



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

USA 4X4
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A very dirty air filter

This is a classic case of L-O-M, (lack of maintenance). The "check engine" light was illuminated on the dash of this 2005 TJ. Our scanner said one of the four casts wasn't working efficiently. No wonder, it had caved in the air filter that was caked in mud with suction. The engine would have been running rich with fuel as no air can get through such a filthy air filter. And for the last month or so it would have been giving really bad fuel economy. There are five clips on the TJ air box and it takes a minute to check the air filter. Other models are also easy to check. The damage done to the motor in a case like this will be considerable and in the long run this motor will need a rebuild much earlier than one that has been well maintained.



A stripped T-176 gearbox

This Tremek T-176 from a 1983 (Aussie) J10 came to us in pieces with the rear output bearing collapsed. The owner was told there were no parts available for this box. This is not the case, we can still get any parts for them and we had this transmission back in once piece in no time. The T-176 is a great 4 speed, with no over-drive, that came out in 1981 diesel CJ7 and 8s and J10s.

One thing Jeep has carried over from the older AMC era to the later Chrysler era is the same engine bolt pattern. This allows you to transplant the 4.0l to an older AMC Jeep that had a 232 or a 258 six cylinder engine or even the V8s including the 290/304/343/360 and 401.

This gives you the benefit of much more power (in the case of the six cylinders that is) and fuel efficiency.

This 1978 CJ fitted with an XJ Cherokee 4.0l engine arrived at the hospital on a flat bed. The owner did a pretty good job fitting the engine and almost got it running but hit a wall in the end, so it came here. The early 4.0l runs the OBD-II computer and our scanner didn't want to talk to it. After checking over the owner's work, making sure all the sensors were wired in correctly, Travis presumed that both computers supplied were crook. We sourced a third unit and as soon as it was plugged in... presto, she ran like a gem.

Unfortunately the original computer was crook and so was the unit he bought on ebay. The CJ went home on a flat bed for the tidy up and final work.



1978 CJ7



Scanning for problems with the 4 litre engine



4 litre engine has been fitted to the CJ7



Different flywheel is fitted to the TJ Wrangler with the six speed gearbox

We had to replace a clutch in a 2005 TJ recently and discovered something new. The original TJ from late 1996 to mid 2000 had the Asian AX-15 gearbox (with the weak fifth gear assembly and 3.83:1 1st) and then came the heavier new venture NV3550 with a stronger fifth and 4:1 first gear. In late 2004 the six speed NSG370 became available and has a great first gear ratio of 4.46:1 compared to 3.83:1 for the AX and 4.01:1 for the NV. When we went to swap fly wheels over with a machined up flywheel we always have in stock for either five speed we discovered the crank position triggers much different from the two five speeds. We had to send this one out for the machine job. You should always machine the fly wheel when changing a clutch over. We also seal up the bell housings and supply a fording plug so the next bog hole this Jeep goes into won't be its last for a while. This clutch died prematurely thanks to a mud bath and the driver selecting gears while immersed in the goop.