

## Rear axle assembly removal



- 6 mm hex key
- allen 10
- hammer
- wire

1. It is easiest to first split the chain. Take the chain of the tensioner in front to get more slack.



2. Now you can lift the chain of the cassette and look for the quick link.



3. Undo the derailleur cable and take it out of the derailleur. Mounting the old cable can be problematic if the end is frayed, make sure you have a new cable at hand.





## Rear axle assembly removal

4. Take the wheels off, start by removing the rubber cap.

5. Use a 6 mm hex key and an extension if needed.

6. The bolts need to be retained with loctite 243, more important if you have disc brakes.

7. Deflate the tyres.

8. Slide the wheel of the axle, sometimes it needs a gentle knock with a hammer. If you only want to change the cassette you can slide the axles sideways after taking the wheels off.

Continue from photo 13.

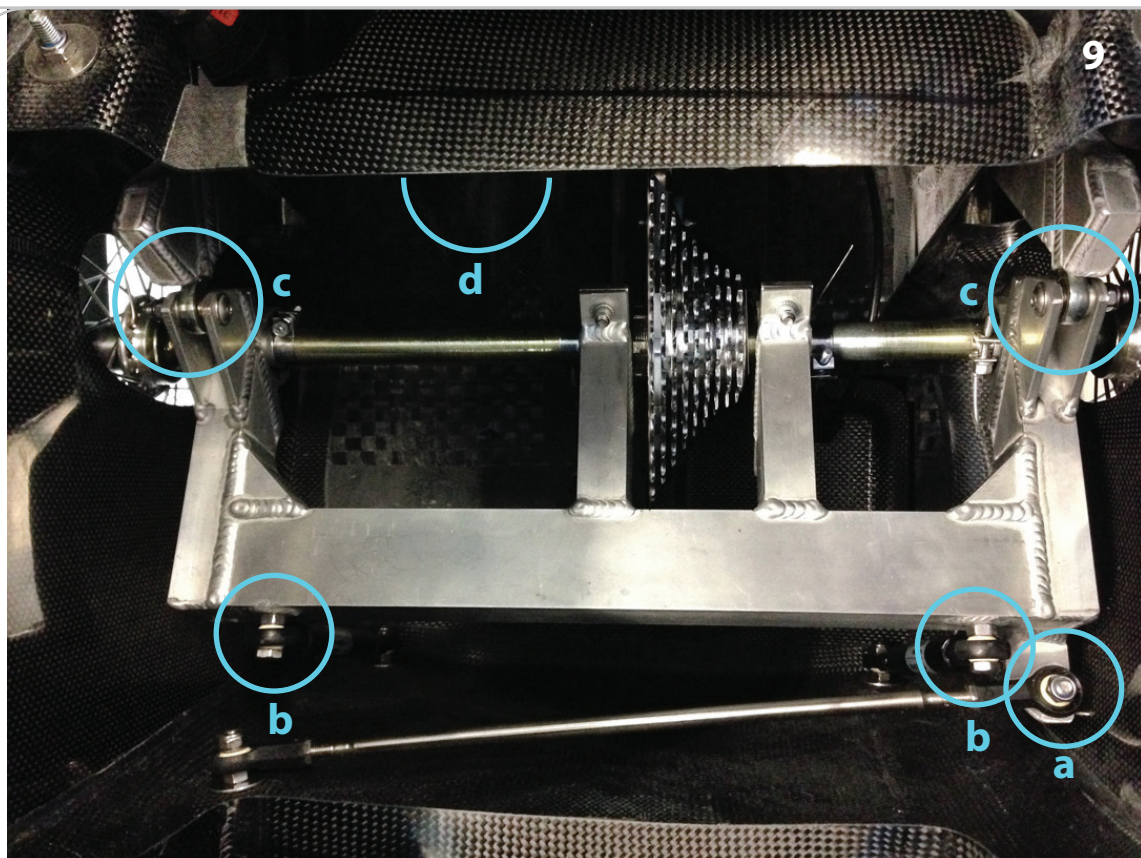




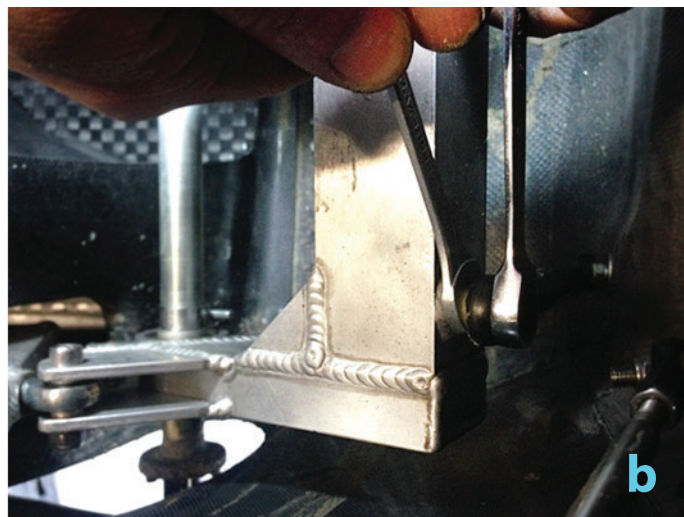
