



GTURBO

WHY A GTURBO

FOR YOUR ZD30

2007-2016 NISSAN GU PATROL

Version 1.0 (2026)

PERFORMANCE BY DESIGN





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A photograph of the GTURBO storefront. The building has a dark grey facade with large windows. The 'GTURBO' logo is prominently displayed in large, 3D, metallic letters. The 'G' is red, and the rest of the letters are silver. The windows show the interior of the shop, which is dimly lit.

GTURBO

US

GTurbo is proudly Australian-owned and operated. Our turbochargers are designed and manufactured at our Balcatta facility in Western Australia.

ABOUT

Our story begins with founder Graeme Bentink, an avid explorer of Australia's rugged landscapes, who struggled with the limitations of an underpowered and inefficient 4WD.

Convinced his factory LandCruiser had untapped potential, Graeme used his background in process engineering and metallurgy to create a solution: a high performance turbocharger built for real-world conditions.





Fourteen years on, GTurbo has grown into one of Australia's leading manufacturers of high-performance diesel turbos and tuning solutions. Fuelled by a passion for performance, we engineer, test, and optimise every product to deliver maximum power and reliability for every drive.

**DRIVEN BY INNOVATION AND BACKED BY ENGINEERING
EXCELLENCE, WE FOCUS ON THE ENTIRE SYSTEM TO BRING
YOU GREATER POWER OUTPUT WITH EVERY UPGRADE.**



OUR TURBOS

**ENGINEERED
BY DESIGN**

**BUILT ON THE FOUNDATION
OF FACTORY-FITTED UNITS,
OUR TURBOCHARGERS ARE
COMPLETELY REIMAGINED
USING CUTTING-EDGE DESIGN
PRINCIPLES TO MEET
MODERN PERFORMANCE
DEMANDS.**

All GTurbo turbochargers are balanced using state-of-the-art, four-stage high-speed equipment, spinning at up to 200,000 RPM.

We use a proprietary GTurbo balancing procedure that delivers levels of precision far beyond any original turbo we've tested. This advanced balancing ensures quiet operation, exceptional reliability under extreme boost, and, most importantly, long service life. Each GTurbo is race-ready straight out of the box, with no need for extra tuning or preparation, giving drivers the confidence to push performance to the limit from day one.

**OUR COMPREHENSIVE REDESIGN DELIVERS MORE POWER,
GREATER EFFICIENCY, AND ENHANCED RELIABILITY UNDER
HIGH-DEMAND CONDITIONS, THROUGH IMPROVED AIRFLOW,
SUPERIOR MATERIALS, AND ROBUST CONSTRUCTION.**

1 Turbine Shaft

Larger and stronger, with advanced blade metallurgy.

2 Compressor Wheel

Precision billet aluminium or titanium, point-machined for uncompromised accuracy, far superior to line-machined alternatives common in the market.

3 Bearings

Reinforced to handle high boost with gapless seals for superior oil control.

4 Boost Capability

Rated over 40psi, ensuring durability even under over-boost conditions.

5 Variable Nozzle Technology (VNT)

Precision-controlled VNT for rapid spool, consistent boost delivery, and unmatched throttle response.





GTURBO & **THE ZD30**

The Nissan ZD30 is a 3.0L inline-four diesel engine renowned for its durability and adaptability across a wide range of off-road and commercial applications. Introduced in the late 1990s as the successor to Nissan's QD, BD, and TD engines, it brought a leap forward in power and efficiency thanks to modern engineering.

The ZD30 has proven itself as a dependable workhorse, built with a cast-iron crankcase, gear-driven balance shafts, and advanced electronic management systems. Over time, it evolved from its early mechanically injected form into a more advanced common-rail diesel (CRD) configuration—offering improved output, smoother operation, and compliance with stricter emissions standards.

