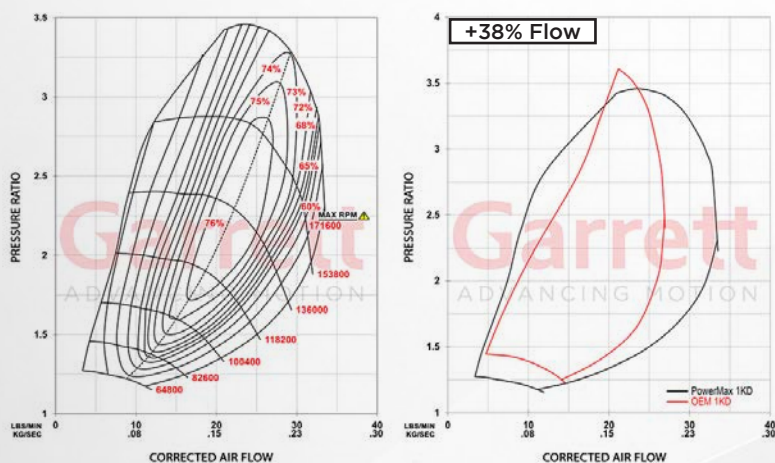
Trust the name that's been powering innovation for over 70 years. Garrett PowerMax turbochargers are engineered with OEM precision and built to outperform—from daily drivers to weekend track cars. With over 70 years of technology leadership and more than 130 million vehicles powered by our turbos, Garrett is the trusted choice for performance, reliability, and innovation.

**Please refer to the legal notice on page 92 before purchasing this product.*

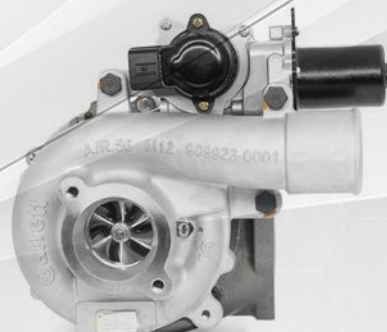
Kit Part Number	Application Description	Engine	Power	Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
953907-5001S	2002-2016 Toyota Hilux	3.0L 1KD Diesel	265BHP 198kW	GTB2260V	42.4mm	61mm	50mm	45mm
953907-5002S	2002-2016 Toyota 120 Prado							

Product Features

- Direct-fit performance turbocharger for the Toyota Hilux & Prado 3.0L 1KD Diesel (2002 - 2016)
- Supports up to 265BHP | 198kW (+38% increase in power tested on dyno compared to the OEM turbo)
- 70% increase in torque (550Nm from 320Nm tested on-dyno compared to the OEM turbo)
- Improved electric actuator assembly for increased durability
- Complete turbocharger assembly with calibrated electric actuator
- Fully machined speed sensor port to monitor turbo shaft speed: use PN 923586-0002 (G-Smart Bluetooth Module / App) or Speed Sensor Kit 781328-0001 (street kit w/ gauge) or 781328-0002 (pro kit w/o gauge)



953907-5001S



953907-5002S



WARNING: Maximum allowable turbocharger speed is 171.6krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



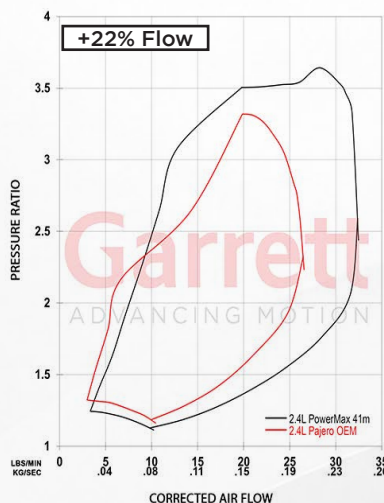
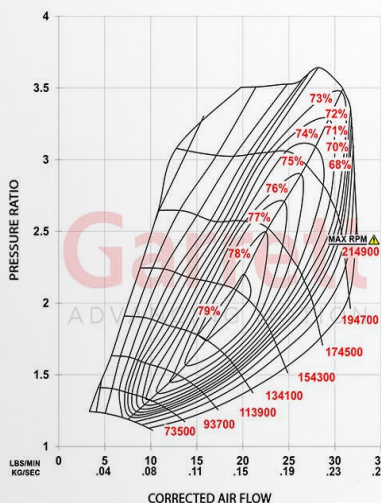
POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

Application: 2016 - 2020 Mitsubishi 2.4L Diesel 4N15 Pajero Sport (QE, QF) Triton MQ

Trust the name that's been powering innovation for over 70 years. Garrett PowerMax turbochargers are engineered with OEM precision and built to outperform—from daily drivers to weekend track cars. With over 70 years of technology leadership and more than 130 million vehicles powered by our turbos, Garrett is the trusted choice for performance, reliability, and innovation.

**Please refer to the legal notice on page 92 before purchasing this product.*

Part Number	Power *	Make	Application Description	Engine	Turbo Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
954952-5001S	194kW 260BHP	Mitsubishi	2016-2025 Pajero Sport (QE, QF) 2016-2020 Triton MQ	2.4L 4N15 Diesel	GTD1752	41mm	54mm	43mm	40mm



KEY PRODUCT FEATURES & BENEFITS

EASY INSTALLATION & INTEGRATION

- Direct-fit, bolt-on performance upgrade with calibrated actuator for hassle-free installation

PROVEN PERFORMANCE GAINS

- Delivers 22% more compressor flow than the OEM turbocharger to support up to 194kW | 260BHP * enabling improved acceleration and power output

- On-vehicle testing produced a 52% increase in power (86kW - 131kW) and a 23% increase in torque (361Nm - 445Nm) with ECU recalibration

ADVANCED MONITORING CAPABILITY

- Fully machined speed sensor port for turbo speed monitoring and tuning optimization. Use PN 923586-0002 (G-Smart bluetooth module / app) or speed sensor kit 781328-0001 (street kit w/ gauge) or 781328-0002 (pro kit w/o gauge)

OEM-LEVEL QUALITY

- Engineered to OEM standards for durability, reliability, and long-term performance



WARNING: Maximum allowable turbocharger speed is 214.9krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Applications: 2022+ Ford Ranger | VW Amarok 3.0L V6 Diesel

Part Number	Model	Comp Ind	Comp Exd	Turb Ind	Turb Exd
930592-5001S	GTD2060V	47mm	60mm	47mm	43mm

**Please refer to the legal notice on page 92 before purchasing this product.*



Product Features:

- Direct-Fit Upgrade for the 2022+ Ford Ranger | VW Amarok 3.0L V6 Diesel
- Replacement for Garrett OEM PN: MB3Q-6K682-AB
- +27% compressor flow compared to the OEM turbo
- +20% torque and horsepower at 2000RPM without modifications, for improved towing and 4x4 performance.
- Complete assembly with calibrated electric actuator for direct fitment
- Ball bearing design for optimized boost response and durability
- DUCTILE IRON turbine housing rated for up to 830°C
- Fully machined speed sensor port



WARNING: Maximum allowable turbocharger speed is 186.2krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.

