SUZUKI JIMNY WHEEL BEARING REPLACEMENT

The Suzuki Jimny has been in production since 1998 and has been a big hit around the world, whether it has been modified for off road competition or used for driving to the shops. The Jimny has worn Chevrolet and Mazda badges, has been fitted with petrol and diesel engines, manual and automatic transmissions and even has a two wheel drive variant for different markets around the world.

On the off road circuit, the Jimny is renowned for its lightness and tight turning circle, often outperforming its more powerful competition. However off road use can lead to increased wear and tear meaning, additional maintenance is required.

This particular Jimny was booked into a workshop for a routine check, which uncovered that the right hand front wheel bearing was showing some excess play – the technician recommended that it should be changed.

A step by step guide to changing the Jimny front wheel bearing:

1. Raise the vehicle onto a ramp so that the wheel can be removed; then remove the brake caliper including the carrier which is held in place by two 17mm headed bolts.

2. Remove the brake discs – if they are difficult to remove, there are two 8mm threaded holes that can have bolts inserted into them, in order to separate the disc from the hub **Figure 1.**

3. Then remove the air locking hub assembly, which is retained by 6 E10 star bolts **Figure 2.**

Figure 1

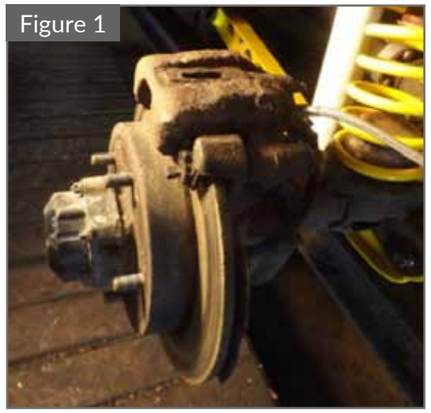
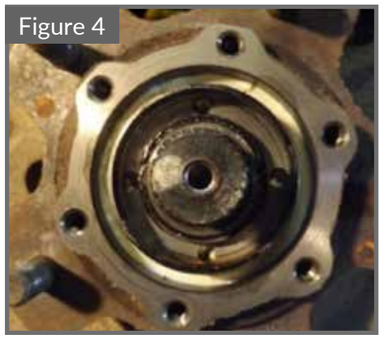


Figure 2

Figure 3

Figure 4



4. With the hub removed, remove the circlip and the thrust washer from the driveshaft **Figure 3.**

5. When the wheel nut is exposed Fig 4, you will notice it is not a regular nut; in order to remove it use Blue Print's Wheel Bearing Socket, **ADK85503**. First unpin the lock nut and insert the tool, and undo the hub nut anticlockwise **Figure 5.**

6. Once the nut has been removed, remove the bearing washer and slide the wheel hub off the shaft. **Figure 6**

Figure 5

Figure 6

7. With the hub removed, remove the bearing seal Fig 7 and the large retaining circlip Fig 8.

With everything removed the bearing can be pressed out using a suitable adaptor **Figure 9**.

NOTE: If the vehicle is fitted with ABS, be careful not to damage the reluctor ring.

Figure 7

Figure 8

8. Once the old wheel bearing has been removed, clean all the surfaces inside the hub and smear with grease – this will make it easier to press the new bearing in. Press in the bearing using a suitable adaptor, making sure only to press on the outer part of the bearing and not the inner race, as this can cause damage. The Blue Print wheel bearing kit (**ADK88223C**) has removable taper roll type bearings that can be packed with grease unlike the bearing which has been removed.

Figure 9

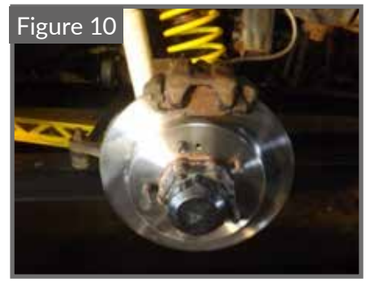
9. Fit the new bearing circlip and the hub seal, then clean the shaft and smear it with fresh grease to aid reassembly.

10. Refit the wheel hub and pack it with grease, then fit the outer bearing race.

11. Refit the bearing washer and the new bearing nut; tighten the hub nut while turning the wheel hub by hand to 220Nm. Pein the lock nut at the groove in the spindle, to stop it coming undone.

12. Fit the new thrust washer and the driveshaft circlip; the shaft may need a bit of a wiggle to pull it forward in order to expose the groove for the circlip. This can be achieved by inserting a suitable bolt into the end of the driveshaft and pulling it towards you.

Figure 10



13. Refit the air locking hub assembly and tighten the bolts to 48Nm.

Before refitting the brake disc and pads on this vehicle it was decided that they had seen better days and they were replaced **Figure 10.**

Other Parts worth checking while the vehicle is on the ramp are:

Figure 11

4WD Control System...

The front axle has freewheeling air locking hubs that are controlled by the selection of four wheel drive; the system consists of a 4WD switch on the transfer box, a vacuum switch, vacuum tank and two vacuum switching valves for the air locking hubs.

The vacuum generated in the intake manifold (petrol variants) or by the vacuum pump (diesel variants) goes through a one way valve and is stored in the vacuum tank. When the 4WD is engaged or disengaged, this activates the switching valves for locking or unlocking to apply vacuum from the vacuum tank, so that the front axle and the wheel hubs are engaged or disengaged.

A common problem when the vehicle is being driven over rough terrain is that the pipes might get caught up, which then disengages drive to the front axle. Therefore, make sure you check if any rubber joints in the system are disconnected or are perishing Fig 11. A vacuum test can be carried out using a hand operated vacuum pump.

Front Suspension lower arm bushes...

The lower arm bushes are prone to wear and tear, causing steering vibration and brake judder, so it's worth checking them to see if they need to be replaced.

With the Suzuki Jimmy given the all clear, it's back off road for some fun!