The ZD30 CRD, fitted in vehicles such as the Nissan Patrol and select Renault models, remains a favourite among off-road enthusiasts and tourers. To fully unlock its potential, GTurbo offers a range of Australian-designed turbocharger upgrades engineered for increased low-end torque, higher peak power, and reliable performance in demanding conditions. We've outlined several upgrade stages to help you choose the best solution based on your performance goals and budget.

At GTurbo, we prioritise safe, reliable performance. The figures we publish reflect conservative, real-world results suited to long-term reliability. If you're aiming for more aggressive tuning, we can accommodate that, with the understanding that increased risk may be involved. We're here to guide you through the right setup based on your goals and how you use your vehicle.



PRODUCT GUIDE

FOR THE ZD30 PLATFORM





TURBOCHARGERS



ZD-G260 Titan
T T ZD30V S2.1

Description

Delivers rapid spool and strong low-end torque, perfect for touring and responsive everyday performance.

\$2990



ZD-G300 Titan
T T ZD30V S3

Description

Combines sharp response with massive midrange power, ideal for heavy towing and high-output builds.

\$3490



ZD-G320 Titanium
T T ZD30V S4

Description

Engineered for maximum boost and top-end performance, delivering extreme power for serious builds.

\$3890



ZD-G260 TITAN

STAGE 1: TURBO UPGRADE

RESPONSIVE | LOW-END TORQUE | DAILY DRIVES

The GTurbo ZD-G260 Titan delivers strong low-end torque and rapid response, giving your ZD30 the punch it should've had from the factory.

Whether you're towing, touring, or chasing big power off-road, the ZD-G260 Titan is designed to perform across a wide rev range with class-leading reliability.



PRICE **\$2990**

Key Features



The ZD-G260 Titan features a high-efficiency billet compressor wheel with our signature TITAN coating, engineered for ultra-low friction, extreme heat resistance, and long-term reliability.



This turbo is built for durability. It includes a larger high-efficiency turbine, reinforced thrust bearing, 60% stronger main shaft, and higher-flow Next-Gen VNT system to ensure consistent boost delivery and robust operation under load.



The ZD-G260 Titan is built for reliable performance under sustained load, with stepped piston ring seals on both compressor and turbine sides for long-term durability.

