

**CHANCE<sup>®</sup>**

# CHANCE<sup>®</sup> ANCHOR TOOL

INSPECTION & MAINTENANCE CHECKLIST



# CHANCE® ANCHOR TOOL INSPECTION & MAINTENANCE CHECKLIST

Truck or Tool Number \_\_\_\_\_ Date \_\_\_\_\_

**WARNING:** Loose parts may be thrown at high speed. Can cause property damage, serious injury or death. Monitor the condition of all parts in the drive train and repair or replace as necessary. Check all fasteners along the drive train periodically to ensure they remain tight and undamaged. Loose or damaged bolts may fail at or below rated torque or contribute to damage elsewhere in the drive train. Replacement bolts must be the same size, grade and length as the originals supplied by CHANCE®.

ITEM	FREQUENCY	POSSIBLE DEFICIENCIES	CAUSE	ACTION															
Kelly Bar Adapter, Locking Dog, Torque Indicator, Drive Tools	Each use	Flange Bolt failure	<ul style="list-style-type: none"> <li>Wrong grade bolts</li> <li>Applied anchor torque in excess of rating</li> <li>Failure to maintain proper bolt tightening torques</li> </ul>	Mounting bolt torque range: <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Torque Rating of Anchor tools (ft-lb)</th> <th>Bolt Circle Dia.</th> <th>Bolt Dia.</th> <th>Grade</th> <th>Recommended tightening dry torque values (ft-lb) on bolts</th> </tr> </thead> <tbody> <tr> <td>10,000</td> <td>5 1/4"</td> <td>1/2</td> <td>5</td> <td>75</td> </tr> <tr> <td>15,000</td> <td>7 5/8"</td> <td>5/8</td> <td>2</td> <td>95</td> </tr> </tbody> </table> <p style="font-size: small; margin-top: 5px;"><i>If necessary to replace any bolts, always replace with the same diameter, length and grade as the originals</i></p>	Torque Rating of Anchor tools (ft-lb)	Bolt Circle Dia.	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
	Torque Rating of Anchor tools (ft-lb)	Bolt Circle Dia.	Bolt Dia.	Grade	Recommended tightening dry torque values (ft-lb) on bolts														
10,000	5 1/4"	1/2	5	75															
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Kelly Bar Adapter	Weekly	Elongation of through bolt holes	<ul style="list-style-type: none"> <li>The retaining pin is carrying torque due to worn or improperly sized Kelly bar Adapter</li> <li>Also if retaining pin is larger than recommended, it can cause pin to shear or Kelly Bar casting to fail</li> </ul>	<ul style="list-style-type: none"> <li>Do not exceed tool's torque rating</li> <li>Keep bolts tightened to recommend torque</li> <li>Using pins larger than recommended can cause adapter to crack</li> </ul>															
	Weekly	Damaged Bent Arm Retaining Pin and Coil Lock	<ul style="list-style-type: none"> <li>Normal usage over time causes items to wear</li> <li>Worn Kelly Bar Adapter</li> <li>Improper sized Kelly Bar Adapter</li> </ul>	<ul style="list-style-type: none"> <li>Retaining pin and coil lock is provided with all new anchor tools</li> <li>The use of bolt and nut or click pin is not recommended</li> <li>Replace Bent Arm Pin and Coil Lock</li> </ul>															
Electronic Torque Indicator	Weekly	Batteries	<ul style="list-style-type: none"> <li>Normal usage will cause batteries to lose power</li> <li>Cold temperatures will reduce batteries power output</li> </ul>	<ul style="list-style-type: none"> <li>Replace batteries with standard 9v batteries</li> <li>Lithium batteries may be best option for extreme hot or cold weather</li> </ul>															
Kelly Bar Adapter & Locking Dog Assembly	Quarterly	Elongation of Flange Bolt holes	<ul style="list-style-type: none"> <li>Applied anchor torque in excess of rating</li> <li>Failure to maintain proper bolt tightening torque</li> </ul>	<ul style="list-style-type: none"> <li>Replace Kelly Bar Adapter. Make sure the new adapter is the proper size for Kelly Bar.</li> <li>Replace Locking Dog Assembly</li> </ul>															
	Quarterly	Casting wear	<ul style="list-style-type: none"> <li>Normal use over time</li> <li>Applied torque in excess of rating</li> <li>Side loading or tool misalignment during anchor installation</li> </ul>	<ul style="list-style-type: none"> <li>Replace Kelly Bar adapter or Locking Dog assembly</li> <li>Use torque indicator to help ensure tools and anchors do not exceed tool's torque rating</li> <li>Maintain proper alignment during installation</li> </ul>															
Locking Dog Assembly	Quarterly	Loose Dog Housing	<ul style="list-style-type: none"> <li>Set screws are loose or missing</li> </ul>	<ul style="list-style-type: none"> <li>Remove and replace set screws</li> </ul>															
	Quarterly	Worn/Cracked Dog or Dog Housing	<ul style="list-style-type: none"> <li>Worn Locking Dog casting</li> <li>Drive tool worn causing excess pressure on Dog Housing</li> </ul>	<ul style="list-style-type: none"> <li>Remove and replace Locking Dog and Housing</li> </ul>															
Pisa and Square Shaft Drive Wrench	Quarterly	Elongation of Drive Wrench holes	<ul style="list-style-type: none"> <li>Worn Locking Dog Assembly</li> <li>Worn Drive Wrench</li> </ul>	<ul style="list-style-type: none"> <li>Replace Drive Wrench</li> <li>Never weld on Drive Wrench. Drive Wrench is heat treated to provide strength and durability.</li> </ul>															
	Quarterly	Twisted Drive Wrench	<ul style="list-style-type: none"> <li>Torque in excess of rating</li> </ul>	<ul style="list-style-type: none"> <li>Replace Drive Wrench</li> <li>Use torque indicator to help ensure tools and anchors do not exceed tool's torque rating</li> </ul>															
Shear Pin Torque Limiter	Quarterly	Shear plates do not rotate smoothly	<ul style="list-style-type: none"> <li>Bearing damaged</li> <li>Rust between shear plates</li> <li>Piece of shear pin in hole</li> </ul>	<ul style="list-style-type: none"> <li>Disassemble unit and clean plates</li> </ul>															
	Quarterly	Shear pins will not shear cleanly	<ul style="list-style-type: none"> <li>Shear plates need to be sharpened</li> </ul>	<ul style="list-style-type: none"> <li>Disassemble unit. Mating surfaces of upper and lower head should be ground to sharpen</li> </ul>															
	Quarterly	Cap Screws loose	<ul style="list-style-type: none"> <li>Normal usage will cause cap screws to loosen</li> <li>Loose cap screws can cause upper and lower head to come apart</li> </ul>	<ul style="list-style-type: none"> <li>Disassemble unit and tighten cap screws</li> </ul>															



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