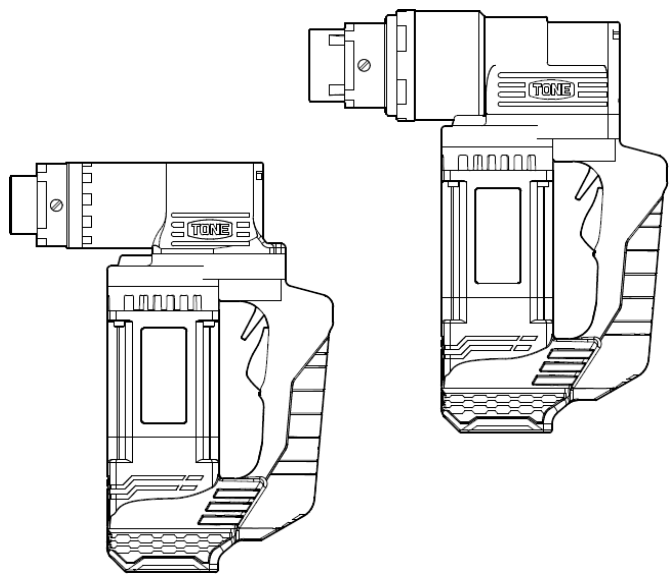
	<p>CORDLESS SHEAR WRENCH INSTRUCTION MANUAL</p>
<p>MODEL</p>	<p>CSM160 CSM220 CSH240</p>
	

Read and fully understand all the instructions before use.
Keep this manual in the designated place for easy and quick reference.

**UK
CA**

CE



TONE CO., LTD.

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GENERAL SAFETY INSTRUCTIONS

When using electric tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock, and personal injury. Read and keep all these instructions before operating this wrench.

Work area safety

1. Keep the work area clean and well-lit. Cluttered and dark areas invite accidents.
2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks that may ignite dust, or fumes.
3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

1. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce the risk of electric shock.
2. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

Personal safety

1. Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
2. Use personal protective equipment. Always wear eye protection. Protective equipment such as non-skid safety shoes, hard hats, or hearing protection used for appropriate conditions will reduce personal injuries.
3. Avoid accidental starting. Ensure the switch is in the off position before installing the storage battery. Carrying power tools with your finger on the switch invites accidents.
4. Remove the slot screwdriver before turning the power tool on. Anything left attached to a rotating part of the power tool may result in personal injury.
5. Do not overreach. Keep proper footing and balance at all times.
6. This enables better control of the power tool in unexpected situations.
7. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
8. Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

Power tool use and care

1. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate at which it was designed.
2. Do not use the power tool if the switch does not turn on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. Disconnect the battery pack or plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

4. When not in use, store power tools out of the reach of children and do not allow people unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
5. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
6. Use the power tool, sockets, and accessories in accordance with these instructions and in the manner intended, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

Battery tool use and care

1. Recharge only with the charger specified by the manufacturer. A charger that is suitable for the one type of battery pack may create a risk of fire when used with another battery pack.
2. User power tools only with specifically designed battery packs. Use of any other battery packs may create a risk of injury and fire.
3. When a battery pack is not in use, keep it away from other metal objects that can make a connection between terminals. Shorting the battery terminals together may cause burns or fire.
4. If a battery pack is damaged, liquid may leak out which may cause burns or irritation. If contact accidentally occurs, flush with water. If liquid contacts the eyes, in addition to flushing with water, seek medical help.
5. Do not use a battery pack if it is damaged. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion, and a risk of injury.
6. Do not expose a battery pack to fire or excessive temperature. Exposure to fire or temperatures above 130° C may cause an explosion.
7. Follow all charging instructions and do not charge the battery pack outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.
8. Charge a battery pack before it is completely discharged
9. Never recharge a fully charged battery pack.
10. Charge battery packs at room temperature (10°C to 40°C). Let hot battery packs cool down before charging.
11. Charge a battery pack if it is not to be used for a long period (typically more than six months).

Service

1. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
2. Never service damaged battery packs . Service of battery packs should only be performed by the manufacturer or authorised service providers.

