

Limited TURBOCHARGER 3 Year Warranty (1 Year for Stage 1 Turbochargers)

PLEASE NOTE: The below information can save time, money and frustration:

Turbochargers and Stepper Motors are manufactured using machinery that has built-in, comprehensive checks and balances for quality control(QC). All turbos are electronically VSR balanced and QC checked before they leave the factory. They are manufactured to fine tolerances and unlikely to fail immediately upon install. Manufacturing to high standards gives an extremely low manufacture failure rate of around 1%.

In the event of malfunction, the turbocharger is suspected to be at fault and is replaced, only to suffer a subsequent failure of replacement. Investigation into cause of failure then reveals the actual reason for failure is not the turbo itself. It is a costly and frustrating sequence of events. To prevent this from happening, it is important to **ascertain why the original turbocharger failed and rectify that fault FIRST.**

NOTE: Qualified mechanics who do not work regularly on turbochargers, often apply standard installation techniques that cause turbocharger failure.

More than 95% of Turbocharger failures are caused by these 3 things: 1) Oil Starvation. 2) Oil Contamination. 3) Foreign Object Damage.

By purchasing you are accepting the terms and conditions of this warranty and our other policies of sale and return.

If you do not agree to these conditions, please contact us immediately BEFORE turbo or part supplied is installed, for return procedure under such circumstance.

If you need to contact us regarding a warranty query, please do so as soon as the issue is discovered.

And please do as follows:

First, please read the confirmation of purchase email you would have received when item was shipped. (will have "POSTED:" in the subject line, and paid invoice attached).

That email contains information about Warranty & Terms and Conditions of sale.

Then EITHER:

- 1) **Log in to your Client Portal at: <https://www.autopowerhouse.com.au/auto-blog/my-account>**

(when your order was processed, you would have received a login link and a password reset email) **and select "Submit Ticket" from menu on left.**

OR

- 2) **Go to: [https:// www.autopowerhouse.com.au/auto-blog/submit-ticket](https://www.autopowerhouse.com.au/auto-blog/submit-ticket) and fill in form from here** (when requested in the form, and if still available, please add the SAME email address you used when you purchased).

This will begin the warranty process and you may be asked to provide further information or be issued a return authorisation (RMA) and a return shipping address.

(Please note: Items received without a return authorisation (RMA), will be sent back 'Return to Sender'.)

Calls received by phone regarding warranty or certain technical aftersales service, will be guided back to the warranty process.

Please allow at least 1 business day for initial & subsequent response to any warranty communications.

Once return has been authorised, item must be sent (post marked as shipped) within 14 days of authorisation.

GENERAL NOTE:

This business can only provide low prices due to being primarily an online business and its use of internet technologies, email communications, low cost premises, limiting time use in processing orders, answering phone inquiries and administration (by batching of all these processes to make operations more efficient).

Any buyer that does not follow these processes, is affecting the ability of the business to operate at a low cost, thereby putting downward pressures on margins and hence requiring an increase in prices offered to buyers.

Buyers that are not willing to follow such processes and terms and conditions of sale set out in this document and on the website, should not purchase from this business as it affects other buyers' ability to access products at these low prices.

Note on technical advice: As a supplier of parts only, the business is not under any obligation to provide technical advice regarding operation or installation. It is assumed that the buyer has the knowledge or is going to procure the services of a qualified person who has the appropriate knowledge. (see 1. below for more information).

Any advice offered is therefore at the sole discretion of the business, is general advice only and should not be used or construed as professional and definitive.

If more definitive advice is required, the contracted rate is: \$80 per hour excl GST (in 1-hour increments), paid in advance.

If installation or servicing / maintenance is not performed 'professionally' (as per the definition in 1. below), we are not able to provide any after sales support.

The warranty and our terms of sale do not affect general consumer guarantees as outlined by Australian Consumer Law.

WARRANTY CONDITIONS for Limited 1/3 Year Warranty.

1. Auto Power House Turbos (the warrantor, herein referred to as APH), warrants each turbocharger or turbocharger system component supplied by seller to be free of defects in material and workmanship under normal road use and operating conditions (warranty not covering excess commercial use or racing) and normal vehicle service, for thirty six (36) months from date of sale. (EXCEPT: 12 Months for Stage 1 and above Turbochargers). As an

express condition of this limited warranty, cover will only apply where initial installation of turbocharger supplied and service and maintenance for vehicle, can be proven as undertaken by a 'Professional Mechanic'. For the purpose of all Warrantor's policies and documents, 'Professional Mechanic' is defined as: Currently certified and qualified mechanic, operating a workshop as a business. The qualified mechanic will also need to have previous experience with turbocharger installation and is aware of and follows turbocharger installation best practice. (also see 8. below regarding best practice).

