



## ***2007-2018 JEEP JK WRANGLER***

**-YA WU-15 5 x 5.5**

**\*THIS KIT WILL CHANGE BOLT PATTERN TO 5 ON 5.5**

**-Wheel center bore needs to be 4.133" or larger.\***

**- 2007-2011 Dana 30 non Rubicon requires new inner axle shafts to accommodate the larger Universal Joints.**

**Part # YA W38828 and YA W38829.**

**THIS KIT INCLUDES NEW BRAKE ROTORS WHICH HAVE BEEN MODIFIED FROM STOCK. THEY MUST BE USED FOR PROPER FITMENT AND OPERATION.**

As you read these instructions, you will see NOTES, CAUTIONS and WARNINGS. Each message has a specific purpose. NOTES are additional information to help you complete a procedure. CAUTIONS are safety messages that indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. A CAUTION may also be used to alert against unsafe practice. WARNINGS are safety messages that indicate a potentially hazardous situation. Which, if not avoided could result in serious injury. CAUTIONS and WARNINGS identify the hazard, indicate how to avoid the hazard, and advise of the probable consequence of not avoiding the hazard. PLEASE WORK SAFELY!

## SAFETY PRECAUTIONS



### CAUTION



### READ INSTRUCTIONS THOROUGHLY BEFORE BEGINNING INSTALLATION.

This sheet provides guidelines to install the Spin Free Hub Conversion Kit (Figure 3). There are NOTES, CAUTIONS, and WARNINGS which should be followed during installation to avoid possibility of personal injury or damage to the vehicle. During installation, standard safety precautions and equipment should be used where appropriate. Because the skill and experience of the installer and the tools used can vary widely, it is impossible to anticipate all conditions under which this installation is made or to provide cautions for all possible hazards. If your installation varies from the instruction, you must be completely satisfied that your safety or the operation of the vehicle will not be compromised.

**NOTE:** If you have questions concerning the installation of the Spin Free Hub Conversion Kit, call Yukon Gear & Axle® at 1-425-348-9002 for assistance.

### FEATURES:

- Eliminates steering drag caused by front locking differentials
- High strength selectable locking hubs
- Serviceable bearing and seals

## TOOLS AND MATERIALS NEEDED

Jack	½" Drive Socket Set
Jack-stands	4-Lug Socket for Dana 44 (Fig 1)*
Torque Wrench	Safety Goggles
13mm 12 Pt. ½" Drive Socket	Shop Rags
4-lug socket part # TLSWR-02	36MM SOCKET
Premium High Temp Bearing Grease	Snap ring pliers

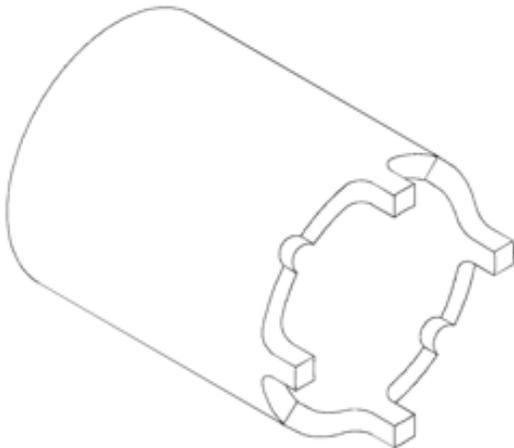
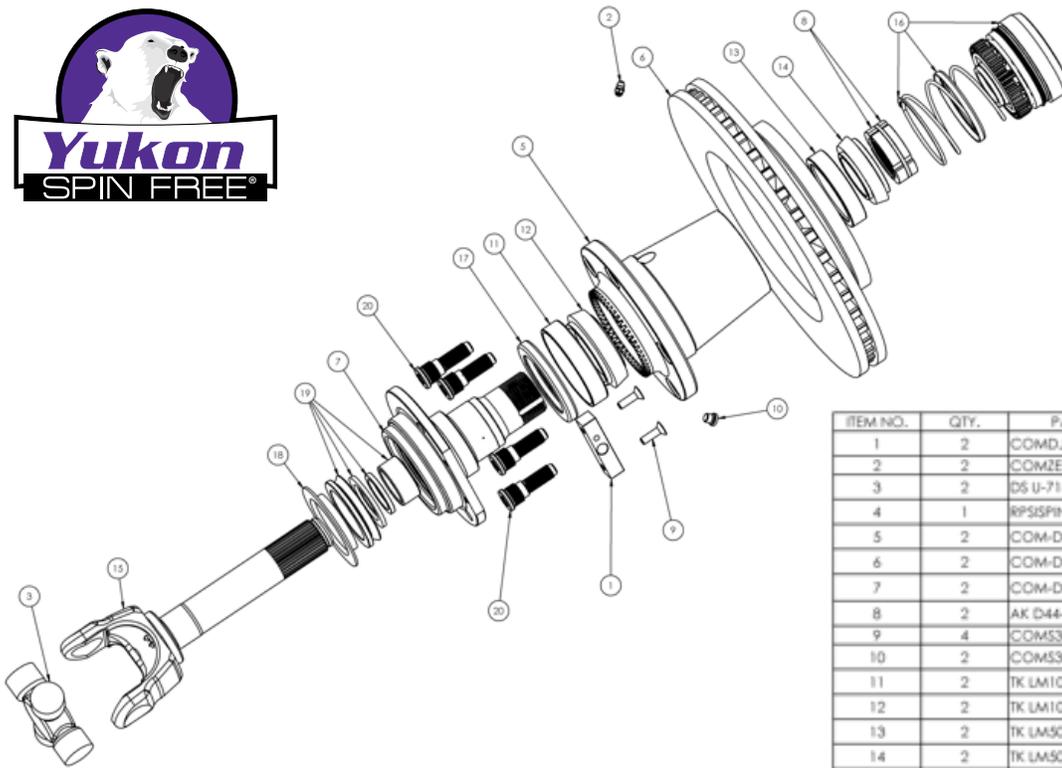


