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Definition

Limited Warranty

"Jaeco Warrants To The Original Purchaser Of Its Services & Rebuild Products That Such Services & Rebuild Products Will, During The Warranty Period And Subject To The Limitations And Exclusions, Comply With All Applicable Specifications And Be Free From Defects In Materials And Workmanship."

"Warranty Does Not Means Guarantee"



Liability

Limited Liability

- The Warranty Would Be Subject To Carrying Out Of All Service As Per The Recommended Periodicity And Schedule As Applicable To OE Engines. Proof Would Be Required At Time Of Warranty Claim On Vehicle Service History. Special Emphasis Is Placed Upon Oil Change Intervals, Oil Filter Replacement And Engine Oil Quality.
- The Warranty Would Be Subject To Proper Fitment Procedure. Failure
 Due To Operational Reasons I.E. Misuse / Improper
 Handling, Accident, Fire, Water Entry Are Not Covered Under
 Warranty.
- No Liabilities Will Be Accepted For The Damage Caused Due To The Following Reasons :
- a. The Unsuitable Or Improper Use Of Product.
- b. Faulty Storage.
- c. Faulty Erection Or Commissioning By The Purchaser Or Third Parties.
- d. Modification Of Fuel Line, Air Line, Oil Line.
- e. Faulty Fuel Line, Air Line, Oil Line.
- f. Rusty Pipes.
- g. Non Genuine Filter.



Liability

Limited Liability

- In The Event Of A Justifiable Complaint, We Reserve The Right Of Repairing The Turbocharger By Replacing Loose Components Rather Than Replacing The Complete Unit. The Repairing Will Be Carried Out By Jaeco Rebuilding Systems Pvt. Ltd. Or By Authorized Representative.
- We Will Not Accept Any Liability Arising From An Incorrect Modification Or Maintenance Work Carried Out By The Purchaser Or Third Party Without Our Prior Consent As Well As Any Maintenance Work Carried Out Other Than At Jaeco Rebuilding Systems Pvt. Ltd
- We Will Not Be Liable For Any Claims Against Damage To Engine, Engine Parts, Vehicle Or Vehicle Parts As Consequence Of The Failure Of The Unit.
- All Legal Disputes Are Subject To Chandigarh Jurisdiction Only.
- We Will Not Accept In Charges Related To Installation Or Removing Of Unit For Warranty Purposes, Nor Any Charges For Logistics Involved For Warranty Settlement



Foreign Objects

Turbo Wheel Damage, Caused By Small Objects Entering The Turbine Or Compressor Housing At High Speed, Leading To Imbalance.

Liability

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Damage To A Compressor Wheel



Damage To A Nozzle Assembly



Lack Of Lubrication

Turbo Fatigue Cracking And Material Transfer Created By Metal Friction And High Temperatures As A Result Of Oil Inlet Supply Restrictions, Incorrect Gasket Placement And Use Of Liquid Gaskets Or Poor Quality Lubricants Or Immediate Acceleration On Idle On Ignition.

Liability

Limited Liability





High Temperature And Material Transfer From Bearing



Incorrect Shape And Position Of Gasket

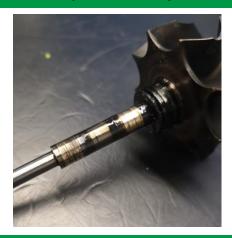


Oil Contamination

Turbo Bearing System Damage Caused By A High Concentration Of Carbon Suspended In Oil, Created By Extended Oil Change Intervals Or Poor Maintenance. Bearing Damage Caused By A Steel Shot Suspended In Oil Following A Major Engine Overhaul.

Liability

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Worn And Scored Bearing. Material
Transfer To The Shaft



Large Particles In Oil Can Cause
Deep Scoring And Impacts



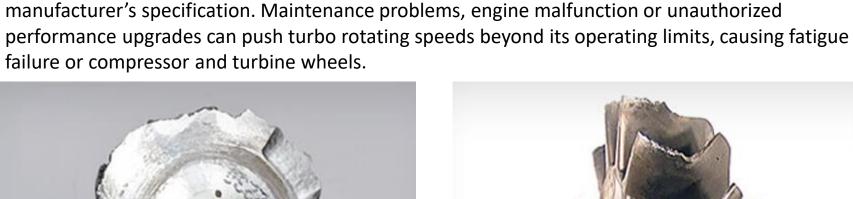
Overspeed & Excessive Temperature

Turbo damage caused by working beyond its designed parameters or outside the vehicle

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Orange Peel Effect On Back Face Of Compressor Wheel Is A Clear Sign Of Over Speeding



Large Particles Can Cause Deep Scoring And Impacts



Engine Back Compression

Oil From Exhaust Causes Shaft To Imbalance Thus Causing Play At High Speeds Leading To Damaging Of The Turbo Chargers

Liability

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Fitment Instructions

95% Of Turbocharger Failure Is Down To The Charge System's Supporting Components Failing. Here Is A Guide To Help Prevent Future Problems With Your Turbocharger Vehicle.