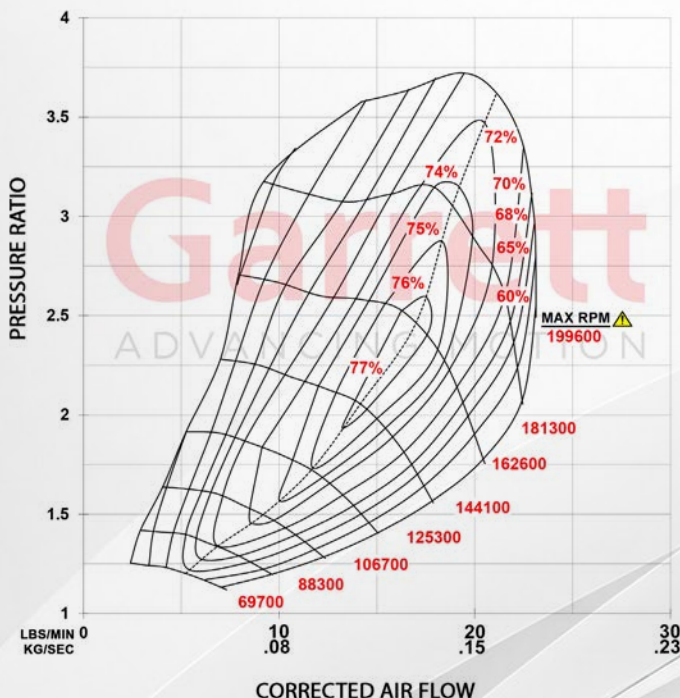


POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Applications: Stage 1 Turbo Upgrade for 2011-2021 Ford Ranger PX1 PX2 PX3 | Everest | 2011-2020 Mazda BT-50
Supports up to 172kW*

This Garrett PowerMax™ direct fit turbocharger is designed for the 3.2L Duratorq 5 cylinder diesel engine platform found in the 2011-2021 Ford Ranger PX1 PX2 PX3 | Everest and the 2011-2020 Mazda BT-50. The forged, fully machined compressor wheel designed for the GTX Gen II product line increases flow by 20% over the OE wheel. With the correct engine calibration, this enables the engine to be tuned up to 172kW from OE standard 147kW. All Garrett PowerMax™ direct fit turbochargers are outline interchangeable with the OE turbocharger ensuring a perfect fit every time.

**Please refer to the legal notice on page 92 before purchasing this product.*



Part Number		880862-5001W **	
Turbo	Replaces OEM part numbers	798166-0006 (5006S) 812971-0006 (5006S) 853333-5001S	
	Make	Ford	Mazda
	Model	Ranger PX1 PX2 PX3 Everest	BT-50
Engine	Year	2011 - 2021	2011 - 2020
	Type	Duratorq 3.2 / Powerstroke 3.2	
	Fuel	Diesel	
	Emissions	Euro V	
		Cylinders	5

** Includes gasket kit

Features:

- GTX Gen II compressor wheel aerodynamics
- Wider compressor map for improved performance
- 20% more flow than the OE turbocharger



WARNING: Maximum allowable turbocharger speed is 199.6krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE INTERCOOLER

Application: 2011-2021 Ford Ranger PX1 PX2 PX3 | Everest | 2011-2020 Mazda BT-50

Part Number: 881649-6001

The Garrett direct fit performance charge air cooler for the Ford Ranger and Mazda BT50 boasts a 218% larger core that helps reduce intake manifold temperatures by an average of 32 °C based on test data. Optimized end tanks improve air flow through the core. This direct fit performance intercooler installs in 2.0 hours and reuses the stock bolts, hoses, and clamps.

This direct fit performance intercooler installs in 1.5 hour and reuses the stock bolts, hoses, and clamps. Removal of the OE grill shutters required. For more information including Installation instructions please visit our website: www.garrettmotion.com/racing-and-performance/performance-catalog/intercoolers/

Features:

- Supports up to 499 kW
- 218% larger core than stock
- Installs in stock location
- Cast aluminum end tanks
- Advanced offset fin design
- Bar-and-plate construction

Part Number		881649-6001	
Vehicle	Make	Ford	Mazda
	Model	Ranger PX1 PX2 PX3 Everest	BT-50
	Year	2011-2021	2011-2020
Engine	Type	3.2L 2.2L 2.0L	
	Fuel	Diesel	
Weight	12.56 kg		
Size Specs	680mm x 101mm x 260mm		



*** Important:** For applications outside of Australia, please contact your local distributor to ensure drop-in fitment as products may need modification or additional hoses/clamps.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

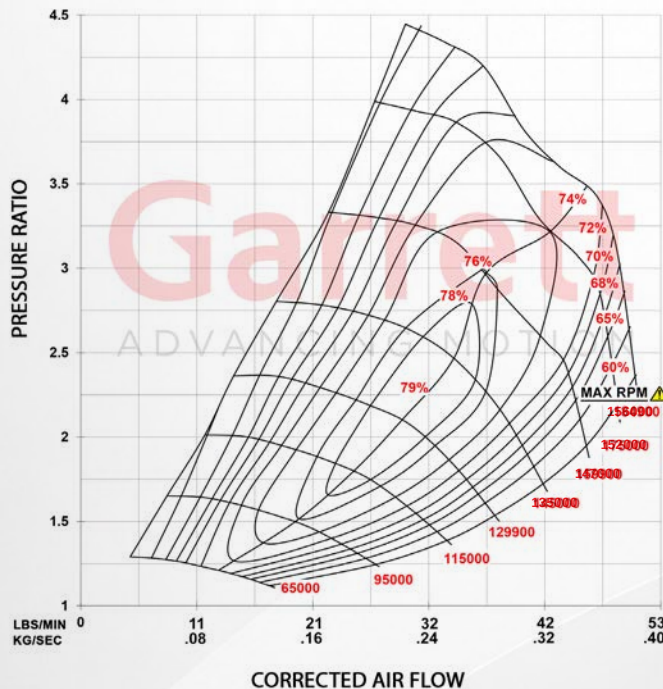
Application: Stage 1 Turbo Upgrade For 2007 - 2018 Toyota Land Cruiser 4.5L 1VD-FTV

Part Number 881604-5001S

Supports up to 164kW*

This Garrett PowerMax™ direct fit turbocharger is designed for the 4.5L 1VD-FTV VS diesel engine platform found in the 2007-2018 Toyota Land Cruiser. The forged, fully machined compressor wheel designed for the G-Series product line increases flow by 20% over the OE wheel. Performance results of this product are highly dependent upon your vehicle's modifications and tuning. The power represented above was recorded on a chassis dyno with a modified ECU and OEM fuel delivery system enabling the engine to produce 164kW from the OE standard 151kW. All Garrett PowerMax™ direct fit turbochargers are outline interchangeable with the OE turbocharger ensuring a perfect fit every time.

**Please refer to the legal notice on page 92 before purchasing this product.*



Part Number		881604-5001S
Turbo	Model	GTA2359V
	Interchangeable with OE PN	775095-0001 (5001S) 842127-0001 (5001S)
Vehicle	Make	Toyota
	Model	Land Cruiser
Engine	Year	2007-2018
	Type	4.5 L 1VD-FTV V8
	Fuel	Diesel
	Emissions	Euro IV
Cylinders		8

Features:

- G-Series compressor wheel aerodynamics
- Wider compressor map for improved performance
- 20% more flow than the OE turbocharger
- VNT variable geometry technology



WARNING: Maximum allowable turbocharger speed is 156krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