Figure 1: 4-Lug socket.



Figure 2: Installed.





ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	2	COMDJK3PC-ABS	ABS HOLDER
2	2	COM2ERK-0.25-285	GREASE ZERK
3	2	DS U-7166	U-JOINT
4	1	RPS5PIN-15	INSTRUCTION MANUAL
5	2	COM-D44JK-HUB-01	WHEEL HUB
6	2	COM-D44JK-RASSY-01	BRAKE ROTOR
7	2	COM-D44JK-SPINDLE-01	SPINDLE
8	2	AK D44-NUTS-CJ	SPINDLE NUT KIT
9	4	COM535	FLAT HEAD CAP SCREW
10	2	COM536	PLUG
11	2	TK LM104911	BRG RACE
12	2	TK LM104949	BRG CONE
13	2	TK LM501310	BRG RACE
14	2	TK LM501349	BRG CONE
15	2	YA W39129	OUTER FRONT AXLE
16	1	YHC70005	LOCKING HUB SET
17	2	YMS471271	FRONT WHEEL SEAL
18	2	YSPBF-016	DUST SHIELD
19	2	YSPSP-025	BRG & SEAL KIT
20	10	YSPSTUD-029	AXLE STUD

Figure 3: Parts list.

## Unit Bearing Eliminator Kit Installation Instructions for JEEP JK

**Before starting, make sure you have all the proper tools and safety equipment!**

- Read instructions carefully before starting
  - Always wear safety goggles and proper safety gear when dealing with tools and chemicals
  - Check parts list carefully. If any components are missing, contact your Yukon distributor
  - This kit requires wheels with a center bore of 4.133" or larger and a 5 on 5.5" bolt pattern
  - The locking hubs provided in this kit will need to be manually engaged for 4 wheel drive to work
  - Inspect all parts. If any parts appear to be damaged, contact your Yukon distributor for replacements.
- Any modified, neglected, abused or improperly installed parts will NOT be accepted or replaced



### WARNING

Raised vehicles can cause falling particles. **WEAR SAFETY GOGGLES.** Falling particles can cause eye injury.



Improperly supported vehicles can fall. **DO NOT USE A JACK TO SUPPORT THE VEHICLE. USE JACK STANDS IN PAIRS TO SUPPORT THE VEHICLE. USE JACKS OR JACK STANDS ONLY ON A HARD, STABLE, AND LEVEL SURFACE. DO NOT EXCEED THE RATED CAPACITY OF A JACK OR JACK STANDS.** An unstable vehicle can fall and cause a crushing injury.



A rolling vehicle can cause jack stands to tip. Before working under vehicle, **VERIFY THAT THE PARKING BRAKE IS SET, THE TRANSMISSION IS IN PARK (AUTOMATIC) OR REVERSE (MANUAL) AND THE REAR WHEELS ARE CHOCKED.** A tipping jack stand or vehicle can cause injury.



## DISASSEMBLY

**NOTE:** The following instructions are for doing one side of the axle. Both sides of the axle can be done simultaneously.

1. Start the engine. Shift the transfer case into one of the 4WD modes. Leave transfer case in the position throughout entire wheel hub conversion installation. This will aid installation of the axle shafts.
2. Turn the ignition key OFF. Put transmission in Park (automatic) or Reverse (manual).
3. Set the parking brake and chock the rear wheels.
4. Raise the front end and support it on 2 jack stands.
5. Remove the tire and wheel assembly.



