Kiwi Cylinder Heads Ltd.



Installation Instructions

Nissan TD42/T Cylinder Head Kit Part Number 11061163/11061199



This instruction manual contains important installation and assembly instructions. Read these instructions carefully before use. Please contact us directly if you have any questions or concerns. Remember...

"Prevention is Better than Cure"

 ${\sf Kiwi\ Cylinder\ Heads\ (NZ)\ Ltd.}$

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Kiwi Cylinder Heads 12 Month, Unlimited Kilometer, Parts & Labor Warranty

coolant, filters etc. as well as any vehicle recovery costs and the cost of any replacement vehicle. reasonable rate to re-instate the vehicle to its pre-failure state. This excludes service items such as but not limited to, oil, this warranty for a period of 12 months from date of purchase, and it includes replacement parts & labor at a fair and This means in the rare event this product fails due to either a manufacturing or physical fault the purchaser is covered by This new cylinder head is subject to a 12 Month (from date of purchase), unlimited kilometer, parts & labor warranty.

suspecting a fault. Proof of Purchase & service records will be requested in an event of a claim. The warranty will be voided if the vehicle to which it is fitted is used in off-road, competition or modified beyond the vehicle manufacturers original vehicles operation. To contact the installer or Kiwi Cylinder Heads Ltd at the very earliest opportunity after detecting or vehicle manufacturers guidelines & service intervals. Ensure the vehicle is not used in an inappropriate manner for which it is designed or intended for. To minimize any further unnecessary damage once a fault is suspected or detected in the Responsibilities: To maintain this warranty the product is to be professionally installed & serviced in accordance to the

completed & returned to Kiwi Cylinder Heads Ltd, along with any requested related documents and/or parts. The suspected work can commence. (Contact details below) A warranty claim form and claim number will be made available and must be these procedures may void any warranty. of the suspected failure. The cost of returning parts & documents is the responsibility of the claimant. Failure to adhere to failed parts supplied by Kiwi Cylinder Heads Ltd must be returned to a pre-determined location for inspection and analysis How to make a claim: If there is a suspected warranty fault, Kiwi Cylinder Heads Ltd must be contacted before any repair

or the Australian Consumer Law 2011. This warranty does not exclude any rights to the claimant under the N.Z Consumer Guarantees Act 1993

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IMPORTANT

If this product is being fitted as a replacement for an item, which has failed in service? It is critical that the "real cause" of the failure has been identified and rectified. Failure to do so may result in this product also failing for the same reasons, which will not be covered under any warranty.

If the purchaser chooses to fit parts other than those supplied, this does not invalidate the Kiwi Cylinder Heads warranty other than to the extent that the replacement parts carry no warranty unless purchased from Kiwi Cylinder Heads. Additionally, any consequential damage to Kiwi Cylinder Heads products as a result of using these alternative parts is not covered by the Kiwi Cylinder Heads warranty.

Foreign Material / Debris Removal Procedure

Whilst every attempt is made to remove unwanted machining material, such as aluminum shavings or casting material at time of assembly. It is possible you may encounter some remaining material.

In most cases it can be cleaned by carefully standing the cylinder head on its end and using a compressed air gun and appropriate personal safety equipment, apply compressed air to the galleries to eliminate the foreign material. You may need to move the cylinder head around to assist in the removal. If this is not acceptable please contact us directly.

NZ- 0800-549-429 AUST- 1800-786-987 info@kch.co.nz



Seven Steps to Success

- 1. Ensure both mating surfaces are CLEAN and FREE OF DIRT AND OIL.
- 2. DO NOT clean block threads with a thread TAP. Best use an old head bolt with "cleaning" grooves cut the length of the thread to "chase" the block threads.
- 3. Ensure **NEW** head bolts are used where applicable
- 4. Ensure the correct torque settings and sequence are employed.
- 5. For engines that use a MLS (Multi Layer Steel) Head gasket, flush block of any remaining "anti freeze". When fitment is completed only use water (preferably distilled water) for the first 600kms. This is to insure the head gasket has the best possible chance to seal correctly.
- 6. FUEL INJECTORS must always be checked and /or serviced to be sure of correct operation.
- 7. If this is a "Fully Assembled" head kit which includes new camshafts? Then the correct "Start-up Procedure" MUST be followed. Otherwise premature camshaft wear WIILL occur and will NOT be covered by warranty.

