

In-line Electric Nutrunner

Product Instructions

Model

EID20-1200-4Q

EID25-1200

EID32-900

EID44-1200

EID65-900

EID75-800

EID120-660

EID170-670

EID270-410

Part number

6151659920

6151656140

6151656150

6151656160

6151656170

6151656180

6151656770

6151656780

6151656790



Download the latest version of this document at
http://www.desouttertools.com/info/6159929670_EN

**⚠ WARNING****Read all safety warnings and instructions**

Failure to follow the safety warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference

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Product Information

General Information

WARNING Risk of Property Damage or Severe Injury

Ensure that you read, understand and follow all instructions before operating the tool. Failure to follow all the instructions may result in electric shock, fire, property damage and/or severe bodily injury.

- ▶ Read all Safety Information delivered together with the different parts of the system.
- ▶ Read all Product Instructions for installation, operation and maintenance of the different parts of the system.
- ▶ Read all locally legislated safety regulations regarding the system and parts thereof.
- ▶ Save all Safety Information and instructions for future reference.

Safety Signal Words

The safety signal words **Danger**, **Warning**, **Caution**, and **Notice** have the following meanings:

DANGER	DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	NOTICE is used to address practices not related to personal injury.

Warranty

- Product warranty will expire 12 months after the product is first taken into use, but will in any case expire at the latest 13 months after delivery.
- Normal wear and tear on parts is not included within the warranty.
 - Normal wear and tear is that which requires a part change or other adjustment/overhaul during standard tools maintenance typical for that period (expressed in time, operation hours or otherwise).
- The product warranty relies on the correct use, maintenance, and repair of the tool and its component parts.
- Damage to parts that occurs as a result of inadequate maintenance or performed by parties other than Desoutter or their Certified Service Partners during the warranty period is not covered by the warranty.
- To avoid damage or destruction of tool parts, service the tool according to the recommended maintenance schedules and follow the correct instructions.
- Warranty repairs are only performed in Desoutter workshops or by Certified Service Partners.

Desoutter offers extended warranty and state of the art preventive maintenance through its Tool Care contracts. For further information contact your local Service representative.

For electrical motors:

- Warranty will only apply when the electric motor has not been opened.

Website

Information concerning our Products, Accessories, Spare Parts and Published Matters can be found on the Desoutter website.

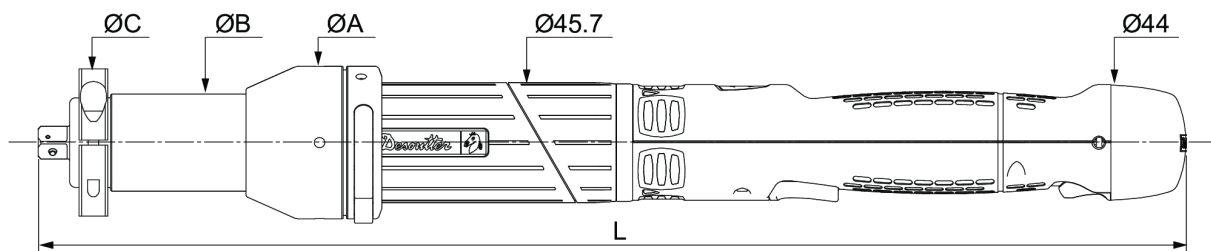
Please visit: www.desouttertools.com.

Information about spare parts

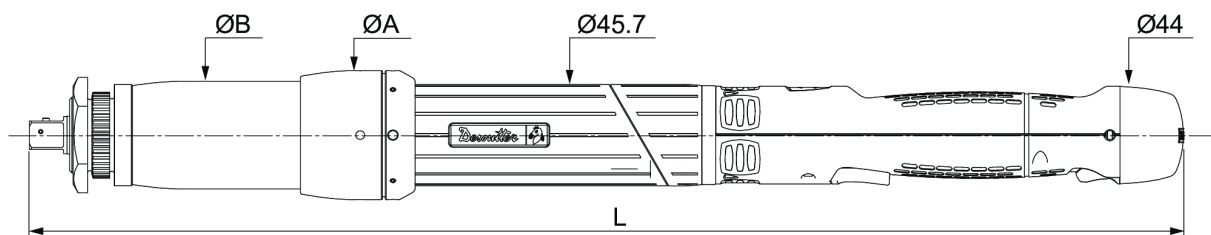
Exploded views and spare parts lists are available in Service Link at www.desouttertools.com.

