



**WARN INDUSTRIES, INC.**

**INSTALLATION INSTRUCTIONS FOR THE**

**JEEP FRONT AXLE WHEEL HUB  
CONVERSION KIT - PN 37132**

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!**

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## SAFETY PRECAUTIONS



### CAUTION



### READ INSTRUCTIONS THOROUGHLY BEFORE BEGINNING INSTALLATION.

This sheet provides guidelines to install the WARN Front Wheel Hub Conversion Kit (Figure 2). 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 Warn Front Wheel Hub Conversion, call our toll-free number (1-888-722-6730) for assistance.**

## APPLICATIONS

The Warn Front Wheel Hub Conversion Kit is designed to fit CJ Jeeps from 1945 to 1986.

## FEATURES

This kit replaces the external mount front Jeep wheel hubs. With the internal spline mounting system, bolt loosening problems are eliminated and wheel end maintenance is simplified.

## TOOLS AND MATERIALS NEEDED

Jack	1/2" Drive Socket Set
Jackstands	4-Lug Socket for Dana 44 (Fig 1)*
Torque Wrench	Safety Goggles
7/64" Hex Key	Snap Ring Pliers
2 1/16" Spindle nut socket†	Shop Rags

\*Snap-On P.N. S8695C or similar

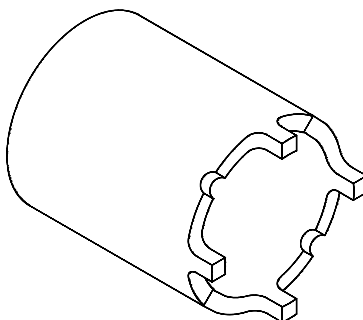


Figure 1. 4-Lug socket.

**PARTS LIST (included in kit) (Refer to Figure 2 for Item #)**

Item #	Part Name (Qty)	Warn P/N
1-6	Hublocks (2)	36940
8	Outer Wheel Bearing Nut (2)	28266
9,10	Lock Washer (2)	36327
11	Inner Spindle Nut (2)	36326
12	Bearing Washer (2)	37019
13	Wheel Hub (2)	36317