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9. Now all the bolts that hold the assembly need to be removed.

If you have disk brakes - see page 08 for more information.



- a) Remove the nut that holds the Panhard rod and put it in a vertical position.
- b) Take the retaining nut and the bolt that hold the dampers out.
- c) Take the bolts out of the trailing arms, note the two spacers on the inside.
- d) Remove the nut of the lower trailing arm and take it off the bolt.





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10. You can deflate the bellows and push the trailing arms up.



11. Rotate the assembly down while pushing the axle completely into its hole on the left side.

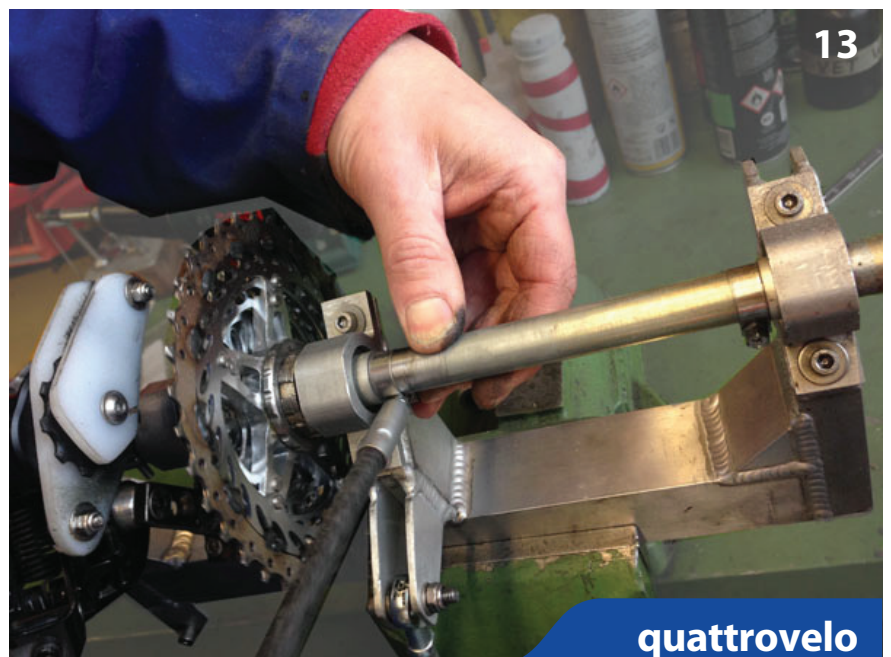
You can now take the axle out of the hole in the right wheelbox.



12. Rotate the assembly upwards, now you can take the assembly out.

13. If you want to take the axles and cassette of start by loosening the hose clamps.

If there are disc brakes mounted the two 5 mm bolts that hold the bracket to the axle need to be removed.





