

## 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.

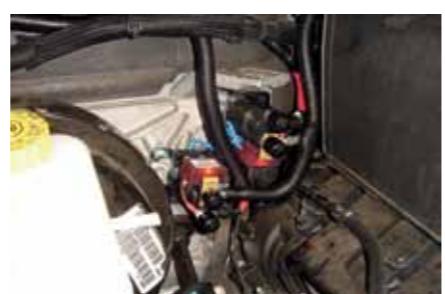


## BIG TJ TROUBLE

A very tall TJ came in for a once over recently. It was built in NSW and had an engineer's certificate BUT that wasn't going to help here in Victoria. The dropped front panhard rod bracket was literally tearing off the chassis. It was the sort of repair that required a complete bracket swap, re-welding on and beefed up from the opposite side as well. The Jeep had a lot of other issues too and is currently on hold for repairs or may actually be simply parted out. Jobs like this are liability nightmares for mechanical workshops and something we'd farm out to a chassis repair shop. If the lift wasn't so massive and the mods so sketchy, this Jeep would still be drivable but this problem is as serious as it could get. Imagine that snapping at 110kph with your five inch lifted TJ on 35 inch tyres. I'd rather not.

## DUAL BATTERIES

This MY13 JK V6 was fitted with a bigger main battery and a second battery in the rear of the Jeep. After removing the stock exhaust and rear muffler there was room to fit a Uneek rear battery compartment box. We had to cut the original box out and make the after market box fit in. We ran a couple of Anderson plugs and a 12V/USB through its own fuse panel to supply power from the 105Ah Full River fully sealed deep cycle battery. This battery is monitored through the Red Arc regulator and circuit breaker mounted in the engine bay. They are fully waterproof and can be



mounted in the engine bay. There isn't much room to play with in the JK engine bay so you need to get creative. A Rancho exhaust system was fitted to finish the job off.



## DANA 35C PROBLEMS

Another XJ came in recently for a check-up. It had a rumble, or three. It was running an ARB diff cover with a magnetic drain plug and after a quick inspection we found this little beauty, metal filings, LOTS of metal filings. So off with the cover and rear drive shaft to feel the grumble by hand, the 35C has a C-clip arrangement so we popped the C-clips out then the axles, to find one of the axle bearings had failed. The other side was ok, we also found twisted splines on the axle, odd as the other side was ok. Maybe that "brand X" HD axle never got the induction hardening it should have got. The carrier bearings had also suffered a small amount of damage and will be replaced. The pinion seemed smooth and will be left this time. Ideally the pinion and carrier bearings are replaced together. But that is another job again – resetting the pinion depth, so to be cost effective on an older Jeep we won't do that this time.



## JK CRD

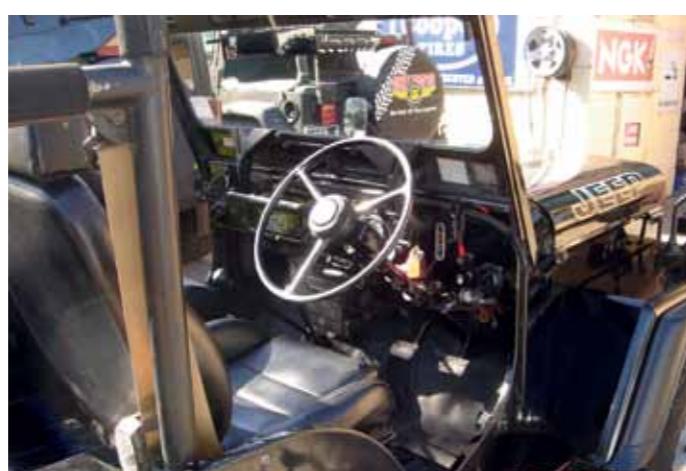
This was odd, the exhaust hanger on the engine pipe of this CRD JK was busted clean off, probably a bad weld. It wasn't hard to fix with the MIG or hard to find, but why? Who knows.





## J53

Through the 80's Mitsubishi produced a copy of the CJ3B under license from Jeep. They're a ripper machine, really well made. This one showed up at the shop to say hello recently and I took it for a spin. It has got the same little turbo diesel that the Mitsubishi canter truck had and a full Japanese copy of pretty well every component that the 3B had. It drove extremely well and they are built RHD from Japan. This one was original and on club plates and I must say I was very impressed by it. The body work is original – even the turbo decal!



## XJ ENGINE SWAP

A gent with a 96 XJ asked us to do a head gasket job on his Jeep and mentioned that there was oil and water mixed showing on the dip stick. I asked how many k's he had on the clock and 350,000 was the reply. Knowing what I do about these 4.0L engines I suggested at this mileage we replace the motor as so many other hidden problems including water jacket cracks and cylinder head cracks can be found. We didn't even bother pulling the head off, instead we extracted the motor as a complete unit.

We removed the sump and after all the shrapnel landed in the drip tray we looked up #6 bore to find the piston gone, but the con rod and gudgeon pin still intact. The XJ was still driving after the piston shattered and the gudgeon had cut a groove in the bore. This is when the coolant flowed into the motor sump and the owner finally thought he better stop as it blew steam up at him. He said it was making a noise too. Really? Anyway it wrote the 350km motor well and truly off.

We purchased a fully reconditioned

Hesco 4.0L. It was a coil pack head motor that needed a few mount casting changes that weren't too tricky once both motors were side by side. The distributor drive is the same on all these motors as is the bolt pattern so it was all just a matter of making the accessories all line up properly.

