

**CHANCE<sup>®</sup>**

**ANCHOR  
TOOL**

MAINTENANCE

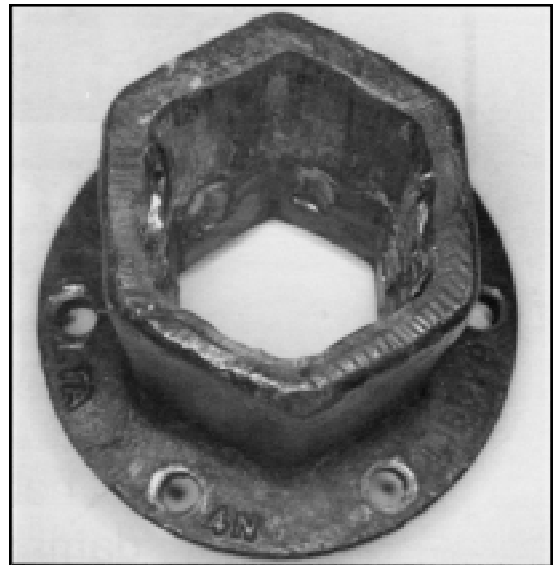
How to detect  
and  
help prevent  
damage to tooling.

# KELLY BAR ADAPTER



## **Elongation of Kelly bar holes.**

- Cause**
- The retaining pin carrying torque due to a worn Kelly bar or a worn or improperly sized Kelly bar adapter socket.
- Action:**
- Replace the Kelly bar adapter. Make sure the new adapter is the proper size for Kelly bar.
  - Replace worn Kelly bar.

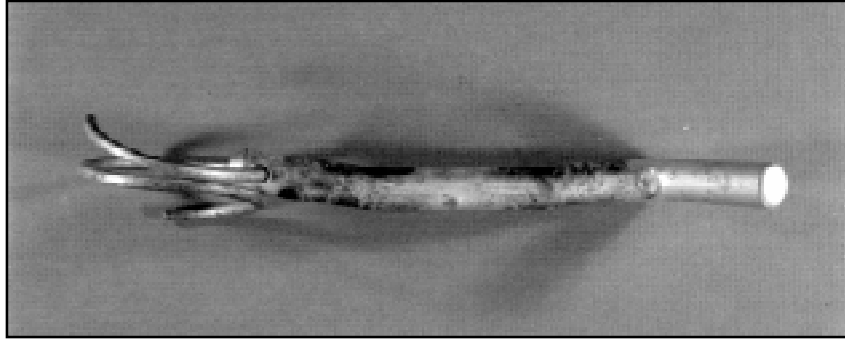


## **Wear**

- Cause:**
- Piloted Kelly bars.
  - Applied torque in excess of rating.
  - Worn Kelly bars.
  - Normal usage over long period of time or in obstruction-laden soils.
  - Side loading or tool misalignment during anchor installation.
- Action:**
- Replace the Kelly bar adapter. Chance now sells only heavy duty Kelly bar adapters which last longer with piloted Kelly bars.
  - Avoid misalignment during anchor installation.
  - Replace worn Kelly bar.

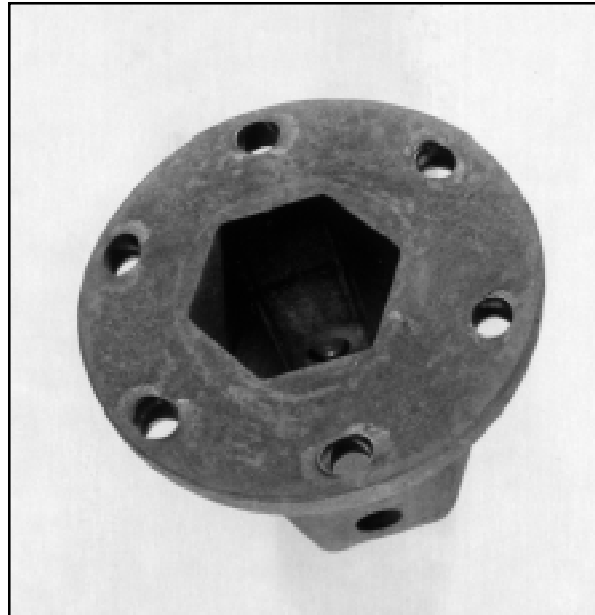
*Kelly Bar Adapter continued . . .*

# KELLY BAR ADAPTER



## Retaining pins & coil locks

- Cause:**
- Normal usage over long period of time.
  - Worn Kelly bar or worn or improperly sized Kelly bar adapter or installing tool socket.
  - Use of wrong size retaining pin.
- Action:**
- Replace with proper size retaining pin and coil lock.
  - Replace worn Kelly bar or Kelly bar adapter or installing tool.