## Rear axle assembly removal

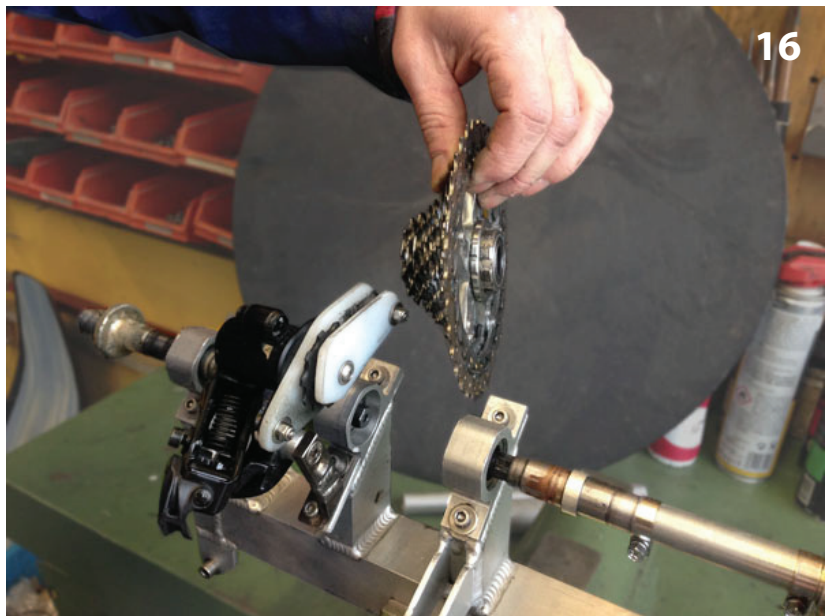


14. Tap on the axles to remove them from the cassette and bearings. Be careful not to bend the arms on the aluminum subframe.



15. & 16. Do the same with the other axle and the cassette can be removed.

If you also disassemble the bearing housings they will need to be aligned when mounted again. This is best done with an axle through all the bearings.



17. Note the position of the clamps and spacers. Older QV's have spacers of equal length most have spacers of different lengths.

The position of the axles is important: it can move the cassette relative to the derailleur causing the index shifting to fail.

Make a note of the way the cassette and derailleur are mounted before disassembling.



18. Mount the assembly in reverse order. Rotate and put the axle in the hole.



19. Mounting the spacers and bolts in the trailing arms can be difficult.

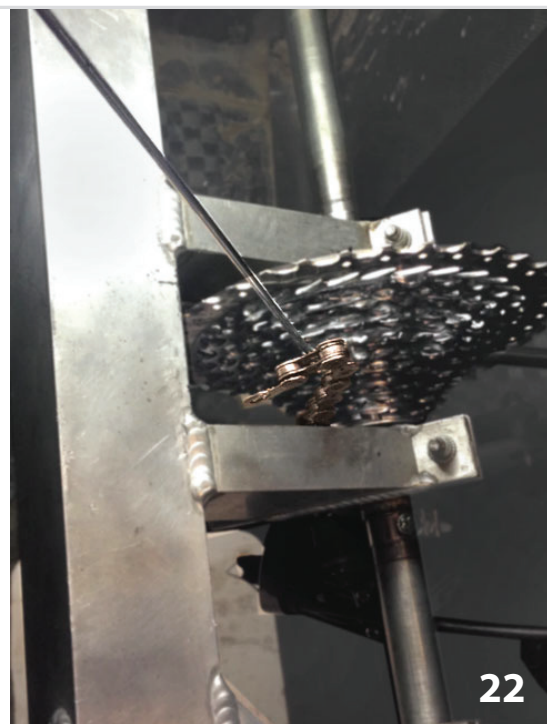


20. & 21. A simple tool made of wire makes it easier.





