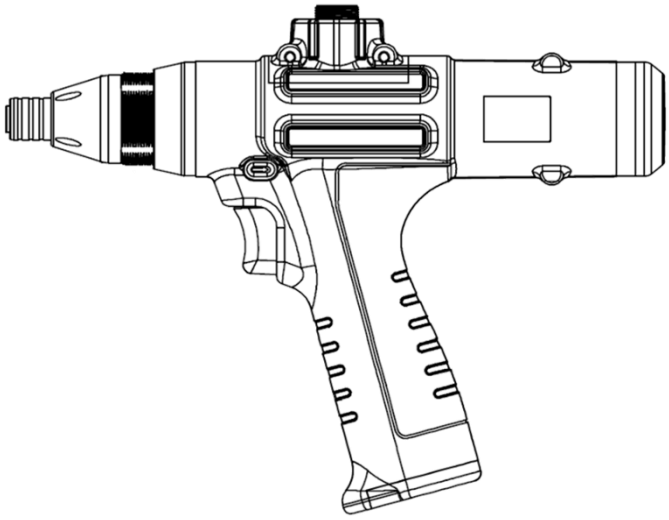
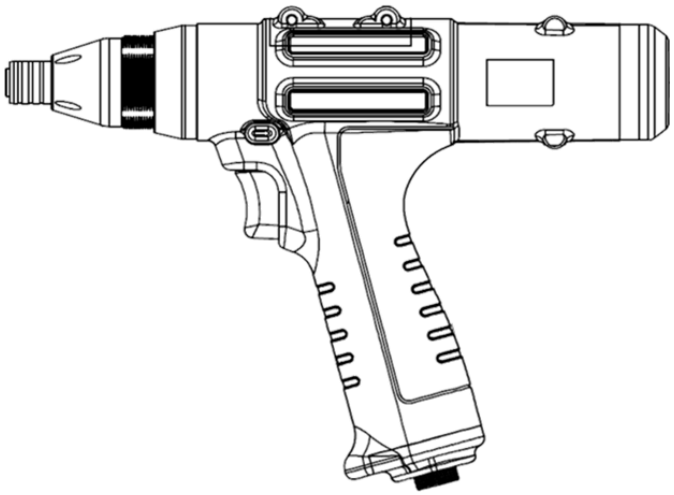
OPERATION AND MAINTENANCE MANUAL









SNT-CS301T-D	**SNT-CS301T-U**	**SNT-CS503T-D**	**SNT-CS503T-U**
SNT-CS302FT-D	**SNT-CS302FT-U**	**SNT-CS505T-D**	**SNT-CS505T-U**
SNT-CS303T-D	**SNT-CS303T-U**	**SNT-CS507T-D**	**SNT-CS507T-U**

Automatic Non-Carbon-Brush Series

KILEWS INDUSTRIAL CO., LTD.

https://www.kilews.com.tw

Y2F241A-5-001

NOTICE

Metal Assembly sensor screwdriver are designed for installing threaded fasteners in light industrial and appliance manufacturing applications.
KILEWS is not responsible for customer modification of tools for applications on which KILEWS was not consulted.

WARNING

Important safety information enclosed.
Read all these instructions before placing tool in service or operation this tool and save these instructions. It is the responsibility of the employer to place the information in this manual into the hands of the operator. Failure to observe the following warnings could result in injury. When using electric tools, Basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following:

Important Safety Rules

WARNING! Read all instructions Failure to follow all instructions listed below may result in electric shock fire and/or serious injury. The term "power tool" in all of the warning listed below refer to your mains operated (corded) power tool or battery operated (cordless) power tool.

SAVE THIS INSTRUCTIONS

1) Electrical Safety

a) **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.

b) **Do not operate power tools in explosive atmosphere, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust of fumes.

c) **Keep children, and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical Safety

a) **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 risk of electric shock.

b) **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.

c) **Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

d) **Do not abuse the cord. Never use the cord to carry, pull or unplug the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.

e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of cord suitable for outdoor use reduces the risk of electric shock.

