



# AXLES: FRONT AND REAR

## OVERVIEW OF AN AXLE

An axle shaft is the final part of a differential that transfers power to the wheels. Front and rear axle shafts have different construction details. A rear axle mates to the wheel via a flange on the end. A front axle consists of two shafts, an inner and an outer, that mate to each other via a universal joint to allow for turning. Front axles connect to the front wheels via a hub assembly. Factory axle are typically made from a 1040 alloy steel, while aftermarket performance shafts are made from a 1541H or 4340 Chromoly alloy for significant strength gains.

## PRODUCT ADD-ON OPPORTUNITIES

When an axle is sold, it is beneficial to sell axle bearings and seals and axle studs.

A common reason for axle failure is bad bearings and seals and replacing these is critical. These parts are inexpensive and will guarantee longevity and optimal performance.

### AXLE BEARINGS & SEALS, AXLE STUDS



## ANATOMY OF AN AXLE

**BOLT PATTERN:** Bolt pattern is determined by counting the number of stud holes and measuring across them (see reverse side).

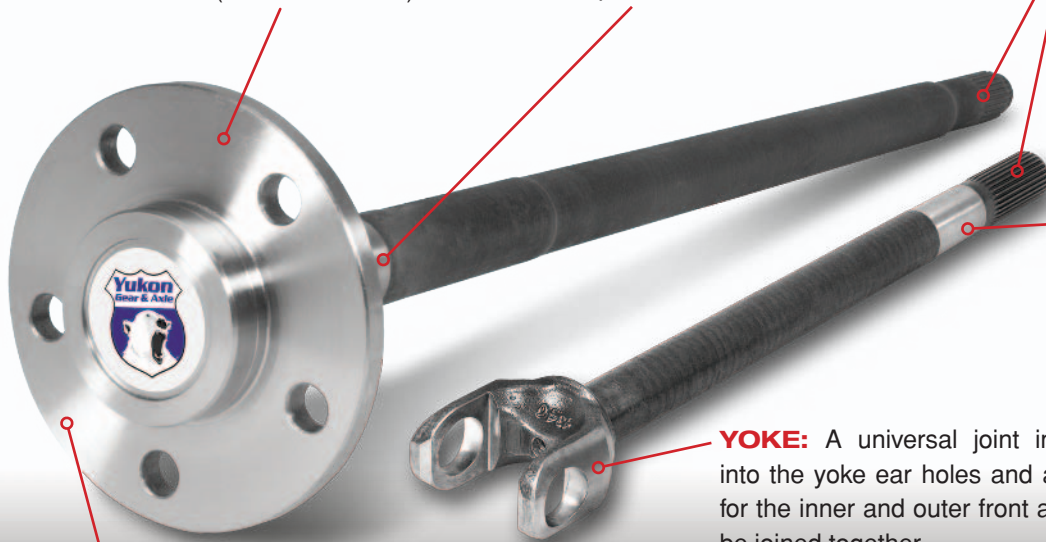
**BEARING JOURNAL:** Where the axle bearing rides or is pressed on to.

**SPLINE:** Mate to the spider gears. Counting the number of splines can help determine what differential the customer has.

**SEAL SURFACE:** Where the axle seal rides on the axle.

**YOKE:** A universal joint installs into the yoke ear holes and allows for the inner and outer front axle to be joined together.

**FLANGE:** Mates to the wheel.



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## YUKON GEAR & AXLE



### OEM Replacement Rear Axle Shafts

Many people don't realize that over time axles wear out and need to be replaced. Yukon manufactures OEM axles to fit most domestic rear-wheel-drive passenger cars as well as 2WD and 4WD pickup trucks and SUVs. Yukon's performance rear axles are heat-treated deeper than the factory axle shafts to ensure added shaft strength and durability in the bearing and seal area.

### High Performance Rear Axles

Rear axles are one of the most important parts of a hot rod or extreme-built 4x4. A weak axle can leave you stranded when you least expect it, so don't compromise. Get the best, get the Yukon advantage. Yukon's high-performance rear axles are made from high quality 1541H and 4340 Chromoly steel. These axles are engineered to stand up to the extreme conditions of hard street driving, trail running or weekends at the track.

### 4340 Chromoly Front Axles for Spicer® 30, 44, 60 & GM 8.5

If you're looking for strength and durability, we can help. Yukon Replacement Chromoly front axles for Spicer® 30, 44, 60 and GM 8.5 are made from only the best steel available and are engineered to withstand the most extreme off-road conditions. Yukon Chromoly axles use a state of the art, dual heat-treating process to provide maximum strength and long life. This dual heat-treating along with the high-quality material gives you a 35-40% strength increase over stock axle shafts.

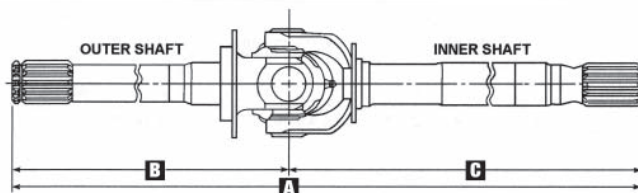
## USA STANDARD

### Quality USA Standard Gear Axles

Proven manufacturing technologies provide top quality, competitive tough axles. For both front and rear applications, put the power of performance in your vehicle. All USA Standard axles come with a limited one year warranty.

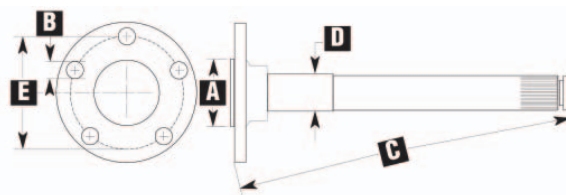
## HOW TO MEASURE AN AXLE

### Measuring for Front Axle Length



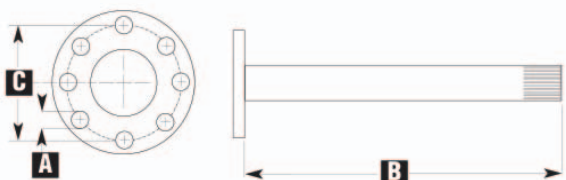
- A. complete assembly
- B. outer shaft length
- C. inner shaft length

### Measuring for Rear Axle Length - Semi Float



- A. brake pilot
- B. stud hole diameter
- C. length
- D. journal diameter
- E. bolt pattern

### Measuring for Rear Axle Length - Full Float



- A. stud hole diameter
- B. length
- C. bolt pattern diameter