### WARNING

Brake pads may contain asbestos. **NEVER CLEAN BRAKE SURFACES WITH COMPRESSED AIR. AVOID INHALING ANY DUST FROM THE BRAKE SURFACE. USE A COMMERCIALY AVAILABLE BRAKE CLEANING FLUID.** Asbestos has been found to be a cancer causing agent.

6. Remove the caliper and hang it from the frame or suspension with a piece of wire, being careful not to strain the brake hose. Do not hang calipers from brake hoses.
7. Remove 3 bolts retaining the original hub (using 13 mm 12 pt socket). Take care not to damage the bolts as they will be reused in the kit. Do not disassemble the bearing assembly from axle shaft. See Figure 4. (For location reference only)
8. Remove factory brake rotor and remove the remove the ABS sensor from the unit bearing.

**NOTE:** Refer to your authorized Jeep Technical Service Manual for removal instructions.

9. Remove axle shafts, brake shield, and unit bearing. This may take some force depending on the amount of rust, salt, or corrosion present. Take caution when removing the shaft assembly not to damage the inner shaft seals. See Figure 4. (For location reference only)

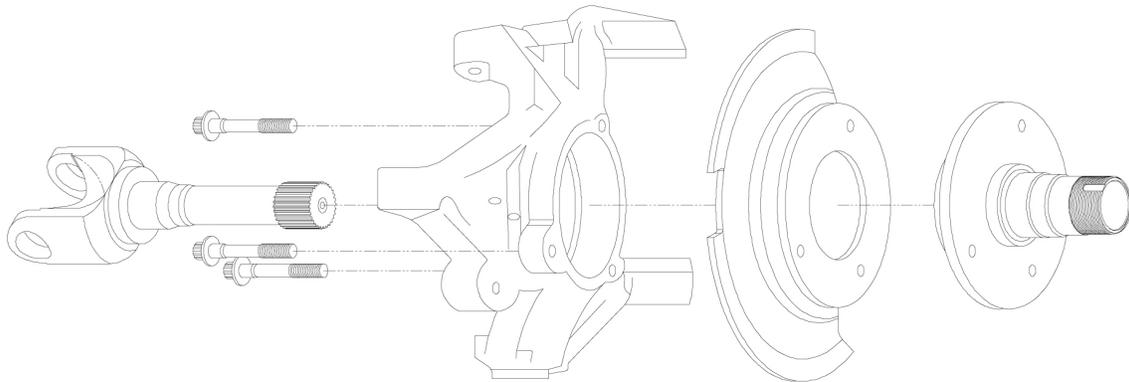


Figure 4. Exploded knuckle



### WARNING



Press parts under stress can break. **WEAR SAFETY GOGGLES.** Broken parts can cause eye injury.

10. Separate the original inner shaft from the outer shaft by removing the u-joint.

**NOTE:** Refer to your authorized Jeep Technical Service Manual for removal instructions.

11. Install shield to outer axle shaft (both components supplied with kit). See Figure 5.

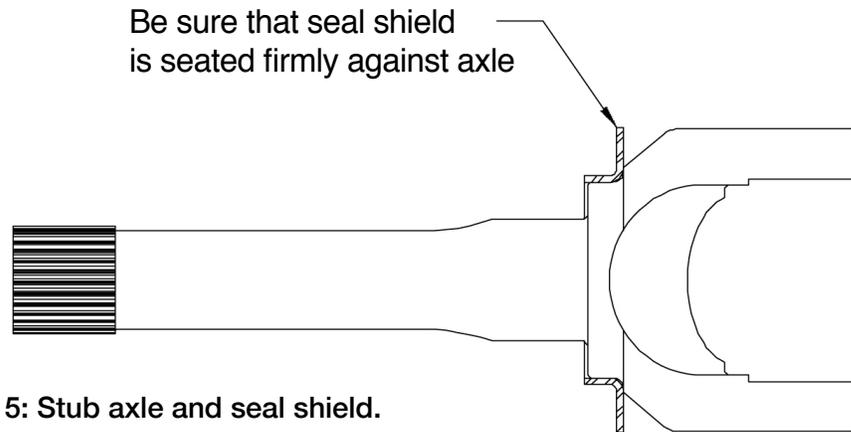


Figure 5: Stub axle and seal shield.

12. Install u-joint and outer axle shaft (both supplied in kit) to inner axle shaft.

13. Place the thrust washer on the shaft with the I.D. chamfer side towards the Yoke.

14. Place V-seal (thick side towards yoke) on axle shaft.



Figure 6: Exploded knuckle.