3) Personal Safety

a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use 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.

b) **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
Rubber gloves and non-skid footwear are recommended when working outdoors.

c) **Avoid accidentally starting the sensor screwdriver.** Pay attention to that the voltage used is suitable for this model.
Before plugging in the power plug of the sensor screwdriver, first make sure that the switch is off .

d) **Remove any adjusting keys or wrench before turning the power tool on.**
A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.

e) **Do not overreach. Keep proper footing and balance at all times.**
This enables better control of the power tool in unexpected situations.

f) **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.

g) **Secure work.** Use clamps or a vice to hold the work. It is safer than using your hand and frees both hands to operate the tool.

h) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust related hazards.

i) **Use a safety device.** Wear protective earmuffs to reduce personal injury.

Noise:
The typical A-weighted noise level acc. To EN62841-2-2
. Sound pressure level (LpA): 53.6 dB(A)
. Sound power level (LwA): 64.6 dB(A)

Vibration:
The vibration total value acc. EN62841-2-2
. Vibration emission value ah (m/s^2): 0.17 m/s^2
. Uncertainty K (m/s^2): 0.02 m/s^2

4) Power tool Use and Care

a) **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 for which it was designed.

b) **Do not use power tool if switch does not turn it on or off.**
Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

c) **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.

d) **Store idle power tools out of reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**

Power tools are dangerous in the hands of untrained users.

Do not let visitors touch the tool or extension cord. All visitors should be kept away from work area.

e) **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 cause by poorly maintained power tools.

Inspect extension cords periodically and replace, if damaged.

f) **Keep cutting tools sharp and clean**,

Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) **Use the power tools, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, 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.

5) SERVICE

a) Have your power tool serviced by qualified repair person using only identical replacement parts, this will ensure that the safety of the power tool is maintained.

Additional information shall be provided.

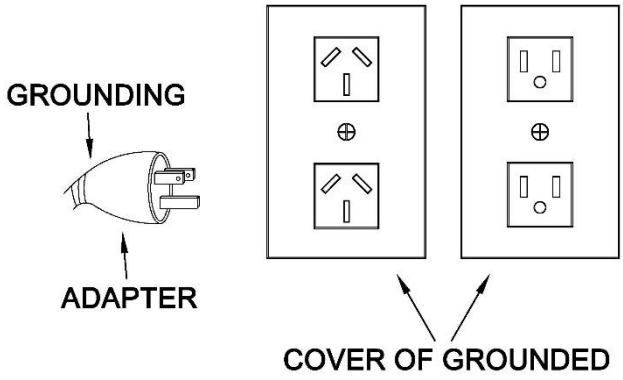
a) Instruction for putting into use.
   1. Setting-up or fixing power tool in a stable position as appropriate for power tools which can be mounted on a support.
   2. Assembly
   3. Connection to power supply, cable, fuse, socket type and earthing requirements.
   4. Illustrated description of functions.
   5. Limitations on ambient conditions.
   6. List of contents.

b) Operating Instructions.
   1. Setting and testing.
   2. Tool changing.
   3. Clamping of work.
   4. Limits on size of work piece.
   5. General instructions for use.

c) Maintenance and servicing.
   1. Regular cleaning, maintenance, and lubrication.
   2. Servicing by manufacturer or agent, list of addresses.
   3. List of user-replaceable parts.
   4. Special tools which may be required.

Grounding Instructions

1、This tool should be grounded while in use to protect the operator from electric shock. NOTICE! To ensure the grounding result, the grounding conductor of the power cord must be well connected with the grounding terminal of power facility. This tool is equipped with grounding conductors. The Green (or Green and Yellow) conductor in the Power Cord is the grounding wire. Never connect Green (or Green and Yellow) to a live terminal. The grounding wires in this tool can not only earth the electric leakage safely, but also can eliminate ESD-the electrostatic that tool occurred while in use.



WARNING !

