

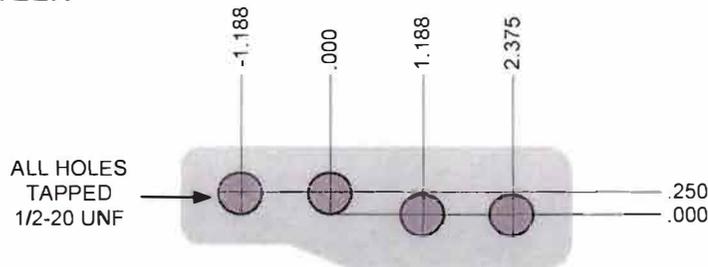
DANA 30 / RUBICON 44 CONVERSION STEERING KNUCKLE

Reid Racing's high steer Dana 30 / Rubicon 44 (1984—2006) knuckles are designed to replace the late model Dana unit bearing design (YJ, TJ, XJ, WJ, ZJ, MJ Dana 30 and TJ Rubicon Dana 44 axles—NOT the older CJ Dana 30) with early model Dana 44 tapered roller bearings and traditional lockout hubs. The Reid Racing knuckles use the Chevy / Jeep spindle bolt pattern and accept "outers" from any standard open knuckle Dana 44: Chevy (including the "10-Bolt"), full size Jeep, Ford (including the "Twin Traction Beam"), Scout, and Dodge 1/2 and 3/4 ton Dana 44 axles. Parts selection determines which wheel lug pattern your Jeep will use: 5 on 5.5", 6 on 5.5", or 8 on 6.5" depending on your choice of hubs and brakes (more details on page 2 of these instructions).

INSTALLATION

Remove the existing Dana 30 knuckles, brakes and axles. The original Dana 30 (1995 and up) inner axles and U-Joints are reused by changing the outer axles to Dana 44 outer axle stub shafts. Earlier (pre-1995) small-U-Joint inner axles will need to be changed to the later, stronger Dana 30 large joint style. Install the spindle studs by tapping them in from the back side of the knuckle, then install the new conversion knuckle onto the original housing. Insert the axle assemblies and install the new Dana 44 spindles, hubs, rotors, brakes and lockout hubs with the use of a Dana factory service manual. Pay particular attention that the existing brake master cylinder is adequate to properly actuate the new brake calipers you intend to use.

OPTIONAL HIGH STEER



USE OF HIGH STEER IS OPTIONAL AND REQUIRES CUSTOM STEERING LINKAGE AND TRACK BAR RELOCATION. If not using high-steer arms, you may wish to plug the high steer threaded holes with short 1/2" x 20 bolts to preserve the threads for future use. Reid Racing knuckles have been machined and drilled for use with high steer arms, all angle correction has been machined directly into the knuckle so simple flat arms can be manu-factured.

STEERING STOPS

The steering stops on Reid Racing knuckles are "cast in" to prevent the common bending of the stock style adjustable bolts. The stops are intentionally cast long so adjustments can be made by grinding the tips of the stops to fit. If you are going to grind the steering stops to increase steering angle, set the toe-in first because the toe-in setting changes the stop settings. After the knuckles are installed and the toe in is set, cycle the steering back and forth grinding small amounts of the stop until the desired degree of steering is set; the front and rear steering stops must be adjusted simultaneously and equally. Make sure to check for u-joint binding and yoke to yoke interference at full lock in both directions; if binding or contact occurs, axle breakage will happen. If a stock style adjustable steering stop is desired, the cast in stop can be cut off at the knuckle then drilled and tapped for a 3/8" bolt.

DANA 30 / RUBICON 44 CONVERSION STEERING KNUCKLE

The Reid Racing knuckles use the Chevy / Jeep spindle bolt pattern and accept "outers" from any standard open knuckle Dana 44: Chevy (including the "10-Bolt"), full size Jeep, Ford (including the "Twin Traction Beam"), Scout, and Dodge 1/2 and 3/4 ton Dana 44 axles. Parts selection determines which wheel lug pattern your Jeep will use: 5 on 5.5", 6 on 5.5", or 8 on 6.5" depending on your choice of hubs and brakes. The wheels and rear axle will need to be changed to match the new front lug pattern; dual-pattern rear axle shafts or wheel adapters are commonly used with this conversion. Brake hose adapters and/or custom brake lines may be required depending on caliper choice.