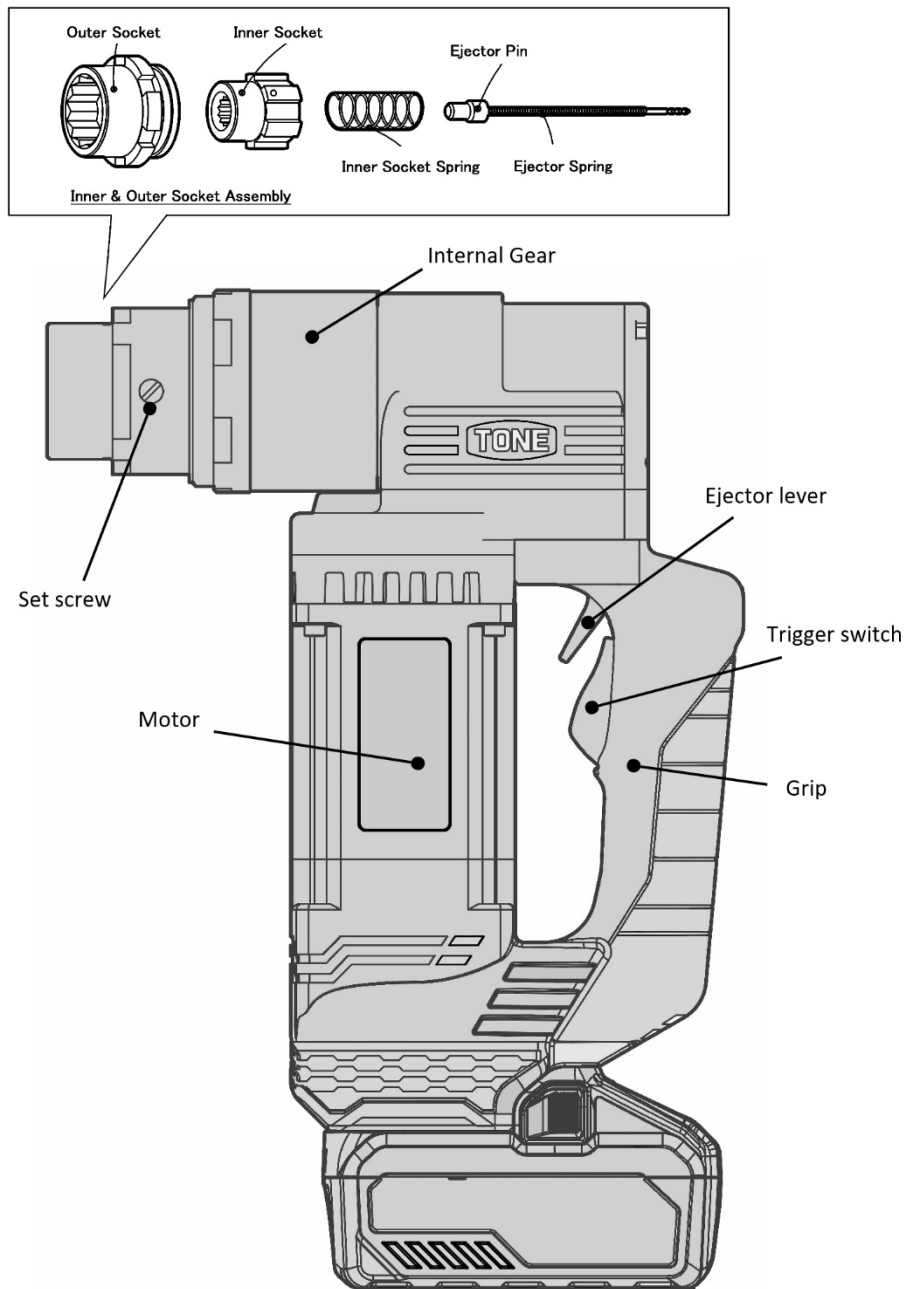
INTENDED USE

The TONE shear wrench (corded or cordless) is an electric tool for tightening Tension Control Bolt bolting assemblies.

SHEAR WRENCH SAFETY WARNINGS

1. Beware of electric shocks. Never use a shear wrench in wet weather conditions.
2. Ensure sockets are fitted correctly with all the appropriate accessories.
3. Avoid accidental starting when carrying a shear wrench.
4. Do not disassemble shear wrenches. Disassembly or modification by unauthorized personnel may result in a malfunction or injury.
5. Disassembly does not include sockets, inner socket spring, ejector pin, ejector pin spring or battery pack.
6. Stop using the shear wrench if unusual sound, vibration or smell is detected.
7. Each day before using a shear wrench, check for any damage or cracks, check the condition of power cable or battery pack.
8. Check the shear wrench for damage if it is dropped. Stop using the shear wrench if unusual sound, vibration or smell is detected.
9. Keep shear wrench in a clean condition.