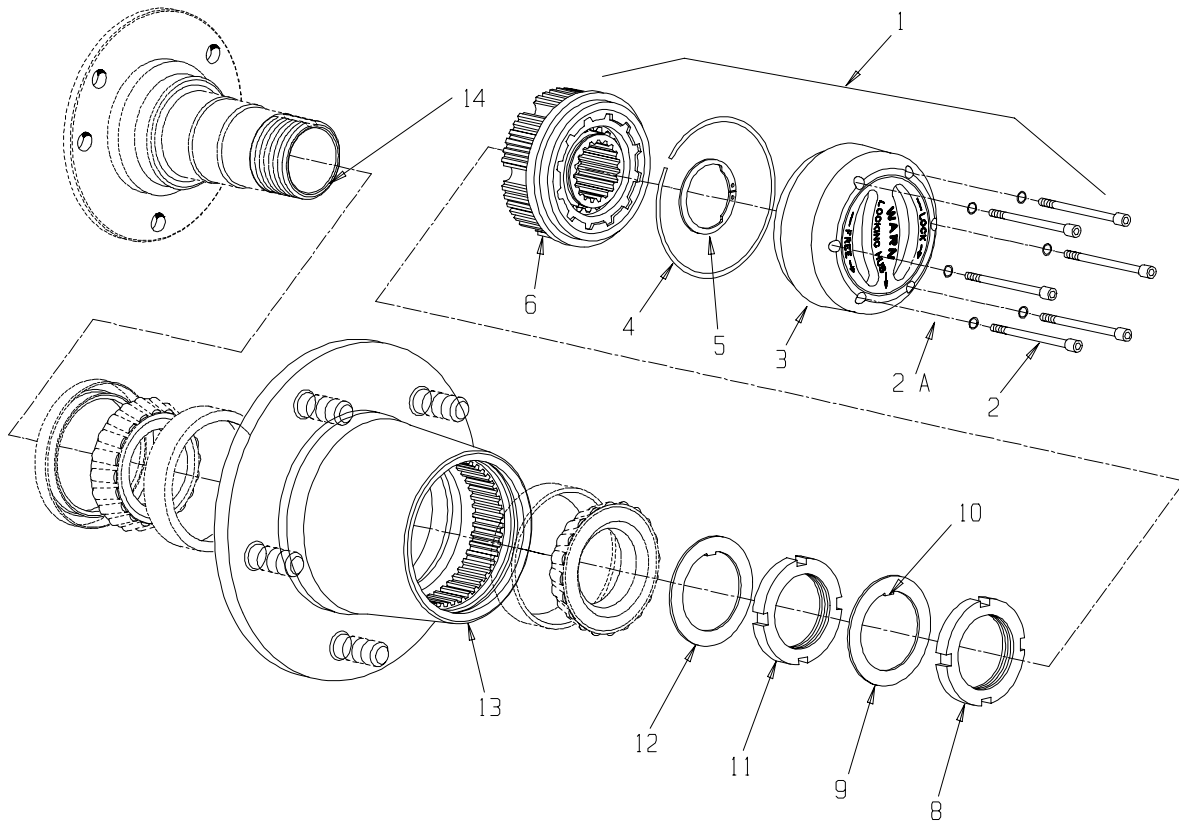


Figure 2. Front wheel hub conversion kit. Parts not included in kit are drawn with dashed lines.

**NOTE: PARTS IN THE FOLLOWING TABLE ARE NOT INCLUDED IN THE KIT. After disassembling your wheel end, examine the bearings, seals and wheel studs to determine if they need replacing (Steps 8,13 and 19). Appropriate replacement part numbers are listed below.**

**REPLACEMENT PART NUMBERS**

Part Name	P/N for Disc Brakes	P/N for Drum Brakes
Inner Bearing Cone	LM102949*	LM501349*
Inner Bearing Cup	LM102910*	LM501310*
Outer Bearing Cone	LM501349*	LM501349*
Outer Bearing Cup	LM501310*	LM501310*
Hub Radial Seal	CR23300**	CR21164**
Wheel Studs	142199†	142042†
Available in kit form from WARN	38072	38073

\* AFBMA bearing P/N

\*\*CR Services P/N

†Bendix P/N



### 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 jackstands 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 jackstand or vehicle can cause injury.

## DISASSEMBLY

1. Turn the ignition key OFF. Put transmission in Park (automatic) or Reverse (manual).
2. Set the parking brake and chock the rear wheels.
3. Raise the front end and support it on 2 jack stands.
4. Remove the tire and wheel assembly.
5. Remove existing hublock cap, axle retaining ring, hublock body, and any remaining hublock parts.

**NOTE: There are several makes and models of hublocks that can be installed on CJ jeeps. Refer to instructions for your particular hublock for further information.**

6. Remove the wheel bearing locknut, lockring, adjusting nut and inner lockring.



### 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.

**NOTE: Steps 7 through 9 are for drum brakes only.**

7. Remove the wheel hub and brake drum assembly. The outer wheel bearing cone will come off with the hub.

**NOTE: If the drum is difficult to remove, loosen brake adjusting wheel.**

8. Press studs out of wheel hub and brake drum assembly. Save brake drum.

**NOTE: Replace studs if they were staked to hold the wheel hub and drum together.**

9. Press or drive the studs into holes in wheel hub (Figure 2, Flag 13).



### WARNING



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

**NOTE: Make sure head of stud firmly contacts wheel hub flange.**

**NOTE: Steps 10 through 16 are for disc brakes only.**

10. Remove the caliper and hang it from the frame or suspension with a piece of wire.

**NOTE: There are two models of brake calipers used on CJ Jeeps. Refer to your authorized Jeep Technical Service Manual for removal instructions.**



### WARNING

Do not disconnect the brake hose. Do not stretch the brake hose. **Use caution when removing and hanging the caliper.** Damage to brake lines could cause brakes to malfunction.

