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Making Your Job More Enjoyable

Cordless Power Flaring Tool

NEF6Li

User Manual



Failure to follow warnings could
result in death or serious injury.

**SAVE THIS MANUAL
FOR FUTURE REFERENCE**

CONTENTS

SAFETY GUIDE	01
NAME OF PARTS	04
ACCESSORIES	05
SPECIFICATION	05
OPERATING INSTRUCTIONS	07
TROUBLESHOOTING	11
ENVIRONMENTAL PROTECTION	12

Dear User:

Thank you for choosing NAVAC product. Please read this operating manual carefully before use it. We suggest you keep this manual with the product or in the place where you can easily find for later reference.

SAFETY GUIDE

1. Work area safety
 - 1.1 Keep work area clean and well lit. Cluttered or dark areas invite accidents.
 - 1.2 Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
 - 1.3 Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
2. Electrical safety
 - 2.1 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 risk of electric shock.
 - 2.2 Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
3. Personal safety
 - 3.1 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.
 - 3.2 Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
 - 3.3 Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
 - 3.4 Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
 - 3.5 Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
 - 3.6 Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

4. Power tool use and care

- 4.1 Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- 4.2 Store idle power tools out of the 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.
- 4.3 Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- 4.4 Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- 4.5 Use the power tool, accessories and tool bits etc. in accordance with these Instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

5. Battery tool use and care

- 5.1 Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- 5.2 Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 5.3 When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- 5.4 Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

6. Service

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.

7. Please use designated accessories

Do not use accessories and attachments other than those designated in the operation manual or our catalogs. Accidents or injuries might result.

8. Do not let unauthorized personnel use the machine.

Accidents or injuries might occur.

9. Use the machine properly

Please read the operating manual carefully before operating and strictly observe the product operating procedures.

10. For overhaul and repair of the machine, ask an appointed NAVAC distributor. (It will be out of warranty if the product disassembled by unauthorized individual).

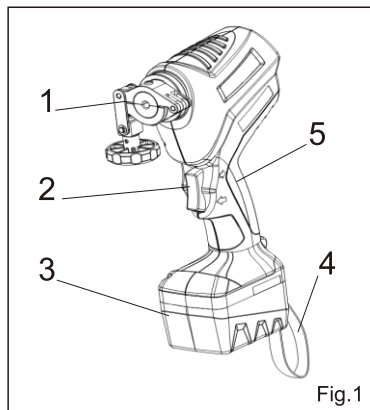
11. Safe Charging

- 11.1 Avoid humid environment.
- 11.2 Do not place the charger close to an open flame.
- 11.3 Keep all flammable materials away from the charger.
- 11.4 Do not charge for more than 5 hours.
- 11.5 Pull the plug after charging finished.

12. Proper Storage

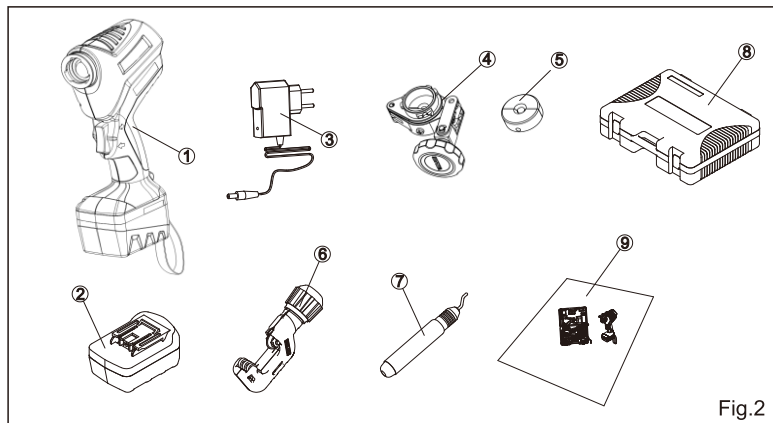
Please store the machine in a dry place away from children and locked with a key. The environmental temperature should be below 104°F.

NAME OF PARTS



No.	Name
1	Expander body
2	Switch
3	Battery
4	Carrier ties
5	Housing

Please check the parts after unpacking to see if any parts missed or damaged.