1.a. As part of the warranty process, you may be required to supply tax invoices from installation and/or maintenance mechanic. Such invoices should be the standard workshop invoices with line items and prices for parts/consumables/labour used at installation or during services and maintenance.

1.b. This warranty is STRICTLY limited to the part, turbocharger, or workmanship of the turbocharger only as per parts supplied on APH invoice of sale to buyer and does not include any parts or components associated with, attached, or connected to the turbocharger unit. This warranty does not cover incidental or consequential damages or expenses of any kind incurred by buyer under any circumstances, nor does it cover any costs of installation under any circumstances. This warranty does not cover any shipping or transport costs unless expressly agreed upon in writing by APH, or unless it is specifically covered by our policy documents.

1.c. Any failure due to defect in material or workmanship discovered within the 12 or 36 month warranty period must be reported to us by the purchaser and returned within the warranty period as stated above. All warranty claims are to be conducted via our warranty process only, under the conditions as set out previously.

2. Any turbocharger or turbocharger system component that has been supplied by the warrantor as a warranty replacement shall be supplied under all the same conditions set out in this policy EXCEPT the new turbocharger or turbocharger system component will be covered under warranty for a period of six (6) months from the date of shipment and only where installation and service conform to the terms of this document.

3. If a turbocharger or a vehicle to which a turbocharger or turbocharger system component supplied by the warrantor has been installed, has ownership transferred from initial purchaser to another person or entity, warranty does not transfer across automatically. It is at the sole discretion of the warrantor as to how, if any, remedy is provided. This may include repairs at cost, provision of a new part at discounted cost, no remedy.

4. If a defect is discovered upon delivery and initial inspection of the product, (due to shipping mishandling) the customer must report the discovery to us within 7 days of receiving the item.

5. As an express condition of this limited warranty, the unit must be installed and operated in accordance with the manufacturer's recommended procedures. Any recommendations here do not supersede manufacturers recommended procedures but are to be used in conjunction. The warranty does not cover incorrect installation under any circumstances.

6. Modifications: Changes such as unauthorised boosting pressures or installing turbo or turbocharger system component supplied, on vehicle other than that specified by the original factory manufacturer or APH, voids all warranty, as does any modifications made to the turbo or systems connected to the turbo.

Exceptions to 'Modifications' above and general install information:

6.a. **Realignment for Fitment:** Turbocharger system components are supplied as factory replacement. However, depending on vehicle set up, a compressor or CHRA angle re-alignment may be required for correct fitment. This is a standard procedure so does not constitute a modification under normal installation or under this warranty. Re-alignment is defined and effected by slight loosening of a few nuts, a central vband or split ring depending on turbo model. Once loosening has occurred, compressor / turbine housing or CHRA can be SLOWLY (to prevent damage to seals) rotated to correct angle.

6.b. **Boost Pressure:** Where an internal wastegate or variable vane system applies, boost pressure (wastegate opening) is set in the range of factory pressure (generally around 10 – 12psi - model dependent). This ensures a balance between efficiency, effective boost and useful life of turbo. However, factors such as exhaust flow and general condition and 'tuning' of the engine can also affect actual boost pressures achieved. On most turbos there is limited adjustment available on the actuator arm and this is generally used to adjust arm length when a realignment is done as in 6.a) above, not to adjust boost. Control of boost is recommended via an electronic controller or a manual boost controller (such as a Dawes and Needle Valve in the case of pneumatically actuated turbochargers). They generally deliver a smoother boost curve than factory standard and prevent over-boost spikes that contribute to accelerated turbo wear or turbo failure. Where unauthorised adjustments to boost have been made or ECU re-mapping has been used to increase performance in the vehicle, warranty will be voided. Likewise, we do not warranty turbos where over-boost has been a factor involved in damaging the turbo, or reducing the working life of the turbo.

6.c. **Hiace Stepper Motors:** Where a new Stepper Motor or Turbocharger and Stepper Motor are being installed into a Toyota Hiace only, a software upgrade to the ECU MAY be required to make sure error code does not persist.

Please see the following page for more information:

<https://www.autopowerhouse.com.au/auto-blog/turbocharger-electric-stepper-motor-actuators/>

6.d. **Stepper Motor Calibration:** Where any Stepper Motor is installed either to an existing turbocharger or one supplied by APH as a standalone unit or as a bundle of turbocharger and stepper motor supplied, some 'calibration' of stepper motor may be required to have correct actuation of variable vanes inside turbocharger across boost range.

For more information on this, please read document:

<https://www.autopowerhouse.com.au/auto-blog/turbocharger-electric-stepper-motor-actuators/>

The above calibration is generally NOT necessary where a turbocharger is supplied with the stepper motor already attached to the turbo (i.e. already flow-tested at factory).

