

### Yukon Gear & Axle

D30, D44 & GM 8.5"
Hardcore Locking Hub
Installation Guide

PLEASE READ COMPLETELY BEFORE INSTALLATION



#### **APPLICATION GUIDE:**

#### YHC70005

D30 & D44 30spl

- YA WU-08 Spin Free
- D30, 30 spline
- Some custom D44 applications with 30 spline stubs

#### YHC70006

D44 19spl

- YA WU-01 & YA WU-02 Spin Free applications
- '78 & down GM
- '78-'92 Ford F150 & Bronco

#### YHC70007

D44 & GM 8.5", 19spl

- '79 & up GM 8.5"
- '66-'77 Bronco D44

#### **SUPPORTING VEHICLE:**

Before starting work on the vehicle make sure it is properly supported with suitable lifting equipment and secured to prevent unwanted movement.

#### **SUBMERSION:**

If the hubs become submersed in water or mud, they will need to be disassembled, cleaned and re-greased on each occurrence. Improper maintenance will prevent proper hub function.

#### **CAUTION:**

LOCK-OUTS SHOULD ALWAYS BE DISENGAGED WITH THE VEHICLE ON LEVEL SURFACE WITH PARKING BRAKE SET TO PREVENT VEHICLE FROM ROLLING.

ALWAYS SHIFT TRANSFER CASE TO 2WD OR NEUTRAL BEFORE DISENGAGING THE LOCK-OUTS.

CHECK STUB AXLE FOR PLAY SIDE TO SIDE, UP AND DOWN. A WORN SPINDLE TO AXLE BEARING CAN RESULT IN IMPROPER LOCK-OUT ENGAGEMENT/DISENGAGEMENT.

SOME RESIDUAL DRIVELINE "WRAP-UP" WILL BE PRESENT AFTER FOUR-WHEEL DRIVE OPERATION. IF THE LOCK OUTS OR TRANSFER CASE ARE DIFFICULT TO MOVE, DRIVING THE VEHICLE A FEW FEET FORWARD OR BACKWARD OR MOVING THE STEERING WHEEL FROM SIDE TO SIDE WILL NORMALLY REMOVE SOME OF THE WRAP-UP AND EASE MOVEMENT.

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#### **ASSEMBLY INSTRUCTIONS**

1. Remove existing lock-out or flange assembly if applicable. See the manufacturer's instructions for proper removal.

Note: See page 11 and 12 for the component lists, descriptions, and exploded view of the Yukon D44 Locking Hubs.

2. With the existing lock-out assembly removed, your stub axle and locking spindle nuts should be visible inside the hub if being installed onto a standard hub, spindle assembly. If bearing service is required now is a good time to remove, repack and replace the wheel bearings. Proper bearing preload and setup is critical to the life of the bearings and the function of the wheel hub, lockout assembly.







3. Before installing lock-outs inspect the splines inside the hub to verify there are no burrs, rust or any other debris. Thoroughly clean and debur the inner portions of the hub.

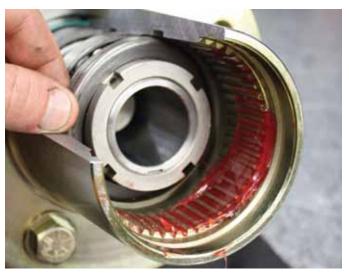
Note: Spline damage will result in improper lockout function. Replace outer wheel hub as needed.

4. Lubricate the hub spline and axle shaft with high pressure grease.



Note: All components must be lubricated with grease when instructed to do so. Photos may not show grease on all components.

5. Insert the spring retainer into the hub. The flat end of the retainer must face out as shown.



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6. Insert the coil spring into hub. The spring will seat on the spring retainer if being used on a standard spindle, hub assembly. Verify the spring is free to compress and does not interfere will the spindle nuts, axle, or any other item inside the hub.



7. Coat the spacer with high pressure grease on all surfaces. Assemble spacer over the outer axle and seat it against the spindle or snap ring. Different spacer heights are available for different hub applications. Verify the Lockout assembly part number and proper application before moving forward.



See page 15 for instructions on how to select the proper spacer thickness on kits that include multiple thickness spacers.





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8. Coat the coupler and driver with high pressure grease on all surfaces.



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9. Mesh the driver and coupler pieces together and install into the hub, over the axle as shown. The hub and or axle may need to be rotated during assembly to properly align the splines. Pressure must be kept against the driver coupler assembly while installing them into the hub.



10. While fully compressing the assembly install the axle snap ring if applicable. Assure the snap ring fully seats into the groove on the outer shaft. If no outer snap ring groove exists proceed to the next step in assembly.





11. Coat the Cam Spacer and retainer plate with high pressure grease.



12. Install the Cam Spacer into the retainer plate by aligning the ears on the cam spacer with the notches in the retainer plate.



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13. Install the hub snap ring into the hub. A small amount of force may be necessary to compress the cam spacer into the hub to allow extra clearance for snap ring installation. Be sure snap ring is fully seated into the snap ring groove of the hub.

Note: The installed driver must have less than 0.160" float between the retainer plate and spacer when installed into the hub. If more than 0.160" of float can be measured check the part number against the application guide found on page 2 and contact Technical Service.



14. Test for proper operation of the cam spacer by compressing the spacer into the hub several times. The cam spacer must freely slide in and out of the hub assembly and return fully seated against the retainer plate. If any binding or resistance occurs disassemble all components and check for proper assembly.