ACCESSORIES

No.	Name	Dimension (W×D×H)(inch)	Weight (oz)	Quantity
1	Flaring Tool (Include One Battery)	6.6×3.4×11.7	66.3	1
2	Backup Battery	4×2.8×2.1	16.2	1
3	Charger	3.1×3.1×1	3.7	1
4	Expander Body(inch)	3.2×3.3×1.8	8.1	4
5	Liner	1.3×1.3×0.6	0.9	6
6	Tube Cutter	5.9×2.4×1.9	12	1
7	Tube Deburring Tool	0.8×5.8	0.9	1
8	Carrying case	15.5×12.6×3.5	68.3	1
9	Operating Manual			1
Total			209	

SPECIFICATION

1. Flaring Tool

Applicable Pipe/Tube	Copper tube
Applicable Pipe/Tube Size	1/4", 5/16", 3/8", 1/2", 5/8", 3/4"
Flaring Shape	Flared
Processing Method	Eccentric cone (constant-pressure plunge rotation)
Power	10.8V DC
Cone Speed	280 rpm
Battery Potential for Flaring	Approximately 170 pipe/tube ends per fully charged
Processing time	Approximately 5 seconds

2. Battery

Battery type	Li-ion
Voltage	10.8 V
Capacity	2.6 Ah
Charging Time	Approximately 3 hours (May vary depending on usage)
Battery Recharge Times	Up to 500 times (May vary depending on usage)
Charging Temperature	-4~140°F

3. Charger

Applicable Battery	Li-ion 10.8 V
Power Supply	AC100~240V (50/60Hz)
Charging Mode	Intelligent Control
Charging Voltage	12.6V
Charging Current	1 A
Charging Temperature	-4~140°F

OPERATING INSTRUCTIONS

1. Charging the Battery

1.1 Remove the battery from the main unit by pressing the latch on the battery. (Push the main unit/Pull the battery) (Fig. 3)

▼ Hold the main unit firmly.

1.2 Connect charger and battery. (Fig.4)

▼ Make sure the battery is connected correctly as Fig4.

1.3 Plug the charger into the power source. (Fig 5)

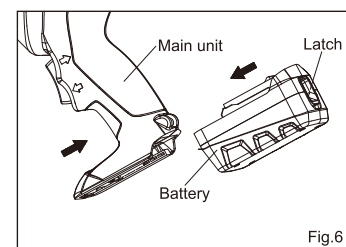
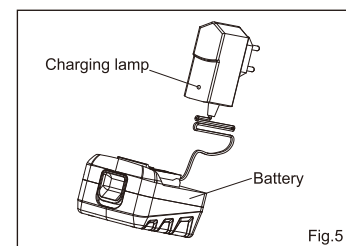
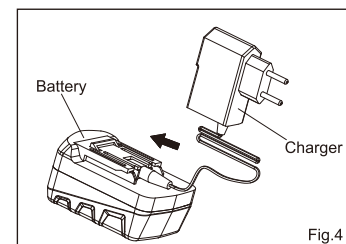
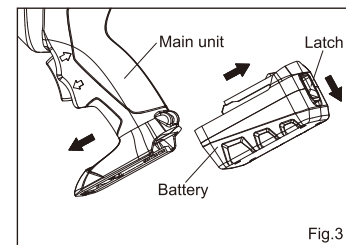
▼ The red charging lamp comes on, and charging starts.

▼ When the green charging lamp comes on, charging is completed. It takes about 3 hours to complete the charging.

▼ The input voltage for this charger is AC100-240V (50/60Hz)

1.4 Remove the battery from the charger, then attach it to the main unit. (Fig.6)

▼ If the battery cannot be fully recharged even after following correct procedure, the battery life may have run out. Replace the battery.

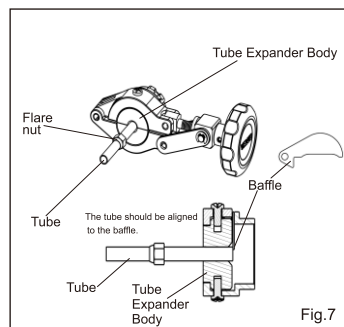


2. Setting up the tool

2.1 Clamping the tube

2.1.1 Choose an expander body that is compatible with the tube size, and then place the tube to make sure that the tube end and baffle at the same level (Fig. 7)

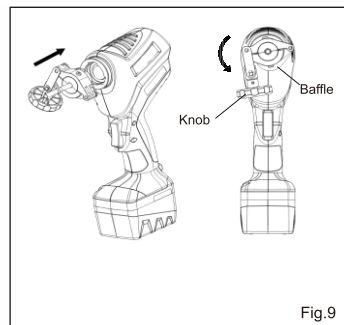
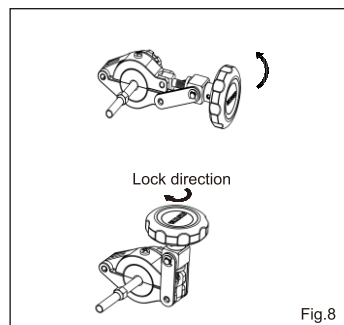
2.1.2 Ensure the tube is placed properly and locked. (Fig.8)