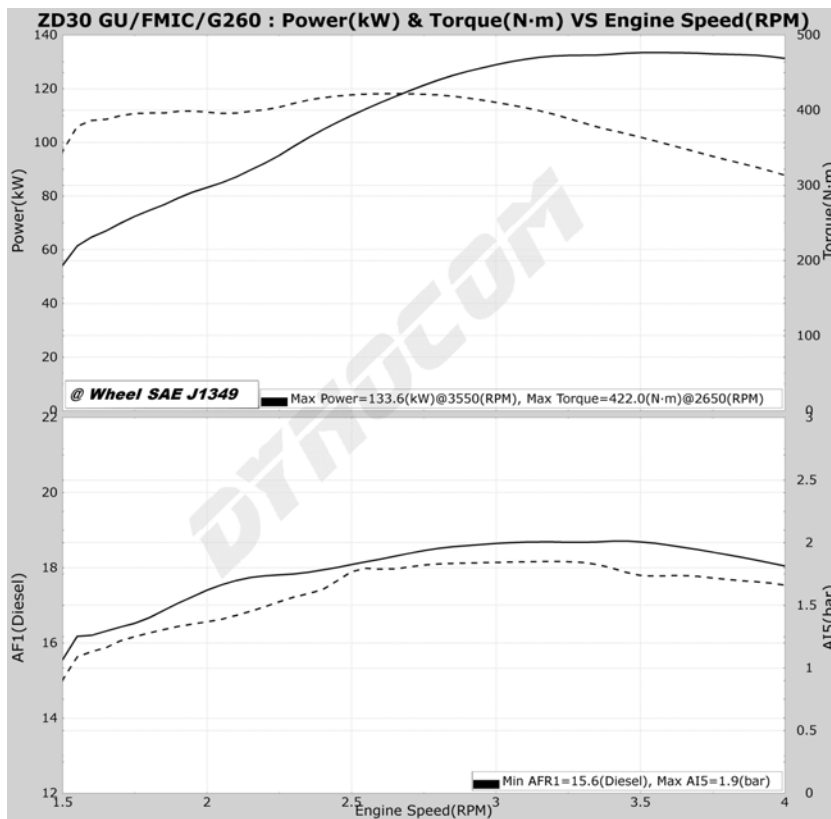
Performance Expectations

The ZD-G260 Titan delivers controlled, efficient boost from 10–32 psi, with a design boost of 28 psi. With a GTurbo ECU tune and supporting modifications, up to ~30 psi is available from as low as 1,600 rpm, with maximum boost limited to 26 psi at 4,000 rpm.

Product	Torque (Nm)	Power (rwkW)
Stock ZD30	280	80-90
ZD-G260T + remap	450-550	140-150
ZD-G260T + supporting mods*	600	180

*Supporting Mods = NPC10000 clutch or shift kit, intercooler, 3" exhaust, upgraded airbox, high-flow injectors.

The dyno graph below reflects the real-world performance of the ZD-G260 Titan on a ZD30 engine.



G TURBO

ZD-G300 TITAN

STAGE 2: TURBO UPGRADE

MID-RANGE PUNCH | REAL-WORLD PERFORMANCE

The GTurbo ZD-G300 Titan steps up overall performance, delivering strong boost response with a substantial increase in mid- to top-end power. Purpose-built for the ZD30, this turbocharger provides consistent, controlled boost across the entire rev range, making it an ideal choice for heavy towing, high-speed touring, and demanding off-road applications.



PRICE **\$3490**

Key Features



At its core, the ZD-G300 Titan has a high-efficiency billet compressor wheel with our aerospace-grade TITAN coating for ultra-low friction and extreme heat resistance.



The ZD-G300 utilises a larger stainless-steel VNT actuator to improve corrosion resistance and deliver more stable, precise variable nozzle control, ensuring consistent boost regulation under sustained load and high-temperature operation.



The ZD-G300 Titan has a 4340 chromoly shaft, stepped piston ring seals, and enhanced oiling to the thrust bearing to provide long-term durability under sustained boost.

