

Mind the Gap: ZD30 Head Fitting Faults

2000 - 2007 Nissan Patrol GU

2001 - 2007 Nissan Navara D22

We would like to thank Geoff, from All Head Services, for sharing this practical information and photos
www.allhead.com.au



Diagram #1



Timing Gear Case

The gap you do not want

Head

Diagram #3



There have been several instances where customers have purchased Nissan ZD30 cylinder heads and after fitting the heads there has been a coolant and oil leak at the timing gear case area near the cylinder head.

It is imperative that the correct procedure be followed when fitting these heads as failure to do so can lead to a gap between the timing gear case and cylinder head which leads to a coolant / oil leak.

See Diagram #1 and #3.

The correct procedure is as follows:

1. Fit gasket to the rear of timing gear case.
2. Install "O" ring to the rear of timing gear case.
3. Fit head gasket.
4. Align cylinder head with dowels on the block and sit the head on the block.

CAUTION: Ensure that the "O" ring DOES NOT fall out and that the gasket is not damaged.
See Diagram #2.

5. Install cylinder head bolts and tension in sequence (See Tech Online for diagram).
1st: 40 - 49 Nm
2nd: Loosen cylinder head bolts completely.
6. Install 2 timing gear case bolts and tension to 9.8 Nm. This should close the gap.
See Diagram #2.
7. Complete tensioning cylinder head in sequence.
3rd: 98 - 102 Nm
4th: Loosen Completely
5th: 40 - 44 Nm
6th: 90 - 95°
7th: 90 - 95°
8. Tighten all timing gear case bolts to 25 - 28 Nm.
9. Check timing gear case to ensure it has pulled in flush with the cylinder head and block.

Diagram #2