11. Remove the wheel hub and rotor assembly. The outer wheel bearing cone will come off with the hub.
12. Press studs out of wheel hub and rotor assembly. Save brake rotor and studs.
13. Clean the mating surfaces of the wheel hub flange and brake rotor.
14. Support the wheel hub flange with the inboard side facing up.
15. Place the brake rotor on the wheel hub, aligning the holes.
16. Press the studs into the holes.

**NOTE: Make sure head of stud firmly contacts the brake rotor flange.**

**NOTE: Steps 17 through 20 are for disc and drum brakes.**

17. Drive out inner and outer bearing cups and seal from original hub.
18. Check bearing cups and cones for wear, pitting, cracks and other conditions indicating replacement.



### WARNING

Using a worn cup with a new cone (and vice versa) will result in a premature failure of the new part. **IF IT IS NECESSARY TO REPLACE A BEARING COMPONENT, REPLACE BOTH.** Bearing failures can cause vehicle damage and possible injury.

19. Press outer bearing cup (LM501310) into wheel hub (Figure 3, Flag 4). Make sure cup is fully seated (Figure 3a).

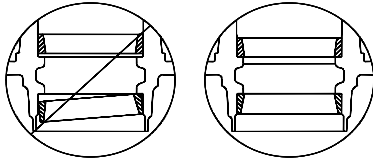


Figure 3a. Cup Installation **NOTE: Avoid scratching the cup surface.**

20. Press inner bearing cup (LM102910 for disc or LM501310 for drum) into wheel hub (Figure 3, Flag 2). Make sure cup is fully seated as shown in Figure 3a.

## BEARING INSTALLATION

1. Inspect inside of wheel hub and clean if necessary.
2. Pack wheel hub inner diameter (Figure 3, Flag 1) with wheel bearing grease.
3. Apply a coating of grease to the inside diameter of the bearing cups.

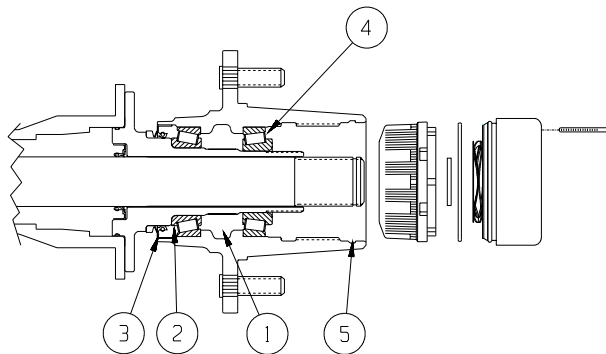


Figure 3. Bearing and seal installation.

4. Pack the inner wheel bearing cone (LM102949 for disc or LM501349 for drum) with wheel bearing grease. Use a wheel bearing packer if possible. To pack by hand, place a large amount of grease in the palm of your hand and force the edge of the bearing into the grease so that it fills with grease. Continue until the whole bearing is coated with grease. Apply additional grease with fingers.
5. Install packed bearing into cup on inboard side of wheel hub.
6. Apply additional grease to top of installed bearing (Figure 3, Flag 2).
7. Press large radial seal into seat in hub until fully seated (Figure 3, Flag 3). Seal may protrude slightly from wheel hub.
8. Pack outer bearing (LM501310) with grease using the same technique described in step 4.
9. Install outer bearing (Figure 3, Flag 4).

## WHEEL HUB INSTALLATION

1. Apply a light coating of grease to the shank of the spindle.
2. Slide wheel hub assembly onto spindle.

**NOTE: Keep wheel hub aligned with spindle so bearings don't wedge on spindle.**

3. Place bearing washer (Figure 2, Flag 12) on spindle.
4. Thread inner nut (Figure 2, Flag 11) on spindle.
5. Using hub spindle nut socket (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.

6. Loosen the nut 1/2 turn (180 degrees).
7. Retorque the nut to 3 to 5 ft-lb.

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

8. Install lockwasher on spindle.

**NOTE: Align tab on washer with spindle keyway (Figure 2, Flags 10 and 14).**

9. Thread outer nut on spindle.
10. Torque outer nut 125 to 150 ft-lb.
11. Depending on the brake system, reinstall drum or caliper. Refer to your authorized Jeep Technical Service Manual for caliper installation instructions.