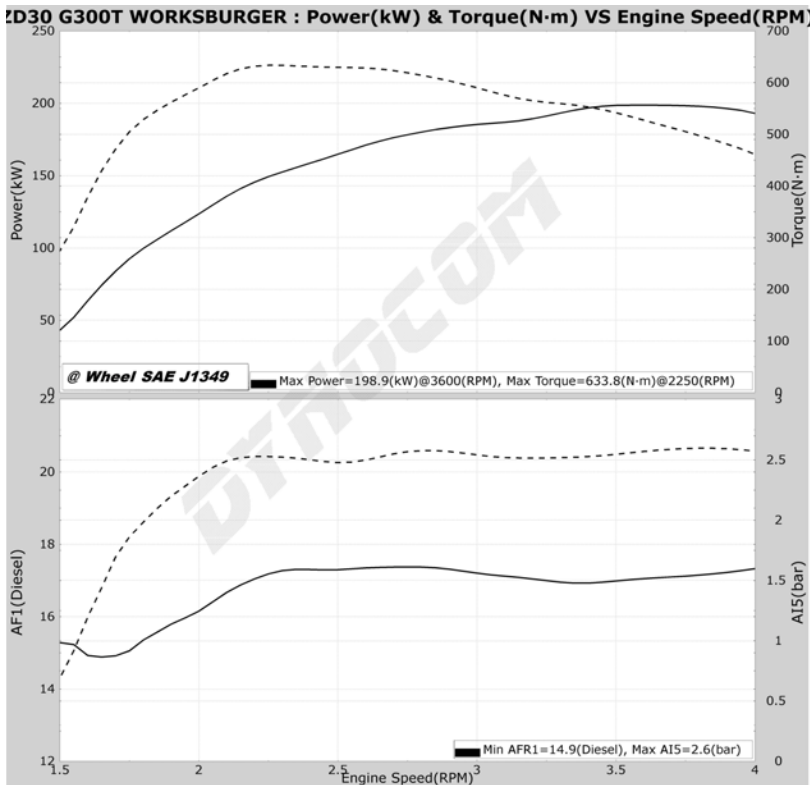
Performance Expectations

The ZD-G300 Titan is engineered for 34 psi, operating efficiently from 16–36 psi under ECU control. With a GTurbo ECU tune and supporting modifications, ~30 psi is on tap from around 1,800 rpm, delivering hard-hitting mid-range and sustained top-end performance.

Product	Torque (Nm)	Power (rwkW)
Stock ZD30	280	80–90
ZD-G300T + remap	450–550	140–150
ZD-G300T + supporting mods*	700	200

*Supporting Mods = NPC10000 clutch or shift kit, intercooler, 3" exhaust, upgraded airbox, high-flow injectors.

The dyno graph below reflects the real-world performance of the ZD-G300 Titan on a ZD30 engine.





ZD-G320 TITANIUM

STAGE 3: TURBO UPGRADE

SUPERIOR TOP-END POWER | DEMANDING DRIVES

The ZD-G320Ti is our highest-flowing turbo for the ZD30, engineered for serious power and long-term reliability. It's designed for those chasing big numbers, heavy towing loads, or strong top-end performance that doesn't fall away at higher RPM. While it still delivers solid bottom-end response, this turbo really shines from the midrange through to redline.



PRICE **\$3890**

Key Features



The ZD-G320 Titanium features our 6AL4V titanium compressor wheel, offering unmatched fatigue resistance, exceptional strength, and superior balance retention under long-term load. It also resists damage from foreign object impact, making it ideal for harsh off-road and high-performance environments.



Combined with our large high-flow turbine, this setup delivers massive flow and exceptional thermal stability under high boost and EGT conditions.



The ZD-G320 Titanium has a 4340 chromoly shaft, stepped piston ring seals, and enhanced oiling to the thrust bearing to provide long-term durability under sustained boost.

