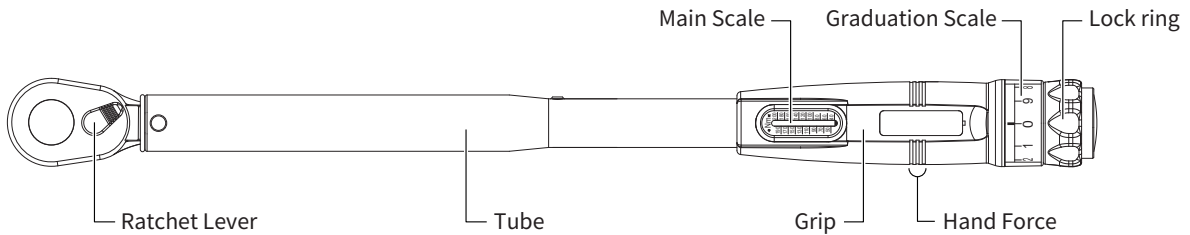
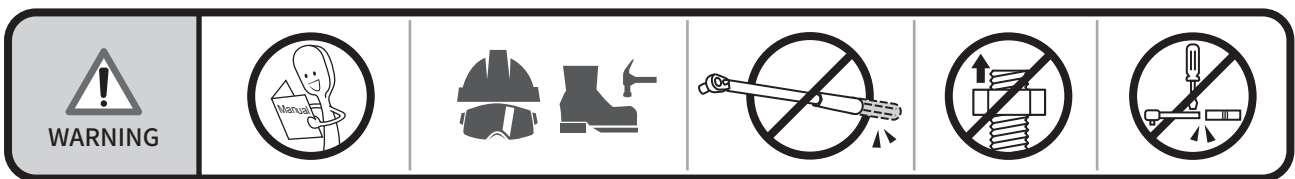


# Adjustable Torque Wrench OPERATION MANUAL



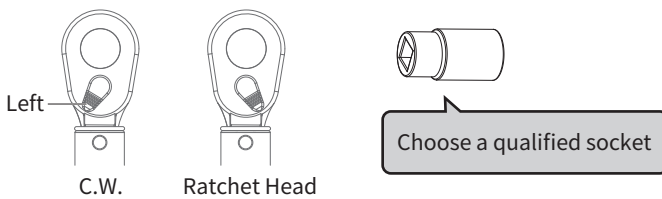
## BEFORE STARTING

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  $\pm 4\%$ .
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.

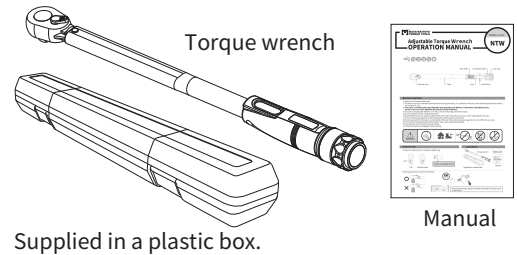


## HOW TO USE

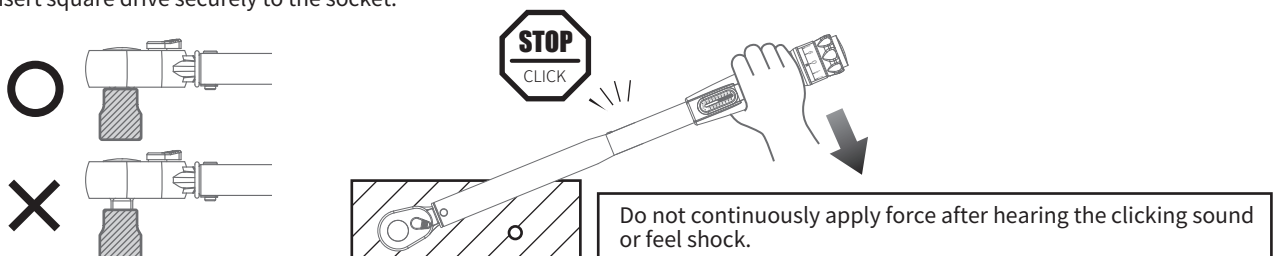
Position of ratchet lever for clockwise tightening.



## CONTENTS



Insert square drive securely to the socket.

