

## Dry Start, Camshaft Seizure!



*The bearing surface of the camshaft has been damaged from lack of lubrication on start up*



**A pair of Subaru EJ255 SOHC cylinder heads had been fully reconditioned on our production line and sold to a customer. The customer contacted us after fitting the heads, stating that the camshafts in both cylinder heads had seized up while warming the vehicle up and has bent the valves!**

The cylinder heads were removed and sent in for inspection. You can see in the pictures above and below where the camshaft had seized and damaged the camshafts and the cam tunnels. It was found that the camshafts had been fitted without lubricant, which in turn, caused the camshafts to seize.

It is imperative that all camshafts, journals and bearing surfaces have "Assembly Lube" applied when

cylinder heads or engines are being reassembled. Assembly lube is made by many suppliers and is designed to provide protection from scoring and seizing of engine components on initial start-up before the oil has a chance to be pumped through.

Assembly lube is a sticky paste or grease which can cling to surfaces better than oil. It is highly recommended for engines that are to be stored for before installation as oil can seep out over time. It should be applied in a thin film, and it will be absorbed by the engine oil after start-up. To reduce the time that the engine is running without oil pressure, you should prime the lubrication system before initial start-up, if you can.

The initial starting and running in

period is a critical time, and the vast majority of these type of camshaft failures can be attributed to a lack of lubricant.

The Subaru cylinder heads were repaired by resizing the cam tunnels. However, new valves and two new camshafts were required, as the originals were beyond repair, making this an expensive job that could have been avoided easily if assembly lube had been applied!



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)