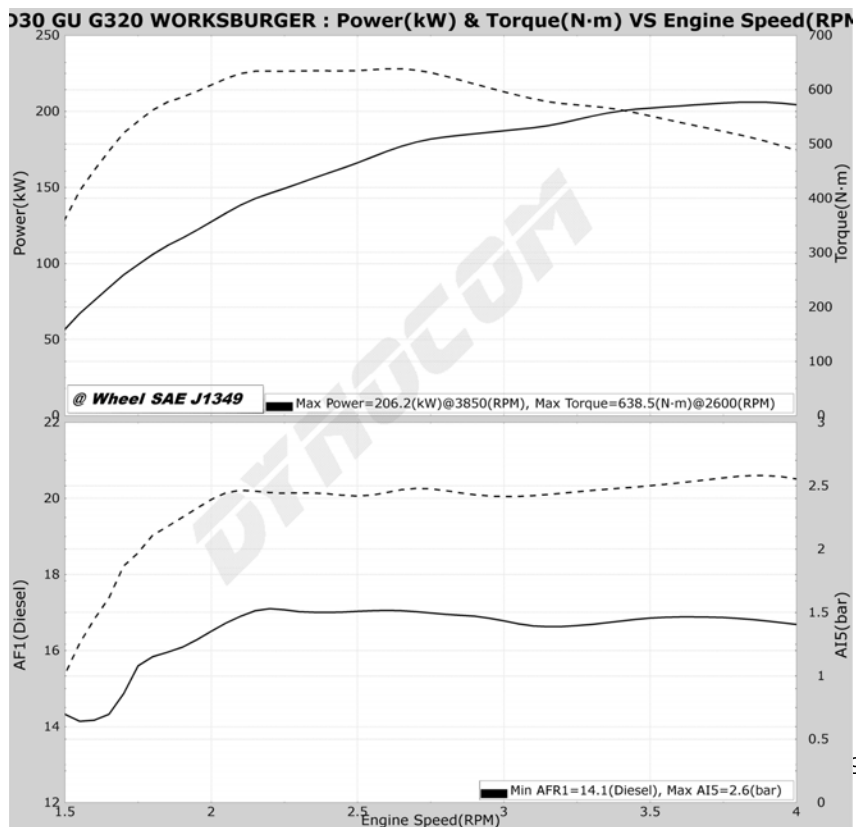
Performance Expectations

The ZD-G320Ti operates efficiently between 16–42 psi and requires a GTurbo ECU tune with appropriate supporting modifications. In a correctly matched setup, boost reaches ~20 psi at 1,550 rpm, rises to ~36 psi by 2,000 rpm, and holds ~35 psi through to 4,000 rpm.

Product	Torque (Nm)	Power (rwkW)
Stock ZD30	280	80-90
ZD-G320Ti + remap	450-550	140-150
ZD-G320Ti + supporting mods*	800	240

*Supporting Mods = NPC10000 clutch or shift kit, intercooler, 3" exhaust, upgraded airbox, high-flow injectors.

The dyno graph below reflects the real-world performance of the ZD-G320Ti on a ZD30 engine.



SUPPORTING MODS





High-Flow Airbox
A AB GT GU

Description

Unrestricted airflow and ultimate dust sealing for maximum engine performance.

\$1535



NPC Viper Clutch
C CL XZD T9

Description

Heavy-duty clutch rated for up to 600Nm, delivering factory-like drivability with unmatched strength for high-torque builds.

\$2490



Intercooler - L Core
A IC AA T6F A

Description

High-performance cooling upgrade that lowers intake temps, sharpens throttle response, and maintains power under load.

\$1700



Intercooler - XL Core
A IC AA T6F A

Description

Optimised airflow and thermal efficiency to support higher boost and sustained performance.

\$1800



HF Injector Nozzles
F | ZD30 BS HFN

Description

Maximum fueling capability for extreme power builds, designed for durability and precise delivery.

\$2790



+100% Injectors
F | ZD30 +100 GNHF

Description

High-flow injectors offering a 100% increase in fuel delivery, supplied on an exchange basis.

\$3490



HIGH-FLOW AIRBOX

NISSAN GU PATROL AIRBOX

DURABLE | LIGHT-WEIGHT | DROP-IN FIT

GTurbo's high-performance airboxes are engineered for maximum airflow, strength, and durability to complement our turbo systems. Designed for harsh conditions, they deliver consistent performance, reliable filtration, and the long-term protection needed for high-power builds.



PRICE **\$1535**

Features

Our High-Flow Airbox features a market-first double-seal system for superior dust and water protection in the harshest conditions. Built from 3mm alloy with 8mm flanges and finished in corrosion-resistant anodizing, it delivers strength, durability, and long-term reliability.

Designed as a direct OEM replacement, it uses factory mounting points and utilises a VDJ79 filter for ease of servicing. Unlike plastic factory units that flex and leak under load, GTurbo's alloy design ensures clean, cool, and unrestricted airflow, improving engine performance and providing consistent protection for towing, touring, and serious off-road use.

Why it's needed

High-performance turbos demand more air than the factory airbox can deliver. Stock units can become a major restriction, reducing power and efficiency.



NPC VIPER CLUTCH

GU PATROL ZD30 MANUAL TRANSMISSION

EXCELLENT DRIVEABILITY | RELIABLE | STRONG

GTurbo proudly partners with NPC to deliver heavy-duty clutch solutions for your GTurbo upgrade. Whether you're towing, touring, or chasing serious power, these clutch kits provide the strength to manage high torque without sacrificing drivability, making them the ideal upgrade for demanding builds.



