

DR JEEP

Each issue Dr Jeep (Tony Whitehead) takes us through the trials and tribulations at his USA 4X4 Jeep Specialist Shop 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.

TJ REAR END CLUNKER

Recently we did a set of 4.11:1 diff gear in a neat little TJ and added my favorite diff centers. Detroit lockers. After test driving it, I noticed the rear end behaving badly. Giving excessive clunky feedback, I never had this type of drama in the past. I thought finally I have a dud Detroit. It must have not been disengaging properly. It drove OK before with the old LSD hemi in there. So, I was looking for a diff or transfercase drama. But I was wrong, well right really, I knew it wasn't the Detroit locker, they just didn't go wrong. I was checking for anything else and took another test drive with a spare

pair of eyes underneath. Saw some excessive rear pinion angle movement. I checked all the control arm bolts, they were all tight. But when I grabbed the rear uppers, they made a little clunk as I twisted them. And sure enough, when I took them out, the bushes just fell out of the arms, need a new one to me. So new uppers went in and shazam, problem solved. All I can think of is they were fitted at full droop on a good size lift and tightened up at full droop. So, when it was put back on the deck, the bushes were all preloaded wrong and tore away from the arms. You'll need to do up control arm bushes and panhard



rod etc on the deck at normal ride height, so their bushes are not twisted to start with. The moral of the story. Detroits rock! And it showed up the dud bushes the LSD didn't.

THE OLD MUD HOLE STRIKES AGAIN

We see a lot of this, especially if you're new to the Jeep world and love to splash mud everywhere. All that mud sprays everywhere thru the engine bay, and the radiator eats it up. This JKU auto had been getting hot. No wonder looks at the buildup, and those JK (in this case CRD) radiators are so thin there isn't much cooling going on here. To get the CRD auto radiator out is a big job too. This one had to come out to get a proper cleaned out. We also added out inline transmission cooler to this JK. JKU autos get so hot, we've seen the paint peel off the torque convertors. They really need all the help they can get. So clean radiator and an extra



cooler is a good plan. Especially if you are towing. We do a neat trans cooler kit that fits in nicely for \$230 plus fitting or postage. And you'll need a little ATF4 to top it up.



This is a very common problem, front axle seals in the Dana 30 or 44 have axle seals deep inside the diff housing (pumpkin) and show up as wet oil at the C-end of the axle housing, due to mud getting down the axle tube and damaging the seal, left long enough that crook seal with oil and dirt eats its way through and hardened axle seal surface, and left crap in the diff its self. This one is a gem, been left for ages, there was oily, sandy mud filling the axle tube and a mess everywhere. When the axle looks like this it's pointless just changing the seal, as it will leak again immediately. There are things called speedy-sleeves, a stainless-steel collar you can slip over this area and they work for a little time (just enough to pass a roadworthy usually) but we don't bother with them. Its new axle time for this guy. Plus, you can see some wear on the splines, check them closely for shoulder wear and torsion bends. This Jeep needs a pair of seals. To get to them you need to pull both axles,



the diff cover then the diff hemi out to access them. It's a bit of a job.

WHEEL BALANCE

Some people don't want external wheel weights on their wheels because they look a bit crappy. To do an alloy wheel balance you need to add copious amounts of weight to the inner center of the wheel. Compared to a dynamic balance when you have less weight further apart. Some big 4wd tires take a fair bit to balance. This JK had so much stick-on weight. It was sitting so high it all jammed on the front caliper and tore off after a wheel rotating. Best you get a dynamic balance if running 17's. Still it will need less weights and they will last longer, we balanced all wheels and sorted it out.



