

CAN YOU FIX CREAKING AND CLICKING SPOKES ON A MODEL T FORD?

The storeys of the old days of stopping in river crossing to let the spokes swell before going into town will probably not pass the eagle eyes of the club inspectors at registration time.

The method of using a spoke jack to stretch the felloe and fit a "C" spacer might be a temporary 1 trip fix but again should not pass inspection.

Pulling apart a wood wheel that has loose spokes can often be done without any specialised equipment, but a tight wheel will provide a little more resistance even after the hub bolts have been removed and the hub flange released.

To release the hub flange, I found it helped to use a punch that matched the width of the square holes in the flange and rotate the flange until it became loose enough to remove.

Putting back together a wheel with tight spokes will take some specialised equipment. On some Model T forums, they show the use of a sheet of stiff plywood with a length of pre-threaded rod to pull the spokes back into to place.

Not being sure of the pressure required to reassemble the wheel I built a press frame from some scrap square tube and left enough space to insert the small hydraulic jack I have in the back of my Model T. This has proved to have a far higher press capacity than is required to assemble the wood wheels.



The wheels on my 23 Coupe, were beyond using decking oil to swell the spokes or adding epoxy resin to the end of the spoke in the felloe.

I had purchased a speedo drive kit that required it drive gear to be pressed fitted into the inner seal face of the hub and as the hubcap thread on that hub had been damaged somewhere in the past I decided to replace the hub and so while the wheel was apart I set out to tighten the spokes. This wheel had three spokes, that I could promote spoke movement by twisting them by hand.

With the wheel apart I investigated what could I adjust. Were the spokes to short or had the spoke wedges shrunk or the inner end of the spoke that fitted to the hub shrunk. I decided it was probably a little of all 3 reasons.

If the spokes are lengthened at the outer end where they fit the felloe they may bear tightly on the hub without the wedges becoming compressed which would still allow spoke movement and this would probably promote end wear on the spoke and the wheel would become noisy again.

So how to expand the wedges so they form a tight pitch circle before the spokes bear heavily on the hub. I decided a fix was to paint the wedges on side to side contact faces as well as the faces that bear against the hub and hub plate, and the wedges inner end of the where they sit on the hub. The other end, the doveled or reduced end of the spokes that fits into the felloe, with a high-grade marine varnish and let this cure for 2 days.



I had numbered the spokes so I could put them back in the same place on the wheel and face the same way they were prior to their removal.

I also cleaned the metal of the felloe around the spoke hole and the circle where the spoke bears against the felloe and treated each area with a rust preventative paint and a topcoat of black. I also cleaned and repainted the hub and the hub flange plate.

I placed a piece of ply on my press and used a small flowerpot to allow me to form the spokes into a Tee Pee shape and check that I could push the hub into place. With the Tee Pee formed I could easily move the wheel without the spokes collapsing which allowed me to remove the flowerpot and sheet of ply before pressing the hub into place. As the spokes near horizontal I could feel the pressure reducing on the hydraulic jack. The reason for removing the sheet of ply is to allow clearance for the hub as it is pushed into place alternatively you need to pack up the felloe to provide clearance.

The end result is that the spokes were well supported by the wedges in the pitch circle, the hub was fitted firmly inside the circle formed by the inner end of the spokes and all the spokes were under compression against the felloe when they were pushed into place.

The other front wheel was in a similar condition and its repair proceeded without difficulties.

The offside rear wheel however was in much a poorer condition it had become noticeably loose on a long trip. I could get a 12 thou feeler gauge in between the spoke and the felloe at the top of the wheel.

I decided I needed to lengthen the spoke to offset the apparent wear at the end and I found a ½ inch Grommet repair kit in Bunnings and the brass grommet that fits the end of the spoke as if made for it. The grommet comes as part of an eyeletting kit but is in the tool shop because it comes with the setting tool.

These grommets force nicely over the spoke doweled end, but I added a coat of Araldite to the exposed timber but some of the Araldite spreads onto the face of the grommet. I also put 2 coats of Varnish on the taper ends.

I attempted to assemble the wheel, but I had clearly overdone the amount of correction, so I had to remove the Araldite on the face of the grommet with my electric file and sand the faces of the tapers before I could assemble the wheel with similar assembly pressure as the front wheels.



To remove the rear wheel, I had to pull the rear hub, and which includes the safety hubs that I had fitted, and I again appreciated the engineering that had gone into them. Last tip if you are having trouble releasing the hub with a centre bolt type hub puller, I found using my air rattle gun makes sure work of it but make sure the puller is tightly screwed onto the hubcap thread.



It is nice to drive the car without the clicking of spokes when going around corners.

If all of this sounds too difficult then save your pennies and contact Keith Wilson that advertise in the Bent Wire and he will rebuild your wheels with nice new spokes Keith's number is 07 4666 3209