PRICING FROM **\$2490**

Features

The NPC clutch upgrade for the ZD30 GU Patrol is engineered to handle up to 1,000Nm of torque, making it an ideal match for high-performance turbocharged applications. Manufactured by NPC, this kit eliminates the factory dual-mass flywheel, known for failure under increased load, by replacing it with a billet flywheel for improved strength, reliability, and heat resistance.

Combined with a heavy-duty pressure plate and performance clutch disc, the system delivers superior clamping force while maintaining smooth engagement and a predictable, factory-like pedal feel under demanding conditions.

Why it's needed

If you're chasing more than 500Nm at the wheels, a clutch upgrade is essential. The factory clutch simply isn't designed to hold that level of torque, especially under sustained load, and will quickly become a limiting factor in drivability and reliability.

FM INTERCOOLER

ZD30 GU PATROL PDI INTERCOOLER

UNMATCHED COOLING | EFFICIENT | SEAMLESS

The PDI Front Mount Intercooler Kits provide the ultimate cooling upgrade for the ZD30 platform. Engineered for serious performance in demanding conditions, this upgrade delivers dramatically lower intake temperatures, improved throttle response, and reliable power delivery, especially under load.



PRICING FROM **\$1700**

Features

The PDI Front Mount Intercooler kit for the ZD30 GU Patrol is engineered for efficient cooling, clean fitment, and durability, featuring a rear-set core design to improve airflow and bullbar and winch clearance. Two core options are available: an extra-large 675 × 370 × 76 mm core offering approximately 40% greater frontal area for maximum cooling, and a large core 675 × 260 × 76 mm option lifted by 110 mm to suit all bullbar and winch combinations, both sharing identical outlet locations.

All kits include high-flow end tanks, 2.5-inch stainless steel piping, oil-resistant silicone joiners, and quality clamps. Turbo-side pipework tapers from 2.5 inches to 2 inches for smooth alignment, while intake-side piping remains 2.5 inches with MAP sensor and spare outlet provisions. The result is a direct-fit intercooler system that lowers intake air temperatures, reduces EGTs, improves throttle response and tune stability, and delivers fuel economy gains.

Why should I upgrade my intercooler?

The ZD30 engine runs rich with relatively low factory boost, resulting in high exhaust gas temperatures, especially as power is increased. The factory top-mounted intercooler quickly becomes a limitation due to heat soak and inconsistent performance, while replacement top-mounted units offer only marginal gains and increased induction noise.

A front-mounted intercooler delivers significantly lower inlet air temperatures, reducing EGTs, improving performance consistency and efficiency, and making it a critical upgrade for towing, touring, off-road use, and tuned or high-boost ZD30 applications.

Why do the kits differ for each vehicle?

PDI offers multiple core configurations to suit different vehicle setups and usage requirements. The extra-large core is ideal for customers seeking maximum cooling performance and efficiency, while the raised-core option provides excellent intercooling capability with increased clearance for vehicles fitted with bullbars and winches. Both designs are engineered to integrate cleanly with the GU Patrol chassis and ZD30 engine layout.

Type	Core Size (mm)	Price
Large Core	675 × 260 × 76	\$1700
Extra Core	675 × 370 × 76	\$1800

Optional Add-Ons

Automatic Transmission Cooler

For automatic GU Patrols, an optional 45,000 BTU transmission cooler mounts directly to the intercooler using supplied adjustable brackets for optimal airflow. If retaining the factory cooler, custom brackets are required, with passenger-side mounting in front of the hot side recommended for effective cooling.

**OPTIONAL
UPGRADE \$520**

HIGH-FLOW INJECTORS

+100% HIGH-FLOW INJECTORS

PRECISION-FLOW | INTEGRATED | RELIABLE

GTurbo High-Flow Injectors are designed for seamless integration with GTurbo systems. These injectors deliver precise fuel delivery for stronger throttle response, increased torque, and big-power capability.