2.2 Fasten the expander body

Slide the expander body (in which the tube has been placed) to the main unit. Rotate the expander body until it is fastened and the baffle shows. (Fig.9)

▼ Ensure the expander bar can be set on the main unit only when the flare cone (on the main unit) is fully-retracted. Press the upper part of the switch until you hear a clank. (from the clutch)

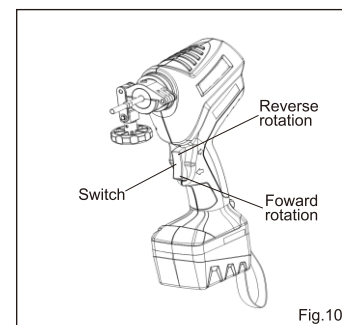


3. Flaring the tube

3.1 Start flaring by pressing and holding the lower part of the switch. Flaring will be completed within 3 seconds when you hear 3 clanks (from the clutch). (Fig.10)

3.2 Press and hold the upper part of the switch. (Fig.10)

▼ Ensure the flare cone is fully retracted. (You will hear 3 clanks from the clutch)

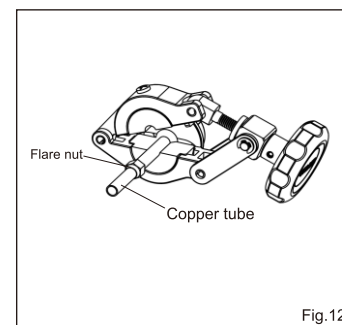
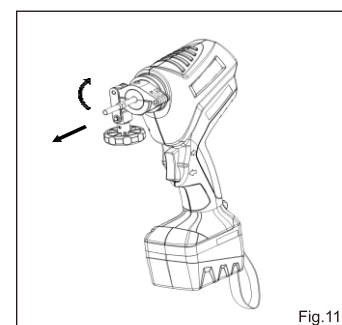


4. Removing the tube

4.1 Detach the expander body from the main unit by reversing the installation steps. (Fig.11)

▼ Ensure the flare cone is fully retracted.

4.2 Open the expander body and take out the copper tube. (Fig.12)



If an abnormality occurs with the product, please check the following troubleshooting form. If cannot solve, please contact the manufacturer or the sales distributor from whom you purchased the product.

Caution:

Do not repair or disassemble it by yourself. (Any self-repair or disassemble will be regarded as voluntary renunciation of warranty.)

TROUBLESHOOTING

Problem	Possible Causes	Solving Method
The flaring diameter is too small	The tube end was pinched due to feeding the blade too quickly when the tube was cut	Feed the cutter blade slowly to cut the tube.
	Burrs were left on the tube end	Remove the burrs.
	There was a space between the tube end and the stopper plate	Place the tube taking care not to leave a space between the tube end and the stopper plate.
	The idling time from when the clutch started operating was too short	Make the idling time longer.
	Flaring pressure is diminished	Ask for inspection or repairs.
Ring-shaped flaws occur on the flared inner surface of the tube	A large burr was on the pipe end.	Remove the burrs
	The idling time from when the clutch started operating was too short	Make the idling time longer.
	Flaring pressure is diminished	Ask for inspection or repairs
Flaws other than ring-shaped ones(vertical flaws, dents, etc.) occur on the flared inner surface of the tube	Flaws were made while removing burrs on the inner surface of the tube	Remove the burrs without making any flaws on the inner surface of the tube
	Dust or metal chips adhered to the flare cone or the inner surface of the tube	Remove dust and metal chips
	Flaring pressure is diminished	Ask for inspection or repairs
The flaring tool does not operate even when the switch is turned ON	The battery has run out	Recharge the battery
	There are insulators, such as dust, between the battery and the conductive part of the flaring tool	Remove the insulators
	The wiring or the motor is faulty	Ask for inspection or repairs
The lamp on the charger does not light up or not change to Green even charging finished	Connection between battery and charger	Ensure battery and charger connect properly
	The wiring or the motor is faulty	Ask for inspection or repairs
	The temperature of the charger is too high	Cool the charger and then recharge the battery

ENVIRONMENTAL PROTECTION



CAUTION!

Electrical products must not be thrown out with domestic waste. They must be taken to a communal collecting point for environmentally friendly disposal in accordance with local regulations. Contact your local authorities or stockist for advice on recycling.

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