Dimensions (mm)

EID25-1200 / EID32-900

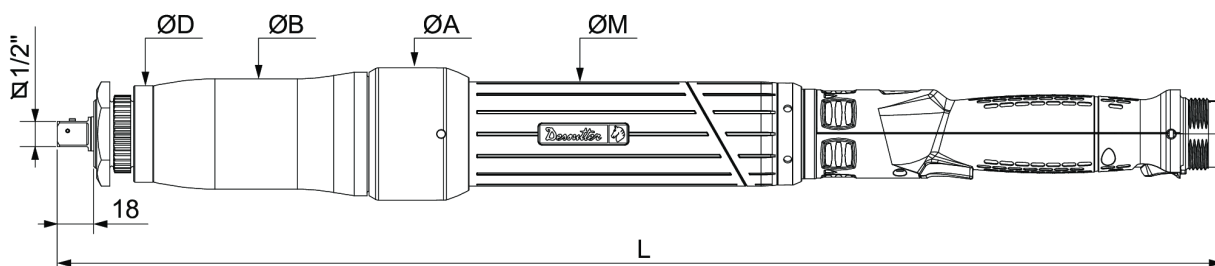


EID44-1200 / EID65-900 / EID75-800



mm

	ØA	ØB	ØC	L
EID20-1200 4Q	46	37	60	445
EID25-1200	46	37	60	430
EID32-900	46	37	60	430
EID44-1200	58	48	-	489
EID65-900	58	48	-	489
EID75-800	58	48	-	489



mm

	ØA	ØB	ØD	ØM	L
EID120-660	66	55	48	52	583
EID170-670	76	55	48	66	591
EID270-410	76	67	60	66	625

CAD files

For information about the dimensions of a product, see the Dimensional drawings archive:

<https://www.desouttertools.com/resource-centre>

Overview

General overview

EID are electric in-line nutrunners powered by one of the following Desoutter controllers.

- CVI3 Essential
- CVI3 Function
- CVI3 Vision
- TWINCVI3

They are hand-held by the operator.

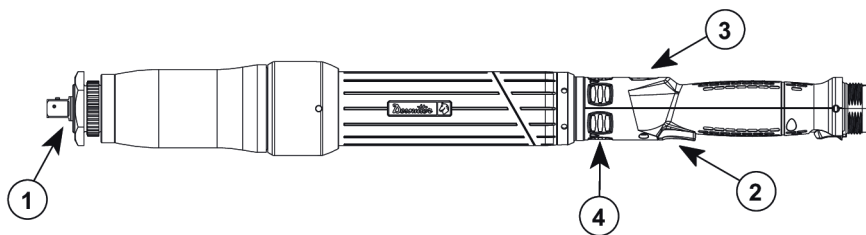
They also can be used as fixtured tools and installed on a frame in the workstation by using the optional mounting plates.

They received the tightening process to run from the controller.

Tools settings such as trigger management, LED management, run reverse mode, etc... can be set up with CVI CONFIG.

Change the orientation of the angle head by mounting an eFLEX cable.

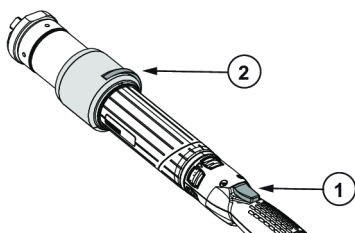
Product description



1	Output drive
2	Trigger
3	Reverse button
4	Reporting LEDs

The following models are equipped with a front trigger on delivery.