7. The warranty does not cover any damage to goods in transit, abuse or misuse, neglect, improper maintenance, unauthorised modifications, alteration or accident, competition use, excess commercial use, or natural disasters.

8. The warranty does not cover failure due to incorrect installation or negligence to perform best practices when installing a turbocharger.

Best practices (strictly required for warranty to be valid) for turbo installation include, but are not limited to:

- **Ascertaining why the original turbocharger failed and rectify that fault FIRST.**
- New oil filter (oil filter primed at install), quality engine oil, new air filter.
- New oil feed line (or at minimum ultrasonically cleaned where appropriate).
- Clean and flush ENTIRE oil system, including dropping out sump and cleaning oil pick up / oil scavenge pump (where fitted) cleaned and tested, oil check valves (where fitted) tested for correct cracking pressure, replaced or cleaned where necessary.
This is also relevant to newly rebuilt engines – as fine abrasive grit from machining may not have been adequately flushed from the system.
- SPECIAL NOTE: Screen Filters inside Banjo Bolts fitted to oil feed lines on Subaru & Ford XR6, MUST be replaced at install (and during regular servicing).**
- Sump ventilation/engine breather system including breather hoses and filters cleaned or replaced where necessary.
- Oil pressure through now-cleaned oil system (via new or cleaned feed line) MUST be tested for correct flow of oil to turbo.
- Oil return hose replaced or checked for damage and cleaned. Return of oil to sump checked and must flow freely through return line without 'pooling' in line and no back pressure from sump (a symptom of poor sump ventilation).
- Intercooler removed and cleaned, induction pipes checked and cleaned, and exhaust cleaned if previous turbo leaked oil into the exhaust system.
- Catalytic Converter, EGR Valve, DPF system and manifold should be checked and cleaned to eliminate excessive back pressure.
- It is also recommended that the Air Flow Meter be replaced at same time as turbo or cleaned at minimum.
- Water lines checked (in the case of water-cooled turbos), to be free from obstruction and hoses are not damaged internally.
- Entire installation process clean and free from any debris (this includes NOT using liquid gaskets, liquid sealant or exhaust sealing paste on any flange that can be sucked into turbo). Please only use correct stainless or fibre/paper gaskets either supplied or as recommended for that turbo.
- Turbo must be primed before initial start-up with oil injection into turbo oil gallery to coat thrust bearing, hand cranks of shaft to encourage oil distribution, and ignition-less engine cranks to build oil pressure in feed line and oil gallery prior to initial start-up. Engine idled for 5 minutes (no revving) and oil pressure checked to application specification.
- Check all systems for oil, air, vacuum, or exhaust leaks especially around hose pipe fittings and flanges.

Failure to do the above, or use of liquid gaskets, voids warranty.

9. The warranty does not cover failure due to incorrect or negligence in performing best practices when servicing / maintaining a turbocharged vehicle.

Best practices (strictly required for warranty to be valid) for servicing / maintenance include:

- Regular replacement of components in 8. above, where required.

- CRITICALLY, oil filter and quality oil of manufacturers recommended specification or better, changed every 6 to 12 months (maximum) or 5,000 to 10,000 km depending on vehicle type and environmental conditions of vehicle use.
- **SPECIAL NOTE: Screen Filters inside Banjo Bolts fitted to oil feed lines on Subaru & Ford XR6, MUST be replaced, removed, or cleaned during regular servicing.**

Failure to do the above, voids warranty.

A Warranty Form needs to be filled in to start the Warranty Process.

The form requests information such as:

- Your details
- Vehicle details
- Problems with the original turbo (why it was replaced)
- Timeframes for current turbo use
- Original installation mechanics details
- Diagnosing / servicing mechanical details

Requests for further information will be advised during warranty process and may include copies of the mechanics tax invoices as proof of qualified fitment, correct maintenance or diagnosis and occasionally photos to clarify the issue at hand.

10. The warranty does not cover failure due to damaged compressor or turbine wheel due to Foreign Object Damage (FOD). And does not cover the breaking of turbo shaft, shaft/wheel play or loosening of compressor wheel nut, where such has happened under misuse or factors such as oil contamination and /or oil starvation. Indications of which include scouring of shaft and / or 'blueing' of internal components due to heat from lack of lubrication.

11. Air leaking at gaskets due to incorrect installation or oil leaking at seals is generally not covered by this warranty. Oil leaks are usually a symptom of incorrect oil pressure in supply or drain of oil or shaft 'wobble' allowing oil to escape the CHRA and release into the compressor or turbine. The warranty will only cover oil leaking under exceptional circumstances where it can be proven that a manufacture fault is at cause.