Start-Up Procedure

- <u>Diesel Cam Shaft.</u> With rocker cover & glow plugs removed & fuel solenoid de-activated. Apply the "Z Paste" to the camshaft lobes. Using the starter motor, crank the engine until oil is present from ALL oil galleries & across the entire cam shaft and valve train area. This may take several minutes. It is now safe to complete the assembly and start the engine.
- Petrol Cam Shaft. With the rocker cover & spark plugs removed & the ignition dis-connected. Apply "Z Paste" to the camshaft lobes. Using the starter motor, crank the engine until oil is present at ALL oil galleries & across the entire cam shaft & valve train area. This may take several minutes. It is now safe to complete the assembly. Ensure the ignition timing is as close as possible to correct setting before firing the engine. Also ensure there is adequate cooling for the engine, air flow & ventilation. DO NOT let the engine idle, run engine at approx. 1800RPM for 15 20 minutes. ANY unusual noises shut down & inspect.
- Failure to follow this exact procedure can & will lead to premature camshaft wear which will NOT be covered by KCH Warranty.

Nissan TD42/T/Ti Torque Sequence

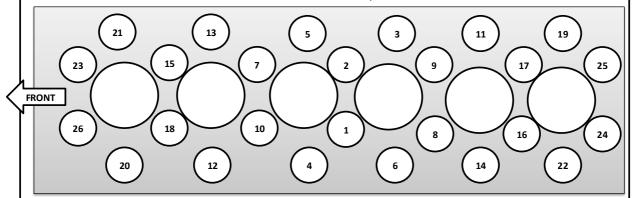
- HEAD BOLT P/N QUANTITIES:
- HEAD BOLT TIGHTENING SEQUENCE.

STEP ONE: 44NmSTEP TWO: 59Nm

• STEP THREE: +90 Degrees



- IMPORTANT: ALL BOLT THREADS, BOLTHEADS AND WASHERS MUST BE LIGHTLY OILED.
- USING AN OLD HEADBOLT WITH GROOVE CUT DOWN THREAD, CLEAN THE BLOCK HEADBOLT THREADS.



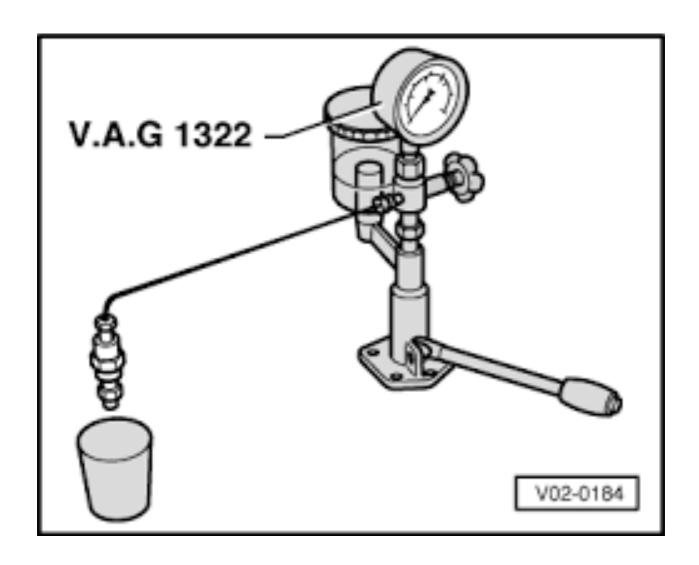
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IMPORTANT NOTE

Installing MLS (Multi-Layer Steel) Head Gaskets

NEVER employ any abrasive cleaning methods to the engine block or cylinder head mating surfaces. Such as sandpapering, scouring discs etc.

Use ONLY proper gasket scrapers and appropriate solvents. The surface finish of the mating surfaces is absolutely critical to the successful sealing of the MLS head gaskets.



Importance of Testing Diesel Fuel Injectors

"Improper Fuel Delivery" is a leading cause of Diesel Cylinder Head failure.

Faulty fuel injectors can & do cause serious engine damage! Never assume they are "ok", always have them tested, serviced or replaced. They are critical to a healthy diesel engine.

Do you have ANY questions?

Please feel free to contact Kiwi Cylinder Heads if you have any questions or comments regarding any of our quality componants.

New Zealand

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Other Products Available from Kiwi Cylinder Heads

- Head Bolt Sets
- **☑** Rocker Cover Sets
- **☑** Bottom Sets
- **☑**Timing Belt Kits
- Timing Chain Sets

- **☑**Thermostats
- **EGR** Coolers
- ☑ Engine Valves
- **☑** Valve Shims
- ✓ Valve Train Components