- EID20-1200-4Q
- EID25-1200
- EID32-900
- EID44-1200



1	Handle trigger
2	Front trigger

This additional trigger is a safety device for the operator when the tool is equipped for example with a close-ended head (Crowfoot) or an open-ended head (Tubenut). The operator has to press both triggers to start the tool. The management of triggers can be set up with CVI CONFIG.

Technical data

Voltage

3 ~ 230 V

Power consumption

Model	W
EID20-1200 4Q	55
EID25-1200	55
EID32-900	55
EID44-1200	100
EID65-900	100
EID75-800	100
EID120-660	160
EID170-670	170
EID270-410	170

Output drive

Model	Type
EID20-1200 4Q	Hex. 1/4 F
EID25-1200	Sq. 3/8"
EID32-900	Sq. 3/8"
EID44-1200	Sq. 3/8"
EID65-900	Sq. 1/2"
EID75-800	Sq. 1/2"
EID120-660	Sq. 1/2"
EID170-670	Sq. 1/2"
EID270-410	Sq. 3/4"

Torque range (Nm)

Model	Min. / Nominal / Max.
EID20-1200 4Q	3 / 18 / 20
EID25-1200	3 / 20 / 25
EID32-900	5 / 30 / 32
EID44-1200	7 / 40 / 44
EID65-900	10 / 60 / 65
EID75-800	20 / 70 / 75
EID120-660	20 / 110 / 120
EID170-670	40 / 150 / 170
EID270-410	60 / 250 / 270

Torque range (ft.lb)

Model	Min. / Nominal / Max.
EID20-1200 4Q	2.2 / 14.8 / 18.4
EID25-1200	2.2 / 14.8 / 18.4
EID32-900	3.7 / 22.1 / 23.6
EID44-1200	5.2 / 29.5 / 32.5
EID65-900	7.4 / 44.3 / 47.9
EID75-800	14.8 / 51.6 / 55.3
EID120-660	15 / 81 / 89
EID170-670	30 / 111 / 125
EID270-410	44 / 184 / 199

Rated speed (rpm)

Model	rpm
EID20-1200 4Q	1200
EID25-1200	1200
EID32-900	900
EID44-1200	1200
EID65-900	900
EID75-800	800
EID120-660	660
EID170-670	670
EID270-410	410

Weight

Model	kg	lb
EID20-1200 4Q	1.45	3.20
EID25-1200	1.45	3.20
EID32-900	1.45	3.20
EID44-1200	2.00	4.41
EID65-900	2.00	4.41
EID75-800	2.00	4.41
EID120-660	3.45	7.60
EID170-670	4.85	10.69
EID270-410	6.35	13.99

Storage and use conditions

Storage temperature	-20 to +70 °C (-4 to +158 F)
Operating temperature	0 to 45 °C (32 to 113 F)
Storage humidity	0-95 % RH (non-condensing)
Operating humidity	0-90 % RH (non-condensing)
Altitude up to	2000 m (6562 feet)
Usable in Pollution degree 2 environment	
Indoor use only	

Accessories**Required accessories**

Tool cables

Length (m)	Length (ft)	Part number
2.5	8.20	6159176010
5	16.0	6159176020
10	32.8	6159176040
15	49.2	6159176050

Tool extension cables

Length (m)	Length (ft)	Part number
8	26.2	6159175810
16	52.5	6159175840
32	105	6159175870

Length (m)	Length (ft)	Part number
50	164	6159175890

Optional accessories

Barcode reader and headlight		6158121380
Headlight		6158121390
Trigger locker		6153978420
Suspension bail (up to EAD105 / EID75)		6153974130
Suspension bail (for EAD160-200-280-660 / EID120)		6155710720
Protective cover for EID20/25/32		6155732110
Protective cover for EID44/65/75		6155732120
Mounting plate		6155960100
Front trigger		6153978125

eFLEX tool cable

Length (m)	Length (ft)	Part number
2.5	8.20	6159176310
5	16.0	6159176320

Service Overview**Maintenance program**

Please consult us on the **Tool Care** program that includes production support and maintenance solutions.

Spare parts

Exploded views and spare parts lists are available at <https://www.desouttertools.com/resource-centre>.

