INSTRUCTIONS FOR
TORQUE WRENCHES
model no: AK223P \& AK224P

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS \& CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.


Refer to instruction manual


Wear eye
protection

## 1. SAFETY

$\checkmark \quad$ Ensure all workshop safety rules, regulations and conditions are complied with when using the torque wrench.
$\checkmark \quad$ Maintain the wrench in good condition and replace any damaged or worn parts. Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
$\checkmark \quad$ The wrench is a precision tool, DO NOT abuse it.
$\checkmark \quad$ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
$\checkmark \quad$ Keep children and unauthorised persons away from the working area.
$\square$ WARNING! DO NOT use the wrench if damaged or thought to be faulty (Contact Service Agent).
$x \quad$ DO NOT drop or throw the wrench.
$x \quad$ DO NOT use wrench unless you have been instructed in its use by a qualified person.
$x \quad$ DO NOT use any cleaner which might affect the high pressure grease with which the wrench it is packed.
$\checkmark \quad$ After use adjust to lowest torque setting (but not below), clean and store in a safe, dry, childproof location.

## 2. INTRODUCTION

Heat treated steel ratchet head. Fully hardened and tempered. Chrome plated for corrosion resistance. Micrometer type torque range adjustment. Flip reverse ratchet mechanism. Supplied in storage case.

## 3. SPECIFICATION

| Model $n$ | AK223P |
| :---: | :---: |
| Drive type: | 3/8"sq. |
| Length: | 365mm |
| Range: | .19-110Nm (14-81lb.ft) |
| Model no: | ........... AK224P |
| Drive type: | .. 1/2"sq. |
| Length: | .440mm |
| Range: | 42-210Nm (31-155lb.ft) |

## 4. OPERATION

4.1. Hold torque wrench in left hand (if right handed) so that required scale is uppermost and visible.
4.2. Turn knurled lock screw at end of handle anticlockwise to unlock knurled adjusting grip.
4.3. Turn adjusting grip to select torque setting as follows, for a required setting of 50 Nm :

- Turn grip until top edge of grip is level with the 47 Nm line on the handle scale and the zero graduation on the grip is aligned with the centre line of the handle scale.
- Rotate handle further, clockwise, until '3rd' graduation on grip is aligned with centre line to give a setting of $47+3=50 \mathrm{Nm}$.

NOTE: If using the 'kgm' scale then each division on the grip graduation is equivalent to 0.98 Nm .
Therefore to set wrench at 4.5 kgm :

- Turn grip until top edge of grip is level with the 4.0 kgm line on the handle scale and the zero graduation on the grip is aligned with the centre line of the handle scale.
- Rotate the handle further, clockwise, until the '5th' graduation on the grip is aligned with the centre line to give a setting of $=4.5 \mathrm{kgm}$.
4.4. Tighten lock screw at end of handle to prevent accidental alteration of the setting.

When tightening the nut/bolt you will feel and hear the wrench mechanism click when the set torque is reached. Immediately stop applying force to wrench to avoid over tightening nut/bolt. Wrench will reset ready for next application.
4.5. DO NOT turn the handle below its lowest torque setting.

NOTE: If the wrench has not been used for some time, operate it a few times, at a low setting, to ensure all internal parts are coated in grease.

## 5. CALIBRATION

5.1. If the user does not utilize a control procedure, a period of 12 months, or 5000 cycles, whichever occurs first, may be taken as default values for the interval between calibrations. The interval starts with the first use of the torque tool. Shorter intervals between calibrations may be used if required by the user, their customer or by legislation.
5.2. Calibration must take place after any repair, overload, impact or other misuse. Contact a UKAS accredited laboratory for calibration.

## 6. MAINTENANCE

6.1. Clean the torque wrench with a soft cloth. DO NOT immerse in any kind of cleaner which may affect the special high pressure lubrication which the torque wrench is packed with at the factory.

