



Turbochargers | Intercoolers | Wastegates | Accessories

PERFORMANCE CATALOGUE VOL 9

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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.

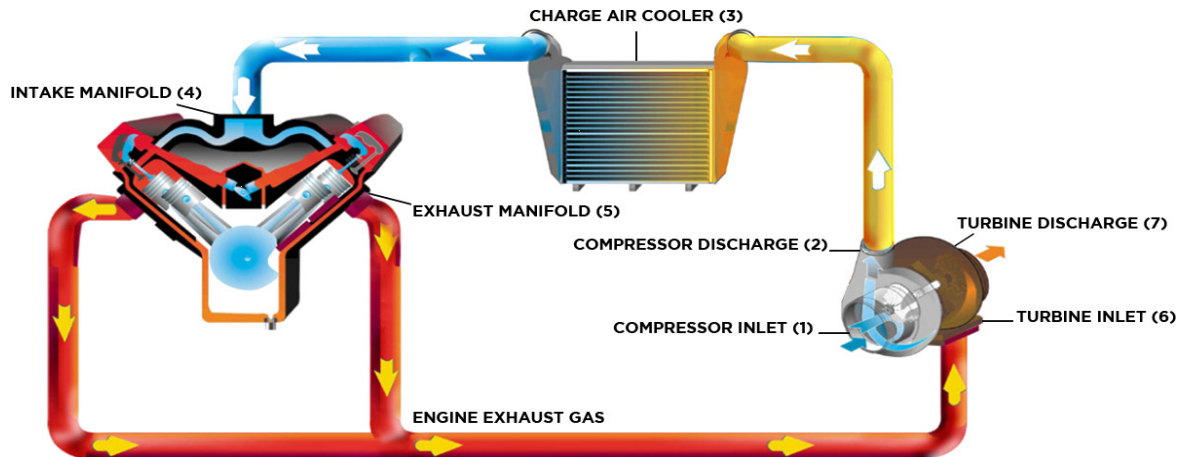
Wheel Fatigue - Garrett will only sell compressor or turbine wheels that have passed a cyclic fatigue test. Garrett runs tests on a regular basis to ensure quality and to constantly improve our products.

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

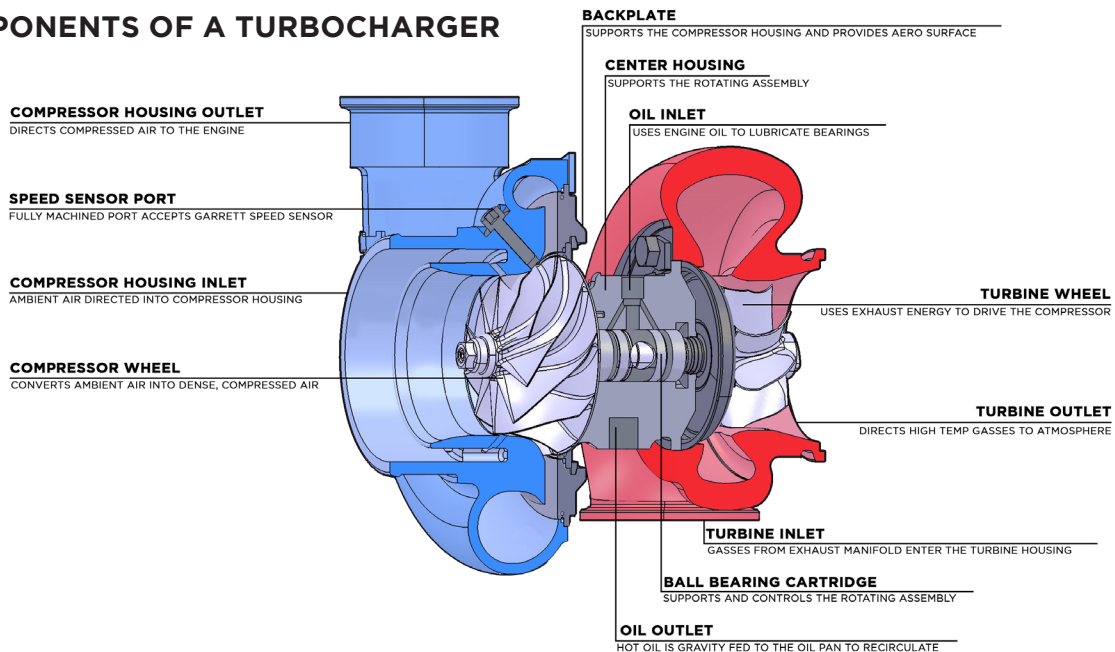
Engine power is proportional to the amount of air and fuel that can get into the cylinders. All things being equal, larger engines flow more air and as such will produce more power. If we want our small engine to perform like a large engine, or simply make our larger engine produce more power, our ultimate 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.

HOW DOES A TURBOCHARGER DELIVER MORE AIR INTO THE ENGINE?

- (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



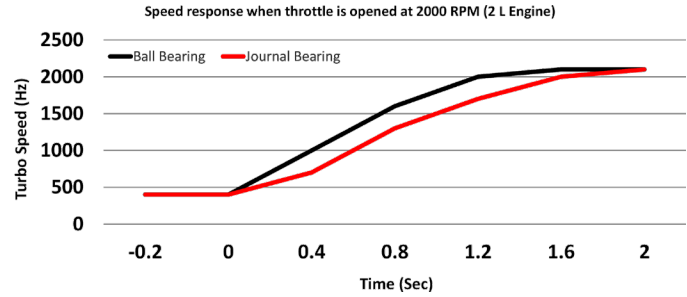
BALL BEARING TECHNOLOGY

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

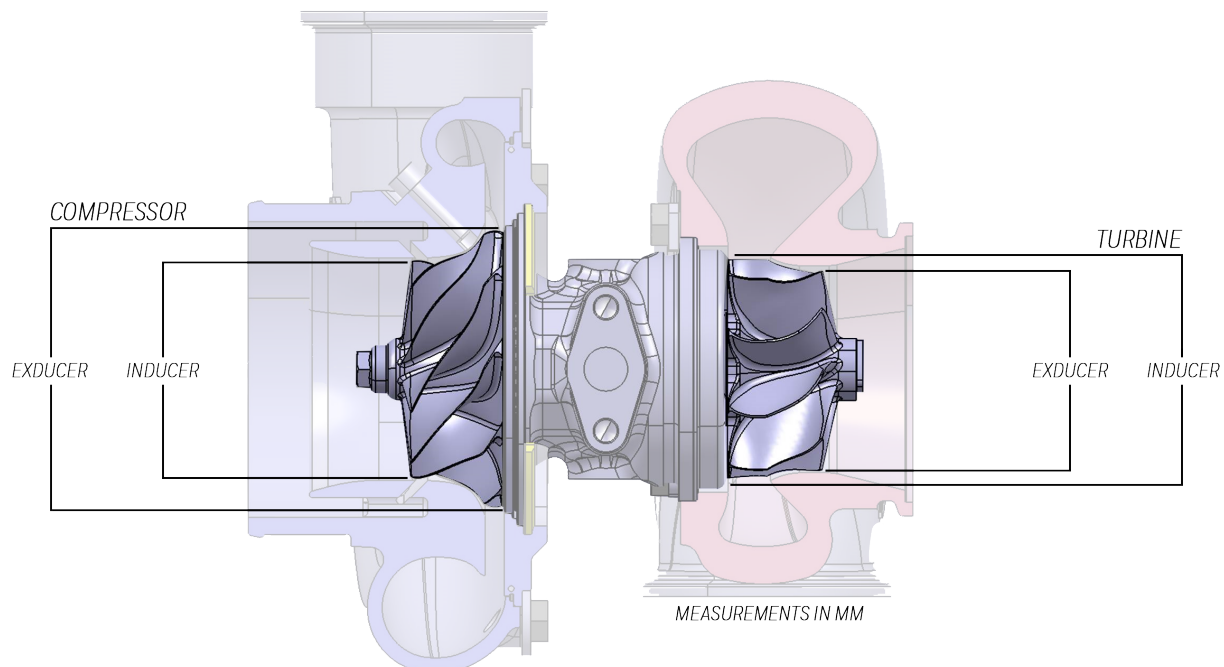
Trim is a common term used when talking about or describing turbochargers. For example, you may hear someone say “I have a GTXxxx”. What is trim? Trim is a term used to express the relationship between the inducer and exducer of both turbine and compressor wheels. More accurately, it is an area ratio. 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.

$$\text{Compressor Trim} = (\text{Inducer}^2 / \text{Exducer}^2) \times 100$$

$$\text{Turbine Trim} = (\text{Exducer}^2 / \text{Inducer}^2) \times 100$$


WHEEL MEASUREMENTS EXPLAINED



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. 

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.

Pressure Ratio: $\Pi_c = \frac{P_{2c}}{P_{1c}}$
Where:
 Π_c = Pressure Ratio
 P_{2c} = Absolute Outlet Pressure
 P_{1c} = 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.

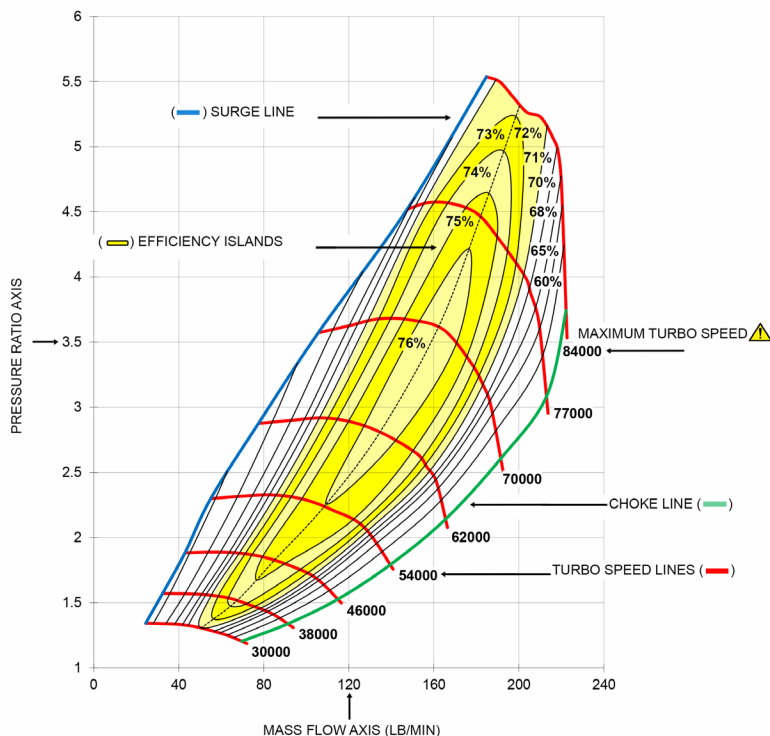
Gauge Pressure: Measures the pressure above atmospheric, so a gauge pressure reading at atmospheric conditions will read zero. Boost gauges measure the manifold pressure relative to atmospheric pressure, and thus are measuring Gauge Pressure. In units of PSig, the "g" refers to "gauge". This is important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

* 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.



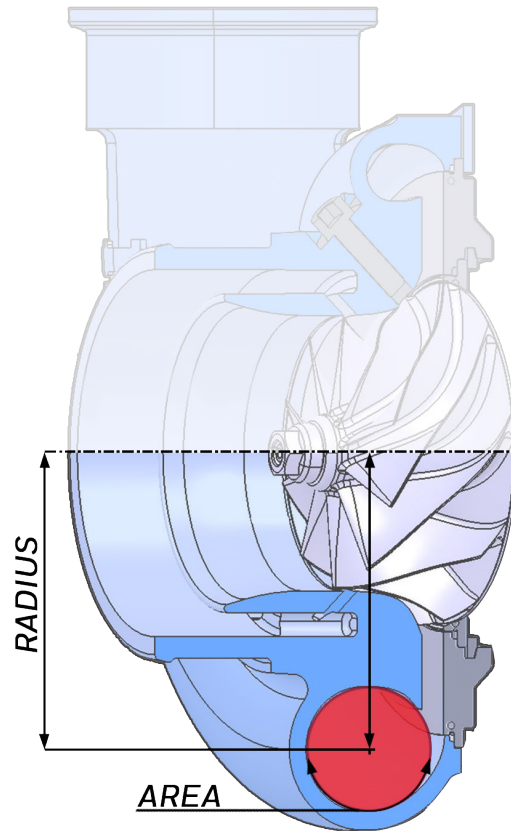
A/R (Area/Radius) describes a geometric characteristic of all compressor and turbine housings. It is defined as the inlet (or, for compressor housings, the discharge) cross-sectional area divided by the radius from the turbo centerline to the centroid of that area.

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 QR codes below to be directed to the Garrett distributor locator or the Boost Adviser turbo matching tool.



Distributor Locator

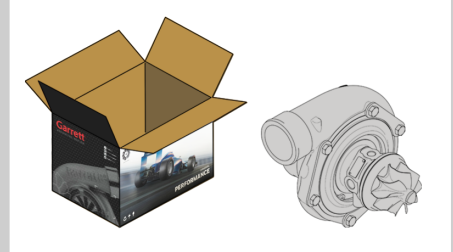


Boost Adviser

Turbocharger part numbers are offered in four configurations and it is important to understand the differences when ordering part numbers. This guide will explain the differences. If you have any questions, please contact a Garrett Distributor for more information.

Supercore PN

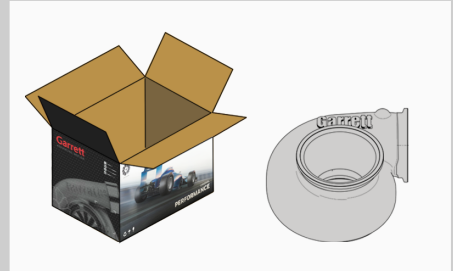
Supercore refers to a rotating assembly with compressor housing attached. Gasket kit included. Turbine housing not included.



Turbine Kit PN

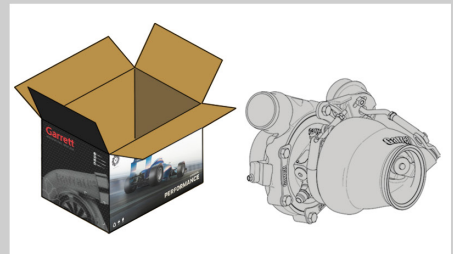
Individually packaged turbine exhaust housings. Connections and size vary between models. Gasket kit, bolts, clamps, V-band/s included. Weld flanges are not included

- Reverse rotation turbine housings are **not** interchangeable with standard rotation supercores
- GT | GTX | GTX Gen II turbine housings **are** interchangeable within the frame family. (GT30 | GTX30 | GTX30 Gen II)
- G-Series housings are **not** interchangeable with GT | GTX | GTW
- GTW housings are **not** interchangeable with GT | GTX | G-Series
- Some options may require modifications to the exhaust system to fit
- Always double check before purchasing



Turbo PN

Supercore and turbine housing are fully assembled and calibrated by Garrett with a 0.5 Bar actuator. The assembly and calibration make it a Turbo. Only offered with internally wastegated turbine housings. Gasket kit is included.



Assembly Kit PN

One part number includes the supercore and turbine kit, in individual boxes, not assembled to make ordering easier. Gasket kit included. Tools and assembly required to connect the supercore to the turbine housing.



G-SERIES

Garrett G-Series turbochargers feature the latest innovations in turbocharger technology. This clean sheet product has our highest performing compressor and turbine aero to date. Countless engineering hours have been spent to create the perfect blend of efficiency and performance in a compact package. Advanced features tailored to meet the demands of hard core competitors making G-Series the most powerful turbochargers on the market.



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

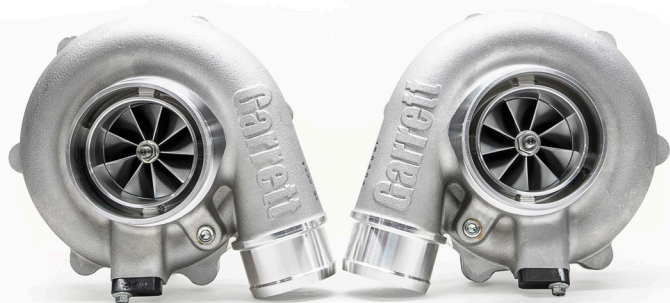


Reliability is always a priority when working in a competitive racing environment. With an entire race team, vehicle transporter, tools, tires, consumables, and more sent to support the vehicle at race events across the country, teams cannot afford to sit on the sidelines due to a mechanical failure. 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.

A TURN AHEAD OF THE COMPETITION



| Product Features | G25 | G30 | G35 | G40 | G42 | G45 | G47 | G50 | G55 | G57 |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-------------|------------|------------|---------------------------|---------------------|
| Horsepower Range | 300-660 | 350-900 | 550-1050 | 500-1150 | 475-1450 | 600-1600 | 825-1850 | 875-1900 | 1000-2900 | 1400-3000 |
| Displacement Range | 1.4L-3.0L | 2.0L-3.5L | 2.0L-5.5L | 2.0L-6.0L | 2.0L-8.0L | 2.0L-8.0L | 2.5L-10.0L | 2.5L-11.0L | 3.0L-12.0L | 3.0L-12.0L |
| Comp Ind Sizes (mm) | 48 54 | 54 58 62 | 62 68 | 62 71 | 73 79 | 67 72 76 80 | 76 80 88 | 80 88 | 85 88 91 94 98 102 106 | 88 94 98 102 106 |
| Turbine Wheel Ind Exd (mm) | 54 49 | 60 55 | 68 62 | 77 70 | 82 75 | 89 82 | 93 88 | 99 94 | 112 106 | 118 112 |
| Standard Rotation | • | • | • | • | • | • | • | • | • | • |
| Reverse Rotation | • | • | • | • | • | • | • | • | • | • |
| Internally Wastegated | • | • | • | • | • | • | • | • | • | • |
| Aluminum Backplate | • | • | • | • | • | • | • | • | • | • |
| Aluminum Center Section | • | • | • | • | • | • | • | • | • | • |
| Speed Sensor Port | • | • | • | • | • | • | • | • | • | • |
| Water Cooled | • | • | • | • | • | • | • | • | • | • |
| Ball Bearing w/ Steel Cages | • | • | • | • | • | • | • | • | • | • |
| Machined Pressure Port | • | • | • | • | • | • | • | • | • | • |
| Oil Restrictor Included | • | • | • | • | • | • | • | • | • | • |
| Water Fittings Included | • | • | • | • | • | • | • | • | • | • |
| Twin Piston Rings | • | • | • | • | • | • | • | • | • | • |
| Ported Shroud | • | • | • | • | • | • | • | • | • | • |
| T25 Inlet Turbine Housing | • | • | • | • | • | • | • | • | • | • |
| T3 Inlet Turbine Housing | • | • | • | • | • | • | • | • | • | • |
| T4 Divided Inlet Turbine Hsg | • | • | • | • | • | • | • | • | • | • |
| T6 Inlet Turbine Housing | • | • | • | • | • | • | • | • | • | • |
| V-Band Inlet Turbine Housing | • | • | • | • | • | • | • | • | • | • |
| Stainless Steel Turbine Hsg | • | • | • | • | • | • | • | • | • | • |
| Inconel Turbine Wheel | • | • | • | • | • | • | • | • | • | • |
| Mar-M Turbine Wheel | • | • | • | • | • | • | • | • | • | • |



STANDARD AND REVERSE ROTATION

turbochargers are offered in the G-Series product line up to G35 frame sizes. Reverse rotation turbochargers are mirrored in appearance and rotate counter clockwise. It is a popular option for twin turbo systems to maintain symmetry in the engine compartment. Reverse rotation components are not interchangeable with standard rotation components and housings. G25 | G30 | G35

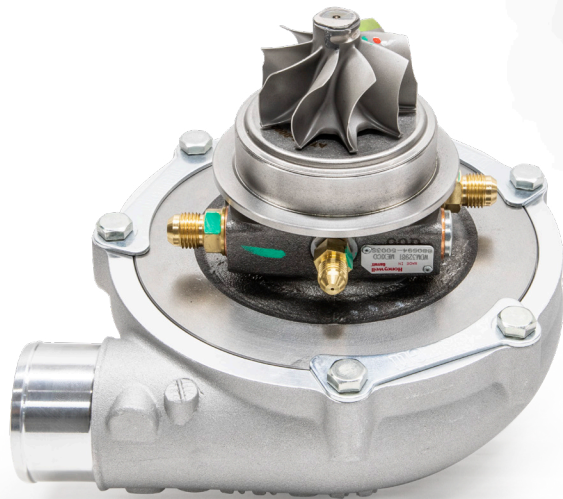
STAINLESS STEEL TURBINE HOUSINGS

are offered with all G-Series turbochargers. High heat tolerance paired with high strength make a robust product that looks great and passes Garrett Motion burst and containment testing.



INTERNALLY WASTEGATED

configurations are available in standard rotation in G25|G30|G35 and reverse rotation in G25. Turbochargers are fully assembled and calibrated with a 0.5 bar actuator.



TURBINE EFFICIENCY

All G-Series turbos feature a new turbine wheel specifically designed to flow more exhaust air with a higher peak efficiency when compared to GTX turbos. Aerodynamics and CFD analysis are performed for each frame size to provide best results. An increase from 10% - 20% more peak flow means G-Series turbos can support 0.5L - 1.0L more engine displacement per frame size than GTX turbos.

TWIN PISTON RINGS

on both sides of the shaft combined with a new oil deflector to help reduce oil leakage from the center housing to the compressor and turbine stages.



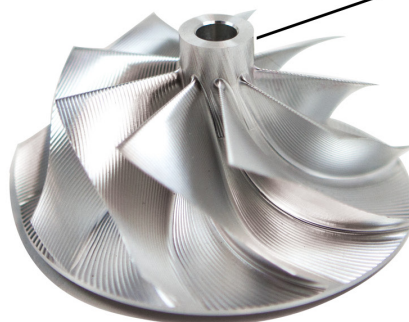
BEARING CARTRIDGE

Ceramic dual ball bearings in a compact cartridge result in less heat transfer to the oil. Steel bearing cages improve the durability of the rotating assembly.



COMPRESSOR WHEEL

Forged fully-machined with new aerodynamics to increase flow up 30% more air than other Garrett turbos.





"We have been able to capture **24** total track records"

C6 Corvette featured on the cover page

10 Questions with Feras Qartoumy:

1. What made you decide to start racing?

I grew up at the track watching my father race. He would take me with him to help change tires and brakes. I probably did more harm than good but thanks to my father I not only developed a passion for racing but it's also where I got my mindset of never giving up!

2. Tell us about your Corvette (YMM, engine, power, turbos, etc.)

2008 Corvette Z06. LME 427. RHS Block Brodix Heads. Garrett G35-900's 1200 whp on kill... Penske Racing 8300's Alcon 6 piston Brakes Front 4 piston Rear. Motec M150 PPG 1:1 6th gear sequential. Yokohama A005 tires. Bosch Motorsport ABS

3. You have made a big name for yourself the last 2 years. Tell us about all the accomplishments.

The past two years have been absolutely unbelievable. With the help from all my amazing partners we have been able to capture 24 total track records in 2020 and 2021 combined! We were also able to place 1st at every event but 1!

4. Do you have a favorite memory?

My favorite memory would have to be capturing the production car record at Road America with a 2:04. The car was overheating by turn 5 and somehow allowed me to keep pushing and finish the lap. Made me feel like both myself and the car wanted it and stuck it out till the end.

5. What is your favorite race track?

Hands down Circuit of the Americas

6. What tips would you give someone who is just starting out in racing?

Have fun. Many people take racing too serious. Never lose sight of how lucky you are to be on track and doing something you are passionate about.

7. Tell us what you like about the different turbo combos and how they have helped you in different ways?

What I like mostly about them is how easily interchangeable they are. I was able to literally just swap turbos and not have to change hot side or charge piping I think that for one making it so easy to test and change out turbos per event is amazing. Also I have noticed I can reach my target HP very easily with all. And can spool sooner by stepping down from a g 35-900 to a g 30-900 but yet still have all the tq and hp I want up top. The g35 seems to be best suited for bigger tracks that have higher speed turns and longer straights. Where the g30 is utilized in smaller tracks where lower speeds are not allowing the turbos to spool as quickly.

8. Your car has some serious aero, how much downforce does it make and how do you know when to adjust it for different tracks?

Currently the car is making north of 3200 lbs of downforce. I have been making slight adjustment to the car per event. I have seen gains and the pros of using high df but also seen cons. That is why at Long Beach and Road America I opted to use a medium downforce package. I am in the process of designing aero with Verus specific to the car based on the data I have acquired over this past year. We just finished scanning the car and have ran it through a few sims now. Big things to come...

9. What's in store for 2022?

For 2022 I'd love to start traveling outside the us and make my way to Australia. I plan on adding to my list of track records and hopefully claim a few more national titles. We have some new aero we are developing in CAD and hopefully a bit more power...

10. Where can people find you on social media?

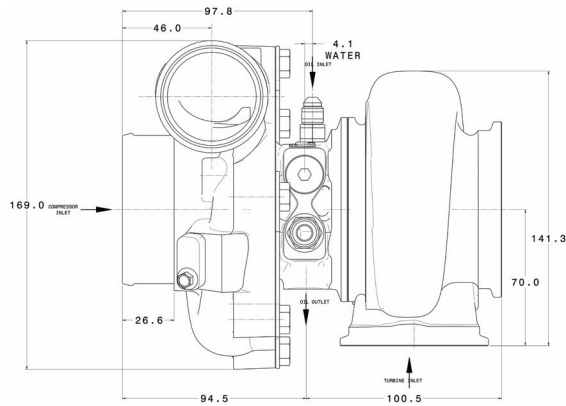
I pretty much do everything on Instagram. You can find me at @feras_qartoumy I post almost all my in-car on YouTube at Feras Qartoumy.

Garrett G25-550

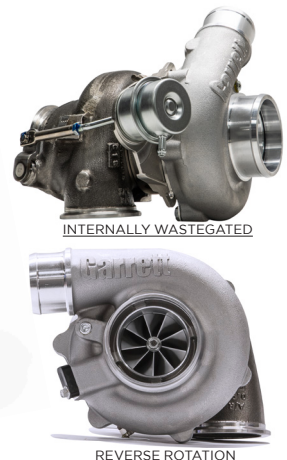
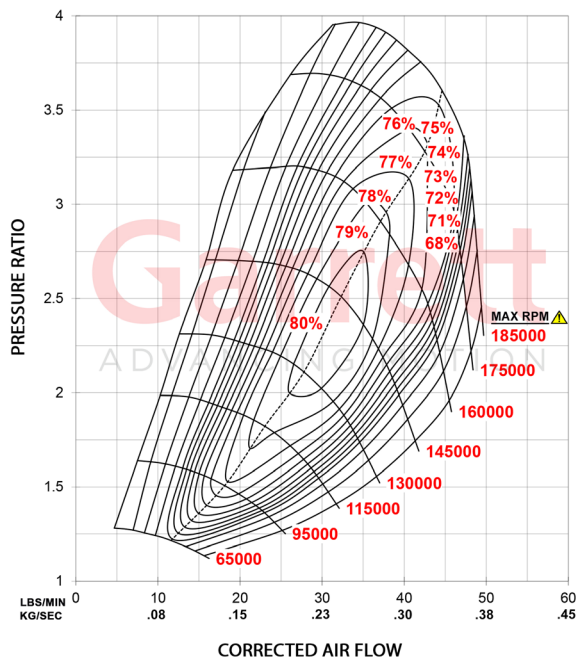
Horsepower: 300 - 550

Displacement: 1.4L - 3.0L

Garrett
ADVANCING MOTION



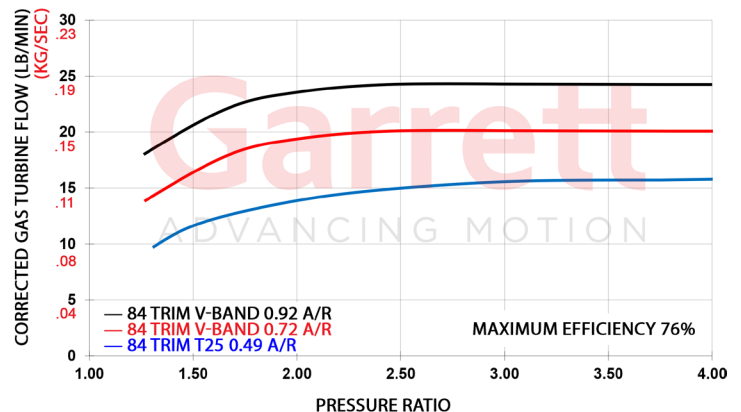
COMPRESSOR MAP



FEATURES:

- ◆ 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

EXHAUST FLOW CHART

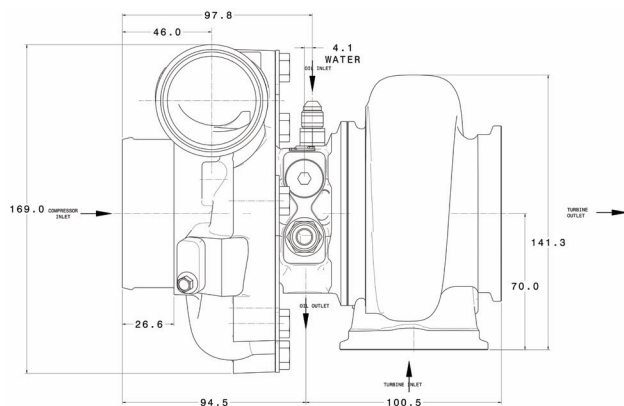


| G25-550 | | Compressor | | | | Turbine | | |
|--|-----------------|-------------------|-----------------|------------|--------------|-----------------|------------------|----------------|
| HP: 300-550 | Disp: 1.4L-3.0L | Inducer 48mm | Exducer 60mm | Trim 65 | A/R 0.70 | Inducer 54mm | Exducer 49mm | Trim 84 |
| Turbo: Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Assembled and calibrated with 0.5 bar actuator | | 877895-5001S | | 0.49 | T25 | V-Band | Internal | N |
| | | 877895-5003S | | 0.72 | V-Band | V-Band | Internal | N |
| | | 877895-5004S | | 0.92 | V-Band | V-Band | Internal | N |
| Turbo: Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| See note above | | 877895-5007S | | 0.72 | V-Band | V-Band | Internal | N |
| | | 877895-5008S | | 0.92 | V-Band | V-Band | Internal | N |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Internal Wastegate | | 740902-0076 | | 0.72 | V-Band | V-Band | Internal | N |
| | | 740902-0077 | | 0.92 | V-Band | V-Band | Internal | N |
| | | 740902-0080 | | 0.49 | T25 | V-Band | Internal | N |
| Turbine Kits Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Internal Wastegate | | 740902-0078 | | 0.72 | V-Band | V-Band | Internal | N |
| | | 740902-0079 | | 0.92 | V-Band | V-Band | Internal | N |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 858161-5002S | | | | | | |
| Reverse Rotation | | 871388-5001S | | | | | | |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0069 | | 0.72 | V-Band | V-Band | External | N |
| | | 740902-0068 | | 0.92 | V-Band | V-Band | External | N |
| Turbine Kits Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0073 | | 0.72 | V-Band | V-Band | External | N |
| | | 740902-0074 | | 0.92 | V-Band | V-Band | External | N |

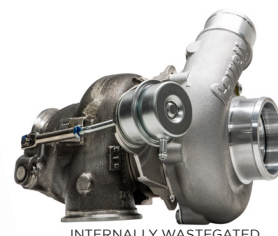
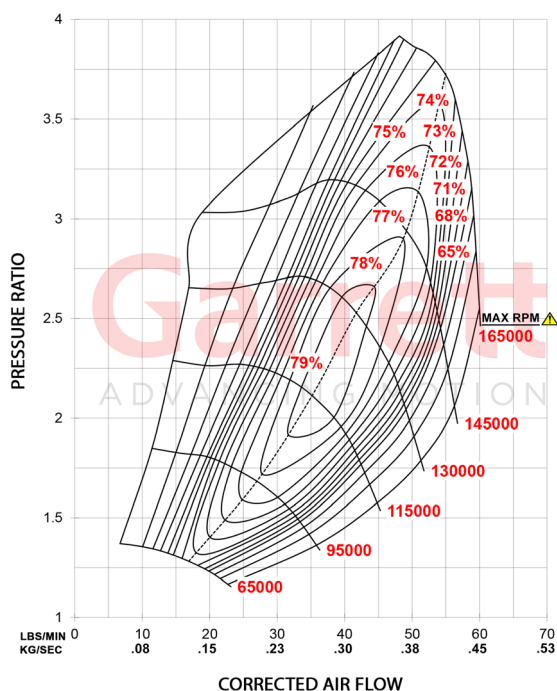
Garrett G25-660

Horsepower: 350 - 660
Displacement: 1.4L - 3.0L

Garrett
ADVANCING MOTION



COMPRESSOR MAP



INTERNALLY WASTEGATED

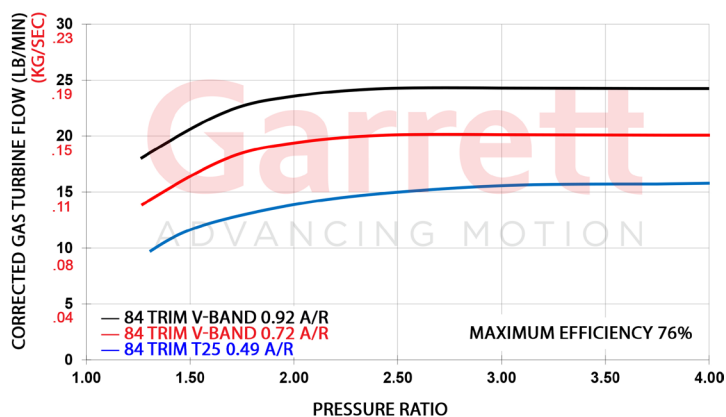


REVERSE ROTATION

FEATURES:

- ◆ 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

EXHAUST FLOW CHART



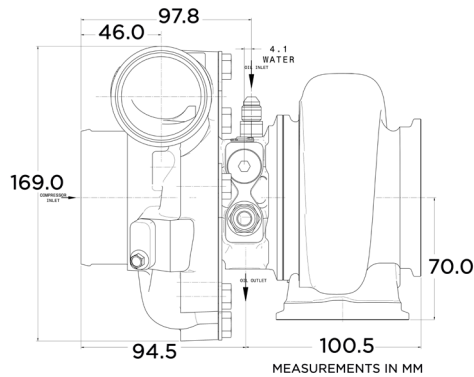
| G25-660 | | Compressor | | | | Turbine | | |
|--|-----------------|-------------------|----------------|-------------|------------|----------------|----------------|-------------|
| HP: 350-660 | Disp: 1.4L-3.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 54mm | 67mm | 65 | 0.70 | 54mm | 49mm | 84 |
| Turbo: Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Assembled and calibrated with 0.5 bar actuator | | 877895-5002S | | 0.49 | T25 | V-Band | Internal | N |
| | | 877895-5005S | | 0.72 | V-Band | V-Band | Internal | N |
| | | 877895-5006S | | 0.92 | V-Band | V-Band | Internal | N |
| Turbo: Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| See note above | | 877895-5009S | | 0.72 | V-Band | V-Band | Internal | N |
| | | 877895-5010S | | 0.92 | V-Band | V-Band | Internal | N |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Internal Wastegate | | 740902-0076 | | 0.72 | V-Band | V-Band | Internal | N |
| | | 740902-0077 | | 0.92 | V-Band | V-Band | Internal | N |
| | | 740902-0080 | | 0.49 | T25 | V-Band | Internal | N |
| Turbine Kits Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Internal Wastegate | | 740902-0078 | | 0.72 | V-Band | V-Band | Internal | N |
| | | 740902-0079 | | 0.92 | V-Band | V-Band | Internal | N |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 858161-5003S | | | | | | |
| Reverse Rotation | | 871388-5002S | | | | | | |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0069 | | 0.72 | V-Band | V-Band | External | N |
| | | 740902-0068 | | 0.92 | V-Band | V-Band | External | N |
| Turbine Kits Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0073 | | 0.72 | V-Band | V-Band | External | N |
| | | 740902-0074 | | 0.92 | V-Band | V-Band | External | N |

Garrett G30-660

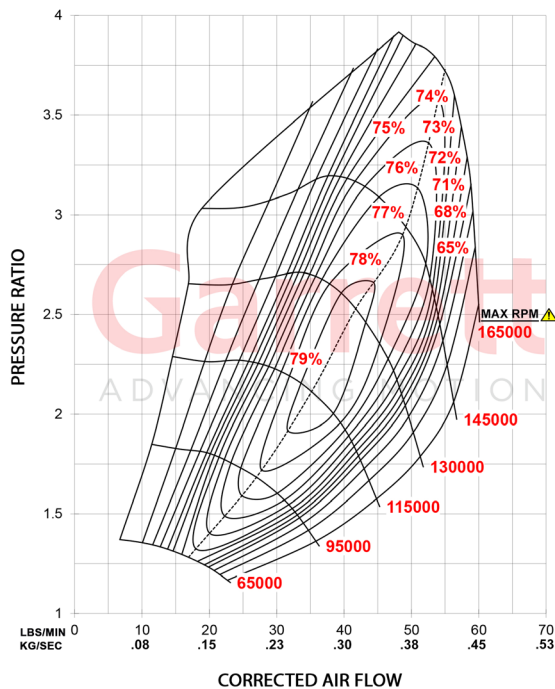
Horsepower: 350 - 660

Displacement: 2.0L - 3.5L

Garrett
ADVANCING MOTION



COMPRESSOR MAP

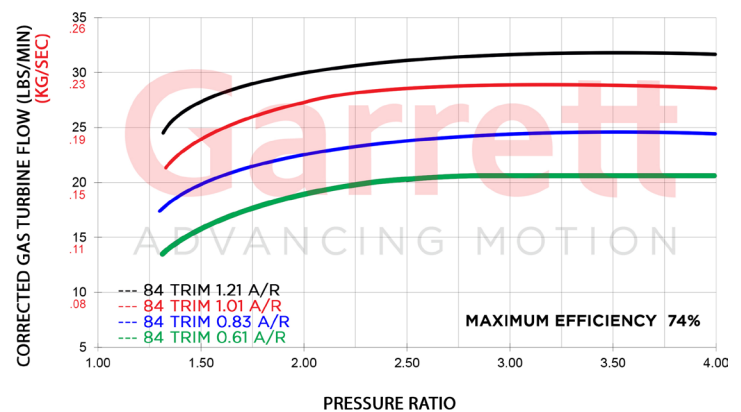


REVERSE ROTATION

FEATURES:

- ◆ 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

EXHAUST FLOW CHART



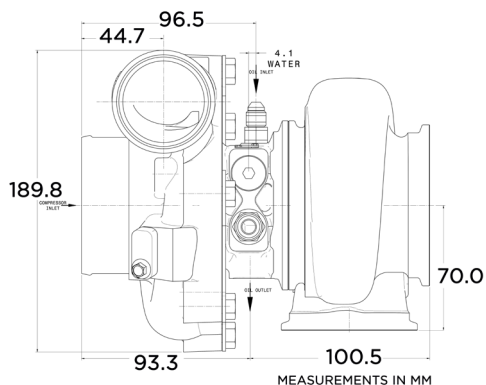
| G30-660 | | Compressor | | | | Turbine | | |
|--------------------------------|-----------------|-------------------|---------|------|--------|----------------|-----------|---------|
| HP: 350-660 | Disp: 2.0L-3.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 54mm | 67mm | 65 | 0.70 | 60mm | 55mm | 84 |
| Turbo: Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Assembled and calibrated | | 880704-5002S | | 0.83 | V-Band | V-Band | Internal | N |
| with 0.5 bar actuator | | 880704-5003S | | 1.01 | V-Band | V-Band | Internal | N |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Internal Wastegate | | 740902-0094 | | 0.83 | V-Band | V-Band | Internal | N |
| | | 740902-0095 | | 1.01 | V-Band | V-Band | Internal | N |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 880693-5001S | | | | | | |
| Reverse Rotation | | 880694-5001S | | | | | | |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0092 | | 1.06 | T4 | V-Band | External | Y |
| | | 740902-0090 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0091 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0086 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0087 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0088 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0089 | | 1.21 | V-Band | V-Band | External | N |
| Turbine Kits Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0100 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0101 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0096 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0097 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0098 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0099 | | 1.21 | V-Band | V-Band | External | N |

Garrett G30-770

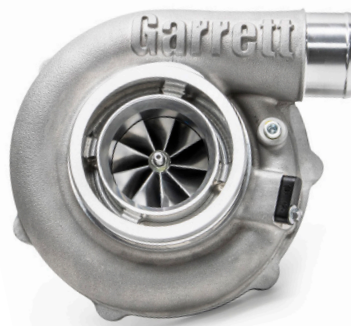
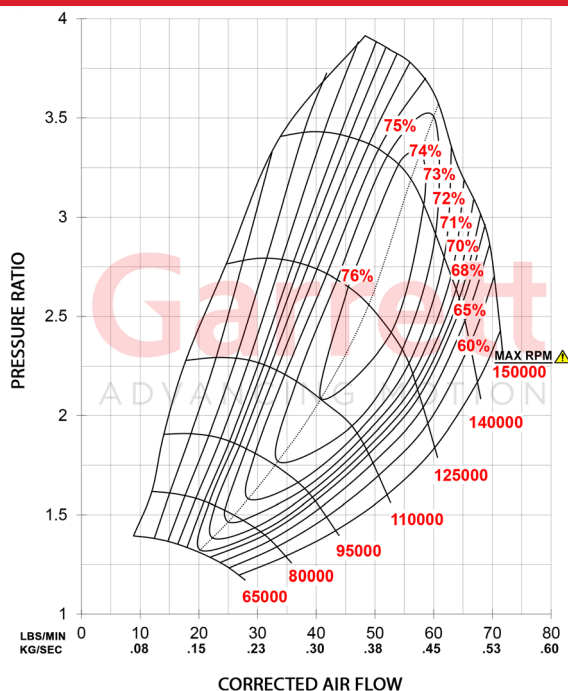
Horsepower: 475 - 770

Displacement: 2.0L - 3.5L

Garrett
ADVANCING MOTION



COMPRESSOR MAP

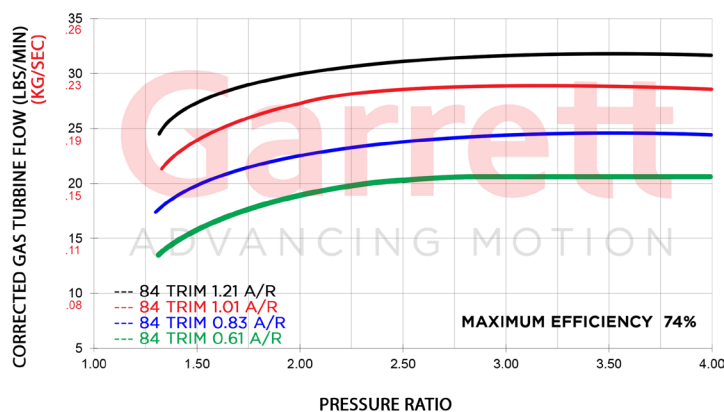


REVERSE ROTATION

FEATURES:

- ◆ 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

EXHAUST FLOW CHART



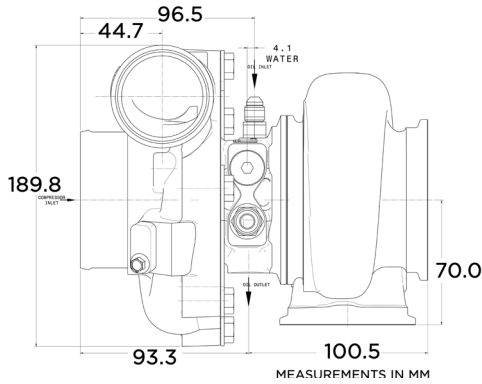
| G30-770 | | Compressor | | | | Turbine | | |
|--------------------------------|-----------------|-----------------|-----------------|------------|-------------|-----------------|-----------------|------------|
| HP: 475-770 | Disp: 2.0L-3.5L | Inducer 58mm | Exducer 71mm | Trim 65 | A/R 0.72 | Inducer 60mm | Exducer 55mm | Trim 84 |
| Turbo: Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Assembled and calibrated | | 880704-5005S | | 0.83 | V-Band | V-Band | Internal | N |
| with 0.5 bar actuator | | 880704-5006S | | 1.01 | V-Band | V-Band | Internal | N |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Internal Wastegate | | 740902-0094 | | 0.83 | V-Band | V-Band | Internal | N |
| | | 740902-0095 | | 1.01 | V-Band | V-Band | Internal | N |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 880693-5002S | | | | | | |
| Reverse Rotation | | 880694-5002S | | | | | | |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0092 | | 1.06 | T4 | V-Band | External | Y |
| | | 740902-0090 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0091 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0086 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0087 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0088 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0089 | | 1.21 | V-Band | V-Band | External | N |
| Turbine Kits Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0100 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0101 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0096 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0097 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0098 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0099 | | 1.21 | V-Band | V-Band | External | N |