The use of spare parts other than those originally supplied by the manufacturer may result in a drop in performance or in increased maintenance and level of vibration and in the full cancellation of the manufacturer's liability.

Installation

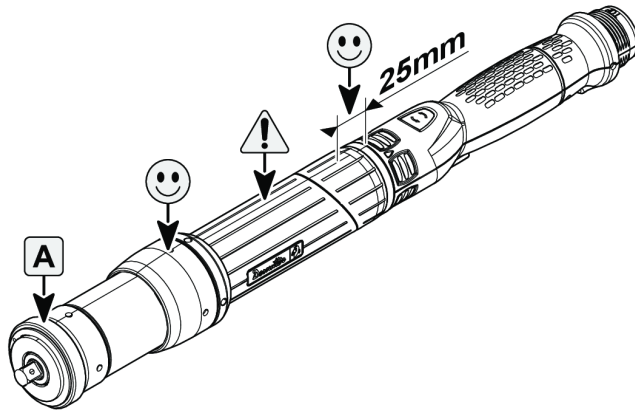
Installation Instructions

How to clamp the tool

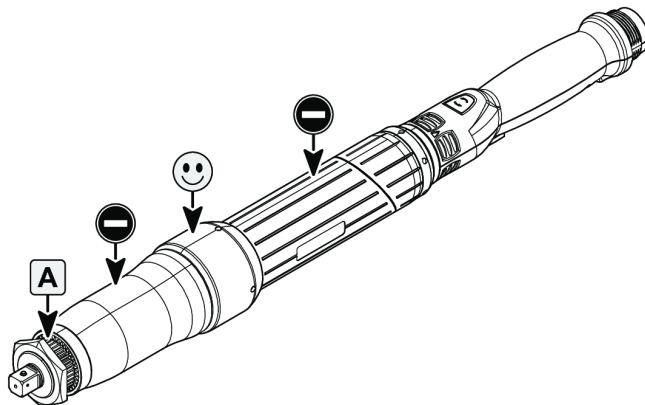
- i** Whether the tool is handled by an operator with a torque arm or embedded in a robot with high dynamics, it is advised to select two clamping locations instead of one.

Before selecting where to clamp the tool, take into account the following instructions.

From EID20-1200 4Q to EID75-800



From EID120-660 to EID270-410



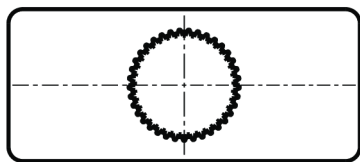
- A** Dedicated clamping area for torque reaction.
- ☺ Preferred clamping area.
- ⚠ This clamping area can be used as a secondary clamping. Do not use this area for torque reaction.
- ⊖ Prohibited clamping area.

- i** Clamping on the motor shall always be selected as the very last option and the operation shall be done with extra care.

Installing the tool on the mounting plate

⚠ WARNING Risk Of Electric Shock

Only qualified and trained operators should install, adjust or use this equipment.



Thickness: 12 mm

SPLINE DATA			
Type of gear	ISO		
Standard-Form	ISO 53/FIG:1/Table:2		
Quality Class ISO:	Not Applicable		
Number of teeth	37		
Module (mm)	1		
Nominal pressure angle	20°		
Addendum modif. coeff.	0		
Measurement over:	2 Rollers "Md"	1 Rollers "Mr"	
Roller Diameter:	Mini: 34.778 mm	17.405 mm	
	1.65 mm	Maxi: 34.848 mm	17.440 mm

Ensure that the mounting plate thickness is consistent with that indicated in the chapter *Dimensions*.

Use only screws with quality class 12.9.

⚠ WARNING Risk Of Electric Shock

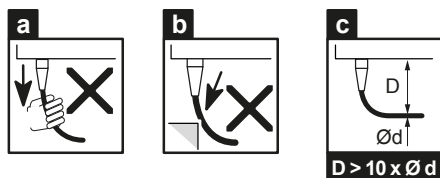
The mounting plate where tools are clamped must be **earthed**.

(i) Be sure that the motor is free of motion to enable torque measurement.

