

Frankenstein Motorworks Installation Guide 5

4.1 Axle Shafts

The axle shafts for this swap can be put together from other OEM Toyota axles. I worked to find a good combination that would be easy for anyone to assemble. Because of this I focused on tripod inner joint style axles because of their ease of assembly. I also focused on finding heavy duty components to avoid broken CVs as much as possible within the bounds of stock components.

To put together the pair of axles you need these three axles, aftermarket axles should be the same but I've only checked OEM parts and Empi parts. I'd suggest new Empi parts over used OEM parts but both will be adequate.

2001-2005 Toyota Rav4 FWD, Front Left

Toyota Part Number: 43420-42070

Empi: 80-6255

2001-2005 Toyota Rav4 FWD, Front Right

Toyota Part Number: 43410-42080

Empi: 80-6256

2001-2005 Toyota Rav4 AWD, Front Left

Toyota Part Number: 43420-42120

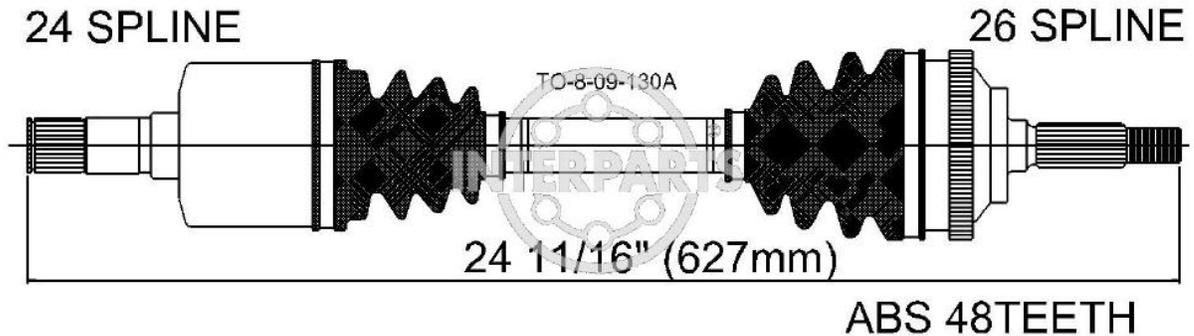
Empi: 80-6259

If buying the three axles above from Empi expect to pay about \$220 for the full set. (price as of 7/5/17)

All of these axles will get split at the tripod joint but it's important to know that CV axles age generally "binned" by size. While it is very easy to slip out the tripod and slide it into the appropriate tulip it's possible that the parts are ground slightly different sizes which will result in noise and/or accelerated wear. This means the inner tripod should always stay with the tulip it came with. Disassembly should be done by removing the larger retaining ring on the boot of the inner joint and pulling the joint apart. You should then use snap ring pliers and remove the snap ring and the tripod carrier with the associated bearings. You should then end up with six parts:

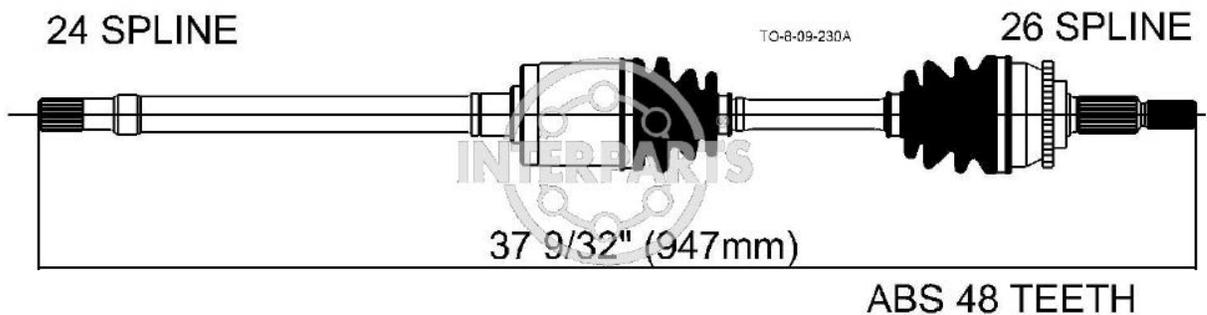
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2001-2005 Toyota Rav4 FWD Front Left:



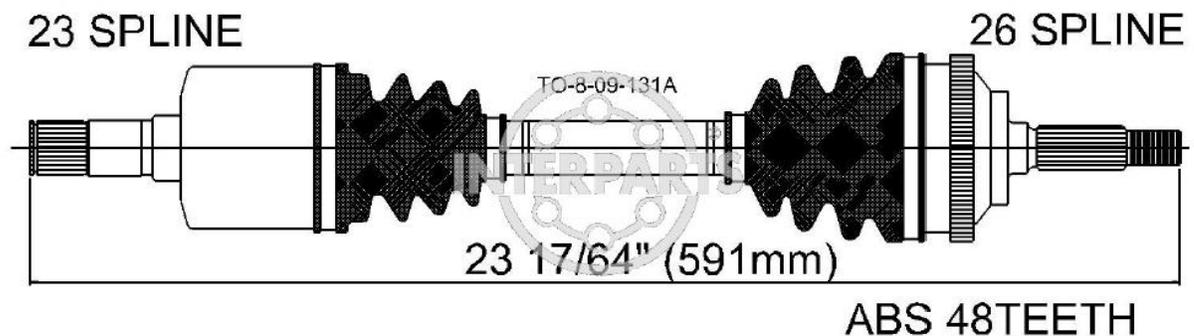
The inner tulip and tripod carrier will be referred to as 'A'
The center shaft and outer joint assembly will be referred to as 'B'

2001-2005 Toyota Rav4 FWD Front Right:



The inner tulip and tripod carrier will be referred to as 'C'
The center shaft and outer joint assembly will be referred to as 'D'

2001-2005 Toyota Rav4 AWD Front Left



The inner tulip and tripod carrier will be referred to as 'E'
The center shaft and outer joint assembly will be referred to as 'F'

The left axle shaft is assembled by putting together parts 'A' and 'F'
The right axle shaft is assembled by putting together parts 'C' and 'B'
Parts 'D' and 'E' are not useful for this swap, they can be disposed of. The boots do match the other axles that you've just assembled so you may find it useful to save them for the future.

For questions or kit part purchases please contact Marc@frankensteinmotorworks.com