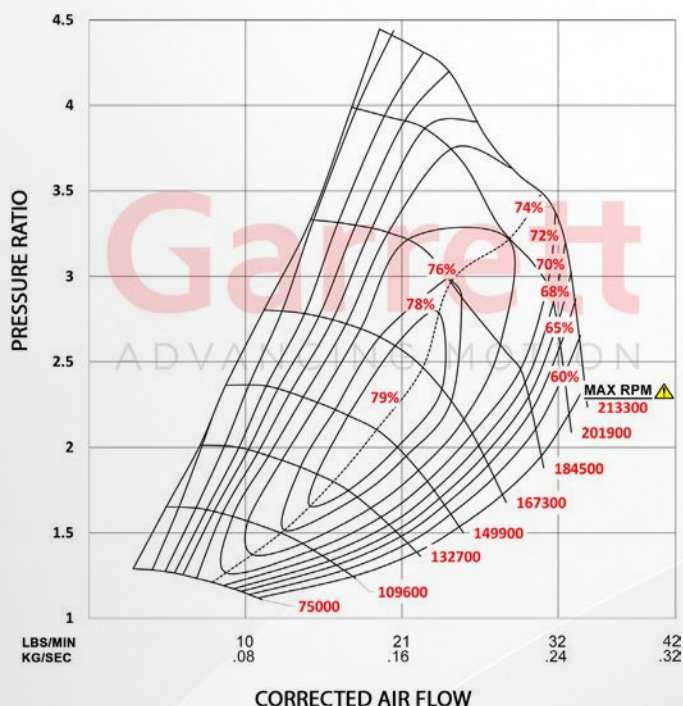
Application: Stage 1 Turbo Upgrade For (2014 - 2019) General Motors (Holden, Chevrolet) Colorado 2.8L XLDE

Part Number: 892179-5001S

Garrett PowerMax™ turbocharger upgrade for the Chevrolet Duramax 2.8L engine platform is engineered to increase engine performance while maintaining OEM installation specifications. This direct drop-in stage 1 upgrade provides up to 20% more flow than OEM and will support up to 160kW/ 215 BHP*. Variable turbine geometry is engineered to factory OEM specs and is controlled by the included module. Improvements in efficiency and flow can be attributed to the lightweight forged fully-machined compressor wheel with advanced aero design. This turbocharger is outline interchangeable with the OE hardware to ensure a perfect fit every time.

Contact your local authorized Garrett distributor for additional information and pricing.

**Please refer to the legal notice on page 92 before purchasing this product.*



Part Number		892179-5001S
Turbo	Model	GTB1752V
	Comp Inducer	42mm
	Replaces OEM part numbers	814067-0005 814067-0004 814067-0003 814067-0002 814067-0001
Vehicle	Model	Colorado Colorado 7
	Year	2014 - 2019
Engine	Type	2.8L XLDE
	Fuel	Diesel
	Emission Regulation	Euro 3,4,5
	Cylinders	I4
	Horsepower	160kW / 215BHP*



WARNING: Maximum allowable turbocharger speed is 213.3krpm. The use of this product above max turbocharger speed is at the owner's risk, and can result in damage and premature failure. To protect the turbocharger from overspeed when operating, a speed sensor port is machined into the compressor housing for the fitment of speed sensor part numbers 781328-0001 (includes sensor and gauge), and 781328-0002 (includes speed sensor). Speed sensors sold separately.

* Estimated Horsepower. Performance results of this product are highly dependent upon your vehicle's modifications and tuning/calibration. The horsepower numbers represented above are calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel horsepower.



POWERMAX™ DIRECT FIT PERFORMANCE INTERCOOLER

Application: 2015+ Ford Mustang 2.3L EcoBoost
Supports Up To 600 Horsepower | C.A.R.B Certified ✓
Part Number: 857564-6001

The Garrett Direct Fit Performance Intercooler is C.A.R.B. certified (EO# D-794) and fits the 2015+ 2.3L Ecoboost Mustang in the stock location and can support up to 600 horsepower. The aluminum core features advanced offset fin design and vacuum brazed bar-and-plate construction resulting in superior thermal and fatigue performance. CFD optimized cast aluminum end tanks reduces recirculation and maximizes flow. The complete assembly results in up to a 30% reduction in pressure drop and up to a 40 °F reduction in charge air temperature.

This direct fit performance intercooler installs in 2.5 hours and reuses the stock bolts, hoses, and clamps. Removal of the OE grill shutters required. For more information including Installation instructions please visit our website:
www.garrettmotion.com/racing-and-performance/performance-catalog/intercoolers/

Features:

- Supports up to 600 horsepower
- C.A.R.B Certified (EO# D-794)
- 60% larger core than stock
- Installs in stock location
- Up to a 40 °F reduction in temperatures

Part Number		857564-6001
Vehicle	Make	Ford
	Model	Mustang
	Year	2015+
Engine	Type	2.3L
	Fuel	Gas
Weight	16.5 LBS	
Size Specs	21" x 5.32" x 5.4"	





POWERMAX™ DIRECT FIT PERFORMANCE INTERCOOLER

Application: 2015+ Subaru WRX 2.0L

Supports Up To 530 Horsepower

Part Number: 891185-6001

The direct fit Subaru WRX performance charge air cooler boasts a 70% larger core that helps reduce intake manifold temperatures up to 30 °F (16.7 °C). Optimized end tanks improve air flow through the core. This performance intercooler showed an increase of up to 16 HP (12 kW) and 15 lb-ft (20 N-m) of torque compared to OE during back to back dyno comparisons in a wind tunnel which generates air velocity that matches vehicle speed. During testing the heat saturation point increased from 4 dyno pulls to 6 dyno pulls.

This direct fit performance intercooler installs in 2.5 hours and reuses the stock bolts, hoses, and clamps. Removal of the OE grill shutters required. For more information including Installation instructions please visit our website:
www.garrettmotion.com/racing-and-performance/performance-catalog/intercoolers/

Features:

- Supports up to 530 HP (395 kW)
- 70% larger core than stock
- Installs in stock location
- Up to 16 HP (12kW) and 15 lb-ft (20 Nm) of torque
- Average 30° F (16.7° C) reduction in intake temp
- Cast aluminum end tanks
- Advanced offset fin design
- Bar-and-plate construction

Part Number		891185-6001
Vehicle	Make	Subaru
	Model	WRX
	Year	2015 +
Engine	Type	2.0L FA20F
	Fuel	Gas
Size Specs	13" x 4" x 10.2"	
	330mm x 102mm x 259mm	





POWERMAX™ DIRECT FIT PERFORMANCE INTERCOOLER

Application: 2015+ BMW M3 | M4

Supports Up To 980 Horsepower

Part Number: 888883-6001 Raw Finish | 888883-6002 Black Finish

Garrett Powermax™ direct fit performance charge air cooler for the 2015+ BMW M3 and M4 boasts a 47% larger core with dual pass coolant flow to help reduce intake manifold temperatures by an average of 10 °F. CFD optimized end tanks improve airflow through the core. An average increase of 12.4 horsepower and 4.9 lb-ft of torque were measured during back to back dyno pulls. This direct-fit performance intercooler installs in 1.5 hours and reuses the stock bolts, hoses, and clamps.

Features:

- Supports up to 980 HP (730 kW)
- 47% larger core than stock
- Installs in stock location
- Up to 12.4 HP (9kW) and 4.9 lb-ft (6.7 Nm) of torque
- Cast aluminum end tanks
- Air-to-liquid design
- Bar-and-plate construction

Part Number	Raw Finish	888883-6001
	Black Finish	888883-6002
Vehicle	Make	BMW
	Model	M3 M4
	Year	2015+
Engine	Type	I6
	Fuel	Gas
Weight	14.1 lbs / 6.4 kg	
Size Specs	7.2" x 9.8" x 3.6"	
	183mm x 249mm x 92mm	





POWERMAX™ DIRECT FIT PERFORMANCE INTERCOOLER

Application: 2016+ Honda Civic 1.5T SI

Supports Up To 660 Horsepower

Part Number: 893516-6001

Garrett Powermax™ direct fit performance charge air cooler for the 2016+ Honda Civic 1.5T SI has a 90% larger core than stock and helps reduce intake manifold temperatures up to 60 °F (15.6 °C) at heat soak. CFD optimized end tanks improve air flow distribution through the core. This performance intercooler showed a max increase of up to 17 WHP (12.7 kW) and 14 lb-ft of torque (19 N-m) compared to OE during back to back dyno comparisons in a wind tunnel which generates air velocity that matches vehicle speed.