PRICING FROM **\$552**

Why upgrade Injectors?

Upgrading injectors is essential when chasing more than ~160rwkW or 550Nm at the wheels, as the factory injectors simply can't deliver the required fuel. Larger injectors reduce the workload on your injection system. By delivering more fuel at lower rail pressures, they help take the strain off your injector pump while improving atomisation and combustion under load. Whether you're chasing more torque, better fuel delivery under boost, or future-proofing your build for power goals, high-flow injectors are a key part of the puzzle.

Whether you're building a mild daily or targeting 200+rwkW and over 700Nm, these injectors are proven performers. Fully ECU-controllable, your tuner can tailor them to suit a wide range of setups and torque targets, giving you flexibility without compromise.

What we offer?

GTurbo has developed a range of +100% high-flow injectors for the ZD30 engine. These are designed to integrate seamlessly with GTurbo turbocharger systems and performance packages.

Purchase Options

New Genuine Nissan +100% High-Flow Injectors

Genuine brand-new injectors are precision-modified and flow-matched by GTurbo for maximum performance.

PRICE **\$3490**

+100 % High-Flow Injector Nozzles Only

Retain your existing injectors while boosting performance with GTurbo's precision-engineered high-flow nozzles. Perfect for customers working with local fuel specialists, this option delivers increased fueling capacity without replacing the entire injector.

PRICE **\$552**

Fitting Kit

Our complete kit with everything you need for an injector install: Gaskets, seals and injector seats.

PRICE **\$199**

Performance Expectations Table

Product	Torque (Nm)	Power (rkwW)
Stock ZD30	280	80-90
ZD-G250T + Tune + HF Injectors*	600	180
ZD-G300T + Tune + HF Injectors*	650-700	180-220
ZD-G320Ti + Tune + HF Injectors*	700-800	200-240

*HF Injectors = +100% High-Flow Injectors

PRODUCT GUIDE

CONSIDERATIONS

Before Upgrading

Before upgrading your turbo, it's crucial to plan for the supporting modifications that make extra power safe and reliable. Relying on stock components can limit performance, or worse, lead to engine or driveline damage. Ensuring the right supporting mods will protect your investment and unlock the full potential of your GTurbo upgrade.

Supporting modifications

We have provided extensive information on preceding pages regarding supporting modifications. To summarise:

REQUIRED

- NPC Viper clutch upgrade

RECOMMENDED

- PDI Front-Mount Intercooler
- Minimum 3" Exhaust
- Airbox
- High-Flow Injectors

Tuning

At GTurbo, we prioritise safe, reliable performance. The figures we publish reflect conservative, real-world results suited to long-term reliability. If you're aiming for more aggressive tuning, we can accommodate that, with the understanding that increased risk may be involved. We're here to guide you through the right setup based on your goals and how you use your vehicle.

Fueling

The factory ZD30 injectors become a restriction around 150 rwkW and ~500–550 Nm at the wheels. To safely exceed this, we recommend +100% high-flow injectors, which support 200+ rwkW and 700–800+ Nm.

Intake Manifold Cleaning

Over time, the EGR system allows oily vapour and soot to build up in the intake manifold, forming sludge that restricts airflow and reduces performance. Given the age of these vehicles, most benefit from a thorough intake clean to restore airflow and efficiency.

MAF Sensor & Turbo Boost Control Solenoid

The MAF sensor and turbo boost control solenoid are common failure points on the ZD30 CRD. The MAF directly affects fuel delivery, and inaccurate readings can cause over- or under-fuelling, leading to high EGTs, poor drivability, and engine stress. The boost control solenoid regulates VNT operation; failure prevents proper vane control and can cause uncontrolled overboost, placing extreme load on the turbo and risking rapid failure.

