

KLUTCH[®]

11AMP SURFACE CONDITIONING TOOL

Owner's Manual



⚠ WARNING: Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item # 5797469

READ & SAVE THESE INSTRUCTIONS

Thank you very much for choosing a **KLUTCH** product!

For future reference, please complete the owner's record below:

Serial Number/Lot Date Code: _____

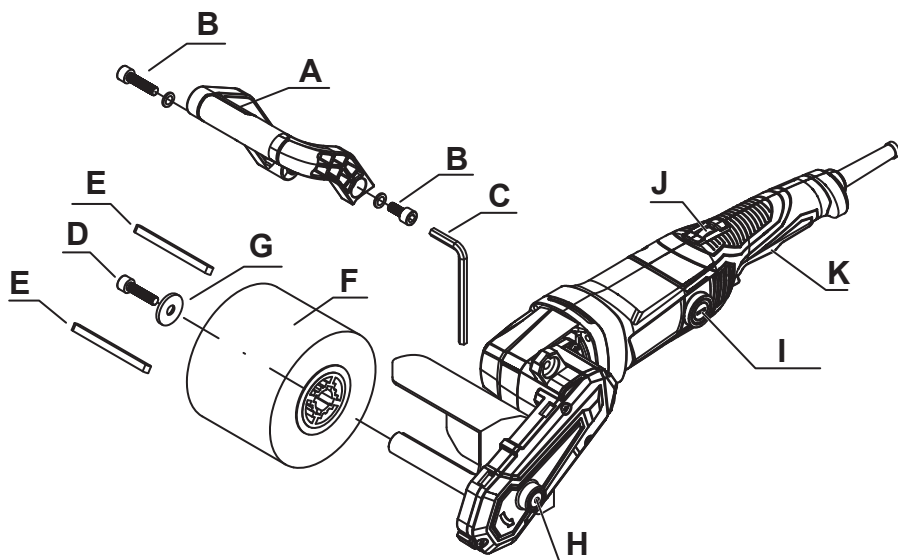
Purchase Date: _____

Save the receipt, warranty, and this manual. It is important that you read the entire manual to become familiar with this product before you begin using it.

This 11AMP Surface Conditioning Tool is designed for certain applications only. Northern Tool and Equipment is not responsible for issues arising from modification or improper use of this product such as an application for which it was not designed. We strongly recommend that this product not be modified and/or used for any application other than that for which it was designed.

For technical questions, please call **1-866-915-8626**.

