## TORQUE TALK

Caravan wheel fasteners tightened correctly? George Hinton
tests a selection of wrenches available for under $£ 100$

1. Draper 3001A An attractive satin chrome inish sets this tool apart and the engraved scale is marked
in Nm and 1 ft . However, the after is in odd fractions, eg 51.6/73.8/81.1, which does not make setting as easy as it might be. The Nm .
scale is in straightforws scale is in straightforward oks increments. The coarse ratchet has just four clicks for difficult in tight locations. Draper offers a epair service, a $\mathrm{f}_{14}$ repair kit and will recalibrate the tool for $£ 55$.

## ATAGLANCE

RRP: f55.12
Range: $22-154 \mathrm{bft} / 28-210 \mathrm{Nm}$
Rent
Length/ weight: $16 /$ in $(420 \mathrm{~mm})$ /
${ }_{3}^{3 l b}(1.35 \mathrm{~kg})$
Contact: 0238049 4333, draper.co.uk
2. Tens 1292AG-EP This Swedish tool is smartly
finished in red with a black finished in red with a black
knurled vernier sleeve, the knurled vernier sleeve, the matt silver. However, while the metric scale is in 10 kg increments, the ib st is a mixture of alternate seven and eight pound steps, es: $33 / 40 / 48 / 55 / 63$ etc.
The ratchet gives six clicks for every quarter turn. The adjuster proved impossible to take to the top of its scale with bare hands, which slipped on the sleeve as it became stiffer to turn, but this might ease with use. The factory
calibration certificate supplied also showed it calibration certificate supplied also showed it was less accurate at the upper end. To have
the calibration rechecked on despatch adds $£_{43}$ to the price.

## ATAGLANCE

RR: $£ 68.80$
Range: 30-1501b ft/40-200Nm Length/weight:17in (430mm)/3bl 107 ( 1.4 kg )
Contact: 01525711500 , pit-pass.com
3. Clarke CHT 141 This wrench is finished in polished chrome. Although it working range is quoted in ib ft as well as Nm , the two are in multiples of 14 Nm and $\mathrm{m} / \mathrm{k}$ only, with a paper conversion chart supplied
for you to work out Imperial values. for you to work out Imperial values. Otherwise it's easy to use -the rotating
vernier scale is divided into 14 for the intermediate forces. This is no problem where your caravan is concerned, but could be inconvenient for older machinery where
torques are quoted in Imperial only The torques are quoted in Imperial only. The
CHI 141 comes with a 5 in $(125 \mathrm{~mm})^{2}$ )/in drive extension bar and 3 in drive adaptor.

## AT ACLANCE

ReP: $: 43.14$
Range: $20-154 \mathrm{lbft}$
/28-210Nm
Range: 20-154/bft/28-210Nm
Lenght/weight: 17 in $(430 \mathrm{~mm}) / 3 \mathrm{lb}(1.3 \mathrm{kgg})$

THE WHEEL DEAL
Caravanners are urged to check the tightness of their wheel fastenings within 50 miles everybody's tool kit. While you can pay hundreds of pounds for a top-off the-range digital-readout tool, here we look at six popular, half-inch-drive mechanical wrenches which all give a satisfactory level of accuracy. You will, of course, also require an
appropriate socket to fit your caravan (usually 19 mm ) and, with many of these, a appropriate socket o fir t your caravan (usda ty y 19 mm ) and, with many of these, an
extension bar. We found the common $\sin (125 \mathrm{~mm})$ length fits most caravans but a few, th deeply-inset wheels, might need a longer one. Compliance with BS $6789: 2003$ leans your wrench will be accurate to better than $4 \%$, as all these are. Lengths are taken from the centre of the drive spindle- some maker's figures include the box!
5. Halfords Professional Distinguished by its black painted finish and black plastic handle, this also
differs from the others t
in having a push-through drive
bit instead of a reversible ratchet.
It has a very easily-read black-on-white setting scale and a red indicator line, visible through a
window. Easy to adjust, its fine ratchet has 18 window. Easy to adjust, its fine ratchet has 18
teeth per $90^{\circ}$ rotation. More importantly, it was also the most accurate and well within
BS6789, yielding at 119.97 to 120.69 Nm at the 120 Nm setting. Together, these features more han compensate for the screw-togethe

## ATAGLANCE

ReP: $£ 69.99$
Range: $30-1501 \mathrm{ftt} / 40-200 \mathrm{Nm}$
ength/weight: $16 / 4 / \mathrm{in}(420 \mathrm{mmm}) / 3 \mathrm{lb}(1.35 \mathrm{~kg})$ Contact: 08457626625 , halfords.com
4. Kamasa SP 3780 All polished chrome, including the knurled vernier
adjustment sleeve, the adjustment sleeve, th
sample Kamasa was commendably accura yielding at 80.1 when set to 801 b $\underbrace{R(B)}_{\text {REL }}$ he medium ratchet has six teeth for each $90^{\circ}$ oration. The Imperial scale is marked in 1010 wed an example of this particular model for around 25 years and it is still as good as new. recalibration service is available at $£ 15$. The amass comes with a $\sin (125 \mathrm{~mm})$ Pin drive extension bar and $\%$ /in drive adapter.

## ATACLANCE


Length/weight:16//in (420mm)/ Bbl (1.3 5kg)

PLEASE NOTE THAT THE RANGES QUOTED IN THE 'AT
GLANCE' PANELS ARE AS ACCURATE AS WE COULD OBTAIN
6. Sealey Premier AK624 This is finished in satin chrome and has a black knurled vernier dandle. The ratchet has six primary setting scale is lb ft in 101b increments, whereas the Nm scale is fractional, starting at 28 and rising in in 10 lb equivalent steps, making it less simple to set. It is well within the expected $4 \%$ accuracy
according to the accompanying test certificate, tending to over-read slightly in the mid range 136.5 for a true 133 Nm ) and under-read at the op ( 198.3 for a true 204 Nm ). Remember each wrench is tested individually, so variations can
occur. The AK 224 is essentially the same tool but without the calibration certificate, at $£ 63.54$.

## ATAGLANCE

RRP: £77.94
Range: 20-1501 fft/28-200 Nm ength/weight:16//in $(420 \mathrm{~mm}) / 3 \mathrm{lb}(1.35 \mathrm{~kg})$ Contact: 01284757500 , sealey.co. 1 k