Garrett G30-900

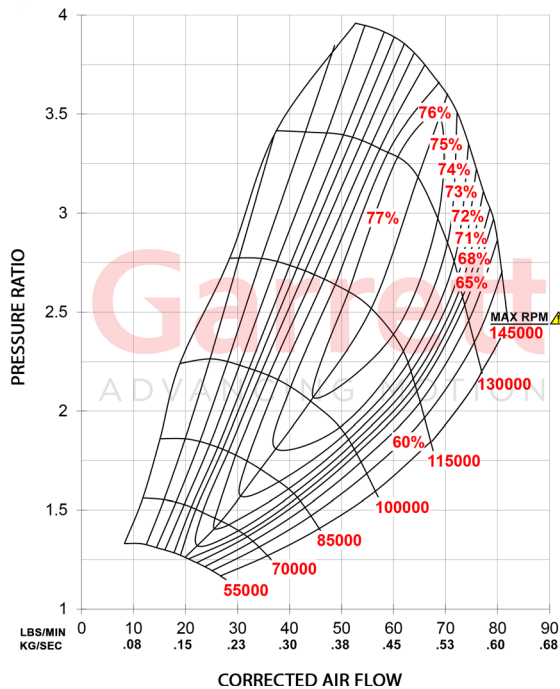
Horsepower: 550 - 900

Displacement: 2.0L - 3.5L

Garrett
ADVANCING MOTION



COMPRESSOR MAP

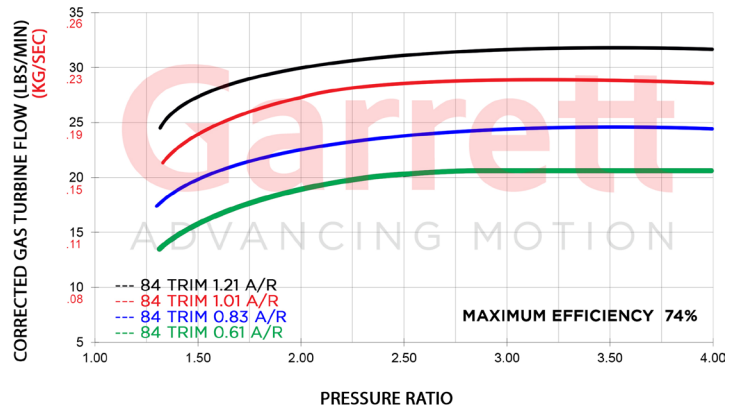


REVERSE ROTATION

FEATURES:

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- ◆ 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

EXHAUST FLOW CHART

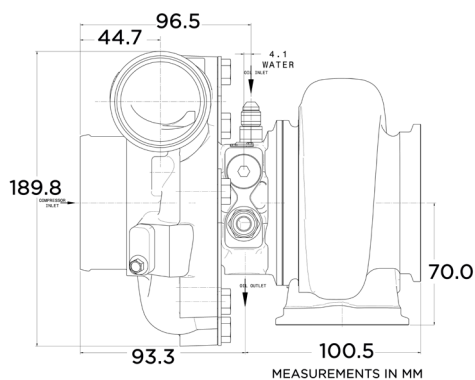


| G30-900 | | Compressor | | | | Turbine | | |
|--|-----------------|-----------------|-----------------|------------|-------------|-----------------|-----------------|------------|
| HP: 550-900 | Disp: 2.0L-3.5L | Inducer 62mm | Exducer 76mm | Trim 65 | A/R 0.72 | Inducer 60mm | Exducer 55mm | Trim 84 |
| Turbo: Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Assembled and calibrated with 0.5 bar actuator | | 880704-5008S | | 0.83 | V-Band | V-Band | Internal | N |
| | | 880704-5009S | | 1.01 | V-Band | V-Band | Internal | N |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Internal Wastegate | | 740902-0094 | | 0.83 | V-Band | V-Band | Internal | N |
| | | 740902-0095 | | 1.01 | V-Band | V-Band | Internal | N |
| Supercore | | PN | | | | | | |
| Supercore: Standard Rotation | | 880693-5003S | | | | | | |
| Supercore: Reverse Rotation | | 880694-5003S | | | | | | |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0092 | | 1.06 | T4 | V-Band | External | Y |
| | | 740902-0090 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0091 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0086 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0087 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0088 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0089 | | 1.21 | V-Band | V-Band | External | N |
| Turbine Kits Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0100 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0101 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0096 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0097 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0098 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0099 | | 1.21 | V-Band | V-Band | External | N |

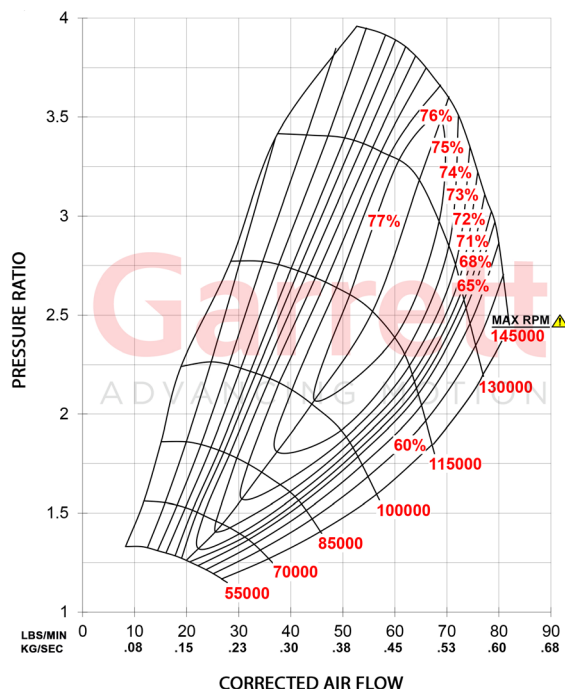
Garrett G35-900

Horsepower: 550 - 900
Displacement: 2.0L - 5.5L

Garrett
ADVANCING MOTION



COMPRESSOR MAP

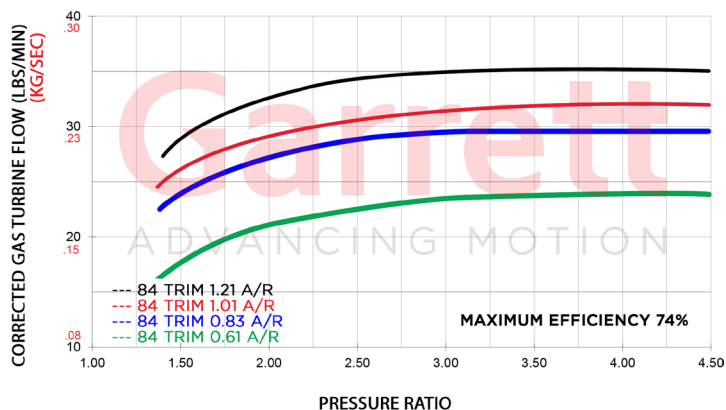


REVERSE ROTATION

FEATURES:

- ◆ G-SERIES COMPRESSOR AERODYNAMICS FOR MAXIMUM HP
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- ◆ OIL RESTRICTOR AND WATER FITTINGS INCLUDED

EXHAUST FLOW CHART



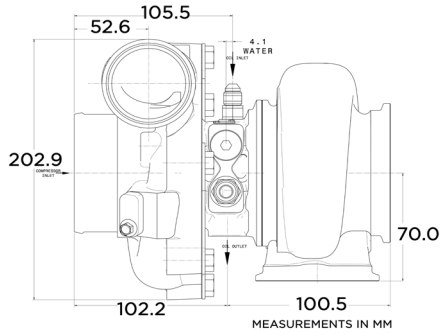
| G35-900 | | Compressor | | | | Turbine | | |
|--|-----------------|-------------------|---------|------|--------|----------------|-----------|---------|
| HP: 550-900 | Disp: 2.0L-5.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 62mm | 76mm | 65 | 0.72 | 68mm | 62mm | 84 |
| Turbo: Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Assembled and calibrated with 0.5 bar actuator | | 880707-5002S | | 0.83 | V-Band | V-Band | Internal | N |
| | | 880707-5003S | | 1.01 | V-Band | V-Band | Internal | N |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Internal Wastegate | | 740902-0110 | | 0.83 | V-Band | V-Band | Internal | N |
| | | 740902-0111 | | 1.01 | V-Band | V-Band | Internal | N |
| Supercore | | PN | | | | | | |
| Supercore: Standard Rotation | | 880695-5001S | | | | | | |
| Supercore: Reverse Rotation | | 880696-5001S | | | | | | |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0108 | | 1.06 | T4 | V-Band | External | Y |
| | | 740902-0106 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0107 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0102 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0103 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0104 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0105 | | 1.21 | V-Band | V-Band | External | N |
| Turbine Kits Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0116 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0117 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0112 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0113 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0114 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0115 | | 1.21 | V-Band | V-Band | External | N |

Garrett G35-1050

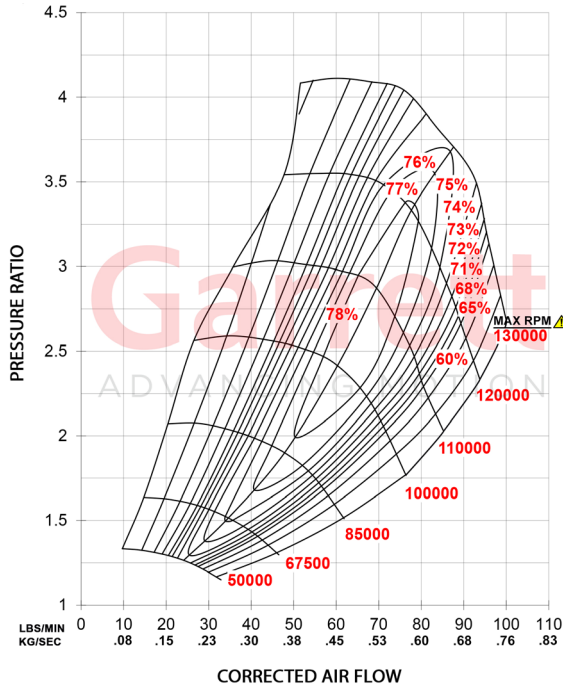
Horsepower: 700 - 1050

Displacement: 2.0L - 5.5L

Garrett
ADVANCING MOTION



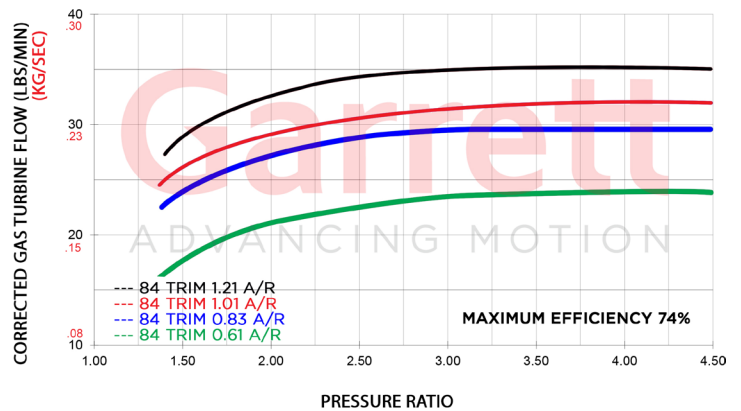
COMPRESSOR MAP



FEATURES:

- ◆ 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

EXHAUST FLOW CHART

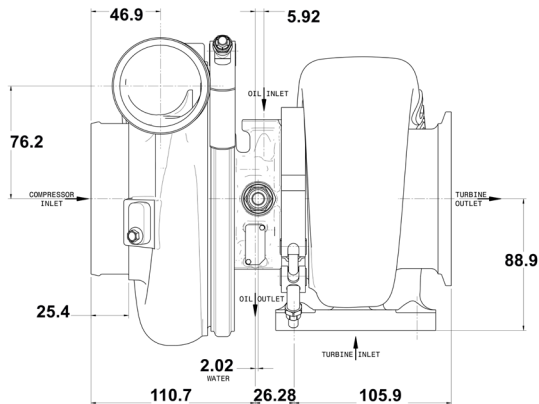


| G35-1050 | | Compressor | | | | Turbine | | |
|--------------------------------|-----------------|-------------------|---------|------|--------|----------------|-----------|---------|
| HP: 700-1050 | Disp: 2.0L-5.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 68mm | 84mm | 65 | 0.75 | 68mm | 62mm | 84 |
| Standard Turbo: G35-1050 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Assembled and calibrated | | 880707-5005S | | 0.83 | V-Band | V-Band | Internal | N |
| with 0.5 bar actuator | | 880707-5006S | | 1.01 | V-Band | V-Band | Internal | N |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Internal Wastegate | | 740902-0110 | | 0.83 | V-Band | V-Band | Internal | N |
| | | 740902-0111 | | 1.01 | V-Band | V-Band | Internal | N |
| Supercore | | PN | | | | | | |
| Supercore: Standard Rotation | | 880695-5002S | | | | | | |
| Supercore: Reverse Rotation | | 880696-5002S | | | | | | |
| Turbine Kits Standard Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0108 | | 1.06 | T4 | V-Band | External | Y |
| | | 740902-0106 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0107 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0102 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0103 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0104 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0105 | | 1.21 | V-Band | V-Band | External | N |
| Turbine Kits Reverse Rotation | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0116 | | 0.83 | T3 | V-Band | External | N |
| | | 740902-0117 | | 1.01 | T3 | V-Band | External | N |
| | | 740902-0112 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0113 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0114 | | 1.01 | V-Band | V-Band | External | N |
| | | 740902-0115 | | 1.21 | V-Band | V-Band | External | N |

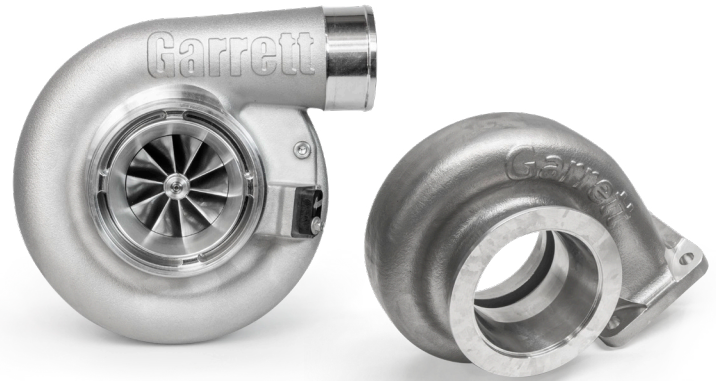
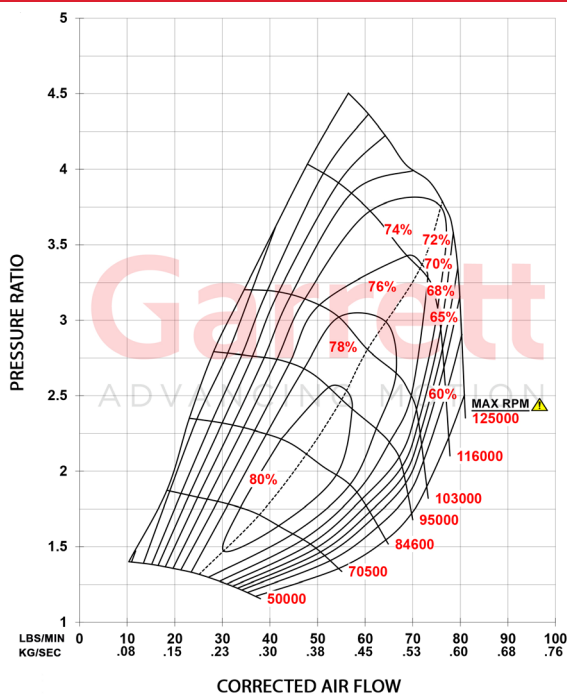
Garrett G40-900

Horsepower: 500 - 900
Displacement: 2.0L - 6.0L

Garrett
ADVANCING MOTION



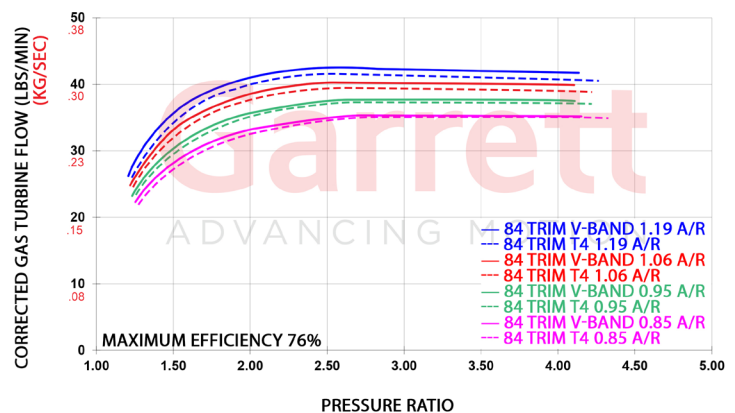
COMPRESSOR MAP



FEATURES:

- ◆ UP TO 32% MORE COMPRESSOR FLOW (COMPARED TO GTX4088R)
- ◆ CERAMIC DUAL BALL BEARING WITH STEEL CAGES
- ◆ UP TO 16% MORE TURBINE FLOW (COMPARED TO GTX4088R)
- ◆ 77MM INCONEL TURBINE WHEEL FLOWS UP TO 43 LBS/MIN
- ◆ 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
- ◆ T4 TURBINE HOUSING OUTLET V-BAND DIMENSION (117.4MM | 4.622" OD) IS EQUAL TO EXISTING GTX42, GTX45 AND G42 MODELS

EXHAUST FLOW CHART

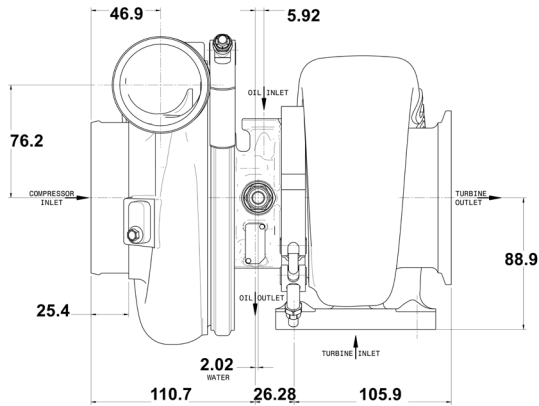


| G40-900 | | Compressor | | | | Turbine | | |
|-------------------|-----------------|--------------|---------|--------|--------|----------|---------|------|
| HP: 500-900 | Disp: 2.0L-6.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 62mm | 88mm | 51 | 0.80 | 77mm | 70mm | 84 |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 860777-5003S | | | | | | |
| Turbine Kits: G40 | | PN | | | | | | |
| Free Float | | 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 | |

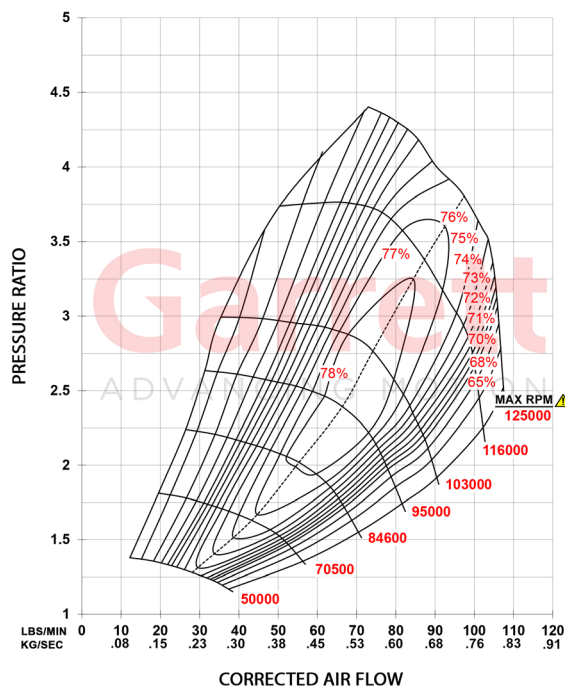
Garrett G40-1150

Horsepower: 500 - 1150
Displacement: 2.0L - 6.0L

Garrett
ADVANCING MOTION



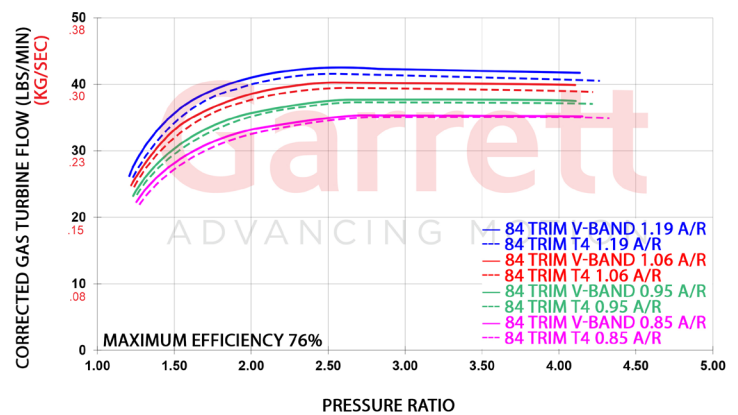
COMPRESSOR MAP



FEATURES:

- ◆ UP TO 32% MORE COMPRESSOR FLOW (COMPARED TO GTX4088R)
- ◆ CERAMIC DUAL BALL BEARING WITH STEEL CAGES
- ◆ UP TO 16% MORE TURBINE FLOW (COMPARED TO GTX4088R)
- ◆ 77MM INCONEL TURBINE WHEEL FLOWS UP TO 43 LBS/MIN
- ◆ 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
- ◆ T4 TURBINE HOUSING OUTLET V-BAND DIMENSION (117.4MM | 4.622" OD) IS EQUAL TO EXISTING GTX42, GTX45 AND G42 MODELS

EXHAUST FLOW CHART

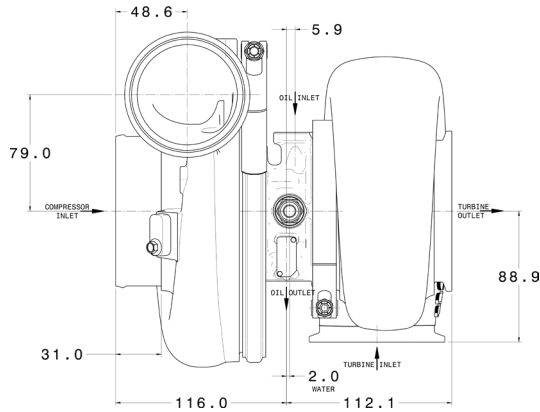


| G40-1150 | | Compressor | | | | Turbine | | |
|-------------------|-----------------|--------------|---------|------|--------|---------|----------|------|
| HP: 500-1150 | Disp: 2.0L-6.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 71mm | 88mm | 65 | 0.80 | 77mm | 70mm | 84 |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 860777-5002S | | | | | | |
| Turbine Kits: G40 | | PN | | | | | | |
| Free Float | | 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 |

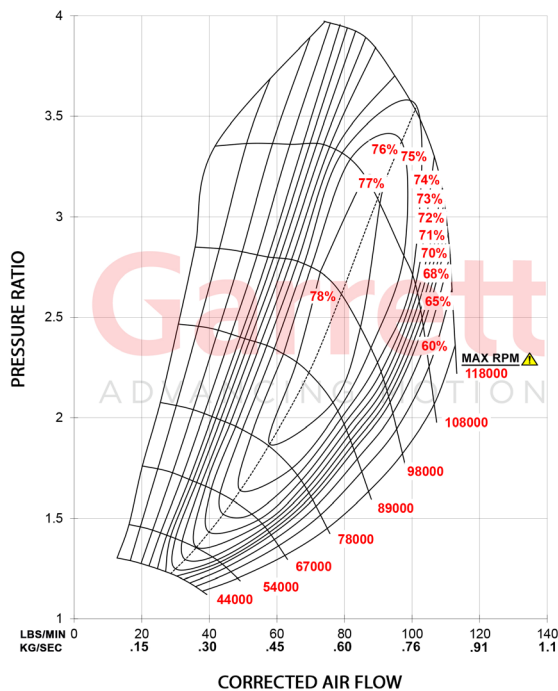
Garrett G42-1200 Compact

Horsepower: 475 - 1200
Displacement: 2.0L - 7.0L

Garrett
ADVANCING MOTION



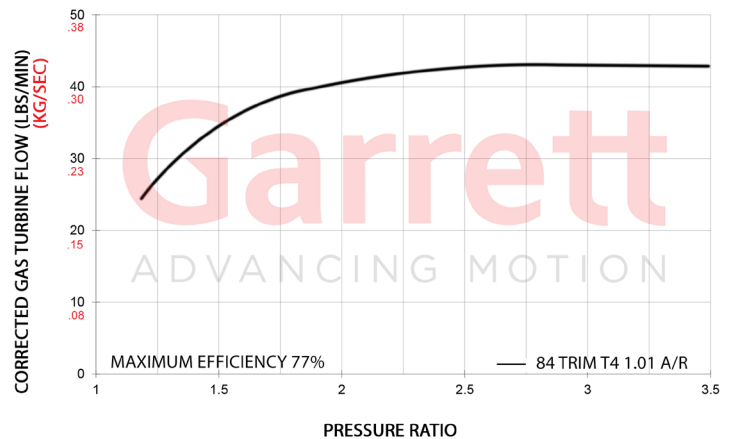
COMPRESSOR MAP



FEATURES:

- ◆ 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

EXHAUST FLOW CHART



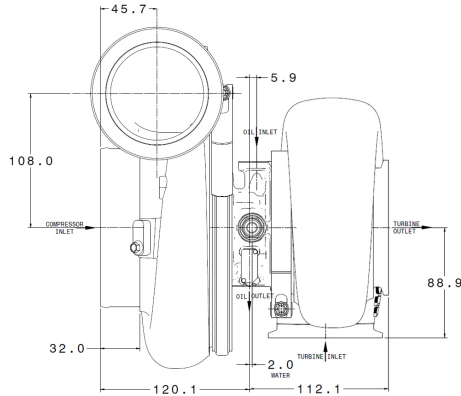
| G42-1200 Compact | | Compressor | | | | Turbine | | |
|----------------------|-----------------|--------------|---------|------|------|---------|---------|-----------|
| HP: 475-1200 | Disp: 2.0L-7.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 73mm | 91mm | 65 | 0.90 | 82mm | 75mm | 84 |
| Supercore | | PN | | | | | | |
| Compact Comp Housing | | 860778-5002S | | | | | | |
| Turbine Kits: G42 | | PN | | | A/R | Inlet | Outlet | Wastegate |
| Free Float | | 757707-0011 | | | 1.01 | V-Band | V-Band | External |
| | | 757707-0012 | | | 1.15 | V-Band | V-Band | External |
| | | 757707-0013 | | | 1.28 | V-Band | V-Band | External |
| | | 757707-0014 | | | 1.01 | T4 | V-Band | External |
| | | 757707-0015 | | | 1.15 | T4 | V-Band | External |
| | | 757707-0016 | | | 1.28 | T4 | V-Band | External |

Garrett G42-1200

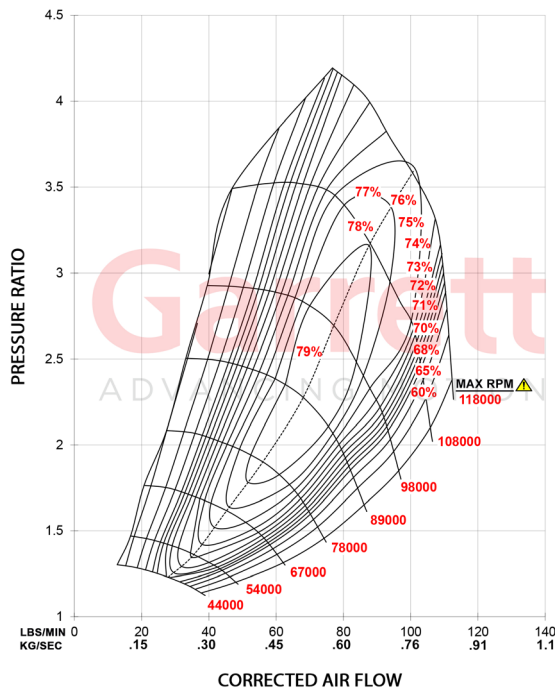
Horsepower: 475 - 1200

Displacement: 2.0L - 7.0L

Garrett
ADVANCING MOTION



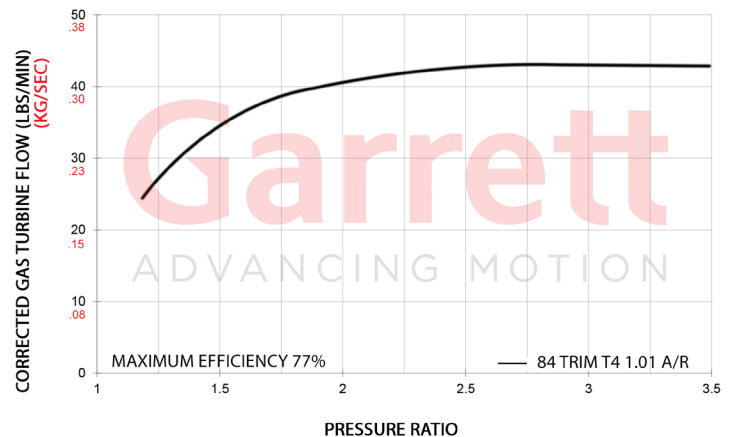
COMPRESSOR MAP



FEATURES:

- ◆ 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

EXHAUST FLOW CHART

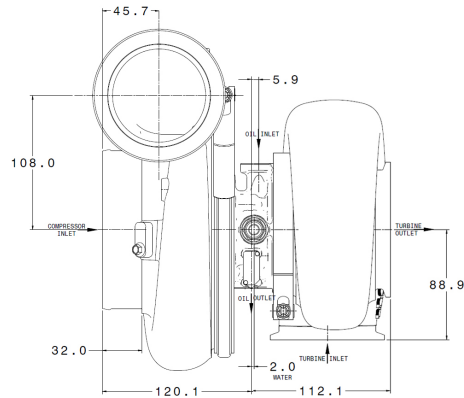


| G42-1200 | | Compressor | | | | Turbine | | |
|--------------------------|-----------------|-------------------|----------------|-------------|--------------|----------------|------------------|----------------|
| HP: 475-1200 | Disp: 2.0L-7.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 73mm | 91mm | 65 | 0.85 | 82mm | 75mm | 84 |
| Supercore | | PN | | | | | | |
| Full-Size Comp Housing | | 860778-5004S | | | | | | |
| Turbine Kits: G42 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 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 |

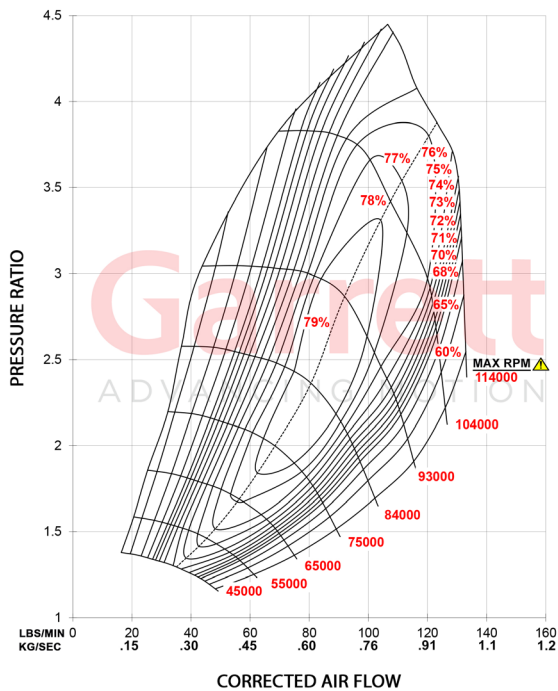
Garrett G42-1450

Horsepower: 525 - 1450
Displacement: 2.0L - 8.0L

Garrett
ADVANCING MOTION



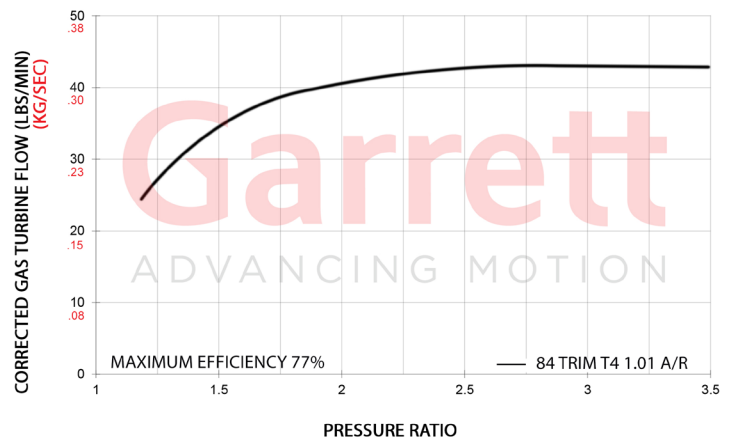
COMPRESSOR MAP



FEATURES:

- ◆ 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

EXHAUST FLOW CHART



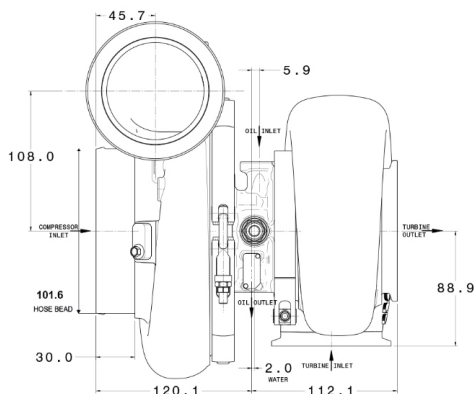
| G42-1450 | | Compressor | | | | Turbine | | |
|-------------------|-----------------|--------------|---------|------|--------|---------|----------|------|
| HP: 525-1450 | Disp: 2.0L-8.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 79mm | 98mm | 65 | 0.85 | 82mm | 75mm | 84 |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 860778-5006S | | | | | | |
| Turbine Kits: G42 | | PN | | | | | | |
| Free Float | | 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 G45-1125

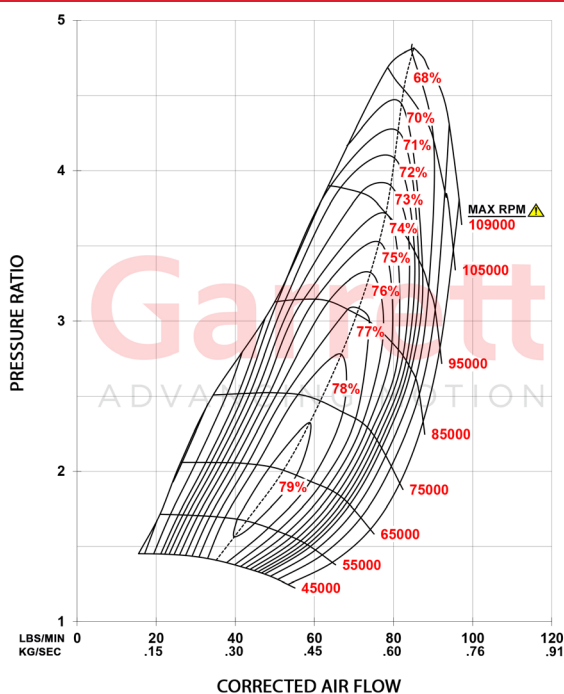
Horsepower: 600 - 1125

Displacement: 2.0L - 8.0L

Garrett
ADVANCING MOTION



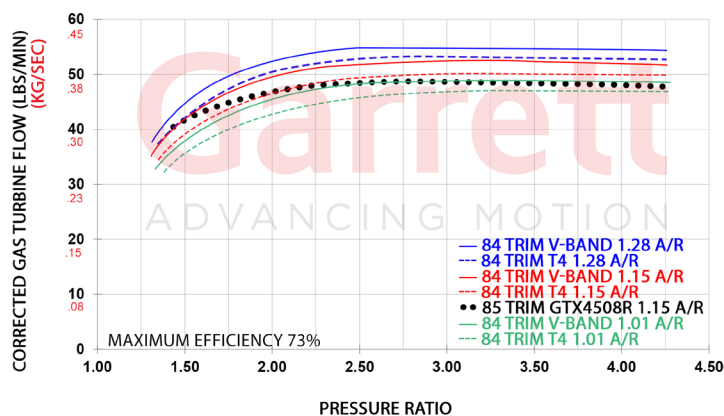
COMPRESSOR MAP



FEATURES:

- ◆ COMPRESSOR AERO INCREASES FLOW UP TO 10% (COMPARED TO GTX4502R 67MM)
- ◆ 67MM COMPRESSOR INDUCER | 102MM COMPRESSOR EXDUCER
- ◆ 10MM CERAMIC DUAL BALL BEARING WITH STEEL CAGES
- ◆ G-SERIES TURBINE AERO INCREASES FLOW 14% (COMPARED TO GTX45R)
- ◆ 89MM INCONEL TURBINE WHEEL INDUCER FLOWS UP TO 56 LBS/MIN
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ STAINLESS STEEL V-BAND AND T4 TWIN SCROLL TURBINE HOUSINGS

EXHAUST FLOW CHART

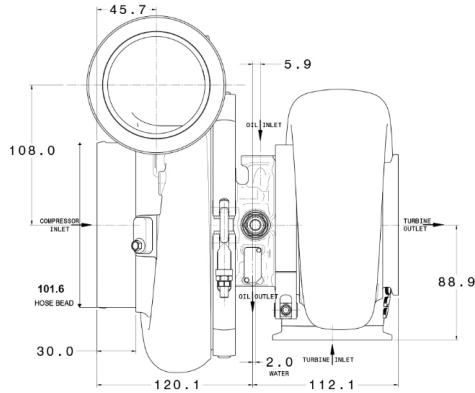


| G45-1125 | | Compressor | | | Turbine | | |
|-------------------|-----------------|--------------|---------|------|---------|---------|-----------|
| HP: 600-1125 | Disp: 2.0L-8.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer |
| | | 67mm | 102mm | 44 | 0.85 | 89mm | 82mm |
| Supercore | | PN | | | | | |
| Standard Rotation | | 888169-5003S | | | | | |
| Turbine Kits: G45 | | PN | | A/R | Inlet | Outlet | Wastegate |
| Free Float | | 757707-0019 | | 1.01 | V-Band | V-Band | External |
| | | 757707-0020 | | 1.15 | V-Band | V-Band | External |
| | | 757707-0021 | | 1.28 | V-Band | V-Band | External |
| | | 757707-0022 | | 1.44 | V-Band | V-Band | External |
| | | 757707-0023 | | 1.01 | T4 | V-Band | External |
| | | 757707-0024 | | 1.15 | T4 | V-Band | External |
| | | 757707-0025 | | 1.28 | T4 | V-Band | External |
| | | 757707-0026 | | 1.44 | T4 | V-Band | External |

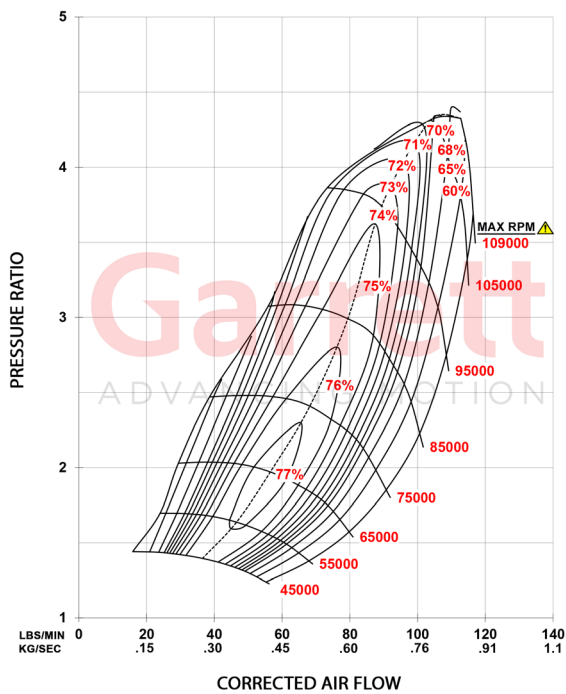
Garrett G45-1350

Horsepower: 650 - 1350
Displacement: 2.0L - 8.0L

Garrett
ADVANCING MOTION



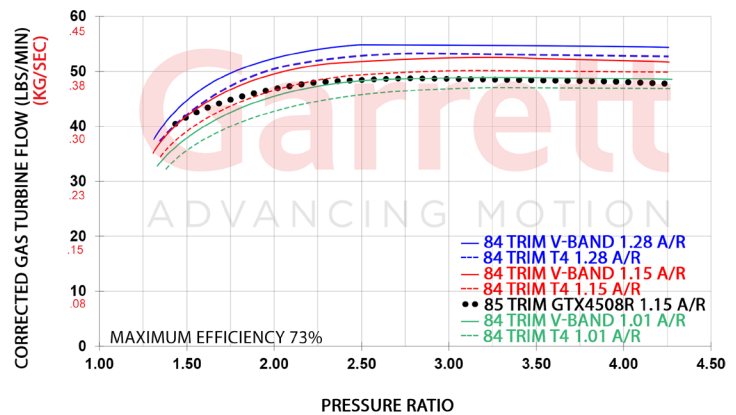
COMPRESSOR MAP



FEATURES:

- ◆ COMPRESSOR AERO INCREASES FLOW UP TO 15% (COMPARED TO GTX4502R 72MM)
- ◆ 72MM COMPRESSOR INDUCER | 102MM COMPRESSOR EXDUCER
- ◆ 10MM CERAMIC DUAL BALL BEARING WITH STEEL CAGES
- ◆ G-SERIES TURBINE AERO INCREASES FLOW 14% (COMPARED TO GTX45R)
- ◆ 89MM INCONEL TURBINE WHEEL INDUCER FLOWS UP TO 56 LBS/MIN
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ STAINLESS STEEL V-BAND AND T4 TWIN SCROLL TURBINE HOUSINGS

EXHAUST FLOW CHART



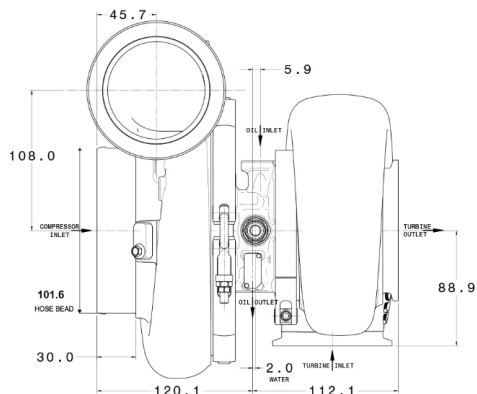
| G45-1350 | | Compressor | | | | Turbine | | |
|-------------------|-----------------|--------------|---------|------|--------|---------|----------|------|
| HP: 650-1350 | Disp: 2.0L-8.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 72mm | 102mm | 51 | 0.85 | 89mm | 82mm | 84 |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 888169-5004S | | | | | | |
| Turbine Kits: G45 | | PN | | | | | | |
| Free Float | | 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 |

Garrett G45-1500

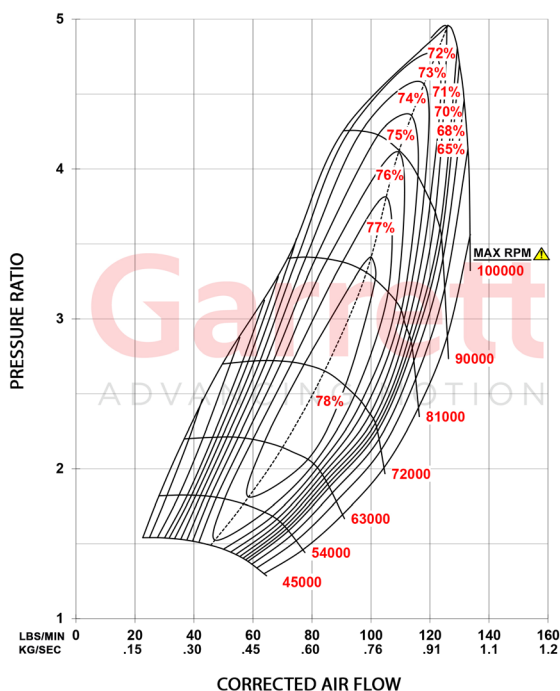
Horsepower: 750 - 1500

Displacement: 2.0L - 8.0L

Garrett
ADVANCING MOTION



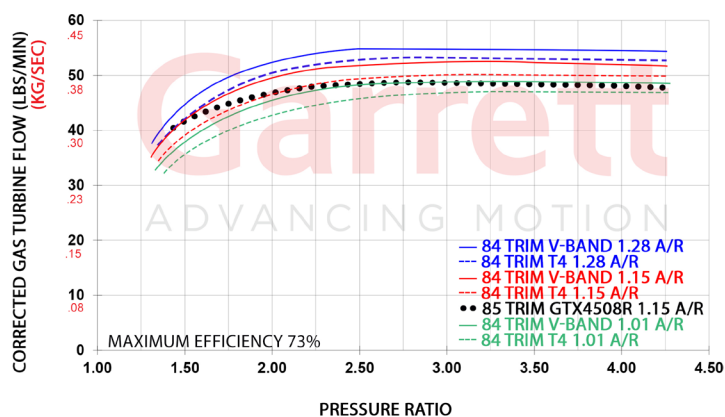
COMPRESSOR MAP



FEATURES:

