

# INSTRUCTIONS FOR

## CHANCE PISA® LOCKING DOG ASSEMBLY

### GENERAL

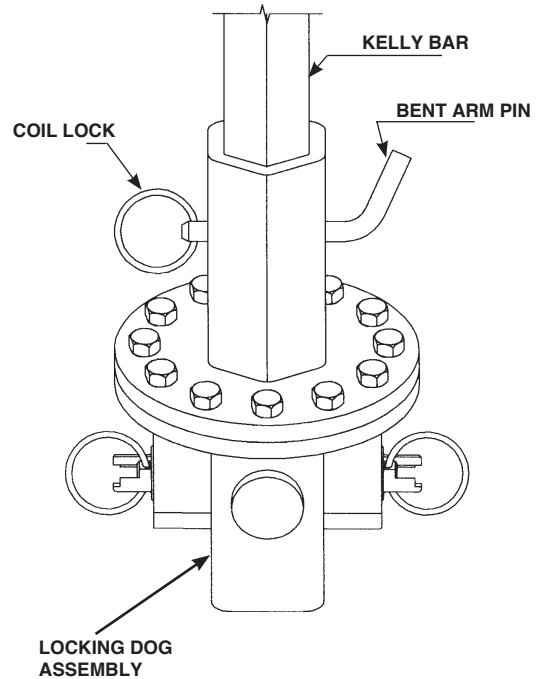
**⚠ WARNING**

Read, Follow, and Understand this instruction sheet completely before installing an anchor. These instructions are intended to illustrate the use of Locking Dog Assembly. Anchor installing tools covered in this instruction sheet must be used by competent personnel familiar with and following good work and safety practices. Should additional information and details be desired, or if specific situations arise which are not covered adequately herein, the user should refer to Chance directly. In some cases, Chance may make specific recommendations concerning installation torque and installation depth for a particular application.

Bolt the Locking Dog Assembly to the Kelly Bar Adapter (a Torque Indicator may be inserted between them) using the bolts, lockwashers, and nuts provided (both must have the same size bolt circles or a Bolt Circle Adapter must be used). The bolts provided with each Locking Dog Assembly are hot dip galvanized, and are the appropriate length for attachment to another flange of equal thickness with clearance holes (not tapped holes).

Tighten the bolts to the recommended torque values shown in the table on the right.

Note: Galvanized bolts cannot be used to attach the adapter to another tool having tapped holes (such as the Chance Torque Indicator). When using a Torque Indicator use the plated bolts provided with the Torque Indicator to attach the Kelly Bar Adapter and Locking Dog Assembly and tighten to the recommended torque values shown in the table on the right.



**⚠ WARNING**

Anchor installation can puncture underground utility service. Can cause property damage, serious injury, or death. Locate and avoid all underground-utility services before installing an anchor.

Torque Rating of the Anchor tools (ft-lb)	Bolt Circle Diameter	Bolt Dia.	Grade	Recommended tightening dry torque values (ft-lb) on bolts
10,000	5-1/4"	1/2	5	75
15,000	7-5/8"	5/8	2	95

If necessary to replace any bolts, always replace with the same diameter, length, and grade as the originals.

These instructions do not claim to cover all details or variations in equipment, nor to provide for all possible conditions to be met with concerning installation, operation, or maintenance of this equipment. If further information is desired or if particular problems are encountered which are not sufficiently covered in this guide, contact Hubbell Power Systems.

NOTE: Hubbell has a policy of continuous product improvement. We reserve the right to change design and specifications without notice.

