

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



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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
- 3. the presence of flammable liquids, gases, or dust. Power tools create sparks that may ignite dust, or fumes.
- 4. 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.
- 2. or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. Do not overreach. Keep proper footing and balance at all times.
- 7. This enables better control of the power tool in unexpected situations.
- 8. 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.
- 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.

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.

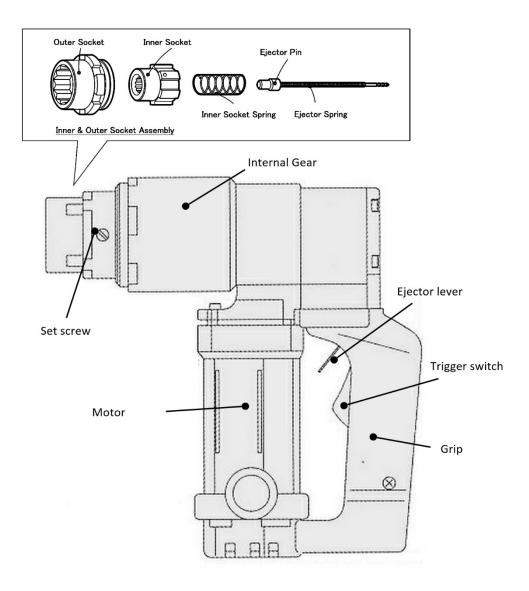
INTENDED USE

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 (see page ??).
- 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
	Inner Socket
	Outer Socket
GM161EZ/GM162EZ	Inner Socket Spring
GM221EZ/GM222EZ	Ejector Pin
GH241EZ/GH242EZ	Ejector Spring
GV301EZ/GV302EZ	Screwdriver (-)
	Metal Case
	Instruction Manual
	1

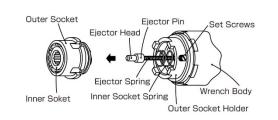
Contact your distributor for long sockets or accessories.

BEFORE USE

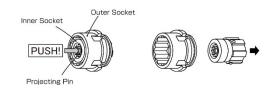
- 1. Check for any deformation, crack or damage on the shear wrench body, socket, storage battery, charger, parts, etc.
- 2. Do not use the wrench if any problem is found.
- 3. Please check the power supply. Only use the power supply indicated on the motor rating plate.
- 4. Select the correct sockets 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 "Removal/Installation of Sockets" below.

REMOVAL/INSTALLATION OF SOCKETS

Remove inner & outer socket assembly from wrench by unscrewing set screws (as below). Do not remove set screws completely from outer socket holder.

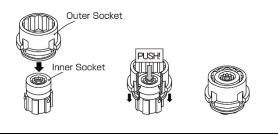


To separate the inner socket from outer socket, push the projecting pin using a screwdriver or TC bolt. The two sockets part allowing them to be cleaned and/or replaced.



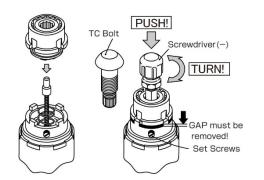
To re-join the inner and outer sockets, place the

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.



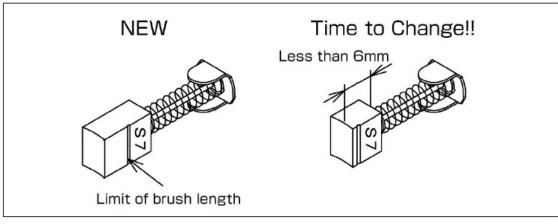
Set inner & outer socket assembly to the wrench body and completely remove the gap between socket assembly and wrench body. The gap can be removed by turning & pushing down screwdriver or TC bolt into the inner socket.

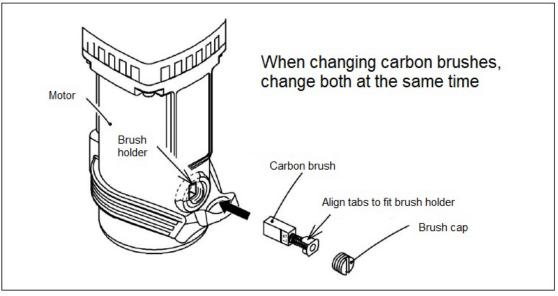
* Fasten the set screws only after gap is completely removed.



INSPECTION AND MAINTENANCE

- 1. Remove the power plug from the mains power supply 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. Clean dust and dirt from the sockets periodically.
- 5. 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.
- 6. Do not allow oil and organic solvents to enter the motor.
- 7. Store wrench in the original metal case and keep it dry.
- 8. 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.
- 9. Maintain the wrench in a state of cleanliness as with any other electrical tool.
- 10. Do not pick up or carry the shear wrench by the electric cable.
- 11. Change motors carbon brushes when necessary. The length of the brush needs to be more than 6mm. If shorter than this an insulation pin protrudes through the carbon, disabling further motor operations to protect the armature.
- 12. To maintain the shear wrench in good condition and service, return to TCB® Ltd every 6 months or 30,000 bolt installations whichever is first.





SPECIFICATIONS AND DIMENSIONS

Model	GM161EZ	GM162EZ	GM221EZ	GM222EZ	GH241EZ	GH242EZ	GV301EZ	GV302EZ
Voltage	115V	230V	115V	230V	115V	230V	115V	230V
Max Current	10A	5A	11A	5.5A	11A	5.5A	11A	5.5A
Input Power	110	0W	120	0W	1200W 1200W			0W
Frequency	y 50 – 60 Hz							
Speed	29 rpm 14 rpm 10 rpm 5 rpm M12, M16 M16, M20, M22 M22, M24 M27, M30		pm					
Bolt Ø	M12,	M16	M16, M20, M22		M22, M24		M27, M30	
Weight	3.7 Kg 4.8 Kg 6.2 Kg 6.7 Kg		Kg					
	Q p	L2	L1					72
L		22		14	26			72
L1				99			128	
L2	1	9	24		24		26	
D	5	8	75		85		98	
D1	5	3	57		68		93	
D2	3	9	49		56		75	
Н	25	51	25	59	274		271	

(Dimensional unit: mm)

EU DECLARATION OF CONFORMITY

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

Product ELECTRIC SHEAR WRENCH Model No. GM161EZ/GM162EZ

el No. GM161EZ/GM162EZ GM221EZ/GM222EZ

GM221EZ/GM222EZ GH241EZ/GH242EZ GV301EZ/GV302EZ

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

Name : Kenichi Shiota

Title : General Manager Development Dept.

Address : 6-25, Kotobukicho, Kawachinagano-shi, Osaka, 586-0026, Japan

Signature : <u>Kenichi Shiota</u>

Date : <u>13 - Oct - 2022</u>

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 ELECTRIC SHEAR WRENCH Model No. GM161EZ/GM162EZ

GM221EZ/GM222EZ GH241EZ/GH242EZ GV301EZ/GV302EZ

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.

Machinery Regulation:

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

EMC Regulation:

EMI BS EN 55014-1:2017 + A11:2020

BS EN 61000-3-2:2014 BS EN 61000-3-3:2013

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

Name : Kenichi Shiota

Title General Manager Development Dept.

Address 6-25, Kotobukicho, Kawachinagano-shi, Osaka, 586-0026, Japan

Signature : <u>Kenichi Shiota</u>

Date : 13 - Oct - 2022

Representative : TENSION CONTROL BOLTS LTD.

Address : Wrexham, LL13 9XS, United Kingdom

NOTES:			

TONE CO., LTD.



6-25, KOTOBUKI-CHO, KAWACHINAGANO-SHI, OSAKA 586-0026, JAPAN

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