

## Ranger / BT50 2.5L & 3.0L TD: Oil Leak at Rear of the Head.

2006 - 2011 Ford Ranger 2.5L TD WL-C / 3.0L TD WE-C

2006 - 2011 Mazda BT50 2.5L TD WLAT / 3.0L TD WEAT

### Concern

All Head Services had a call from a customer who had fitted a new cylinder head to a 3.0L WE-C Turbo Diesel Ford Ranger several months ago with a complaint of an oil leak at the rear of the cylinder head which had been there since the head was fitted.

Approximately half way up the rear of the head there is a Welch plug and above that is an open oil drain hole, which is there to drain any oil out of the injector tunnel area.

The customer believed there was a fault as the hole had no thread in it and engine oil was leaking out of the hole!

### Causes

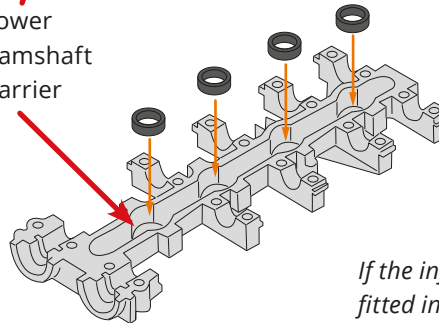
These cylinder heads have a bolt on cam carrier fitted to the head. The lower cam carrier has four injector seals which must be replaced whenever the injectors and valve cover are removed. Care must be taken when fitting the injectors and rocker cover gasket as damage to either or misplacement of the gasket will cause oil to enter the injector valley and leak out of the oil drain hole at the rear of the cylinder head.



*Injector Seals must be fitted with this side up, to a depth between 0 - 0.4mm from the top face.*



Lower Camshaft Carrier



*If the injector seals or the rocker cover gasket are fitted incorrectly, oil will leak into the injector valley and out of this drain hole at the back of the head.*

### Service Fix

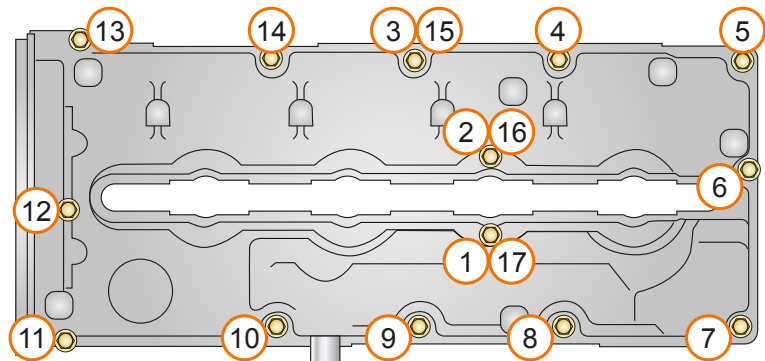
The customer removed the rocker cover and replaced the valve cover gasket along with the four injector seals and the problem was solved! Should one of these vehicles be presented to your workshop with these symptoms check the valve cover

gasket and injector seals for any damage or fitment issues that could cause the oil leak!

### Tensions

Injector Clamp: 21 - 26 Nm  
Camshaft Carrier / Caps: 8 - 11 Nm

*Tighten valve cover bolts to 8 - 11 Nm using the following sequence.*



We would like to thank Geoff, from All Head Services, for sharing this practical information and photos [www.allhead.com.au](http://www.allhead.com.au)