PART NAMES AND ACCESSORIES



Accessories

MODEL	WORKING PARTS AND ACCESSORIES
CSM160-BTL CSM200-BTL CSM220-BTL CSH240-BTL	Inner Socket Outer Socket
	Inner Socket Spring
	Ejector Pin
	Ejector Spring Screwdriver (-) Metal Case
	Instruction Manual

- Contact your distributor for long sockets or accessories.

BEFORE USE

1. Check for any deformation, crack or damage on the shear wrench body, socket, storage battery, charger, parts, etc.
2. Do not use the wrench if any problem is found.
3. Please check the power supply. Only use the power supply indicated on the nameplate of the charger.
4. Select the correct sockets according to the size of the bolt assembly to be tightened.
5. Ensure that the socket assembly is correctly installed on the wrench. Ensure that set screws are securely fastened as any loosely installed sockets may result in accidents and personal injury.
6. See "Installation of Sockets".

PRECAUTIONS WHEN USING LITHIUM-ION BATTERIES

1. While using this wrench, the motor may stop in the following cases even if the switch is operated. This is due to the protection function and is not a malfunction.
2. The motor will stop when the battery level is low. In this case, charge the battery immediately.
3. If the wrench body becomes overloaded, the motor may stop. In this case, press and release the switch once to eliminate the cause of the overload.
4. If the battery becomes overheated, the motor may stop. In this case, stop using the wrench, remove the battery from the wrench body, and cool it sufficiently in a well-ventilated area. Then it can re-used.
5. In addition, be sure to observe the precautions below to prevent leakage, heat generation, smoke, and ignition of the battery.
6. Do not charge the battery outside the operating temperature range of the charger. Not only will it not be charged properly, but the life of the battery will be shortened. In addition, there is a risk of explosion and fire.
7. Do not cover the battery or charger with a cloth while charging. There is a risk of explosion or fire.
8. Charge the battery in a well-ventilated place.
9. Do not store the wrench body or storage battery in a place where the temperature may rise above 50°C (such as in a metal box or in a car in summer).
10. It may cause deterioration of the storage battery and may cause smoke or fire.

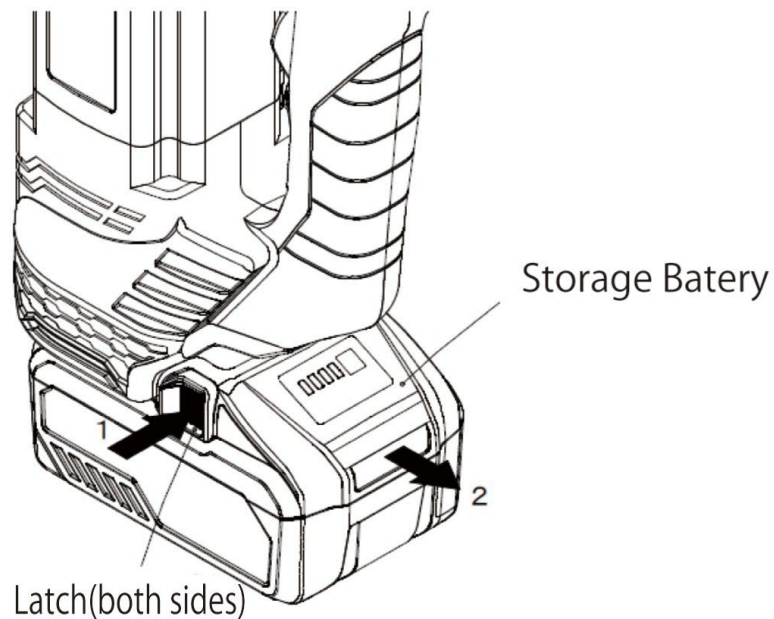
Recycling of batteries

Batteries are a valuable recyclable resource. When disposing of storage batteries or products, please co-operate with recycling and take them to a recycling center or recycling scheme.