ACCESSORIES



A. Auxiliary handle

B. HEX screw

C. Hex spanner

D. HEX screw M8x25

E. Flat Key

F. Drum Wheel

G. Washer

H. Self-locking Button

I. Brush Holder Cap

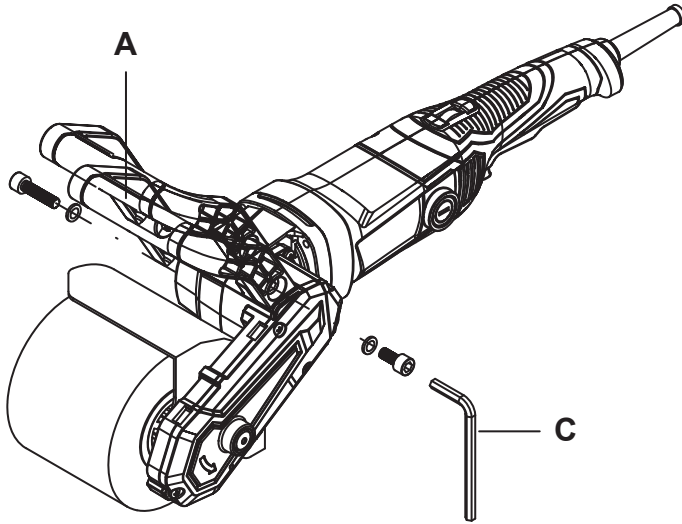
J. Constant speed knob

K. ON/OFF Switch

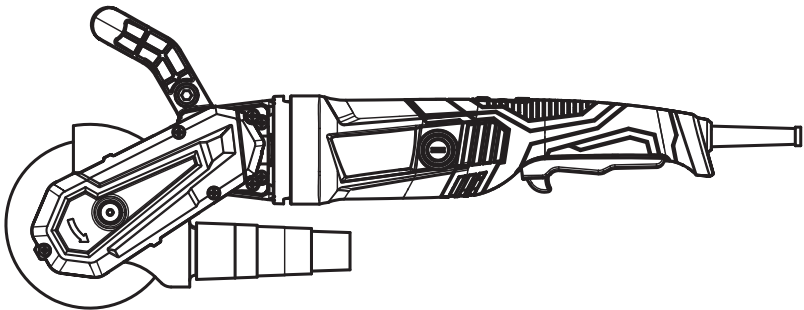
TECHNICAL SPECIFICATIONS

Model Number	5797469	
Voltage	110-120V 60Hz	
Power	10A	1300W
Rotation Speed	900-3700/min ¹	
MAX. Dia. of Wheel	120mm	
Protection class	II □	

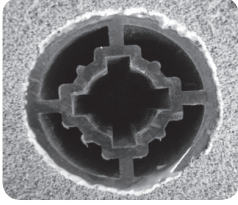
AUXILIARY HANDLE ASSEMBLY



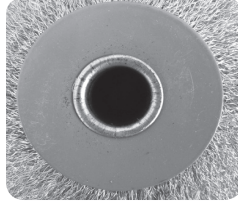
DUST ADAPTOR DEMONSTRATION



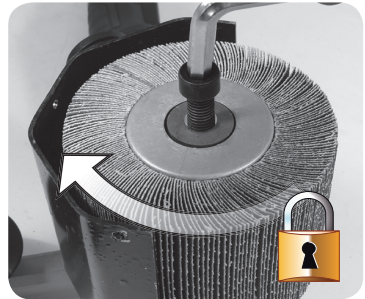
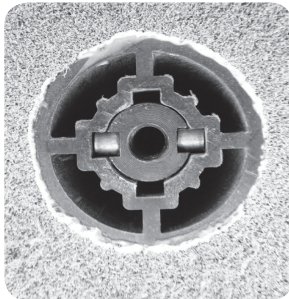
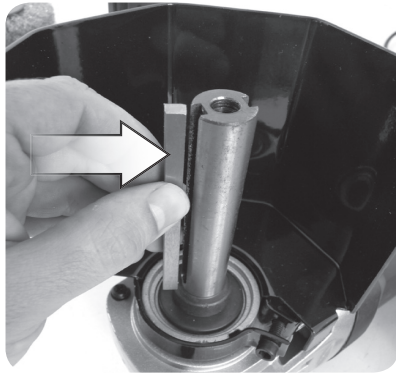
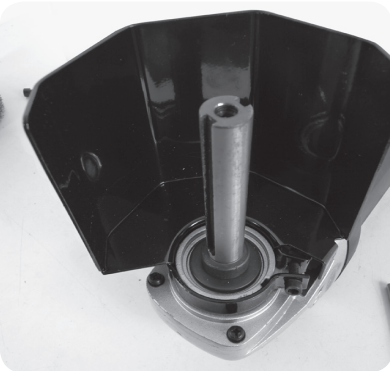
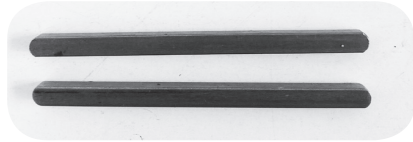
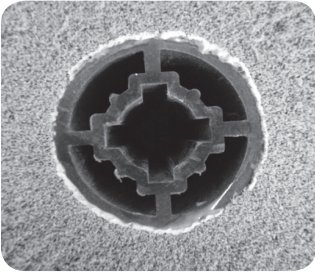
DRUM WHEEL CHOICE AND ASSEMBLY



ok



NO



SAFETY

GENERAL POWER TOOL SAFETY WARNINGS



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

Save all warnings and instructions for future reference.

The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1.WORK AREA SAFETY

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- 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.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2.ELECTRICAL SAFETY

- 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.
- 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.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use an earth leakage circuit breaker. Use of an earth leakage circuit breaker reduces the risk of electric shock.

3.PERSONAL SAFETY

- 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.

- 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.
- 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.
- 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.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- 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.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- Use ear protectors. Exposure to noise can cause hearing loss.

4. POWER TOOL USE AND CARE

- 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.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- 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.
- 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.
- 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.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- 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.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.
- The substitution of the brushes cable of the power tool should be accomplished by an authorized and qualified technical service.Brushes out of specification can cause damages to the motor of the power tool.
- If the power cord is damaged, the power cord shall be replaced by manufacturer, service or qualified person to avoid the risk of electrical shock.