This direct fit performance intercooler installs in 3 hours and reuses the stock bolts, hoses, and clamps. Some modification to the shroud required. For more information including Installation instructions please visit www.garrettmotion.com/racing-and-performance/performance-catalog/intercoolers/

Features:

- Supports up to 660 HP (492 kW)
- 90% larger core than stock
- Installs in stock location
- Max increase of 17 HP (12.7 kW) and 14lb-ft (19 N-m)
- Up to 60 °F (15.6 °C) reduction in intake temp
- Cast aluminum end tanks
- Advanced offset fin design
- Bar-and-plate construction

Part Number		893516-6001
Vehicle	Make	Honda
	Model	Civic
	Year	2016+
Engine	Type	1.5L/SI
	Fuel	Gas
Weight	12.56 kg	
Size Specs	27.5" x 3.5" x 6.2"	
	698.5mm x 88.9mm x 157.5mm	



CASE STUDY: POWERMAX™ DIRECT FIT PERFORMANCE INTERCOOLER

Application: 2016+ Honda Civic 1.5T SI

Tested By:



The Garrett intercooler has smooth aerodynamically shaped cast end tanks for the best flow and the most even distribution of charge air flow across the intercooler core possible. This helps make cooling better and results in less pressure drop across the core. Garrett used CFD studies to determine the best end tank shape.

The Garrett end tanks have the correct bosses so the OEM charge pipes will fit perfectly to them with no leaks. The end tanks also have provisions for the stock chassis mounts making the intercooler a true bolt-in part. The intercooler is assembled with strong tig welding for leak and crack free service.

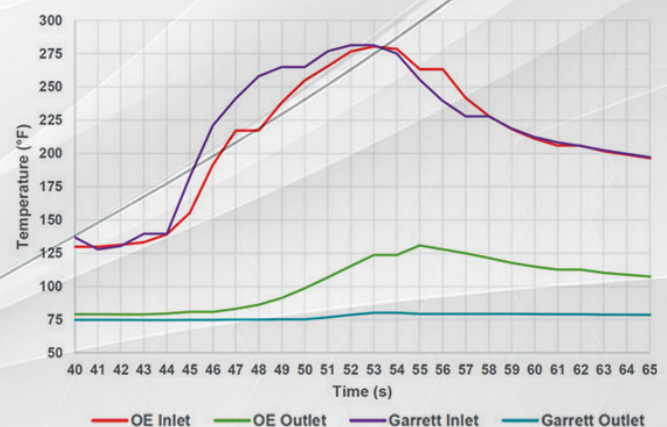
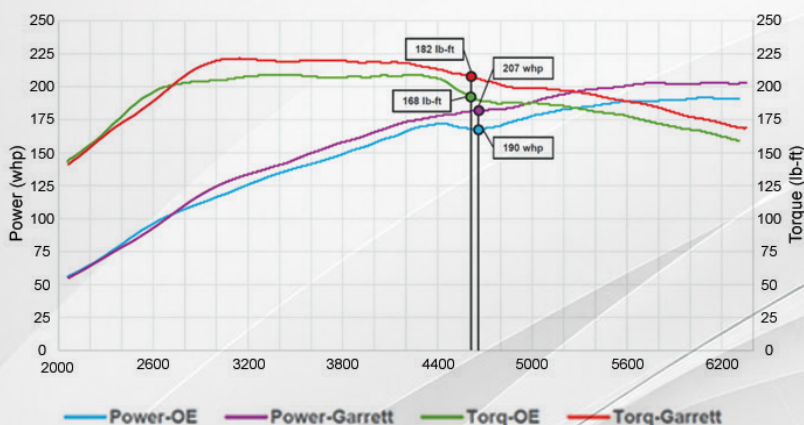
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Before starting the Garrett intercooler test we had to do a baseline test to get the stock power data of our test Honda Civic Si. We not only got a basic power run, but we also tested the temperature drop across the core as well as the intercooler's ability to keep absorbing heat after many runs. After doing our power runs, we ran the car many times back to back as fast as the dyno could recover until the inlet and outlet temperatures stabilized indicating that the system was heat soaked. We timed each run to ensure consistent data.



Like we do for all of our super critical testing, we used World Motorsports wind tunnel dyno. The World Motorsports dyno is the only one we know that can provide a consistent test environment in the same configuration as the car is driven. Multiple fans exchange the air in the cell very quickly to keep the oxygen content and temperature consistent and the huge main fan is linked to the roller speed and can produce air flows of over 120 mph.

So how much power does the Garrett intercooler make? The peak power gains are 17 hp and 14 lb feet of torque! What is more impressive is that the power gains come from 2700 rpm to the rev limiter at 6500 rpm. The power gains are pretty consistent across the rev range. This is a lot of power under the curve. Note that this is just by simply bolting on the intercooler with no tuning. With an intercooler this effective, tuning to exploit the significantly cooler charge air temperatures can probably extract at least another 20 hp without any other mods.



CHARGE AIR COOLERS



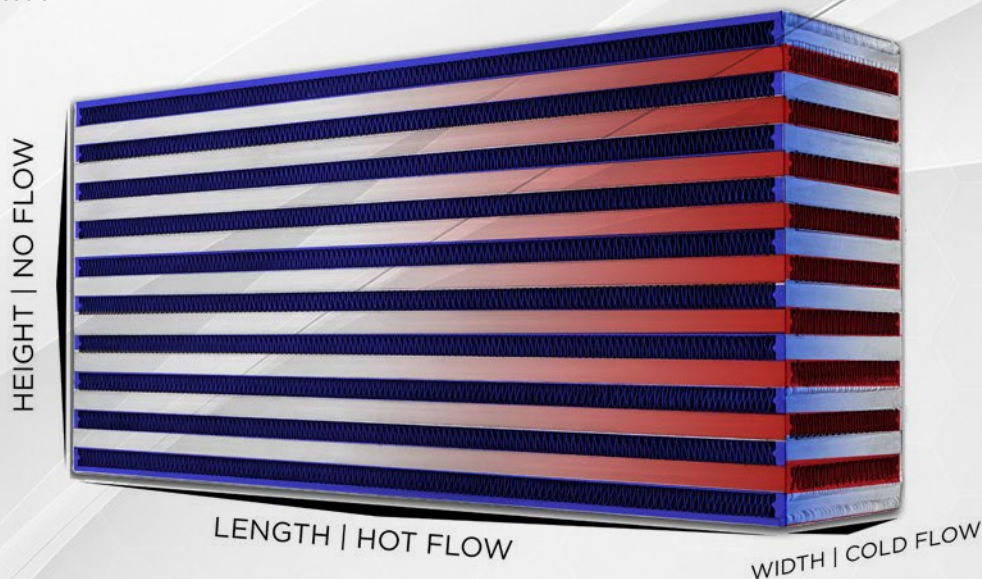
Garrett intercooler cores combine world class engineering and manufacturing with unbeatable performance. Air-to-air and air-to-liquid bar and plate intercooler cores are proven to reduce intake temperatures through advanced fin density and offset composition. Find the perfect fit for every project, at the perfect price.



CHARGE AIR COOLERS

Utilizing advanced thermal technology, Garrett intercoolers offer superior fatigue protection for the high boost pressures and temperatures of today's extreme engines. With over 75 years of charge air cooler experience, Garrett remains ahead of the industry in intercooler design and function making it the number one choice for some of the premier names in the performance car industry - Roush, Saleen, Mercedes-Benz AMG, Ford SVT, GM, and McLaren have all turned to Garrett to cool their hottest models.