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## **! WARNING**

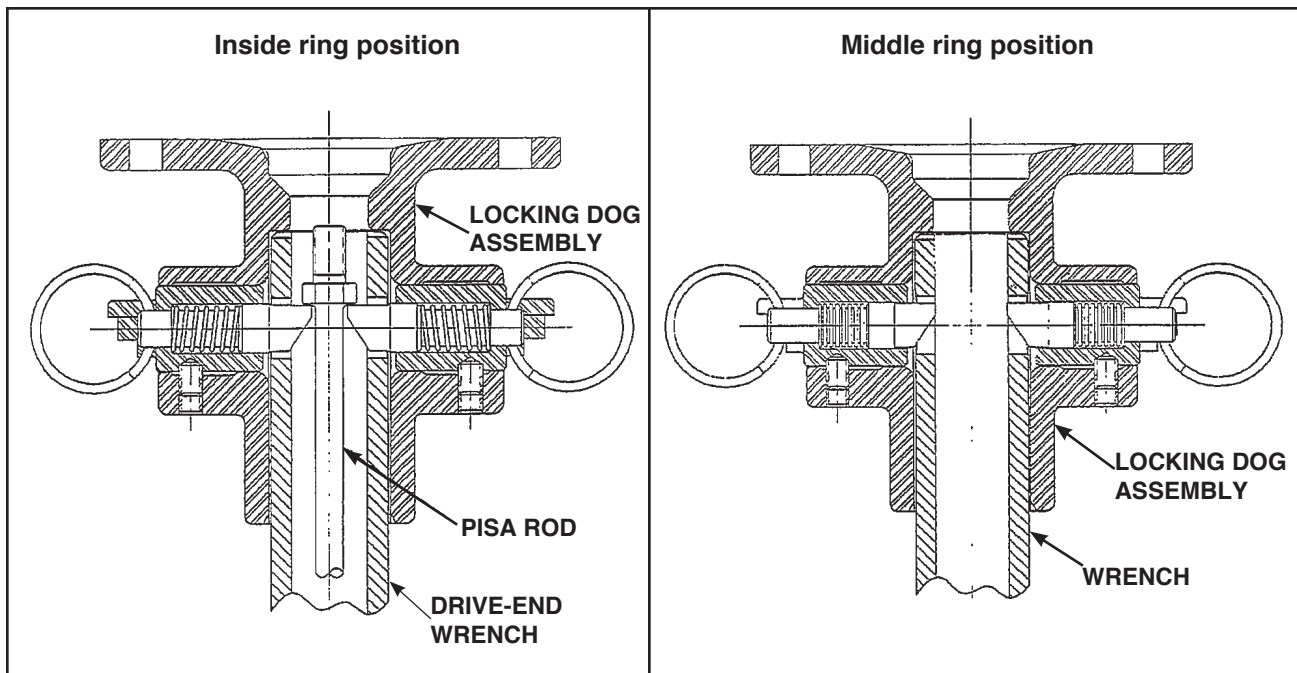
Inadequate maintenance or improper use of tools and hardware may lead to unexpected failure.  
Can cause property damage, injury, or death.  
Frequently inspect tools and hardware for damage, correct quantity, correct type, and proper torque. Replace as necessary with the same grade and size as the originals.

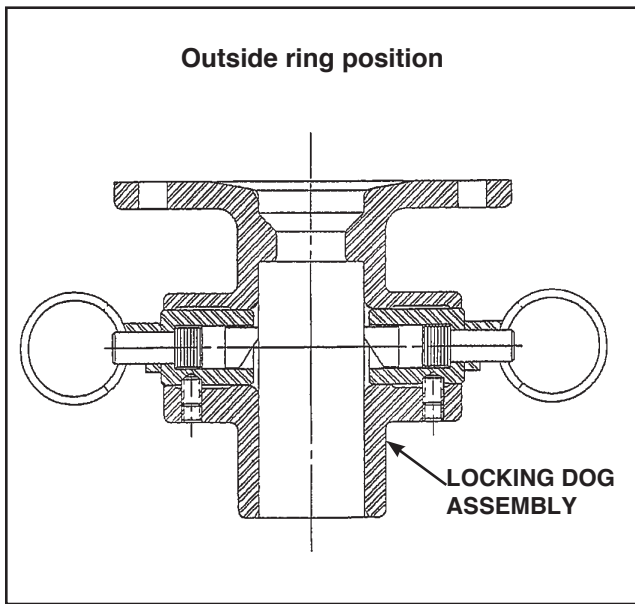
## **! WARNING**

Loose or broken parts may be thrown at high speed.  
Can cause property damage, injury, or death.  
Stay away from drive train during installation.

## **USE OF LOCKING DOGS**

The Locking Dog Assembly has three ring positions. The inside ring position allows the Locking Dogs to hold both the Drive-End Wrench and the Pisa Rod. The middle position releases the Pisa Rod, but holds the Drive-End Wrench.





The outside position releases the Pisa Rod and Drive-End Wrench.