DANA 44 PARTS NEEDED TO COMPLETE THIS INSTALLATION

The necessary Dana 44 "outers" to complete this installation include 2 Dana 44 outer axle (stub) shafts, 12 spindle studs, 12 spindle nuts & washers, 2 Chevy or full-size Jeep Dana 44 spindles with inner spindle bearings and seals, 2 hubs with rotors & wheel studs, 2 inner & outer wheel bearings and races, 2 inner wheel seals, 2 sets spindle lock nuts, 2 lockout hubs or drive flanges (spline count to match the new stub shafts), caliper mounting brackets (brake backing plates) left and right, calipers left & right, brake pads & caliper hardware.

The most common lug pattern used with this conversion is 5 on 5.5" from a Ford 1/2-ton truck and Bronco because of the availability of dual-pattern rear axleshafts for the Jeep Dana 35 and Dana 44 with the both the 5 on 4.5" and 5 on 5.5" lug patterns. Many Reid Racing dealers offer a complete "outers" package, but the following list of part numbers can assist you in sourcing the individual OEM parts for this particular lug pattern. **This is only a basic guide and all parts should be test-fitted before final assembly:**

Spindles: Dana-Spicer 706528X (1.625" & 1.785" bearing journals).

Spindle studs: OEM from any disc brake Jeep Wagoneer or Chevy Dana 44 or "10-Bolt" from 1971-1987, also available from Reid Racing as part # D44101.

Spindle nuts: OEM Dana-Spicer 28068X.

Brake Backing Plates: OEM from most Chevy Dana 44 and "10-Bolt" axles from 1971-1987, and from a disc brake Jeep Wagoneer. They must be from a half-ton axle, and if you use the later "10-Bolt" backing plates, you will need to grind a small tab off the back of the caliper mount. Heavy-duty aftermarket backing plates are available from a company named PartsMike, part numbers CB6675-L and CB6675-R.

Brake Calipers: Any 1971-1987 4x4 Chevy or Jeep Wagoneer brake caliper set will fit. New part numbers are FRC4141 and FRC4142. New pads set is part # TS728A.

Outer Stub Axles: Any Chevy or Jeep Wagoneer front Dana 44 or Chevy "10-Bolt" from 1971-1987 including 3/4-ton trucks. Yukon part # YA W38815. Axle slingers are Dana-Spicer part # 36364. Spindle rebuild kits are Dana-Spicer part # 706527X.

U-Joints: If you are careful, you can re-use your existing joints. Otherwise, any aftermarket "297" U-Joint will work, including CTM's. OEM Dana-Spicer part # 5-760X.

Locking Hubs: Any Chevy/Jeep Dana 44 or "10-Bolt" from 1971-1987 or disc brake Ford F150/Bronco Twin Traction Beam "IFS" front axle will have the correct standard OEM hubs. Warn has standard (part # 9790) and premium (part # 20990) hubs available at most aftermarket retailers.

5x5.5" Hub & Rotor Assemblies: Any disc brake Ford F150 or Bronco with a solid front axle or Twin Traction Beam "IFS" axle will work. New OEM assemblies are part # 4886297.

Wheel Bearings & Seals: Bearing part # LM501349, LM603049. Seal part # NS4250.

WARRANTY

All "Off Road Products" sold by Reid Racing, Inc. are intended to be used for "off road" and "off highway" use only, and are NOT designed, manufactured or approved for use on any public road or highway. Due to the intended use of the products offered, all "Off Road Products" are sold without any warranties of fitness for purpose or use, merchantability, or any other kind, either expressed or implied, whether written or oral, by Reid Racing, Inc., or its past, present or future officers, directors, principals, agents, employees, legal representatives, trustees, partners, associates, affiliates, subsidiaries, division, partners, heirs, executors, administrators, purchasers, predecessors, or successors. The buyer of these "Off Road Products" bears and assumes the entire risk of loss or injury as to the fitness for purpose or use, merchantability, durability and performance of these "Off Road Products" and assumes the entire cost of any necessary maintenance, service or repair. Reid Racing, Inc. will not be liable for any subsequent, resulting or consequential damages, expenses, losses or injuries arising from or out of the use, misuse, or improper installation of any "Off Road Product".