Figure 7.

15. While supporting axle assembly to keep from pushing loose material into differential, slide axle assembly into differential being careful not to damage the inner seal.



Figure 8.

16. Install spindle bearing and seal into spindle. Make sure the spindle seal is placed cup side, facing towards needle bearing. This seal is held in by grease only.



Figure 9.



Figure 10.

## BEARING INSTALLATION

17. Install the wheel studs into the hubs. Use a hammer or press.



Figure 11.



Figure 12.

18. Install the grease zerk and plug into the Hub. The zerk takes an 11/32" socket.

19. The grease zerk was designed to facilitate periodic greasing of the wheel bearings without having to disassemble the Hub from the spindle. Before adding grease, you must remove the plug or "purge valve" to allow the old grease to escape. Be careful not to add too much grease as it can seep past seals and stick the lockouts together rendering them inoperable. If too much grease is added the lockouts would need to be uninstalled and cleaned. Use of the grease zerk is optional and not required.



Figure 13.



Figure 14.

20. Inspect inside of wheel hub and clean if necessary.

21. Press wheel bearing races into the new wheel hubs. Bearing races must be full seated.



Figure 15.



Figure 16.

22. Apply a coating of grease to the inside diameter of the bearing cups.

23. Pack the bearings full of high temp grease and install the inner wheel bearing into the new hub.



Figure 17.



Figure 18.

24. Pack the interior of the hub with premium high temp bearing grease.

Install wheel seal into the back of the hub. The ridge to stop the seal is very small because the wheel bearing size has been maximized. Take special care not to drive it in too far as it can cause damage to the seal or interfere with the bearing. Correct depth is 0.120-0.160" from the top of the ABS teeth. See figure 20.



Figure 20. (Seal 0.120-0.160" from top of ABS teeth)

25. Clean the steering knuckle where the new spindle will be installed. You may need to use a die grinder equipped with a flapping wheel, depending on the amount of rust or corrosion present
26. Lubricate the outer axles & seals with grease
27. Make sure you install the brake dust shields prior to installing the spindle. The photos show no dust shields as the vehicle owner decided to remove them. We recommend running the shields for a daily driven vehicle as they do prevent road debris from corroding brake components and minimizes road splash on the brake rotors.
28. Apply anti-seize to the knuckle surface where the spindle will be installed  
Install the new spindle over the axle and install with the factory bolts. Torque bolts to 75 ft/lbs.
29. Install the ABS sensor block.



Figure 21.



Figure 22.

30. Install the hub assembly onto the spindle. The bearing is a close fit onto the spindle so special care needs to be taken in order to slide in on straight and avoid damaging the seal.

31. Install the outer bearing cone.



Figure 23.



Figure 24.

32. Thread inner spindle nut on to spindle making sure the pin on the spindle nut is facing outwards.



Figure 25.

33. Using hub spindle nut socket (See Figure 1) and torque wrench torque nut to 50 ft-lb. Rotate wheel back and forth while tightening the nut. This helps seat the bearings.



**WARNING**



Excess force can cause tool slippage or breakage and damage to the nut. **DO NOT OVERTORQUE NUTS.** Broken or slipping wrenches can cause eye or other injury.

34. Loosen the nut ¼ turn (90 degrees).
35. Re-tighten the locknut to 15-20 ft. lbs.



Figure 26.

36. Do not over torque the spindle nut.
37. Install lock washer on spindle. Use care to align the pin in the inner nut with the hole in the washer. The washer may be flipped if the hole does not align with the pin.



Figure 27.

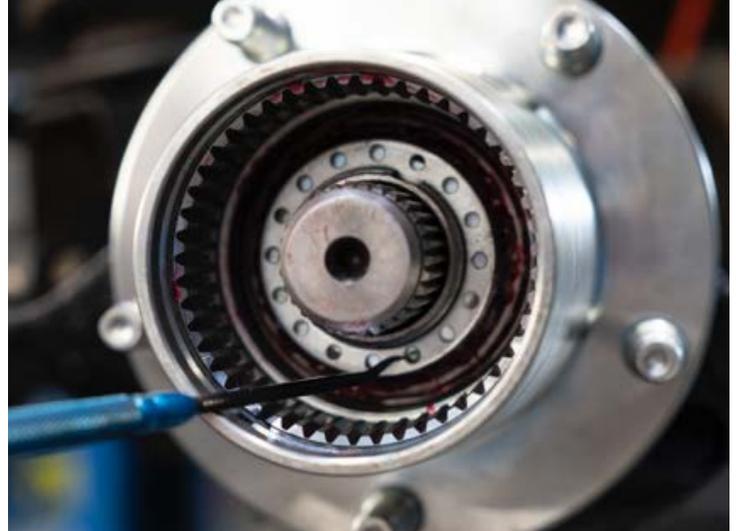


Figure 28.