Warning: in case of installation in a wheelnut tightening machine, an additional mounting plate must be mounted next to the output drive.

Read before installing tool cables

(i) Do not connect several extension cables together. Preferably use the longest length of extension cable and the shortest length of tool cable.



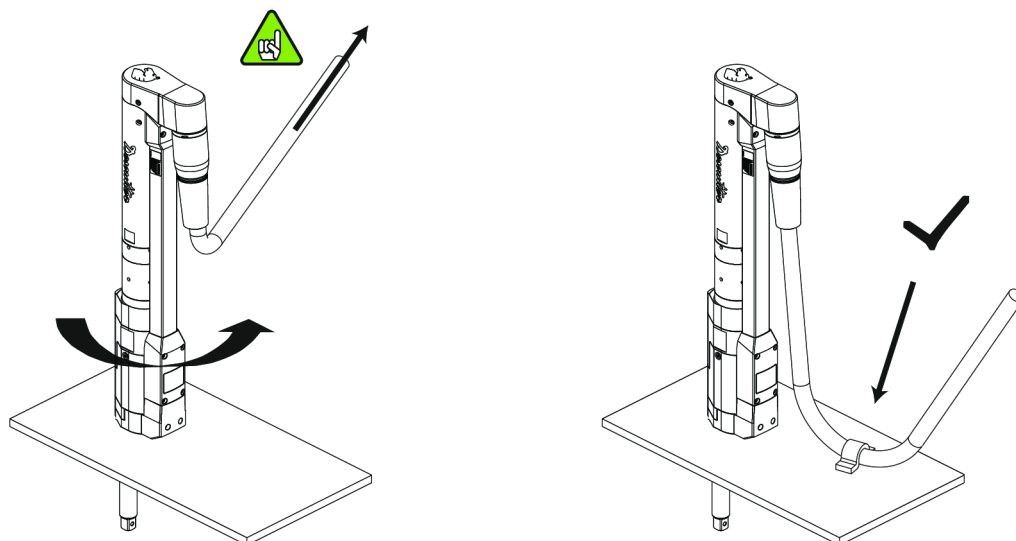
Although our tool cables are designed to work under drastic conditions, we recommend that you check the following points for longer service life:

- a - Any direct pull on the cable should be avoided.
- b - Friction with the outer sheath should be restricted.
- c - Bending radii should not be lower than 10 times the cable diameter.

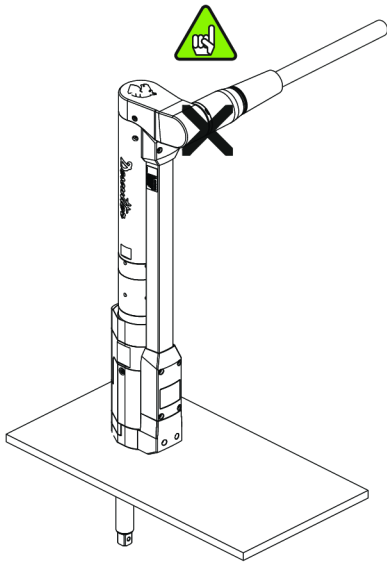
Instructions for cables of fixtured tools

The cable shall not apply any traction to the tool. Any traction force on the cable (even low intensity depending on the cable orientation) can generate a torque signal on the transducer.

Check the cables are long enough or clamp the tool cable on the frame as shown below.

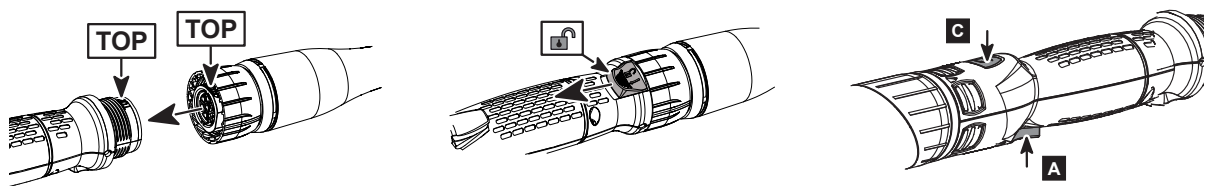


Do not set up the tool cable as shown below.