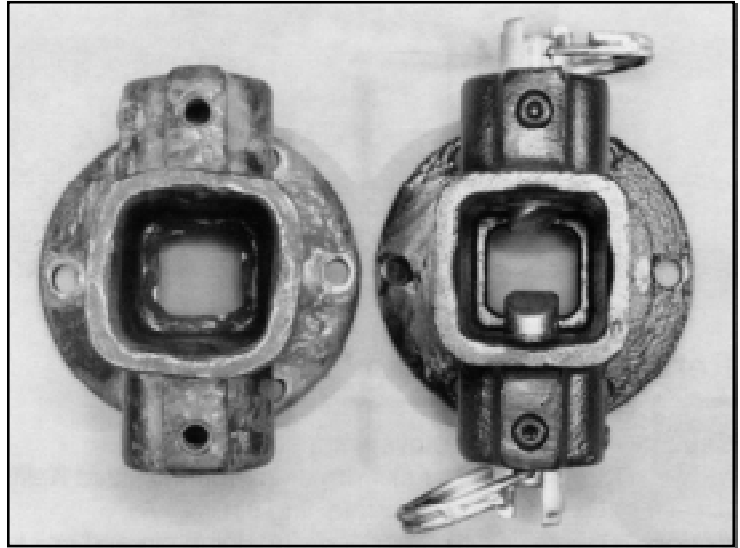


## Elongation of flange bolt holes

- Cause:**
- Applied torque in excess of rating.
  - Failure to maintain proper bolt tightening torques.
- Action:**
- Replace the Kelly bar adapter.
  - Do not exceed tool's torque rating.
  - Keep bolts tightened to recommended torque.

# LOCKING DOG ASSEMBLY

## Square Socket Wear



- Cause**
- Normal usage over long time.
  - Applied torque in excess of rating.
  - Side loading or tool misalignment during anchor installation.
- Action:**
- Replace locking dog assembly (may also be necessary to replace drive tube).
  - Do not exceed tool's torque rating.
  - Maintain proper alignment during anchor installation.