- ◆ COMPRESSOR AERO INCREASES FLOW UP TO 18% (COMPARED TO GTX4508R 76MM)
- ◆ 76MM COMPRESSOR INDUCER | 102MM COMPRESSOR EXDUCER
- ◆ 10MM CERAMIC DUAL BALL BEARING WITH STEEL CAGES
- ◆ G-SERIES TURBINE AERO INCREASES FLOW 14% (COMPARED TO GTX45R)
- ◆ 89MM INCONEL TURBINE WHEEL INDUCER FLOWS UP TO 56 LBS/MIN
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ STAINLESS STEEL V-BAND AND T4 TWIN SCROLL TURBINE HOUSINGS

EXHAUST FLOW CHART

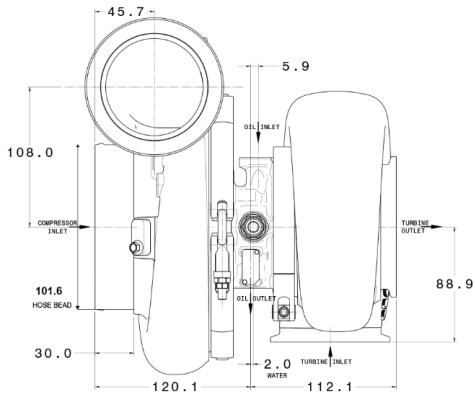


| G45-1500 | | Compressor | | | | Turbine | | |
|-------------------|-----------------|-----------------|---------|------|--------|---------|----------|------|
| HP: 750-1500 | Disp: 2.0L-8.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| Supercore | | 76mm | 109mm | 49 | 0.85 | 89mm | 82mm | 84 |
| Standard Rotation | | PN 888169-5005S | | | | | | |
| Turbine Kits: G45 | | PN | | | | | | |
| Free Float | | 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 |

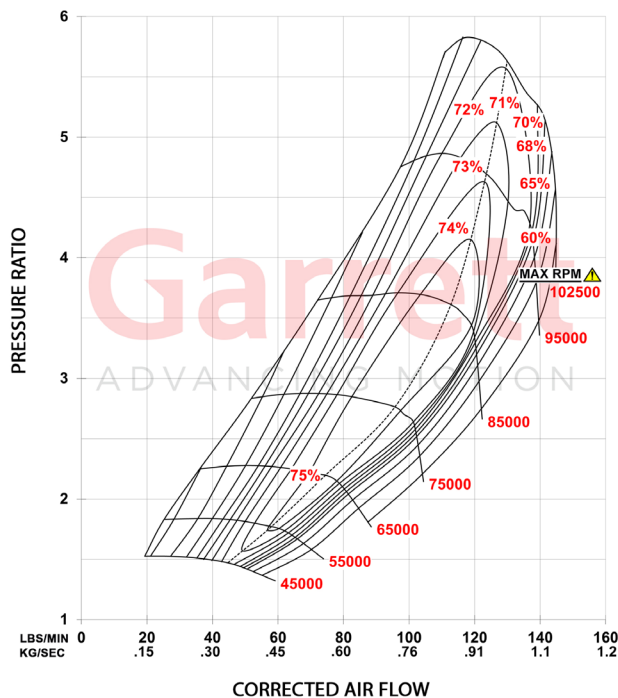
Garrett G45-1600

Horsepower: 750 - 1600
Displacement: 2.0L - 8.0L

Garrett
ADVANCING MOTION



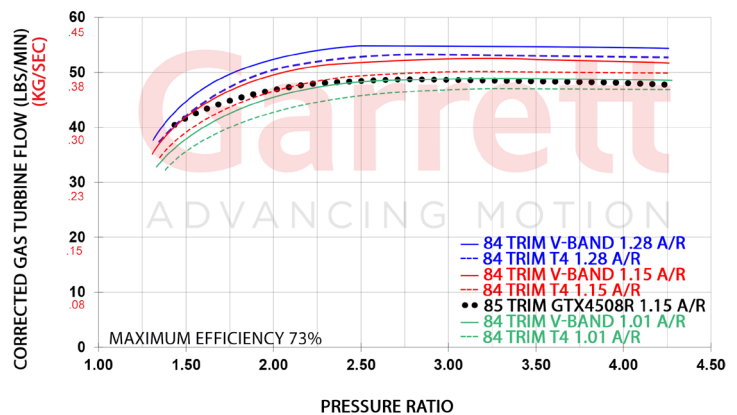
COMPRESSOR MAP



FEATURES:

- ◆ COMPRESSOR AERO INCREASES FLOW UP TO 16% (COMPARED TO GTX4508R 76MM)
- ◆ 80MM COMPRESSOR INDUCER | 102MM COMPRESSOR EXDUCER
- ◆ 10MM CERAMIC DUAL BALL BEARING WITH STEEL CAGES
- ◆ G-SERIES TURBINE AERO INCREASES FLOW 14% (COMPARED TO GTX45R)
- ◆ 89MM INCONEL TURBINE WHEEL INDUCER FLOWS UP TO 56 LBS/MIN
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ STAINLESS STEEL V-BAND AND T4 TWIN SCROLL TURBINE HOUSINGS

EXHAUST FLOW CHART



| G45-1600 | | Compressor | | | | Turbine | | |
|-------------------|-----------------|--------------|---------|--------|--------|----------|---------|------|
| HP: 750-1600 | Disp: 2.0L-8.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 80mm | 109mm | 49 | 0.85 | 89mm | 82mm | 84 |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 888169-5006S | | | | | | |
| Turbine Kits: G45 | | PN | | | | | | |
| Free Float | | 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 | |

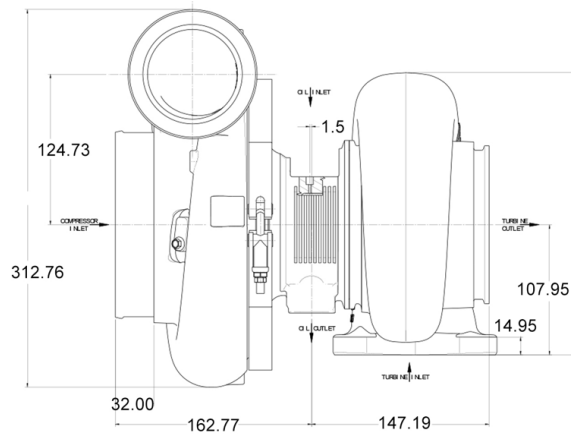


Garrett G47

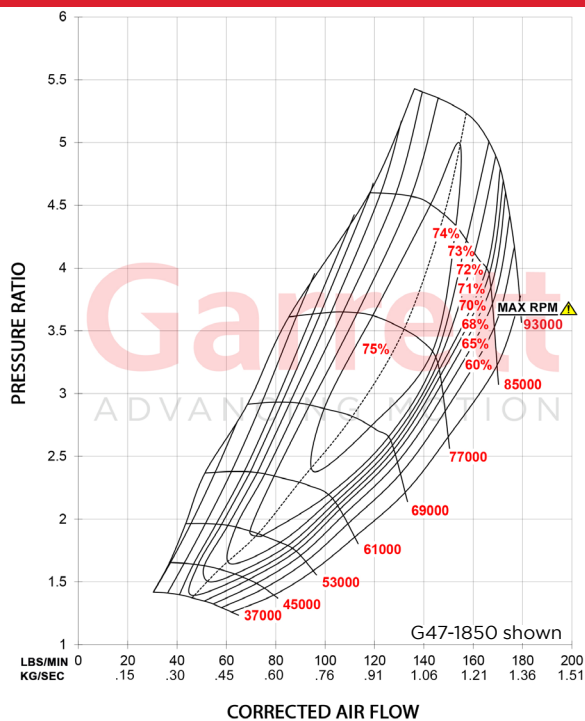
Horsepower: 825 - 1850

Displacement: 2.5L - 10.0L

Garrett
ADVANCING MOTION



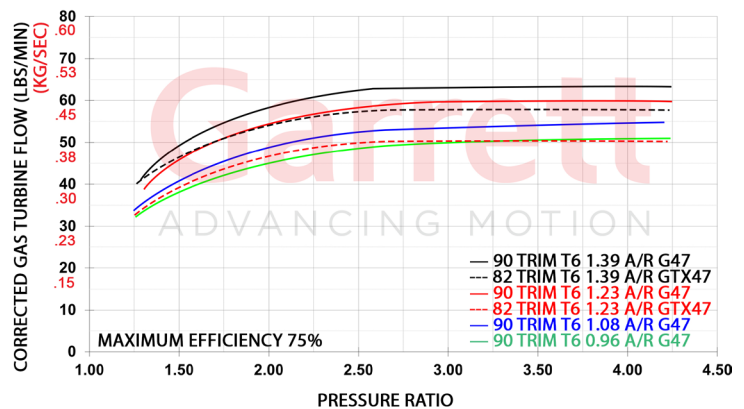
COMPRESSOR MAP



FEATURES:

- ◆ OUTLINE INTERCHANGEABLE WITH GTX GEN II TURBOS
- ◆ 76MM | 80MM COMP IND | 109MM COMP EXD
- ◆ 80MM | 88MM COMP IND | 120 COMP EXD
- ◆ HIGH FLOW, HIGH EFFICIENCY GTX GEN II COMP AERO
- ◆ G-SERIES TURBINE WHEEL AERO INCREASES PERFORMANCE COMPARED TO GTX47 GEN II: • FLOW: UP TO 20% MORE • SPOOL: UP TO +9% (ESTIMATED BY FLOW, EFFICIENCY, AND INERTIA)
- ◆ ONE-PIECE LIGHTWEIGHT ALUMINUM CENTER HSG/BACKPLATE

EXHAUST FLOW CHART



| G-Series G47 | | Compressor | | | Turbine | | |
|-------------------|------------------|-------------|---------|-------|---------|-----------|---------|
| HP: 825-1850 | Disp: 2.5L-10.0L | Inducer | Exducer | A/R | Inducer | Exducer | Trim |
| Supercore | PN | | | | | | |
| G47-1550 | 880547-5023S | 76mm | 109mm | 0.88 | 93mm | 88mm | 90 |
| G47-1650 | 880547-5024S | 80mm | 109mm | 0.88 | 93mm | 88mm | 90 |
| G47-1650 | 880547-5025S | 80mm | 120mm | 0.88 | 93mm | 88mm | 90 |
| G47-1850 | 880547-5026S | 88mm | 120mm | 0.88 | 93mm | 88mm | 90 |
| Turbine Kits: G47 | | PN | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 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



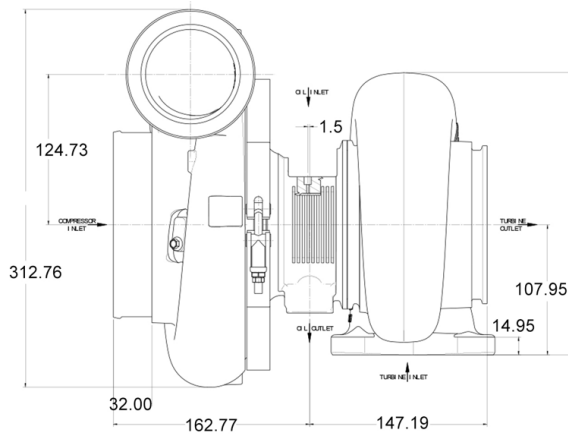
G47-1850 88mm

Garrett G50

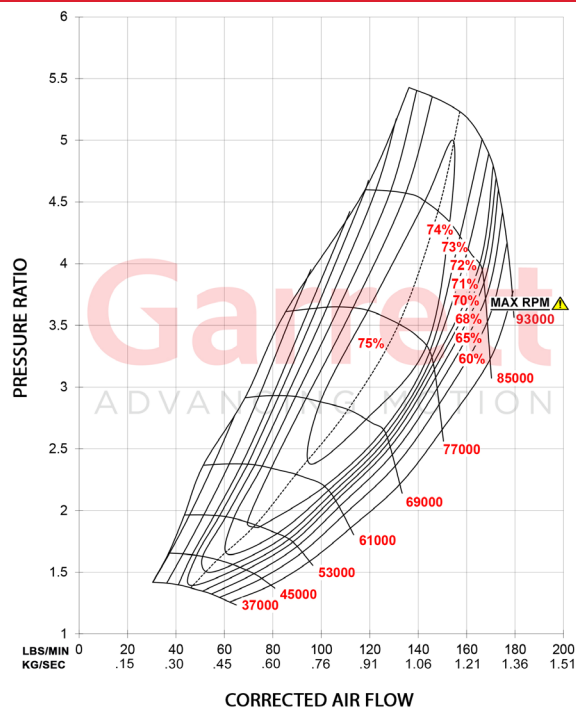
Horsepower: 875 - 1900

Displacement: 2.5L - 11.0L

Garrett
ADVANCING MOTION



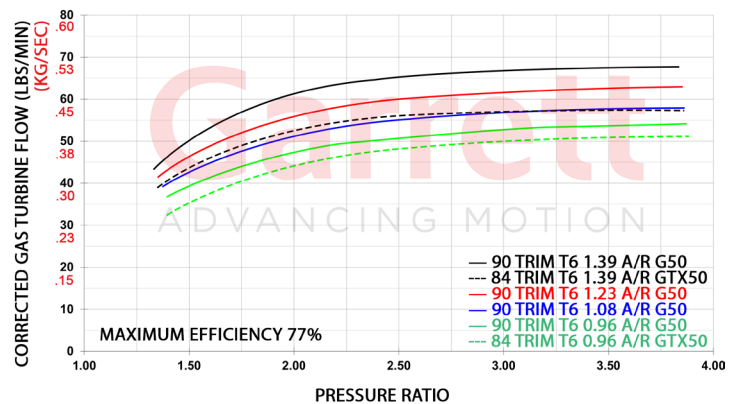
COMPRESSOR MAP



FEATURES:

- ◆ OUTLINE INTERCHANGEABLE WITH GTX GEN II TURBOS
- ◆ 80MM COMP IND | 109MM COMP EXD
- ◆ 88MM COMP IND | 120MM COMP EXD
- ◆ HIGH FLOW, HIGH EFFICIENCY GTX GEN II COMP AERO
- ◆ G-SERIES TURBINE WHEEL AERO INCREASES PERFORMANCE COMPARED TO GTX50 GEN II: • FLOW: UP TO 23% MORE • SPOOL: UP TO +12% (ESTIMATED BY FLOW, EFFICIENCY, AND INERTIA)
- ◆ ONE-PIECE LIGHTWEIGHT ALUMINUM CENTER HSG/BACKPLATE

EXHAUST FLOW CHART



| G-Series G50 | | Compressor | | | Turbine | | |
|-------------------|------------------|-------------|---------|-------|---------|-----------|---------|
| HP: 875-1900 | Disp: 2.5L-10.0L | Inducer | Exducer | A/R | Inducer | Exducer | Trim |
| Supercore | PN | | | | | | |
| G50-1700 | 880547-5027S | 80mm | 109mm | 0.88 | 99mm | 94mm | 90 |
| G50-1900 | 880547-5028S | 88mm | 120mm | 0.88 | 99mm | 94mm | 90 |
| Turbine Kits: G50 | | PN | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 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:



G47-1650
80/109mm



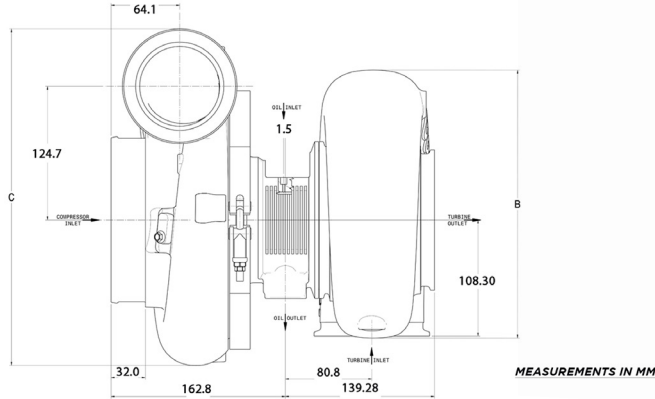
G47-1850 88mm

Garrett G55

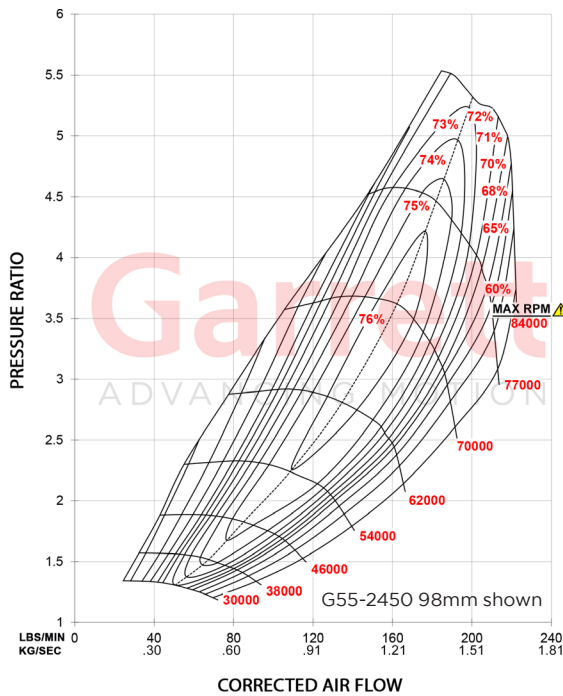
Horsepower: 1000 - 2900

Displacement: 3.0L - 12.0L

Garrett
ADVANCING MOTION



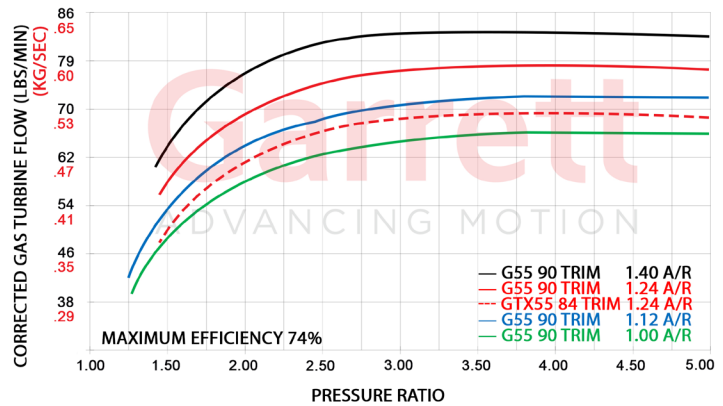
COMPRESSOR MAP



FEATURES:

- ◆ 85MM, 88MM, 91MM, 94MM, 98MM, 102MM, 106MM COMPRESSOR SIZES
- ◆ GTX GEN II COMPRESSOR AERODYNAMICS
- ◆ 106MM TURBINE EXDUCER (+4MM COMPARED TO GTX55)
- ◆ 15% MORE TURBINE FLOW (COMPARED TO GTX)
- ◆ 6% INCREASE IN SPOOL-UP PERFORMANCE
- ◆ STAINLESS STEEL TURBINE HOUSINGS IN T6 AND V-BAND INLET
- ◆ ONE-PIECE ALUMINUM CENTER HOUSING (28% LIGHTER)
- ◆ 16MM CERAMIC DUAL BALL BEARING WITH STEEL CAGES
- ◆ OUTLINE INTERCHANGEABLE WITH GTX GEN II TURBOS

EXHAUST FLOW CHART



| G Series G55 | | Compressor | | | Turbine | | |
|-------------------|------------------|-------------|---------|--------|---------|-----------|---------|
| HP: 1000-2900 | Disp: 3.0L-12.0L | Inducer | Exducer | A/R | Inducer | Exducer | Trim |
| Supercore | PN | | | | | | |
| G55-1850 | 880547-5001S | 85mm | 133mm | 0.88 | 112mm | 106mm | 90 |
| G55-1950 | 880547-5002S | 88mm | 133mm | 0.88 | 112mm | 106mm | 90 |
| G55-2100 | 880547-5003S | 91mm | 133mm | 0.96 | 112mm | 106mm | 90 |
| G55-2250 | 880547-5004S | 94mm | 133mm | 0.96 | 112mm | 106mm | 90 |
| G55-2450 | 880547-5005S | 98mm | 133mm | 0.96 | 112mm | 106mm | 90 |
| G55-2650 | 880547-5021S | 102mm | 144mm | 0.96 | 112mm | 106mm | 90 |
| G55-2900 | 880547-5022S | 106mm | 144mm | 0.96 | 112mm | 106mm | 90 |
| Turbine Kits: G55 | | PN | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 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



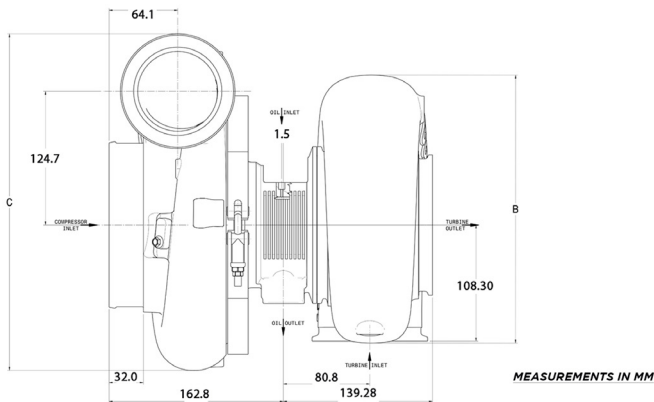
G55-2900 106mm

Garrett G57

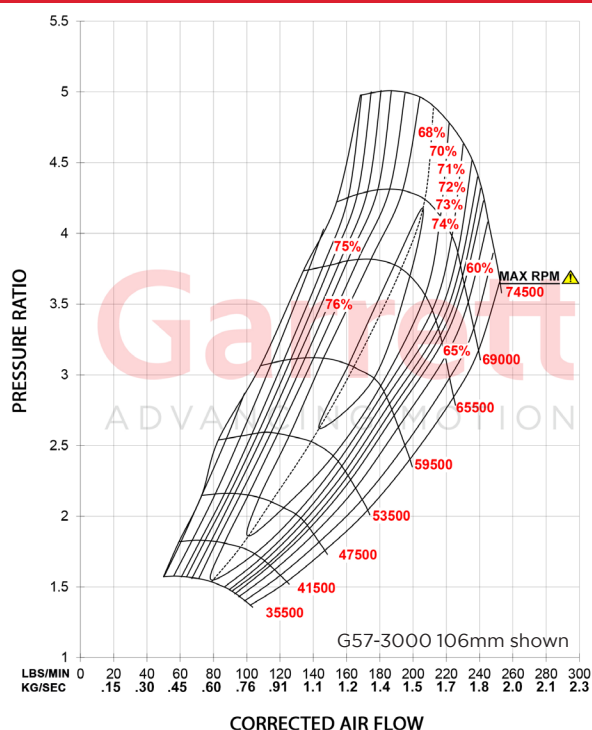
Horsepower: 1400 - 3000

Displacement: 3.0L - 12.0L

Garrett
ADVANCING MOTION



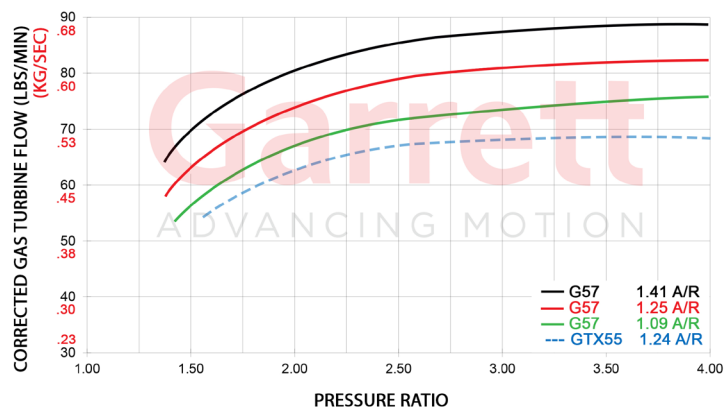
COMPRESSOR MAP



FEATURES:

- ◆ 88MM, 94MM, 98MM, 102MM, 106MM COMPRESSOR OPTIONS
- ◆ 118MM INDUCER TURBINE WHEEL
- ◆ 28% MORE TURBINE FLOW (COMPARED TO GTX) SEE GRAPH BELOW
- ◆ STAINLESS STEEL TURBINE HOUSINGS
- ◆ ONE-PIECE ALUMINUM CENTER HOUSING
- ◆ 16MM CERAMIC DUAL BALL BEARING WITH STEEL CAGES
- ◆ OUTLINE INTERCHANGEABLE WITH GTX GEN II TURBOS
- ◆ STAINLESS STEEL TURBINE KIT SOLD INDIVIDUALLY. 1.09 A/R, 1.25 A/R, 1.41 A/R

EXHAUST FLOW CHART



| G Series G57 | | Compressor | | | Turbine | | |
|-------------------|------------------|-------------|---------|--------|---------|-----------|---------|
| HP: 1400-3000 | Disp: 3.0L-12.0L | Inducer | Exducer | A/R | Inducer | Exducer | Trim |
| Supercore | PN | | | | | | |
| G57-2000 | 880547-5031S | 88mm | 133mm | 0.88 | 118mm | 112mm | 90 |
| G57-2350 | 880547-5032S | 94mm | 133mm | 0.96 | 118mm | 112mm | 90 |
| G57-2550 | 880547-5033S | 98mm | 133mm | 0.96 | 118mm | 112mm | 90 |
| G57-2750 | 880547-5029S | 102mm | 144mm | 0.96 | 118mm | 112mm | 90 |
| G57-3000 | 880547-5030S | 106mm | 144mm | 0.96 | 118mm | 112mm | 90 |
| Turbine Kits: G57 | | PN | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 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

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)

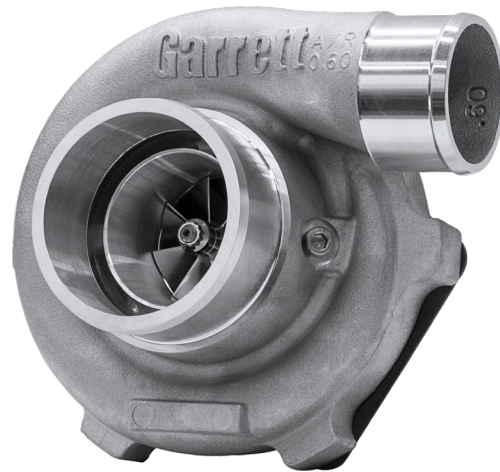
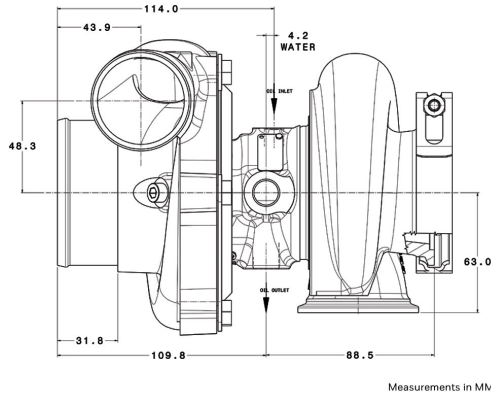




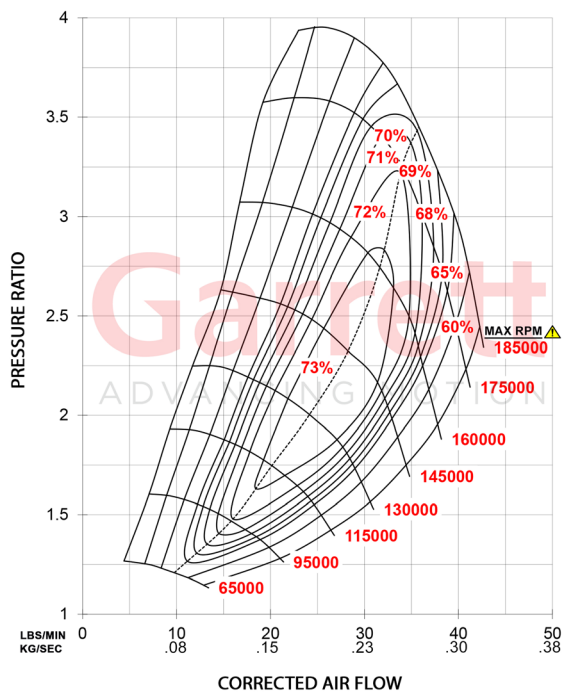
Garrett GTX2860R GEN II

Horsepower: 200 - 475
Displacement: 1.4L - 2.5L

Garrett
ADVANCING MOTION



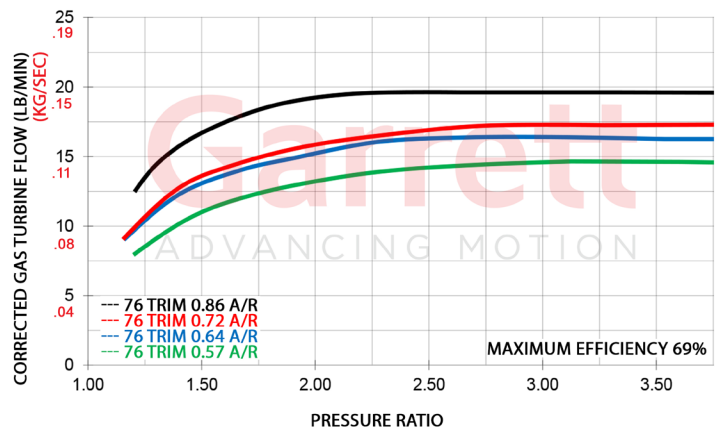
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 AERODYNAMICS FEATURE INCREASED HORSEPOWER RANGE
- ◆ IMPROVED PORTED SHROUD DESIGN FOR SURGE RESISTANCE
- ◆ FULLY-MACHINED SPEED SENSOR PORT. DETAILS ON PG. 80
- ◆ WASTEGATE ACTUATORS & BRACKET KIT AVAILABLE ON PG. 81

EXHAUST FLOW CHART



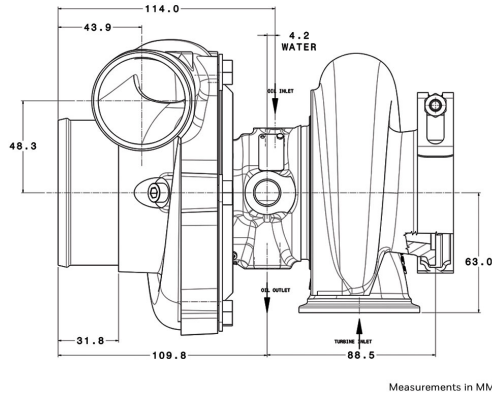
| GTX2860R Gen II | | Compressor | | | | Turbine | | |
|---|-----------------|-------------|---------|------|--------|---------|------------|---------|
| HP: 200-475 | Disp: 1.4L-2.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 46mm | 60mm | 58 | 0.60 | 54mm | 47mm | 76 |
| Supercore | Assembly Kit | Turbine Kit | | A/R | Inlet | Outlet | Wastegate | Divided |
| 849894-5001S | 856800-5001S | 827690-0001 | | 0.57 | V-Band | V-Band | Free Float | N |
| | 856800-5002S | 827690-0002 | | 0.72 | V-Band | V-Band | Free Float | N |
| Assembly Kit PN Includes Supercore and Turbine Kit | 856800-5003S | 827690-0003 | | 0.64 | T25 | 5 bolt | Wastegated | N |
| | 856800-5004S | 827690-0004 | | 0.86 | T25 | 5 bolt | Wastegated | N |

Garrett GTX2867R GEN II

Horsepower: 275 - 550

Displacement: 1.4L - 2.5L

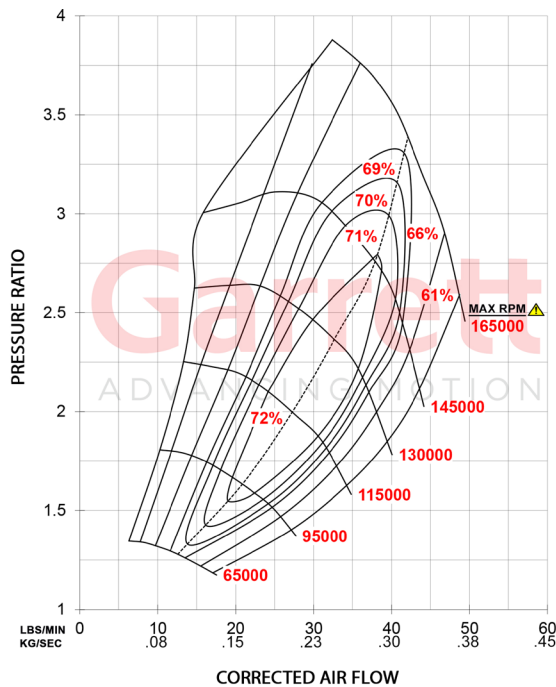
Garrett
ADVANCING MOTION



Measurements in MM



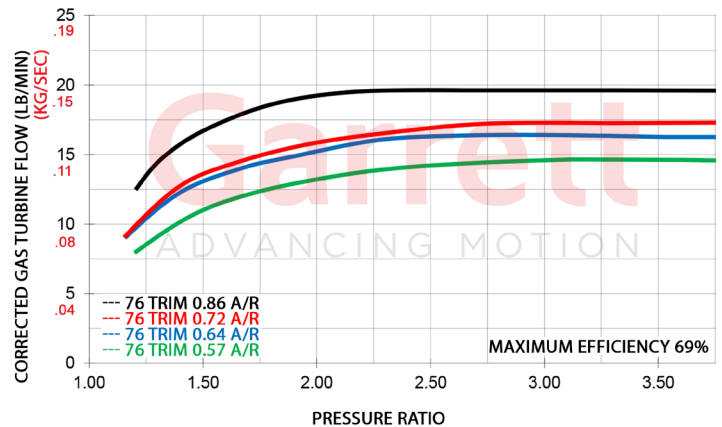
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 AERODYNAMICS FEATURE INCREASED HORSEPOWER RANGE
- ◆ IMPROVED PORTED SHROUD DESIGN FOR SURGE RESISTANCE
- ◆ FULLY-MACHINED SPEED SENSOR PORT. DETAILS ON PG. 80
- ◆ WASTEGATE ACTUATORS & BRACKET KIT AVAILABLE ON PG. 81

EXHAUST FLOW CHART

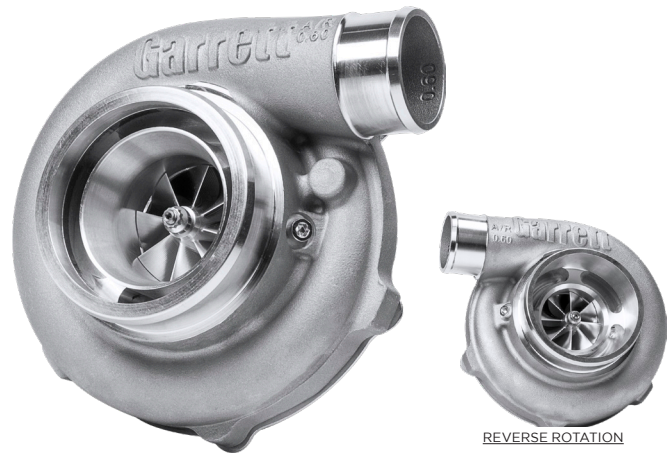
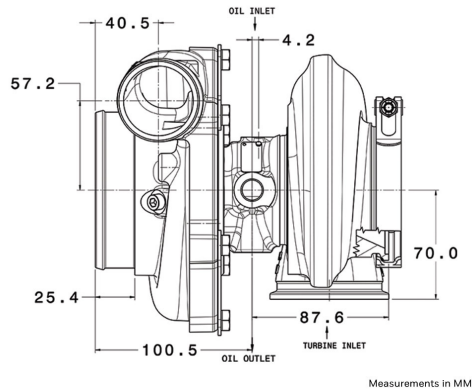


| GTX2867R Gen II | | Compressor | | | | Turbine | | |
|---------------------------|-----------------|-------------|---------|------|--------|---------|------------|---------|
| HP: 275-550 | Disp: 1.4L-2.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 50mm | 67mm | 55 | 0.60 | 54mm | 47mm | 76 |
| Supercore | Assembly Kit | Turbine Kit | | A/R | Inlet | Outlet | Wastegate | Divided |
| 849894-5002S | 856800-5005S | 827690-0001 | | 0.57 | V-Band | V-Band | Free Float | N |
| | 856800-5006S | 827690-0002 | | 0.72 | V-Band | V-Band | Free Float | N |
| Assembly Kit PN Includes | 856800-5007S | 827690-0003 | | 0.64 | T25 | 5 bolt | Wastegated | N |
| Supercore and Turbine Kit | 856800-5008S | 827690-0004 | | 0.86 | T25 | 5 bolt | Wastegated | N |

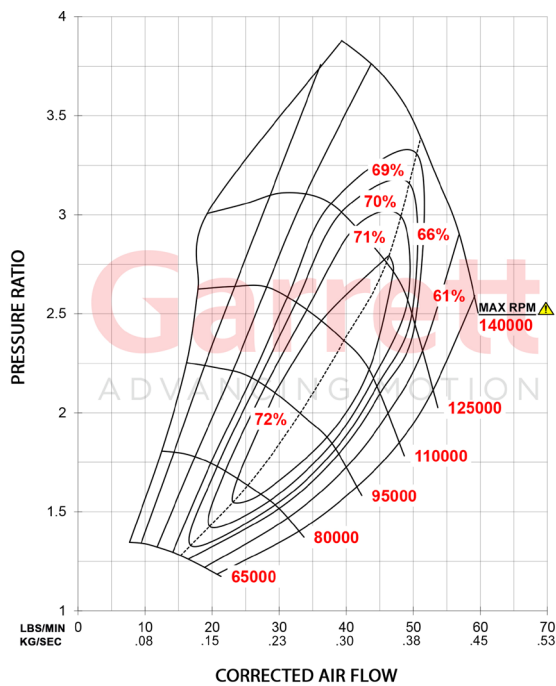
Garrett GTX3071R GEN II

Horsepower: 340 - 675
Displacement: 1.8L - 3.0L

Garrett
ADVANCING MOTION



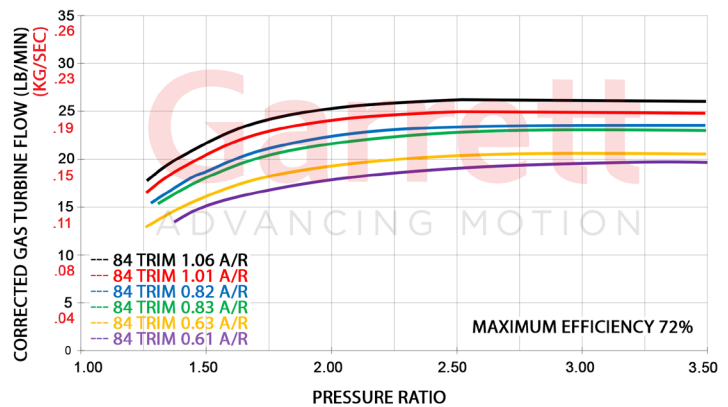
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 AERODYNAMICS FEATURE INCREASED HORSEPOWER RANGE
- ◆ FULLY-MACHINED SPEED SENSOR PORT. DETAILS ON PG. 80
- ◆ WASTEGATE ACTUATORS & BRACKET KIT AVAILABLE ON PG. 81
- ◆ REVERSE ROTATION CONFIGURATIONS AVAILABLE

EXHAUST FLOW CHART



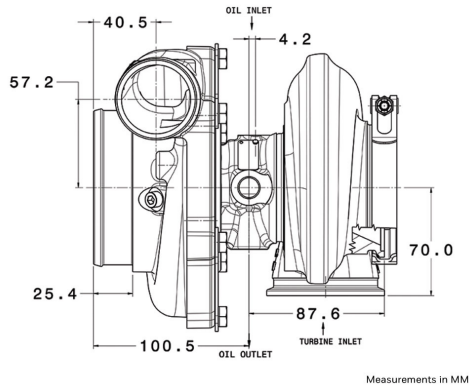
| GTX3071R Gen II | | Compressor | | | | Turbine | | |
|---|-----------------|--------------------|----------------|-------------|--------------|----------------|------------------|----------------|
| HP: 340-675 | Disp: 1.8L-3.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 54mm | 71mm | 58 | 0.60 | 60mm | 55mm | 84 |
| Supercore | Assembly Kit | Turbine Kit | | A/R | Inlet | Outlet | Wastegate | Divided |
| 851154-5002S | 856801-5006S | 740902-0009 | | 0.63 | T3 | V-Band | Free Float | N |
| | 856801-5005S | 740902-0008 | | 0.82 | T3 | V-Band | Free Float | N |
| | | 740902-0007 | | 1.06 | T3 | V-Band | Free Float | N |
| | 856801-5018S | 740902-0036 | | 0.61 | V-Band | V-Band | Free Float | N |
| | 856801-5017S | 740902-0035 | | 0.83 | V-Band | V-Band | Free Float | N |
| Assembly Kit PN Includes Supercore and Turbine Kit | | 740902-0034 | | 1.01 | V-Band | V-Band | Free Float | N |
| | | 771300-0006 | | 0.63 | T3 | 5 bolt | Wastegated | N |
| | | 771300-0005 | | 0.82 | T3 | 5 bolt | Wastegated | N |
| | | 771300-0004 | | 1.06 | T3 | 5 bolt | Wastegated | N |
| Reverse Rotation | | Turbine Kit | | A/R | Inlet | Outlet | Wastegate | Divided |
| | Supercore | 740902-0053 | | 0.61 | V-Band | V-Band | Free Float | N |
| | 844621-5003S | 740902-0054 | | 0.83 | V-Band | V-Band | Free Float | N |
| | | 740902-0055 | | 1.01 | V-Band | V-Band | Free Float | N |

Garrett GTX3076R GEN II

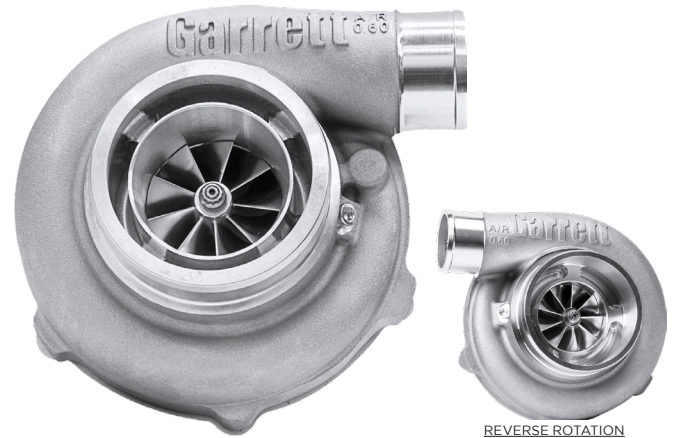
Horsepower: 400 - 750

Displacement: 1.8L - 3.0L

Garrett
ADVANCING MOTION

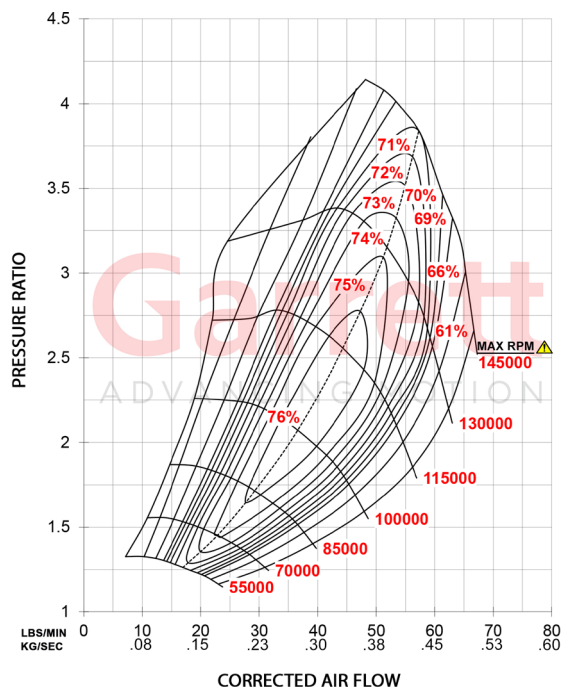


Measurements in MM



REVERSE ROTATION

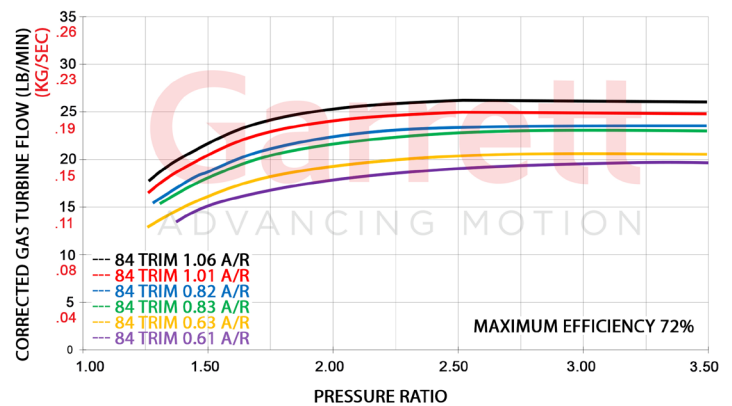
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 AERODYNAMICS FEATURE INCREASED HORSEPOWER RANGE
- ◆ FULLY-MACHINED SPEED SENSOR PORT. DETAILS ON PG. 80
- ◆ WASTEGATE ACTUATORS & BRACKET KIT AVAILABLE ON PG. 81
- ◆ REVERSE ROTATION OPTIONS AVAILABLE

