## **P-SHAFT**

2008 Peter Huth in Gayndah sold me a very nice 1974 D speciale. This was a Brisbane car previously maintained by DS Motors and was in excellent mechanical condition with no rust to speak of. The Beige Vanneau paint was however shabby and peeling off here and there and the roof was a rather incongruous brown colour. In addition the original seat fabric had rotted and had been palliated with seat covers. A leaking hydraulic pump was fixed before sale but was obscuring discovery of a leaking steering rack later removed and refurbished by Peter Raffles in Childers.

Seemingly it only needed painting and I removed every panel and took them to a paint shop for a revamp in Beige Thollonet except for the roof which on advice I did not remove because of likely difficulties refitting rusted and broken clips. With some grumbling the roof was painted in situ and a good job in fact by pulling back the rubber seal so there was no sign of the previous colour.

There was a bit of clicking from the original drive shafts and athough I am told they would have been ok for another 25 thou km I investigated replacing them, a relatively easy

task on a D compared to a Traction.

A well known Citroen garage in Melbourne supplied me with a set with modern universal joints welded on , a conversion that I had already done on my Big15 with ID19 engine and gearbox. The task involved taking apart the Triaxe joints, messy but not difficult and fitting the "new" shafts to them. My only problem was neatly replacing the steel boot bands without the special tool and I eventually replaced them with long cable ties which were surprisingly durable and effective.

There was no real problem with the car until March 2015 when I took some friends for a drive out to Kenilworth west of Nambour from our Sunshine Coast home in Cooroy ,bowling along beautiful quiet roads at 100 kph. On the way back I thought I would show them our rather nice little village. There is a 40 km zone in the village and a busy pedestrian crossing followed by a roundabout to negotiate before turning left into the main street. It is difficult to manage more than 30 kph. I dabbed the brake to turn left at the roundabout and as I did so there was a snapping sensation followed by that heart stopping feeling of no brakes. There was

a roundabout and all I could do was wrench the steering wheel left and pray. Amazingly the other vehicle kept driving around the roundabout and did not even seem to notice me. he or she must have been doing a U-turn, it is a three way junction, furthermore were no pedestrians crossing. As I turned left there was a mild knocking under the car as though something loose was hitting the road. We cruised down a slight slope into a vacant park spot. I realised that there was still enough in the foot pedal to stop us rolling back but was perplexed that the hand brake did not work. My passengers gratefully got out and found some wooden blocks to put under the back wheels. The ladies were packed off to see the shops and my friend John and I started to investigate. I had a quick look under the car thinking there might have been a hydraulic leak but no LHM to see. Then I raised the bonnet to try and look down at the disc brakes. It was John who found the problem with a better look under the front end. The R hand drive shaft had broken in two, immediately explaining why we had very limited braking from the back wheels and no hand brake (operating only on the front discs, rather unfortunately) Until then I had not realised that we had no traction, just coasting downhill!

There was a 2cv parked

across the street and the owner came across to view the scene and told me he had once had a broken shaft on his ID 19.

There was nothing for it but to call the RACQ, my second free ride in a month. (if you have a few challenging vehicles membership of a top table is a bargain I think!) As the front end was hitched up to the chains the operator pointed out that both drive shafts had fractured.

The old shafts had been cut and joined with a central peg and then welded all round the joint.

Once over the shock of all this I got onto the Citart website in France and was able to buy a pair of new drive shafts( you need left and right they are different in length!) with modern universal joints incorporated. These came to \$1000 whereas the welded concoctions had been a princely \$1650! I believe that Citroen may have been supplying these versions as a spare part since 1974. They are very nice and come with fitting instructions in four languages. Unlike the older shafts the hub plate is separate and is pressed onto the splined end of the drive shaft after it has been passed through the hub, by screwing on the wheel nuts. Even better they come with the triaxe joints so there is no messy assembly to do there. I did the

job in my inspection pit but I am sure one could manage with jacks or ramps. It is necessary to turn the hubs as necessary so as to get the end of the drive shaft through and bolt the other end onto the brake disc. An easy and satisfying process. Thread locker was used on the splined shaft and the brake disc nuts.

So if you have got welded drive shafts on your D you might wish to consider the implications of a failure, no effective braking. Not the same problem with a traction where the brake drums will still operate.

Can you get your welds checked? Probably by Xray or ultrasound. I was a keen trainspotter as a lad and well remember the engine drivers tapping the connecting rods as they went around with their oil can.

I did enquire who did the welding but was politely informed that it was someone in Bairnsdale of unmemorable name and deceased for good measure. I wonder if he had a D?

What about my other RACQ tow that month? Well I would like to report that to you later as

"IDeTraction".

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