## Elongation of Flange Bolt Holes

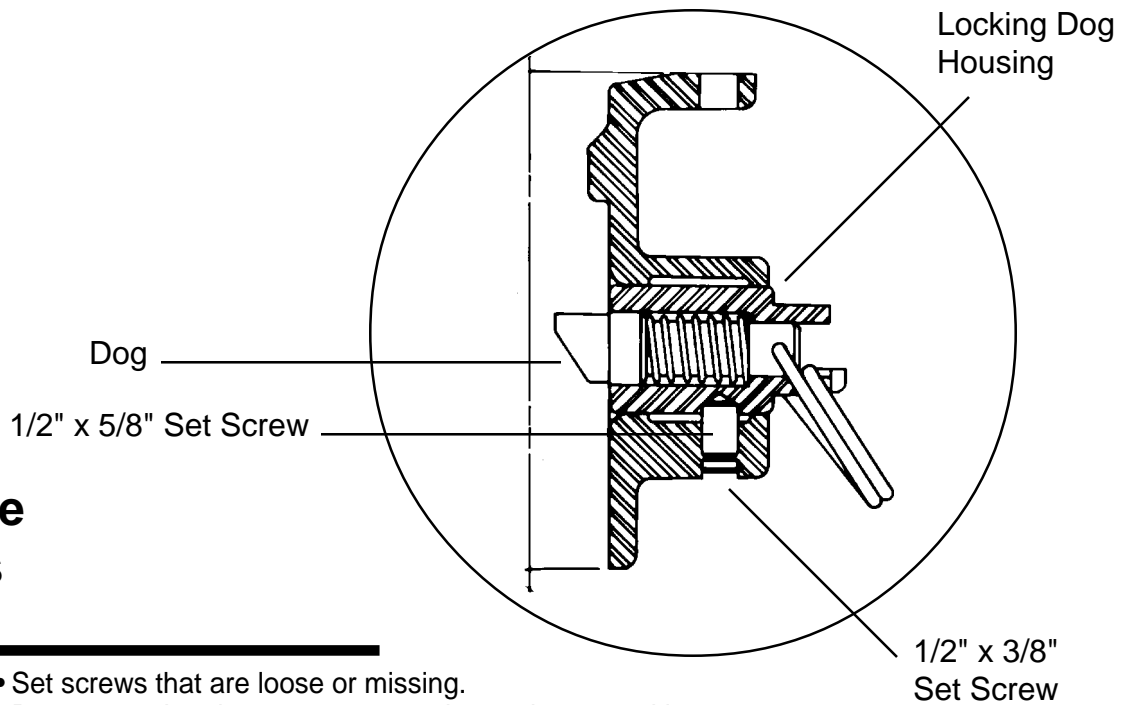


- Cause:**
- Applied torque in excess of rating.
  - Failure to maintain proper bolt tightening torques.
- Action:**
- Replace the locking dog assembly.
  - Do not exceed tool's torque rating.
  - Keep bolts tightened to recommended torque.

*Locking Dog Assembly continued . . .*

# LOCKING DOG ASSEMBLY

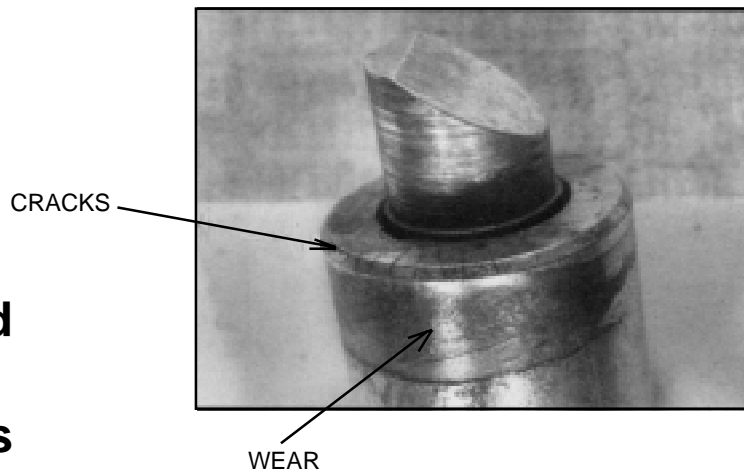
## Loose Dogs



**Cause** • Set screws that are loose or missing.

**Action:** • Remove and replace set screws using replacement kit.

## Worn/Cracked Dogs or Dog Housings



**Cause** • Worn locking dog assembly socket.  
• Drive tube wear.

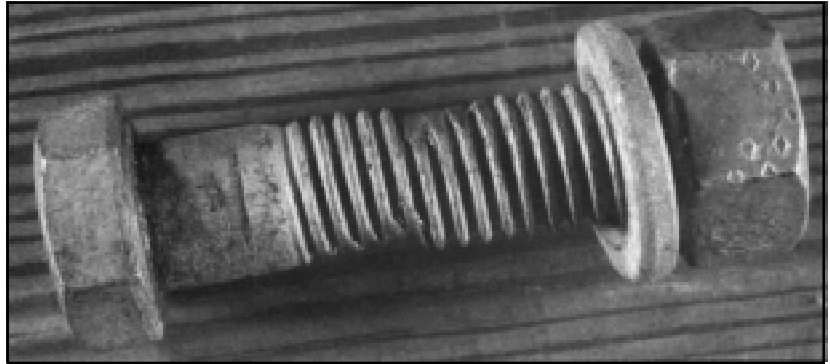
**Effect:** • Dog assemblies share torsional load.

**Action:** • Inspect locking dog adapter and wrench tube and replace as necessary.  
• If locking dog adapter is ok, replace dog assemblies using replacement kit in catalog.