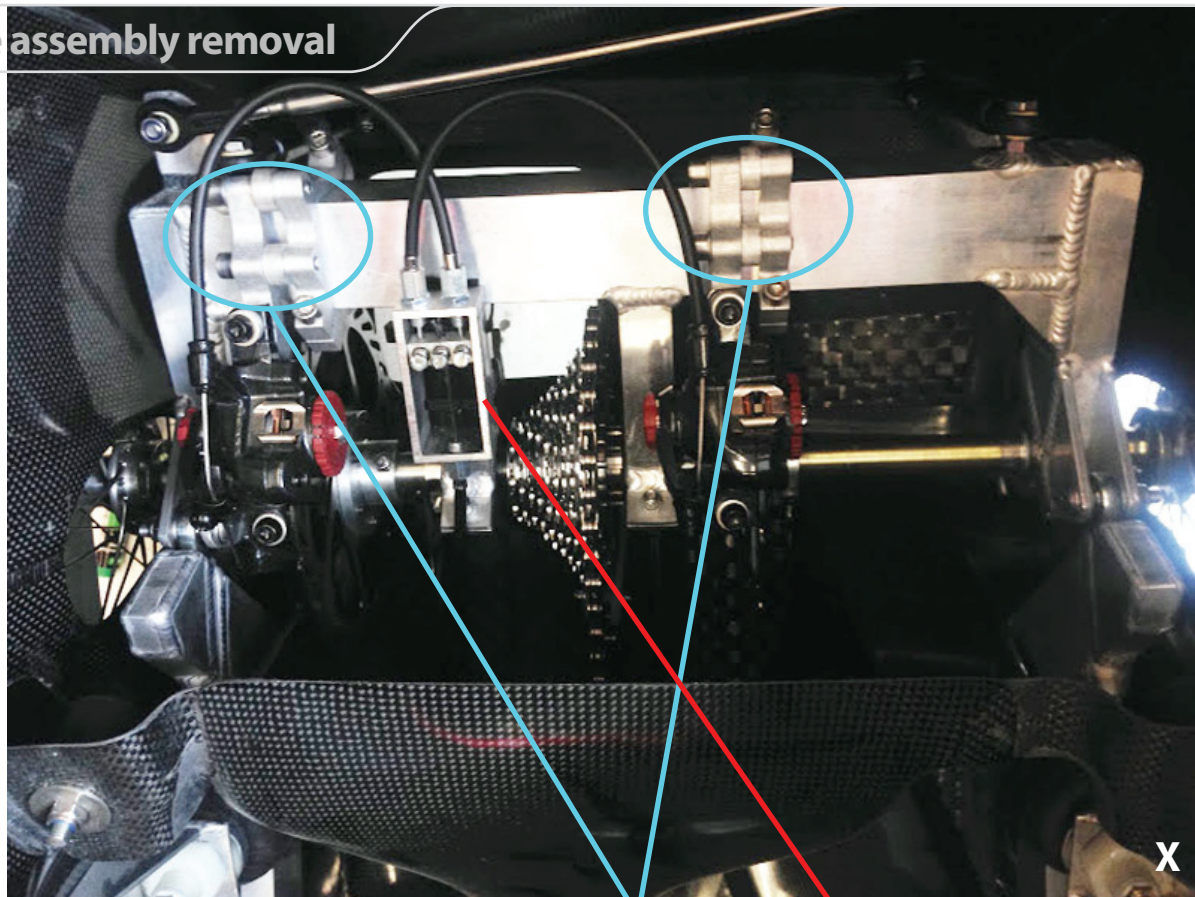
22. The tool in Photo 20 is also very helpful if the chain needs to be fished from the bottom after it was guided through the derailleur.



23. Inflate the bellows to the desired pressure.



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X. If there are disc brakes mounted remove the 4 bolts (Y) that hold the caliper to the clamps around the rear axle subframe, note the spacers. Cut the tyraps (Z) that hold the cable splitter.

If you remove the black bolts that hold the calipers you will need to adjust them when reassembling.