## HUBLOCK INSTALLATION

**NOTE: Do not add grease to hublocks.**

1. Separate body assembly from cap assembly (Figure 2, Flags 6 and 3).
2. Install body assembly (Figure 2, Flag 6) into wheel hub.
3. Install axle retaining ring (Figure 2, Flag 5) using snap-ring pliers.

**NOTE: If necessary, a pry bar can be inserted into the knuckle (universal joints) to hold the axle shaft outboard while installing the axle retaining ring.**

4. Install large lock ring (Figure 2, Flag 4) into groove in wheel hub.

**NOTE: Ensure that large lock ring is fully seated. The lock ring can be removed with the Plews O-ring pick (P/N 72-017).**

**NOTE: Dial hublock cap (Figure 2, Flag 3) to FREE position.**

5. Place hublock cap on body. Install o-rings on cap screws.
6. Align holes on cap using one socket head cap screw (Figure 2, Flag 2) as a pilot.
7. Insert remaining 5 cap screws. Torque to 25-30 **INCH**-lb.

**NOTE: Repeat all steps for other side of vehicle.**

## HUBLOCK CHECK

1. To check for proper engagement, dial both hublocks to LOCK. Spin one axle.

**NOTE:** For an open differential, the opposite axle will reverse rotate if the hublocks are engaging properly. For a locking differential, the drive line and opposite axle will turn if the hublocks are engaging properly.

2. To check for proper disengagement, dial one hublock to FREE and spin the same axle.

**NOTE:** For a locking differential, if the drive line does not turn and there are no ratcheting sounds, the hublock is disengaging properly. For an open differential, if the opposite axle does not turn and there are no ratcheting sounds, the hublock is disengaging properly.

3. Repeat steps 1 and 2 for opposite hublock.

4. Install wheels and tires. Snug lug nuts.

**WARNING:** Check lug nuts for 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 P/N 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.

5. Lift vehicle. Remove jackstands. Lower vehicle to ground.

6. Torque lug nuts per manufacturer's specifications.

**WARNING:** After 50 miles, re-torque lug nuts to manufacturer's specifications. Always re-torque lug nuts after hard trail use.

## **Warn 4x4 Front Wheel Hub Conversion Kit Limited Warranty**

Warn Industries, Inc. ("Warn") warrants parts and labor directly to the first purchaser of each Warn Front Wheel Hub Conversion Kit ("Kit") against defects in material and workmanship appearing under normal use and service for as long as said purchaser owns the Kit (Bearings and seals are not covered). If you discover a covered defect, Warn will, at its option, repair, replace, or refund the purchase price of the Kit, or components, at no charge to you, provided you remove the Kit or components from the vehicle and return them prepaid to the nearest Warn Industries' Factory Authorized Jobber. You can obtain additional information from Warn directly at the address printed below. Please attach to the returned Kit or components, your name, address, telephone number, a description of the problem and a copy of the bill of sale (as proof of original retail purchase). To obtain warranty coverage, it is absolutely necessary that you present proof of purchase acceptable to Warn, such as a copy of the purchase receipt.

This warranty does not apply if the product has been damaged by: accident, abuse, misuse, collision, overloading, or misapplication; or has been improperly: installed, used, serviced, or modified without the written permission of Warn.

Except as expressly stated herein, there are no warranties, express or implied, including implied warranties of merchantability or fitness for a particular purpose. Any implied warranty of merchantability or fitness for a particular purpose which by law may not be excluded is limited in duration to one (1) year from the date of the original retail purchase of this product.

The warranty and the remedies set forth above are exclusive and in lieu of all others, oral or written, express or implied. No Warn dealer, agent or employee is authorized to make any modification, extension or addition to this warranty.

In no event is Warn responsible for special, incidental or consequential damages resulting from any breach of warranty, or under any other legal theory, including, but not limited to lost profits, down time, goodwill, damage to or replacement of equipment and property, loss of use of the product or of any associated equipment, or cost of substituted products.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Warranty inquiries should be directed to: WARN INDUSTRIES, INC.

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