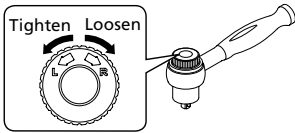


■ Drive Ratchet and Torque Wrench Rotation Direction Adjustment

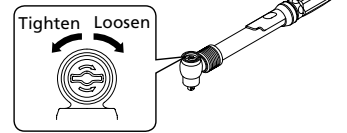
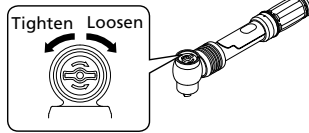
Ratchet Handle

Turn the dial to change the rotation direction.



Torque Wrench

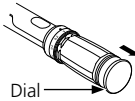
Turn the knob to change the rotation direction.



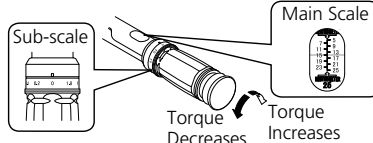
■ Torque Wrench Torque Adjustment

Torque Wrench 5-25 N·m

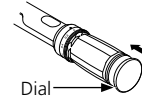
① : Pull the dial to unlock it.



② : Turn the dial to adjust the torque.

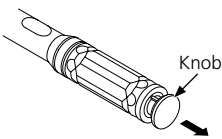


③ : Push the dial to lock it.

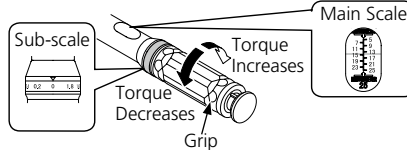


Torque Wrench 20-100 N·m

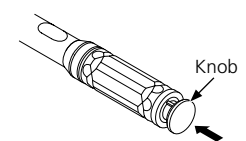
① : Pull the knob to unlock it.



② : Turn the grip to adjust the torque.

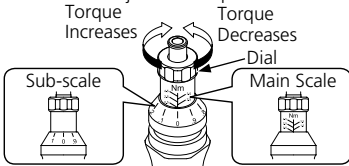


③ : Push the knob to lock it.



■ Torque Screwdriver Torque Adjustment

Turn the dial to adjust the torque.



■ Changing the Torque Screwdriver Bit

The bit holder on this tool is designed to firmly hold the bit to prevent it from being detached during use.

Insert the bit all the way to the base of the bit holder.



4. Maintenance

• In order to keep the torque wrench accurate, periodic calibration is required. We recommend calibrating the torque wrench once a year to maintain its accuracy (periodic calibration requires a fee).

[Contact Information]

Snap-on Tools Japan K.K.

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Phone: +81-3-5534-1300 Fax: +81-3-5534-1302 E-mail: oem@snapon.co.jp

5. Specifications

• Conforms to Standards: IEC 60900:2004

• Country of Manufacture: Taiwan

	Square Drive	Torque Range	Withstand Voltage	Usable Temperature Range	Usable Temperature Gradient	Usable Relative Humidity
Torque Wrench	9.5mm Sq	5 N·m ~ 25 N·m	AC1000V, DC1500V	0°C ~ 40°C (During use) - 10°C ~ 50°C (During storage)	± 10°C /h or less	90% RH or less (With no condensation)
Torque Wrench		20 N·m ~ 100 N·m				
Deep Torque Adapter		11 N·m or less				
Ratchet Handle						
Standard Socket						
Extra Deep Socket						
T Handle						
Extension Bar						
Screwdriver						
Torque Screwdriver		0.5 N·m ~ 4.5 N·m				
L Wrench	11 N·m or less					
Pliers						

- In order to improve the product, the above specifications may change without notice.

Snap-on Tools Japan K.K.