We now offer this expertise and quality to enthusiasts, in a full range of intercooler cores that are manufactured in-house by Garrett technicians. The bar and plate construction offers hi-performance, in a compact design using high strength vacuum brazed aluminum alloys with advanced fin designs to ensure greater heat transfer effectiveness and durability. From air-to-air cores sized for sport compact cars to air-to-liquid cores capable of supporting 1000+ hp, we can provide optimum performance for nearly any application.



Part Number	Model	Supported Horsepower	Length Hot Flow (in) (mm)	Height No Flow (in) (mm)	Width Cold Flow (in) (mm)
* 848054-6012	Air / Air	300	10.2 260	8.1 205	4.7 120
703518-6015	Air / Air	310	18.0 457	6.4 163	3.0 76
703521-6003	Air / Air	375	10.0 254	12.3 312	4.5 114
703518-6016	Air / Air	410	18.0 457	8.0 203	3.0 76
703520-6025	Air / Air	425	18.0 457	8.0 203	3.5 89
* 848054-6013	Air / Air	450	13.5 343	8.6 219	5.5 140
703518-6018	Air / Air	475	24.0 610	6.4 163	3.0 76
703520-6009	Air / Air	500	24.0 610	6.4 163	3.5 89
703518-6017	Air / Air	510	18.0 457	10.5 267	3.0 76
703520-6002	Air / Air	550	14.0 356	12.1 307	3.5 89
848054-6004	Air / Air	600	21.0 533	5.4 137	5.3 135
848054-6024	Air / Air	600	13.0 330	10.2 259	4.0 102
487085-6002	Air / Air	600	20.1 511	11.2 284	3.0 76
703520-6010	Air / Air	600	24.0 610	8.0 203	3.5 89
893513-6001	Air / Air	660	27.5 699	6.2 157	3.5 89
* 848054-6037	Air / Air Vertical Flow	750	8.0 203	24.0 609	3.5 89
* 858893-6001	Air / Air	750	9.0 229	22.1 560	4.0 102
848054-6015	Air / Air	750	21.0 533	9.4 239	5.3 135
703518-6004	Air / Air	750	18.0 457	12.1 307	3.0 76
703522-6008	Air / Air	750	18.0 457	11.2 284	4.5 114
703522-6004	Air / Air	785	18.0 457	12.1 307	4.5 114
848054-6020	Air / Air	800	26.3 668	7.8 198	4.3 109
703520-6011	Air / Air	800	24.0 610	10.5 267	3.5 89
848054-6005	Air / Air	800	13.1 333	8.6 218	5.0 127
848054-6001	Air / Air	870	20.0 508	12.5 318	3.5 89
703518-6005	Air / Air	900	24.0 610	12.1 307	3.0 76
703520-6005	Air / Air	925	24.0 610	12.1 307	3.5 89
848054-6021	Air / Air	950	26.8 681	10.4 264	4.0 102
703522-6005	Air / Air	950	24.0 610	12.1 307	4.5 114
486827-6002	Air / Air	1000	23.7 602	12.0 305	3.8 97
* 848054-6039	Air / Air Vertical Flow	1100	12.0 305	22.4 568	4.5 114
848054-6003	Air / Air	1140	22.0 559	14.0 356	4.5 114
701596-6001	Air / Air	1260	27.8 706	12.7 323	5.1 130
* 858893-6003	Air / Air	1275	14.0 356	22.1 561	4.5 114

* New Cores

Part Number	Model	Supported Horsepower	Length Hot Flow (in) (mm)	Height No Flow (in) (mm)	Width Cold Flow (in) (mm)
717874-6009	Air / Liquid	500	3.8 97	3.8 97	9.8 249
717874-6008	Air / Liquid	750	3.8 97	3.8 97	11.7 297
873213-6002	Air / Liquid	980	7.2 183	3.6 91	9.8 249
734408-6005	Air / Liquid	1000	4.8 122	4.5 114	11.9 302

BAR AND PLATE CONSTRUCTION

Bar and plate intercoolers are organized by stacking a series of aluminum bars, plates, and fins in an alternating pattern until you reach the desired core height and length. Bars and plates create a framework of sealed passages for the air to travel through while the fins set the row height and facilitate the exchange of heat energy from the hot passages to the cold passages in a process called heat transfer. There are hot flow/ charge air passages and cold flow/ ambient air passages. Air leaving the turbo travels through the hot flow passages of the core and heat is transferred from the air to the fins making the air cooler and more dense before it goes into the engine. The cold flow/ ambient air passages use cold air from the front of the vehicle to continuously cool the hot flow passages. Intercoolers will not function without sufficient cold air flow.

HEAT TRANSFER

How does the intercooler remove heat from the charge air? There are three types of heat transfer modes, but the bar and plate intercooler relies on Conduction and Convection to extract heat from the charge air. Conduction is the transfer of heat to materials that have direct contact with each other. Convection is the transfer of heat from one place to another by movement of air. As you can see in the image below, the bars, plates, and fins alternate direction and flow and all play a part in extracting heat from the charge air. The charge air fins transfer heat from the charge air to the plates and the ambient air fins transfer the heat from the plates and the ambient air cools the fins. The process repeats as long the car is moving or until the core gets heat soaked.



FIN DENSITY

Fin density is measured in FPI or fins per inch. Each fin surface counts as one fin meaning there are two fins per wave. Fin stacks start off as flat sheets of aluminum that are fed through a special machine where they are bent to the desired FPI per row height and length. Garrett manufacturers around 20 different air to air and air to water intercooler cores supporting a range of horsepower from 310 up to 1260. Each of those cores are different in length, width, and height to meet the needs of different performance enthusiasts.

Garrett Intercooler cores utilize a combination of fin density depending on the flow path of the core. For example, the cold flow path or the front of the intercooler commonly has a higher density fin count to allow for better thermal performance and cooling. Core width/ cold flow can range from 3 – 5 inches so higher fin density is critical with the short span the ambient air travels across to cool the charge air passages. Additionally, the cold air passages are not sealed or pressurized like the charge air passages, so your ambient air flows through, cools the hot passages and evacuates into the engine compartment.

Hot flow passages have a longer run spanning from 11-28 inches in some intercooler cores. The hot flow path is a series of sealed chambers with fins spanning the entire length. There is a lot of surface area for heat transfer to take place and for that reason, the hot chambers have a lower fin density. This also helps reduce pressure drop as the charge air travels from one side to the other.

PRESSURE DROP

By now you may be asking what is pressure drop and how does fin density affect it? Pressure drop is the difference in pressure between two points caused by flow resistance. An example of pressure drop is when the air pressure leaving the intercooler is less than the pressure that went in. You may never actually see this happening because your turbo will work harder (spin faster) to deliver the correct PSI to the engine. The faster a turbo spins the hotter the air is so it's critical to use an intercooler that has a good balance of fin density so you don't overwork the turbo.

Think about driving down the road with your hand out of the window and your palm facing forward. Your hand is interrupting the flow of the air and it must find a way around your hand to pass. Now imagine you and 10 friends in a limousine with your hands out of the window one after another. The last person in line will not feel the same flow as the first person because of pressure drop.

CONCLUSION

Now you understand the concept of fin density and pressure drop and the importance of choosing an intercooler core that has a balanced combination of fins selected for both hot and cold flow passages. Garrett intercooler cores come in a variety of sizes for many different horsepower ranges and they are all flow tested and optimized for performance.