The Locking Dog Assembly is now ready to accept a Drive-End Wrench.

**! WARNING**

Heavy suspended objects.  
Can fall and cause property damage, injury, or death.  
Do not stand under the locking dog assembly when adjusting the dog positions.

**! WARNING**

Bending or over-torquing the tool string is hazardous.  
Can cause property damage, injury, or death.  
Do not allow visible bending or torque greater than the rating of your tool.

Always use tools that are the appropriate size and rating for your particular application. For instructions on how to use the Kelly Bar Adapter, Drive-End Wrench, or other anchor tools, see the instruction sheets included with each tool.

## INSTRUCTIONS FOR SECURING THE LOCKING DOGS

If set screws become loose, remove and replace by cleaning the set screw threads with Loctite® thread cleaner.

Coat the thread of the 1/2" x 5/8" set screw with Loctite RC 680.

Insert the Locking Dog Housing into the Locking Dog Assembly. Align the "v" on the Locking Dog Housing with the "v" on the Locking Dog Assembly. While the "v"s are aligned, slide the Locking Dog Housing in and out of the Locking Dog Assembly until the indentation in the Locking Dog Housing is under the set screw holes in the Locking Dog Assembly.

Insert the 1/2" x 5/8" set screw. The set screw must be seated in the indentation of the Locking Dog Housing in order to hold it securely in the Locking Dog Assembly.

### **! WARNING**

Falling objects.

Can cause property damage, injury, or death.

Locking Dog Housing must be installed with the angled face of dog pointing toward socket opening of Locking Dog Assembly to prevent anchor or wrench from falling.

Tighten the set screw to 15 to 20 ft-lb. torque.

Coat the threads of 1/2" x 3/8" set screw with Loctite RC 680.

Insert the set screw and tighten to 15 to 20 ft-lb. torque.

**IMPORTANT:** Proper installation of set screws will result in the head of the 1/2" x 3/8" set screw being recessed about 1/16" to 1/8" below boss on the Locking Dog Assembly. If set screws are installed improperly, the 1/2" x 3/8" set screw will extend out of hole about 1/8" above boss on the Locking Dog Assembly.

If this occurs, the 1/2" x 5/8" set screw must be removed and properly aligned with the counter-sink in the dog housing.

**Note:** Installation of the set screws should be completed within fifteen minutes of application of Loctite. Follow the instructions on the Loctite package.

Repeat the same process for other Locking Dog Housing.

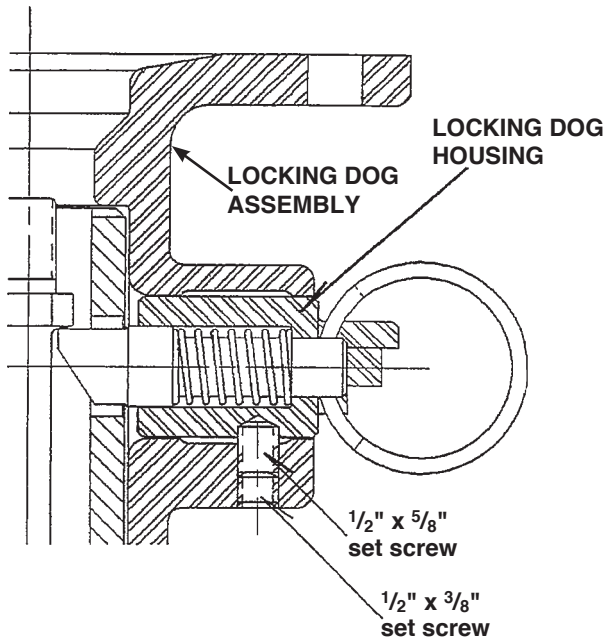
Replacement kits and warning labels are available from A. B. Chance Co. Replace the warning labels if they are damaged or removed. Three warning labels are included in the replacement kit. Wire brush casting housing until it is clean and completely remove old labels. Replace new labels onto the outside of the casting so they are readable by the user.

### **! WARNING**

Loose parts may be thrown at high speed.

Can cause property damage, injury, or death.

The Locking Dog Housing must be properly aligned in the Locking Dog Assembly. The set screws must be inserted and Loctited into position to ensure that the Locking Dog does not eject during operation.



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