# **WIKKIT™** NO REAM INSTALLATION for KING PIN STEERING KNUCKLE REPAIRS

#### **REMOVAL**

 Use established procedures for teardown. It is not necessary to remove the steering knuckle from the truck to install a STEMCO Kaiser QWIK KIT™.

## STEERING KNUCKLE AND AXLE PREPARATION

- Clean spindle bores and axle eyes then wipe dry.
- Remove any burrs from spindle bores and axle eyes using a brake hone or similar device.

#### **INSTALLING BUSHING LIP SEALS**

- Handle with care, lip seals are easily damaged.
- Using a bushing driver or similar device, drive the seal into the bore, leaving the seal flush with the axle side of each spindle.
- Be sure to position the seal so the lip is pointing towards the axle eye. (see figure #3)

#### **INSTALLING SPIRAL STEEL BUSHINGS**



figure #1

- Grip bushing wall with a "T" wrench or pliers about 1" from the tip. Continue the clockwise rotation as far as possible. (see figure #2)
- Tap bushing into the bore until slightly below flush using a brass mallet.

 Place the tip of the bushing at a slight angle to the bore.
With a push-in, clockwise twisting action, the bushing will enter the bore. Continue with the twisting action as far as the hand grip will permit. (see figure #1)



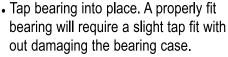
figure #2

#### **CHECK BEFORE ASSEMBLY**

 Wipe the bushing clean. Insert the king pin into just the upper bushing, then into just the bottom bushing. In both cases the pin should be a slip fit. Then insert the pin into both bushings simultaneously and again the pin should be a slip fit. If at any time during this test the pin becomes tight, remove the bushing or bushings and use a brake hone to thoroughly clean the bores again. If upon reinstallation the pin is still tight, call technical service.

#### **BEARING INSTALLATION**

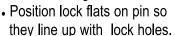
- Pre-pack bearing with grease.
- Opening on bearings outside diameter should point down. (see figure #3)
- Place needed shims under upper spindle bore.
- Position king pin through upper bushing and through needed shims. Be sure TOP on pin is parallel to axle for proper lock flat alignment.
- Place spindle, shims and pin onto axle, allow pin into axle bore about 2".



 If bearing is too tight or too loose, adjust number of shims being used.

 Once bearing fit is correct allow pin to slip into lower bushing.

Cross section of bushing lip seal.



 Pound lock pins into place, for lock pins with threads apply 25-30 ft. lbs of torque



figure #3

#### **END PLATE OR END PLUG INSTALLATION**

- Install end plates or end plugs, use proper seal under plates
- Install grease fitting into end plate or end plug

#### **GREASING**

 Apply grease until it can be seen between axle and spindle. Then turn spindle and grease again repeating the process 5 times

#### **CHECK INSTALLATION**

- Once greased the spindle should turn easily from side to side.
- There should be very little up and down movement.



### **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.