Table of Contents

Table of Figures ................................................................. 4
Part List ............................................................................... 5
Precautions Prior to Use ..................................................... 6
Set-Up Instructions ............................................................. 7
  Turn on Tool .................................................................. 7
  Set Tool to ‘Peak’ mode .................................................. 7
  Choose Desired Units .................................................... 7
  Set Torque to Peak Value ............................................. 7
 Operating Instructions ......................................................... 8
  Step 1 ......................................................................... 8
     Insert Breakaway Torque Tool into Bearing .............. 8
  Step 2 ......................................................................... 8
     Select Gauge Pin ....................................................... 8
  Step 3 ......................................................................... 9
     Position Digital Torque Reader .............................. 9
  Step 4 ......................................................................... 9
     Apply Torque to Breakaway Torque Test Tool .......... 9
  Step 5 ......................................................................... 9
     Read Torque Output ................................................ 9
# Table of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Digital Torque Reader</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Breakaway Torque Tool</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Gauge Pins</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>AAA Battery</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Turning on digital torque reader</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>Digital torque reader in ‘Track’ mode</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>Digital torque reader in ‘Peak’ mode</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Digital torque reader in ‘cN-m' units</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>Digital torque reader in ‘in-lb’ units</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Digital torque reader in ‘kg-cm' units</td>
<td>7</td>
</tr>
<tr>
<td>11</td>
<td>Digital torque reader set to highest value</td>
<td>8</td>
</tr>
<tr>
<td>12</td>
<td>Inserting breakaway torque tool into bearing bore</td>
<td>8</td>
</tr>
<tr>
<td>13</td>
<td>Breakaway torque tool correctly inserted into bearing</td>
<td>8</td>
</tr>
<tr>
<td>14</td>
<td>Gauge pin within shaft slot</td>
<td>8</td>
</tr>
<tr>
<td>15</td>
<td>Correctly sized gauge pin fitted into shaft</td>
<td>8</td>
</tr>
<tr>
<td>16</td>
<td>Breakaway torque tool and gauge pin correctly fitted into bearing bore</td>
<td>8</td>
</tr>
<tr>
<td>17</td>
<td>Digital torque reader correctly positioned onto breakaway torque tool</td>
<td>9</td>
</tr>
<tr>
<td>18</td>
<td>Gauge pin seated against side of slot to remove play</td>
<td>9</td>
</tr>
<tr>
<td>19</td>
<td>Applying torque using breakaway torque test tool</td>
<td>9</td>
</tr>
<tr>
<td>20</td>
<td>Torque value reading</td>
<td>9</td>
</tr>
</tbody>
</table>
Part List

Figure 1 - Digital Torque Reader

Figure 2 - Breakaway Torque Tool

Figure 3 - Gauge Pins

Figure 4 - AAA Battery
Precautions Prior to Use

- Due to the tool being battery powered, it is advisable to have a spare AAA battery available in the event of battery life depletion.

- Ensure the housing has suitable clearance for test to be performed.

- Make sure all contact surfaces are clean and lube dry.

- Perform an initial test by hand to gauge the torque required to initiate bearing rotation.
Set-Up Instructions

Turn on Tool

- Turn on digital torque reader by holding the “C” button.
- Connect the load cell to the electronic load display ensuring to match the keyway with the slot.
- Secure the connector by turning the collar clockwise.

Set Tool to ‘Peak’ mode

- Hold U/S button until a beeping sound occurs.
- Use arrow keys until the letter in the bottom right of the screen reads “P”.
- Click U/S button 3 times to return to the main screen.

Select Desired Units

- On main screen, click U/S button to select between units: cN-m, in-lb or kg-cm.
Operating Instructions

- On main screen, use arrow buttons to set torque to read the highest value: 400.0cN-m, 35.39 in-lb or 40.82 kg-cm.

Perform Breakaway Torque Test

- On main screen, click U/S button to select between units: cN-m, in-lb or kg-cm.

Step 1 – Insert Breakaway Torque Tool into Bearing

- Insert breakaway torque tool into bore of the bearing until the flange sits flush against the bearing.

Step 2 – Select Gauge Pin

- Select gauge pin that slides into the slot on the shaft causing a light interference fit with the bore.
- Fully insert the gauge pin.
Step 3 – Position Digital Torque Reader

- Position the digital torque reader on the hex head of the breakaway torque tool.

Step 4 – Apply Torque to Breakaway Torque Test Tool

- Rotate handle slightly to lock gauge pin against the side of the slot on the shaft thus eliminating play.

- Gradually increase rotational torque, as slowly as possible, until rotation is initiated within the bearing.

**NOTE:** ENSURE THE BREAKAWAY TORQUE TOOL DOES NOT ROTATE WITH RESPECT TO THE INNER RING OF THE BEARING, AS THIS WILL INVALIDATE THE READING.

Step 5 – Read Torque Output

- Read torque output value to determine the breakaway torque.

**NOTE:** THIS TORQUE VALUE IS CONSIDERED YOUR BREAKAWAY TORQUE AND DETERMINES WHETHER THE BEARING INSTALLATION WAS COMPLETED SUCCESSFULLY.
This catalogue has been produced with a great amount of care and attention; all data has been checked for its accuracy. However, no liability can be assumed for any incorrect or incomplete data.

Due to the constant development and expansion of the product range, we reserve the right to make modifications without prior notice.

All rights reserved. Reproduction in whole or in part without authorisation is prohibited.