EXHAUST FLOW CHART

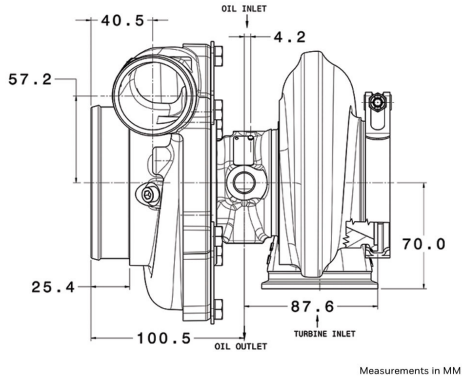


| GTX3076R Gen II | | Compressor | | | Turbine | | |
|--|-----------------|-------------|---------|------|---------|---------|------------|
| HP: 400-750 | Disp: 1.8L-3.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer |
| | | 58mm | 76mm | 58 | 0.60 | 60mm | 55mm |
| Supercore | Assembly Kit | Turbine Kit | | A/R | Inlet | Outlet | Wastegate |
| 851154-5001S | 856801-5027S | 740902-0009 | | 0.63 | T3 | V-Band | Free Float |
| | 856801-5026S | 740902-0008 | | 0.82 | T3 | V-Band | Free Float |
| | | 740902-0007 | | 1.06 | T3 | V-Band | Free Float |
| | | 740902-0036 | | 0.61 | V-Band | V-Band | Free Float |
| | 856801-5038S | 740902-0035 | | 0.83 | V-Band | V-Band | Free Float |
| | 856801-5037S | 740902-0034 | | 1.01 | V-Band | V-Band | Free Float |
| | | 771300-0006 | | 0.63 | T3 | 5 bolt | Wastegated |
| | | 771300-0005 | | 0.82 | T3 | 5 bolt | Wastegated |
| | | 771300-0004 | | 1.06 | T3 | 5 bolt | Wastegated |
| Assembly Kit PN Includes Supercore and Turbine Kit | | | | | | | |
| Reverse Rotation | Supercore | Turbine Kit | | A/R | Inlet | Outlet | Wastegate |
| | 844621-5004S | 740902-0053 | | 0.61 | V-Band | V-Band | Free Float |
| | | 740902-0054 | | 0.83 | V-Band | V-Band | Free Float |
| | | 740902-0055 | | 1.01 | V-Band | V-Band | Free Float |

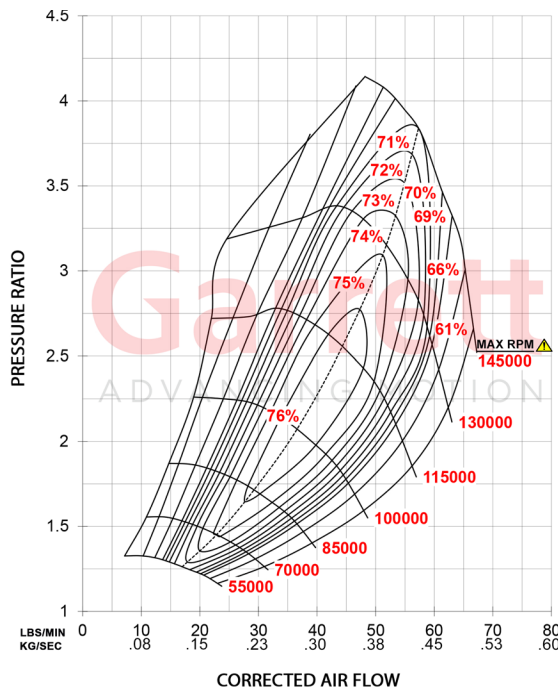
Garrett GTX3576R GEN II

Horsepower: 400 - 750
Displacement: 2.0L- 4.5L

Garrett
ADVANCING MOTION



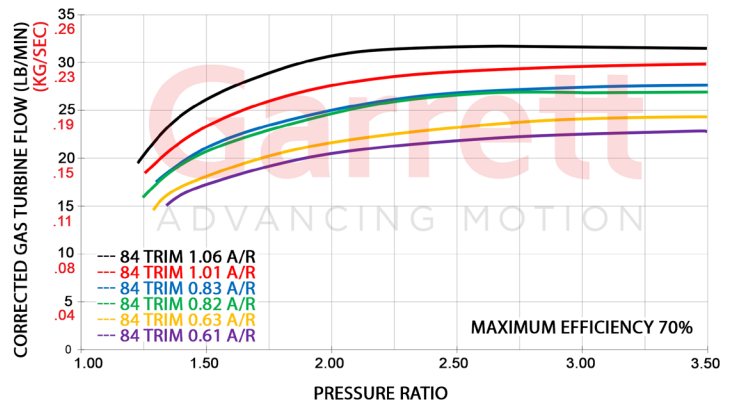
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 AERODYNAMICS FEATURE INCREASED HORSEPOWER RANGE
- ◆ FULLY-MACHINED SPEED SENSOR PORT. DETAILS ON PG. 80
- ◆ REVERSE ROTATION OPTIONS AVAILABLE

EXHAUST FLOW CHART

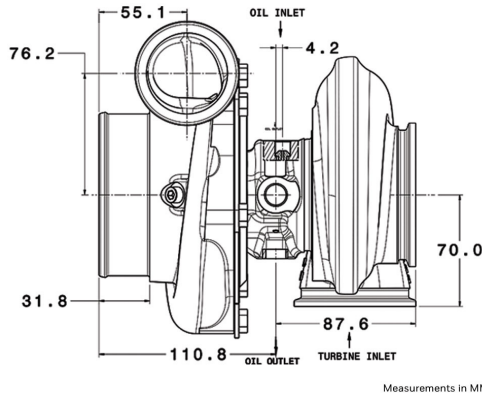


| GTX3576R Gen II | | Compressor | | | | Turbine | | |
|---------------------------|-----------------|-------------|---------|------|--------|---------|------------|---------|
| HP: 400-750 | Disp: 2.0L-4.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 58mm | 76mm | 58 | 0.60 | 68mm | 62mm | 84 |
| Supercore | Assembly Kit | Turbine Kit | | A/R | Inlet | Outlet | Wastegate | Divided |
| 851154-5003S | | 740902-0012 | | 0.63 | T3 | V-Band | Free Float | N |
| | | 740902-0011 | | 0.82 | T3 | V-Band | Free Float | N |
| | | 740902-0010 | | 1.06 | T3 | V-Band | Free Float | N |
| | | 740902-0018 | | 0.63 | T4 | V-Band | Free Float | N |
| | | 740902-0017 | | 0.82 | T4 | V-Band | Free Float | N |
| | | 740902-0016 | | 1.06 | T4 | V-Band | Free Float | N |
| | | 740902-0033 | | 0.61 | V-Band | V-Band | Free Float | N |
| | | 740902-0032 | | 0.83 | V-Band | V-Band | Free Float | N |
| | | 740902-0031 | | 1.01 | V-Band | V-Band | Free Float | N |
| | | | | | | | | |
| Assembly Kit PN Includes | 856801-5059S | 740902-0032 | | 0.83 | V-Band | V-Band | Free Float | N |
| Supercore and Turbine Kit | 856801-5058S | 740902-0031 | | 1.01 | V-Band | V-Band | Free Float | N |
| Reverse Rotation | Supercore | Turbine Kit | | A/R | Inlet | Outlet | Wastegate | Divided |
| | 844626-5003S | 740902-0056 | | 0.61 | V-Band | V-Band | Free Float | N |
| | | 740902-0057 | | 0.83 | V-Band | V-Band | Free Float | N |
| | | 740902-0058 | | 1.01 | V-Band | V-Band | Free Float | N |

Garrett GTX3582R GEN II

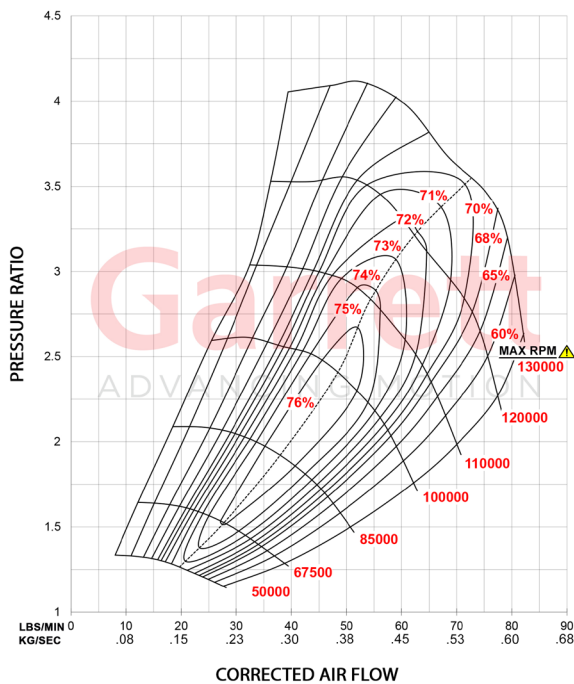
Horsepower: 450 - 900
Displacement: 2.0L - 4.5L

Garrett
ADVANCING MOTION



REVERSE ROTATION

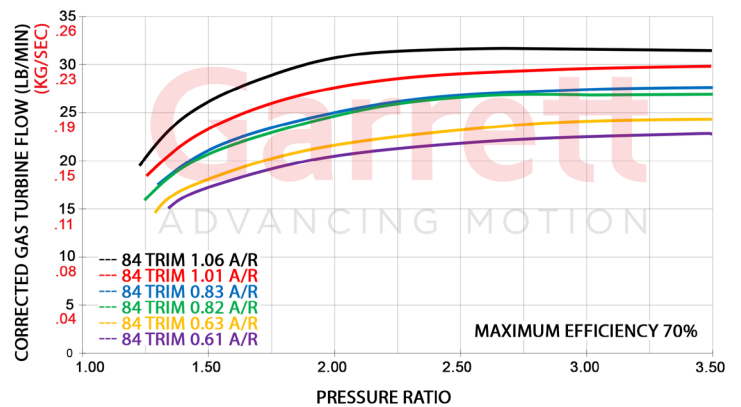
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 AERODYNAMICS FEATURE INCREASED HORSEPOWER RANGE
- ◆ FULLY-MACHINED SPEED SENSOR PORT. DETAILS ON PG. 80
- ◆ REVERSE ROTATION OPTIONS AVAILABLE

EXHAUST FLOW CHART

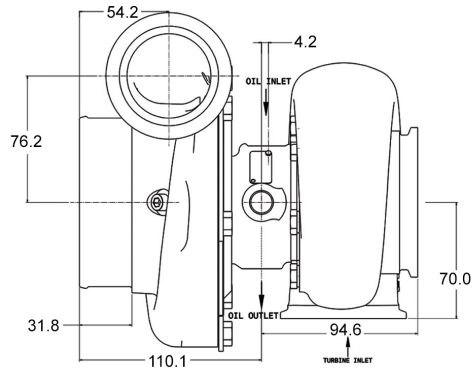


| GTX3582R Gen II | | Compressor | | | | Turbine | | |
|---------------------------|-----------------|-------------|---------|--------|--------|------------|-----------|---------|
| HP: 450-900 | Disp: 2.0L-4.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 66mm | 82mm | 64 | 0.70 | 68mm | 62mm | 84 |
| Supercore | Assembly Kit | Turbine Kit | | A/R | Inlet | Outlet | Wastegate | Divided |
| 851154-5004S | | 740902-0012 | 0.63 | T3 | V-Band | Free Float | N | |
| | 856801-5068S | 740902-0011 | 0.82 | T3 | V-Band | Free Float | N | |
| | | 740902-0010 | 1.06 | T3 | V-Band | Free Float | N | |
| | | 740902-0018 | 0.63 | T4 | V-Band | Free Float | N | |
| | 856801-5071S | 740902-0017 | 0.82 | T4 | V-Band | Free Float | N | |
| | | 740902-0016 | 1.06 | T4 | V-Band | Free Float | N | |
| | | 740902-0033 | 0.61 | V-Band | V-Band | Free Float | N | |
| Assembly Kit PN Includes | 856801-5080S | 740902-0032 | 0.83 | V-Band | V-Band | Free Float | N | |
| Supercore and Turbine Kit | 856801-5079S | 740902-0031 | 1.01 | V-Band | V-Band | Free Float | N | |
| Reverse Rotation | Supercore | Turbine Kit | | A/R | Inlet | Outlet | Wastegate | Divided |
| | 844626-5004S | 740902-0056 | 0.61 | V-Band | V-Band | Free Float | N | |
| | | 740902-0057 | 0.83 | V-Band | V-Band | Free Float | N | |
| | | 740902-0058 | 1.01 | V-Band | V-Band | Free Float | N | |

Garrett GTX3584RS

Horsepower: 550 - 1000
Displacement: 2.0L - 5.5L

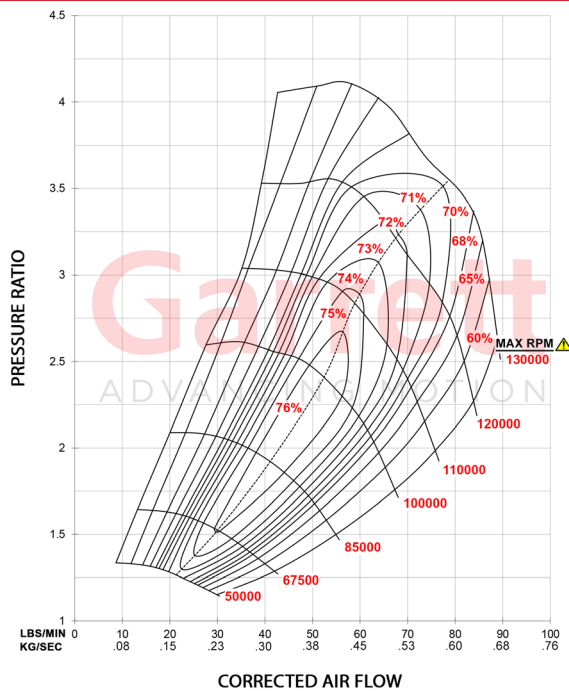
Garrett
ADVANCING MOTION



Measurements in MM



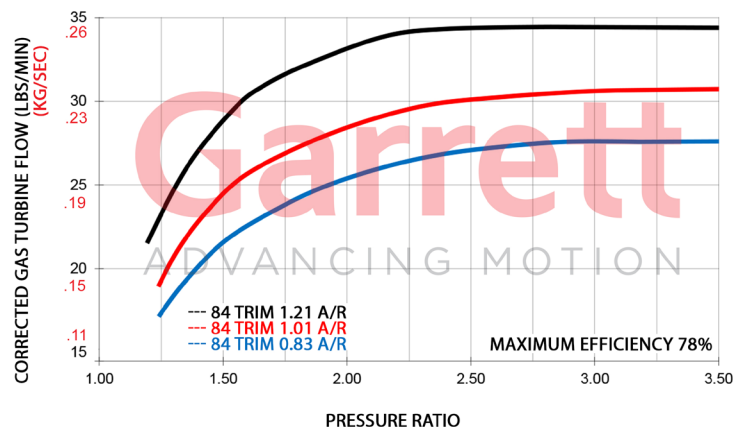
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 AERODYNAMICS FEATURE INCREASED HORSEPOWER RANGE
- ◆ "RS" HIGH FLOWING TURBINE WHEEL
- ◆ COMPACT DESIGN FOR TIGHT INSTALLATIONS
- ◆ FULLY-MACHINED SPEED SENSOR PORT. DETAILS ON PG. 80
- ◆ COMP OUTLET AVAILABLE IN V-BAND & HOSE CONNECTION

EXHAUST FLOW CHART



| GTX3584RS | | Compressor | | | | Turbine | | |
|-----------------------|-----------------|-----------------|-----------------|------------|-------------|-----------------|-----------------|------------|
| HP: 550-1000 | Disp: 2.0L-5.5L | Inducer 67mm | Exducer 84mm | Trim 64 | A/R 0.72 | Inducer 68mm | Exducer 62mm | Trim 84 |
| Supercore | Assembly Kit | Turbine Kit | | A/R | Inlet | Outlet | Wastegate | Divided |
| 846098-5001S | 856804-5001S | 740902-0067 | | 0.83 | V-Band | V-Band | Free Float | N |
| Hose bead comp outlet | 856804-5002S | 740902-0066 | | 1.01 | V-Band | V-Band | Free Float | N |
| | | 740902-0052 | | 1.21 | V-Band | V-Band | Free Float | N |
| 846098-5002S | | 740902-0067 | | 0.83 | V-Band | V-Band | Free Float | N |
| V-band comp outlet | | 740902-0066 | | 1.01 | V-Band | V-Band | Free Float | N |
| | | 740902-0052 | | 1.21 | V-Band | V-Band | Free Float | N |

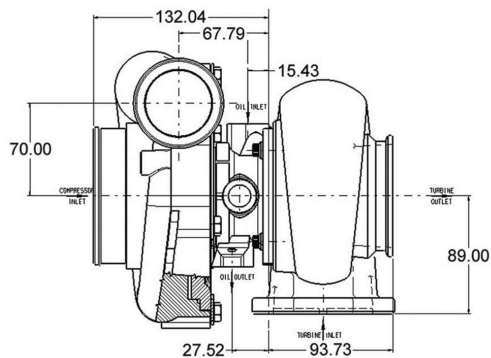
*GTX3584 turbine housings not compatible with GT/GTX35 housings

Garrett GTX4088R

Horsepower: 460 - 850

Displacement: 2.0L - 6.0L

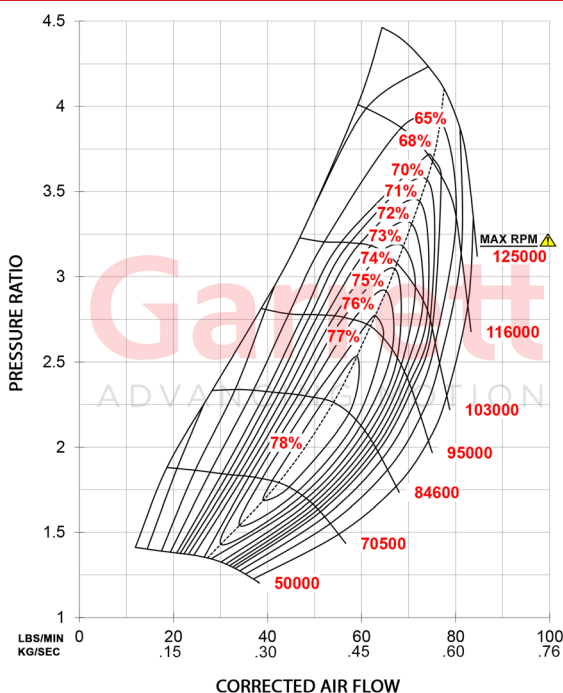
Garrett
ADVANCING MOTION



Measurements in MM



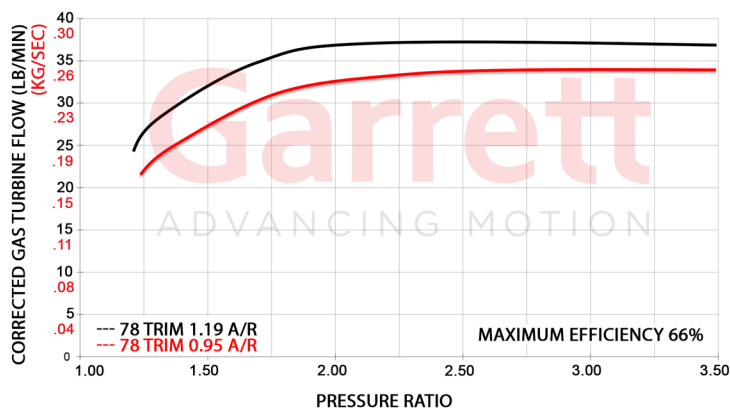
COMPRESSOR MAP



FEATURES:

- ◆ FEATURES ORIGINAL GTX COMP WHEEL AERODYNAMICS
- ◆ SUPERCORE AND TURBINE KIT SOLD SEPARATELY
- ◆ AVAILABLE ONLY WITH DIVIDED TURBINE HOUSINGS

EXHAUST FLOW CHART



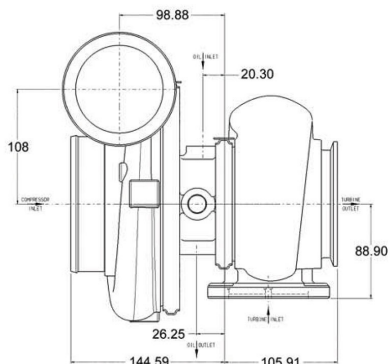
| GTX4088R | | Compressor | | | | Turbine | | |
|---------------------|-----------------|-----------------|---------|------|------|---------|-----------|---------|
| HP: 460-850 | Disp: 2.0L-6.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| Supercore | | 65mm | 88mm | 54 | 0.72 | 77mm | 68mm | 78 |
| Standard Rotation | | PN 825614-5005S | | | | | | |
| Turbine Kits: GTX40 | | PN A/R Inlet | | | | Outlet | Wastegate | Divided |
| Free Float | | 773628-0011 | | 0.95 | T4 | V-Band | External | Y |
| | | 773628-0013 | | 1.19 | T4 | V-Band | External | Y |

Garrett GTX4294R

Horsepower: 475 - 950

Displacement: 2.0L - 7.0L

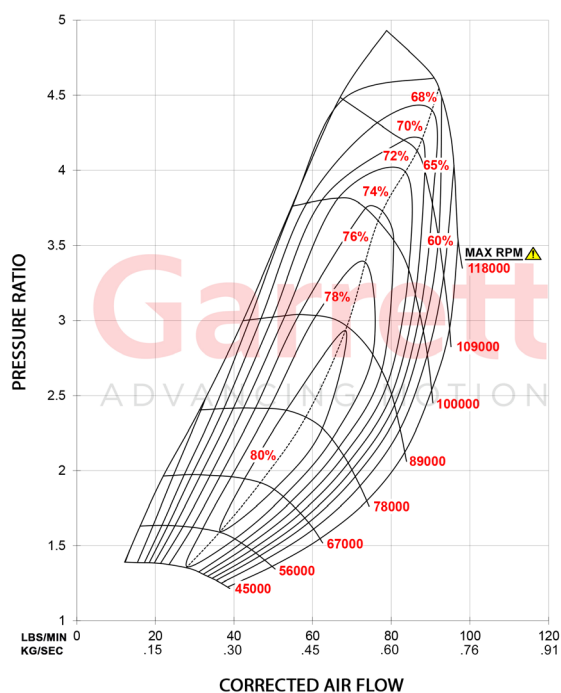
Garrett
ADVANCING MOTION



Measurements in MM



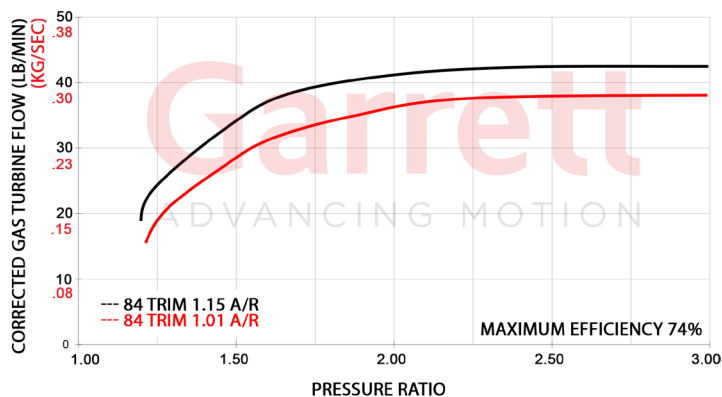
COMPRESSOR MAP



FEATURES:

- ◆ FEATURES ORIGINAL GTX COMP WHEEL AERODYNAMICS
- ◆ SUPERCORE AND TURBINE KIT SOLD SEPARATELY
- ◆ AVAILABLE ONLY WITH DIVIDED TURBINE HOUSINGS
- ◆ V-BAND COMPRESSOR OUTLET CONFIGURATION

EXHAUST FLOW CHART



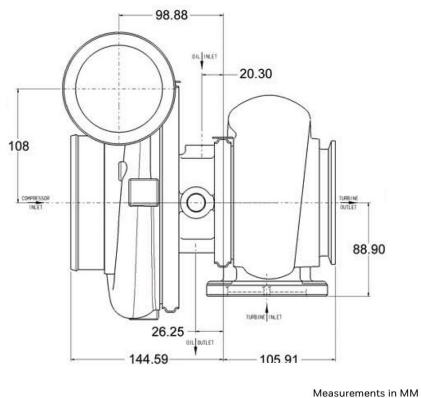
| GTX4294R | | Compressor | | | | Turbine | | |
|---------------------|-----------------|--------------|---------|------|-------|---------|-----------|---------|
| HP: 475-950 | Disp: 2.0L-7.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 70mm | 94mm | 56 | 0.60 | 82mm | 75mm | 84 |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 800269-5001S | | | | | | |
| Turbine Kits: GTX42 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 757707-0002 | | 1.15 | T4 | V-Band | External | Y |
| | | 757707-0003 | | 1.28 | T4 | V-Band | External | Y |
| | | 757707-0004 | | 1.44 | T4 | V-Band | External | Y |

Garrett GTX4202R

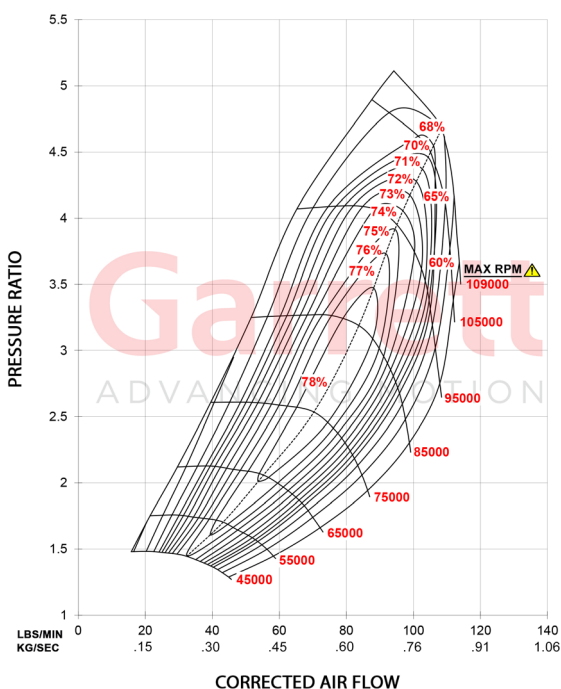
Horsepower: 525 - 1120

Displacement: 2.0L - 7.0L

Garrett
ADVANCING MOTION



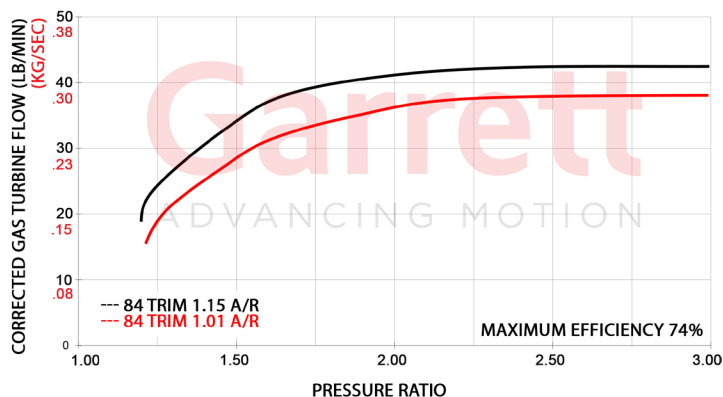
COMPRESSOR MAP



FEATURES:

- ◆ FEATURES ORIGINAL GTX COMP WHEEL AERODYNAMICS
- ◆ SUPERCORE AND TURBINE KIT SOLD SEPARATELY
- ◆ AVAILABLE ONLY WITH DIVIDED TURBINE HOUSINGS
- ◆ V-BAND COMPRESSOR OUTLET CONFIGURATION

EXHAUST FLOW CHART

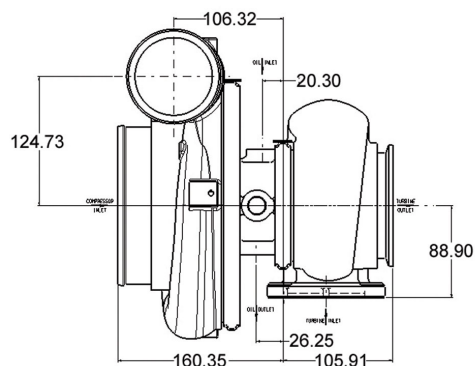


| GTX4202R | | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
|---------------------|-----------------|--------------|---------|------|-------|---------|-----------|---------|
| HP: 525-1120 | Disp: 2.0L-7.0L | 76mm | 102mm | 55 | 0.60 | 82mm | 75mm | 84 |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 800269-5002S | | | | | | |
| Turbine Kits: GTX42 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 757707-0002 | | 1.15 | T4 | V-Band | External | Y |
| | | 757707-0003 | | 1.28 | T4 | V-Band | External | Y |
| | | 757707-0004 | | 1.44 | T4 | V-Band | External | Y |

Garrett GTX4508R

Horsepower: 700 - 1250
Displacement: 2.0L - 8.0L

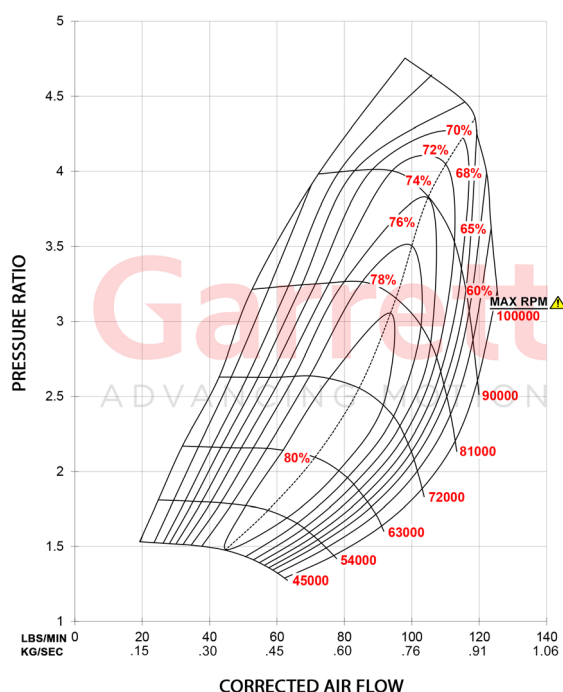
Garrett
ADVANCING MOTION



Measurements in MM



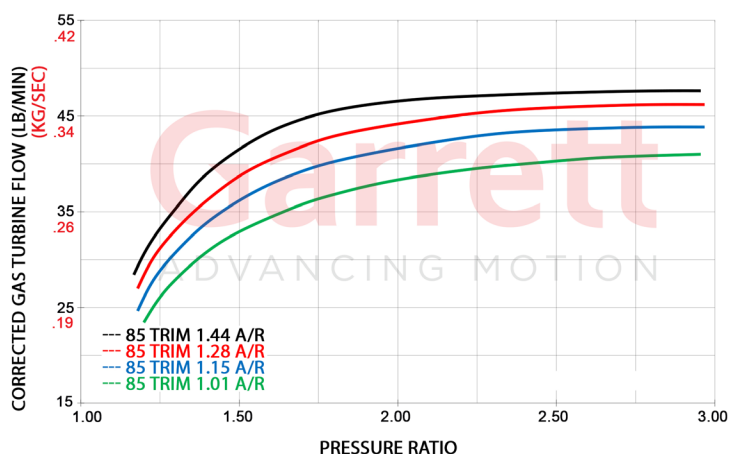
COMPRESSOR MAP



FEATURES:

- ◆ FEATURES ORIGINAL GTX COMP WHEEL AERODYNAMICS
- ◆ SUPERCORE AND TURBINE KIT SOLD SEPARATELY
- ◆ AVAILABLE ONLY WITH DIVIDED TURBINE HOUSINGS
- ◆ V-BAND COMPRESSOR OUTLET CONFIGURATION

EXHAUST FLOW CHART



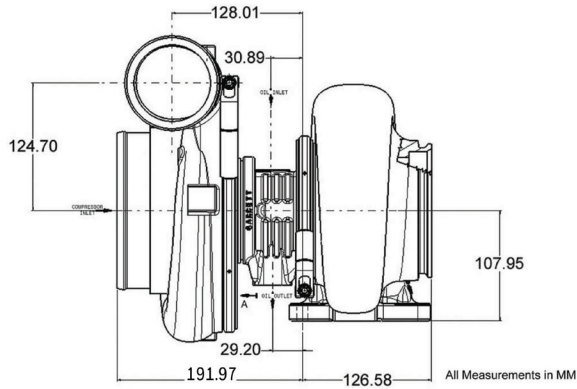
| GTX4508R | | Compressor | | | | Turbine | | |
|---------------------|-----------------|--------------|---------|------|--------|----------|---------|------|
| HP: 700-1250 | Disp: 2.0L-8.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 80mm | 108mm | 55 | 0.69 | 87mm | 80mm | 85 |
| Supercore | | PN | | | | | | |
| Standard Rotation | | 800270-5001S | | | | | | |
| Turbine Kits: GTX45 | | PN | | | | | | |
| Free Float | | 757707-0006 | 1.15 | T4 | V-Band | External | Y | |
| | | 757707-0007 | 1.28 | T4 | V-Band | External | Y | |
| | | 757707-0008 | 1.44 | T4 | V-Band | External | Y | |

Garrett GTX4709R GEN II

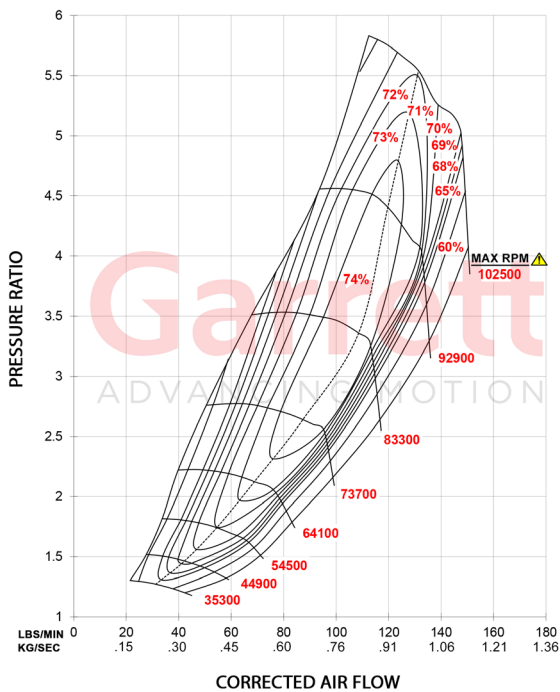
Horsepower: 825 - 1625

Displacement: 2.0L - 10.0L

Garrett
ADVANCING MOTION



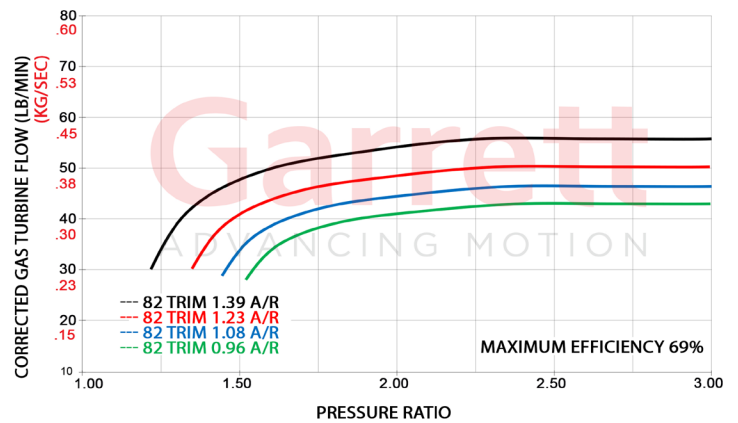
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 COMPRESSOR WHEEL AERODYNAMICS
- ◆ 15% INCREASED COMPRESSOR FLOW
- ◆ 76MM, 80MM, INDUCER CONFIGURATIONS
- ◆ .88 A/R COMPRESSOR HOUSING VOLUTE
- ◆ 39% LOWER INERTIA THAN PREVIOUS GENERATION
- ◆ SUPERCORE AND TURBINE HOUSING SOLD SEPARATELY
- ◆ COMPATIBLE WITH GT AND GTX GEN I TURBINE HOUSINGS

EXHAUST FLOW CHART

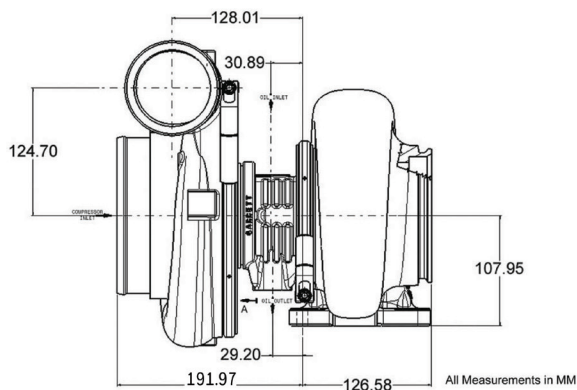


| GTX4709R Gen II | | Compressor | | | | Turbine | | |
|---------------------|------------------|-------------|---------|------|-------|---------|-----------|---------|
| HP: 825-1625 | Disp: 2.0L-10.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| Supercore | PN | | | | | | | |
| | 851285-5011S | 76mm | 109mm | 49 | 0.88 | 93mm | 84mm | 82 |
| | 851285-5012S | 80mm | 109mm | 54 | 0.88 | 93mm | 84mm | 82 |
| Turbine Kits: GTX47 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 761208-0010 | | 1.08 | T6 | V-Band | External | N |
| | | 761208-0011 | | 1.23 | T6 | V-Band | External | N |

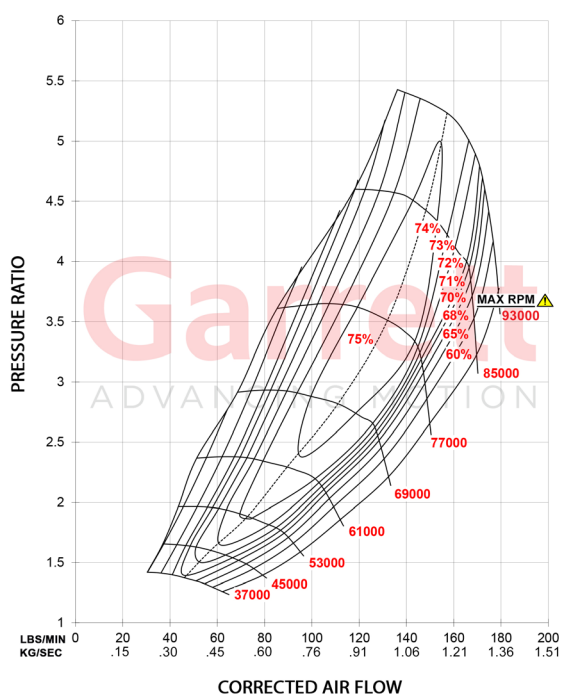
Garrett GTX4720R GEN II

Horsepower: 1025 - 1950
Displacement: 2.5L - 10.0L

Garrett
ADVANCING MOTION



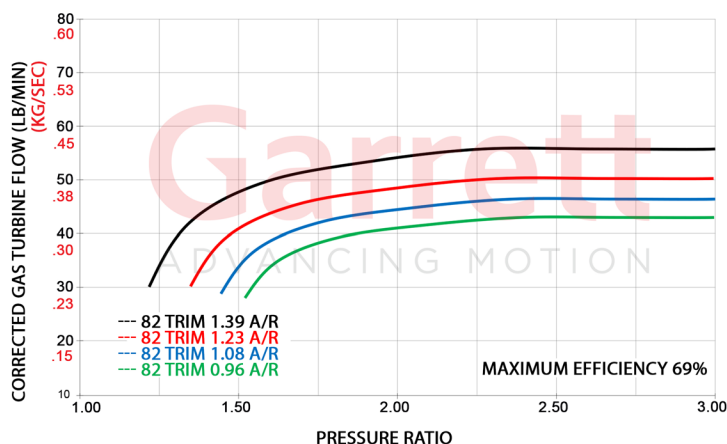
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 COMPRESSOR WHEEL AERODYNAMICS
- ◆ 9% INCREASED COMPRESSOR FLOW
- ◆ 76MM, 80MM, 88MM INDUCER CONFIGURATIONS
- ◆ .88 A/R COMPRESSOR HOUSING VOLUTE
- ◆ 30% LOWER INERTIA THAN PREVIOUS GENERATION
- ◆ SUPERCORE AND TURBINE HOUSING SOLD SEPARATELY
- ◆ COMPATIBLE WITH GT AND GTX GEN I TURBINE HOUSINGS

EXHAUST FLOW CHART



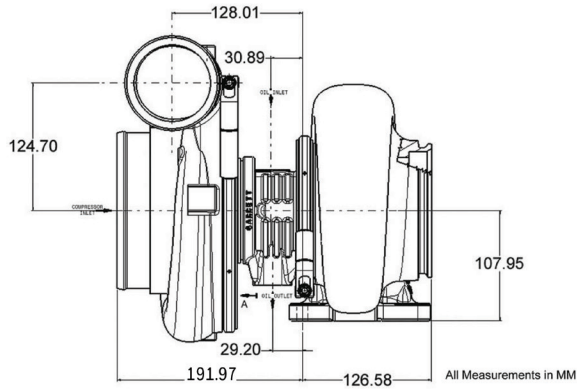
| GTX4720R Gen II | | Compressor | | | | Turbine | | |
|---------------------|------------------|-------------|---------|------|-------|---------|-----------|---------|
| HP: 1025-1950 | Disp: 2.5L-10.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| Supercore | PN | | | | | | | |
| | 851285-5013S | 76mm | 120mm | 41 | 0.88 | 93mm | 84mm | 82 |
| | 851285-5014S | 80mm | 120mm | 45 | 0.88 | 93mm | 84mm | 82 |
| | 851285-5015S | 88mm | 120mm | 54 | 0.88 | 93mm | 84mm | 82 |
| Turbine Kits: GTX47 | | | PN | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 761208-0010 | | 1.08 | T6 | V-Band | External | N |
| | | 761208-0011 | | 1.23 | T6 | V-Band | External | N |

Garrett GTX5009R GEN II

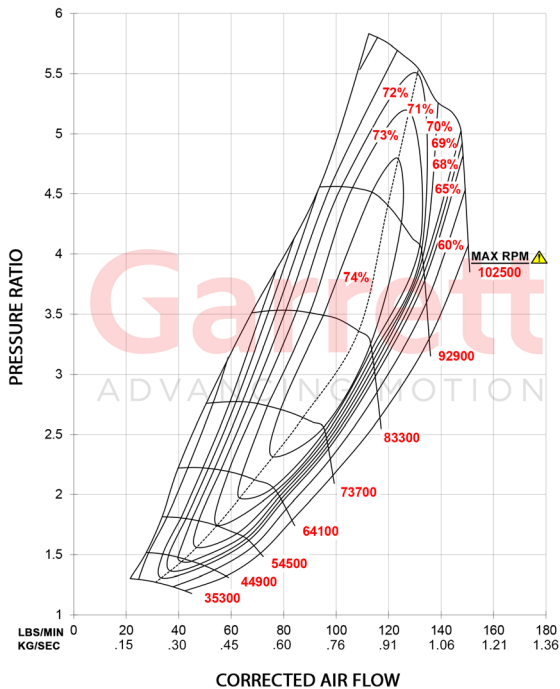
Horsepower: 875 - 1700

Displacement: 2.5L - 10.0L

Garrett
ADVANCING MOTION



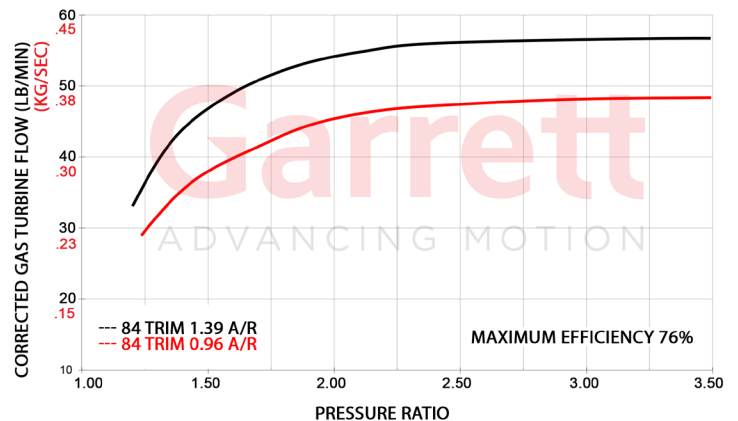
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 COMPRESSOR WHEEL AERODYNAMICS
- ◆ 15% INCREASED COMPRESSOR FLOW
- ◆ 76MM, 80MM, INDUCER CONFIGURATIONS
- ◆ .88 A/R COMPRESSOR HOUSING VOLUTE
- ◆ 39% LOWER INERTIA THAN PREVIOUS GENERATION
- ◆ SUPERCORE AND TURBINE HOUSING SOLD SEPARATELY
- ◆ COMPATIBLE WITH GT AND GTX GEN I TURBINE HOUSINGS

