



# INSTALLATION INSTRUCTIONS

ROYAL KING PIN KIT A24148

1949 - 1953 FORD CAR SPINDLES

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Thank you for choosing STAINLESS STEEL BRAKES CORPORATION for your braking needs. Please take the time to read and carefully follow these instructions to insure the ease of your installation as well as the proper performance of the complete system.

Before beginning your installation, please verify you have received all the parts indicated on the packing slip. If you believe anything to be missing or incorrect, please call our Customer Service Department at 716-759-8666.

To assure your installation will go safely and smoothly, have the following items on hand to assist you:

**BRASS HAMMER**  
**GREASE GUN**

**WRENCH SET**

Revision 3 07/16/12



**NOTE: IF YOU ARE INSTALLING THE ROYAL KING PINS IN A CAR THAT CURRENTLY HAS CONVENTIONAL KING PINS ALREADY IN PLACE, YOU MUST FIRST COMPLETELY REMOVE THE PINS AND BRASS BUSHINGS. WITH THE KING PINS REMOVED AND THE PARTS CLEANED, INSPECT THE SPINDLE AND AXLE BORES TO MAKE SURE THERE ARE NO BURRS OR GOUGES THAT MIGHT MAKE ASSEMBLY OF THE NEW PART DIFFICULT.**

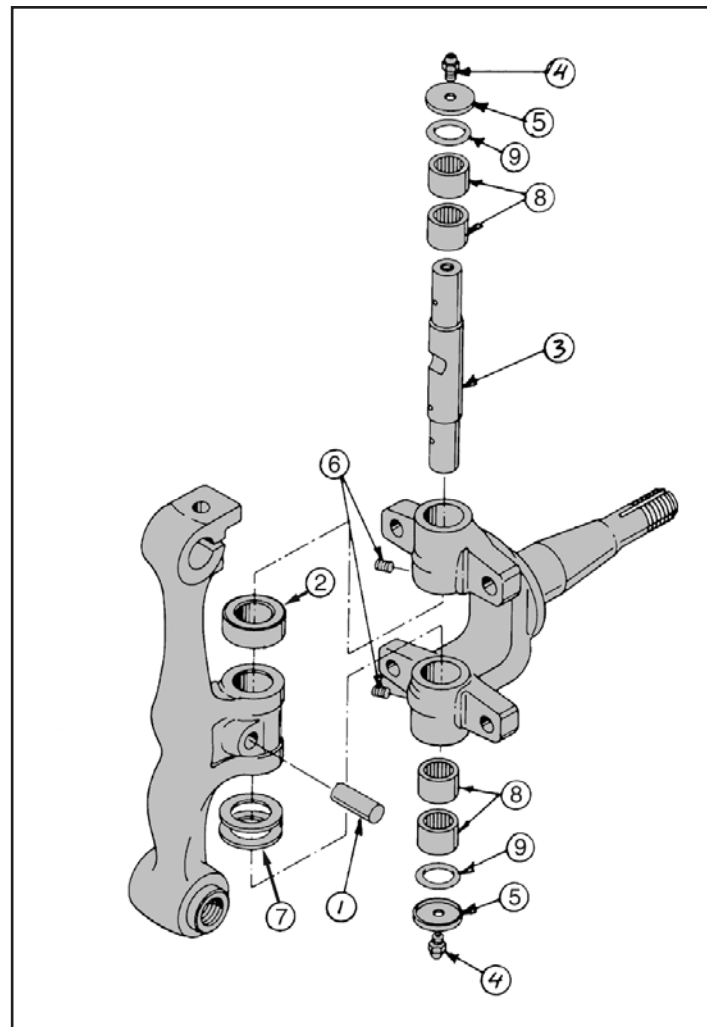
- 1) Begin the installation by driving or pressing the needle bearings into the lower spindle boss using the installation tool provided in the kit. The bearings should be driven in until they are flush with the spindle casting. With both bearings installed, there should be a small gap between them. The alignment of the Needle Bearing is critical. The gap is necessary for grease to reach the bearings.
- 2) Place the thrust bearing onto the lower spindle boss with the lettered side of the bearing pointing up.
- 3) Slide the spindle into place over the axle and line-up the holes in the spindle with the axle. Carefully slide the Royal King Pin into place through the axle and thrust bearing and all the way into the needle bearing already installed in the lower spindle boss.



**NOTE: The  $\frac{7}{16}$ " roll pin notch in the King Pin is closer to one end of the pin. The longer end of the King Pin must be installed down. So, the notch of the King Pin lines up properly with the axle  $\frac{7}{16}$ " roll pin.**

- 4) At this time, check the spindle for up and down movement. If excessive play is present, the spindle can be shimmed by removing the King Pin and placing one or two of the thin shims between the upper side of the axle and the upper spindle boss. The number of shims needed will be different from car to car and even side to side. No more than two (2) shims per side are required if you have more play after shims are in place, you have a worn axle or spindle and it should be replaced.
- 5) With the spindle shimmed, the King Pin can then be re-installed in the same manner as before. Be sure the center hole in the shim is lined-up with the hole in the axle to prevent bending the shim while installing the King Pin.
- 6) With the King Pin installed, the notch in the pin should be visible through the small horizontal hole in the axle. Slide the roll pin into the hole, making sure that the roll locks into the notch on the King Pin. Drive roll pin flush with spindle surface.
- 7) Next install the needle bearing into the top spindle boss using the installation tool. Notice that one end of the installation tool has a larger center hole than the other end. By using this end of the tool to drive the top bearings into place, you can drive the bearings all the way into the spindle with the installation tool, sliding over the King Pin. The first bearing should be driven all the way in until it bottoms out against the axle. The second bearing should then be driven in until it is just flush with the top of the spindle casting. This will leave a small gap between the two bearings for lubrication.

- 8) At this point, move the spindle back and forth to make sure it moves freely and no excessive play is detected.
- 9) Place one of felt gaskets inside the lip of the end caps and install one on each end of the King Pin using the grease fitting to secure them in place.
- 10) The Royal King Pins should always be greased through the fittings on each end of the pin. Since you will no longer use the grease fittings in the spindles, they can be removed and replaced with the stainless steel set screws included in the kit. The set screws should be installed so they are flush with or just past the spindle surface. Make sure not to run the set screws in all the way as they will push against the bearings. A small drop of Loctite on the set screw will insure that they can't back out.
- 11) With everything installed, use a grease gun to lubricate both ends of each King Pin. Move the spindle back and forth through its full travel, several times to make sure everything works freely.
- 12) Remember to occasionally grease fittings on end of king pin to keep things working freely.



### Royal King Pin Assembly

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|-------------------|--------------------|
| 1. Roll Pin       | 6. S.S. Set Screws |
| 2. Thrust Bearing | 7. Shims           |
| 3. Royal King Pin | 8. Needle Bearings |
| 4. Grease Fitting | 9. Felt Washer     |
| 5. Dust Cover     |                    |

**NOTE: For frequently asked questions and technical reference information please visit the tech section of our website at [www.ssbrakes.com](http://www.ssbrakes.com).**

TECH LINE -- If technical help is required, please call 716-759-8666.