Connecting the tool to the controller

1. Connect the cable to the tool.



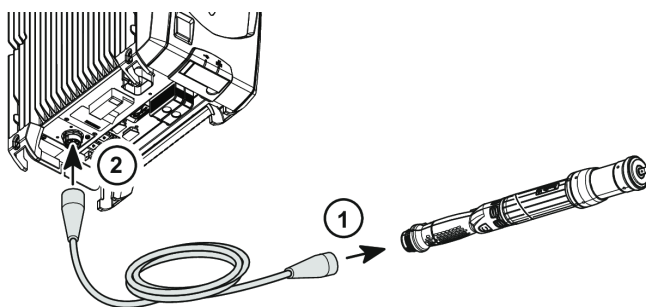
Plug the cable with help of TOP indication.

Tighten the nut. No need to tighten it too much.

The locking system will prevent any loosening.

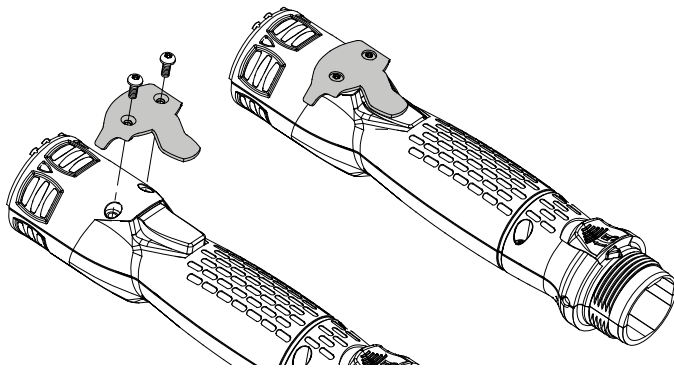
To enable the loosening of the cable, actuate the locking trigger at the bottom of the handle.

2. Connect the cable to the controller.

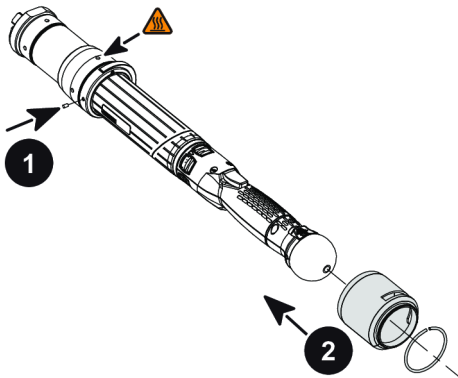


Mounting the trigger locker

Follow the instructions below.



Mounting the front trigger



This additional trigger is a safety device for the operator when the tool is equipped for example with an open-ended Crowfoot head. The operator has to press both triggers to start the tool. The management of triggers can be set up with CVI CONFIG.

How to install optional accessories

Refer to the user manual dedicated to the accessory available at <https://www.desouttertools.com/resource-centre>.

Operation

Configuration Instructions

How to set up the reverse mode

Go to CVI CONFIG to set up the *run reverse* settings.

Refer to the *Configuration Manual* of CVI CONFIG (printed matter: 6159925470) available at <https://www.desouttertools.com/resource-centre>.

How to set up the tool as a fixtured tool

Desoutter should not be held responsible for any injury, accident or damage which may be the consequence of an incorrect installation, modification or start-up, or a use out of the intended use of Desoutter products, by the customer or a third party.

This tool can be used as a fixtured tool installed on a frame in the workstation.

WARNING Risk Of Electric Shock

The frame where tools are clamped must be **earthed**.

In this case, the tool trigger must be locked by the optional accessory *Trigger locker*.

The tightening operation is then triggered by an external start.

The external start can be a remote pushbutton or a PLC output signal sent to the controller.

Operating Instructions

Starting the tool

WARNING Risk Of Injury

As the reaction force increases in proportion to the tightening torque, there is a risk of severe bodily injury of the operator as a result of unexpected behavior of the tool.