EXHAUST FLOW CHART



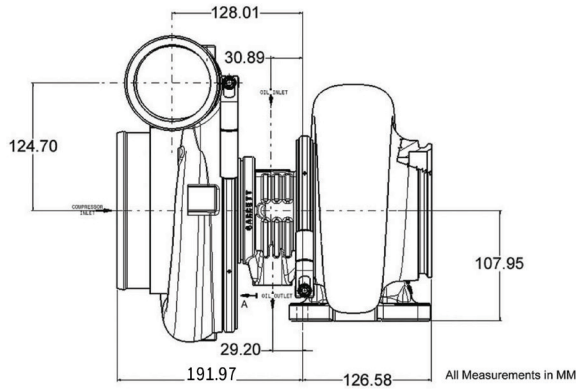
| GTX5009R Gen II | | Compressor | | | | Turbine | | |
|---------------------|------------------|-------------|---------|------|-------|---------|-----------|---------|
| HP: 875-1700 | Disp: 2.5L-10.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| Supercore | PN | | | | | | | |
| | 851285-5016S | 76mm | 109mm | 49 | 0.88 | 99mm | 91mm | 84 |
| | 851285-5017S | 80mm | 109mm | 54 | 0.88 | 99mm | 91mm | 84 |
| Turbine Kits: GTX50 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 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 |

Garrett GTX5020R GEN II

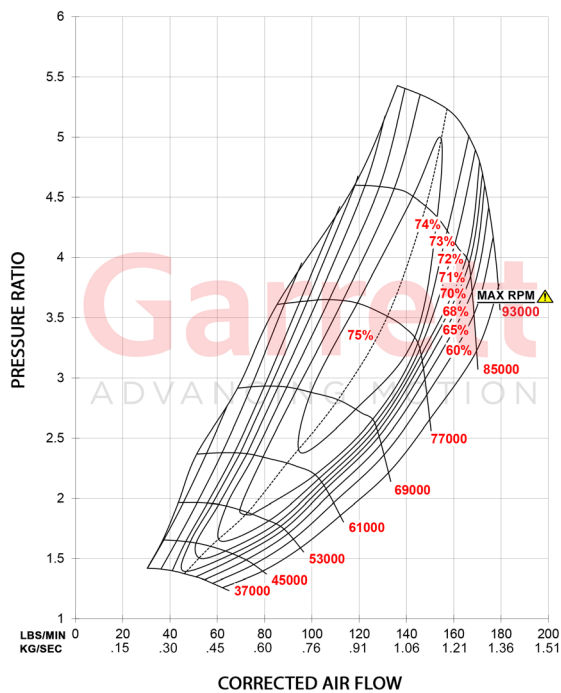
Horsepower: 1075 - 2050

Displacement: 2.8L - 11.0L

Garrett
ADVANCING MOTION



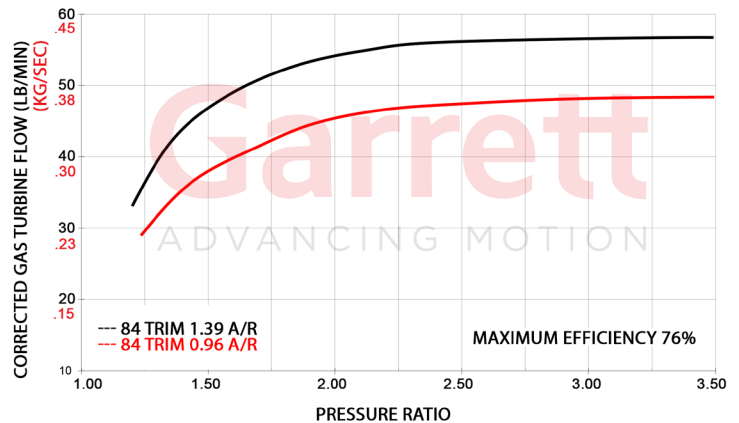
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 COMPRESSOR WHEEL AERODYNAMICS
- ◆ 9% INCREASED COMPRESSOR FLOW
- ◆ 76MM, 80MM, 88MM INDUCER CONFIGURATIONS
- ◆ .88 A/R COMPRESSOR HOUSING VOLUTE
- ◆ 30% LOWER INERTIA THAN PREVIOUS GENERATION
- ◆ SUPERCORE AND TURBINE HOUSING SOLD SEPARATELY
- ◆ COMPATIBLE WITH GT AND GTX GEN I TURBINE HOUSINGS

EXHAUST FLOW CHART



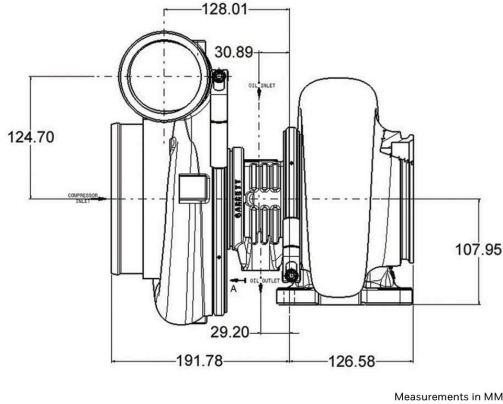
| GTX5020R Gen II | | Compressor | | | | Turbine | | |
|---------------------|------------------|-------------|---------|------|-------|---------|-----------|---------|
| HP: 1075-2050 | Disp: 2.8L-11.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| Supercore PN | | | | | | | | |
| | 851285-5018S | 76mm | 120mm | 41 | 0.88 | 99mm | 91mm | 84 |
| | 851285-5019S | 80mm | 120mm | 45 | 0.88 | 99mm | 91mm | 84 |
| | 851285-5020S | 88mm | 120mm | 54 | 0.88 | 99mm | 91mm | 84 |
| Turbine Kits: GTX50 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 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 |

Garrett GTX5533R GEN II

Horsepower: 1000- 2500

Displacement: 3.0L - 12.0L

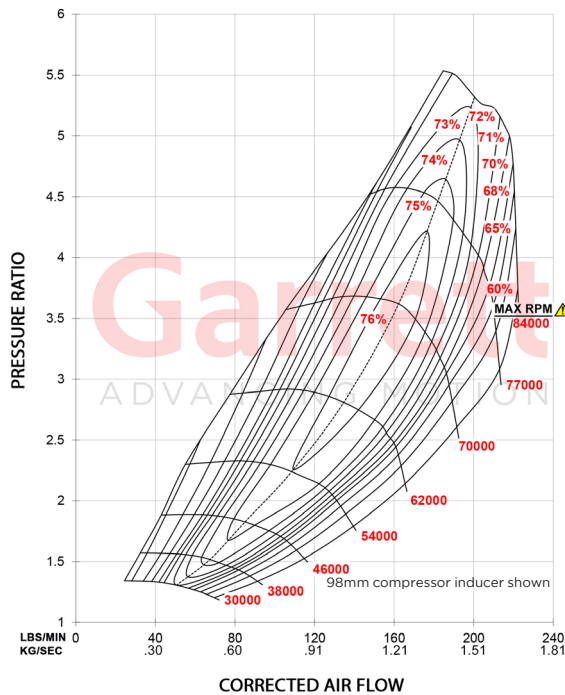
Garrett
ADVANCING MOTION



Measurements in MM



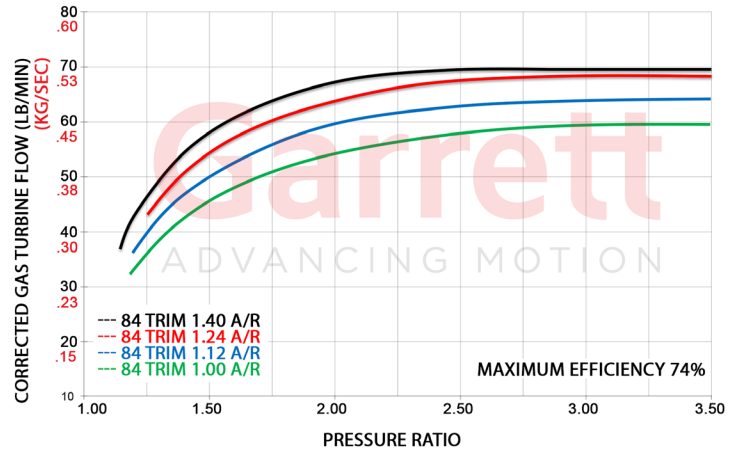
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 AERODYNAMICS FEATURE INCREASED HORSEPOWER RANGE
- ◆ NEW FULLY-MACHINED SPEED SENSOR PORT
- ◆ IMPROVED PORTED SHROUD DESIGN FOR SURGE RESISTANCE
- ◆ LIGHTWEIGHT BILLET BACKPLATE
- ◆ V-BAND COMPRESSOR OUTLET CONFIGURATION
- ◆ T6 AND V-BAND TURBINE HOUSING INLET OPTIONS

EXHAUST FLOW CHART

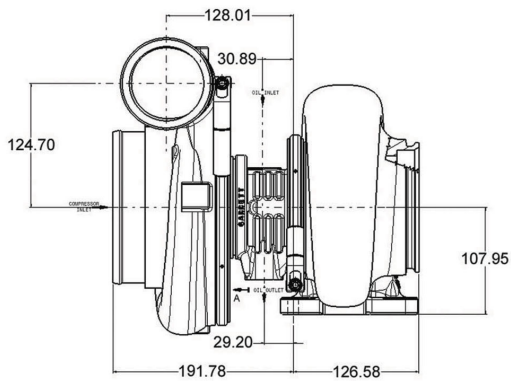


| GTX5533R Gen II | | Compressor | | | | Turbine | | |
|--------------------------------|------------------|--------------|---------|------|--------|---------|-----------|---------|
| HP:1000-2500 | Disp: 3.0L-12.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| Supercore PN | | | | | | | | |
| | 851285-5001S | 85mm | 133mm | 41 | 0.88 | 112mm | 102mm | 84 |
| | 851285-5002S | 88mm | 133mm | 44 | 0.88 | 112mm | 102mm | 84 |
| | 851285-5003S | 91mm | 133mm | 47 | 0.96 | 112mm | 102mm | 84 |
| | 851285-5004S | 94mm | 133mm | 50 | 0.96 | 112mm | 102mm | 84 |
| | 851285-5005S | 98mm | 133mm | 54 | 0.96 | 112mm | 102mm | 84 |
| Turbine Kits: GTX55 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| * Long outlet with cross bolts | | *761208-0062 | | 1.24 | V-Band | V-Band | External | N |
| | | *761208-0063 | | 1.40 | V-Band | V-Band | External | N |
| | | 761208-0064 | | 1.24 | V-Band | V-Band | External | N |
| | | 761208-0065 | | 1.40 | 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 | | 1.40 | T6 | V-Band | External | N |

Garrett GTX5544R GEN II

Horsepower: 1400- 2850
Displacement: 3.0L - 12.0L

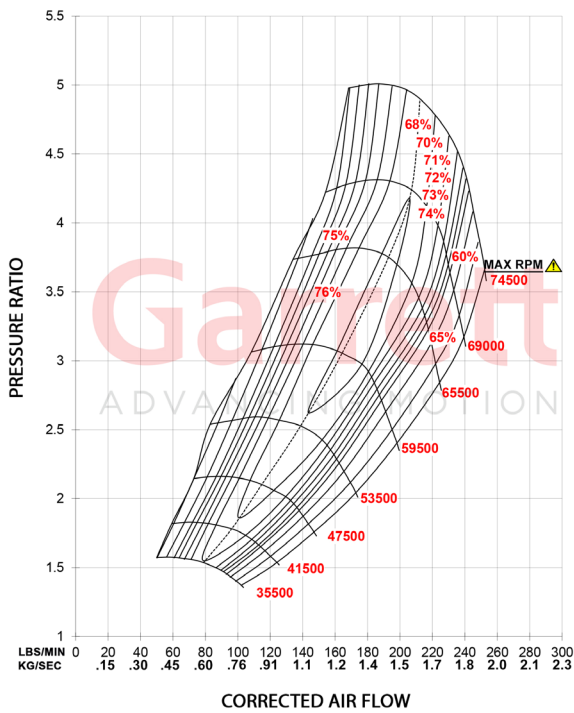
Garrett
ADVANCING MOTION



Measurements in MM



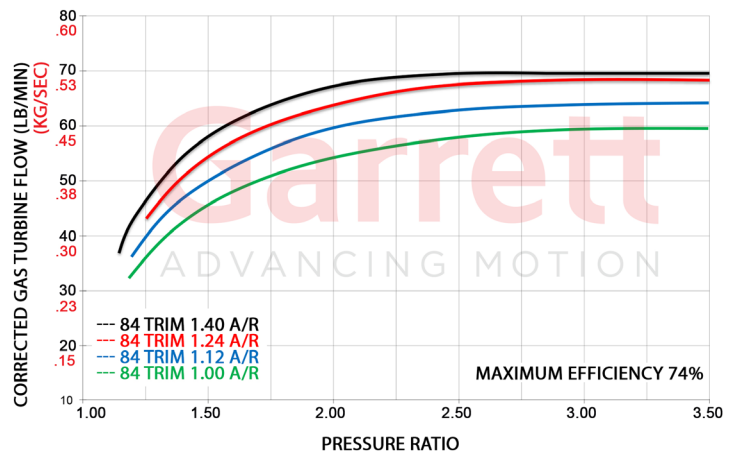
COMPRESSOR MAP



FEATURES:

- ◆ GEN 2 COMPRESSOR WHEEL AERODYNAMICS
- ◆ LIGHTWEIGHT BILLET BACKPLATE
- ◆ (NEW) BACKPLATE TO COMPRESSOR HOUSING O-RING
- ◆ 144MM COMPRESSOR EXDUCER
- ◆ FEATURES THE .96 A/R COMPRESSOR HOUSING
- ◆ SUPERCORE AND TURBINE HOUSING SOLD SEPARATELY
- ◆ COMPATIBLE WITH GT, GTX, AND GTX5533R TURBINE HOUSINGS

EXHAUST FLOW CHART



| GTX5544R Gen II | | Compressor | | | | Turbine | | |
|--------------------------------|------------------|--------------|---------|-------|------|---------|---------|-------------------|
| HP:1400-2850 | Disp: 3.0L-12.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| Supercore | | PN | | | | | | |
| | | 851285-5021S | 102mm | 144mm | 50 | 0.96 | 112mm | 102mm 84 |
| | | 851285-5022S | 106mm | 144mm | 54 | 0.96 | 112mm | 102mm 84 |
| Turbine Kits: GTX55 | | PN | | | A/R | Inlet | Outlet | Wastegate Divided |
| * Long outlet with cross bolts | | *761208-0062 | | | 1.24 | V-Band | V-Band | External N |
| | | *761208-0063 | | | 1.40 | V-Band | V-Band | External N |
| | | 761208-0064 | | | 1.24 | V-Band | V-Band | External N |
| | | 761208-0065 | | | 1.40 | 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 | | | 1.40 | T6 | V-Band | External N |



GTX5533R GEN II

Horsepower: 1000- 2500
Displacement: 3.0L - 12.0L

Comp: 85mm, 88mm, 91mm, 94mm, 98mm



GTX5544R GEN II

Horsepower: 1400- 2850
Displacement: 3.0L - 12.0L

Comp: 102mm, 106mm

FEATURES:

- ◆ GEN II AERODYNAMICS FEATURE INCREASED HORSEPOWER RANGE
- ◆ NEW FULLY MACHINED SPEED SENSOR PORT
- ◆ IMPROVED PORTED SHROUD DESIGN FOR SURGE RESISTANCE
- ◆ LIGHTWEIGHT BILLET BACKPLATE
- ◆ V-BAND COMPRESSOR OUTLET CONFIGURATION
- ◆ AVAILABLE IN 85MM, 88MM, 91MM, 94MM, 98MM, 102MM, 106MM

GTX55 STAINLESS STEEL TURBINE HOUSING CONFIGURATIONS



FEATURES:

- ◆ 1.24 A/R AND 1.40 A/R OPTIONS
- ◆ 3/8" GRADE 5 CROSS BOLTS ON LONG OUTLET HOUSINGS
- ◆ THREADED BOSSES FOR ATTACHMENT POINTS
- ◆ 4.25" V-BAND INLET | 5" V-BAND OUTLET
- ◆ COMPATIBLE WITH GTX5533R GEN I & GEN II | GTX5544R
- ◆ LONG AND SHORT OUTLET CONFIGURATIONS

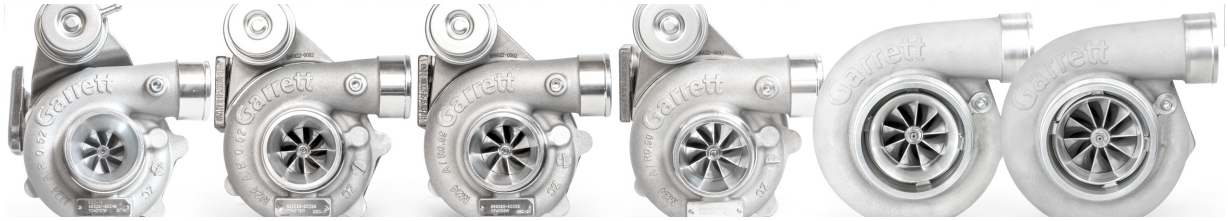
| GTX55 Turbine Kit PN | Desc | A/R | Inlet | Outlet |
|----------------------|--------------|------|--------|--------|
| 761208-0062 | Long Outlet | 1.24 | V-Band | V-Band |
| 761208-0064 | Short Outlet | 1.24 | V-Band | V-Band |
| 761208-0063 | Long Outlet | 1.40 | V-Band | V-Band |
| 761208-0065 | Short Outlet | 1.40 | V-Band | V-Band |

GARRETT BOOST | CLUB LINE

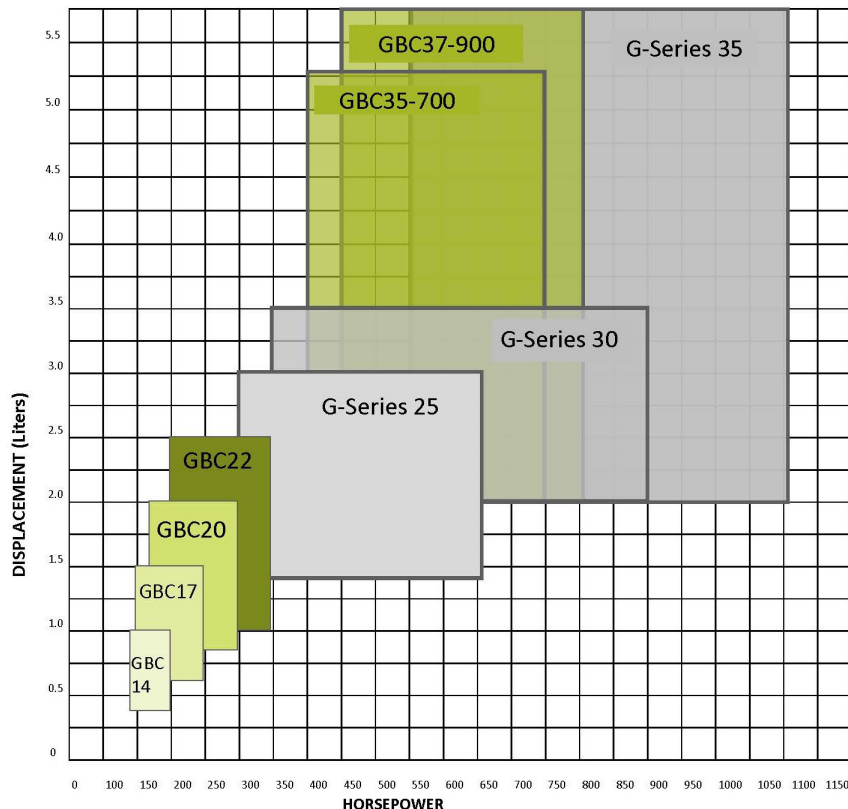
Garrett Boost | Club Line turbochargers are high performance journal bearing products at a cost effective price range. GBC combines modern, high flowing aerodynamics with a robust journal bearing rotating group to make a powerful and affordable turbocharger.



THE REPLACEMENT FOR **SMALL** DISPLACEMENT



| Product Features | GBC14-200 | GBC17-250 | GBC20-300 | GBC22-350 | GBC35-700 | GBC37-900 |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Displacement Range | 0.4L-1.0L | 0.6L-1.5L | 0.8L-2.0L | 1.0L-2.5L | 2.0L-5.0L | 2.0L-5.5L |
| Horsepower Range | 140-200 | 150-250 | 170-300 | 200-350 | 400-700 | 450-900 |
| Standard Rotation | • | • | • | • | • | • |
| Internally Wastegated | • | • | • | • | | |
| Aluminum Backplate | | | | | • | • |
| Oil Cooled | • | • | • | • | • | • |
| Journal Bearing | • | • | • | • | • | • |
| Machined Pressure Port | • | • | • | • | • | • |
| Ported Shroud | | | | | • | • |
| T25 Inlet Turbine Housing | | • | • | • | | |
| T3 Inlet Turbine Housing | | | | | • | • |
| T4 Inlet Turbine Housing | | | | | • | • |
| T4 Divided Inlet Turbine Housing | | | | | • | • |
| 3-Bolt Inlet Turbine Housing | • | | | | | |
| Inconel Turbine Wheel | • | • | • | • | • | • |
| Outline Interchangeable | | • | • | • | | |
| Outline Interchangeable | | | | | • | • |



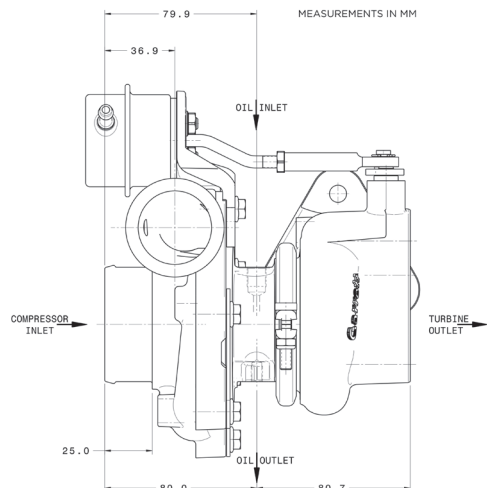
GARRETT BOOST | CLUB LINE FEATURES

- 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

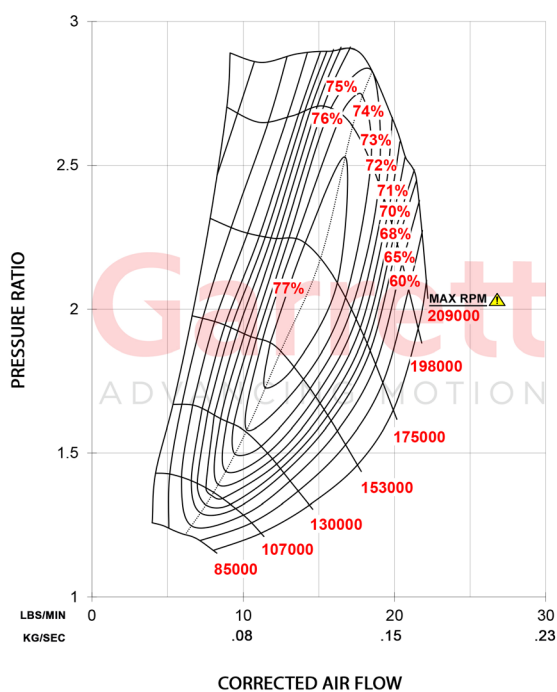
Garrett GBC14-200

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

Garrett
ADVANCING MOTION



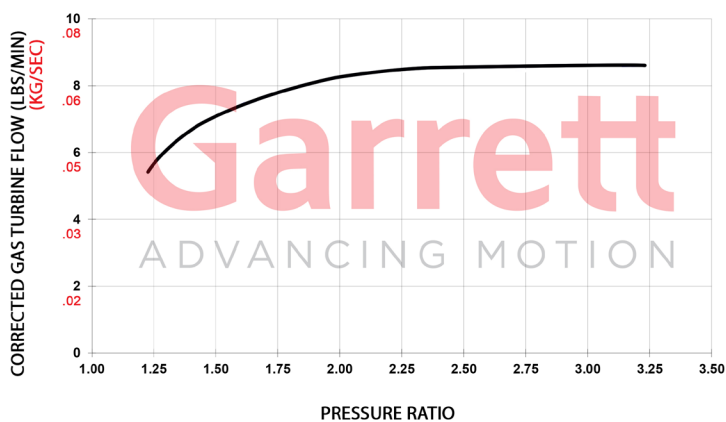
COMPRESSOR MAP



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



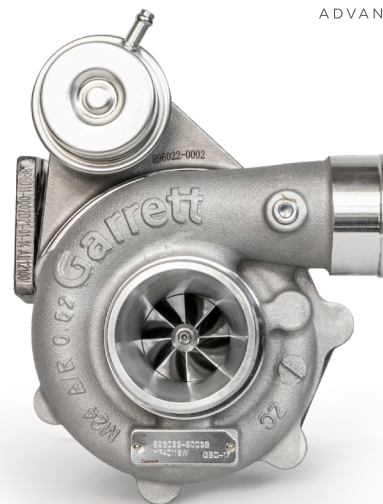
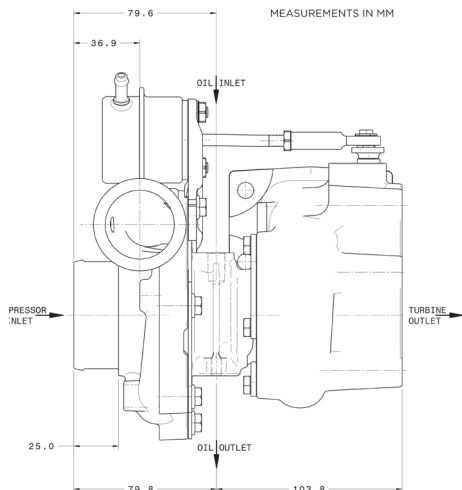
| GBC14-200 | | Compressor | | | Turbine | | | |
|------------------------|-----------------|------------|---------|------|---------|---------|------|------|
| HP: 140-200 | Disp: 0.4L-1.0L | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo PN: 896051-5004S | | 34mm | 46mm | 0.52 | 39mm | 36mm | 84 | 0.45 |

Garrett GBC17-250

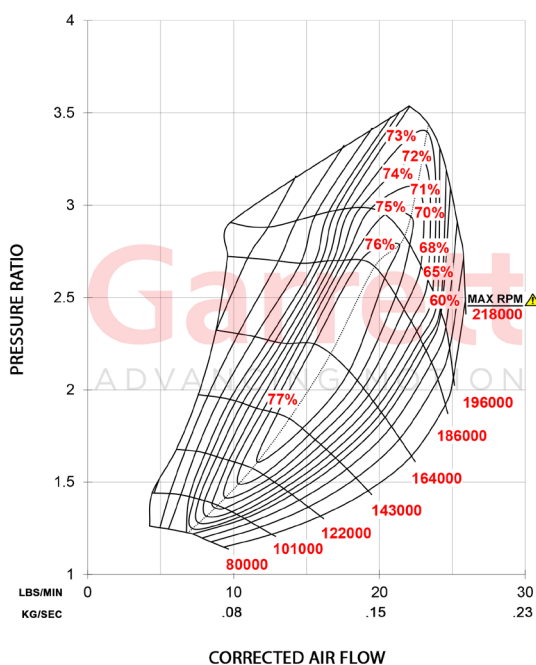
Horsepower: 150 - 250

Displacement: 0.6L - 1.5L

Garrett
ADVANCING MOTION



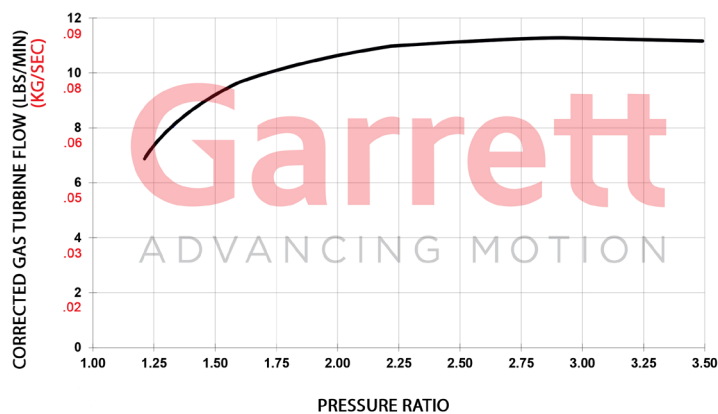
COMPRESSOR MAP



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

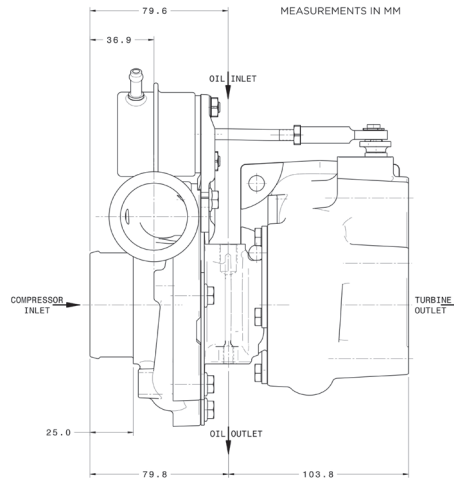


| GBC17-250 | | Compressor | | | Turbine | | | |
|------------------------|-----------------|------------|---------|------|---------|---------|------|-----|
| HP: 150-250 | Disp: 0.6L-1.5L | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo PN: 896052-5003S | | 36mm | 49mm | 0.52 | 44mm | 40mm | 80 | 0.5 |

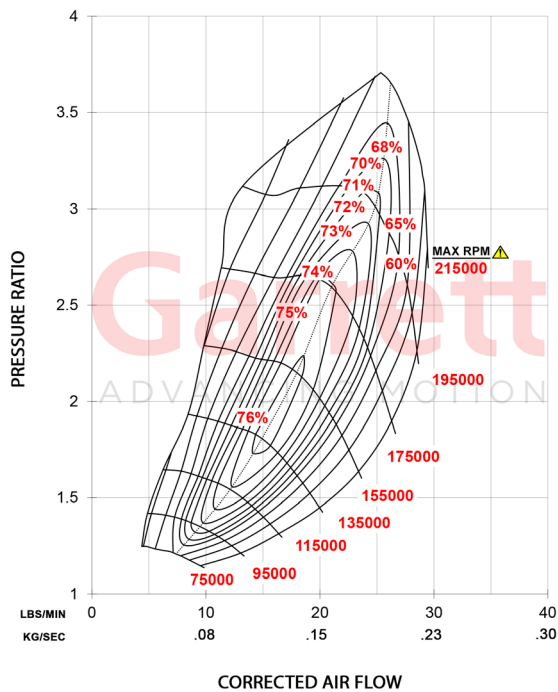
Garrett GBC20-300

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

Garrett
ADVANCING MOTION



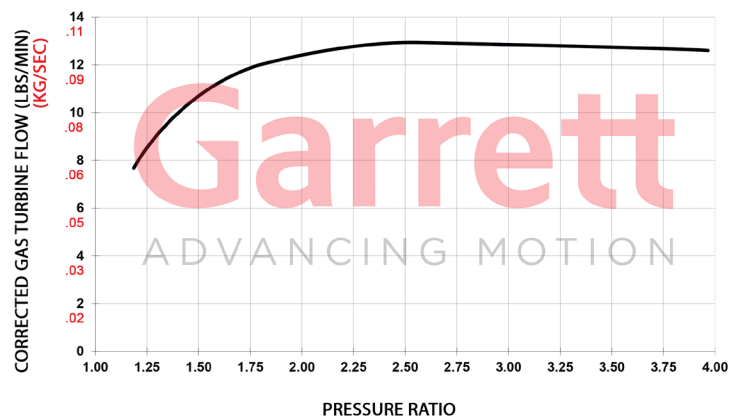
COMPRESSOR MAP



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

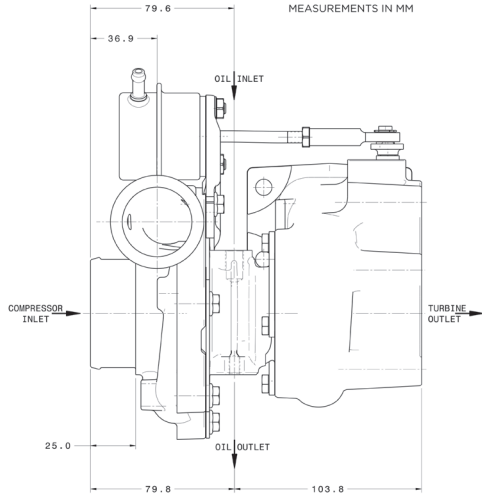


| GBC20-300 | | Compressor | | | Turbine | | | |
|------------------------|-----------------|------------|---------|------|---------|---------|------|------|
| HP: 170-300 | Disp: 0.8L-2.0L | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo PN: 896053-5003S | | 39mm | 52mm | 0.59 | 47mm | 42mm | 84 | 0.55 |

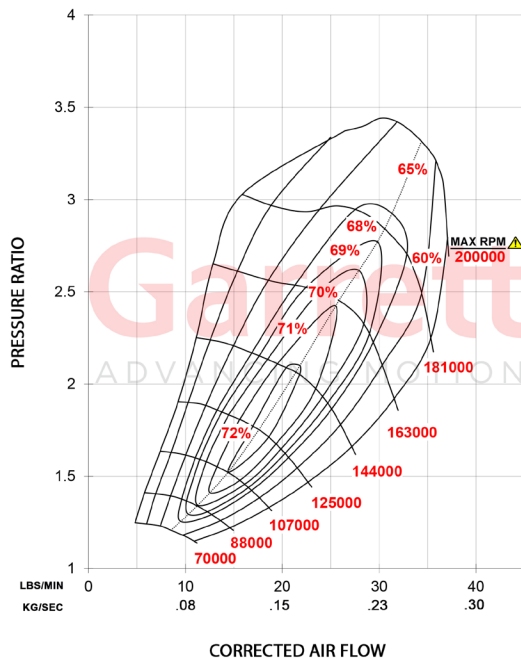
Garrett GBC22-350

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

Garrett
ADVANCING MOTION



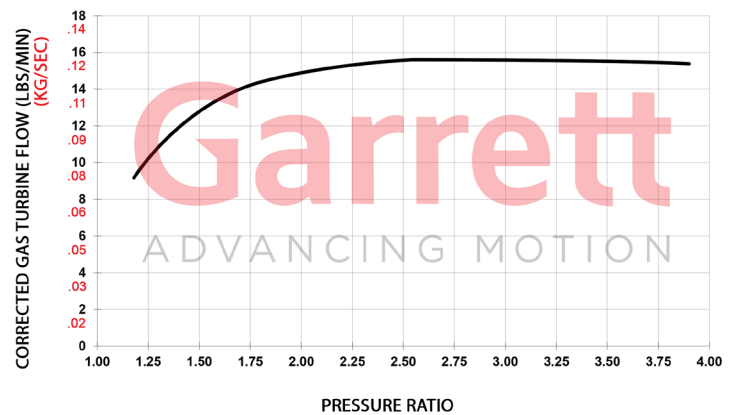
COMPRESSOR MAP



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

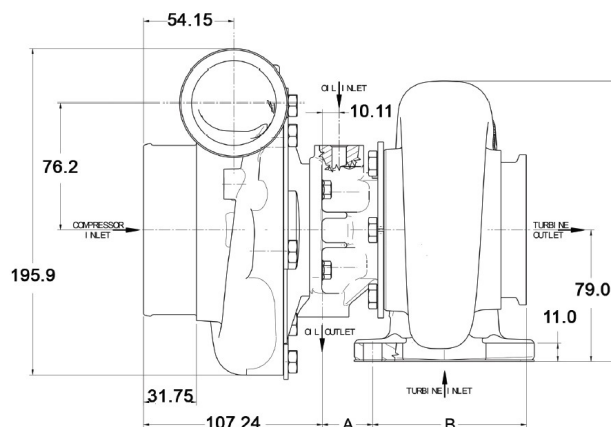


| GBC22-350 | | Compressor | | | Turbine | | | |
|------------------------|-----------------|------------|---------|------|---------|---------|------|------|
| HP: 200-350 | Disp: 1.0L-2.5L | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo PN: 896055-5003S | | 44mm | 56mm | 0.59 | 50mm | 46mm | 84 | 0.64 |

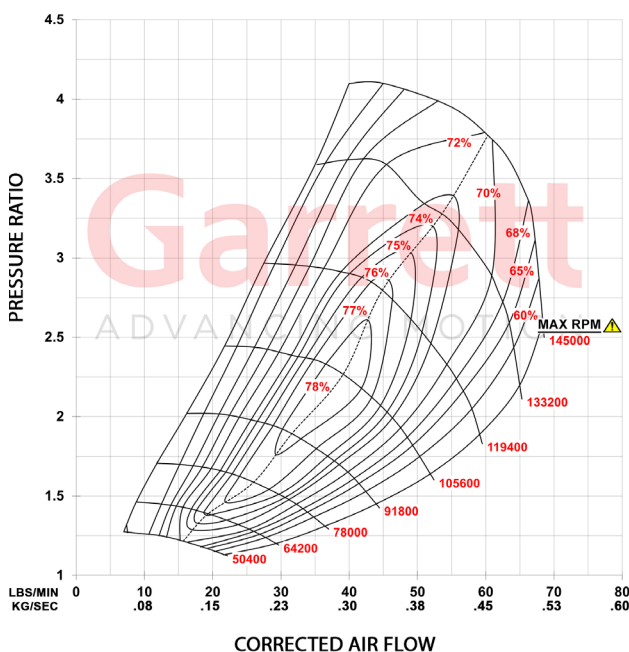
Garrett GBC35-700

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

Garrett



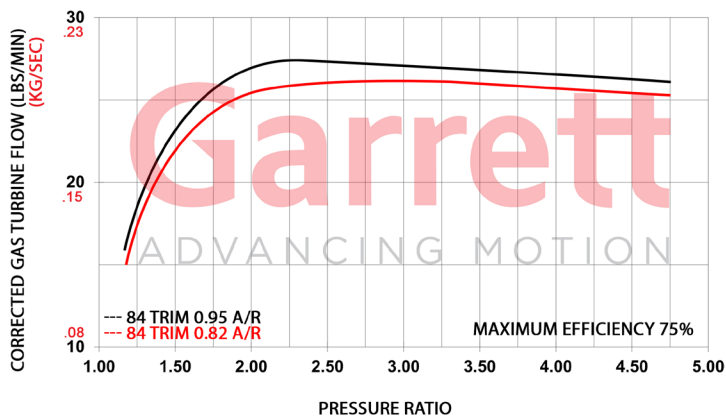
COMPRESSOR MAP



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

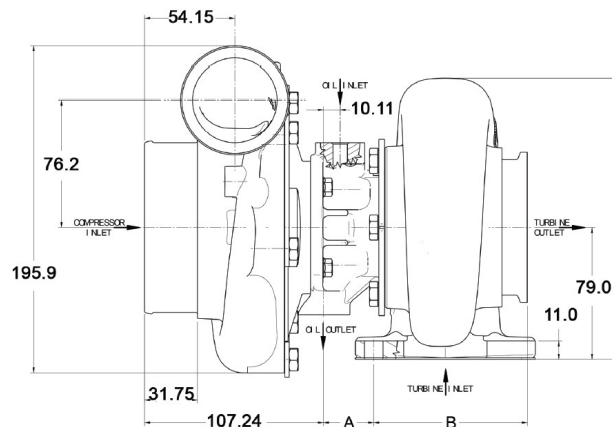


| GBC35-700 | | Compressor | | | | Turbine | | |
|---------------------|-----------------|--------------|---------|------|-------|---------|-----------|---------|
| HP: 400-700 | Disp: 2.0L-5.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 58mm | 76mm | 58 | 0.72 | 68mm | 62mm | 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 |

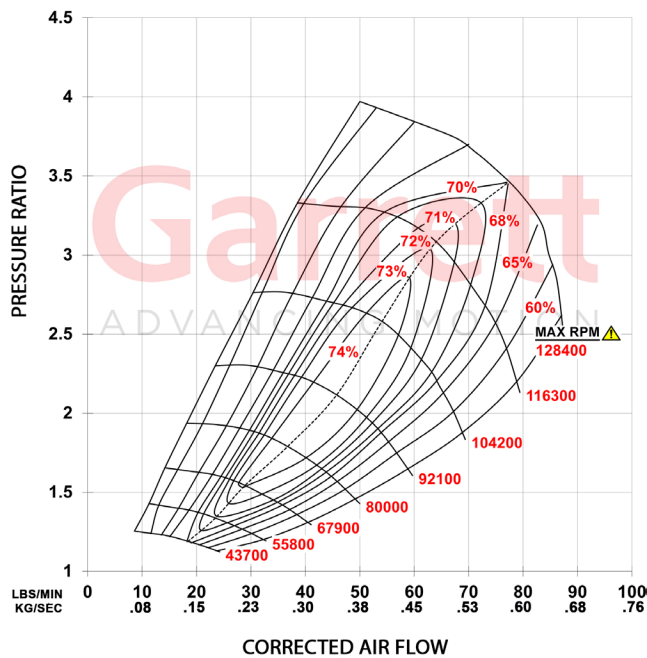
Garrett GBC37-900

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

Garrett



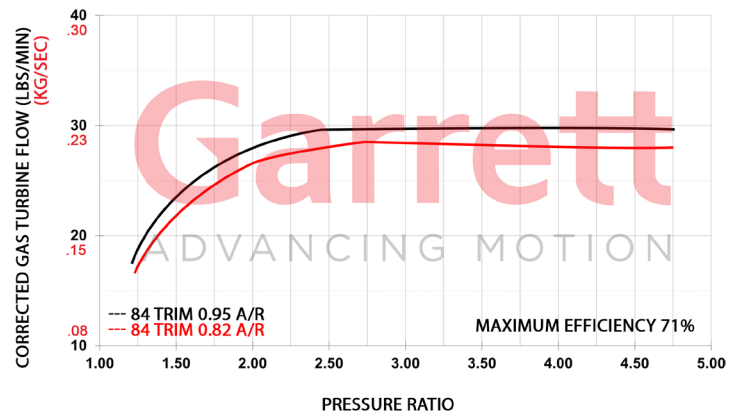
COMPRESSOR MAP



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 GBC37-900
- ◆ MACHINED BOOST SIGNAL PORT WITH INSTALLED PLUG
- ◆ MODERN TURBINE WHEEL AERODYNAMICS
- ◆ OIL-COOLED CENTER HOUSING

EXHAUST FLOW CHART




| 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 | |

GTW SERIES

GTW Series turbochargers were engineered to provide budget-minded enthusiasts with a high-performing mid frame product that is offered in ball bearing and journal bearing options. GTW combines popular compressor inducer sizes like 58mm | 62mm | 64mm | 67mm with slightly larger (than GTX) turbine wheel sizes.

Fully-machined aluminum compressor wheels with GTX Gen II aero provide optimal horsepower range and boost response for 2.0L - 6.0L engine displacements. A lightweight aluminum backplate comes standard on all GTW turbochargers and reduces overall weight.

The water cooled CHRA keeps housing temperatures to a minimum. The GTW3476 and GTW3884 turbine wheels are constructed from Inconel, a Super Alloy that maintains strength during 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. The GTW is a cost effective option for enthusiasts looking to turbocharge their vehicles.



