

Operational Instructions of Torque Wrench

Set the torque as followings (applicable for "T" and "NTP" series):

1. Choose the required torque and turn the adjusting handle by turning clockwise to set the required torque.

Example 1
(40-210 Nm):

1. Turn the upper edge of adjusting handle to 140Nm and meantime, the reading "0" on the handle must align with the centerline of scale perpendicularly so as to acquire 140 Nm (as per Fig. A1).
2. Then turn clockwise to align the reading of "6" on the adjusting handle with the centerline of scale so as to acquire 146 Nm (as per Fig. A2).

Example 2
(30-150 Ft-lb):

1. Turn the upper edge of adjusting handle to 90 Ft-lb and meantime, the reading "0" on the handle must align with the centerline of scale perpendicularly so as to acquire 90 Ft-lb (as per Fig. B1).
2. Then turn clockwise to align the reading of "6" on the adjusting handle with the centerline of scale so as to acquire 96 Ft-lb (as per Fig. B2).

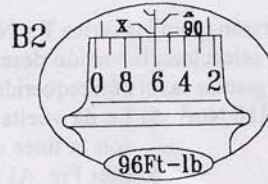
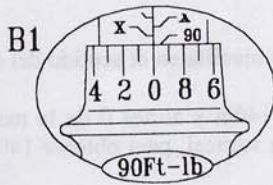
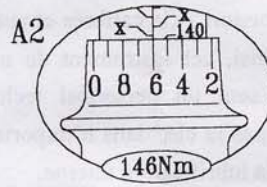
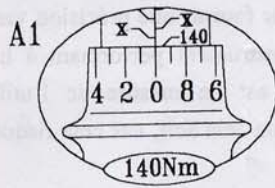
Example 3
MOT Series:

Set the fixing casing at UNLOCK position to start turning/ and at this time, the cursor (red line) on Window will indicate the torque value you require: F: Ft-lb; N: NEWTON METER (as per Fig. C)

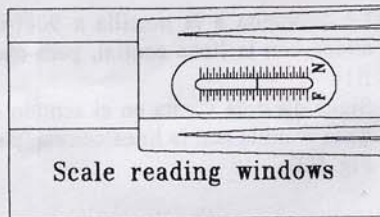
2. Soon as the required torque value is selected, set the fixing button (fixing casing) at LOCK position as per Fig. D, Fig. E.
3. After installing appropriate casing and fixing on the work piece, apply force on the handle of torque wrench and then stop applying force upon hearing "click" sound and at this time, the torque wrench will return to zero reset. Special attention should be paid when using lower torque for setting, i.e. it is necessary to stop applying force soon as reaching the preset torque.

- Cautions:**
1. After the first using or being left unused for longer time and it is required to use once again, be sure to use higher torque to operate for 5-10 times so that the components within may be fully lubricated by the special-purpose lubricant oil. When it is not used, be sure to set the torque to the lowest value.
 2. Do not keep applying pressure after reaching the preset torque; otherwise, the work piece may get damaged.
 3. Before setting the torque value, check to see if the torque wrench is at LOCK or UNLOCK status.

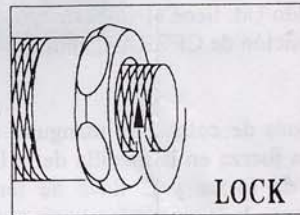
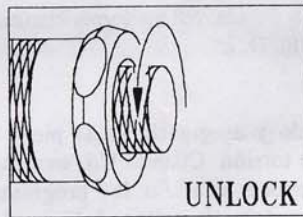
Upon the ex-factory, the torque wrench has been calibrated and tested in providing an accuracy as high as $\pm 4\%$. As such, it belongs to a kind of high-precision measuring instrument and only the well-trained professional can perform the service. Do not soak in any liquid to avoid affecting the lubrication inside.



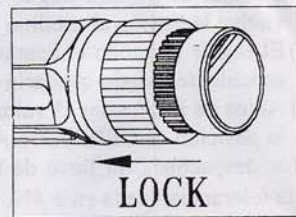
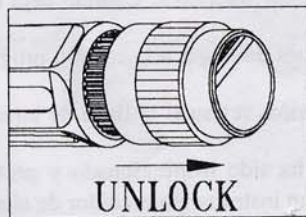
C.



D.



E.



**CONVERSION TABLES
 TABLADE CONVERSION
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 TABLE DE CONVERSION**

Foot Pounds (ft. lbs)	Kilo-gram Meters (Kgm or mkp)	Newton Meters (Nm)	Newton Meters (Nm)	Foot Pounds (ft. lbs)	Kilo-gram Meters (Kgm or mkp)	Kilo-gram Meters (Kgm or mkp)	Newton Meters (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	50.63
40	5.53	54.24	80	59.01	8.16	8	78.46	57.86
45	6.22	61.02	90	66.38	9.18	9	88.26	65.10
50	6.91	67.80	100	73.76	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	225.57	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						
215	29.71	291.54						
220	30.40	298.32						
225	31.09	305.10						
230	31.78	311.88						
235	32.47	318.66						
240	33.16	325.44						
245	33.85	332.22						
250	34.54	339						
260	35.88	352.56						
270	37.26	366.12						
280	38.64	379.68						
290	40.02	393.24						
300	41.40	406.80						

CONVERSION FORMULAS

- 1 CMKG=13.887 IN-OZ
- 1 CMKG= 0.8677 IN-LB
- 1 MKG=7.233 FT-LB
- 1KpCM=1 CMKG
- 1CMKG=0.098 Nm
- 1 FT/LB=12 INCH POUNDS.
- 1 dNm=14.161 IN-OZ
- 1 Nm=141.6 IN-OZ
- 1 Nm= .73756 FT-LB
- 1 KpM=1 MKG
- 1 MKG=9.80665 Nm