



Best Practices- CV Axle Shaft and Axle Nut Fastening

Brand	TTX/Supreme/Original Grade	Product	Wheel Hub Assembly	Date	November 2021
Part Number(s)	Various				

The fit between the splines on the CV axle end and wheel hub assembly is exact and precise. This is designed to avoid “clicking”, potential premature spline wear and maintains the proper tolerance between the two components.

During the reassembly phase of a wheel end repair, the Professional Technician may be tempted to apply grease or other lubricants onto the spline ends of a CV axle shaft to facilitate mating with the wheel hub assembly and overcome perceived resistance. This is not advised, as lubricant can become lodged between the two components when the axle nut is tightened to draw the CV axle shaft into the wheel hub.

Even if proper torque specification is followed, this condition may prevent the correct seating of the CV axle shaft due to the gap introduced between the two components. This will impact the ability of the axle nut to retain its correct clamping force, reducing part performance and/or service life.

For a successful repair outcome, ensure to adhere the following:

- Inspect CV axle shaft to ascertain condition. Replace if out-of-specification or otherwise damaged.
- Do not reuse old hardware. Replace circlips, axle nuts and other fastening hardware where applicable.
- Do not use grease, anti-seize compound or other lubricants when mating the CV axle shaft to the wheel hub assembly.
- Clean and remove all corrosion, rust, burrs and any other debris from the CV axle spline end, wheel hub assembly and steering knuckle.
- Always reference the original factory service manual for proper diagnostic, removal and replacement procedures and for all related specifications and values. Only use a calibrated torque wrench for final fastening.

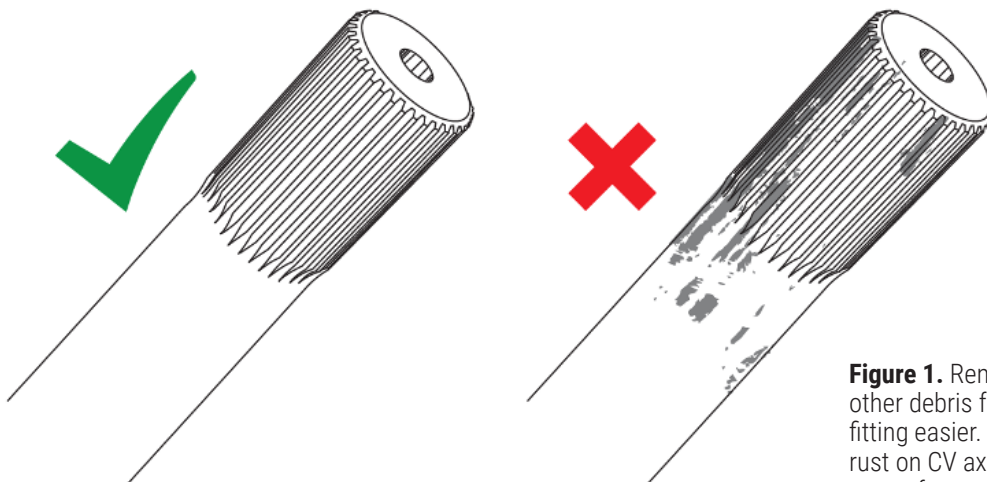


Figure 1. Remove all corrosion, rust, burrs and other debris from mating components to make fitting easier. Even a minor build-up of surface rust on CV axle shaft spline ends may impede ease of reassembly.