For more information on the issue of oil leaks, please see:

<https://turbo-torque.blogspot.com.au/2010/10/turbo-blues.html>

12. Normal wear of service items shall not be considered defects under this warranty.

13. Where a Turbocharger and Stepper Motor have been ordered together, they are supplied as separate components but bundled together for cheaper shipment and to provide a discounted price for the buyer. As such, each component has a separate warranty and a separate price. That is, should there be an issue with the turbo system (Turbocharger and Stepper Motor) supplied, the 2 components are treated as separate units for warranty purposes. It is highly unlikely for 2 components to fail simultaneously, so steps must be taken to isolate the issue to either component. Should a factory defect be suspected in either component, only the component that is suspected to have the issue, will need to be returned under conditions as per this warranty document.

Please see the following page for more information:

<https://www.autopowerhouse.com.au/auto-blog/turbocharger-electric-stepper-motor-actuators/>

14. Freight cost for the return of goods to APH will be incurred by the purchaser, and liability of cost of return of goods back to the purchaser, will be determined from the results of the inspection report as to the cause of the failure. If the warranty claim is successful, the return freight back to purchaser will be incurred by APH. If claim unsuccessful (non-warrantable), return freight back to purchaser will be incurred by the purchaser. In the case of non-warrantable returns, it is up to the purchaser to request the return of the goods. If return is not requested (and paid by purchaser), for return freight of non-warrantable goods, within 1 month from date of email from APH confirming non-warranty determination, then goods may be permanently disposed of by APH and not be available for return.

15. APH obligations under this warranty are limited to repairing or replacing, (at its discretion where fault is not deemed major), any part or parts returned in as removed condition, which examination shall disclose to have been deemed manufacturing defective as defined by this warranty. The repair or replacement of defective parts under this warranty will be made by APH without charge. APH may at its discretion, refund Purchase Price instead of repair or replacement of items(s) if defect is not determined to be a major fault.

To warranty a turbo or turbocharger system component for manufacture workmanship defect; purchased item needs to be returned to APH for inspection in its "as is" condition (not cleaned or disassembled, unless otherwise specified by us). Tampering with, or any disassembly of turbo or parts prior to return, voids warranty, NO exceptions. All gaskets used should also be included "as is" in the return.

16. If after inspection by us and/or the manufacturer or a non-affiliated qualified turbocharger specialist, it is determined that the product and/or workmanship of parts supplied is indeed manufacturer defective, APH at its own discretion will repair, replace or refund the cost of the component(s) and workmanship in relation to parts supplied to the maximum value as stated on the original invoice excluding any freight costs incurred by the purchaser. If however, defect is defined as a Major Fault, buyer may elect a refund of purchase price or repair or replacement.

A Major Fault as defined under this warranty, covers complete turbo or turbo component failure only. That is, failure prevents the use of the vehicle. An example defect defined as a major fault would be failed bearing causing shaft to seize, where failure is proven as manufacture fault. Failure of seals, components such as actuator or lack of boost for any reason, noise from turbo etc, do not constitute Major Fault under this warranty and hence are covered under Minor Defect and will be handled on case-by-case basis as part replacement, repair or otherwise as determined by the APH.

17. In all cases where credit/refund to customer is due (in such case as 12. above with Major Fault), refund is calculated on base purchase price (cost less actual initial post & handling charges). As such the actual cost of shipping & handling will be recovered from all refunds/credits and will vary depending on shipping origin and destination (especially relevant where item sold inclusive of, or with 'free' post).

If credit/refund is required on an individual part supplied in a bundle (e.g. where a turbocharger and stepper motor where purchased and supplied together), the refund due will be calculated on the cost of the separate component less shipping cost of component.

18. If buyer changes mind or has purchased incorrect part, it is at the sole discretion of APH to accept return. We are under no obligation to accept return under these circumstances.

However, if APH agrees to a return that is not covered under Warranty, part can be returned only once an RMA number and return address is issued to buyer. Parts returned without an RMA Number will be returned to sender (RTS). And in cases where return is authorized, refunds will have re-stock, penalty & sunk costs deductions as follows: up to 40% restocking fee (to be deducted from purchase price), and BUYER must pay return postage. Buyer will be advised and must agree to that deducted cost, prior to an RMA number being issued.

Please choose product purchase carefully as:

1) No returns on items for change of mind / incorrect purchase 30 days post purchase date.

2) No returns on sale items for change of mind / incorrect purchase.

19. Under all cases of warranty, please allow a minimum 2 weeks from receipt of turbo or part back at base for reply of diagnosis and subsequent actions. Please allow 2 weeks for return post of turbo in repair situation or for refund of funds.

Address for Returns: PO BOX 9013, Bundall, QLD 4217.

Email: info2@autopowerhouse.com.au