

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.

RANCHO LIFT KIT FOR THE JK WRANGLER

Here at USA 4X4, being one of the many Australian authorised Rancho dealers we recently Researched and Developed (R&D) the 2.5" Rancho RS6570B short arm lift kit for the JK Wrangler. Our research has been offered to Tennaco, Rancho's parent company.



The kit is available as a left hand drive (LHD) system only and there were several issues we faced in preparing it for a right hand drive (RHD) Jeep.

The LHD kit comes with 4 coils, 4 bump stops, 2 front sway bar drop brackets (for non Rubicon only), 2 rear sway bar mount drop brackets, 4 brake line drop brackets, 2 front control arm drop brackets, a drop pitman arm and a pair of panhard rod brackets and all the hardware associated to those brackets. Shock absorbers are not included in the kit so we add them to the system and in this case used the new RS9000XL gas 9 speed Rancho shock RS999330 and RS999329.

The supplied LHD pitman arm bends the wrong way so won't work on our

Jeeps. We solved that issue the same way we sort out TJ Wranglers, by retaining the existing pitman arm and supply an adjustable length front panhard rod that we get made. Eventually a RHD drop pitman arm would be a good thing. What we've done in the past for TJ RHD lifts is get OEM panhard cut in half and a thread turned on them the same as a factory drag link has and use a factory drag link tie rod coupler. The bonus of these is they don't need to be dropped out to adjust; the turnbuckle coupler can be adjusted in the Jeep to get perfect front axle position and the drag link and other tie rod ends still work with in there limits at full droop with the OEM pitman arm so it works for us for now.

The front Rancho bump stops went in OK at the bottom of the front spring but

could be a little taller. The front brake line extension brackets are nice. Then the neatest front end component goes in, a full drop bracket to lower both front control arm pivot points, which keeps the front arms at almost the same angle as stock to give a smooth ride and does not alter caster angles. The front diff breather was too short and needed an extension as well.

On a Rubicon Wrangler the front sway bar has an electric disengage unit. The Rancho kit came with a set of drop brackets for the support bush mounts, this lowers the entire sway bar and motor assembly making the motor too vulnerable to impact and mud contamination in our opinion. Our trails here are muddy and rutted and we didn't use the brackets supplied. Perhaps on a

non-Rubicon model they would be OK to use but this was a Rubicon.

Our solution, being Australia's TERAFLEX agent and having already sorted several (true) 2.5" Teraflex kits, was to utilise some Teraflex components. We added a set of their longer rear sway bar links to the rear sway bar and utilised the old rear links for the front sway bar. This works well and is a Teraflex instruction. I think there were Rancho instructions saying to get the longer front links for a Rubicon model but there weren't any locally to use. Then by adding the front coils and the new 9-speed Rancho XL shock absorbers the front was complete.

Australia has an ADR stipulating we cannot add over 50mm track overall so a wheel with 25mm less off set than stock is required. We must also keep the tread of the tyre under the widest part of the wheel flare when in a straight line so tyre size selection needs contemplation for ADR.

The rear end comes with matching coils that have a lot more beef to them than the OEM coils and there are matching rear shocks (supplied separately), a set of bump stop brackets also go in OK, the supplied rear sway bar mount drop brackets we opted not to use and used the teraflex longer rear link, we also found we had to mount the r/hand rear sway bar link inboard to clear the rear

right wheel at full droop and 265/75R16s on the stock wheels. Any bigger rubber and you need to change the wheel offset by an inch or so. The original rear sway bar link goes to the front as mentioned above. The rancho drop brackets will complicate the right wheel and sway bar clearance even more so.

The main problem we had in the rear was the rear tack arm/panhard rod, the LDH bracket doesn't fit at all and the only other local rear bracket we can get fouls on the passenger side shock and axle housing. Teraflex have made us a RHD rear bracket to try off CAD/CAM diagrams and it fits like a glove around the axle housing on the right hand side of the rear axle to lift the panhard rod up.

The TERA bracket has a set of 3 holes for 3 different set heights and allows us to run the OEM rear panhard. The teraflex bracket bolts on several ways including the main bolt for the rear lower arm and another U-bolt that bracket that wraps around the axle housing. Then a spacer is placed where the old arm went and you get the best rear track arm system I've ever seen with heaps of clearance in every direction.

The steering wheel needs to be adjusted to dead ahead so the ABS doesn't think you're going around a corner and lock up a front wheel when heading straight ahead and a road test and we found the kit smooth as silk.

The end height was a little taller than planned, the front came up 90mm and the rear 100mm.

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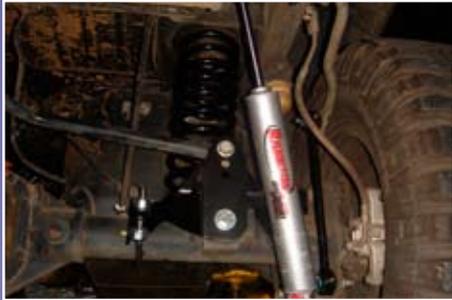
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