POWER TOOL -SPECIFIC SAFETY WARNINGS

SAFETY WARNINGS COMMON FOR GRINDING, SANDING, WIRE BRUSHING, POLISHING OR ABRASIVE CUTTING-OFF OPERATION

- This power tool is intended to function as a sander, wire brush or polisher. Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.
- Operations such as grinding, or cutting-off are not recommended to be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.
- Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.
- The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can fly apart.
- The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- Threaded mounting of accessories must match the spindle thread. For accessories mounted by flanges, the arbor hole of the accessory must fit the locating diameter of the flange. Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pads for cracks, tear or excess wear, wire brushes for loose or cracked wires. If the power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and

installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no load speed for one minute. Damaged accessories will normally break apart during this test time.

- Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of the workpiece or of a broken accessory may fly away and cause injury beyond the immediate area of operation.
- Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- Position the cord clear of the spinning accessory. If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
- Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.
- Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- Regularly clean the power tool’s air vents. The motor’s fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

FURTHER SAFETY INSTRUCTION FOR ALL OPERATIONS

KICKBACK AND RELATED WARNINGS

- Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory’s rotation at the point of the binding.

- For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on the direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions.
- Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.
 - a) Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.
 - b) Never place your hand near the rotating accessory. The accessory may kickback over your hand.
 - c) Do not position your body in the area where power tool will move if kickback occurs. Kickback will propel the tool in the direction opposite to the wheel's movement at the point of snagging.
 - d) Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
 - e) Do not attach a saw chain woodcarving blade or toothed saw blade. Such blades create frequent kickback and loss of control.

Safety Warnings Specific for Wire Brushing Operations:

- a) Be aware that wire bristles are lost by the brush even during ordinary operation. Do not overstress the wires by applying excessive load to the brush. The wire bristles can easily penetrate light clothing and/or skin.
- b) If the use of a safety guard is recommended for wire brushing, do not allow any interference of the wire wheel or brush with the guard. Wire wheel or brush may expand in diameter due to work load and centrifugal forces.

ADDITIONAL SAFETY WARNINGS



Wear safety goggles

GFCI and personal protection devices like electrician's rubber gloves and footwear will further enhance your personal safety.

- Do not use AC only rated tools with a DC power supply. While the tool may appear to work, the electrical components of the AC rated tool are likely to fail and create a hazard to the operator.
- Keep handles dry, clean and free from oil and grease. Slippery hands cannot safely control the power tool.
- Only use “wrap around” control handle, supplied with tool. Use of an auxiliary side handle will cause the hand to be within reach of the spinning accessory.
- Use clamps or other practical ways to secure and support the work piece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- Develop a periodic maintenance schedule for your tool. When cleaning a tool be careful not to disassemble any portion of the tool since internal wires may be misplaced or pinched or safety guard return springs may be improperly mounted. Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia, etc. may damage plastic parts. Risk of injury to user.

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

ASSEMBLY

Before any work on the machine itself, pull the mains plug.

Auxiliary Handle

Operate your power tool only with the auxiliary handle (A).

Screw the auxiliary handle (A) on the body of the machine with hex spanner (C).

Drum wheel

Put the flat keys (E) in the spindle groove.

Slide the drum wheel (F) onto the spindle.

Press in spindle locking button (if the tool is with this function) and hold in place.

Screw the drum wheel fixing screw (D+G) onto the spindle and tighten.

OPERATION

STARTING OPERATION

Observe correct mains voltage! The voltage of the power source must agree with the voltage specified on the nameplate of the machine.

SWITCHING ON AND OFF

To start the machine, press the On/Off switch.

To lock-on the switch, press Lock on switch while holding On/Off switch.

To release lock on switch, press On/Off switch one more time.

In continuous operation, the machine continues running if it is forced out of your hands. Therefore, always hold the machine with both hands using the handles provided, stand in a safe position and concentrate.

SPEED SELECTION

The required speed can be preselected with the constant speed knob(J) (also while running).

The required speed depends on the material and the working conditions and can be determined through practical testing.

WORKING ADVICE

Wait until the machine has come to a standstill before placing it down.

Do not strain the power tool so heavily that it comes to a standstill.

Switch on first, then guide the accessory towards the workpiece.