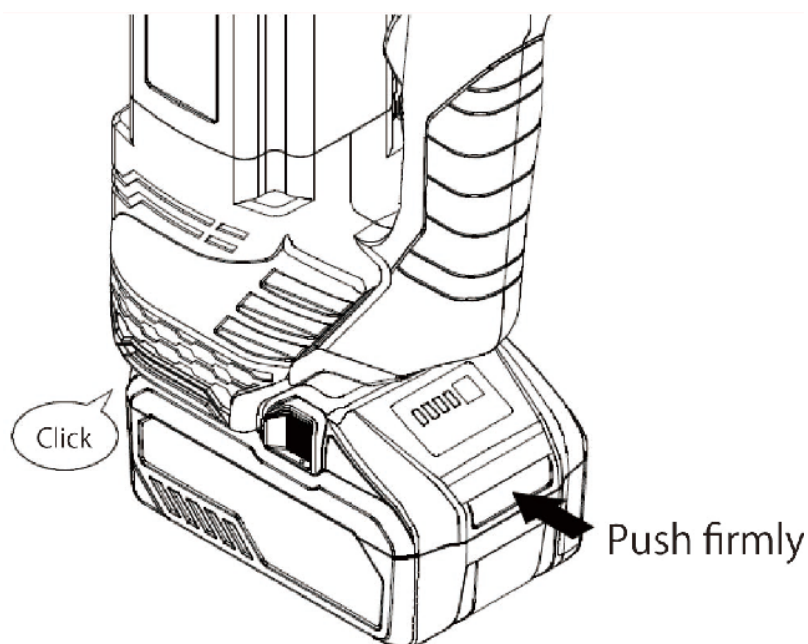


INSTALLATION/REMOVAL OF BATTERY PACK

When removing the battery pack from the wrench body, press the latches on both sides and slide the battery pack out.



When attaching a battery pack to the wrench body, align the grooves on the battery pack with the grooves on the wrench body and insert completely until you hear a click.

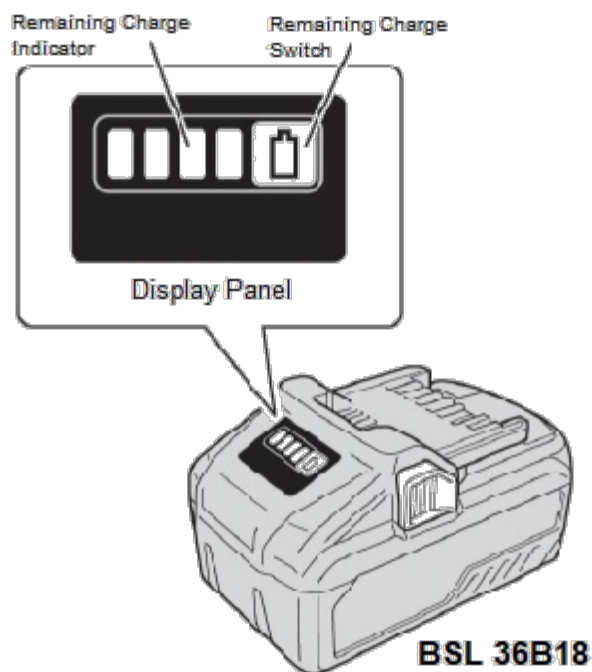


REMAINING BATTERY POWER LEVEL

Batteries have a fitted power level indication system.

- Press the check button and the indicator lamps show the battery pack's remaining power level.
- The indicator lamps turn off about 3 seconds after pressing the battery level indicator button.
- The power level display may differ to actual power level depending on the usage environment, battery characteristics, etc.
- In addition, the power level may differ from the charger side that has the battery power display function.

Lamp lighting status	Remaining Battery
	75%~100%
	50%~75%
	25%~50%
	0%~25%
	0%
	Output stopped due to high ※1
	Output stopped due to failure ※2



※1: Remove the storage battery from the wrench and let it cool down sufficiently.

※2: The storage battery may be out of order, so please contact the distributor where you purchased the product.

PRECAUTIONS FOR OPERATION

Continuous use.

1. Cordless shear wrenches are equipped with a temperature protection circuit to protect the motor and the electronic components that control the drive of the motor.
2. If the wrench is used continuously and the temperature of the motor rises, the temperature protection circuit may activate. This stops the wrench operating automatically.
3. If this occurs, allow the wrench to cool so the temperature drops. It can then be used again when sufficiently cooled.
4. Additionally, when working a wrench continuously, it is advisable to stop using the tool for about 15 minutes to allow it to cool down before a new battery pack is installed.

