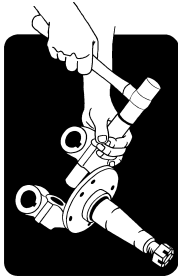


QWIKKIT™ NO REAM INSTALLATION

STEMCO Kaiser KING PIN SPINDLE CONVERSION FOR FORD AND MACK



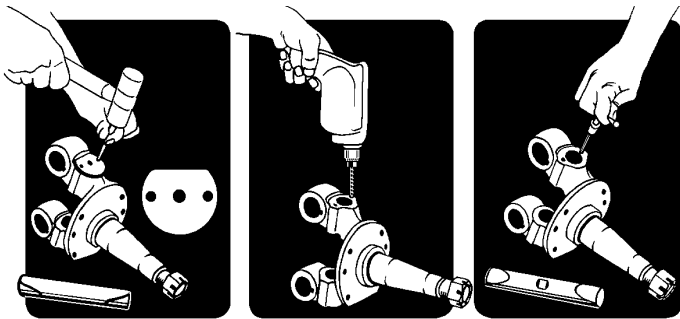
- Use established procedures for teardown. Remove steering knuckle from vehicle.

STEERING KNUCKLE PREPARATION

1. Drive out old bushings with a bushing driver.
2. Remove grease fittings and clean out grease ports. (side spindle grease only)
3. Clean spindle bores and wipe dry.
4. Remove burrs from each bore including the bores on the axle.

CAUTION: STEMCO Kaiser Qwik kit™ cannot correct worn spindle bores. Nylon bushing applications: measure the spindle bores for excessive wear after removing the bushings.

STEMCO Kaiser Qwik kit™ SPINDLE CONVERSION INSTALLATION

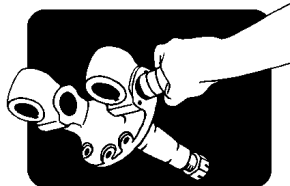


1. End plates must fit the surface above the bore for a good seal. Grind edge of end plates to fit the contour of the surface.
2. **Drilling and tapping spindle.**
 - Use end plate as a template for hole location. Locate holes with a center punch before drilling. (Each spindle top and bottom).
 - Use a 5/32" drill. Drill hole about 1/2" deep and blowout chips.
 - Tap each hole with a 10/32" two fluted tap. Check threads with a cap screw from kit before assembly.

DO NOT PRESS OR DRIVE SPIRAL BUSHING INTO BORE. Bushing will shear the corner of the bore and set up a burr as the bushing enters. The bushing will not seat properly and will fail prematurely.

INSTALLING SPIRAL STEEL BUSHING

1. Wipe a small amount of grease in each spindle bore. Place the tip of the bushing at a slight angle to the bore. With a push-in, clockwise twisting action, the spiral bushing will enter the bore. Continue with the twisting action as far as the hand grip will permit.



2. Grip bushing wall with a "T" wrench or narrow nose pliers away from the tip about 1/2". Continue the clockwise rotation to within 1/8" of end plate surface.

DO NOT GRIP BUSHING ON TIP!!!

3. Tap bushing in the bore flush to the end plate surface with a brass mallet. The tapping will allow the bushing to seat itself properly.

NOTE: Spiral steel bushing will not move in the bore or cause wear to the bores when instructions are followed.

4. Testing before assembly

Wipe bushing I.D. (inside diameter) and test king pin for alignment and fit in both axle eye and spindle bores. King pin must have a smooth slip fit. Burrs, grit, and dirt in the spindle bores will cause the bushing to bind with the king pin. To correct this condition remove bushing with a bushing driver. Remove obstruction with emery cloth. Wipe clean and reassemble starting with Step 1.

5. Applications with bushing lip seals

When installing bushing lip seals the metal casing of the seal must back up to the bushing. The lip of the seal must face the axle eye from each bore. (See arrow in drawing.)

After king pin installation is complete and greased, check the spindle action. If the spindle will not move from side to side the bushing seals have been installed backwards. Tear down, turn seals around and reassemble.

6. Greasing before assembly

Pack thrust bearings with grease and wipe grease in spindle bores. Install new grease fittings.

7. Finish assembling in your usual manner

NOTE: Top of king pin is marked "Top," these markings are parallel to lock flats for ease of installation (straight pin applications).

8. Test spindle movement before final greasing.

Movement should be smooth and uninterrupted.

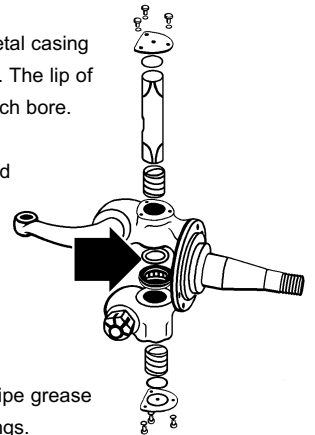
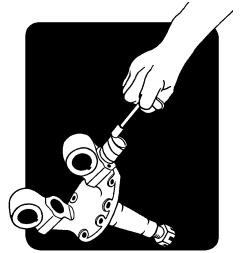
9. Greasing after assembly

- **Side spindle greasing:** Apply grease until visible from between wear surface (spindle and axle). The pressure relief valve in the end plates prevent blowing seals. (top and bottom)
- **End plate greasing:** Grease from each end until grease appears between wear surface (axle and spindle).

NOTE: The vehicle can be greased without jacking up the front axle when using Kaiser grooved pins and bushings.

FINAL INSPECTION

Make a final check of the assembly before placing vehicle in service.



STEMCO KAISER™

GETTING HELP

USE THE STEMCO Kaiser TECHNICAL SERVICE LINE

888-854-6474

WARNING: STRIKING STEEL PARTS WITH HAMMERS CAN RESULT IN CHIP PROJECTILES, ALWAYS WEAR SAFETY GLASSES TO PROTECT YOURSELF AGAINST INJURY. STEMCO Kaiser IS NOT RESPONSIBLE FOR ANY INJURY THAT MAY OCCUR DURING THIS PROCESS.

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