

Jeep Hospital



Over the coming months Dr Jeep will take us through the trials and tribulations at his "Jeep Hospital", USA 4X4 Jeep Specialist in Melbourne, Victoria. Over 20 Jeeps are admitted weekly for servicing and suspension work through to differential, transmission and engine rebuilds. Dr Jeep will explain the diagnosis, the corrective surgery and future care of these vehicles.

Engine Surgery



CJ7 requiring engine surgery



Head removed from motor



Hydraulic lifters – new one on left, worn on right

Older Jeeps find their way to us and one particularly famous old CJ7 that was once known as SUB-CJ has wound up in the USA 4X4 operating theatre.

It's an 84 model with a 258 AMC 6 cylinder, the original AMC20 rear and Dana 30 front diffs and Dana 300 transfer case. It used to have the Borg Warner T5 Jeep five speed but they're legendary for breaking third gear and the cluster gear. A few years ago when it had issues we replaced it with a Tremek T176 from a J10. While the T176 has no over-drive its strong as an ox.

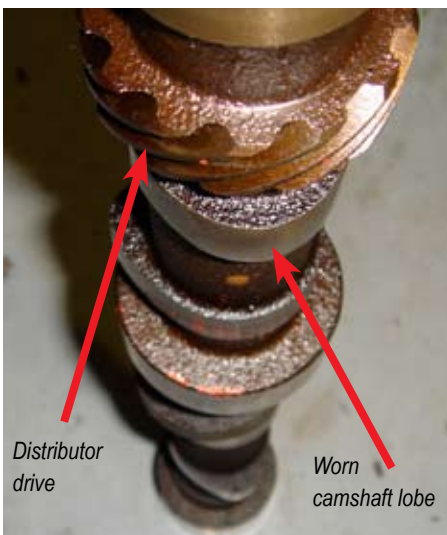
Back in the days this Jeep received a lot of custom work from the now closed down Suburban 4WD in Sydney, including YJ springs, air lockers and a Mopar fuel injection kit. The motor didn't get a full rebuild back then as the EFI kit ran well as is. The CJ7 is a daily driver and it is booked in every six months with us for a check over, regardless of the kilometres travelled. During it's latest appointment we found it had a flutter or a miss under idle and notable at higher revs.

The owner had not noticed it. Things like that sneak up slowly and if you drive it every day sometimes you just miss this

sort of thing. To diagnose the problem we removed the spark plugs and carried out a cylinder compression test with good results. Next step was to remove the rocker cover to watch the rocker gear as it idled, and we noticed number three exhaust not moving very far. We had either a crook lifter or a crook cam lobe. The fluffy noise was the exhaust not being able to escape properly.

The cylinder head was removed for inspection and provide access to the lifters. We found several exhaust valves burnt around the outside edge. The head was sent away for reconditioning including new exhaust valves, valve grind, valve seat grind, surface grind and new valve stem seals. The lifters were removed from the block with a telescopic magnet and presto, number three lifter had a concave face, not a nice flat one like it is meant to have. The camshaft no doubt was in the same shape.

To remove a camshaft from most Jeeps you have two choices, most models



The camshaft lobe below the distributor drive is worn