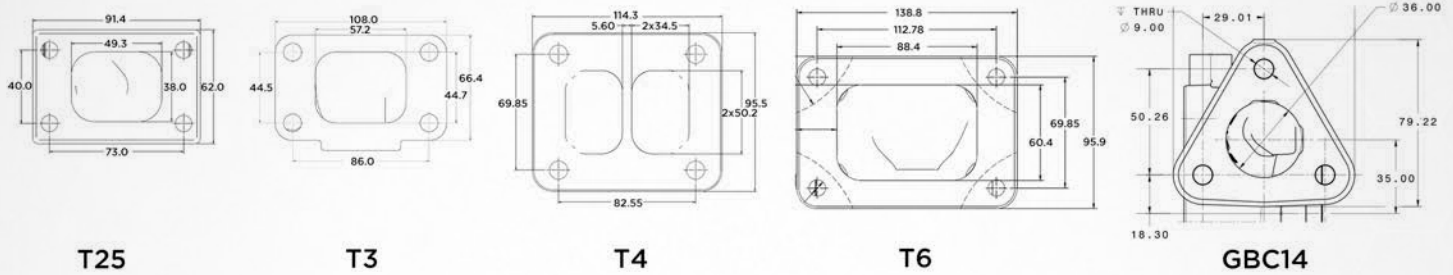
Garrett ancillary components are factory replacement parts for most G-Series and GTX Gen II turbochargers. From bolts, to clamps, actuator brackets, rod ends, o-rings and more. G-Series turbochargers have many new features on the compressor and CHRA sides of the turbo. The new speed sensor plug, bolt, and o-ring, pressure port plug, and oil and water fittings to name a few. These small ancillary components are now available for purchase.

Part Number	Description	Model
400809-0203	Pressure Plug Comp Hsg	G-Series GTX42 45 47 50 55 Gen II
403069-0242	O-Ring Speed Sensor	G-Series GTX47 50 55 Gen II
871104-0001	Plug Speed Sensor	
400674-0516	Bolt Speed Sensor	
400975-0203	Bolt Compressor Hsg	G25 G30 G35-900
400975-0303	Bolt Compressor Hsg	G35-1050 GTX28 Gen II
871795-0001	Clamp Compressor Hsg	G25 G30 G35-900
871795-0003	Clamp Compressor Hsg	G35-1050
403069-0077	O-Ring Compressor Hsg	GTX30 35 Gen II
403069-0157	O-Ring Compressor Hsg	G25 G30-660
403069-0162	O-Ring Compressor Hsg	G30-770 G30-900 G35
403069-0164	O-Ring Backplate	GTX28 30 35 Gen II
767567-0002	Fitting Oil Inlet	G25 30 35 GTX28 30 35 Gen II
434705-00041	Plug Water	
872902-0001	Fitting Water	
444657-0006	Washer Copper	
400702-1025	Circlip Rod End	
413885-0032	Rod End	
400146-0207	Nut Actuator Bracket / Rod End	G25
876079-0001	Bracket Actuator Standard Rotation	
876079-0002	Bracket Actuator Reverse Rotation	
876079-0003	Bracket Actuator Twin Scroll	G25 G30-660
826466-0001	V-Band Turbine Inlet	G25 30 35 GTX30 35 Gen II GTX28 (Turbine Outlet)
446397-0364	V-Band Turbine Outlet	G25 30 35 GTX30 35 Gen II
446397-0382	V-Band Center Hsg - Turbine Hsg	G25 30 35
400515-0212	Locknut V-Band	G-Series GTX Gen II



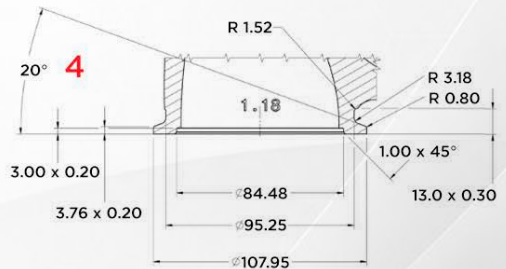
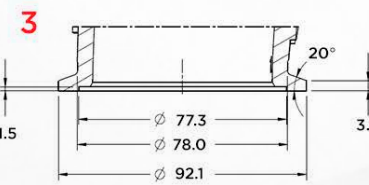
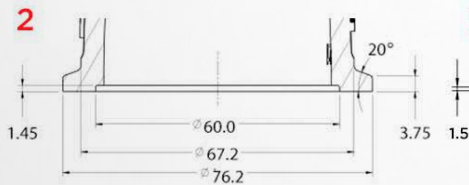
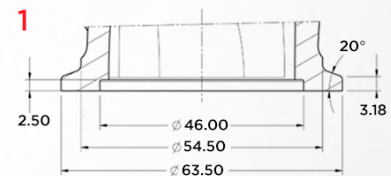
FLANGE DIAGRAMS

BOLTED INLET TURBINE HOUSINGS: T25 | T3 | T4 | T6 | GBC14



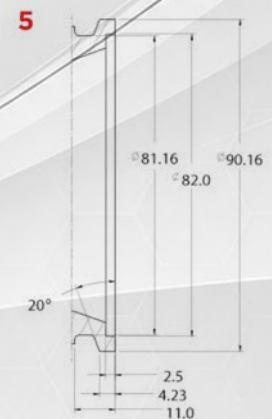
V-BAND INLET TURBINE HOUSINGS:

