Fine Gunsmithing Supplies


Storage case

The Wheeler Engineering ${ }^{\circledR}$ Digital F.A.T. Wrench is a hand driven torque wrench with a digital LCD that is very useful for applying the necessary torque to most firearm and firearm accessory fasteners. The Digital F.A.T. Wrench features an ergonomic rubber overmolded handle, a standard $1 / 4$ " hex drive tip, and can be used to apply torque from $15-100 \mathrm{lb}$-in at 0.1 $\mathrm{lb}-\mathrm{in}$ increments. Units of measurement can be changed from lb -in to $\mathrm{kg}-\mathrm{cm}$ or $\mathrm{N}-\mathrm{m}$. The digital display is capable of two different modes. The "LIVE" mode displays the torque being applied and increases/decreases as the torque load changes. The "PEAK" mode displays the highest torque applied and will hold this value on the LCD for approximately 5 seconds.

Common uses include, but are not limited to; installation of scope ring and base screws, action screws and trigger guard screws. With proper care and use, the Digital F.A.T.Wrench will provide you with a lifetime of reliable service. Package includes: Digital F.A.T.Wrench, 9 drive bits, I square drive adapter, and a storage case.

## NOTE: BEFORE USE

Remove battery discharge prevention strip from battery compartment. Loosen screws enough to allow strip to be pulled from the compartment. DO NOT PULL STRIP WHILE SCREWS ARE TIGHT. Once strip is removed, re-tighten screws.

## ADJUSTING AND USING THE DIGITAL F.A.T.WRENCH

I. To power the unit ON, press the $\boldsymbol{J}$ bottom middle button once. The same button will power the unit OFF.
2. Select the units of torque measurement by depressing the bottom left button labeled "U". By default, the units are set to lb -in and can be changed to $\mathrm{kg}-\mathrm{cm}$ or $\mathrm{N}-\mathrm{m}$.
3. Select the display mode by depressing the bottom right button labeled "M". The "LIVE" mode displays the torque being applied and increases/decreases as the torque load changes. The "PEAK" mode displays the highest torque applied and will hold this value on the LCD for approximately 5 seconds.

5. Select the target torque value by depressing either of the top two buttons labeled "-" and " + ". Depressing the top left button labeled "-" will decrease the torque setting. Depressing the top right button labeled "+" will increase the torque setting. Pressing and holding either button will rapidly change the value. When the lowest or highest setting is reached, it will loop to the highest or lowest setting and continue until the button is released.
6. Insert the bit needed into the hex drive tip. The Digital F.A.T.Wrench can now be used to apply torque to the fastener.
7. Tighten the fastener by turning clockwise. As the fastener begins to get tight, you will see the number displayed on the LCD increase as well as the number of bars on the far left side. When $80 \%-95 \%$ of the target torque is reached a slow audible beep can be heard. When $95 \%$ - $105 \%$ of the target torque is reached a solid audible tone can be heard. If you exceed $105 \%$ of the target torque a fast audible beep can be heard.


NOTE: Holding at the target torque setting will cause the speaker to draw more power and may result in premature low battery life.

NOTE: It may be difficult for the hearing impaired to detect the high frequency tone produced by the internal speaker. Using the value displayed on the LCD is the best method to confirm accurate torque application.
8. After use, the Digital F.A.T.Wrench should be turned off and placed in its protective case. The last Units, Display Mode, and Target Torque Value will be stored in memory and ready to use when the device is turned on again.

NOTE: If the device is not used for 5 minutes it will automatically turn off to save the battery. When turned back on, all previous settings will be active.

## A WARNING

- Always practice safe gun handling procedures when working on firearms.
- Always be sure the firearm being handled is unloaded.
- Most work on firearms should be performed by a qualified gunsmith.


## TORQUE RECOMMENDATIONS:

Before applying torque to any fastener, consider whether the fastener is lubricated or dry/degreased. Lubricated fasteners require much less torque to achieve consistent clamping power compared to dry un-lubricated fasteners. Keep in mind that most fasteners used for installing gun accessories are coated with oil to prevent corrosion. This oil as well as removable thread-locking compounds that are often applied to screw threads should be considered as lubricant.

NOTE: The values tabulated below are for high grade (SAE Grade 8 or equivalent) steel fasteners. If you are unsure about the size or quality of the fastener you are installing, start with a lower torque value and only increase to the maximum torques listed if you feel comfortable doing so. Bits are considered "use" items and are not warrantied against bending or breakage.

| Nominal <br> Screw Sizes | Common Uses <br> ForThese Screws | Screw Diameter <br> atThreads (in) | Lubricated Fastener <br> Torque (in.-lbs.) |
| :---: | :---: | :---: | :---: |
| 6-32 UNC <br> $6-40$ UNF <br> $6-48$ FINE | Commonly used <br> on scope base <br> mounts | 0.131 " $-0.138^{\prime \prime}$ | $18-20$ |
| 8-32 UNC <br> $8-36 ~ U N F ~$ <br> $8-40 ~ F I N E ~$ | Commonly used <br> on scope rings | $0.157^{\prime \prime}-0.164^{\prime \prime}$ | $28-30$ |
| 10-24 UNC <br> I0-32 UNF | Commonly used <br> on scope base <br> windage screws | $0.184^{\prime \prime}-0.190^{\prime \prime}$ | $40-45$ |



## BATTERY AND REPLACEMENT

The Digital F.A.T.Wrench uses a CR 2032 Lithium coin battery.
To replace the battery:
I. Unscrew the 4 screws holding the battery compartment door closed
2. Remove old battery
3. Replace with new battery
4. Replace cover and screw down snug.

NOTE: DO NOT OVER TIGHTEN SCREWS. ONLY HAND TIGHTEN THE 4 COVER SCREWS.


## TIPS

- The Digital F.A.T.Wrench is used like a screwdriver; it is not a ratcheting, click, or clutch style torque wrench
- Applying more than I 20 lb -in will OVERLOAD the device and potentially damage the internal components
- The Digital F.A.T.Wrench is designed to be accurate to $\pm 2 \%$ for entire torque setting range of 15 - 100 lb -in.
- The Digital F.A.T.Wrench can be used to apply torque to any fastener; it is not limited to firearms and firearm accessories
- Always protect the area surrounding screw heads with masking tape to prevent marring of metal and wood finishes - just in case a bit slips out of the screw head while tightening
- Small, inexpensive screws can be damaged with high torque settings. Be sure to comply with recommended settings
- Small bits can be damaged with high torque settings. Replacement bits are available from many of our dealers and through our website

NOTE: The middle screw in a guard that has three screws should only be slightly tightened. Please see the photo below so you can better understand this instruction.


Battenfeld ${ }^{\circ}$

