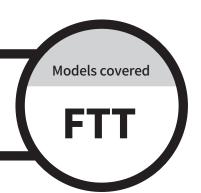
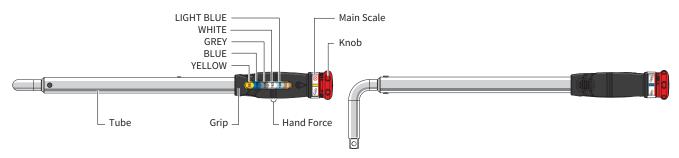


# L-Shaped Adjustable Torque Wrench **Multi Pre-Set Type OPERATION MANUAL**









## **BEFORE STARTING**

- 1. Study this instruction before use.
- 2. This torque wrench is calibrated and tested before leaving the factory, it is certified to meet the current standard specification and has an accuracy of C.W. ±4%
- 3. THIS TOOL IS A PRECISION MEASUREMENT AND DESIGNED FOR MANUAL TIGHTENING FASTENERS ONLY. DO NOT USE IT AS A NUT BREAKER OR FOR ANY OTHER PURPOSE.
- 4. Do not over torquing the fastener, or it will cause tool's damage and serious injury.
- 5. Do not use this tool near rotating machinery.
- 6. Disassemble this tool or make any adjustments will result in the loss of accuracy and invalidating the warranty.
- 7. Do not continuously apply force after hearing the clicking sound or feel shock.
- 8. Do not use any kind of extension on the handle of the tool. This will not only damage the tool, also affect the accuracy.
- 9. Do not immerse grease inside ratchet head. It may cause unexpected damage.
- 10. Use special care at minimum torque setting.
- 11. Please wear gloves and goggles when working.











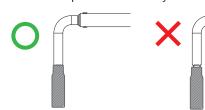
**CONTENTS** 

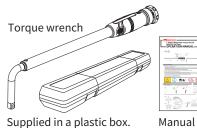


## **HOW TO USE**

Choose a qualified socket Insert square drive securely to the socket.

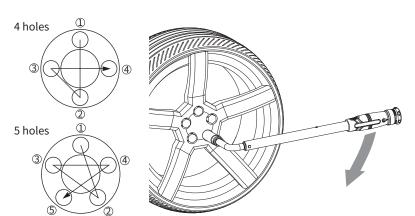






Supplied in a plastic box.

After all the nuts are installed, use a torque wrench to tighten the screws one by one in the order.

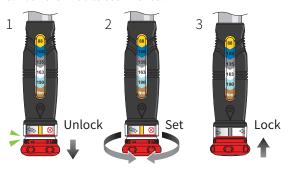




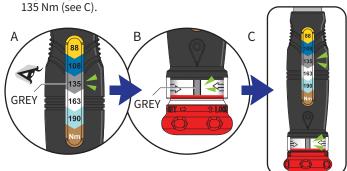
Do not continuously apply force after hearing the clicking sound or feel shock.

#### **HOW TO SET TORQUE VALUE**

- 1. Pull the knob to unlocked.
- 2. Turn the adjustable knob clockwise or counter-clockwise (Right or left) to set the desired torque.
- 3. Push the knob to set finished.

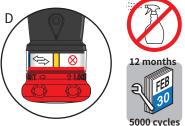


For example : ITEM NO. FTT-190N  $^{,}$  To set torque to 135 Nm. Pull the knob, rotate the required value 135 Nm/GREY (see A) to align the grey line of the handle (see B), that is, the torque value



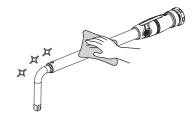
#### **MAINTENANCE AND STORAGE**

- 1. Please return torque value to the lowest reading when not in use. (see D) Do not turn below the lowest reading.
- 2. If this tool has not been used for a period of time, it shall be preloaded several times at its maximum torque setting. This will allow internal lubricant to recoat.
- 3. Clean this tool by wiping with a clean cloth after operation and storage in a dry environment. Do not dip any type of liquid in this tool. This may damage the internal of this tool.
- 4. This tool should be recalibrated a period of 12 months, or 5,000 cycles, whichever occurs first. To contact with local vendor or an authorized repair center for supporting.



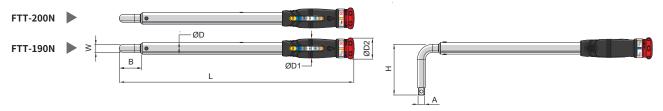
# **TORQUE CONVERSION FACTORS**

Units to be	Corresponding unit										
converted	=mN·m	=cN-m	=N·m	=ozf-in	=lbf-in	=lbf-ft	=gf-cm	=kgf·cm (kp·cm)	=kgf·m (kp·m)		
1 mN·m	1	0.1	0.001	0.142	0.009	0.0007	10.2	0.01	0.0001		
1 cN·m	10	1	0.01	1.416	0.088	0.007	102	0.102	0.001		
1 N·m	1000	100	1	141.6	8.851	0.738	10197	10.2	0.102		
1 ozf-in	7.062	0.706	0.007	1	0.0625	0.005	72	0.072	0.0007		
1 lbf-in	113	11.3	0.113	16	1	0.083	1152.1	1.152	0.0115		
1 lbf-ft	1356	135.6	1.356	192	12	1	13826	13.83	0.138		
1 gf-cm	0.098	0.01	0.0001	0.014	0.0009	0.00007	1	0.001	0.00001		
1 kgf-cm(kp-cm)	98.07	9.807	0.098	13.89	0.868	0.072	1000	1	0.01		
1 kgf·m(kp·m)	9807	980.7	9.807	1389	86.8	7.233	100000	100	1		



Conversion-formula : Units to be converted  $\times$  Factor = Corresponding unit Example : Convert 5 lbf·ft into cN·m Solution :  $5 \times 135.6 = 678$  cN·m

#### **SPECIFICATION**



 $Accuracy: C.W. \pm 4\%$ 

A	SET Nm (ft.lb)							~_	~~.	~~~	KG
	FTT-190N (140F)	FTT-200N (148F)	Color	W	н	В	L	ØD	ØD1	ØD2	KG
	88 Nm (65 ft.lb)	120 Nm (89 ft.lb)	YELLOW	16	103	46	476.9	23.5	39.1	42.3	1.30
	108 Nm (80 ft.lb)	140 Nm (103 ft.lb)	BLUE								
1/2"	135 Nm (100 ft.lb)	160 Nm (118 ft.lb)	GREY								
	163 Nm (120 ft.lb)	180 Nm (133 ft.lb)	WHITE								
	190 Nm (140 ft.lb)	200 Nm (148 ft.lb)	LIGHT BLUE								
Limite a manage											

Unit:mm





Manufacturer

MATATAKITOYO TOOL CO., LTD.

No. 63, Ln. 493, Sec. 3, Zhongshan Rd., Tanzi Dist., Taichung City 42754, Taiwan TEL : 886-4-2533 5893 Version

01 Nov. 2023