38. Thread outer nut on spindle.

39. Torque outer nut to 125 to 150 ft-lb.

**NOTE:** All free clearance should be removed from the bearings. If not, repeat procedure.



Figure 29.



Figure 30.

40. Install ABS sensor into the block and torque to 12 ft lbs. Zip tie ABS sensor cable as shown to prevent it from contacting the rotor.

41. Install brake rotor and caliper.



Figure 31.



Figure 32.

42. Install Yukon Hardcore Locking hubs with the instructions provided with them.

43. Install wheels and tires. Snug lug nuts.

**WARNING**



Check lug nuts for a proper amount of thread engagement on the wheel stud. The minimum amount of engagement is equal to the diameter of the stud. If the minimum amount of engagement is not achieved then it is possible to use special AMERICAN RACING Lug nuts PIN 831142 (1/2-20 Acorn Shank) to help achieve the minimum amount required. It is the installers responsibility to check lug nut compatibility and engagement.



- 44. Double check ALL bolts and nuts.
- 45. Lift vehicle. Remove jack-stands. Lower vehicle to ground.
- 46. Torque lug nuts per manufacturer's specifications.



**WARNING**

After 50 miles and 500 miles all nuts and bolts should be checked. Re-torque lug nuts to manufactures specifications. Always re-torque lug nuts after hard trail use.

## ***YUKON LIMITED WARRANTY***

Yukon Gear & Axle (“Yukon”) warrants the original retail purchaser that all Yukon products will be free from defects in materials and workmanship for the periods shown herein. Yukon makes no other warranty of any kind, express or implied. All other warranties, including but not limited to an implied warranty of merchantability or fitness for a particular purpose, are excluded. This warranty is offered provided that the Yukon product has been installed and maintained in accordance with Yukon instructions, and that it has not been subject to modification, accident, abnormal use or misuse. At Yukon’s discretion, this warranty may be voided if installation of Yukon product(s) occurs on vehicles with tires that exceed Yukon Maximum Recommended Tire Size.

Upon notification of a warranty claim, Yukon shall investigate the claim of defect, and, in the event of a verified defect, shall, at their sole choice, either repair the defective product, replace it, or refund the purchase price.

This warranty does not cover, and Yukon shall not be liable for, incidental or consequential damages, including loss of time, road service charges, labor charges, inconvenience, loss of vehicle use, loss of revenues, or loss or damage to personal property (including loss or damage to vehicle parts due to the failure of the Yukon product)\*. In addition, this warranty does not cover, and Yukon shall not be liable for, any undertaking, representation, or agreements made by dealers or other third parties selling Yukon Gear & Axle products, except where such agreements are within the provisions of this Warranty statement. Also, this warranty does not cover damage to the axle caused by or facilitated by failure of a non-Yukon component.

### **For Your Records**

Name: .....

Date: .....

Invoice #                      Yukon Part #

.....



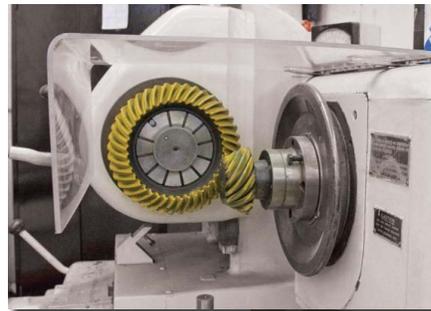


## ***YUKON UNDERSTANDS QUALITY***

Yukon invests significant care and attention to detail in every product we offer. This added effort requires extra time. However, it provides our customers with a strong high-quality gear set or axle that is easy to set up and quiet to use.

Such consistent, outstanding product results require the highest standards and a proven approach. Top-quality materials, deep heat-treats, and the latest in manufacturing technology go into every Yukon product. Our operations and materials are first-class and monitored every step, from design and manufacturing through shipment and delivery.

No matter what model you drive, or what ratio you need, high-quality Yukon Gear & Axle products are the right choice. Yukon products reflect a professionalism and pride that are unequaled in the industry. Before we approve any part for production, we put it through a rigorous series of tests and inspections to ensure that you will be delighted with your purchase.



### ***QUALITY TESTED & PROVEN***

- Parts produced with state-of-the-art equipment
- Techniques used by leaders in OEM manufacturing
- All component requires QA lab careful inspection & series of rigorous tests before approval

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