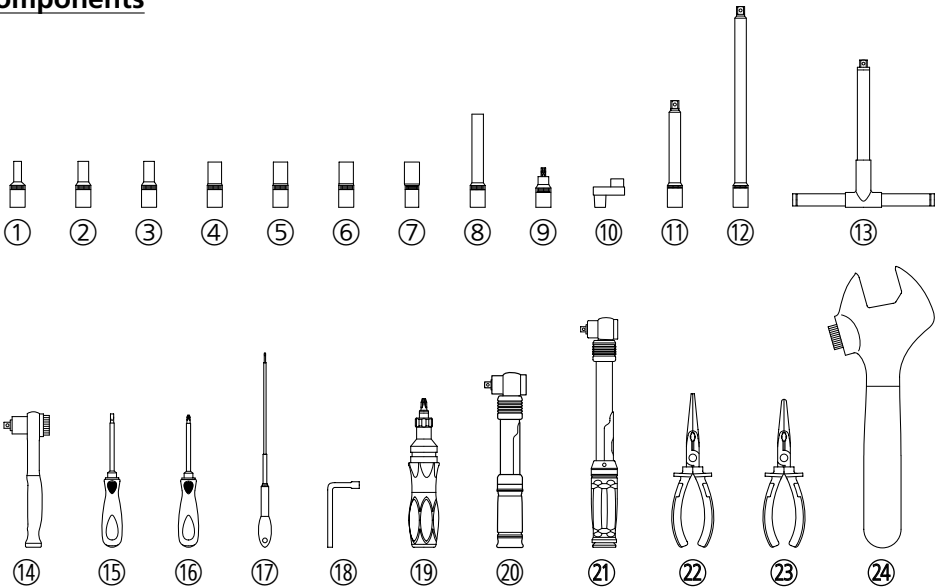
■ Please be sure to confirm following matters before using.

- Please read this instruction manual carefully before use.
- Be sure to practice inspection of tools at each use, beforehand.
- ※ Refer this manual for inspection procedures.
- Keep this instruction manual at hand for future reference.

■ Intended use

- These tools are to be used to assure further safe operations, beside the application of wearing protective insulation equipments such as insulated gloves for servicing hybrid and electric vehicles.

1. Components



No.	Part Name	Part Number	No.	Part Name	Part Number
①	Insulated Deep Socket 8mm	J-50369-SKT8DP	⑬	Insulated T Handle	J-50369-THDL38
②	Insulated Deep Socket 10mm	J-50369-SKT10DP	⑭	Insulated Ratchet Handle	J-50369-RCHT38
③	Insulated Deep Socket 12mm	J-50369-SKT12DP	⑮	Insulated Screwdriver (Flat-tip Head 1.0X5.5X125)	J-50369-FLH
④	Insulated Deep Socket 13mm	J-50369-SKT13DP	⑯	Insulated Screwdriver (Philips Head 2X100)	J-50369-PHH
⑤	Insulated Deep Socket 14mm	J-50369-SKT14DP	⑰	Insulated Lock Button Release Screwdriver	J-50369-ACCESS
⑥	Insulated Deep Socket 16mm	J-50369-SKT16DP	⑱	Insulated L Wrench 4mm	J-50369-LBOX4
⑦	Insulated Deep Socket 17mm	J-50369-SKT17DP	⑲	Insulated Torque Screwdriver 0.5-4.5 N·m	J-50369-TRQSCDR
⑧	Insulated Extra Deep Socket 10mm	J-50369-SKT10XDP	⑳	Insulated Torque Wrench 5-25 N·m	J-50369-TRQWR38-25
⑨	Insulated T30 Tamper Proof Socket	J-50369-TRX30TP	㉑	Insulated Torque Wrench 20-100 N·m	J-50369-TRQWR38-65
⑩	Insulated Torque Adapter	J-50369-CFW	㉒	Insulated Long Nose Pliers	J-50369-NDL6
⑪	Insulated Extension Bar 150mm	J-50369-EXT6	㉓	Insulated Long Nose Bent Pliers	J-50369-NDL6-BT
⑫	Insulated Extension Bar 300mm	J-50369-EXT12	㉔	Insulated Adjustable Wrench	J-50369-ADJWR

2. Safety Precautions

■ Signs used in this instruction manual

The following signs are used to categorize and explain the injury and damage that can occur due to misuse caused by disregarding the instructions.

CAUTION :

This is a warning against anything which may cause injury or death to people if the warning is ignored. You are informed about what you must or must not do in order to reduce the risk of injury to yourself and others.

NOTICE :

This is a warning against anything which may cause damage to the vehicle or components if the warning is ignored. You are informed about what you must or must not do in order to avoid or reduce the risk of damage to the vehicle and components.