- ▶ Make sure that the tool is in perfect working order and the system is programmed correctly.

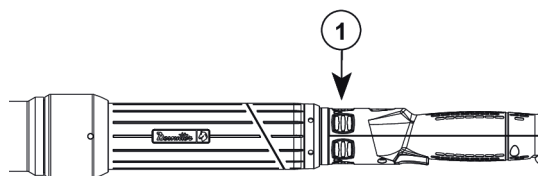
Fit the tool with a suitable socket.

Select the appropriate program on the controller.

Hold the tool by means of the handle and apply to the fastener to be tightened.

Press the trigger to start the tool.

How to reverse the rotation



1 Run reverse button

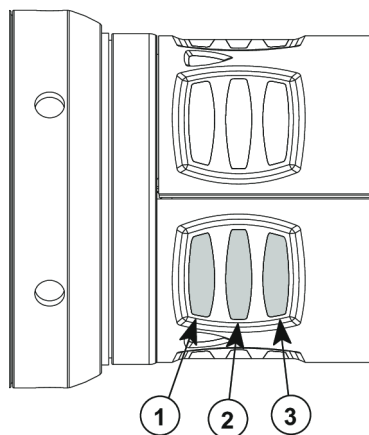
Press this button.

Red and green LEDs are blinking alternatively.

Apply the tool to the fastener and press the trigger.

Tightening status and LED reporting

Reporting LEDs



1	Red
2	Green
3	Yellow

How to read the tightening report

LED color	Description	Action to do
Green	Accept report	None
Yellow	Incomplete rundown	Tighten again.
Yellow and red (orange)	Reject report	Loosen and tighten again.
Red	Above max. limits	Loosen, replace the fastener and tighten again.

Service

Maintenance Instructions

Instructions for transducerized tools

- Do not damage the wires when pulling out the connectors.
- Do not pull out the torque transducer wires.
- Ensure that wires are not crushed.

Read before maintenance

WARNING Connection Hazard

The tool can start unexpectedly and cause severe bodily injury.

- ▶ Prior to any maintenance task, disconnect the tool.

Maintenance should be performed by **qualified personnel only**.

Follow standard engineering practices and refer to exploded views for disassembling and reassembling the different parts of the system.

Take into account the following instructions given in the exploded views.

Be cautious: when reassembling, tighten the right direction.



Left hand thread



Right hand thread

When reassembling:



Apply the recommended glue.



Tighten to the required torque.



Lubricate with the required grease or oil. Do not apply too much grease on gears or bearings; a thin coat shall be sufficient.

Preventive Maintenance

Recommendations

Overhaul and preventive maintenance are recommended at regular intervals once per year or after a maximum number of tightenings (refer to the table below) depending on which occurs sooner.

Heavy duty

Heavy duty use can require more frequent overhaul and Preventive Maintenance intervals. Please contact your local Desoutter Service team to get a customized maintenance plan.

Upgrading tools

To upgrade tools, it is necessary to have:

- an ACCESS KEY USB stick set with the right profile.
This USB stick is provided by your CVIKEY manager.
- CVIMONITOR software

Contact your Desoutter representative to get more information and support.

Checking before putting back into service

Prior to putting the equipment back into service, check that its main settings have not been modified and that the safety devices work properly.

Recommissioning

Prior to putting the different parts of the system back into service, check that the main settings have been correctly set up and that the safety devices work properly.

Original instructions

Founded in 1914 and headquartered in France, Desoutter Industrial Tools is a global leader in electric and pneumatic assembly tools serving a wide range of assembly and manufacturing operations, including Aerospace, Automotive, Light and Heavy Vehicles, Off-Road, General Industry.

Desoutter offers a comprehensive range of Solutions -tools, service and projects- to meet the specific demands of local and global customers in over 170 countries.

The company designs, develops and delivers innovative quality industrial tool solutions, including Air and Electric Screwdrivers, Advanced Assembly Tools, Advanced Drilling Units, Air Motors and Torque Measurement Systems.

Find more on www.desouttertools.com



More Than Productivity