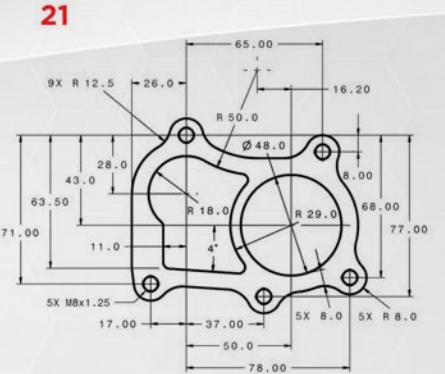
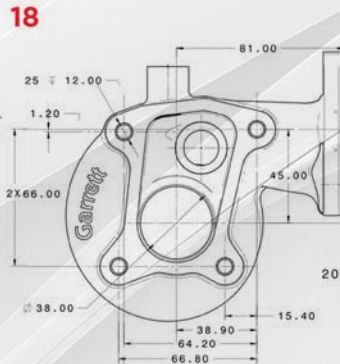
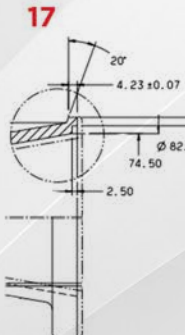
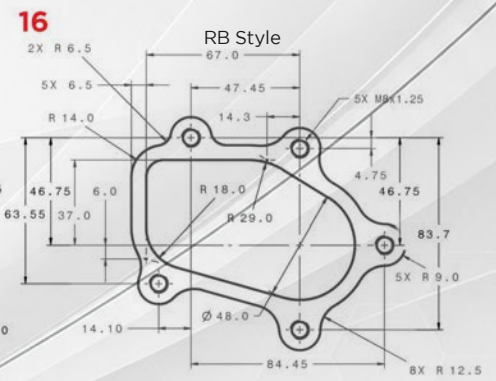
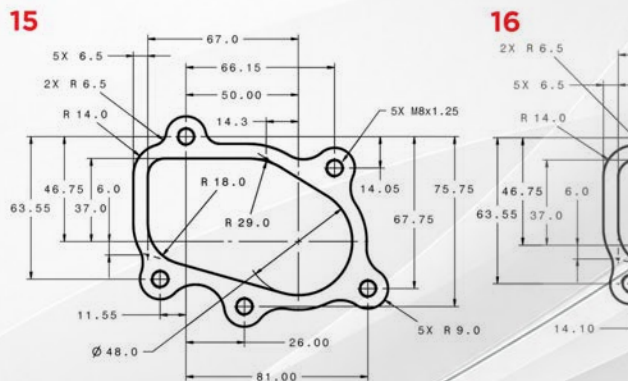
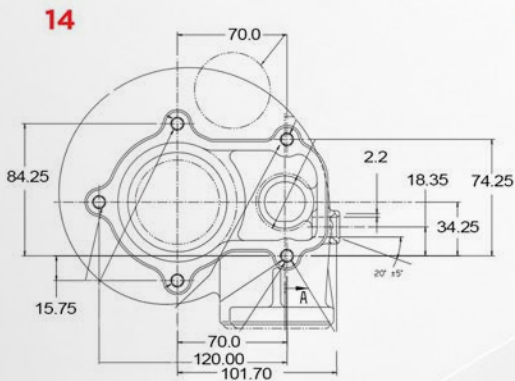
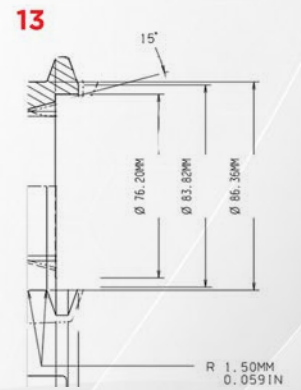
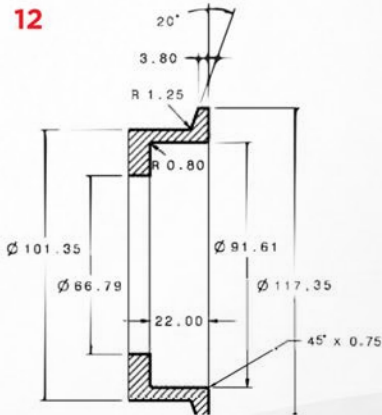
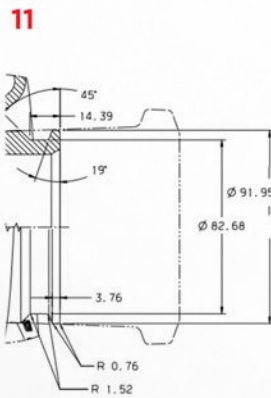
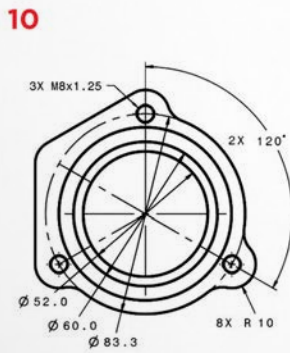
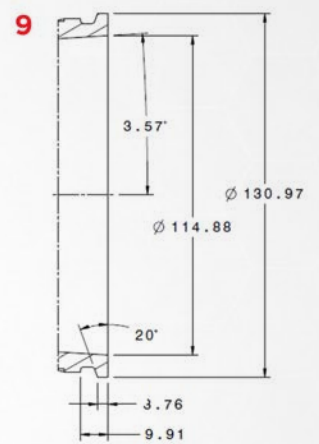
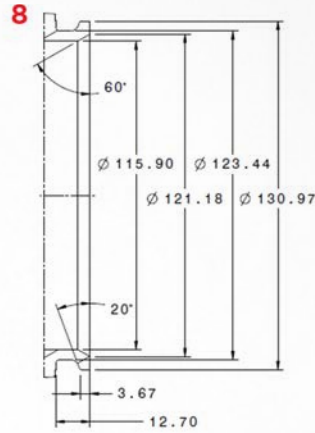
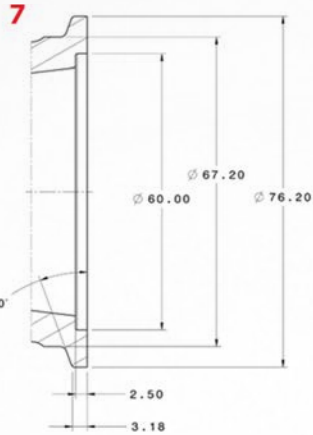
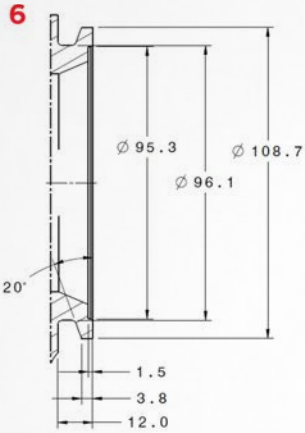
Diagram	V-Band Turbine Inlet Flange Reference		
1	GT28	GTX28	GTX28 Gen II
2	G25	G30	G35
2	GT30	GTX30	GTX30 Gen II
2	GT35	GTX35	GTX35 Gen II
3	G42	G45	G40
4	G57 G55	GTX55	GTX55 Gen II



TURBINE HOUSING OUTLET (DOWN PIPE) FLANGE

Garrett Series	Turbine Housing Inlet Type						
	All	V-Band	T25	T3	T3 WG	T4	T6
G25 G30 G35	5						
G40 G42 G45		6				19	
G47 G50	8						
G55		9					8
G57	9						
GT28 GTX28 GT25		7	15				
GT28 RB Style			16				
GBC14			15				
GBC17 20 22	18						
GBC35 GBC37	5						
GT30 GTX30		5		17	14		
GT35 GTX35		5		17	14	20	
GTX40	11						
GTX42 GTX45	12						
GTX47 GTX50	8						8
GTX55		9					8
GTX36 GTW38	13						
GT2052	10						
GT2252	21						