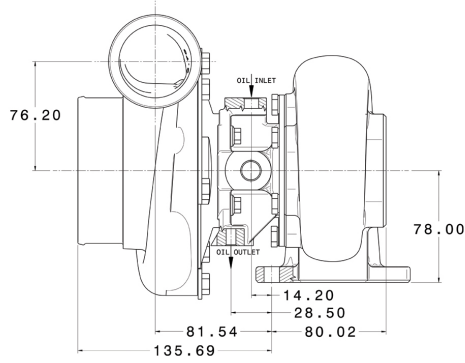
Scott Birdsall | Garrett GTW3884R | Pikes Peak International Hill Climb



Garrett GTW3476R

Horsepower: 450 - 700
Displacement: 2.0L - 4.5L

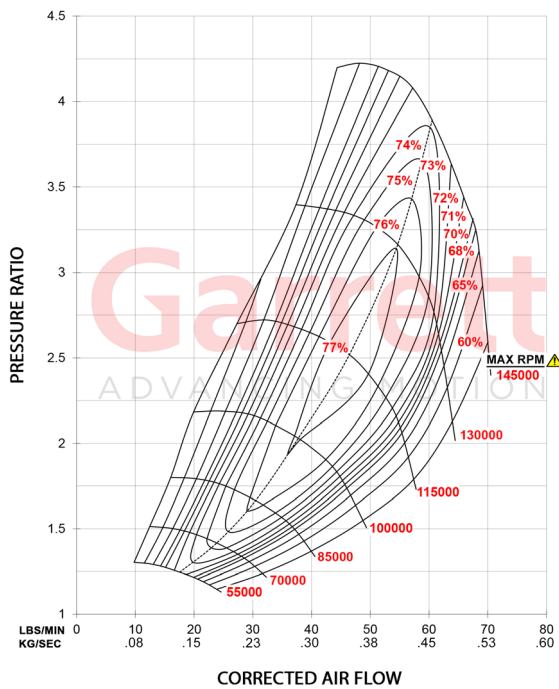
Garrett
ADVANCING MOTION



Measurements in MM



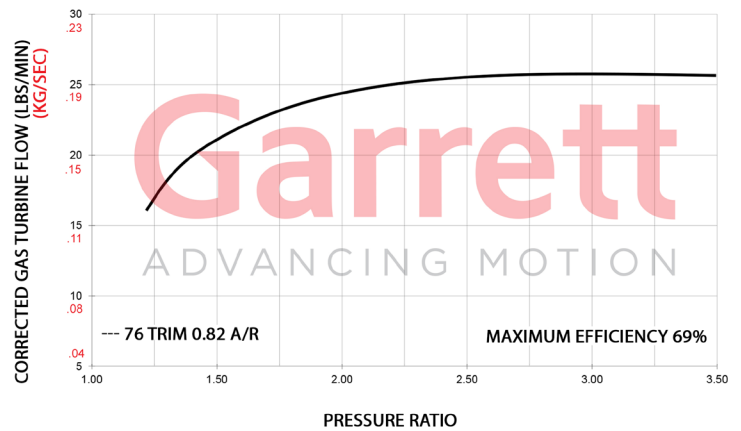
COMPRESSOR MAP



FEATURES:

- ◆ PORTED SHROUD DESIGN FOR SURGE RESISTANCE
- ◆ AVAILABLE IN BOTH JOURNAL BEARING AND BALL BEARING OPTIONS
- ◆ FORGED FULLY-MACHINED BILLET COMPRESSOR WHEEL
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE
- ◆ INCONEL SUPER-ALLOY TURBINE WHEEL

EXHAUST FLOW CHART



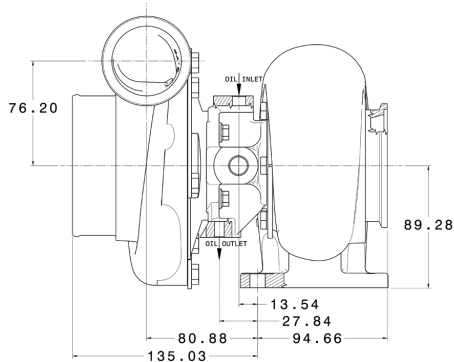
| GTW3476R | | Compressor | | | | Turbine | | |
|---------------------|-----------------|--------------|---------|------|------|---------|---------|-----------|
| HP: 450-700 | Disp: 2.0L-4.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 58mm | 76mm | 58 | 0.70 | 65mm | 57mm | 76 |
| Supercore | | PN | | | | | | |
| Ball Bearing | | 841691-5001S | | | | | | |
| Journal Bearing | | 841297-5001S | | | | | | |
| Turbine Kits: GTW34 | | PN | | | A/R | Inlet | Outlet | Wastegate |
| Free Float | | 844669-0002 | | | 0.63 | T3 | 4-Bolt | External |
| | | 844669-0003 | | | 0.82 | T3 | 4-Bolt | External |
| | | | | | | | | Divided |
| | | | | | | | | N |
| | | | | | | | | N |

Garrett GTW3684R

Horsepower: 425 - 750

Displacement: 2.0L - 5.3L

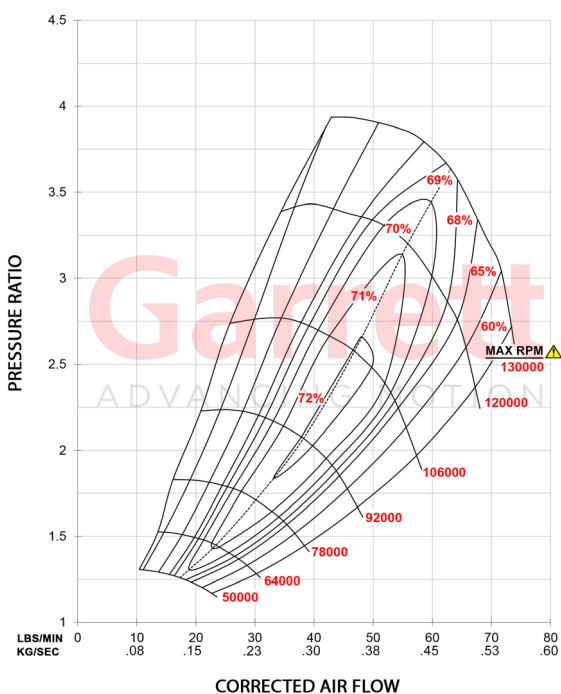
Garrett
ADVANCING MOTION



Measurements in MM



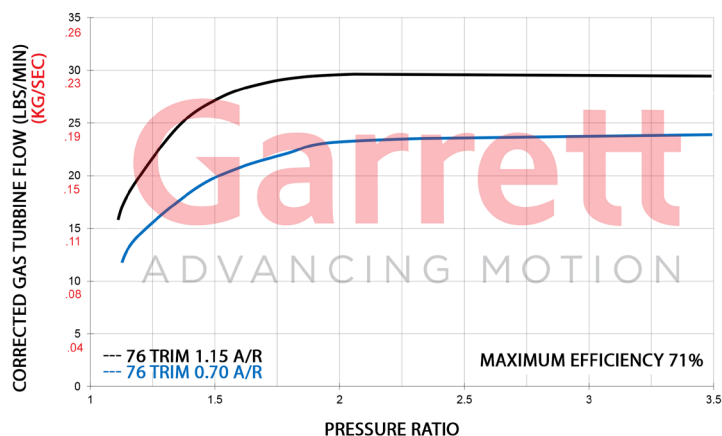
COMPRESSOR MAP



FEATURES:

- ◆ PORTED SHROUD DESIGN FOR SURGE RESISTANCE
- ◆ AVAILABLE IN BOTH JOURNAL BEARING AND BALL BEARING OPTIONS
- ◆ FORGED FULLY-MACHINED BILLET COMPRESSOR WHEEL
- ◆ TURBINE HOUSINGS AVAILABLE IN DIVIDED CONFIGURATION
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE

EXHAUST FLOW CHART

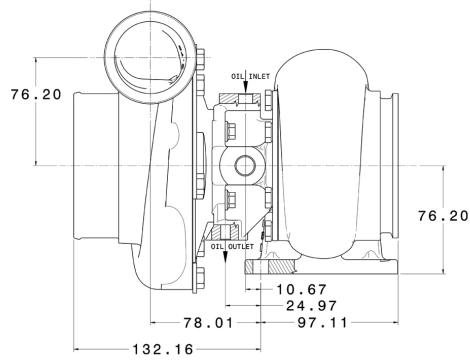


| GTW3684R | | Compressor | | | | Turbine | | |
|---------------------|-----------------|--------------|---------|------|------|---------|---------|-----------|
| HP: 425-750 | Disp: 2.0L-5.3L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 62mm | 84mm | 54 | 0.70 | 71mm | 62mm | 76 |
| Supercore | | PN | | | | | | |
| Ball Bearing | | 841691-5002S | | | | | | |
| Journal Bearing | | 841297-5002S | | | | | | |
| Turbine Kits: GTW36 | | PN | | | | | | |
| Free Float | | 844669-0005 | | | A/R | Inlet | Outlet | Wastegate |
| | | 844669-0007 | | | 0.70 | T4 | V-Band | External |
| | | | | | 1.15 | T4 | V-Band | External |
| | | | | | | | | Divided |

Garrett GTW3884R

Horsepower: 450 - 950
Displacement: 2.0L - 6.0L

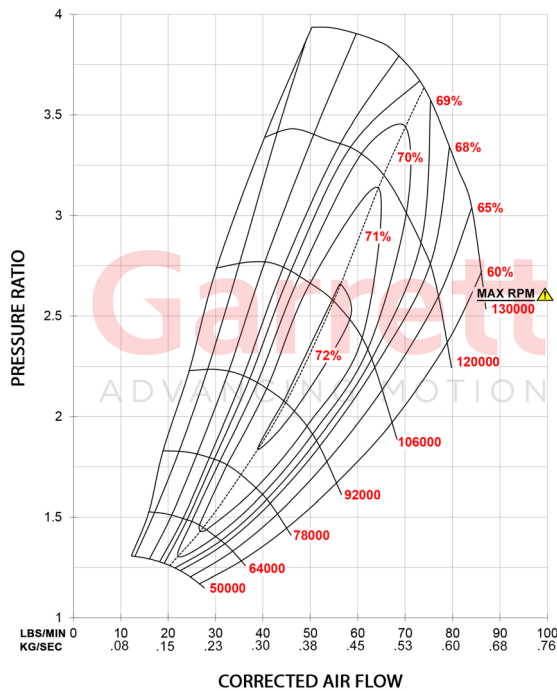
Garrett
ADVANCING MOTION



Measurements in MM



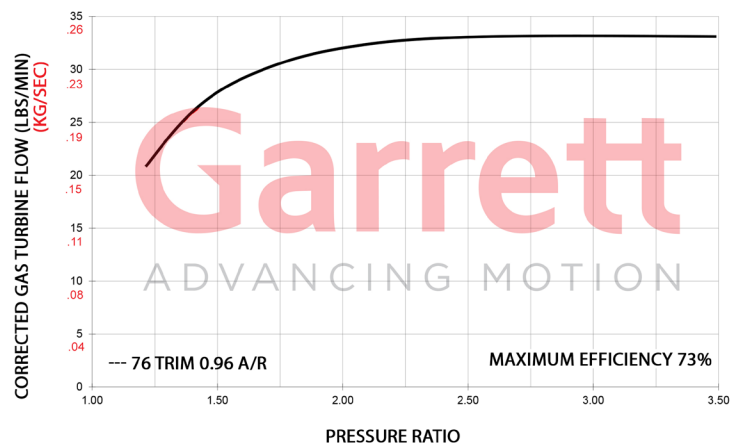
COMPRESSOR MAP



FEATURES:

- ◆ PORTED SHROUD DESIGN FOR SURGE RESISTANCE
- ◆ AVAILABLE IN JOURNAL BEARING OR BALL BEARING OPTIONS
- ◆ FORGED FULLY-MACHINED BILLET COMPRESSOR WHEEL
- ◆ INCONEL SUPER-ALLOY TURBINE WHEEL
- ◆ LIGHTWEIGHT ALUMINUM BACKPLATE

EXHAUST FLOW CHART



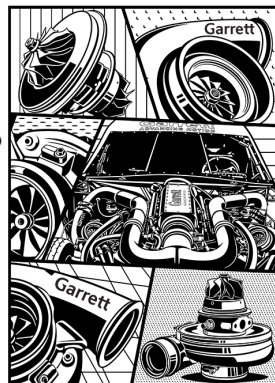
| GTW3884R | | Compressor | | | | Turbine | | |
|---------------------|-----------------|-------------|---------|------|-------|---------|-----------|---------|
| HP: 450-950 | Disp: 2.0L-6.0L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| Supercore | PN | | | | | | | |
| Ball Bearing | 841691-5003S | 62mm | 84mm | 54 | 0.70 | 74mm | 65mm | 76 |
| Ball Bearing | 841691-5004S | 64mm | 84mm | 58 | 0.70 | 74mm | 65mm | 76 |
| Ball Bearing | 841691-5005S | 67mm | 84mm | 64 | 0.70 | 74mm | 65mm | 76 |
| Journal Bearing | 841297-5003S | 62mm | 84mm | 54 | 0.70 | 74mm | 65mm | 76 |
| Journal Bearing | 841297-5004S | 64mm | 84mm | 58 | 0.70 | 74mm | 65mm | 76 |
| Journal Bearing | 841297-5005S | 67mm | 84mm | 64 | 0.70 | 74mm | 65mm | 76 |
| Turbine Kits: GTW38 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 844669-0009 | | 0.96 | T4 | V-Band | External | N |



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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.

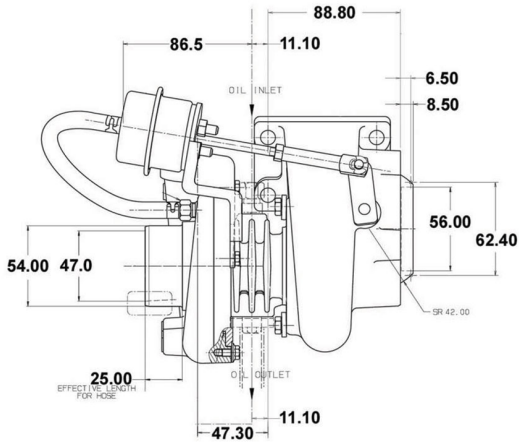
Turbine kits are offered in open volute and twin scroll, and a variety of A/R and flange configurations. For any performance need, GT Series turbochargers have you covered.



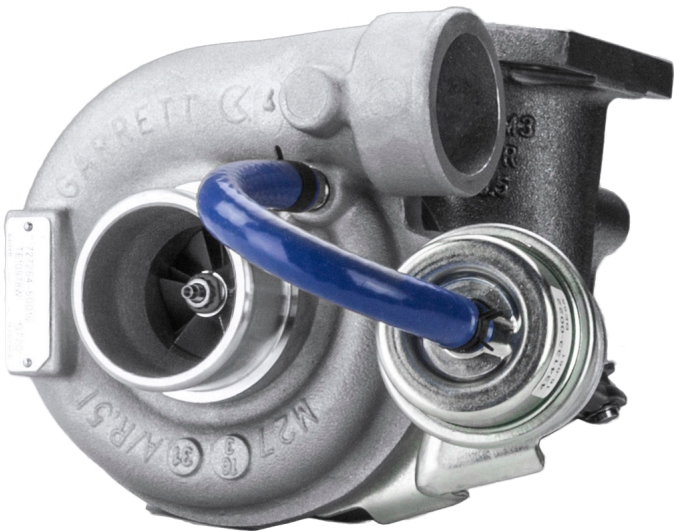


Garrett GT2052

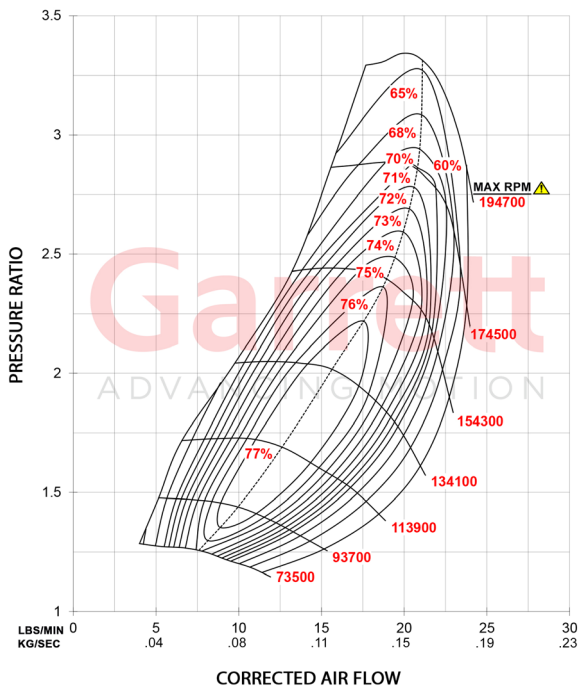
Horsepower: 140 - 230
Displacement: 1.4L - 2.0L



Measurements in MM



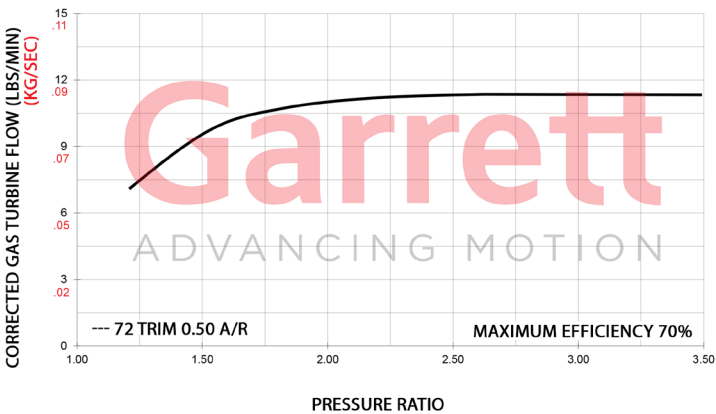
COMPRESSOR MAP



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



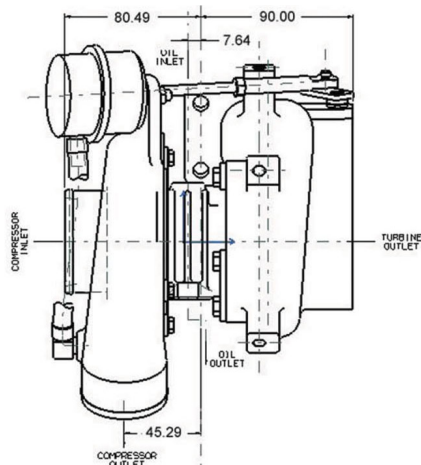
| GT2052 | | | Compressor | | | Turbine | | | |
|------------------------|-----------------|--|------------|---------|------|---------|---------|------|------|
| HP: 140-230 | Disp: 1.4L-2.0L | | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo PN: 727264-5001W | | | 38mm | 52mm | 0.51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

Garrett GT2252

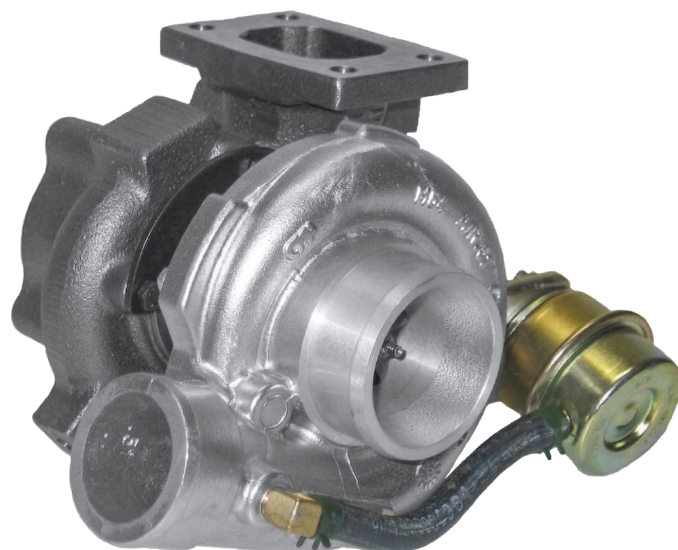
Horsepower: 150 - 260

Displacement: 1.7L - 2.5L

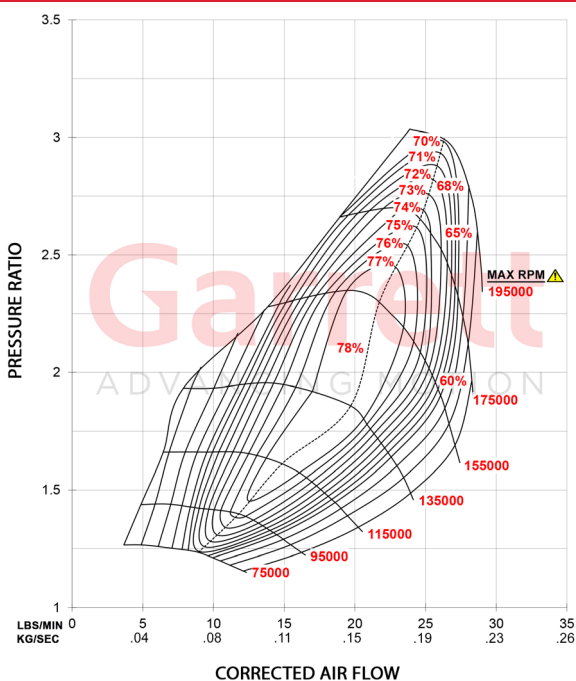
Garrett
ADVANCING MOTION



Measurements in MM



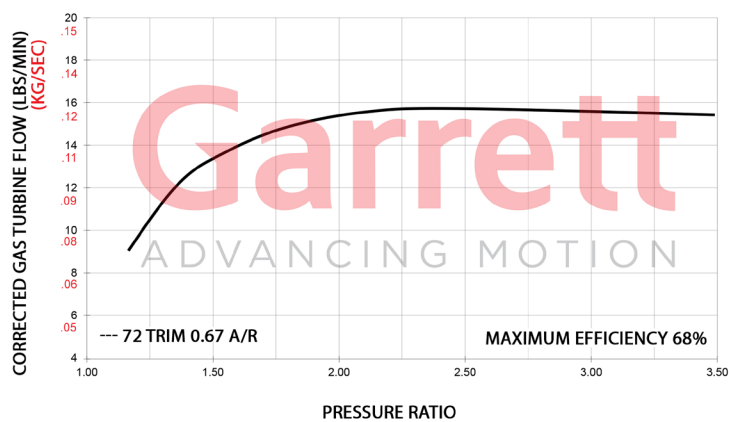
COMPRESSOR MAP



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



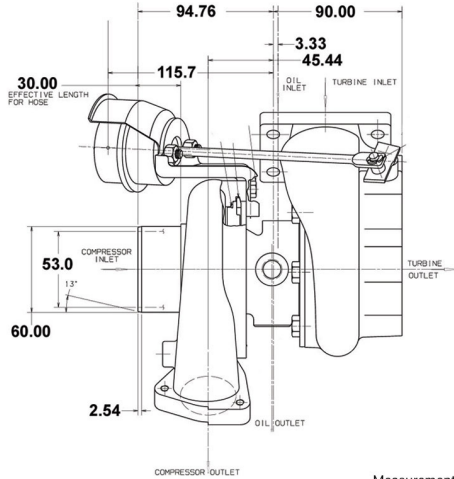
| GT2252 | | | Compressor | | | Turbine | | | |
|------------------------|-----------------|--|------------|---------|------|---------|---------|------|------|
| HP: 150-260 | Disp: 1.7L-2.5L | | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo PN: 452187-5006S | | | 40mm | 52mm | 0.51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

Garrett GT2554R

Horsepower: 170 - 270

Displacement: 1.4L - 2.2L

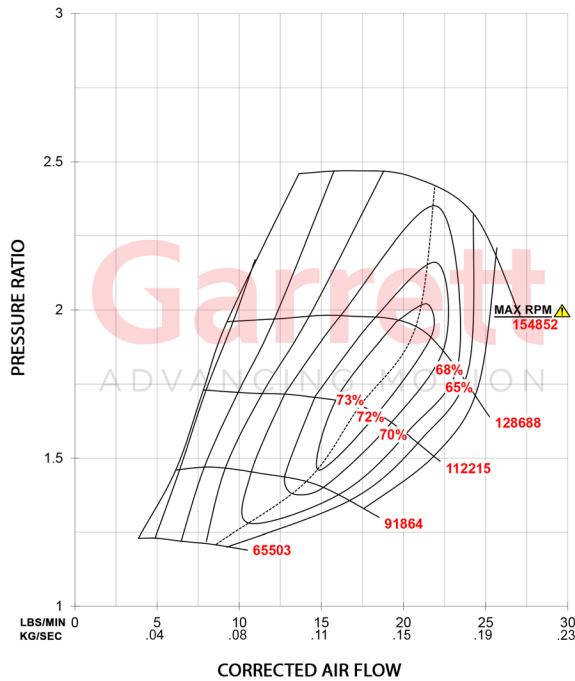
Garrett
ADVANCING MOTION



Measurements in MM



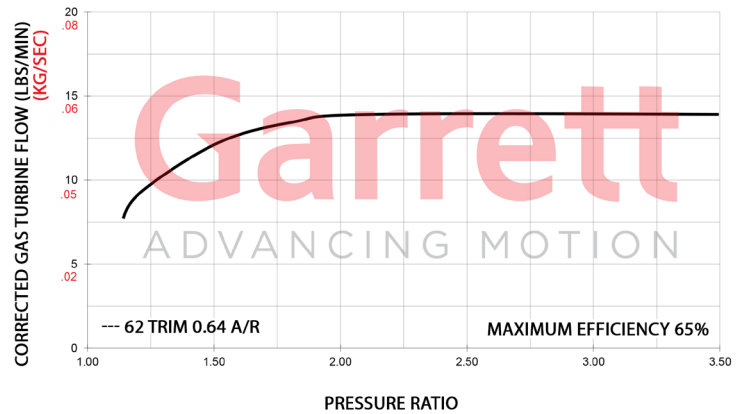
COMPRESSOR MAP



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



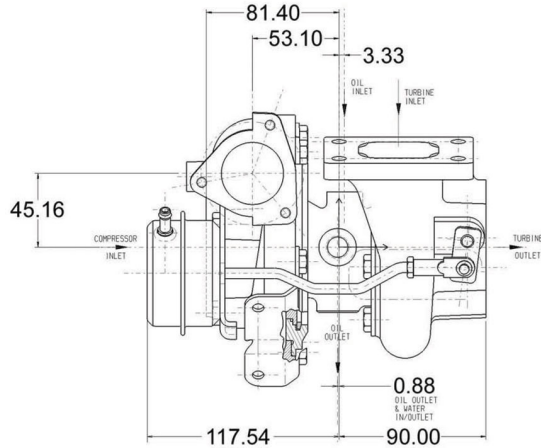
| GT2554R | | Compressor | | | Turbine | | | |
|------------------------|-----------------|-------------------|----------------|------------|----------------|----------------|-------------|------------|
| HP: 170-270 | Disp: 1.4L-2.2L | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo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

Garrett GT2560R

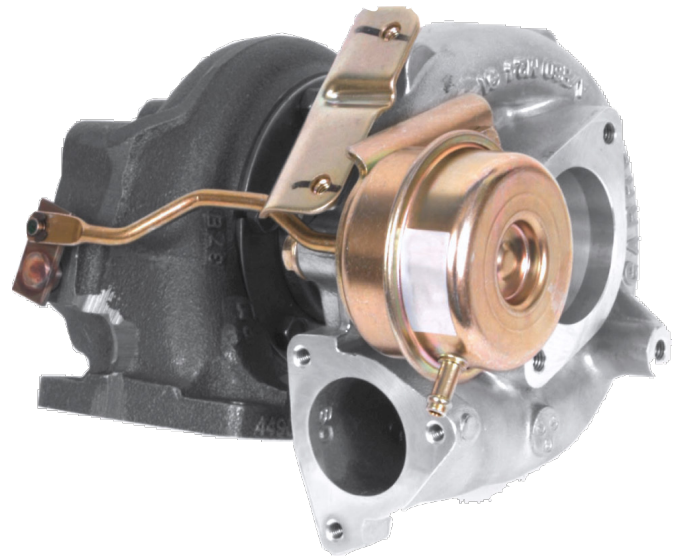
Horsepower: 200 - 330

Displacement: 1.6L - 2.5L

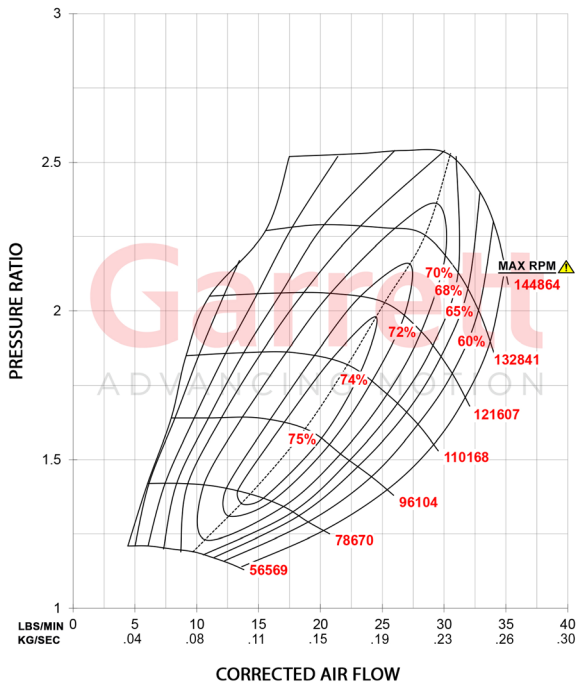
Garrett
ADVANCING MOTION



Measurements in MM



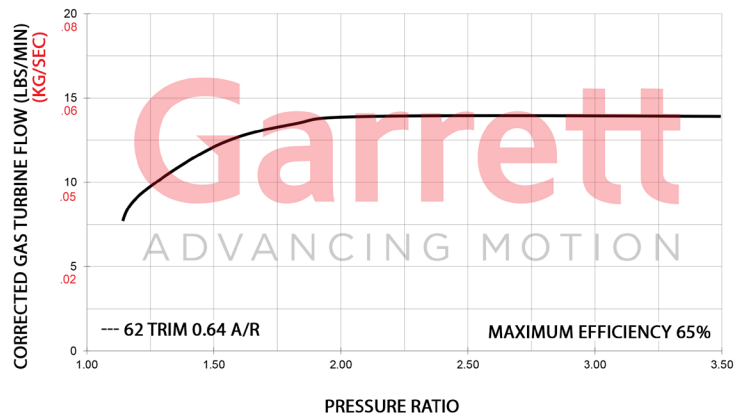
COMPRESSOR MAP



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

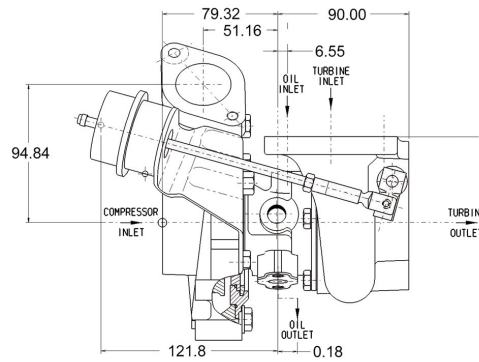


| GT2560R | | Compressor | | | Turbine | | | |
|------------------------|-----------------|-------------------|----------------|------------|----------------|----------------|-------------|------------|
| HP: 200-330 | Disp: 1.6L-2.5L | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo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

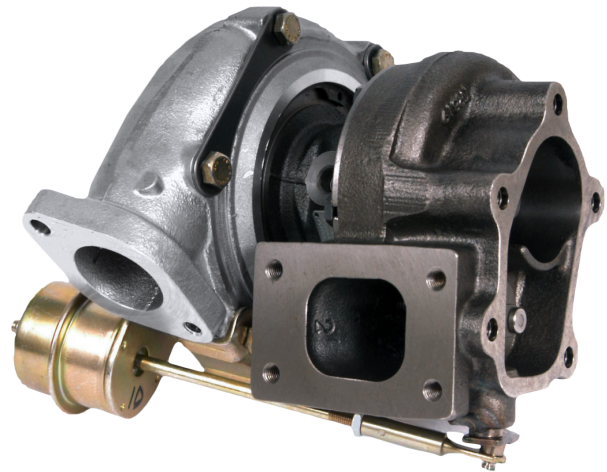
Garrett GT2860R

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

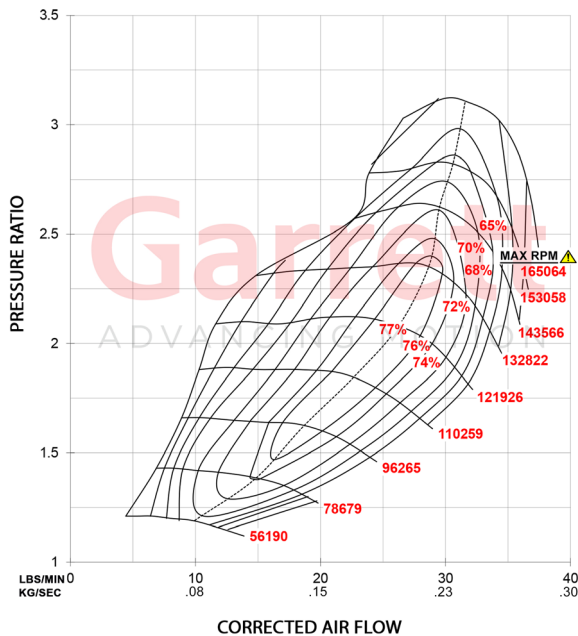
Garrett
ADVANCING MOTION



Measurements in MM



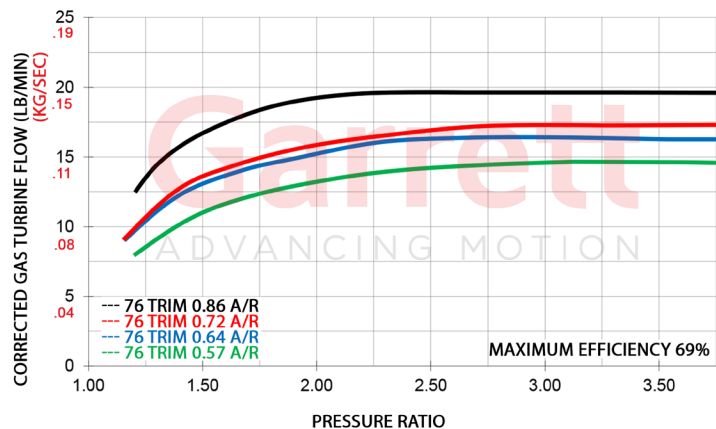
COMPRESSOR MAP



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



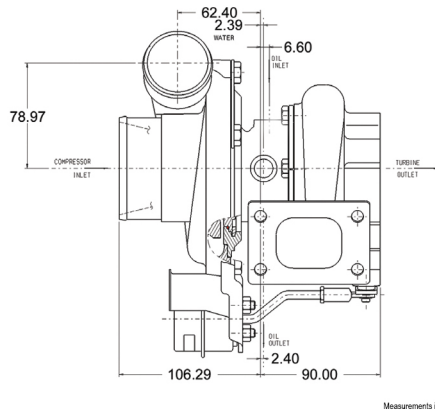
| GT2860R | | Compressor | | | Turbine | | | |
|------------------------------------|-----------------|-------------|---------|------|---------|---------|-----------|---------|
| HP: 250-360 | Disp: 1.8L-3.0L | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo PN: 836026-5005S | | 47mm | 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

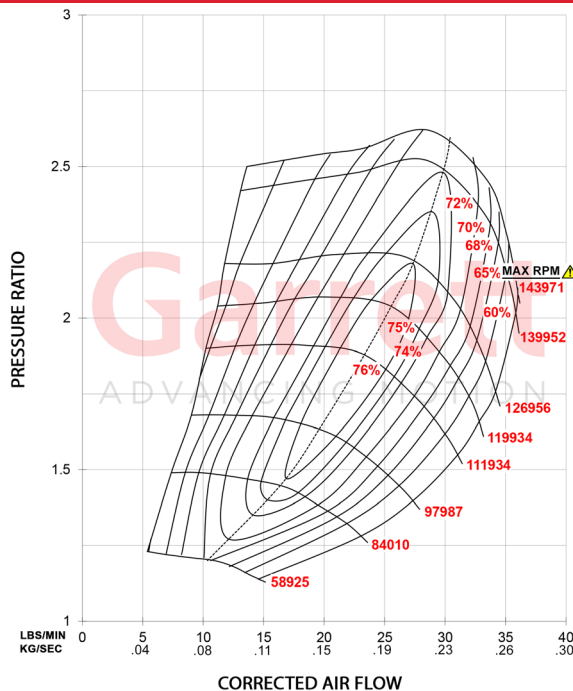
Garrett
ADVANCING MOTION



Measurements in MM



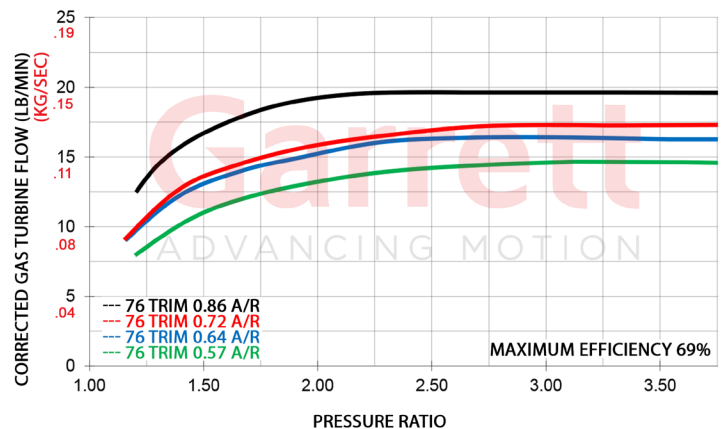
COMPRESSOR MAP



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

EXHAUST FLOW CHART



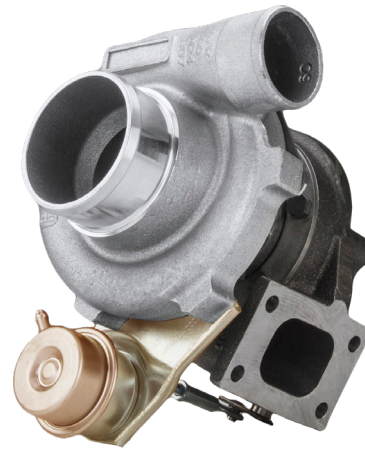
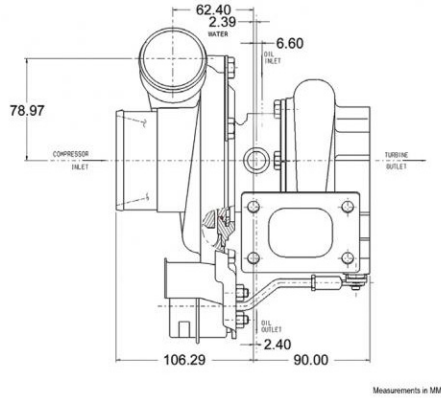
| GT2860RS | | Compressor | | | Turbine | | | |
|--|-----------------|-------------|---------|------|---------|---------|-----------|---------|
| HP: 250-360 | Disp: 1.8L-3.0L | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo PN: 836026-5013S | | 47mm | 60mm | 0.60 | 54mm | 47mm | 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 |

Garrett GT2871R

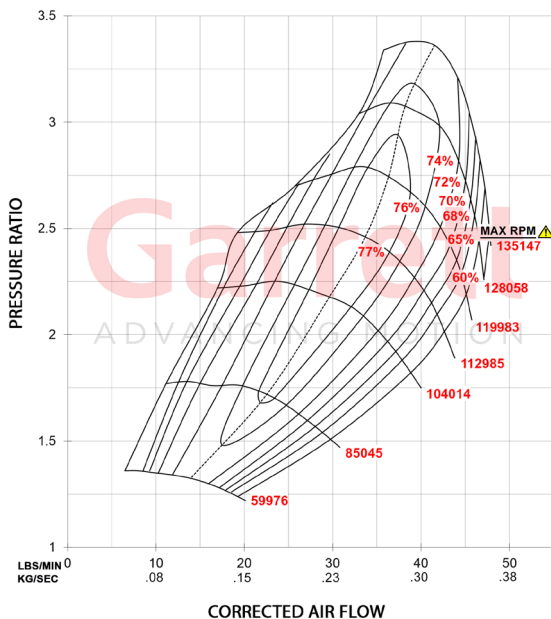
Horsepower: 280 - 475

Displacement: 1.8L - 3.0L

Garrett
ADVANCING MOTION



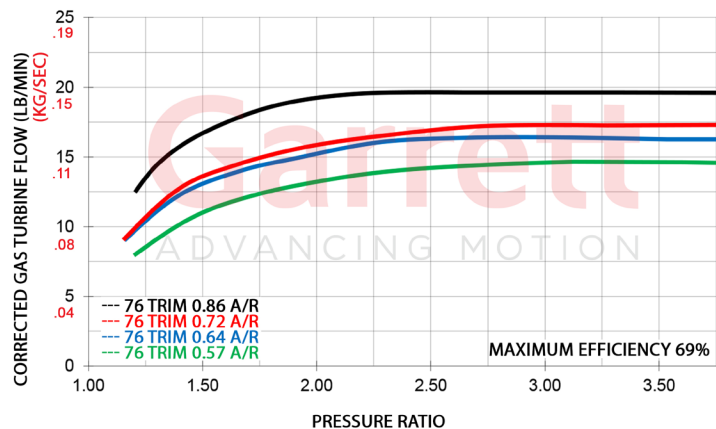
COMPRESSOR MAP



FEATURES:

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

EXHAUST FLOW CHART



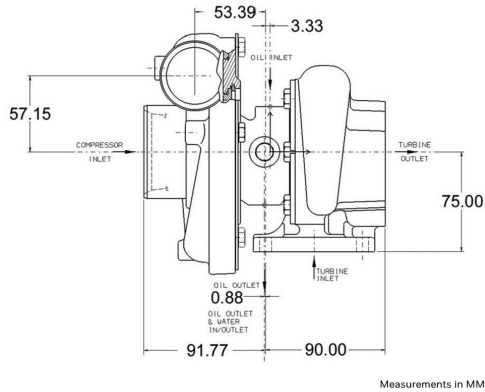
| GT2871R | | Compressor | | | Turbine | | | |
|------------------------------------|-----------------|-------------|---------|------|---------|---------|-----------|---------|
| HP: 280-475 | Disp: 1.8L-3.0L | Inducer | Exducer | A/R | Inducer | Exducer | Trim | A/R |
| Turbo PN: 836026-5020S | | 53mm | 71mm | 0.60 | 54mm | 47mm | 76 | 0.86 |
| Turbo PN: 836026-5021S | | 53mm | 71mm | 0.60 | 54mm | 47mm | 76 | 0.64 |
| Turbine Kits: GT28 | | PN | | | Inlet | Outlet | Wastegate | Divided |
| Kits not directly interchangeable. | | 827690-0005 | | | T25 | 5-Bolt | Internal | N |
| Modifications required to the | | 827690-0004 | | | T25 | 5-Bolt | Internal | N |
| exhaust system to fit. | | 827690-0001 | | | V-Band | V-Band | External | N |
| | | 827690-0002 | | | V-Band | V-Band | External | N |

Garrett GT3071R

Horsepower: 280 - 480

Displacement: 2.5L - 3.5L

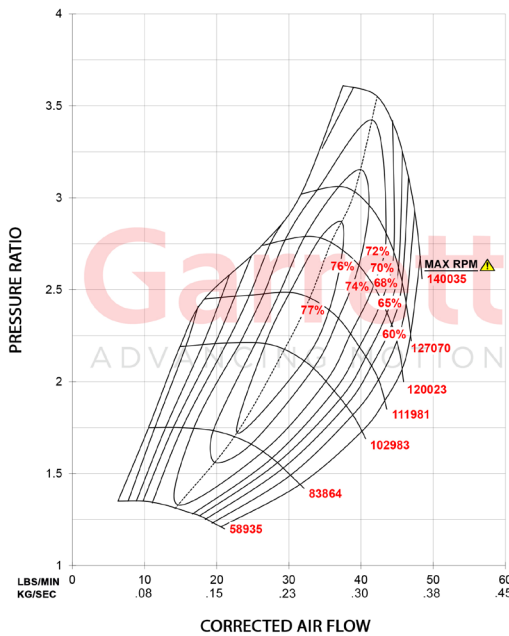
Garrett
ADVANCING MOTION



Measurements in MM



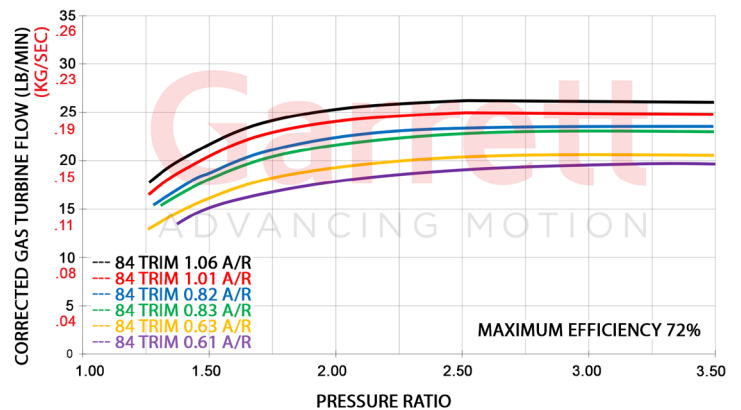
COMPRESSOR MAP



FEATURES:

- ◆ ORIGINAL GT SERIES AERODYNAMICS
- ◆ NON WASTEGATED TURBINE HOUSINGS AVAILABLE
- ◆ BALL BEARING CONFIGURATION WITH WATER COOLED CHRA
- ◆ V-BAND AND T3 TURBINE HOUSING INLET OPTIONS

