TechTalk
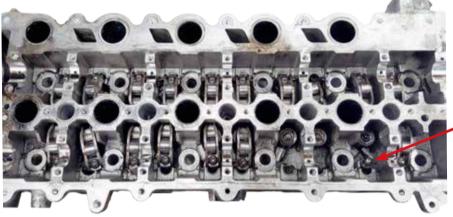

Shredded Serpentine Belt Destroys Volvo XC60 2.4L D5244T Engine

The valve lifters have been smashed out of the head due to the serpentine belt shredding, which caused the timing belt to fail.

All Head Services recently received a cylinder head from a customer for repair. The cylinder head was from a 2010 Volvo XC60 with the five-cylinder 2.4L turbo diesel D5244T engine.

The serpentine belt that drives all the accessories had frayed, and part of the belt managed to get between the timing cover, which in turn caused the timing belt to fail.

The cylinder head was inspected and had smashed all the valve lifter bores in the cylinder head and bent all the valves. The cylinder head was beyond repair, and another cylinder head could not be sourced, giving the customer no other option than to fit a second-hand engine.

It is a common issue for the serpentine belt to cause this type of expensive failure and it is important that the serpentine belts and tensioners are replaced at the correct intervals **OR** when showing signs of wear.

There was a recall on the auxiliary belt tensioners in 2011 for S80, XC70 and XC60 with this engine for causing premature wear on the belts.

Timing Belt Replacement

Renew timing belt, timing belt tensioner and timing belt idler pulley every 180,000 km or 10 years.

Serpentine Belt Replacement Interval

2010

Inner Auxiliary Drive Belt– Renew

• Every 180,000 km or 10 years

Outer Auxiliary Drive Belt and Tensioner, – Renew

• At 90,000 km or 6 years

2011: Up to Engine # 884797

With Mechanical Tensioner

Inner Auxiliary Drive Belt– Renew

• Every 180,000 km or 10 years

Outer Auxiliary Drive Belt and Tensioner, – Renew

• At 60,000 km or 10 years

From Engine # 884798 -

With Hydraulic Tensioner

Inner Auxiliary Drive Belt, - Renew

• Every 180,000 km or 10 years

Outer Auxiliary Drive Belt – Renew

• Every 90000 km or 10 years

Auxiliary Drive Belt Tensioner – Renew

• Every 180,000 km or 10 years.