## 7. CONVERSION TABLE

| Foot Pounds (Ft.Lbs) | Kilo-gram Meters (Kgm or mkp) | Newton <br> Meters <br> ( Nm ) | Newton <br> Meters <br> ( Nm ) | Foot Pounds (Ft.Lbs) | Kilo-gram Meters (Kgm or mkp) | Kilo-gram <br> Meters <br> (Kgm or <br> mkp) | Newton <br> Meters <br> ( Nm ) | Foot Pounds (Ft.Lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 0.69 | 6.78 | 10 | 7.38 | 1.02 | 1 | 9.81 | 7.23 |
| 10 | 1.38 | 13.56 | 20 | 14.75 | 2.04 | 2 | 19.61 | 14.47 |
| 15 | 2.07 | 20.34 | 30 | 22.13 | 3.06 | 3 | 29.42 | 21.70 |
| 20 | 2.76 | 27.12 | 40 | 29.50 | 4.08 | 4 | 39.23 | 28.93 |
| 25 | 3.46 | 33.90 | 50 | 36.88 | 5.10 | 5 | 49.04 | 36.17 |
| 30 | 4.15 | 40.68 | 60 | 44.26 | 6.12 | 6 | 58.84 | 43.40 |
| 35 | 4.84 | 47.46 | 70 | 51.63 | 7.14 | 7 | 68.65 | 47.87 |
| 40 | 5.53 | 54.24 | 80 | 59.01 | 8.16 | 8 | 78.46 | 50.63 |
| 45 | 6.22 | 61.02 | 90 | 66.38 | 9.18 | 9 | 88.26 | 65.10 |
| 50 | 6.91 | 67.80 | 100 | 13.76 | 10.20 | 10 | 98.07 | 72.33 |
| 55 | 7.60 | 74.58 | 110 | 81.14 | 11.22 | 11 | 107.88 | 79.57 |
| 60 | 8.29 | 81.36 | 120 | 88.51 | 12.24 | 12 | 117.68 | 86.80 |
| 65 | 8.98 | 88.14 | 130 | 95.89 | 13.26 | 13 | 127.49 | 94.03 |
| 70 | 9.67 | 94.92 | 140 | 103.26 | 14.28 | 14 | 137.30 | 101.27 |
| 75 | 10.37 | 101.70 | 150 | 110.64 | 15.30 | 15 | 147.11 | 108.50 |
| 80 | 11.06 | 108.48 | 160 | 118.02 | 16.32 | 16 | 156.91 | 115.74 |
| 85 | 11.75 | 115.26 | 170 | 125.39 | 17.34 | 17 | 166.72 | 122.97 |
| 90 | 12.44 | 122.04 | 180 | 132.77 | 18.36 | 18 | 176.53 | 130.20 |
| 95 | 13.13 | 128.82 | 190 | 140.14 | 19.38 | 19 | 186.33 | 137.43 |
| 100 | 13.82 | 135.60 | 200 | 147.52 | 20.40 | 20 | 196.14 | 144.67 |
| 105 | 14.51 | 142.38 | 210 | 154.90 | 21.42 | 21 | 205.95 | 151.90 |
| 110 | 15.20 | 149.16 | 220 | 162.27 | 22.44 | 22 | 215.75 | 159.13 |
| 115 | 15.89 | 155.94 | 230 | 169.65 | 23.46 | 23 | 225.37 | 166.37 |
| 120 | 16.58 | 162.72 | 240 | 177.02 | 24.48 | 24 | 235.37 | 173.60 |
| 125 | 17.28 | 169.50 | 250 | 184.40 | 25.50 | 25 | 245.18 | 180.84 |
| 130 | 17.97 | 176.28 | 260 | 191.78 | 26.52 | 26 | 254.98 | 188.08 |
| 135 | 18.66 | 183.06 | 270 | 199.15 | 27.54 | 27 | 264.79 | 195.30 |
| 140 | 19.35 | 189.84 | 280 | 206.53 | 28.56 | 28 | 274.60 | 202.54 |
| 145 | 20.04 | 196.62 | 290 | 213.91 | 29.58 | 29 | 284.41 | 209.77 |
| 150 | 20.73 | 203.40 | 300 | 221.29 | 30.60 | 30 | 294.22 | 217.00 |
| 155 | 21.42 | 210.18 | 310 | 228.67 | 31.62 | 31 | 304.03 | 224.23 |
| 160 | 22.11 | 216.96 | 320 | 236.05 | 32.64 | 32 | 313.84 | 231.46 |
| 165 | 22.80 | 223.74 | 330 | 243.43 | 33.66 | 33 | 323.65 | 238.69 |
| 170 | 23.49 | 230.52 | 340 | 250.81 | 34.68 | 34 | 333.46 | 245.92 |
| 175 | 24.19 | 237.70 | 350 | 258.30 | 35.70 | 35 | 343.35 | 253.05 |
| 180 | 24.88 | 244.08 | 360 | 265.68 | 36.72 | 36 | 353.16 | 260.28 |
| 185 | 25.57 | 250.86 | 370 | 273.06 | 37.74 | 37 | 362.97 | 267.51 |
| 190 | 26.26 | 257.64 | 380 | 280.44 | 38.76 | 38 | 372.78 | 274.74 |
| 195 | 26.95 | 264.42 | 390 | 287.82 | 39.78 | 39 | 382.59 | 281.97 |
| 200 | 27.64 | 271.20 | 400 | 295.20 | 40.80 | 40 | 392.40 | 289.20 |
| 205 | 28.33 | 277.98 | 410 | 302.58 | 41.82 | 41 | 402.21 | 296.43 |
| 210 | 29.02 | 284.76 | Conversion Formulas |  |  |  |  |  |
| 215 | 29.71 | 291.54 |  |  |  |  |  |  |
| 220 | 30.40 | 289.32 |  |  |  |  |  |  |

1 CMKG=13.887 IN-OZ
1 CMKG=0.867 IN-LB
$1 \mathrm{MKG}=7.233 \mathrm{FT}-\mathrm{LB}$
$1 \mathrm{KPCM}=1 \mathrm{CMKG}$
1 CMKG=0.98Nm
1 FT-LB=12 IN-LB
$1 \mathrm{dNm}=14.16 \mathrm{IN}-\mathrm{OZ}$
$1 \mathrm{Nm}=8.8507 \mathrm{IN}-\mathrm{LB}$
$1 \mathrm{Nm}=0.73756 \mathrm{FT}-\mathrm{LB}$
$1 \mathrm{KPM}=1 \mathrm{MKG}$
$1 \mathrm{MKG}=9.80665 \mathrm{Nm}$

| 300 | 41.40 | 406.80 |
| :--- | :--- | :--- |

## ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.
Important: No Liability is accepted for incorrect use of this product.
Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

## Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk. IP32 7AR 

