

Loader bush and pin overhaul:

It looks simple in the video, but in practice...

Quicke has a few on-line videos showing how to renew the pins and bushes on its loaders. It looks like a simple task and one that should be well within the scope of a farm workshop. Armed with one of the company's pin and bush kits, we decided to see if the job was as easy as it looked.



The pivots and bushes on a front-end loader are subject to wear, with those at the carriage end typically working the hardest. The subject Quicke Q750 loader and the now 6,500hour tractor have been together since new in 2005, the loader having seen routine attention from a grease gun but little else.



Basic pin and bush replacement tools should include an old flat head screwdriver, heavy hammer and a socket to undo the bolt-on locking covers and an Allen key to fit the new replacements. We found a drift and smaller screwdriver also came in handy.



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The subject Quicke Q750 front loader did not appear to have play in the main loader arms or carriage pivots. Or more accurately play that was noticeable in typical yard work such as handling round bales and using a loader bucket. A degree of play was, however, noticeable when the loader was hooked up to a flat-eight bale grab, and it was this that prompted a full loader pin and bush 'refurb' using a Quicke pin and bush kit. The loader maker has produced several online videos that outline how to renew the pins and



Quicke supplied a pin, bush and locking cover kit to renew all the pivot points on the loader. For instruction on how to do the job, the company will refer you to on-line videos.



The tilt ram pins and bushes looked barely worn although there was a degree of play in the pivots. Removing a lightly worn bush was easy once we got the knack ...

bushes of its loaders, a glance at these suggesting this should prove a simple job. In one video, a bush is shown being inserted by simply sliding it onto a pin and then using it to guide the bush into place as the pin is knocked in with a hammer to seat it. When nearly fully home, the pin is removed, reversed, and then 'flat' end used to tap the pin flush.

The pins on the Q750 have a plate section that secures against a raised half-collar on the body of the loader to stop the pin rotating in work. Knocking the bush home with the top of this type of pin will distort and damage the bush. We found we just needed to knock



...unlike the really worn bushes at the base of loader arm. These were worn paper thin, with the lip proving hard to see. The bush was prised out with the aid a small screwdriver.



The new bushes are inserted back into the housing using the pivot pin, a few hammer blows being enough to push them securely into place. Note the split in the bush is aligned so it is behind the collar. We found this ensured the bush was pushed in square.



Once the bush has been seated on one side, the pin will need removing so it can be used to secure the opposite bush. We damaged the locking cover bolt hole with the drift on one pin, screwing in a bolt into the thread ensuring this did not happen again.



Wear in the pins and bushes was not evenly distributed, with a couple of the replaced items showing virtually no wear with others quite the opposite. No surprise that the latter were at the lowest point of the carriage.



We pumped in a few shots of grease into the new pins ahead of crowding and tilting the carriage a few times. We then added another shot or two.

the pin on our loader flush to the bush housing for it to seat the bush correctly. In the video, a flathead screwdriver is used to part the 'worn' bush from its housing, simply levering it out to pop the bush free. This approach worked well with a bush that was not over worn as you can easily see the line that separates bush and the parent metal and force the screwdriver between the two. With a severely worn bush, we found it hard to determine the edge of the bush and, with a really worn bush, see if a bush was still in-situ. We just felt for an edge where we

expected the remnants of the bush to be and resorted to using a small screwdriver to work between the bush and its housing.
NOTE: We found the remains of a really worn bush still in-situ, despite it looking as if the housing was bare parent metal with no trace of the original bush. If a bush is reluctant to be tapped into place, ensure the housing is completely clear of all traces of the old bush.

One person job

Loader pin and bush renewal can easily be a one-person job but with two it will be quicker.

This is simply down to having another pair of hands to help manipulate the loader to make it easier to push the new pins home. It took us a steady three-hours to re-bush and replace all the carriage and tilt ram pins on the Q750, the main loader arm pins being left for another day. We reckon removing the loader and renewing these pivot pins will take a similar amount of time. This is not a difficult job and one that can be spread over a few days. You can even just replace a couple of pins and related bushes at a time. What came as a surprise was the amount of



Removed bush on the right looked, like its corresponding pin, to be barely worn....



RIGHT: ...the two lowest carriage pins running in paper thin bushes that proved difficult to remove. One of the pins was 'dry', its refusal to take grease having long provided a clue that it needed some attention. We then added another shot or two.



The design of locking covers in the parts kit (left) differed from the originals but proved a perfect fit...

...with Allen head fasteners in place of the bolts. The threads of the new screws have a thread lock coating to prevent them working loose.



wear in the carriage bushes and pins. A couple were renewed just in time, with paper thin bushes and wear grooves in the pins suggesting we caught them before they would soon start to eat into parent metal. You also need to be careful when visually looking at a pin or bush to check for wear. The upper pivot of the tilt ram had a slight amount of play but pins and bushes looked as good as new. When these pins and bushes were removed, however, it was easier to see that they were worn evenly all round and this made it hard to pick up what must have been a fair degree of the wear. New pins and bushes removed all traces of play.

tilt cycles, the re-bushed and pinned loader carriage was hooked up to a grain bucket for a quick try. The verdict? The loader just 'felt' better to use. So much so that, although we had intended leaving the replacement of the jib pivots to later, we completed this work the following day. This task was easier than expected, the bushes proving easy to access once the loader was detached from the tractor.

Although the job was eased by having two us doing it, we reckon one person should be able to replace all the pins and bushes on a typical Quicke loader without any assistance. A key

point to note on allotting time to compete the work is that really worn bushes can be hard to extract, the more so if it is difficult to see what you are doing.

We found less worn bush pairs in the carriage took 15 to 20 minutes to remove and replace, the jib pivots proving easier to renew. If you need to use the loader and cannot afford for it to be out of action for a full bush and pin removal in one go, consider just tackling a few bushes at a time.

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Summary

Following a grease up and a few crowd and

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