POSSIBLE CAUSES	SYMPTOMS											SOLUTION
	Engine lacks power	Black smoke	Excessive oil consumption	Blue smoke	Noise	Excessive oil - compressor end	Excessive oil - turbine end	Drag or bind in rotating assembly	Excessive rotating assembly play	Damaged compressor wheel	Damaged turbine wheel	
Dirty air cleaner element	●	●		●	●	●						Clean or replace filter element
Clogged crankcase breathers			●			●	●					Clear obstruction per manufacturer's manual
Air cleaner element missing, leaking, or loose connections to turbo					●			●		●		Replace, repair or reconnect air cleaner element per manufacturer's manual
Collapsed or restricted air pipe before turbocharger	●	●		●	●	●						Inspect pipe for damage or obstruction, replace or repair
Restricted or damaged crossover pipe - turbo to inlet manifold	●	●			●	●						Inspect pipe for damage or obstruction, replace or repair
Foreign object between cleaner and turbocharger	●	●			●	●		●	●	●		Inspect air intake piping, remove foreign object
Foreign object in exhaust system (check engine)	●	●			●		●	●	●		●	Inspect exhaust piping only when engine is not running and cold, remove foreign object
Turbocharger flanges, clamp or bolts loose	●	●	●	●	●	●	●	●	●	●	●	Inspect all connecting hardware for damage, ensure tight fits per installation instructions
Inlet manifold cracked, gaskets, loose or missing, connections loose	●	●		●	●							Remove and inspect inlet manifold for damage to castings and gaskets, replace if needed
Exhaust manifold cracked, burned, gasket loose, blown or missing	●	●			●							Remove exhaust manifold only when engine is cold and not running and inspect for damage to castings and gaskets, replace if needed
Restricted exhaust system					●							Inspect exhaust system only when engine is cold, not running, remove obstruction
Oil lag at start-up								●	●			Inspect lubrication system lines, filters and oil for obstruction, remove obstruction
Insufficient lubrication								●	●			Inspect lubrication system lines, filters and oil for obstruction, remove obstruction
Lubricating oil contaminated with dirt or other material								●	●			Replace all filters and lubricating oil with new per manufacturer's manual
Improper lubricating oil type used								●	●			Replace lubricating oil with correct grade
Restricted oil feed line						●	●	●	●			Remove and inspect oil line, remove obstruction
Restricted oil drain line			●				●					Remove and inspect oil line, remove obstruction
Turbine housing damaged or restricted	●	●			●						●	Remove turbine housing, inspect for cracks or wear, replace if needed
Turbocharger seal leakage			●	●		●	●					Inspect for proper oil feed / drain line installation. Contact Garrett distributor for rebuild
Worn journal bearings	●	●	●		●	●	●	●	●	●	●	Contact a Garrett performance distributor or Garrett master distributor
Excessive dirt build-up behind turbine wheel	●	●		●	●	●		●		●	●	Inspect air cleaner element and intake piping for damage or leaks, replace if needed. Clean compressor wheel and housing
Excessive carbon build-up behind compressor housing	●	●		●	●	●	●			●	●	Inspect crankcase ventilation
Too fast acceleration at initial start									●	●		Decrease acceleration at initial start
Too little warm-up time									●	●		Extend warm-up period
Oil pump malfunction	●	●										Refer to engine manufacturer's manual and replace if needed
Worn or damaged injectors	●	●										Inspect injectors for damage and replace if needed
Valve timing	●	●										Refer to engine manufacturer's manual and replace if needed
Burned valves	●	●										Refer to engine manufacturer's manual and replace if needed
Worn piston rings	●	●										Refer to engine manufacturer's manual and replace if needed
Burned pistons								●	●			Refer to engine manufacturer's manual and replace if needed
Leaking oil feed line				●			●					Remove and inspect oil line, remove obstruction
Excessive engine pre-oil			●	●		●	●					Refer to engine manufacturer's manual and replace if needed
Excessive engine idle			●	●			●	●			●	Refer to engine manufacturer's manual and replace if needed
Cracked or sludged center housing									●			Contact a Garrett performance distributor or Garrett master distributor
Oil pump malfunction			●	●		●	●	●	●	●	●	Refer to engine manufacturer's manual and replace if needed
Oil filter plugged	●	●	●	●	●							Refer to engine manufacturer's manual and replace if needed
Oil bath cleaner: air inlet screen restricted / dirty air cleaner	●	●	●	●	●							Replace air inlet screen
Oil bath air cleaner: oil pull-over / oil viscosity too low or high	●	●	●	●	●							Replace lubricating oil with correct grade
Boost control malfunction: wastegate	●	●	●	●	●	●	●		●	●	●	Inspect for damage, leaks or obstructions; replace or repair if needed
Boost control malfunction: vnt	●	●	●	●	●	●	●		●	●	●	Contact a Garrett performance distributor or Garrett master distributor
Boost control malfunction: engine management system	●	●	●	●	●	●	●		●	●	●	Refer to manufacturer's manual and adjust as needed

● Probable cause
□ Not a probable cause

Nearly all turbocharger-related problems are the result of a handful of causes. Knowing how to recognize the symptoms of these issues early and link them with causes will help you save downtime and money. The chart above outlines the probable causes and noticeable conditions of the most common turbocharger maladies as well as what you can do to solve them. If a problem falls outside of your mechanical comfort level, contact a Performance Distributor or a Master Distributor for assistance.

www.GarrettMotion.com/Racing-and-Performance/Distributor-Locator/

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Consumers are required to work through an authorized Garrett distributor to process warranty claims. When Garrett requires the examination of a failed part, Garrett will promptly notify Customer and will await receipt of the failed part before processing the claim. If Garrett ultimately determines that the failed part is covered under the Limited Warranty, Garrett will reimburse Customer for the actual cost of ground shipment for any part found to be defective.

No representative or distributor of Garrett has authority to alter this warranty. This warranty may only be modified by an agreement signed by an authorized officer of a Garrett legal entity.

We recommend that Garrett products be installed by qualified automotive technicians. If you have doubts as to your ability to install our product, consult with a local automotive repair company. Carefully read all attached instructions prior to starting installation. If you have questions about the enclosed parts or instructions, call the distributor that you purchased the kit from for clarification. Prior to product installation, ensure that the vehicle is parked on a level surface and the engine is cool. Engine fluids and components can be extremely hot following normal vehicle operation. Avoid direct contact of engine fluids or components.



BOOST ADVISER

THE RIGHT TURBO.
EVERY TIME.



SCAN TO TRY
BOOST ADVISER



FASTER
RESPONSE



IMPROVED
EFFICIENCY



RELIABLE
POWER



REDUCED
TURBO LAG

Quickly find the right Garrett turbocharger for your engine combination and horsepower target.



garrettmotion.com/racing-and-performance/boost-adviser/

1 ENTER YOUR ENGINE PARAMETERS

Input key engine and operation parameters for your project.



Horsepower Target



Engine Displacement



Fuel Type



RPM Range



Altitude & Temperature



Intercooler Type



Single or Twin Turbo

2 ANALYZE THE CALCULATIONS

Boost Adviser calculates your engine's airflow needs and operating range.

Here are your calculations.

SAVE SEARCH INPUTS

	Mid Range RPM	Max Power RPM
Power at crankshaft (HP)	392	799
Torque at crankshaft (Lb-Ft)	571	699
Boost gauge pressure (PSI)	10.66	17.40
Intake manifold temp (°F)	115	132
Pressure ratio	1.79	2.24
Corrected air flow (LBS/MIN) per turbo	34.84	71.03

The maximum power stated for each turbocharger has been calculated based strictly on choke flow of the compressor map (total turbo capability), which represents the potential flywheel power. Performance results are highly dependent upon your vehicle's modifications and tuning/calibration.



392 HP
Mid Range Power



799 HP
Max Power



34.84
lb/min
Mid Range Airflow



71.03
lb/min
Max Power Airflow

3 FIND YOUR MATCH & DEALER

Review the recommended products and connect with a local dealer.



RECOMMENDED TURBOCHARGERS

Based on your engine calculations and operating range.



G-XRace G42-71 71mm
Garrett G-XRace G42-71 71mm
952766-5006S

FULL SPECS > BUY NOW >



G-XRace GXR47-76 116 exd
Garrett G-XRace GXR47-76
76.6mm Turbocharger

FULL SPECS > BUY NOW >



G-XRace GXR45-82 82.9mm
952766-5001S

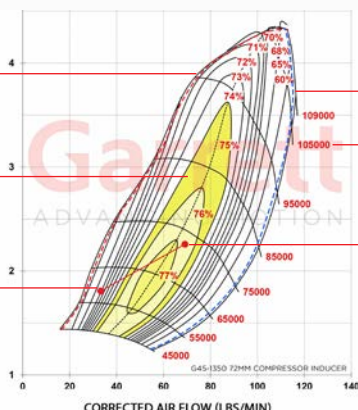
FULL SPECS > BUY NOW >

HOW TO READ THE COMPRESSOR MAP

Surge Line- avoid operating left of the surge line to prevent compressor surge

Efficiency Islands- higher values mean lower intake temps and better performance

Mid-Range RPM- operating point: 1.79 PR | 34.84 LBS/MIN



Choke Line- avoid operating right of the choke line

Turbo Speed- turbo shaft speed points. Do not exceed maximum RPM

Max-Power RPM- operating point: 2.24 PR | 71.03 LBS/MIN



IMPORTANT: Boost Adviser results are a starting point. Working with a Garrett distributor ensures you get the best performance, reliability, and drivability from your turbo.



WORK WITH A GARRETT DISTRIBUTOR

Garrett distributors have the knowledge and experience to help you narrow down your options and choose the right turbo for your build.



Application expertise to match your goals



Support with installation, tuning, and optimization



Access to the latest Garrett technology and product updates



FIND A DEALER NEAR YOU

Our global network of distributors is ready to help.

FIND A DEALER >