

# SLO

## NAVODILA ZA UPORABO

Stisni drsni ročaj (A) do konca, zatem vstavi napero med dva zatiča na orodju (B). Prepričaj se, da je napera popolnoma vzporedna z orodjem, kar se doseže tako da se napera nasloni na oba stranska distančnika (C) na zatičih.

Ročaja ne spusti na hitro, temveč nežno popuščaj pritisk in sledi poti ročaja dokler se ne ustavi, kot prikazano na sliki 2. V kolikor nisi prepričan o meritvi, postopek ponovi večkrat, dokler ne dobis ponavljajočih rezultatov.

V kolikor nisi prepričan o premeru merjene napere, uporabi merilnik na vrhu orodja (D).

Ko imaš premer napere in izmerjeno vrednost, poglej v priloženo tabelo konverzij in odčítaj trenutno napetost.

\*Pripomočamo merjenje napere pri sobni temperaturi.

## NAVODILA ZA KALIBRACIJO

Vstavite kalibracijsko napero (E) v orodje za merjenje napetosti naper in po istem postopku kot z normalno napero, izmerite vrednost, kot je to prikazano na sliki 4. Odčitana vrednost, mora biti enaka vrednosti napisani na kalibracijski naperi.

V kolikor vrednost ni prava, obrnite kalibracijski vijak (F) na zadnji strani orodja. Če merilec kaže manj kot bi moral, obrnite vijak nasprotni smeri urinega kazalca za nekaj obroatov. V kolikor merilec kaže več kot bi moral, vijak obrnite v smeri urinega kazalca. Postopek ponovite dokler ne dobite prave vrednosti.

Kalibracijsko napero shranjujte v originalni škatli in jo uporabljajte samo za kalibracijo tega orodja.

Za več informacij se lahko obrnete na Uniorjevo tehnično pomoč na elektronskem naslovu [bike@unior.si](mailto:bike@unior.si).

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1752/2

EN

Spoke tension meter

SLO

Merilec napetosti naper

ES

DE

IT

PL

CS

SK

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NL

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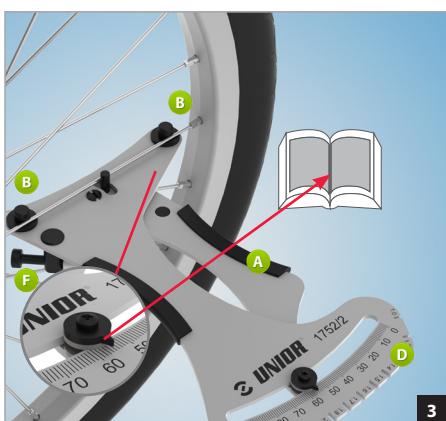
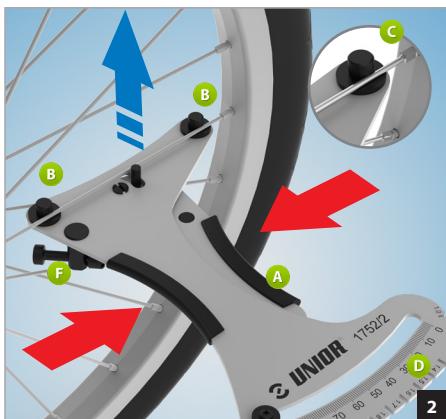
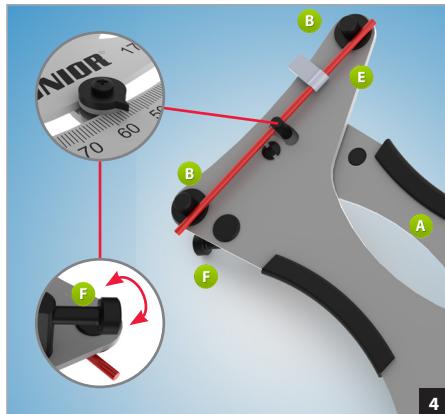
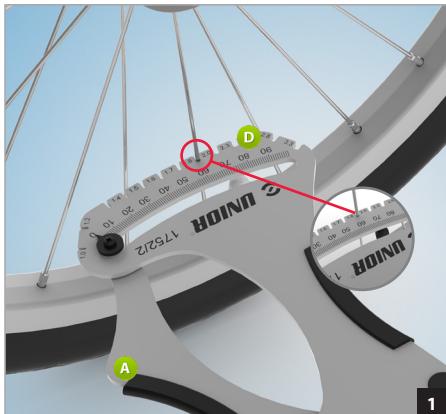
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# ENG

## USAGE INSTRUCTIONS

Press the handle (A) till the very end, and then insert the spoke between the two pins on the tool (B). Make sure, the spoke is completely parallel with the tool, which is achieved by positioning the spoke to the side spacers (C) on the two pins.