REMOVAL/INSTALLATION OF SOCKETS

<p>Remove inner & outer socket assembly from wrench by unscrewing set screws (as below). Do not remove set screws completely from outer socket holder.</p>	
<p>To separate the inner socket from outer socket, push the projecting pin using a screwdriver or TC bolt. The two sockets part allowing them to be cleaned and/or replaced.</p>	
<p>To re-join the inner and outer sockets, place the inner socket vertically onto a flat surface then slide the outer socket over the inner socket. They may not fully fit together so push the projecting pin on the inner socket down using a screwdriver or a complete TC bolt. The outer socket will be appropriately assembled.</p>	
<p>Set inner & outer socket assembly to the wrench body and completely remove the gap between socket assembly and wrench body. The gap can be removed by turning & pushing down screwdriver or TC bolt into the inner socket.</p> <p>* Fasten the set screws only after gap is completely removed.</p>	

INSPECTION AND MAINTENANCE

1. Turn off the switch and remove the storage battery from the wrench. Also, remove the power plug from the outlet of the charger before inspection and maintenance.
2. Replace the inner socket when sheared bolt spline falls out of the inner socket without pulling the ejector lever.
3. There is a risk of unexpected bolt spline ejection when inner drive of the inner socket is worn down. The inner socket should be replaced.
4. Check the battery pack terminals for dirt.
5. Clean dust and dirt from the sockets periodically.
6. Use only a dry cloth to clean your wrench and sockets since organic solvents such as benzene, thinner and gasoline may cause cracks or discoloration to parts.
7. Do not allow oil and organic solvents to enter the motor.
8. Store wrench in the original metal case and keep it dry.
9. Ejector pin must be regularly inspected and replaced when it wears down. A sheared bolt spline will not be ejected from inner socket with worn ejector pin.
10. A service to be carried out every 6 months or 30,000 bolt installations, whichever comes first. Contact your distributor for service.

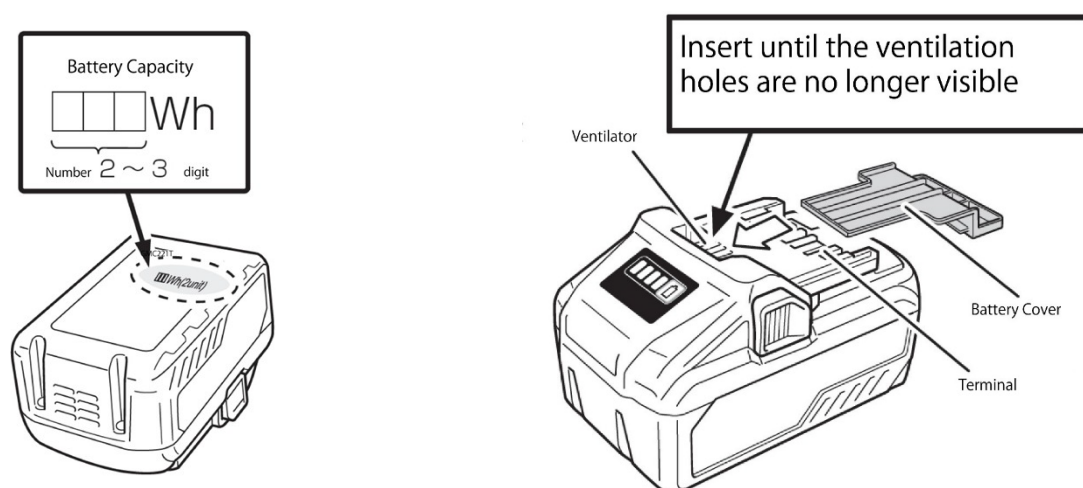
STORAGE OF LITHIUM-ION BATTERIES

When transporting lithium-ion batteries, please heed the following points.

Do not short the battery pack:

- a. Do not touch the terminals with any conductive material.
- b. Avoid storing the battery pack in a container with other metal objects such as bolts, washers etc.
- c. Never expose the battery pack to water or rain.

To prevent shorting from occurring, load the battery in the wrench body or correctly insert a battery cover securely over the terminals.



Fully charge the lithium-ion battery before storing it.