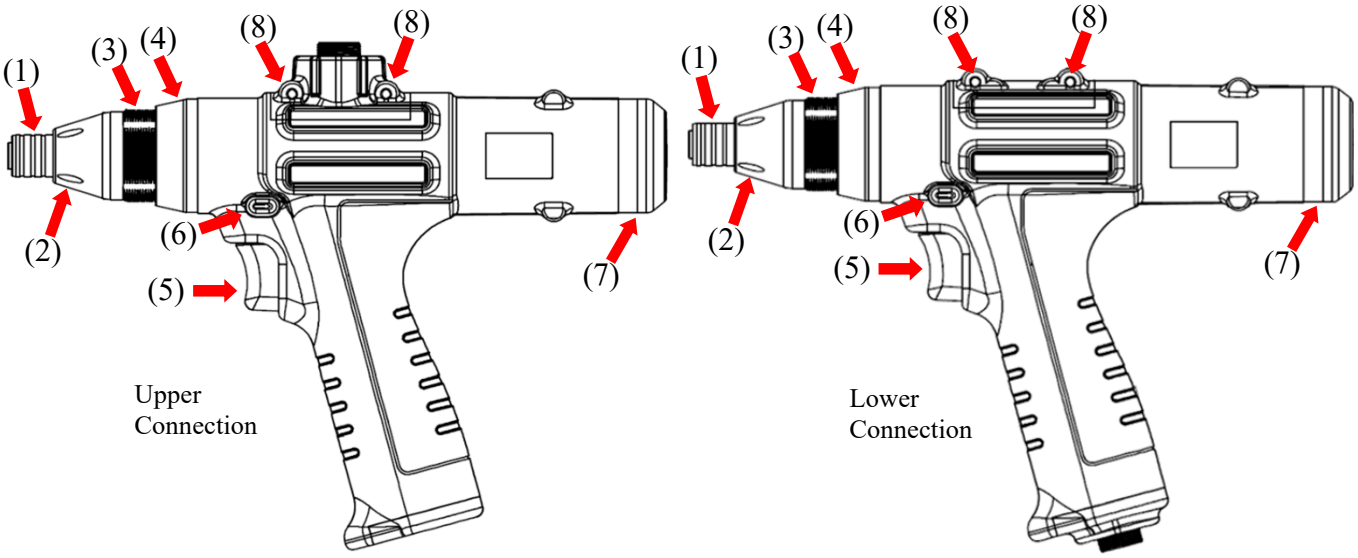
DO NOT OPERATE THIS TOOL WITHOUT PROTECTIVE EARTH CONNECTED

Operations Cautions

1) Do not allow chemicals such as acetone, benzene, thinner, trichloroethylene ketone, or other similar chemicals to come in contact with the sensor screwdriver housing as damage will result.
2) Use the sensor screwdriver carefully, do not drop or be impacted, it is best to use a balancer to lift it, and set it on the auxiliary arm for operation.
3) Loading and unloading the sensor driver head: Simply pull down the screwdriver head cap with your fingertips to freely attach or detach the sensor screwdriver head, release the finger to return the screwdriver head cap to fix the sensor screwdriver head.
   Note: Make sure to turn off the power switch and remove the power plug from the socket when installing and removing the sensor driver.
4) Do not drop or abuse the sensor screwdriver.
5) Connect the power cord to a power outlet.
   CAUTION: Danger of electric shock due to wet power cord plug or hands.
6) Do not use this screwdriver for tightening wood screws. This is “Metal Assembly sensor screwdriver.”
7) The control settings of the sensor screwdriver can be set by the controller. Please refer to the controller operation manual for setting adjustment.
8) The sensor screwdriver operation can be set to the press-plate start/down-press start/pull-screw start…etc. by controller. Please refer to controller operation manual.
9) Operation frequency: Over frequently using makes the motor overheated and damage to screwdriver. Enough heat-dissipation is good for screwdriver. Please refer to the Working Time from the Technical Specification sheet.
10) Whenever the sensor screwdriver is not used, turn off the power for the controller or unplug the power cord.
11) Don't touch switch during operating for keeping system from wrong judgement.
12) Please use the designated connection cable for KL-NTCS.

