



JEEP HOSPITAL

Each month Dr Jeep (Tony Whitehead) takes 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 explains the diagnosis, the corrective surgery and future care of these vehicles.



Tony Whitehead (Dr Jeep) and head mechanic Travis



The Importance of Servicing



Rusty and pitted crown wheel

Hello Jeep mummies and daddies! Just a note to you all out there through these tight economic times about servicing. We are seeing something happen with a lot of people's service intervals. They're stretching them out over a year or even two, to try to save money I'm guessing. Jeep service schedules dictate that a service should be carried out every 12,000km for a petrol or 10,000km for diesel. If you're under warranty that's a part of the contract you need to comply with. And if your Jeep is used off-road regularly that schedule is down to 6,000km and 5,000km.

As your Jeep gets older you really need to keep on top of it's maintenance more than ever – just like us! Checking the oil and water yourself and topping up the washer fluid etc should be done on a regular basis at home. Checking brakes, steering, diff and transfer case oils, gear box mounts, shockers etc is all pretty hard at home and is really best performed by a 4WD or preferably a Jeep dedicated professional

workshop.

For example letting the brake linings get low will damage the drums or rotors and for the cost of a machine job and pads or shoes your brake job can triple in cost. Letting air filters go to the point where they're letting dirt into the motor and using twice as much fuel is costly. Running filthy diff oil that takes the hardened surface off the carrier, pinion and wheel bearings can turn a \$60 diff service into a \$1000 dollar diff rebuild. So its doesn't save you at all to skip services. In fact it can cost you way more and meanwhile you have a Jeep you can't really rely on.

I realize running any 4WD is expensive and maybe some of us really don't need one and would be better off financially with a 2WD car but if you're



Worn brake shoe linings



Leaking pinion oil seal

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going to own one you can't neglect it and think you're saving yourself money or driving a safe vehicle.

Road safety is the other paramount issue here. Worn brakes, worn steering, bald tyres and oil leaks are all dangerous to you and other road users and given most of you have modified rigs with bigger tyres than standard, its even more important to keep on top of your maintenance schedule. Bigger tyres work the brakes harder and off-roading introduces mud to the equation and brakes wear many times faster than those with stock tyres that rarely see mud.

I'm writing this now as I just realized a good mate's 2003 TJ, which doesn't get driven much, hasn't been touched for 24 months! When any 4WD is left sitting for that long with minimal driving, condensation forms in the diffs, gear box etc and the oil drains from the bare metal components like gears and bearings. They then start to pit with little rust marks and that component's life expectancy is drastically reduced. The ensuing repairs are usually at a great cost. We often pull diff covers off to find half the cover inside rusted and matching rust on the crown wheel and pinion. That diff needs a full rebuild if you want to use it reliably.

Other items that fail are rubber components. They

all perish over time not distance, and for example the serpentine belt, hoses, engine mounts, tyres and all your oil seals are rubber! When oil seals fail, oil leaks out, dirt gets in and the wear aspect is accelerated. So more regular driving and more regular servicing is the key to saving yourself lots more than you think you're saving by avoiding it. Imagine buying a brand new Jeep and parking outside under a carport indefinitely. The battery will die; the tyres will deflate and crack; all the oil seals will go hard and crack and leak; all the internal metal faces on any component will rust; grease will dry up in the unis and rust. Whereas some 30 year old CJs we see being continuously driven and visit here every six or so months are still motoring along fine and will be for some time to come.

These are just some examples of what can happen. So please, be good to your Jeeps. They're fantastic machines that deserve just as much love as we do. Here at USA 4X4 we have a fully equipped Jeep dedicated workshop and stock an extensive range of genuine and non-genuine spares – new and used so we're not waiting for parts to be delivered. We use quality Penrite oils and fluids and know these vehicles inside out. Also bare in mind that Ultratune advertisement is right, you won't risk your new car warranty if you get a professional work shop to do the servicing on time with genuine parts – so you don't need to take it back to the dealer if you don't want to.

We also offer free drop off and pick up from Mordialloc Station, vehicle pick up early from Café Racer on Marine Parade in St Kilda or for a small fee to cover insurance our courtesy truck. So don't let your baby down this winter, save lots of money in the long run, have a reliable machine ready to answer any call and most of all keep your family and other road users safe.



Rust dust indicating a worn universal joint