Do not release the handle, but gently release the pressure and follow the path of the handle till it stops slowly, like shown on the picture 2. If not certain, repeat the measurement several times until you receive repeatable results.

If you are uncertain of the spoke diameter, use the gauge on the top of the tool (D).

Having the spoke diameter and the measured value, check conversion table to determine the current tension.

*\* We suggest to measure the spoke tension at normal room temperature.*

## CALIBRATION INSTRUCTIONS

Insert the calibration spoke (E) into the Spoke Tension Meter and use the same procedure as with a normal spoke, like shown in the picture 4. After releasing the handle, the indicator must show equal value to the one specified on the calibration spoke.

If the value is not correct, screw the calibration bolt (F) on the back side of the tool. If the indicator shows less than it should, unscrew the calibration bolt counter clockwise direction for a few turns. If the indicator is showing more, screw the calibration bolt clockwise direction. Repeat the process until you reach the desired value.

Calibration spoke must be stored in the box and only used for calibration of this tool.

For additional help, contact Unior's technical assistance at [bike@unior.si](mailto:bike@unior.si).

STEEL ROUND									
SPOKE THICKNES & WIDTH									
UP >	Ø 1.80	Ø 2,00	Ø 2,00	Ø 2,00	Ø 2.20	Ø 2,00	Ø 2,00	Ø 2.30	Ø 2.30
MIDDLE >	<b>Ø 1.40</b>	<b>Ø 1.50</b>	<b>Ø 1.65</b>	<b>Ø 1.70</b>	<b>Ø 1.80</b>	<b>Ø 1.80</b>	<b>Ø 2.00</b>	<b>Ø 2.00</b>	<b>Ø 2.30</b>
DOWN >	Ø 1.80	Ø 2,00	Ø 2,00	Ø 2,00	Ø 2.00	Ø 2,00	Ø 2,00	Ø 2.00	Ø 2.30
33	50								
34	55								
35	60								
36	65	50							
37	70	55							
38	75	60							
39	80	65							
40	90	70	50						
41	95	75	55						
42	100	80	60	50					
43	110	90	65	55		50			
44	115	95	70	60	50	55			
45	120	100	75	65	55	60			
46	130	110	80	70	60	65			
47	140	120	90	80	65	70			
48	150	130	95	90	70	75			
49	165	140	100	95	75	80			
50	185	150	110	100	85	85	50		
51	200	165	120	110	100	90	55	50	
52		185	130	120	110	100	60	55	
53		200	140	130	120	110	70	60	
54			155	140	130	120	80	70	
55				175	155	145	135	90	80
56					195	175	160	155	100
57						195	170	170	110
58							190	180	120
59								195	130
60									145
61									130
62									165
63									145
64									120
65									130
66									145
67									170
68									195

Units are in kilograms force. 1 Kfg = ~ 10 Newtons (N)

Spreadsheet is valid for products from batch 15-18 (week 18, year 2015) and newer.

	STEEL BLADE						
	SPOKE THICKNESS & WIDTH						
	0.9 x 1.8	0.9 x 2.2	0.9 x 3.5	1.2 x 2.6	1.2 x 2.2	1.3 x 2.3	1.3 x 2.8
22							
23							
24	50						
25	55	50					
26	60	55					
27	65	60	50				
28	70	65	55				
29	80	70	60				
30	90	75	65	50			
31	100	80	70	55	50		
32	110	85	75	60	55		
33	120	90	80	65	60		
34	135	100	85	70	65		
35	155	105	90	75	70	50	50
36	175	110	100	80	75	55	55
37	195	120	110	85	80	60	60
38		130	120	90	90	65	65
39		140	130	100	95	70	70
40		155	140	110	100	80	80
41		175	150	120	110	90	85
42		195	160	130	120	95	90
43			175	140	130	100	100
44			195	150	140	110	110
45				165	155	120	120
46				180	175	130	130
47				195	190	140	145
48					200	150	165
49						160	180
50						175	195
51						195	

Units are in kilograms force. 1 Kfg = ~ 10 Newtons (N)

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v2

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