The wiring PIN correspondence table for each model and controller.				
Screwdriver side	PIN header	Connection cable	Pin 頭	Controller side
SNT-CS303T Series	Small	Connection cable	Large	KL-NTCS
SNT-CS505T Series	Small	Connection cable	Large	

Function / Operating Introduction



Number	Product Name	Description Use			
(1)	Bit Sleeve	The bit can be freely attached and detached			
(2)	LED Lighting auxiliary lighting	Please refer to the KL-NTCS operation manual for setting adjustment.			
(3)	Front Cover Thread	Help to fix on the auxiliary arm			
(4)	Front Lock Ring	Lock stationary gearbox and housing			
(5)	Press-plate Start	Press to start the screwdriver			
(6)	Forward/Reverse Selector Lever	Switch rotation direction CW/CCW			
(7)	Ring Light Status	Warning Sound	Operation Indicator Light		
			Green Light	Red Light	Blue Light
	Single Screw OK	Short Beep ×1	Steady On	OFF	OFF
	Task Completed	Long Beep ×1	Steady On	OFF	OFF
	Process Completed	Long Beep ×1	Steady On	OFF	OFF
	Error Status	Short Beep ×3	OFF	Steady On	OFF
	Screw Removal	None	OFF	OFF	Steady On
	Screw Count Interval Warning	Rapid Short Beep Sequence	Continues Previous Screw Result Indicator		OFF
	Process Completion Time Warning	Continuous Short Beeps	Continues Previous Screw Result Indicator		OFF
(8)	Hook Hole	Used for installing a hook to hang the screwdriver. ◦			

Start Mode: Set the start mode on the controller

MODEL: (SNT-) / Function	CS301T	CS302FT	CS303T	CS503T	CS505T	CS507T
1.When pushing down on the screwdriver, there will be no action, but the screwdriver can be operated by pressing the lever trigger.	Function: No pushing down.	V	V	V	V	V
2.When pressing the lever trigger, there will be no action, but pushing down on the screwdriver can operate it.		V	V	V	V	V
3.Pressing the lever trigger and pushing down on the screwdriver simultaneously operate the screwdriver.		V	V	V	V	V
4.Pressing the lever trigger or pushing down on the screwdriver operates the screwdriver.		V	V	V	V	V
5.The screwdriver can be operated by pressing the lever trigger, pushing down on the screwdriver, or remotely from a far side.		V	V	V	V	V

Servicing

Maintenance and Inspection:

1. The recommended daily operating time for this transducerized screwdriver is no more than 8 hours to remain a better performance.
   Depending on usage frequency and tool load, it is recommended to apply lubricant to the clutch every 3 to 6 months. Calibration should be performed every one million cycles or at least once a year. For maintenance and calibration, please contact your local distributor.
2. Please note don't let the motor get over heated, please refer to the Working Time from the Technical Specification sheet.
3. The frequency use of this electric sensor screwdriver is over than eight hours a day, still it needs periodically testing and treatment.
4. Inspect tool cords periodically and if damaged, have them repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged.
5. Do not remove any labels. Replace any damaged label.
6. To adjust the torque on this sensor screwdriver. Proceed as follows:
   Stop the sensor driver first and adjust it with the KL-NTCS controller.

CAUTION

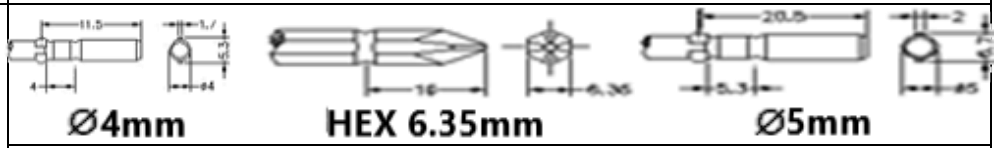
1. The use of other than genuine KILEWS replacement parts may Result in decreased tool performance and increased maintenance and may invalidate all warranties.
2. All repairs and maintenance of this tool and its word must be performed by an authorized service center.
3. KILEWS is not responsible for customer modification of tools for applications on which KILEWS was not consulted.
4. Repairs should be made only by authorized, trained personnel. Consult your nearest KILEWS authorized service center.
5. It is the responsibility of the employer to place the information in this manual into the hands of the operator.