If a battery pack is stored for a long time (3 months or more) with low remaining capacity, the storage battery may deteriorate, the usage time may be significantly shortened, or the battery may not work when charged. However, if battery pack's usage time is significantly reduced, it may be restored by repeating charging and use 2 to 5 times. If the usage time is extremely short even after repeated charging and use, it may indicate the end of the battery life, and it is recommended to purchase a new battery.

FAILURE DIAGNOSIS

If "Failure diagnosis" does not work, please contact the distributor where you purchased the product.

Also, faults may be caused by the storage battery, so ensure the charger and battery pack are also sent with the wrench.

Wrench body

Failure symptoms	Cause	Remedy
Pulling the switch does not start	Battery is low	Battery packs needs to be charged.
Wrench shutdown	Battery is low	Battery packs needs to be charged.
	Overloaded during tightening	The motor will automatically stop if the wrench is overloaded. Check the tightening status and eliminate the cause of overload.
	The battery pack or wrench body has become overheated	Cool down the battery pack and the wrench body sufficiently.
Battery cannot be installed.	The battery pack is not the specified one.	Use a specified multi-volt storage battery.

SPECIFICATIONS

Wrench Body

Model	Motor	Storage Battery	No-load rpm (min ⁻¹)	Weight (kg)
CSM160-BTL	DC brushless motor	DC 36V	25	3.6
CSM220-BTL			17	4.5
CSH240-BTL			8	5.9

- Weight excludes sockets.

Model	Bolt	Dimensions(mm)	
	TC Bolt	Gear Diameter	Length × Height × Width
CSM160-BTL	M12, M16	φ58	218×278×90
CSM220-BTL	M16, M20, M22	φ75	241×287×90
CSH240-BTL	M22, M24	φ85	262×301×90

Model	Approximate number of tightening per full-charged battery (4.0Ah)
CSM160-BTL	400pcs when tightening M16 TCB assemblies.
CSM220-BTL	200pcs when tightening M22 TCB assemblies.
CSH240-BTL	160pcs when tightening M24 TCB assemblies.

EU DECLARATION OF CONFORMITY

We hereby declare that the following products conform to the essential health and safety requirements of EU Directives.

Product CORDLESS SHEAR WRENCH (Battery operated tools)
Model No. CSM160-BTL
 CSM220-BTL
 CSH240-BTL

Serial No. : As Serial Number List

Manufacturer : **TONE CO., LTD.**
 6-25, Kotobukicho, Kawachinagano-shi, Osaka 586-0026, Japan
 Tel: +81-721-56-8722 Fax: +81-721-56-1851

Directives : Machinery Directive, 2006/42/EC
 EMC Directive, 2014/30/EU
 RoHS Directive, 2011/65/EU

The above products have been evaluated for conformity with above directives using the following European standards. The technical documentation for these products is retained at the above manufacturer's location.

Machinery Directive:

EN 62841-1:2015, EN 62841-2-2:2014

EMC Directive:

EMI EN 55014-1:2017 + A11:2020

EN 61000-3-2:2014

EN 61000-3-3:2013

EMS EN 55014-2:1997 + A1:2001 + A2:2008

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Title : General Manager Development Dept.
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Signature : Kenichi Shiota
Date : 13 - Oct - 2022

Representative based on EU regulation 2019/1020 : Quali-Torc

Address : 2 rue du Vivier, ZA du Bois de Teillay, 35150 Janze, France

UK DECLARATION OF CONFORMANCE

We hereby declare that the following products conform to the essential health and safety requirements of UK Regulations.

Product CORDLESS SHEAR WRENCH (Battery operated tools)
Model No. CSM160-BTL
 CSM220-BTL
 CSH240-BTL

Serial No. : As Serial Number List

Manufacturer : **TONE CO., LTD.**
 6-25, Kotobukicho, Kawachinagano-shi, Osaka 586-0026, Japan
 Tel: +81-721-56-8722 Fax: +81-721-56-1851

Regulations : Machinery Regulation, S.I. 2008 No. 1597
 EMC Regulation, S.I. 2016 No. 1091
 RoHS Regulation, S.I. 2012 No. 3032

The above products have been evaluated for conformity with above regulations using the following Designated standards. The technical documentation for these products is retained at the above manufacturer's location.

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●Specifications and the design are subject to change without notice. ●