EXHAUST FLOW CHART



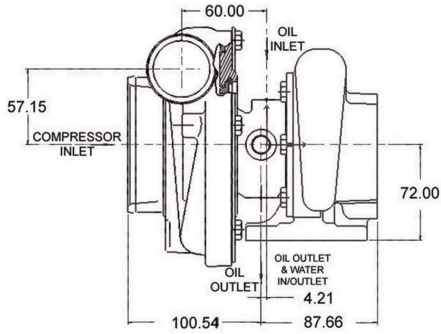
| GT3071R | | Compressor | | | Turbine | | |
|---|-------------------------------------|-------------|---------|--------|---------|-----------|---------|
| HP: 280-480 | Disp: 2.5L-3.5L | Inducer | Exducer | A/R | Inducer | Exducer | Trim |
| Supercore PN | | | | | | | |
| 836028-5001S | 69.85mm hose / square heat shroud | 53mm | 71mm | 0.50 | 60mm | 55mm | 84 |
| 836028-5002S | 102.00mm hose / square heat shroud | 53mm | 71mm | 0.50 | 60mm | 55mm | 84 |
| 836028-5005S | 102.00mm hose / stepped heat shroud | 53mm | 71mm | 0.50 | 60mm | 55mm | 84 |
| Turbine Kits: GT30 | | PN | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0009 | 0.63 | T3 | V-Band | External | N |
| | | 740902-0008 | 0.82 | T3 | V-Band | External | N |
| | | 740902-0007 | 1.06 | T3 | V-Band | External | N |
| | | 740902-0036 | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0035 | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0034 | 1.01 | V-Band | V-Band | External | N |
| | | PN | A/R | Inlet | Outlet | Wastegate | Divided |
| 771300 turbine assembly does not include bolts, clamps, or actuator | | 771300-0006 | 0.63 | T3 | 5 bolt | Internal | N |
| | | 771300-0005 | 0.82 | T3 | 5 bolt | Internal | N |
| | | 771300-0004 | 1.06 | T3 | 5 bolt | Internal | N |

Garrett GT3076R

Horsepower: 310 - 525

Displacement: 2.0L - 3.5L

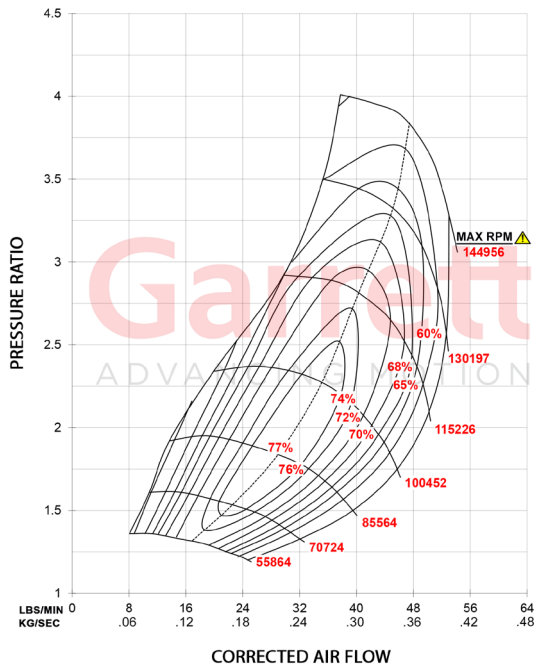
Garrett
ADVANCING MOTION



Measurements in MM



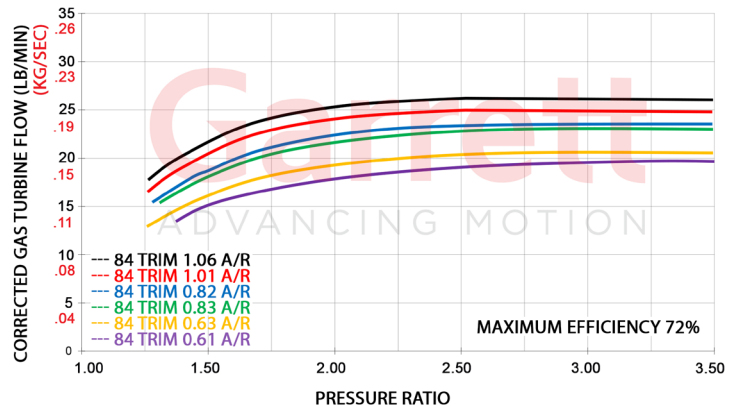
COMPRESSOR MAP



FEATURES:

- ◆ ORIGINAL GT SERIES AERODYNAMICS
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ NON WASTEGATED TURBINE HOUSINGS AVAILABLE
- ◆ BALL BEARING CONFIGURATION WITH WATER COOLED CHRA
- ◆ V-BAND TURBINE HOUSING OPTIONS

EXHAUST FLOW CHART



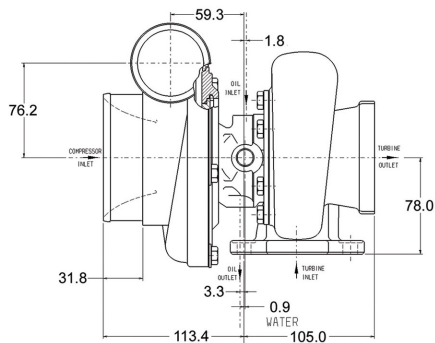
| GT3076R | | Compressor | | | | Turbine | | |
|---|-----------------|--------------|---------|------|--------|---------|-----------|---------|
| HP: 310-525 | Disp: 2.0L-3.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 57mm | 76mm | 56 | 0.60 | 60mm | 55mm | 84 |
| Supercore | | PN | | | | | | |
| | | 836028-5003S | | | | | | |
| Turbine Kits: GT30 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0009 | | 0.63 | T3 | V-Band | External | N |
| | | 740902-0008 | | 0.82 | T3 | V-Band | External | N |
| | | 740902-0007 | | 1.06 | T3 | V-Band | External | N |
| | | 740902-0036 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0035 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0034 | | 1.01 | V-Band | V-Band | External | N |
| | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| 771300 turbine assembly does not include bolts, clamps, or actuator | | 771300-0006 | | 0.63 | T3 | 5 bolt | Internal | N |
| | | 771300-0005 | | 0.82 | T3 | 5 bolt | Internal | N |
| | | 771300-0004 | | 1.06 | T3 | 5 bolt | Internal | N |

Garrett GT3582R

Horsepower: 400 - 675

Displacement: 2.0L - 4.5L

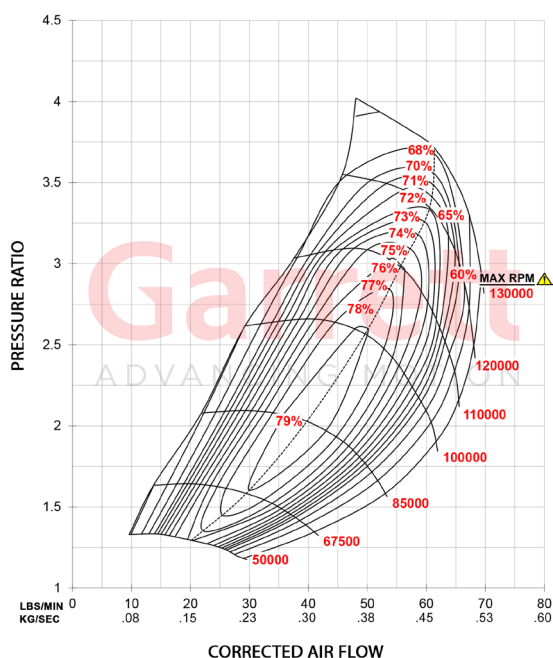
Garrett
ADVANCING MOTION



Measurements in MM



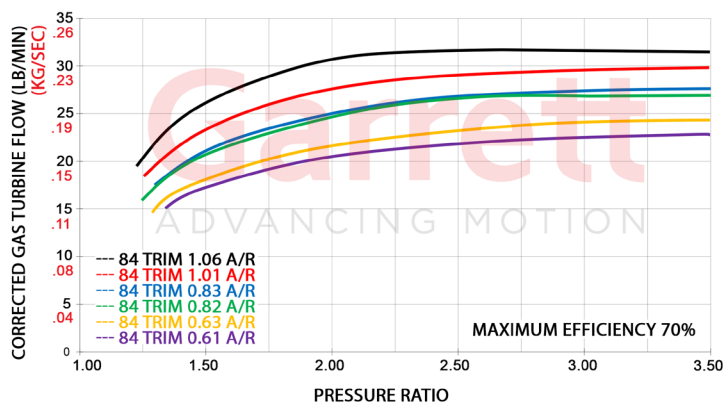
COMPRESSOR MAP



FEATURES:

- ◆ ORIGINAL GT SERIES AERODYNAMICS
- ◆ INTERNALLY WASTEGATED TURBINE HOUSING
- ◆ NON WASTEGATED TURBINE HOUSINGS AVAILABLE
- ◆ BALL BEARING CONFIGURATION WITH WATER COOLED CHRA
- ◆ V-BAND TURBINE HOUSING OPTIONS

EXHAUST FLOW CHART



| GT3582R | | Compressor | | | | Turbine | | |
|---|-----------------|--------------|---------|------|--------|---------|-----------|---------|
| HP: 400-675 | Disp: 2.0L-4.5L | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| | | 61mm | 82mm | 56 | 0.70 | 68mm | 62mm | 84 |
| Supercore | | PN | | | | | | |
| | | 836033-5002S | | | | | | |
| Turbine Kits: GT35 | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| Free Float | | 740902-0012 | | 0.63 | T3 | V-Band | External | N |
| | | 740902-0011 | | 0.82 | T3 | V-Band | External | N |
| | | 740902-0010 | | 1.06 | T3 | V-Band | External | N |
| | | 740902-0018 | | 0.63 | T4 | V-Band | External | N |
| | | 740902-0017 | | 0.82 | T4 | V-Band | External | N |
| | | 740902-0016 | | 1.06 | T4 | V-Band | External | N |
| | | 740902-0033 | | 0.61 | V-Band | V-Band | External | N |
| | | 740902-0032 | | 0.83 | V-Band | V-Band | External | N |
| | | 740902-0031 | | 1.01 | V-Band | V-Band | External | N |
| | | PN | | A/R | Inlet | Outlet | Wastegate | Divided |
| 771300 turbine assembly does not include bolts, clamps, or actuator | | 771300-0003 | | 0.63 | T3 | 5 Bolt | Internal | N |
| | | 771300-0002 | | 0.82 | T3 | 5 Bolt | Internal | N |

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

External wastegates for turbocharged racing and performance engines

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.

GVW wastegates are set to 1 Bar | 14.5 PSI of base pressure and can be configured from 0.2 Bar | 2.9 PSI - 1.7 Bar | 24.7 PSI (considering 1:1 back pressure). The actuator design allows for multiple air/liquid fitting orientations. All fasteners, springs, fittings, V-bands, clamps, and flanges included. For pricing and availability please contact an authorized distributor.

| 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 |

Features:

- CFD tested for maximum flow and thermal efficiency
- Optimized actuation stability and temperature resistance for superior durability
- Replaceable valve and bushing components to increase service life
- Robust design for easy diaphragm replacement
- Liquid-cooled actuator ports for use on severe applications (up to 52% reduction in body temp)
- Anodized aluminum actuator cover



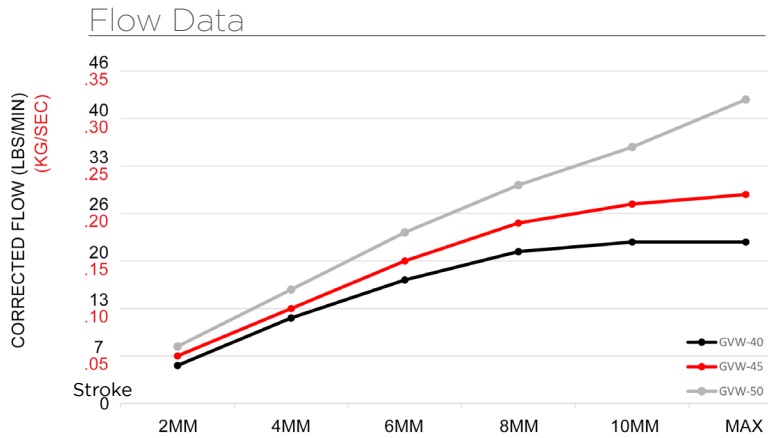
| Mechanical Data | GVW-40 | GVW-45 | GVW-50 | Material Data | GVW-40 GVW-45 GVW-50 |
|------------------------------|--|---------------|---------------|---------------------|--|
| Valve Diameter | 40mm | 45mm | 50mm | Valve Housing | High temp stainless steel rated up to 1050°C |
| Valve Mass | 1.27kg 45oz | 1.47kg 52oz | 1.56kg 55oz | Diaphragm | High temp Nomex reinforced elastomer |
| Max Spring Base Pressure | 1.7 bar 25 psi (1:1 backpressure ratio) | | | Actuator Cover | Fully-machined anodized 6061 aluminum |
| Minimum Spring Base Pressure | 0.2 bar 3 psi (1:1 backpressure ratio) | | | Valve Guide/Bushing | Nitronic 60 |
| Port Fitting: Air | M10x1.0 to hose barb (Hose ID 6mm .25in) | | | Valve | High temp stainless steel with plated stem |
| Port Fitting: Liquid | M8x1.0 to AN-3 | | | V-Band | CNC machined 304 stainless steel |
| | | | | Flanges | Fully-machined 304 stainless steel |
| | | | | Springs | 17/7 PH stainless steel |

| Thermal Data | GVW-40 GVW-45 GVW-50 |
|------------------------------------|--|
| Max Thermal Stress (Non-Cooled) | 270°C actuator body temp during thermal cycle test |
| Max Thermal Stress (Liquid-Cooled) | 130°C actuator body temp during thermal cycle test |
| Max Exhaust Temp: Peak | Up to 1050°C |



GARRETT VENT | EXTERNAL WASTEGATES

External wastegates for turbocharged racing and performance engines

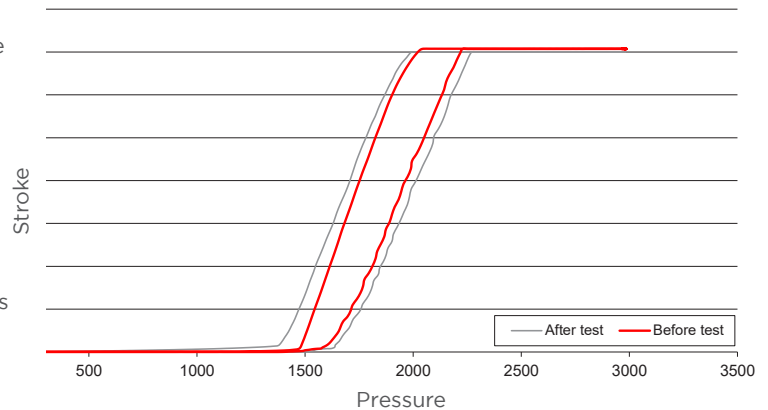


Actuation Durability Test Data

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

| 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 | | |
| Purple | | | | | | | | | | | x | x | x | 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 |
| Black | | | | | | | | | | | x | x | x | x | x | x |

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

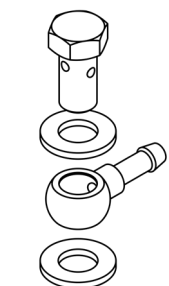
GARRETT VENT | EXTERNAL WASTEGATES

Ancillary Part Chart | Tightening Torque Specs

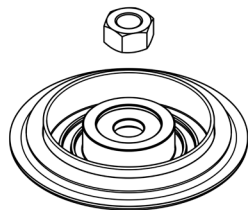


| Description | Tightening Torque Nm ft-lb | GVW-40 | GVW-45 | GVW-50 |
|---|---------------------------------|-------------|-------------|-------------|
| Kit: Air Fitting (Banjo Fitting, Bolt, 2 Crush Washers) | 15 11 | | 910477-0001 | |
| Kit: Diaphragm (Diaphragm Assy, Valve Stem Nut) | 10 7 | 910476-0001 | 910476-0002 | |
| Kit: Valve/Bushing (Valve,Bushing,Seal Washer,O-Ring,Valve Stem Nut,Seat) | 10 7 | 910478-0001 | 910478-0002 | 910478-0003 |
| Kit: V-Band Inlet (V-Band, Bolt, Locknut) | 15 11 | 910475-0001 | 910475-0003 | 910475-0004 |
| Kit: V-Band Outlet (V-Band, Bolt, Locknut) | 15 11 | 910475-0002 | 910475-0001 | 910475-0003 |
| Bolt, Actuator Body | 5 4 | | | |
| Bolt, Actuator Cap | 2.5 2.0 | | 894537-0001 | |
| Bolt, V-band | NA | | 894540-0006 | |
| Bolt, Banjo Fitting | 15 11 | | | |
| Bushing | 30 22 | | | |
| Fitting, Water 8mm | 10 7 | | 895520-0001 | |
| Fitting, Plug Air 10mm | 15 11 | | 895519-0001 | |
| Flange, Inlet Weld | NA | 894649-0003 | 894649-0001 | 894649-0007 |
| Flange, Outlet Weld | NA | 894649-0004 | 894649-0002 | 894649-0008 |
| Locknut, V-band | 15 11 | | 905694-0001 | |
| Nut, Valve | 10 7 | | | |
| Nut, V-Band | 15 11 | | | |
| Seat, Valve | NA | 894648-0002 | 894648-0001 | 894648-0004 |
| Spring, Red (See Spring Chart For Spring Pressure) | NA | 898344-0001 | | |
| Spring, Blue (See Spring Chart For Spring Pressure) | NA | | 898344-0002 | |
| Spring, Green (See Spring Chart For Spring Pressure) | NA | | 898344-0003 | |
| Spring, White (See Spring Chart For Spring Pressure) | NA | | 898344-0004 | |
| Spring, Brown (See Spring Chart For Spring Pressure) | NA | | 898344-0005 | |
| Spring, Purple (See Spring Chart For Spring Pressure) | NA | | 898344-0006 | |
| Spring, Black (See Spring Chart For Spring Pressure) | NA | | 898344-0008 | |
| Washer, Crush 8mm | NA | | 895518-0002 | |
| Washer, Crush 10mm | NA | | 895518-0001 | |

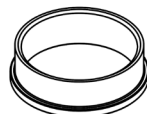
GVW Replacement Part Kits



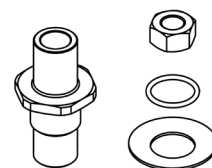
Air Fitting Kit



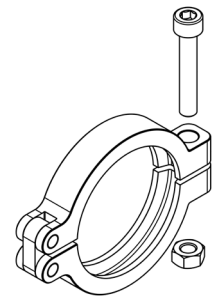
Diaphragm Kit



Valve/Bushing Kit



V-Band Inlet | Outlet Kit





Garrett
ADVANCING MOTION

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 | Actuator, rod end, jam nut, retaining clip. *Bracket and heat shield not included |
| 759498-0007 | GT GTX28 | 1.0 | |
| 759498-0005 | GT GTX28 | 1.5 | |
| 759498-0004 | GT GTX35R | 0.8 | G-Series V-band standard rotation, actuator, bracket and bolts, rod end, jam nut, retaining clip. *Heat shield not included |
| 759498-0008 | G25 | 0.5 | |
| 759498-0009 | G25 | 1.0 | |
| 759498-0010 | G25 | 1.5 | G-Series V-band reverse rotation, actuator, bracket and bolts, rod end, jam nut, retaining clip. *Heat shield not included |
| 759498-0011 | G25 | 0.5 | |
| 759498-0012 | G25 | 1.0 | |
| 759498-0013 | G25 | 1.5 | G-Series T4 standard rotation, actuator, bracket and bolts, rod end, jam nut, retaining clip. *Heat shield not included |
| 759498-0014 | G25 | 0.5 | |
| 759498-0015 | G25 | 1.0 | |
| 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.



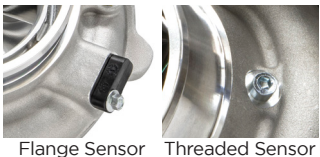
PRISHOW
[FEATURED PRODUCTS]
SHOWCASE TOP 3
BEST ENGINE PRODUCT



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.



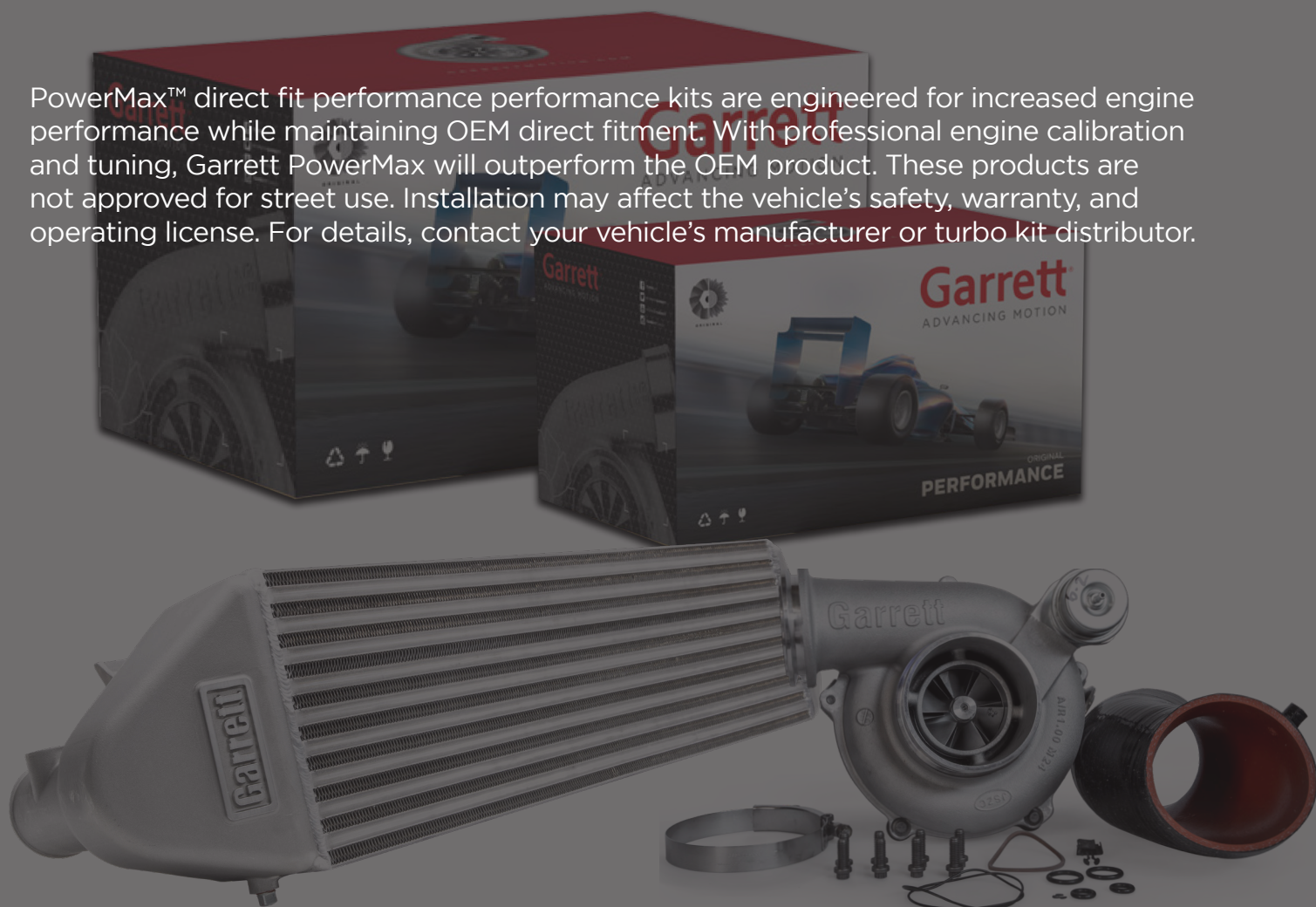
FEATURES

- 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

PowerMax™ direct fit performance performance kits are engineered for increased engine performance while maintaining OEM direct fitment. With professional engine calibration and tuning, Garrett PowerMax will outperform the OEM product. These products are not approved for street use. Installation may affect the vehicle's safety, warranty, and operating license. For details, contact your vehicle's manufacturer or turbo kit distributor.



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.



2014 - 2018
VOLKSWAGEN | AUDI 2.0L
TSI MK7 STAGE 1 | STAGE 2



2013 - 2018
FORD ECOBOOST 2.0L
FOCUS ST | ESCAPE | FUSION | TAURUS



2017 +
FORD ECOBOOST 3.5L
F-150 | RAPTOR | STAGE 2



2014 - 2019
HOLDEN | CHEVROLET 2.8L
COLORADO XLDE DIESEL



2011 - 2021
FORD EVEREST | RANGER PX1 PX2 PX3
2011 - 2020
MAZDA BT-50



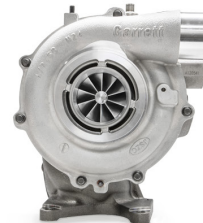
2007 - 2018
TOYOTA 4.5L
LAND CRUISER 1VD-FTV



2011 - 2017
FORD ECOBOOST 3.5L
F-150 | EXPEDITION | STAGE 1



2003 - 2011
VOLKSWAGEN | AUDI | 1.9L 2.0L
BEETLE | GOLF | JETTA | PASSAT | A3



2011 - 2016
CHEVROLET | GMC 6.6L
2500HD | 3500HD



1999.5 - 2007
FORD POWERSTROKE 7.3L
F-250 | F-350



1995.5 - 2007
FORD POWERSTROKE 6.0L
F-250 | F-350



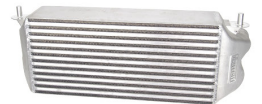
2004.5 - 2010
CHEVROLET | GMC 6.6L
2500HD | 3500HD STAGE 1 STAGE 2



2020+
VOLKSWAGEN | AUDI | SKODA |
CUPRA | SEAT | 2.0L EA888 ENGINE



2015 +
FORD ECOBOOST 2.3L
MUSTANG



2015+
FORD ECOBOOST 3.5L | 2.7L
F-150 | RAPTOR



2013 - 2018
FORD ECOBOOST 2.0L
FOCUS ST



2015+
SUBARU 2.0L
WRX



2011 - 2021
FORD EVEREST | RANGER PX1 PX2 PX3
2011 - 2020
MAZDA BT-50



2015 +
BMW 3.0L
F80 M3 | F82 / F83 M4



2016 +
HONDA 1.5L
CIVIC T/ISI



Use Your Smart Phone
Camera To Scan



POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

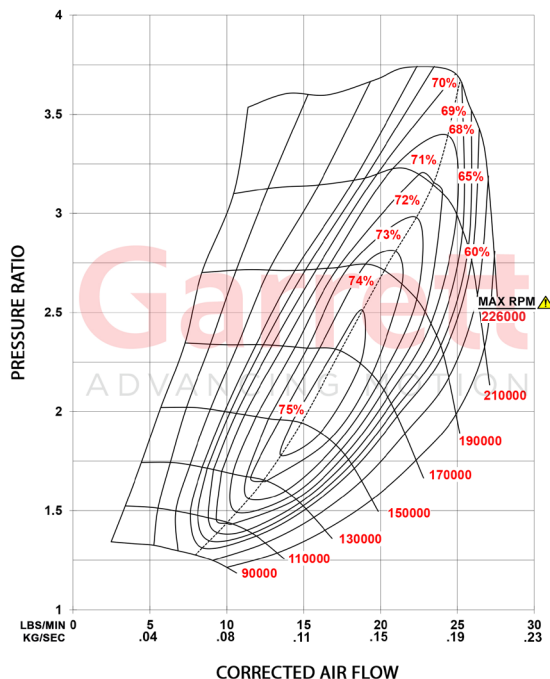
Applications: Stage 1 Turbo Upgrade for F-150 3.5L | Expedition | Navigator 3.5L (2011 - 2017)

Part Numbers 881027-5001S | 881028-5001S | 881027-5002S | 881027-5002S

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 88 before purchasing this product.*

| Part Number | Year | Model | Make | Engine | OEM PN | Notes: |
|--------------|-----------|------------|---------|---------------|--------------|--------------------|
| 881027-5001S | 2011-2012 | F-150 | Ford | 3.5L EcoBoost | CL3Z-6K682-C | Left Turbocharger |
| 881028-5001S | 2011-2012 | F-150 | Ford | 3.5L EcoBoost | CL3Z-6K682-D | Right Turbocharger |
| 881027-5002S | 2013-2017 | F-150 | Ford | 3.5L EcoBoost | DL3Z-6K682-E | Left Turbocharger |
| 881028-5002S | 2013-2017 | 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.



**D-871
CARB
EMISSIONS
CERTIFIED**

POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGERS

Application: Stage 2 Turbo Upgrade For Ford Raptor | F-150 3.5L (2017 - 2021) Supports up to 700+HP**
Part Number 911984-5003S (Includes stock inlet adapter and o-ring. Does not include gaskets)

The Garrett PowerMax™ Stage 2 turbocharger upgrade for the 2017 - 2021 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.

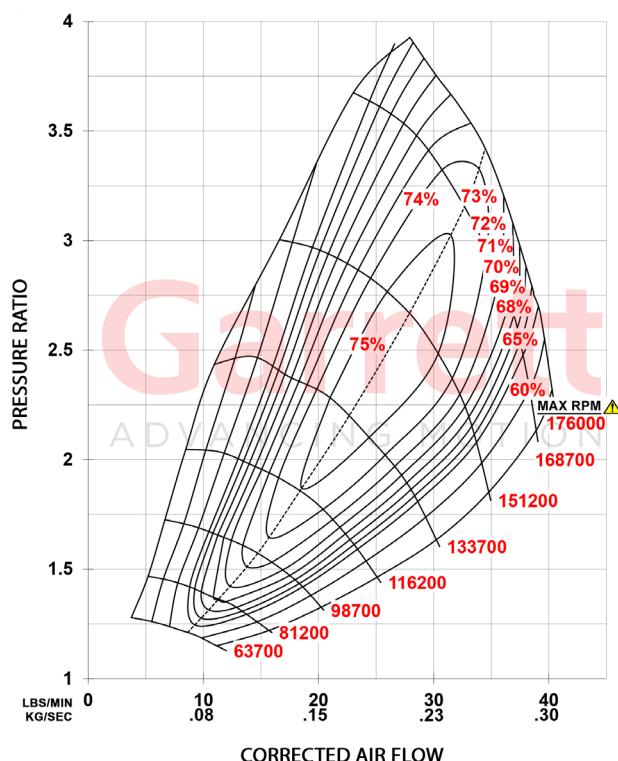
**Please refer to the legal notice on page 88 before purchasing this product.*

| PowerMax Stage 2: 2017+ Ford F-150 F-150 Raptor | | | | Compressor | | | | Turbine | | |
|---|---------|----------|-----------|------------|---------|------|------|---------|---------|------|
| Turbo PN | Bearing | Rotation | Actuation | Inducer | Exducer | Trim | A/R | Inducer | Exducer | Trim |
| 911984-5003S | Journal | Standard | Electric | 45mm | 60mm | 57 | 0.60 | 50mm | 46mm | 84 |
| | Journal | Reverse | Electric | 45mm | 60mm | 57 | 0.60 | 50mm | 46mm | 84 |

These turbochargers have received California Air Resources Board (CARB) certification. This 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.

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



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.



**D-871
CARB
EMISSIONS
CERTIFIED**



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.

** 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: Stage 1 & 2 TURBO UPGRADE FOR VW / Audi 2.0L TSI 2014 - 2021

Part Number: Stage 1 898199-5001W | Stage 2 898200-5001W

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 88 before purchasing this product.*

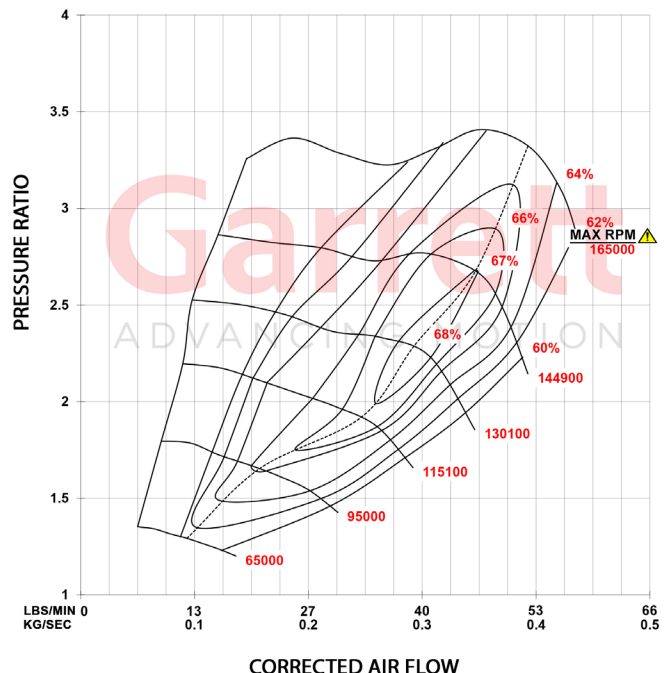
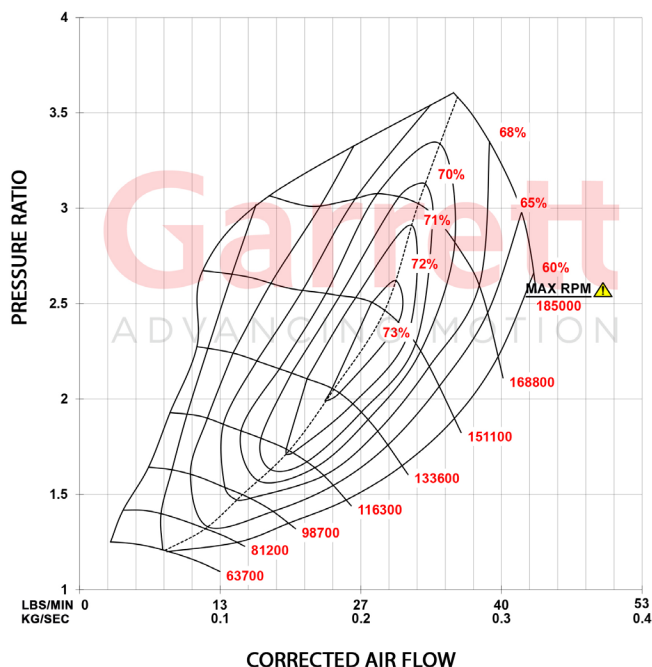
| Part Number | Stage | Power | Model | Comp Ind | Comp Exd | Turb Ind | Turb Exd |
|--------------|---------|---------------|---------|----------|----------|----------|----------|
| 898199-5001W | Stage 1 | 485HP 362kW | GT2260S | 47mm | 60mm | 50mm | 45mm |
| 898200-5001W | Stage 2 | 600HP 447kW |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

Stage 1 Features:

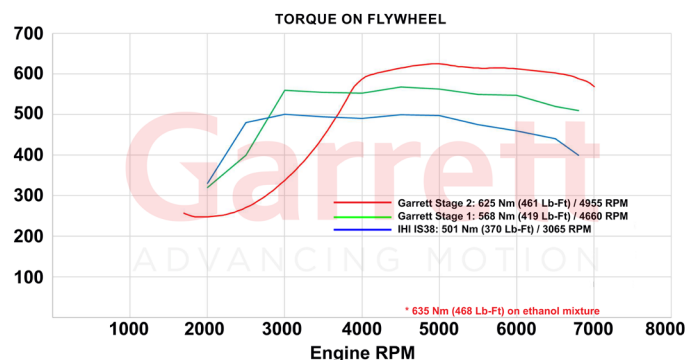
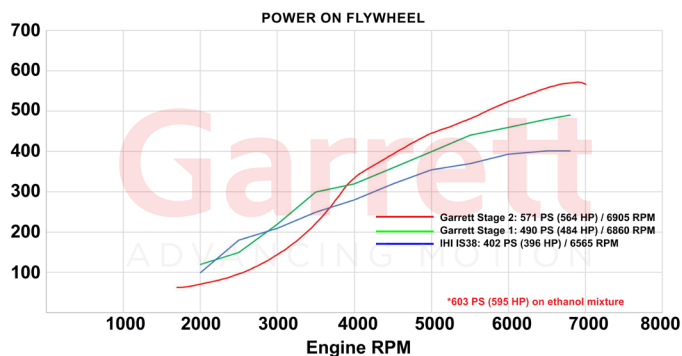
- Direct-fit stage 1 with 485HP | 362kW (flywheel) power capability (on-vehicle results)*
- Complete assembly with electronic actuator
- +17% compressor flow compared to IS38 turbo (stock Golf R)
- GTX Gen II compressor aerodynamics
- Mar-M alloy turbine wheel and twin scroll stainless steel turbine 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: 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 88 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 |

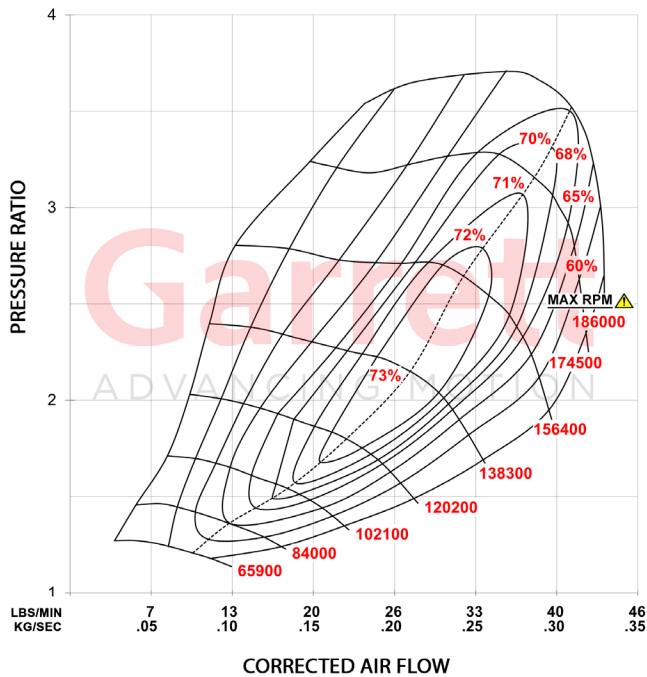
Vehicle Applications:

| 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 | Kodiaq 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 | | |

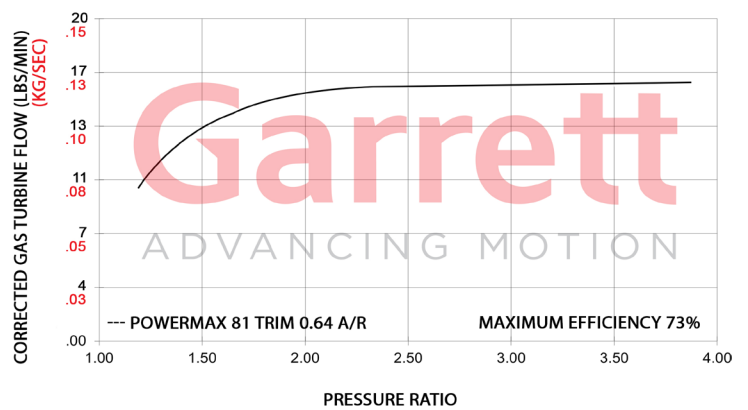
• Garrett is the OEM turbocharger for this application. For regions and applications not listed above please reference the OEM turbo part number for fitment.

** 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.*

Compressor Map



Exhaust Flow Chart



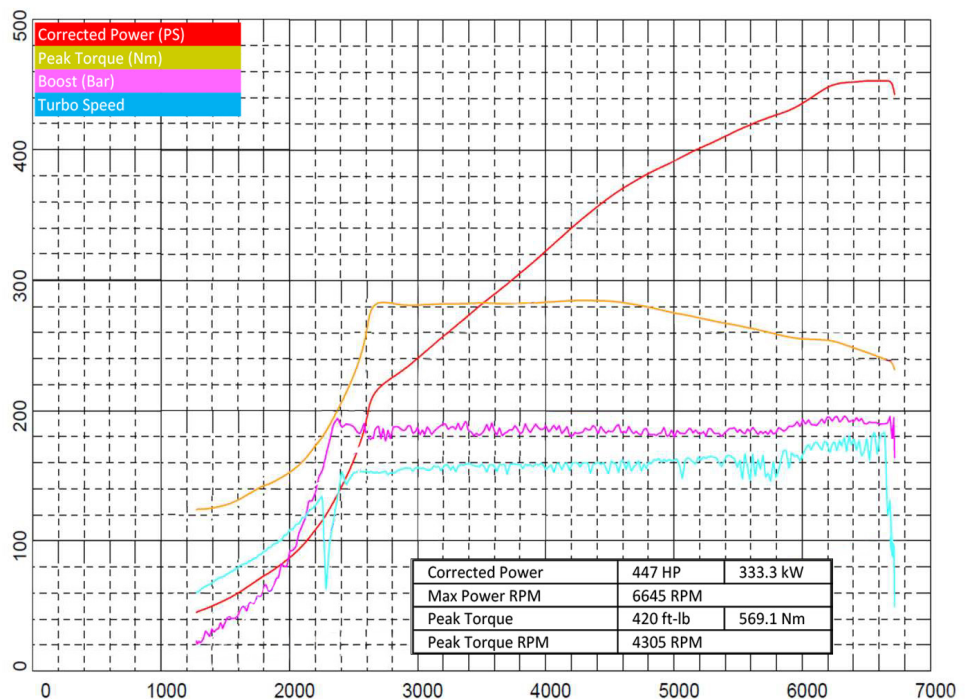
Features:

- 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

On-Vehicle Test Data: VW Golf GTI 2.0L TFSI (EA888 Evo4)

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.

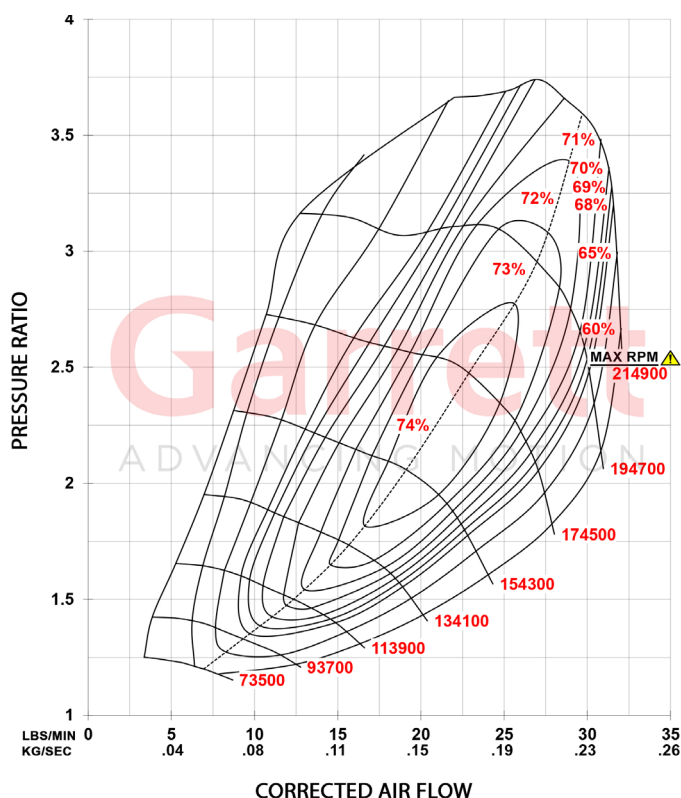


POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Applications: Stage 1 Turbo Upgrade For Ford 2.0L EcoBoost (2013 - 2018) Focus ST | Escape | Kuga | Fusion | Taurus | Lincoln
Part Number: 886195-5001S

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 88 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

Part Number: 880736-6001

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.