MAINTAINANCE AND SERVICE

MAINTAINANCE AND CLEANING

- Before any work on the machine itself, pull the mains plug.
- For safe and proper working, always keep the machine and ventilation slots clean.
- Blow low-pressure compressed air through the ventilation slots with the motor running to keep motor clean.

In extreme working conditions, conductive dust can accumulate in the interior of the power tool when working with metal. The protective insulation of the power tool can be degraded. The use of a stationary extraction system is recommended in such cases as well as frequently blowing out the ventilation slot and installing a ground fault circuit interrupter (GFIC).

On the product, the rating label and within these instructions you will find among others the following symbols and abbreviations. Familiarize yourself with them to reduce hazards like personal injuries and damage to property.

V~	Volt, (alternating voltage)	mm	Millimetre
Hz	Hertz	W	Watt

/min or min ⁻¹	Per minute	m/s ²	Metres per seconds squared
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Lock / to tighten or secure.



Unlock / to loosen.



Note / Remark.



Caution / Warning.



Read the instruction manual.



Wear hearing protection.



Wear eye protection.



Wear a dust mask.



Wear protective gloves.



Wear protective, slip-resistant footwear.



Switch the product off and disconnect it from the power supply before assembly, cleaning, adjustments, maintenance, storage and transportation.



This product is of protection class II. That means it is equipped with enhanced or double insulation.

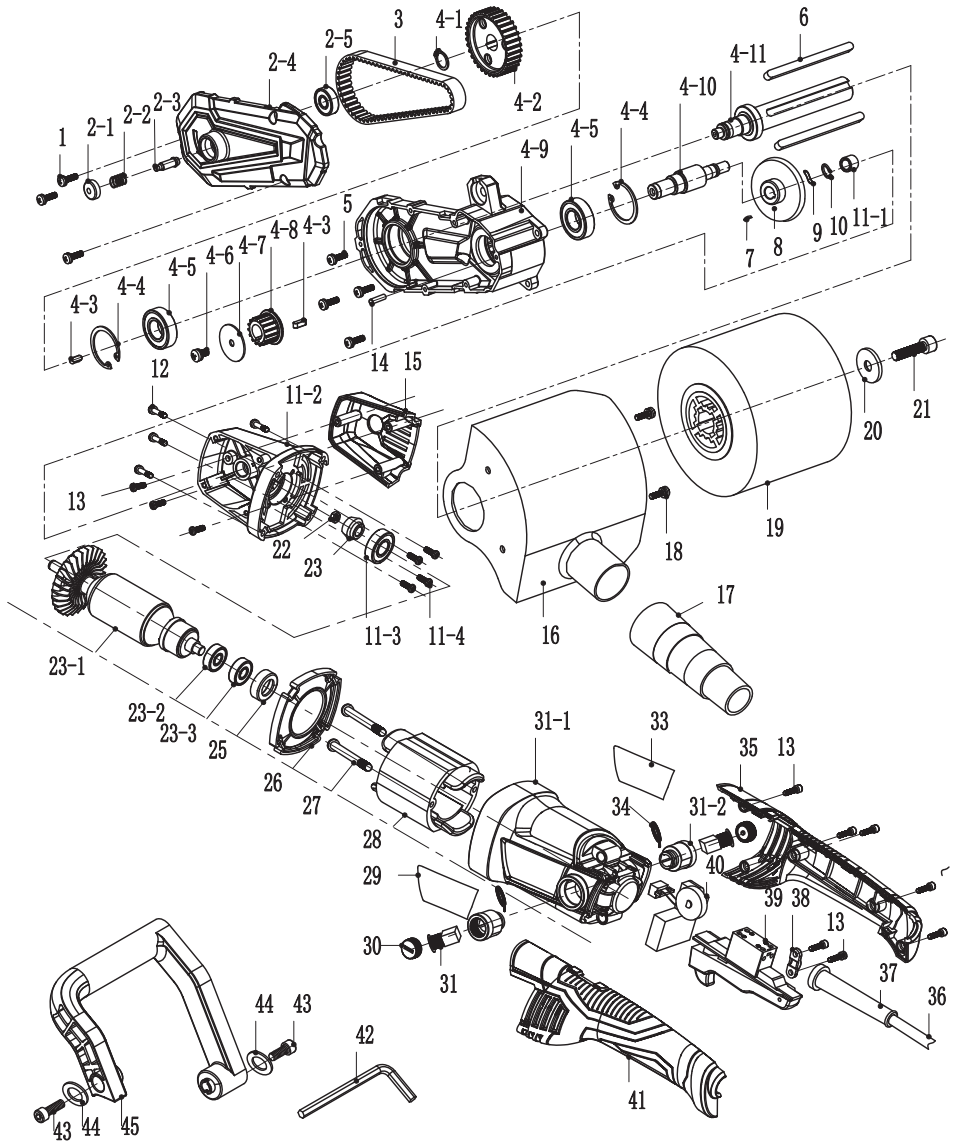


WEEE symbol. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.