15. Apply o-ring lube to the o-rings and assemble onto the selector.



16. Assemble the selector and bezel together and align them to "lock".



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17. With the arrow still aligned with the "LOCK" label on the Bezel, install the Bezel, Selector assembly into the hub. The cam spacer must align into the cutouts on the backside of the bezel. If items are not aligned check all assembly steps.

Note: All components are designed to align during installation. No force is required when installing the bezel and selector. If the assembly requires force to compress the cam spacer contact Technical Service.



18. Install the Nylon washers over the 10-24 bolts and apply 1 drop of Loctite 242 or equivalent onto the threads of the lockout bolts.

19. Install bolts and tighten to 22 in-lbs. Do not over torque the bolts. Over torqueing the bolts may result in improper hub function and damage to the lockout components.



#### TO CHECK FOR PROPER OPERATION:

20. To check for proper engagement, dial both hubs to the "LOCK" position and raise the front two wheels in the air. If the drive line spins when you turn the tire then the hubs are engaging properly.

21. To check for proper disengagement, turn dials to "FREE" position and spin the lifted wheels. Check behind wheel to ensure that the stub axle is not rotating with the wheel. If the stub axle is rotating, the hub is not disengaging properly.

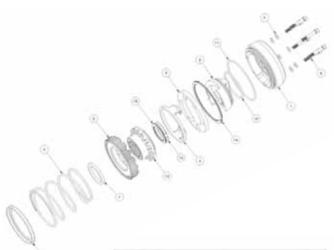


Note: The arrow of the selector must align to the center of the "FREE" and "LOCK" indicators. If the arrow does not align to the center of the indicators, check all installation steps. Extra force may be required to fully turn the selector handle.

DO NOT DRIVE LOCKING HUBS IF THE ARROW IS NOT DIRECTLY CENTERED OVER THE INDICATORS.

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#### D44 LOCKING HUB KIT# YHC70005 & YHC70006



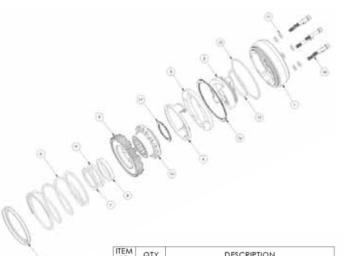
NO.	QTY	DESCRIPTION	
1	2	BEZEL	
2	2	SELECTOR	
3	2	RETAINER PLATE	
4	2	CAM SPACER	
5	2	COUPLER	
6	2	SPRING	
7	2	SPACER	
8	12	10-24 X 1-1/8" SHCS	
9	12	NYLON WASHER	
10	2	HUB O-RING	
11	2	HUB O-RING	
12	2	DRIVER ASSEMBLY	
13	2	SPRING RETAINER	
14	2	HUB SNAP RING	
15	2	AXLE SNAP RING	
16	2	SNAP RING	

#### FOR YOUR RECORDS

Name
Date
Invoice Number
Yukon Part Number



# D44 LOCKING HUB KIT# YHC70007 (SEE PAGE 15 FOR SPACER INFO)

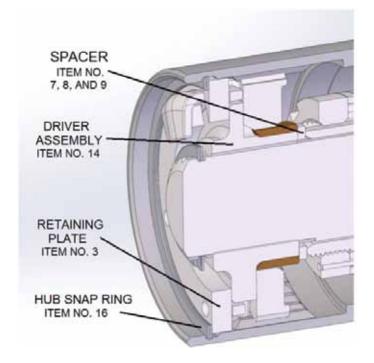


NO.	QTY	DESCRIPTION
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2	2	SELECTOR
3	2	RETAINER PLATE
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11	12	NYLON WASHER
12	2	HUB O-RING
13	2	HUB O-RING
14	2	DRIVER ASSEMBLY
15	2	SPRING RETAINER
16	2	HUB SNAP RING
17	2	AXLE SNAP RING

#### **FOR YOUR RECORDS**

Name
Date
nvoice Number
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# CHOOSING THE RIGHT SPACER FOR D44 LOCKING HUB KIT# YHC70007



There are three spacers included with the YHC70007 kit which are different thicknesses; small, medium, and large.

- 1. Start by installing the largest (thickest) spacer.
- 2. Install the driver assembly and retaining plate.
- 3. Try to install the hub snap ring in front of the retaining plate.
- 4. If the snap ring fits remove the driver assembly and retaining plate and began full installation.
- 5. If the snap ring does not fit (retaining plate is pushed too far out to install the snap ring) remove the driver assembly and retaining plate. Install the next smaller size spacer and repeat above steps until the hub snap ring installs properly. When the hub snap ring fits remove the driver assembly and retaining plate and began full installation.

**CAUTION:** Using a spacer that is too thin could result in damage to the hub assembly and/or having the hub automatically locking when in the "FREE" position.



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### Limited Lifetime Warranty

#### D30, D44 & GM 8.5" Hardcore Locking Hubs<sup>®</sup>

#### WARRANTY DETAILS

Yukon Gear & Axle® ("Yukon") warrants the original retail purchaser that the Hardcore Locking Hubs will be free from defects in materials and workmanship for as long as you own the vehicle. This warranty is not transferable to another party. 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. 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.

This agreement offers you specific legal rights. You may also have other rights which vary from state to state.