- **Before using these tools, carefully read over the service manual for the vehicle being repaired. Also, be sure to complete any special training that is required by law, take proper measures to prevent electrocution and perform all procedures as instructed by the repair manual.** Serious injury or death due to electrocution may result if proper measures to prevent electrocution are not carried out before performing work.
- **Before using this tool set, be sure to wear insulated gloves.** Serious injury or death may result due to electrocution.
- **When storing this tool set, avoid direct sunlight and places with high temperature and humidity. Always be sure to store all the tools in the included case.** Insulating coating may deteriorate by UV rays causing cracks which lose primary insulating ability and may result in serious or fatal injuries.
- **Before using this tool set, make sure that the insulating coating of the tools is not cracked, damaged, loose parts and discoloration.** If found any damages, cracks or loose parts, stop using the tool, right away. Using the tools having such defects may cause electrical shocks which might result in serious or fatal injuries.
- **Before using any tool in this set on a part, make sure the voltage of the part does not exceed DC 1500V or AC 1000V.** If a tool in this set is used on a part which has a voltage exceeding DC 1500V or AC1000V, serious injury or death due to electrocution may result.
- **Do not disassemble or modify any of the tools in this set.** The insulating properties of the tools may be lost and serious injury or death may result due to electrocution.
- **After use, clean the tools before storage.** If tools are stocked without cleaning dirt, primary insulating ability may be lost and electrical leakage may cause electrical shock, which may result in serious or fatal injuries.
- **Do not use this tool set if there is water, oil, etc. on the tools.** Water, oil, etc. may not only cause short circuits, but may lead to serious injury or death due to electrocution.
- **Do not combine any other tools with the tools in this set.** If the tools in this tool set are used together with insulated tools from a different manufacturer, or with other non-insulated standard tools, the insulating effect may be lost and serious injury or death may result due to electrocution.



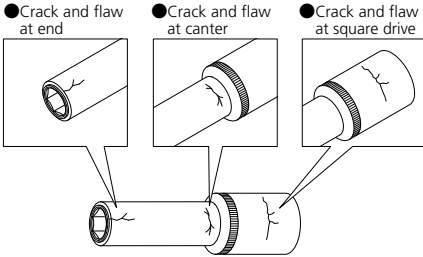
- **Do not apply excessive force directly to these tools and do not increase the applied force by attaching extensions, such as pipes, etc. Also, do not hit these tools with hammers, etc.** If excessive force is applied, these tools and vehicle parts may be damaged.

3. Inspections before using, Handling and usage.

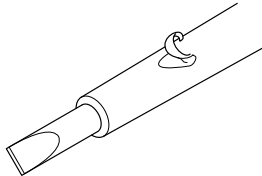
■ Inspection before use

Always confirm the following before use:

- ① Visually inspect that there are no damages such as flaws and cracks or discoloration on insulating cover. Stop using tools having such defects.

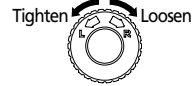


[Examples of cracks and flaws]



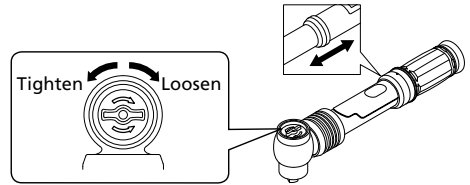
- ② In order to confirm that ratchet mechanism is functioning correctly, turn the dial both clockwise and counterclockwise to turn gear, as shown in the following illustrations. And also, make sure that there is no such play on Torque Wrench. If gear does not turn normally, stop using the tool. And also, tools showing too much play should not be used.

[Ratchet Handle]
Internal gear check



[Torque Wrench]

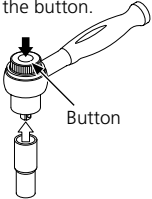
Check for excessive plays on internal gear and handle. (Pull handle toward the direction indicated by arrow to check for excessive play.)



■ Socket Installation and Removal

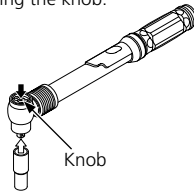
Ratchet Handle

Install and remove the socket while pushing the button.



Torque Wrench

Install and remove the socket while pushing the knob.



▲ CAUTION

Make sure the socket is securely installed to the ratchet handle, torque wrench or T handle. A socket may cause a short circuit if it falls off during work.

■ Using the Socket Locking System

Install and remove the socket while pushing the release button on the tip of the square drive by the insulated lock button release screwdriver.

Insulated Lock Button Release Screwdriver