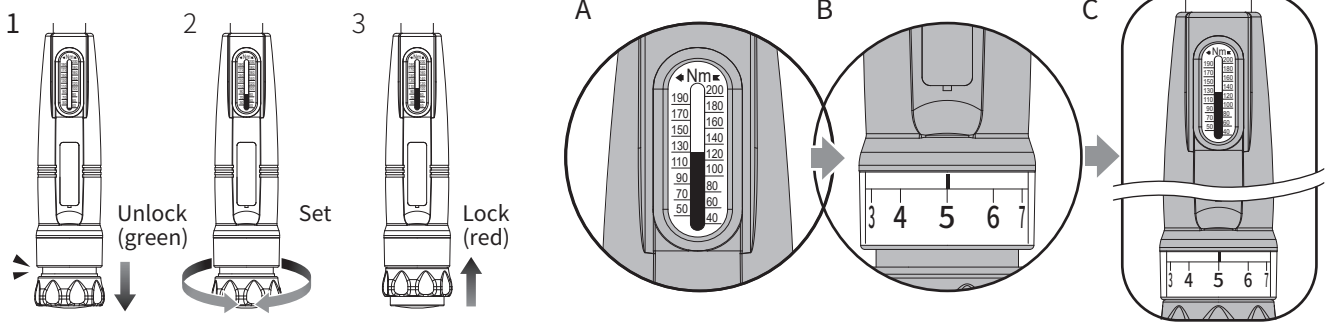


## HOW TO SET TORQUE VALUE

1. Pull down the lock ring to unlocked.
2. Turn the adjustable handle Clockwise or Anti-clockwise (Right or left) to set the desired torque.
3. Push up the lock ring to set finished.

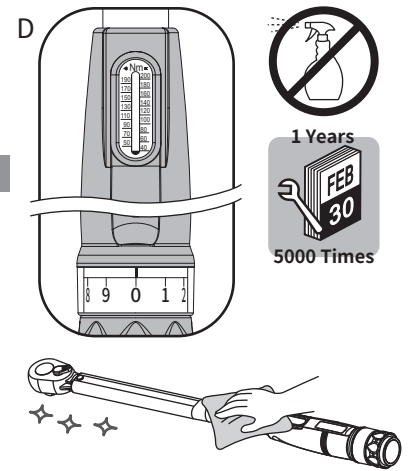
For example : ITEM NO. NTW-200N

To set torque to 135 Nm. Red line of main scale need to reach 130 Nm (see A) and adjust graduation scale to 5 Nm (see B). Then 130+5=135Nm (see C)



## MAINTENANCE AND STORAGE

1. Please return torque value to just below lowest reading when not in use. Do not turn below lowest reading. (see D)
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 1 years, 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 converted	Corresponding unit								
	=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	0.9807	1389	86.8	0.7233	10000	100	1

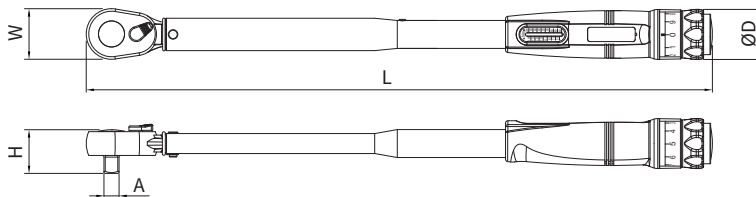
Conversion-formula :

Units to be converted × Factor = Corresponding unit

Example : Convert 5 lbf-ft into cN-m

Solution : 5 × 135.6 = 678 cN-m

## SPECIFICATION



### Metric

ITEM NO.	Ø A	Range	Scale	W	H	L	ØD	KG
NTW-30N	1/4"	6-30 Nm	0.05 Nm	26.0	20.1	322.5	44.0	0.69
NTW-60N	3/8"	12-60 Nm	0.1 Nm	32.5	27.0	382.6	44.0	0.88
NTW-100N	3/8"	20-100 Nm	0.125 Nm	32.5	27.0	438.6	44.0	0.94
NTW-200N	1/2"	40-200 Nm	0.25 Nm	42.5	36.7	526.6	44.0	1.46
NTW-320N	1/2"	60-320 Nm	0.5 Nm	42.5	36.7	604.4	44.0	1.72
NTW-500N	3/4"	100-500 Nm	0.625 Nm	73.0	51.5	829.0	44.0	3.44
NTW-1000N	3/4" 1"	200-1000Nm	1 Nm	73.0	57.0	1242.0	44.0	6.38

### SAE

Accuracy : ± 4%

ITEM NO.	Ø A	Range	Scale	W	H	L	ØD	KG
NTW-250i	1/4"	50-250 in.lb	0.5 in.lb	26.0	20.1	322.5	44.0	0.69
NTW-45F	3/8"	9-45 ft.lb	0.1 ft.lb	32.5	27.0	382.6	44.0	0.88
NTW-75F	3/8"	15-75 ft.lb	0.125 ft.lb	32.5	27.0	438.6	44.0	0.94
NTW-150F	1/2"	30-150 ft.lb	0.25 ft.lb	42.5	36.7	526.6	44.0	1.46
NTW-230F	1/2"	50-230 ft.lb	0.5 ft.lb	42.5	36.7	604.4	44.0	1.72
NTW-300F	3/4"	60-300 ft.lb	0.625 ft.lb	73.0	51.5	829.0	44.0	3.44
NTW-700F	3/4" 1"	100-700 ft.lb	1 ft.lb	73.0	57.0	1242.0	44.0	6.38

Unit : mm

Version 02

Jan. 2023



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