*Locking Dog Assembly continued . . .*

# LOCKING DOG ASSEMBLY

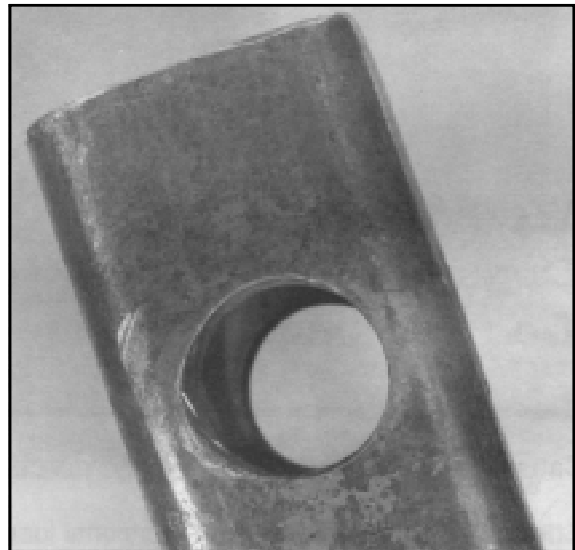
## Flange Bolts



- 
- Cause**
- Wrong grade bolts.
  - Applied torque in excess of rating.
  - Failure to maintain proper bolt tightening torques.
- Action:**
- Replace with proper size and grade bolts.
  - Do not exceed tool's torque rating.
  - Keep bolts tightened to recommended torque.

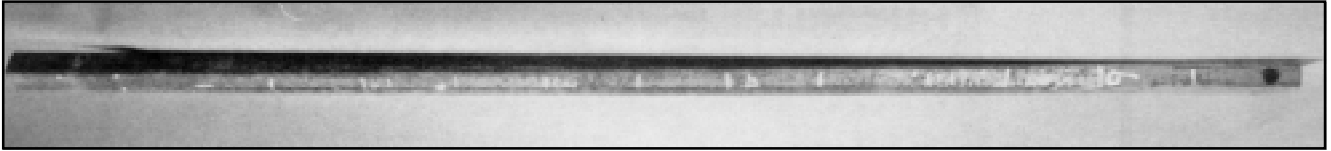
# DRIVE TUBE

## Elongation of Drive Tube Holes



- 
- Cause:**
- Worn locking dog assembly socket.
  - Worn drive tube.
- Action:**
- Replace drive tube.
  - Check locking dog assembly - replace if worn.

# DRIVE TUBE



## Twist

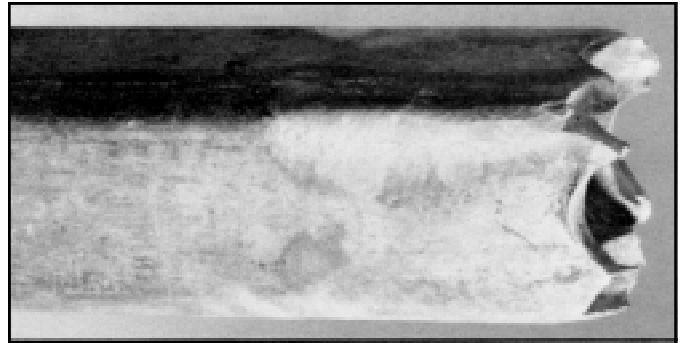
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**Cause:** • Torque in excess of rating.

**Action:** • Replace drive tube.  
• Do not exceed tube's torque rating.

## Dog End of Tube Twisted Off

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**Cause** • Extremely worn locking dog adapter.  
• Insufficient engagement of tube in locking dog adapter.

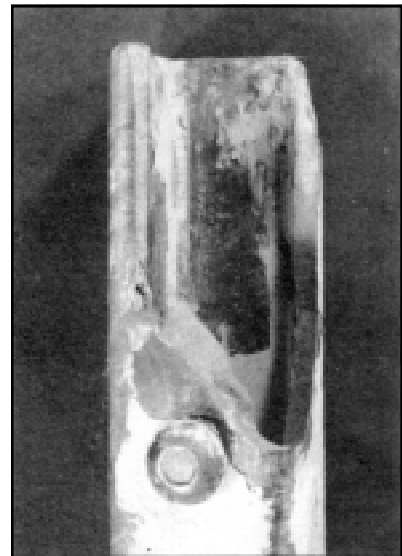
**Action:** • Replace drive tube.  
• Check locking dog assembly - replace if worn.  
• Be sure tube is captured in locking dog adapter by dogs before using.

## Split or Broken Drive End

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**Cause** • Torque in excess of rating.  
• Inadequate engagement of anchor in tube.

**Action:** • Replace drive tube.  
• Do not exceed tube's torque rating.  
• Maintain full engagement with anchor at all times.





210 N. Allen St.  
Centralia, MO 65240  
Phone 573-682-5521  
Fax 573-682-8714



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