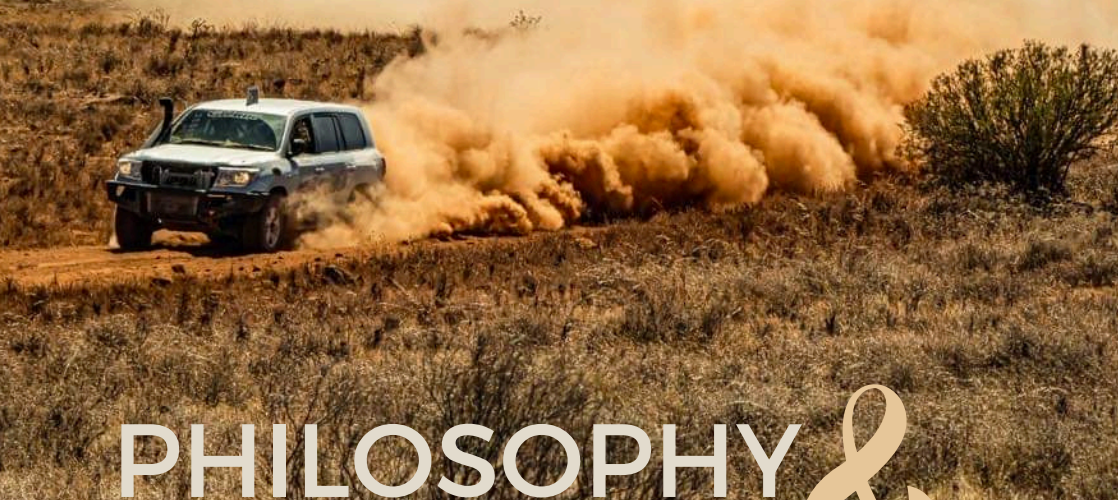
For this reason, GTurbo strongly recommends using GENUINE sensors only, as aftermarket replacements often provide incorrect control signals and increase the risk of turbo damage.

Aftermarket Chips & Piggyback ECUs

Aftermarket chips and piggyback ECUs are unsuitable for the ZD30 CRD, as they manipulate sensor signals without properly recalibrating the factory ECU, often causing incorrect fueling, poor boost control, and unsafe operating conditions. The ECU should instead be tuned through proper remapping or reprogramming, ensuring fuel delivery, boost control, and safety strategies remain correctly integrated for safe, reliable performance.

Manual Boost Controllers & Needle Valves

Manual boost controllers (bleed valves, needle valves, or T-piece setups) must not be used on the ZD30 CRD, as they cannot properly control a VNT turbocharger and only manipulate pressure rather than vane position. This leads to unstable boost, excessive shaft speed, and uncontrolled exhaust energy, greatly increasing the risk of turbocharger failure.



PHILOSOPHY & WARRANTY

Philosophy

GTurbo turbos are designed to safely handle the boost levels we specify, while maintaining exceptional durability and performance. Our units are bolt-on replacements, connecting seamlessly to your existing manifold and exhaust for a straightforward upgrade.

At GTurbo, we prioritise safe, reliable performance. The figures we publish reflect conservative, real-world results suited to long-term reliability. If you're aiming for more aggressive tuning, we can accommodate that, with the understanding that increased risk may be involved. We're here to guide you through the right setup based on your goals and how you use your vehicle.

Warranty

Every GTurbo product comes with a 12-month warranty against manufacturing and assembly defects. This excludes our titanium models which are covered for 24-months under warranty.

We take pride in delivering world-class products that significantly enhance your vehicle's performance and in providing outstanding support to ensure the best possible GTurbo experience.

While we'll assist you wherever possible, please note that we cannot accept liability for issues caused by factors outside our control.

CONTACT US

G GTURBO

PERFORMANCE BY DESIGN

We're here to help you get the most out of your diesel performance. Whether you have questions about our products, need advice on the right upgrade, or want to book a tune, the GTurbo team is ready to assist.

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Opening Hours

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Saturday – Sunday:

Closed

PERFORMANCE BY DESIGN