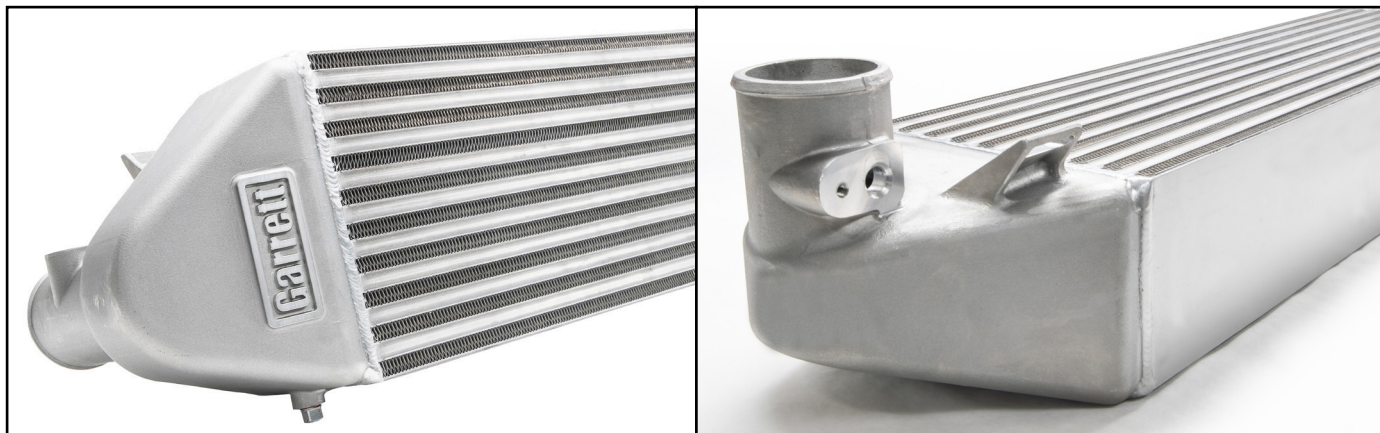
This direct fit performance intercooler installs in 1.5 hour and reuses the stock bolts, hoses, and clamps. Removal of the OE grill shutters required. For more information including Installation instructions please visit our website:
www.garrettmotion.com/racing-and-performance/performance-catalog/intercoolers/

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 INTERCOOLER

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

Part Number: 881649-6001

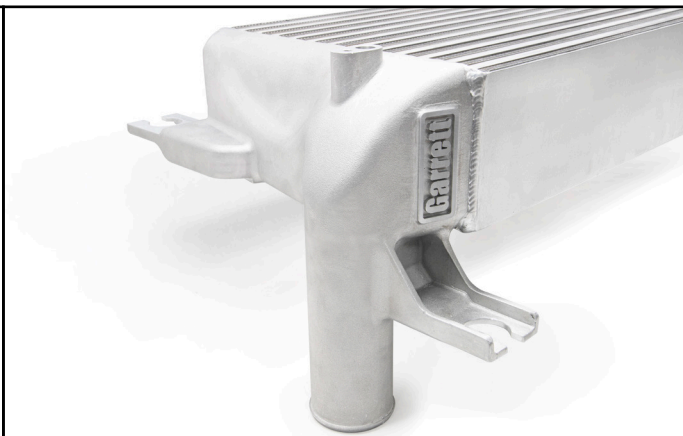
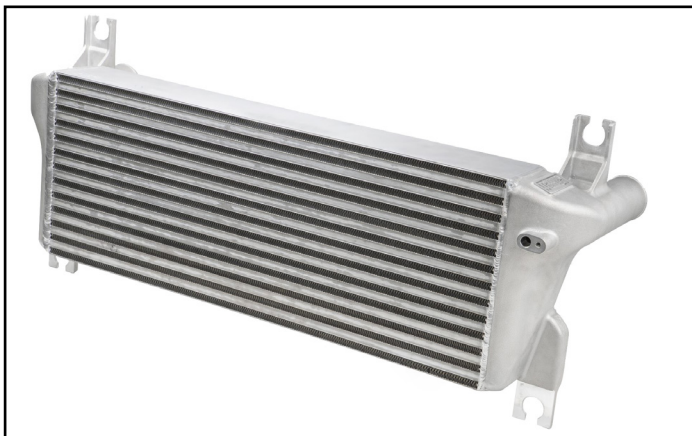
The Garrett direct fit performance charge air cooler for the Ford Ranger and Mazda BT50 boasts a 218% larger core that helps reduce intake manifold temperatures by an average of 32 °C based on test data. Optimized end tanks improve air flow through the core. This direct fit performance intercooler installs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



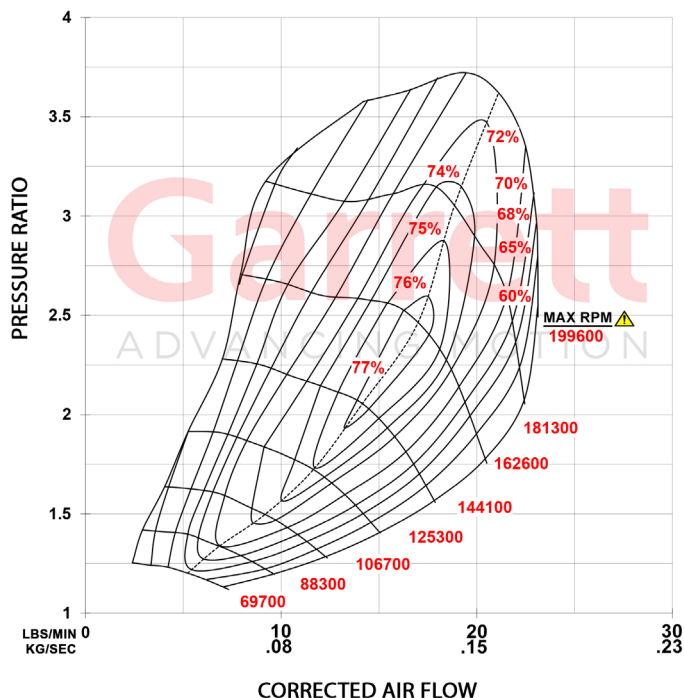
POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

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

Part Number: 880862-5001W

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 88 before purchasing this product.*



| Part Number | | 880862-5001W ** | |
|-------------|---------------------------|--|-------------|
| Turbo | Replaces OEM part numbers | 798166-0006 (5006S) 812971-0006 (5006S) 853333-5001S | |
| | | | |
| Vehicle | Make | Ford | Mazda |
| | Model | Ranger PX1 PX2 PX3 Everest | BT-50 |
| | Year | 2011 - 2021 | 2011 - 2020 |
| Engine | 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: 2015+ Ford F-150 and Raptor 3.5L EcoBoost

Supports Up To 750 Horsepower | C.A.R.B Certified ✓

Part Number: 870702-6001

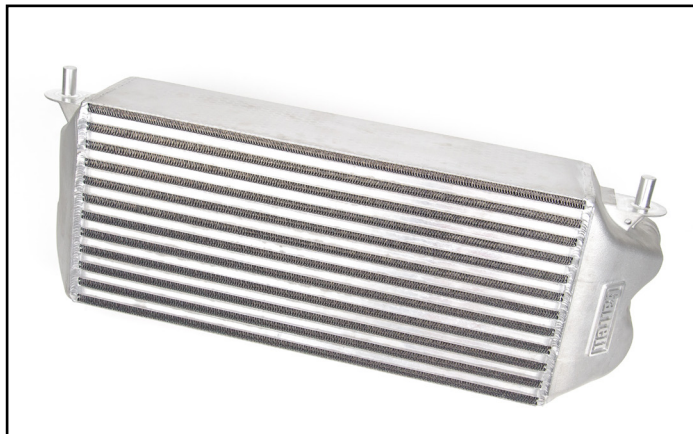
The Garrett direct fit F-150 charge air cooler boasts an 83% larger core than stock to provide up to 40 °F reduction in air temperature and up to 30% reduction in pressure drop. Optimized end tanks improve air flow through the core. This direct fit performance intercooler is easily installed and can 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" | |





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.

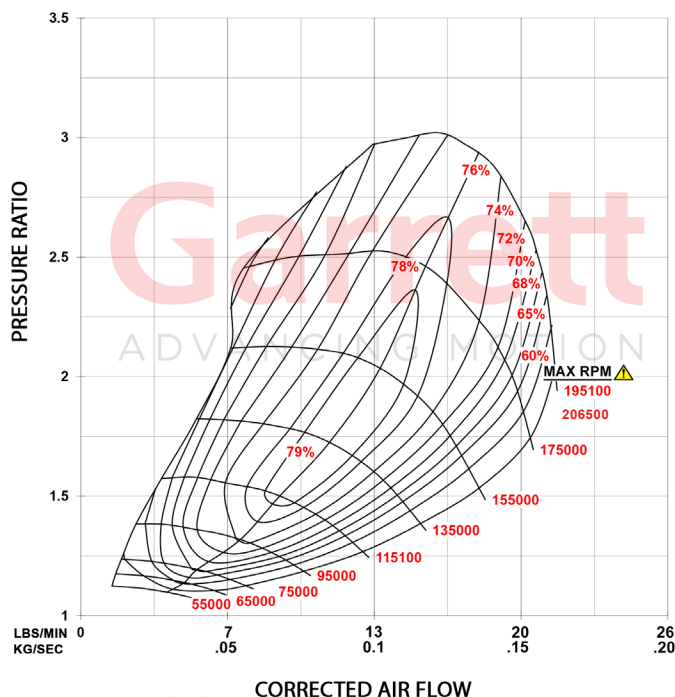
VW 2.0L TURBO UPGRADE

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 88 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 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*)

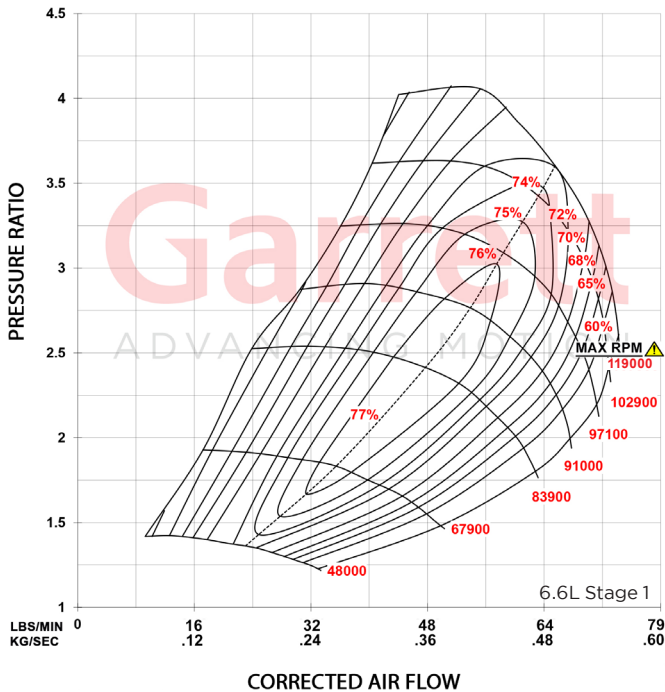
The Duramax Stage 1 turbocharger kit features Garrett patented Advanced Variable Nozzle Turbine AVNT™ design for increased compressor and turbine flow. The GT Series wheel design ensures top performance, lower back pressure and reduces intake and exhaust gas temperatures. The unique design features nine 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.

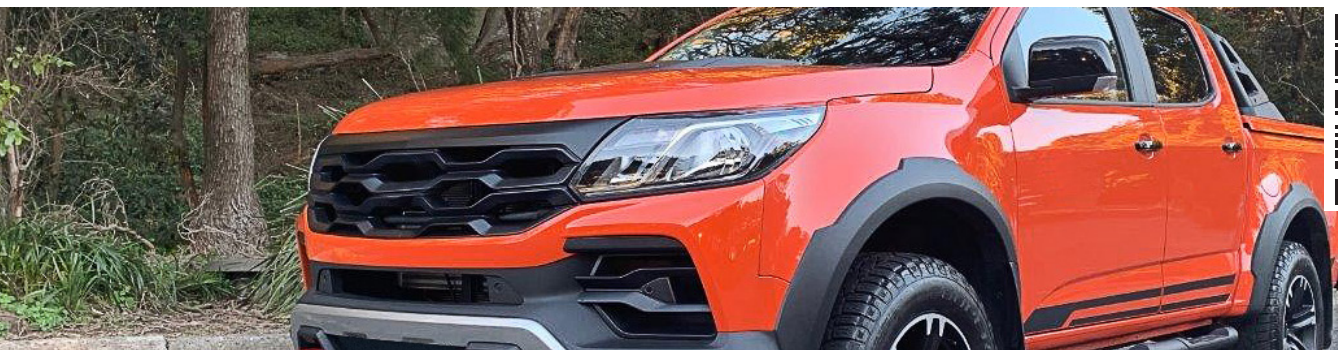
**Please refer to the legal notice on page 88 before purchasing this product.*

| 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

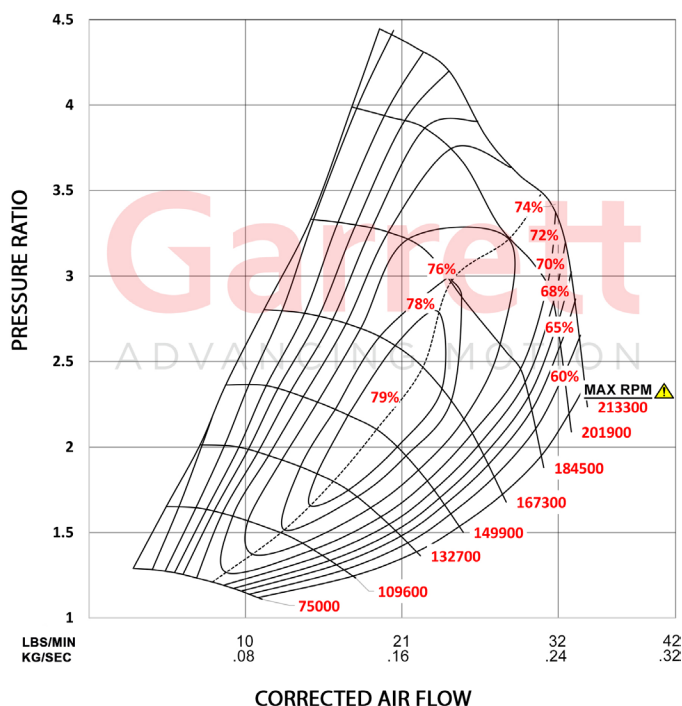
Application: Stage 1 Turbo Upgrade For (2014 - 2019) General Motors (Holden, Chevrolet) Colorado 2.8L XLDE

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 88 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 TURBOCHARGER

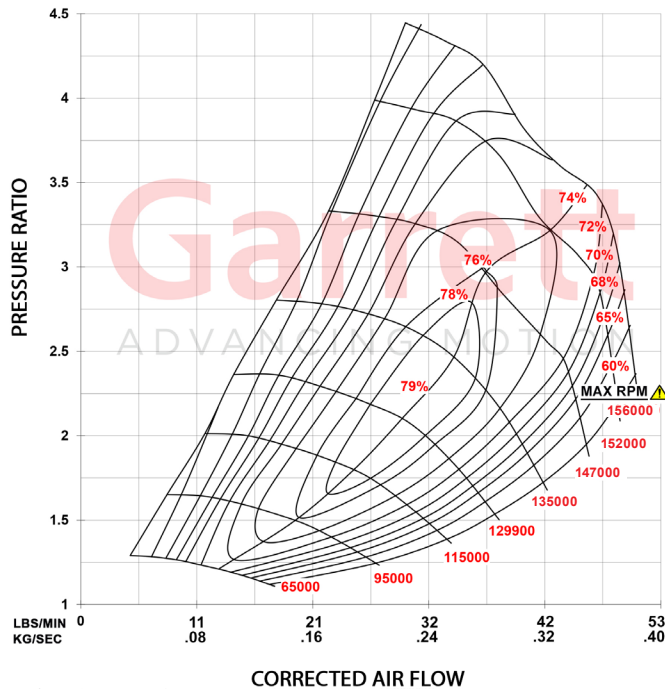
Application: Stage 1 Turbo Upgrade For 2007 - 2018 Toyota Land Cruiser 4.5L 1VD-FTV

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.

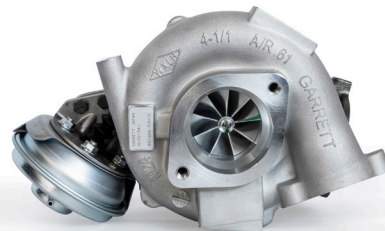
**Please refer to the legal notice on page 88 before purchasing this product.*



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

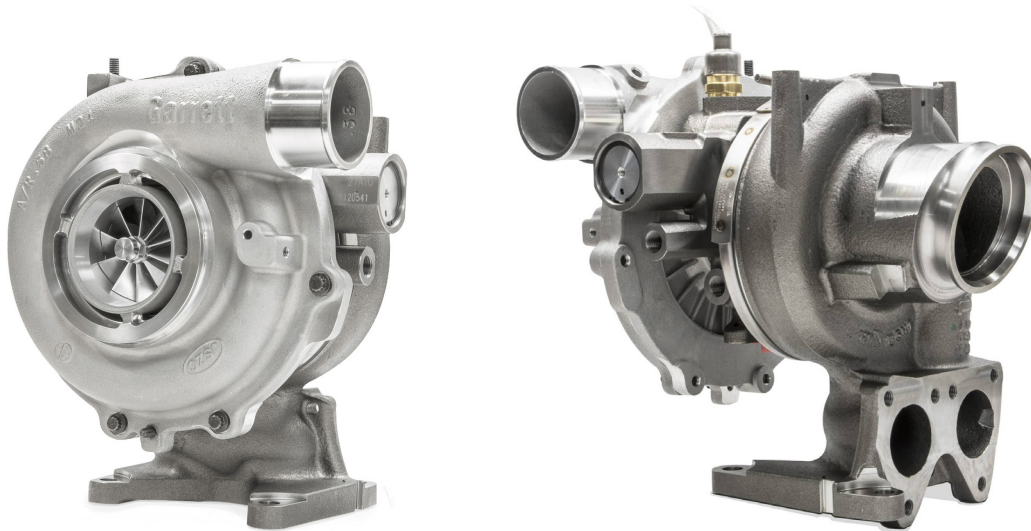
Features:

- 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

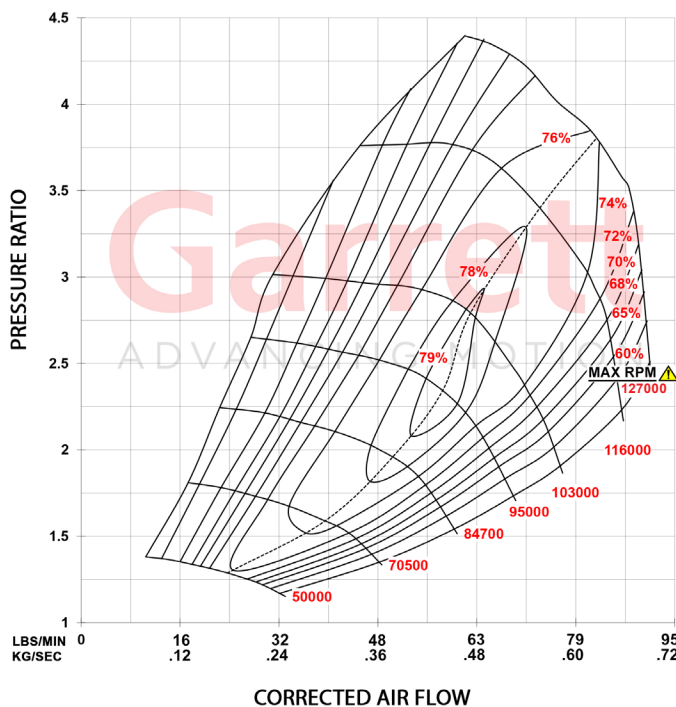
Application: Stage 1 Turbo Upgrade For 2011 - 2016 6.6L Chevrolet / GMC 2500HD, 3500HD

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 88 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.

Available through the Master Distributors, Performance Distributors, and PowerMax™ Distributor networks.

* 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.



7.3L Power Stroke



6.0L Power Stroke

POWERMAX™ DIRECT FIT PERFORMANCE TURBOCHARGER

Application: Stage 1 Turbo Upgrade For 7.3L | 6.0L Power Stroke Engines

*Please refer to the legal notice on page 88 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 |
| 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 |

7.3L Power Stroke

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.

6.0L Power Stroke

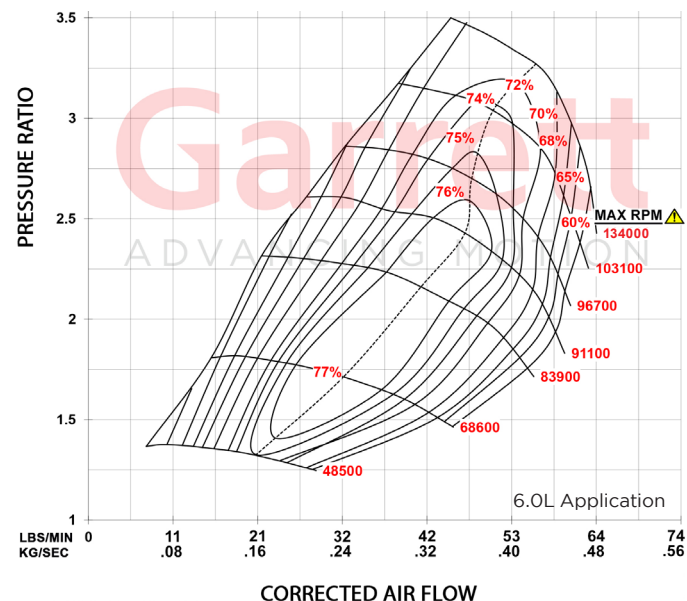
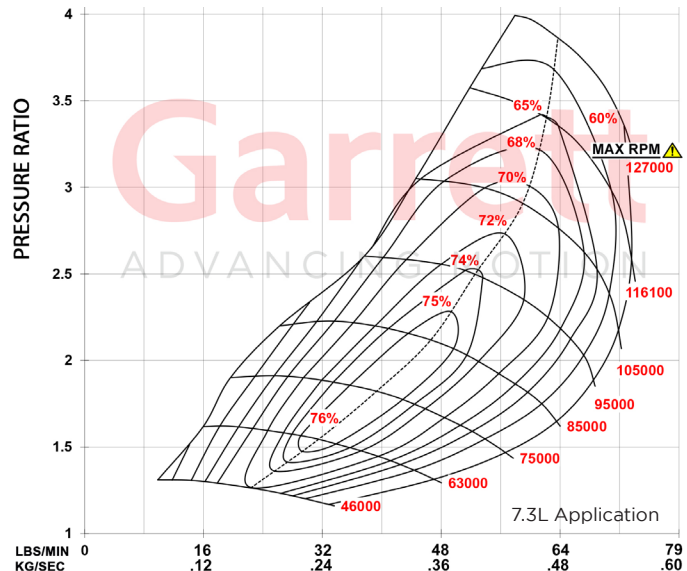
Applications: 2003 Ford F-250 | F-350
Part Number 777469-5002S (560HP*)
Applications: 2004-2007 Ford F250 | F350 | Excursion
Part Number 772441-5002S (560HP*)

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.



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 INTERCOOLER

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

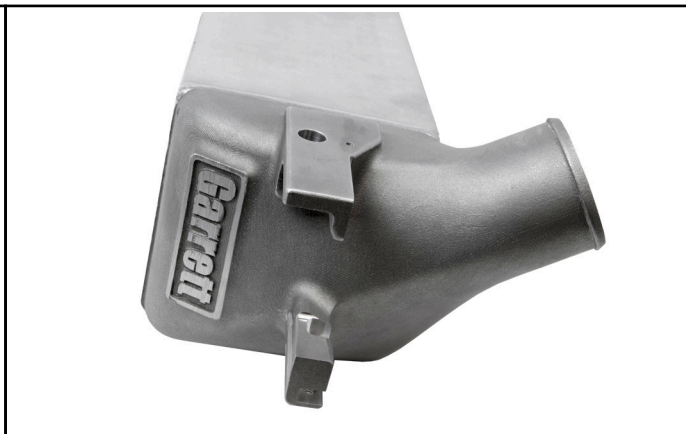
The Garrett Direct Fit Performance Intercooler is C.A.R.B. certified (EO# D-794) and fits the 2015+ 2.3L EcoBoost Mustang in the stock location and can support up to 600 horsepower. The aluminum core features advanced offset fin design and vacuum brazed bar-and-plate construction resulting in superior 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

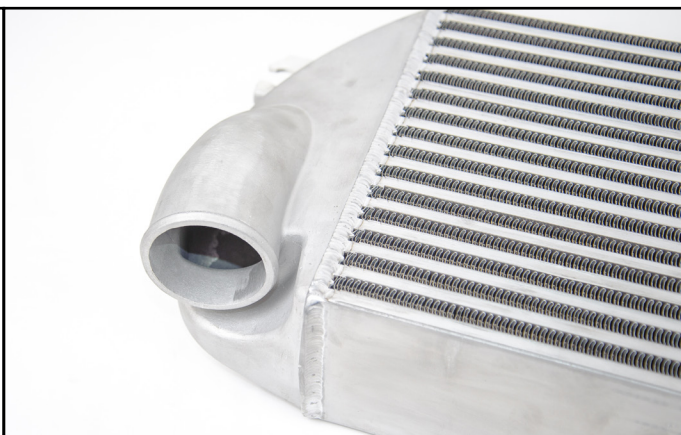
The direct fit Subaru WRX performance charge air cooler boasts a 70% larger core that helps reduce intake manifold temperatures up to 30 °F (16.7 °C). Optimized end tanks improve air flow through the core. This performance intercooler showed an increase of up to 16 HP (12 kW) and 15 lb-ft (20 N-m) of 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

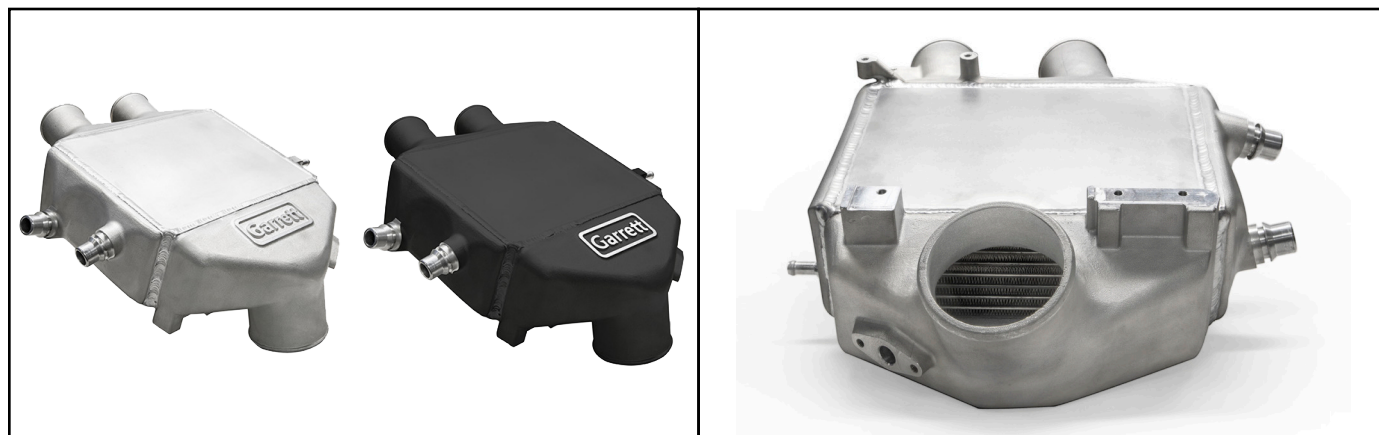
Part Number: 888883-6001 Raw Finish | 888883-6002 Black Finish

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

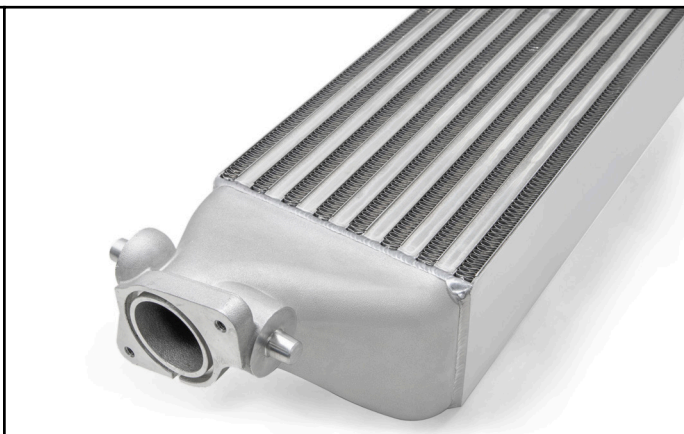
Garrett Powermax™ direct fit performance charge air cooler for the 2016+ Honda Civic 1.5T SI has a 90% larger core than stock and helps reduce intake manifold temperatures up to 60 °F (15.6 °C) at heat soak. CFD optimized end tanks improve air flow distribution through the core. This performance intercooler 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 | |



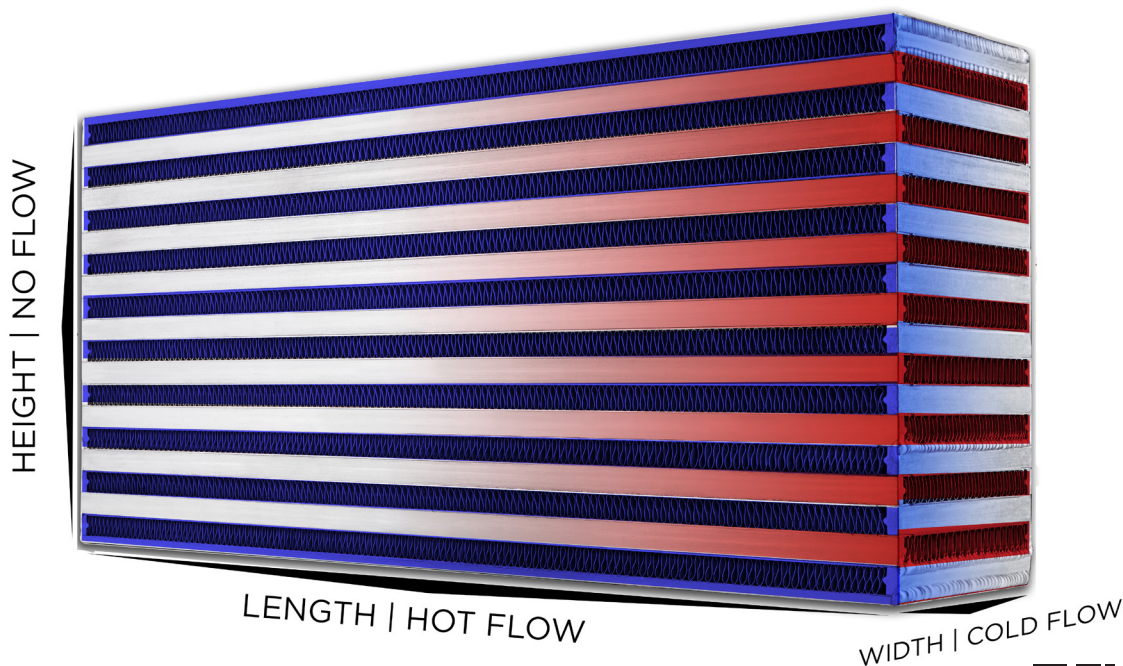


INTERCOOLER CORES

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 | | Height No Flow | | Width Cold Flow | |
|---------------|-------------------------|----------------------|-------------------|------|------------------|------|-------------------|------|
| | | | (in) | (mm) | (in) | (mm) | (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

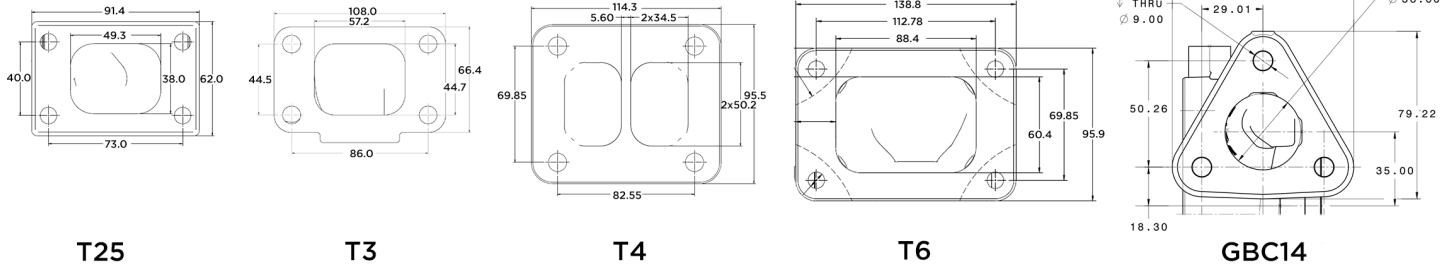
| Part Number | Model | Supported Horsepower | Length Hot Flow | | Height No Flow | | Width Cold Flow | |
|-------------|--------------|----------------------|-------------------|------|------------------|------|-------------------|------|
| | | | (in) | (mm) | (in) | (mm) | (in) | (mm) |
| 717874-6009 | 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 |

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 |

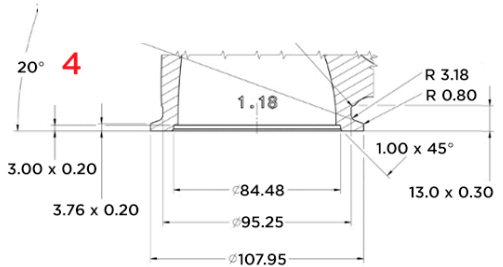
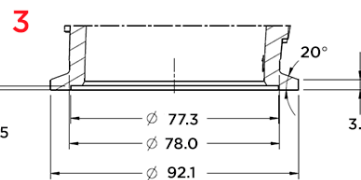
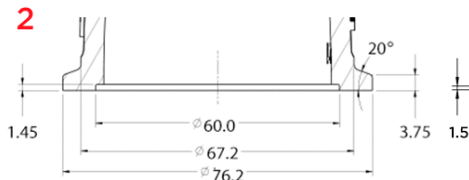
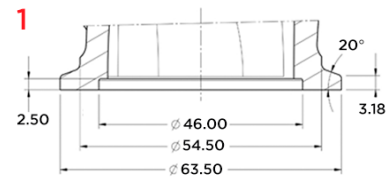


BOLTED INLET TURBINE HOUSINGS: T25 | T3 | T4 | T6 | GBC14



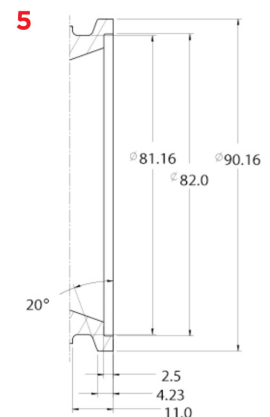
V-BAND INLET TURBINE HOUSINGS:

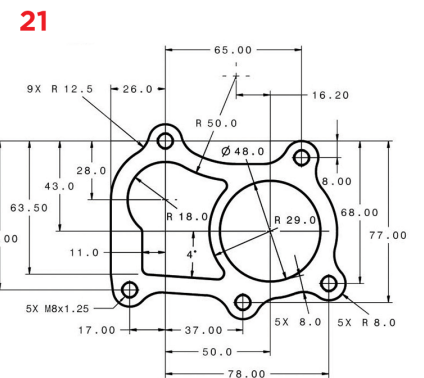
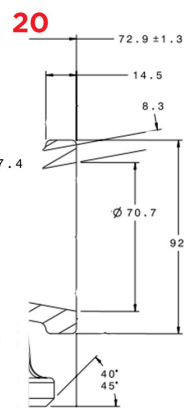
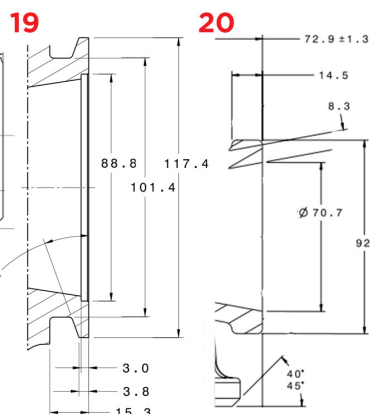
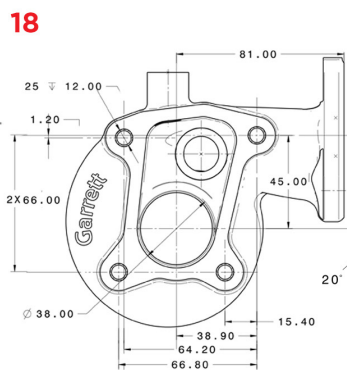
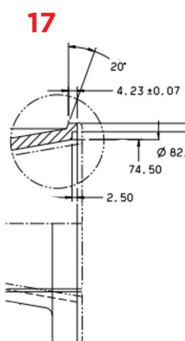
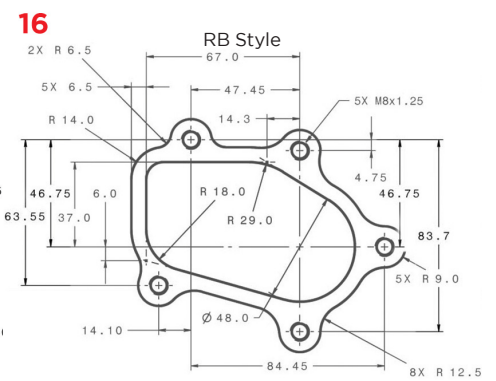
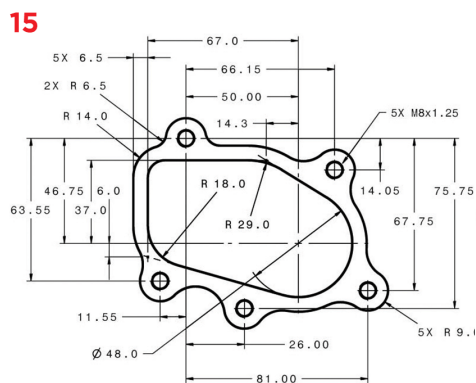
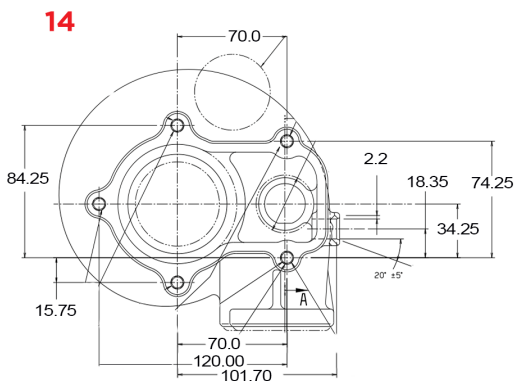
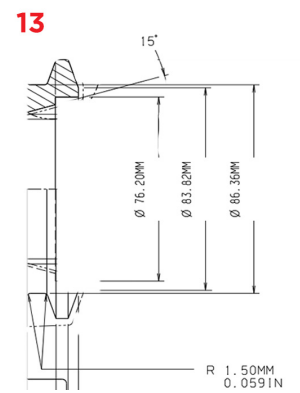
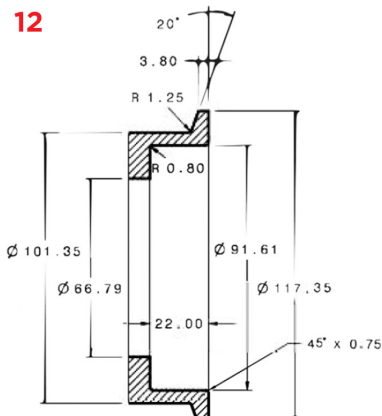
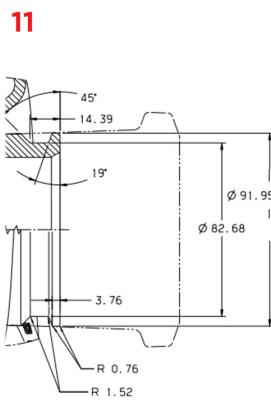
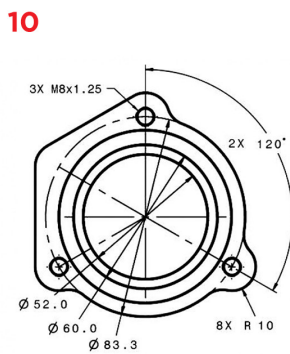
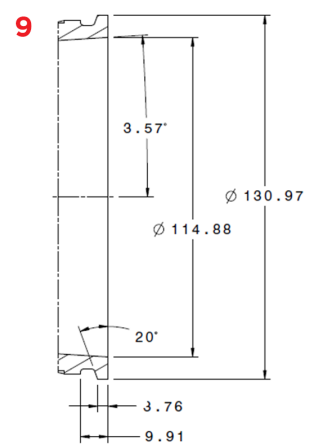
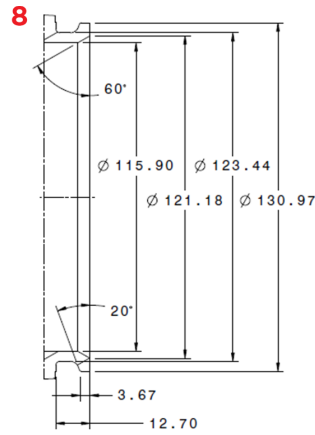
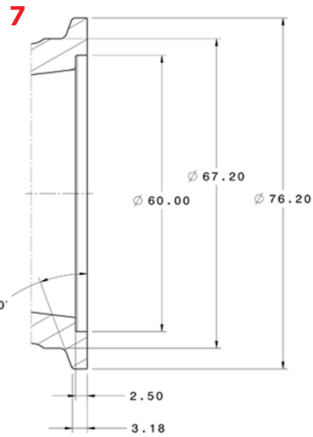
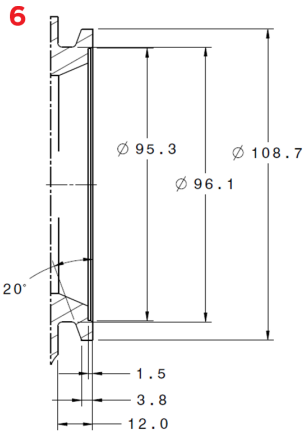
| Diagram | V-Band Turbine Inlet Flange Reference | | |
|---------|---------------------------------------|-------|--------------|
| 1 | GT28 | GTX28 | GTX28 Gen II |
| 2 | G25 | G30 | G35 |
| 2 | GT30 | GTX30 | GTX30 Gen II |
| 2 | GT35 | GTX35 | GTX35 Gen II |
| 3 | G42 | G45 | G40 |
| 4 | G57 G55 | 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 | |
| Dirty air cleaner element | ● | ● | | ● | ● | ● | | | | | Clean or replace filter element |
| Plugged 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 |
| Fuel 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 |
| Coked 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.

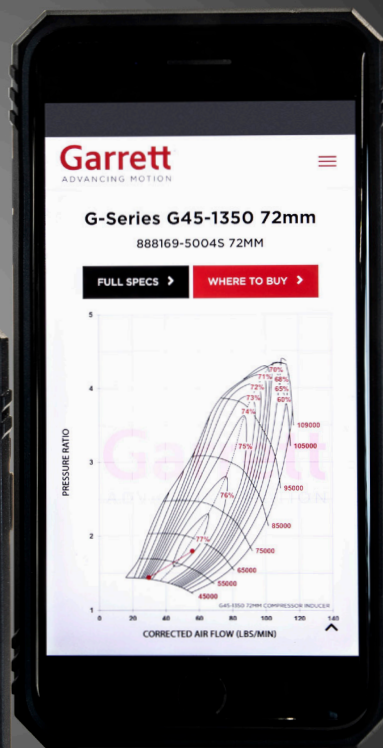
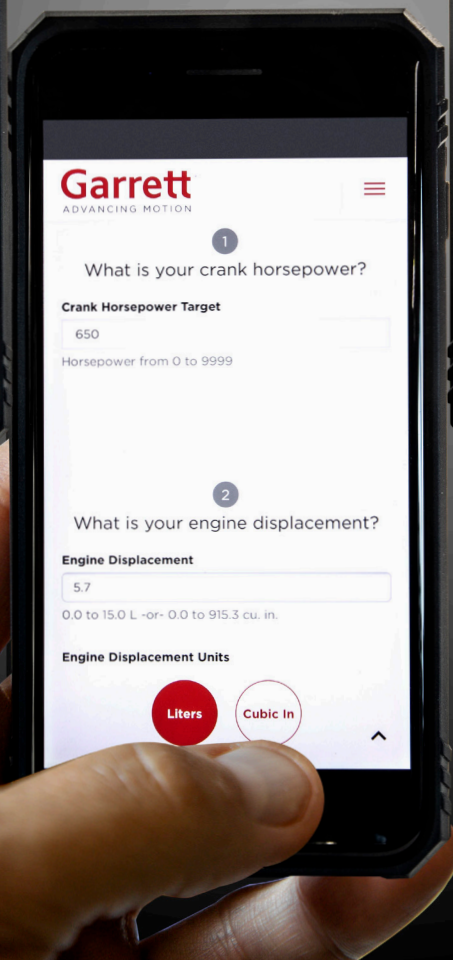
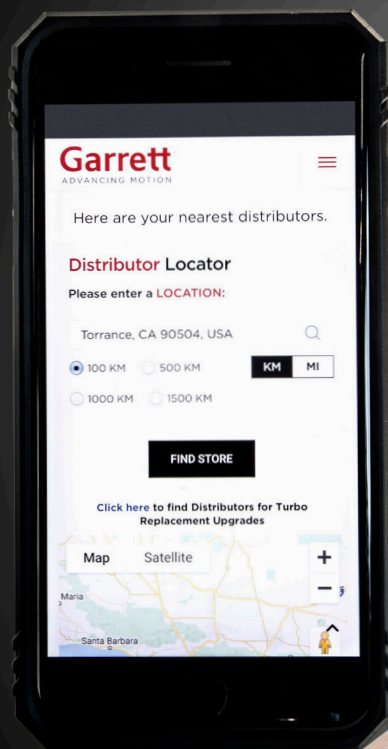
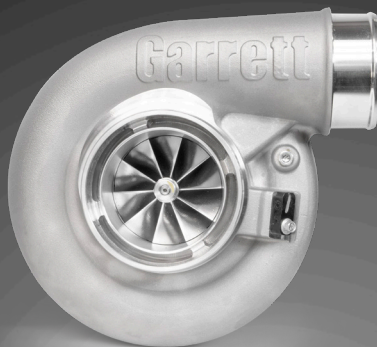
We recommend that Garrett products be installed by qualified automotive technicians. If you have doubts as to your ability to install our product, consult with a local automotive repair company. Carefully read all attached instructions prior to starting installation. If you have questions about the enclosed 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.



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