Fitment Instructions

Limited Liability

Warranty Only If











Before Installation

Diagnose And Solve The Reason For The Failure Of The Old Turbocharger (Possibly A Fault On Or Around

- Engine).
 Compare Turbocharger Model Number With The Engine Specifications And The Turbocharger
- Compare Turbocharger Model Number With The Engine Specifications And The Turbocharger Manufacturer's Model Number.
- Sump Must Be Removed And Cleaned.
- Oil Strainer Must Be Removed And Replaced Due To Residual Carbon/Sludge Build-up.
- Oil Pump Should Be Removed And Checked.
- Oil Cooler And Filter Assembly Should Be Removed And Cleaned.
- Check For Proper Engine Cooling.
- Check Oil Supply, Make Sure Oil Return From The Turbocharger To The Crankcase Is Clear.
- Intake, Charge Air And Exhaust Area:- Check For Functional Capability, Clean Out Any Contamination By Foreign Bodies Or Fluids And Solve Why They Were Present And Clean Any Undamaged Air Supply Hoses And Pipes.
- In The Case Of Liquid-cooled Turbochargers: Check For Adequate Coolant Flow.
- Check Whether An Adjustment Of The Housing Position Is Necessary.
- Torque Fasteners As Specified By The Engine And Vehicle Manufacturer.
- Make Sure The Flanges And Threads Are Free Of Damage, Debris And Wear
- Use Only Brand New Gaskets And Seals.
- Exhaust System To Be Checked For Contamination/Blockage (Catalyst, DPF Etc.).
- Turbocharger Oil Feed Pipe & Banjo Bolts Must Be Replaced.
- New Oil Filter And Oil To Be Fitted.
- New Air Filter To Be Fitted.

Fitment Instructions

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During Installation

- **Fitment Instructions**
- Limited Liability
 - Warranty Only If

- Before Securing The Oil Supply Line The Turbocharger Should Be Filled With New Engine Oil Through The Oil Inlet Hole, While Slightly Turning The Rotor Manually.
- Attention Paid To Correct Handling.
- Oil Flow Must Be Checked:
 - Fit Turbocharger To Engine Leaving Oil Return Pipe Off.
 - Install A Longer Oil Return Line And Feed Into Suitable Container.
 - Start Engine And Idle For 60 Seconds, Then Switch Off Engine.
 - Measure Volume Of Oil In Container 60 Seconds Of Idle Should Produce At Least 0.3 Liters Of Oil.
 - Repeat Test Two Or Three Times To Confirm Oil Flow Is Correct.
 - During This Test, Do Not Allow Engine To Run Below Minimum Oil Level!

After Installation

- Idle For Approximately 120 Seconds After Engine Is Running
- During Idling: All Connections (Air, Exhaust, Water And Oil) Checked For Firm Seating, Tightness And Free
 Of Leaks, Gas-tightness Checked With Soapy Water If Necessary



Warranty Handling

Limited Liability

In Case Of Unit Failure The Following Process Is To Be Followed For Warranty Claims

- Customer To Send Vehicle Service History Along With Details Required In The Prescribed Format.
- Details Received To Be Reviewed By The Warranty Team.
- Based On The Details Received Warranty Decision To Be Taken. Warranty Acceptance Or Rejection Depends Upon Fulfilment Of Warranty Terms And Conditions. In A Situation Of Manufacturing Defect Warranty Is To Be Immediately Accepted. Benefit Of The Doubt To Lie With The Customer. Company Reserves The Right To Reject The Warranty In Case Of Incorrect Data Provided.
- In An Event Where The Data Provided Is Not Satisfactory Or Any Further Analysis Is Required To Understand Nature And Cause Of Failure Unit Is To Be Called Back To The Plant Before Deciding Upon The Warranty Decision.
- In An Event Where On Vehicle Analysis Is Required Technician Is To Be Sent To Gather Evidence Or Data. Transportation Charges For The Technician May Be Claimed From The Customer If The Vehicle Is Outside Service Area
- On Rejection Any Further Work To Be Carried Out On Paid Basis Only. All Goodwill Cases At The Sole Discretion Of The Company.
- On Acceptance The Unit Is To Be Repaired, Warranty Will Continue Till Time Limit, If Good Will Is Executed All Further Warranty Will Cease To Exist.