DO NOT ATTEMPT TO REPAIR THIS ELECTRIC SCREWDRIVER

CAUTION

SAVE THESE INSTRUCTIONS DO NOT DESTROY

Specifications

MODEL		SNT-CS301T	SNT-CS302FT	SNT-CS303T
Input voltage (DC)		DC40V		
Power Consumption		90W		
Torque +/-3sigma /AVG. 5%	(N.m)	0.1-1	0.3-2.4	0.38-3
	(kgf.cm)	1.02-10.2	3.06-24.48	3.88-30.60
	(Lbf.in)	0.89-8.85	2.66-21.24	3.36-26.55
Repeatable Torque Accuracy		+/- 3sigma / AVG., 5%		
Unloaded Rotation Speed ±3% (r/min)Can be set and adjusted		20-980	20-2000	20-980
Working Time		1s ON / 3s OFF	1s ON / 3s OFF	1s ON / 3s OFF
Weight (g)		644	705	
Length (mm)		285	293	
Power controller		KL-NTCS、 KL-NTCS-M7		
Auxiliary Arm		KP-AUX-TI-300N、KP-AUX-TI-600N KP-AUX-TL-450N、KP-AUX-TL-700N		
Model of Suspension Rack		KH-2、KH-2L		
Bit Type				
		B9.5、D、B		

* 1N.m=10.2Kgf.cm 1N.m=8.85Lbf.in

Accessories

1. BIT Type：

No. 00 ・・・ Bit use in dia 1.3~1.8mm screw
No. 0・・・ ・Bit use in dia 1.8~2.0mm screw
No. 1・・・ ・Bit use in dia 2.0~2.6mm screw
No. 2・・ ・・Bit use in dia 3.0~4.0mm screw.

SNT-CS301T	with BIT	1#&2#	1 Pcs. Each
SNT-CS302FT	with BIT	2#	2 Pcs
SNT-CS303T	with BIT	2#	2 Pcs

	Name	Quantity	Unit
Quantity	Screwdriver Hook	1	Pcs
	Connecting Cable	1	Piece
	Bit (B9.5)	2	Pcs
	User Manual	1	set
	Warranty Card	1	piece
	Inspection Report	1	set

Specifications

MODEL		SNT-CS503T	SNT-CS505T	SNT-CS507T
Input voltage (DC)		DC40V		
Power Consumption		90W		
Torque +/-3sigma /AVG. 5%	(N.m)	0.38-3	0.63-5	0.88-7
	(kgf.cm)	3.88-30.60	6.43-51.00	8.98-71.40
	(Lbf.in)	3.36-26.55	5.58-44.26	7.79-61.96
Repeatable Torque Accuracy		+/- 3sigma / AVG., 5%		
Unloaded Rotation Speed ±3% (r/min)Can be set and adjusted		20-1600	20-1100	20-660
Working Time		1s ON / 3s OFF	1s ON / 3s OFF	1s ON / 3s OFF
Weight (g)		949		
Length (mm)		307		
Power controller		KL-NTCS、 KL-NTCS-M7		
Auxiliary Arm		KP-AUX-TI-300N、KP-AUX-TI-600N KP-AUX-TL-450N、KP-AUX-TL-700N		
Model of Suspension Rack		KH-6、KH-2L		
Bit Type				
		A、B9.5、D	A、B9.5	B9.5

* 1N.m=10.2Kgf.cm 1N.m=8.85Lbf.in

Accessories

1. BIT Type：

No. 00 ・・・ Bit use in dia 1.3~1.8mm screw
No. 0・・・ ・Bit use in dia 1.8~2.0mm screw
No. 1・・・ ・Bit use in dia 2.0~2.6mm screw
No. 2・・ ・・Bit use in dia 3.0~4.0mm screw.

SNT-CS503T	with BIT	2#	2 Pcs
SNT-CS505T	with BIT	2#	2 Pcs
SNT-CS507T	with BIT	2# & 3#	1 Pcs. Each

	Name	Quantity	Unit
Quantity	Screwdriver Hook	1	Pcs
	Connecting Cable	1	Piece
	Bit	2	Pcs
	User Manual	1	set
	Warranty Card	1	piece
	Inspection Report	1	set

Our company reserves the right to modify the product without prior notice.