PARTS LIST

No.	Description	QTY	No.	Description	QTY
1	Screw M4×14	3	17	Shield Connection Tube	1
2-1	Switch Self-Locking Cap	1	18	Screw M5×10	2
2-2	Self-Locking Spring	1	19	Wire Drawing Wheel	1
2-3	Self-Lock Pin	1	20	Flat Gasket	1
2-4	Side Cover	1	21	Screw	1
2-5	Bearing Cap	1	22	Nut	1
3	Arc Synchronous Belt	1	23	Pinion	1
4-1	Circlip For Shaft	1	24-1	Rotor	1
4-2	Engaged Wheel	1	24-2	Magnet Ring	1
4-3	Flat Key	2	24-3	Bearing Cap	1
4-4	Hole Circlip	2	25	Bearing Sleeve	1
4-5	Bearing	2	26	Wind Guide Ring	1
4-6	Bearing	1	27	Screw	2
4-7	Flat Washer	1	28	Stator	1
4-8	Capstan	1	29	Label	1
4-9	Middle Cover	1	30	Brush Holder Cover	2
4-10	Jack Shaft	1	31	Carbon Brush	2
4-11	Output Shaft	1	32-1	Housing	1
5	Screw M4X16	4	32-2	Brush Holder	2
6	Flat Key	2	33	Label	1
7	Woodruff Key	1	34	Spring	2
8	Gearwheel	1	35	Right Handle	1
9	Wave Washer	1	36	Cable	1
10	Circlip For Shaft	1	37	Sheath	1
11-1	Quill Roller	1	38	Cable Clamp	1
11-2	Front Cover	1	39	Switch	1
11-3	Bearing	1	40	Constant Speed Knob	1
11-4	Large Flat Head Machine Nail	4	41	Left Handle	1
12	Screw ST5×25-F	4	42	Wrench S6	1
13	Screw ST4×16-F	10	43	Screw M8×20	2
14	Cylinder Pin	1	44	Flat Washer	2
15	Head Cap	1	45	Auxiliary Handle	1
16	Protective Cover	1			

SCHEMATIC DRAWING



REPLACEMENT PARTS

- For replacement parts and technical questions, please call Customer Service at 1-866-915-8626.
- Not all product components are available for replacement. The illustrations provided are a convenient reference to the location and position of parts in the assembly sequence.
- When ordering parts, the following information will be required: item description, item model number, item serial number/item lot date code, and the replacement part reference number.
- The distributor reserves the rights to make design changes and improvements to product lines and manuals without notice.

LIMITED WARRANTY

Limited Warranty

- Northern Tool and Equipment Company, Inc. (“We” or “Us”) warrants to the original purchaser only (“You” or Your”) that the KLUTCH product purchased will be free from material defects in both materials and workmanship; normal wear and tear excepted, for a period of one year from date of purchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product or product component without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

Limitations on the Warranty

- This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

Obligations of Purchaser

- You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at 1-866-915-8626, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

Remedy Limits

- Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for service or labor charges or damage to Your property incurred in removing or replacing

LIMITED WARRANTY

- the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation or maintenance of the product or product component; or any indirect, incidental or consequential damages of any kind for any reason.

Assumption of Risk

- You acknowledge and agree that any use of the product for any purpose other than the specified use (s) stated in the product instruction is at Your own risk.

Governing Law

- This limited warranty gives You specific legal rights, and You also may have other rights which vary from State to State. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages. So, the above limitations may not apply to You. This limited warranty is governed by the laws of the State of Minnesota, without regard to rules pertaining to conflicts of law. The state courts located in Dakota County, Minnesota shall have exclusive jurisdiction.

KLUTCH[®]

Distributed by:

Northern Tool & Equipment Company, Inc.

Burnsville, Minnesota 55306

www.northerntool.com

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